VOLUME I OF II

FINAL
MARCH 2004
QUARTERLY GROUNDWATER MONITORING REPORT
Martin State Airport: Middle River, Maryland



LOCKHEED MARTIN

Tetra Tech
Environmental Engineers & Scientists
TC#10825-10/June 2004

Final
March 2004
Quarterly Groundwater Monitoring Report
Martin State Airport
Middle River, Maryland

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1.0 INTRODUCTION

On behalf of Lockheed Martin Corporation (LMC), Tetra Tech, Inc. has prepared the following quarterly monitoring well sampling report for the southeast portion of Martin State Airport (MSA) in Middle River, Maryland. This report summarizes data collected during the March 2004 sampling event (1st quarter 2004). The quarterly sampling program was initiated to monitor chlorinated volatile organic compound (VOC) and metal concentrations previously identified in surficial groundwater.

2.0 SITE LOCATION AND DESCRIPTION

The MSA is located at 701 Wilson Point Road in Middle River, Maryland, and is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west. Both creeks join into Chesapeake Bay at the south side of the airport. The area under investigation is located at the southeast portion of the MSA and is bounded by Frog Mortar Creek to the east, and the main airport runway to the west. The location of the investigation area is shown in Figure 1 – *see Appendix A.*

The investigation area was initially identified in July 1991, when the Maryland Aviation Administration (MAA) encountered four drums adjacent to Taxiway Tango during trenching activities for the installation of an electrical cable. Based on the discovery of these buried drums, the surrounding area was investigated for potential impacts to soil and groundwater, as required by MDE in their letters dated January 6, 1992 and January 14, 1997 to MAA.

3.0 SUBSURFACE CONDITIONS

3.1 Geology

Martin State Airport is located in the Western Shore of the Coastal Plain Physiographic Province. Based on geologic mapping of Baltimore County, the property is underlain by the Potomac Group, a Cretaceous age interbedded gravel, sand, silt, and clay unit ranging in thickness from 0 to 800 feet. The Potomac Group is composed of three units: the Raritan and Patapsco Formations, the Arundel Clay, and the Patuxent Formation. The Raritan and Patapsco Formations range up to 400 feet thick and are composed of a gray, brown, and red variegated

silt and clay unit with lenticular lenses of sand and few gravels. The Arundel Clay is composed of dark gray and maroon lignitic clays and ranges in thickness from 0 to 100 feet. The Patuxent Formation is described as a white or light gray to orange brown, moderately sorted sand unit with quartz gravels, silts and clays and ranges up to 250 feet in thickness.

The Potomac Group has not been subdivided in the vicinity of Martin State Airport nor has the unit's total thickness been well mapped in the area.

Based on lithologic logging of soil borings within the investigation area, the subsurface soils are highly heterogeneous, consisting of gravels, sands, silts, and clays. While some soil zones were consistently observed throughout the project area, generally the soil lithology varied considerably between soil borings. The soils consist of an upper layer of fill materials that overlies native soils of the Potomoc Group. The maximum depth of the logged borings (110 feet below ground surface [bgs]) identified interbedded sands, silts, and clays of the Patapsco Formation

3.2 Hydrogeology

The uppermost water-bearing zone in the region is known as the Patapsco Formation. Available regional well log data indicate that the Patapsco Formation may extend to a depth of approximately 120 feet bgs beneath the site. The Patapsco Formation is underlain by the Arundel Formation, a thick red clay aquiclude. Regional lithologic information indicates that the Arundel Formation is approximately 120 feet thick and serves as the aquiclude overlying the water-bearing Patuxent Formation. Based on this information, the Arundel Formation may extend from 120 to 240 feet bgs at the MSA site.

Based on the physiographic setting as a narrow peninsula, surficial groundwater will tend to flow away from topographic rises and toward open water (i.e., toward Chesapeake Bay). The Patapsco aquifer is recharged directly by rainfall in the unpaved portions of the site. Annual precipitation is approximately 42 to 46 inches.

Groundwater supplies in the Baltimore area are obtained primarily from two separate aquifers: the Patuxent and the Patapsco Formations. The Patuxent is generally the major aquifer utilized;

however, the Patapsco is also used in the Middle River Area where the project site is located (Preliminary Assessment, Maryland Air National Guard Base, July 1988).

A total of thirty eight permanent groundwater monitoring wells were located within the investigation area. All wells were screened in the surficial aquifer system (the Patapsco Formation), but at different elevations to understand conditions across the entire water-bearing zone. For data evaluation and correlation, the aquifer was divided into Upper, Intermediate, and Lower zones. Sixteen of the groundwater monitoring wells (DMW-1S through DMW-11S, and MW-3 through MW-7) are screened in the Upper Surficial Aquifer, which is the portion at elevations above -15 feet mean sea level (msl). Thirteen wells (DMW-1A, DMW-2A, DMW-3I through DMW-11I, MW-1, and MW-2) are screened in the Intermediate Surficial Aquifer, which is the portion at elevations between -15 and -45 feet msl. Nine wells (DMW-1B, DMW-2B, and DMW-3D through DMW-9D) are screened in the Lower Surficial Aquifer, which is the portion at elevations below -45 feet msl.

4.0 DESCRIPTION OF HISTORICAL AREAS OF CONCERN

From 1992 through 1996, the Maryland Aviation Administration (MAA) conducted several investigations at the southeast portion of Martin State Airport[2]. Results of the investigations identified four areas of concern. The locations of the four areas of concern are shown in Figure 2 included in Appendix A, and are described as follows:

1) *Taxiway Tango Median Anomaly Area* – After removal of four buried drums in 1991, a geophysical survey was conducted throughout the area adjacent to Taxiway Tango. Several anomalous zones were identified as potentially containing buried metal.

2) *Drum Area* – During a previous investigation conducted at the site in 1996, several drums were uncovered during surface vegetation clearing.

3) *Two Existing Ponds* – Based on historical records, acids may have been discharged during the 1950's and 1960's at the locations where two ponds currently exist.

4) *Petroleum Hydrocarbon Area* – During a previous investigation conducted at the site in 1996, petroleum hydrocarbons were encountered while drilling a soil boring. The petroleum hydrocarbon area is located approximately 200 feet west of the ponds.

[2] The previous investigations included the following: (1) Geophysical Survey of Taxiway Tango (Handex 2/92), (2) Preliminary Site Investigation of Taxiway Tango (MES 5/94), (3) Confirmation Investigation of Taxiway Tango (MES 1/95), and (4) Expanded Investigation of Taxiway Tango (MES 7/96).

5.0 SITE HISTORY

This section provides a brief chronological history of investigation activities that have been conducted at the site by Lockheed Martin Corporation:

- **March 1999: Initial Groundwater Monitoring Well Sampling** – The first evaluation of the site by Lockheed Martin was performed in March 1999 and consisted of sampling six existing groundwater monitoring wells to obtain updated chemical data on groundwater quality, groundwater elevation, and flow direction at the southeast portion of Martin State Airport. Cis-1,2-Dichloroethene, Trichloroethene (TCE) and vinyl chloride were detected in select monitoring wells above the Maximum Contaminant Level (MCL) specified by the U.S. EPA's National Primary Drinking Water Regulations. A detailed description of the groundwater sampling program is provided in the Final Groundwater Monitoring Well Surveying and Sampling Report, dated May 18, 1999. Based on the detection of elevated VOCs in the existing monitoring wells, further investigation of the site to identify potential chemical source areas was initiated.

- **March 2000: Source Identification and Assessment Program** – The second investigation was identified as a Source Identification and Assessment Program and was performed from March through May 2000. Four specific areas were previously identified by MAA as having the potential to have released chemicals. Each of these areas of potential concern was investigated through a combination of excavations, localized trenching, drilling of soil borings, and sampling and laboratory analysis of soil, sediments, and groundwater. VOCs, petroleum hydrocarbons, and metals were detected in the soil and groundwater during this investigation. Only one VOC (*vinyl chloride*) was detected above the EPA Region III industrial soil risk-based concentrations used by MDE. Selected VOCs were also detected in the groundwater above their MCLs. The results of the investigation activities are documented in the Final Source Identification and Assessment Report, dated September 29, 2000. Results of the source identification and assessment program identified VOCs in excess of published cleanup criteria, therefore delineation of chemicals in the groundwater was initiated.

- **December 2001 through December 2002: Partial Chemical Delineation and Initial Modeling** – The third investigation was performed from December 2001 through December 2002 to further delineate the lateral extent of chemicals in the near surface groundwater at the four source areas of concern. In addition, deep multi-level monitoring wells were installed at two locations to characterize the site geology and vertical extent of groundwater impacts. The deep wells were installed where the highest concentrations of TCE and vinyl chloride were detected in the shallow groundwater investigation. A summary of the activities performed during this investigation program is provided below and documented in the Final Chemical Delineation and Groundwater Modeling Report, dated December 27, 2002.

  Based on the data collected during the groundwater investigation, VOCs *(primarily cis-1,2-dichloroethene, TCE, and vinyl chloride*) and metals *(primarily cadmium)* were detected in the groundwater above their MCLs throughout the investigation area. The lateral and vertical distribution of chemicals in groundwater had not been delineated during this phase of the investigation.

- **July 2003 through March 2004: Data Gap Investigation and Groundwater Modeling** – The fourth investigation was performed from July 2003 through March 2004 to fully delineate and characterize the chemical plumes at the site and perform groundwater modeling. Nine additional multi-level monitoring wells (DMW-3 through DMW-11), three shallow wells (DMW-1S, DMW-2S, and MW-7), and four temporary wells (TT-11 through TT-14) were installed at the site. The lateral and vertical distributions of chemical concentrations in groundwater indicate that three potential source areas are present at the site contributing to three primary groundwater plumes. These source areas and plumes are:

  1) Plume 1, originating from the Drum Area
  2) Plume 2, originating from the Petroleum Hydrocarbon and Pond #1 Area
  3) Plume 3, originating from the Taxiway Tango median area

  Three chlorinated VOCs (*cis-1,2-dichloroethene, TCE, and vinyl chloride*) and one metal *(cadmium)* were reported at the highest concentrations during this investigation. The distribution of VOCs in groundwater suggests that dechlorination of TCE to its daughter

products cis-1,2-DCE and vinyl chloride is occurring. The plumes are migrating along the down-gradient groundwater flow path from west to east toward Frog Mortar Creek. While the three plumes represent the primary source areas, the chemicals have commingled, particularly at areas approaching Frog Mortar Creek, to form larger groundwater plumes. This data gap investigation program adequately completed the vertical and lateral delineation of the existing groundwater chemical plumes.

Site-specific information was used to develop a conceptual model, including regional setting, soil lithology, aquifer characteristics, and historical and current chemical concentration data. Numerical modeling was conducted to predict the groundwater flow and chemical migration in the investigation area. The modeling results will be used in future risk assessments, and remedial feasibility studies. A summary of the investigation and modeling effort is documented in the Final Data Gap Investigation and Modeling Report, dated May 2004.

6.0 MONITORING OBJECTIVES

In accordance with MDE's letter dated November 22, 2002, quarterly groundwater sampling was initiated at the site. Quarterly monitoring has been initiated to track and evaluate chemical trends in the groundwater and potential migration of the plumes. The baseline sampling event (September 2003) and first quarter (December 2003) of monitoring consisted of sampling the 10 existing wells (MW-1 through MW-6, multi-level wells DMW-1 and DMW-2), 28 newly installed permanent wells (DMW-1S, DMW-2S, DMW-3 through DMW-11, and MW-7), and 4 temporary wells (TT-11 through TT-14). The second quarter (March 2004) of monitoring consisted of sampling the 10 existing wells, and 28 newly installed permanent wells. The 4 temporary wells were not sampled and scheduled for abandonment[2].

[2] The temporary wells (TT-11 through TT-14) were used for a maximum of two groundwater sampling events (baseline sampling in September 2003 and first quarter of groundwater sampling in December 2003), and not intended for long-term monitoring. In accordance with the Final Data Gap and Hydrogeologic Work Plan (Tetra Tech, May 2003), the temporary wells will be scheduled for abandonment.

7.0 GROUNDWATER MONITORING PROCEDURES

Groundwater Level Measurements

Water levels in the monitoring wells were measured using a water level meter consisting of a liquid sensor attached to a measuring tape that was lowered down into the well until water was encountered. A buzzer sounded when the probe reached groundwater and the depth was read from the tape relative to the top of the well casing. Water level measurements for each well were recorded on field data logging sheets. The water level measurement data is presented in Tables B-1 and B-2 – *see Appendix B.*

Well Purging and Sampling

Prior to collecting the groundwater samples, purging was conducted using a low-flow method intended to comply with USEPA Region III's recommended procedure for low-flow purging and sampling of groundwater monitoring wells (USEPA, 1999). Purging was conducted using dedicated bladder pumps for the thirty eight permanent wells. During well purging, groundwater parameters including water temperature, pH, conductivity, dissolved oxygen, and turbidity were measured using a field water quality monitoring system. Stabilization of these parameters served as an indication of water representative of the formation, and their values were recorded on field data logging sheets – *see Appendix C.*

After parameter stabilization was achieved, groundwater samples were collected. Groundwater samples were collected directly from the tubing into sample containers provided by the analytical laboratory. Water samples were placed in a cooler with ice pending shipment to a State-Certified laboratory for analysis.

Laboratory Analysis

Groundwater samples were collected from a total of thirty eight permanent wells at the site – *see Figure 3 in Appendix A.* A State of Maryland certified laboratory analyzed the groundwater samples collected. All samples were analyzed for VOCs using EPA Method 8260B, and total and dissolved priority pollutant metals using EPA Method 6020A. Samples analyzed for dissolved

metals were filtered in the field using a disposable filter. In addition, samples collected from two wells (DMW-3S, and DMW-9S) were also analyzed for SVOCs using EPA Method 8270C[4]. A completed Chain-of-Custody form accompanied each shipment of samples to the laboratory to insure accountability for the samples from the time of collection to the time they were analyzed.

Bio-parameters consisting of nitrate, sulfate, and iron (III) were also analyzed at selected deep well locations (DMW-1B, DMW-2B, DMW-4D, and DMW-8D). Nitrate and sulfate was analyzed using EPA Method 300.0, and iron (III) was analyzed by EPA Method 6020.

8.0 PRIMARY CHEMICALS OF CONCERN

Based on the data collected during the well sampling, VOCs, dissolved metals, and SVOCs were detected in the groundwater above the MDE groundwater cleanup standards. A summary of the distribution of chemicals detected above the MDE standards within each groundwater zone is presented in Table 8-1.

Table 8-1
Summary of Chemicals Detected in Groundwater Above MDE Cleanup Standards

Surficial Aquifer	VOCs	Dissolved Metals	SVOCs
Upper	Benzene; Carbon Tetrachloride; Chlorobenzene; Chloroform; 1,1-DCA; 1,2-DCA; 1,1-DCE; cis-1,2-DCE; trans-1,2-DCE; Ethylbenzene; Naphthalene; 1,1,2,2-Tetrachloroethane; PCE; Toluene; 1,1,1-TCA; 1,1,2-TCA, TCE; Vinyl Chloride; Xylenes	Beryllium Cadmium Nickel Selenium	2,4-Dimethylphenol Naphthalene
Intermediate	Benzene; Carbon Tetrachloride; Chlorobenzene; Chloroform; 1,2-DCA; 1,1-DCE; cis-1,2-DCE; Naphthalene; PCE; Toluene; 1,2,4-Trichlorobenzene; TCE; Vinyl Chloride; Xylenes	Beryllium Cadmium Chromium Nickel	NA
Lower	Benzene; Chloroform; 1,2-DCA; 1,1-DCE; cis-1,2-DCE; TCE; Vinyl Chloride	Cadmium	NA

NA – Not Analyzed

[4] In accordance with the Final Data Gap and Hydrogeologic Work Plan (Tetra Tech, May 2003), all wells were also analyzed for SVOCs and pesticides in the September 2003 baseline sampling event. In the wells where SVOCs and pesticides were not detected during the baseline sampling, these parameters were not included in subsequent sampling events. In the December 2003 sampling event, SVOCs were only detected in two wells above the practical quantitation limit, therefore these wells were also sampled for SVOCs in March 2004.

Three primary chlorinated VOCs (cis-1,2-DCE, TCE, and vinyl chloride) were reported at the highest concentrations and frequency of any VOCs detected during the sampling event. The three primary chlorinated VOCs were detected throughout the investigation area with the highest concentrations in the upper and intermediate surficial groundwater. A detailed discussion and depiction of the primary VOC plumes within the three groundwater zones is presented in Section 10. Dissolved Cadmium was detected at the highest concentration of any metal above its MDE cleanup standard and was generally found west of the Petroleum Hydrocarbon and Pond #1 Area. Most samples containing metals above MDE cleanup standards were co-located with the chlorinated VOCs.

9.0 GROUNDWATER ANALYTICAL RESULTS

The analytical results for the groundwater samples collected at the site were compared to the appropriate MDE groundwater cleanup standards. A summary of all detected VOCs, dissolved and total priority pollutant metals, and SVOCs is included in Table B-3 – *see Appendix B.* The laboratory analytical data reports are included in Appendix D. A summary of results for the four chemicals of concern (cis-1,2-DCE, TCE, vinyl chloride, and dissolved cadmium) detected within each groundwater zone is discussed below.

COC Results in the Upper Surficial Aquifer

A total of sixteen permanent wells installed in the upper surficial aquifer were sampled for VOCs and metals. A summary of the four chemicals of concern detected in the upper surficial aquifer exceeding MDE groundwater cleanup standards is presented in Table 9-1.

Table 9-1
COCs Detected Above MDE Cleanup Standards in the Upper Surficial Aquifer

Monitoring Well	COC Detected	Concentration (µg/L)	MDE Standard (µg/L)
DMW-1S	Vinyl Chloride	31	2
DMW-2S	Cadmium	200	5
	cis-1,2-Dichloroethene	910	70
	Trichloroethene	3,600	5
	Vinyl Chloride	170	2
DMW-3S	cis-1,2-Dichloroethene	3,800	70
	Trichloroethene	76	5
	Vinyl Chloride	7,700	2
DMW-4S	cis-1,2-Dichloroethene	190	70
	Trichloroethene	3,300	5
	Vinyl Chloride	57	2
DMW-5S	cis-1,2-Dichloroethene	1,900	70
	Trichloroethene	11,000	5
	Vinyl Chloride	42	2
DMW-6S	*No COC Detected Above Standards*	NA	NA
DMW-7S	Cadmium	12	5
	cis-1,2-Dichloroethene	29,000	70
	Trichloroethene	45,000	5
	Vinyl Chloride	190	2
DMW-8S	*No COC Detected Above Standards*	NA	NA
DMW-9S	cis-1,2-Dichloroethene	37,000	70
	Trichloroethene	2,000	5
	Vinyl Chloride	20,000	2
DMW-10S	Vinyl Chloride	93	2
DMW-11S	cis-1,2-Dichloroethene	E53,000	70
	Trichloroethene	E52,000	5
	Vinyl Chloride	2,400	2
MW-3	cis-1,2-Dichloroethene	100	70
	Trichloroethene	110	5
MW-4	Cadmium	8.7	5
MW-5	Cadmium	6.8	5
	cis-1,2-Dichloroethene	E120,000	70
	Trichloroethene	31,000	5
	Vinyl Chloride	E350	2
MW-6	*No COC Detected Above Standards*	NA	NA
MW-7	*No COC Detected Above Standards*	NA	NA

NA – Not Applicable
E – Estimated Value, Exceeds Calibration Range

As shown in Table 9-1, COCs exceeding MDE standards were detected in twelve of the sixteen wells in the upper surficial aquifer. The VOC detected at the highest concentration was cis-1,2-DCE at a maximum concentration of 120,000 µg/L in well MW-5 located near the Drum Area. Dissolved cadmium was detected in only four wells with the highest concentration of 200 µg/L reported in well DMW-2S.

COC Results in the Intermediate Surficial Aquifer

A total of thirteen wells installed in the intermediate surficial aquifer were sampled for VOCs and metals. A summary of the four chemicals of concern detected in the intermediate surficial aquifer exceeding MDE groundwater standards is presented in Table 9-2.

Table 9-2
COCs Detected Above MDE Cleanup Standards in the Intermediate Surficial Aquifer

Monitoring Well	COC Detected	Concentration (µg/L)	MDE Standard (µg/L)
DMW-1A	Cadmium	790	5
	cis-1,2-Dichloroethene	12,000	70
	Trichloroethene	9,000	5
	Vinyl Chloride	8,500	2
DMW-2A	Cadmium	760	5
	cis-1,2-Dichloroethene	7,600	70
	Trichloroethene	E51,000	5
	Vinyl Chloride	910	2
DMW-3I	Cadmium	250	5
	cis-1,2-Dichloroethene	14,000	70
	Trichloroethene	16,000	5
	Vinyl Chloride	E3,400	2
DMW-4I	cis-1,2-Dichloroethene	1,300	70
	Trichloroethene	12,000	5
	Vinyl Chloride	100	2
DMW-5I	cis-1,2-Dichloroethene	120	70
	Trichloroethene	460	5
DMW-6I	*No COC Detected Above Standards*	NA	NA
DMW-7I	cis-1,2-Dichloroethene	140	70
	Trichloroethene	E220	5
	Vinyl Chloride	19	2
DMW-8I	Cadmium	86	5
	cis-1,2-Dichloroethene	500	70
	Trichloroethene	1,200	5
	Vinyl Chloride	83	2
DMW-9I	cis-1,2-Dichloroethene	19,000	70
	Trichloroethene	1,900	5
	Vinyl Chloride	6,400	2
DMW-10I	Trichloroethene	480	5
DMW-11I	*No COC Detected Above Standards*	NA	NA
MW-1	Trichloroethene	100	5
MW-2	*No COC Detected Above Standards*	NA	NA

NA – Not Applicable
E – Estimated Value, Exceeds Calibration Range

As shown in Table 9-2, COCs exceeding MDE standards were detected in ten of the thirteen wells in the intermediate surficial aquifer. The VOC detected at the highest concentration was TCE at a maximum concentration of 51,000 µg/L in well DMW-2A. Dissolved cadmium was only detected in four wells with the highest concentration of 790 µg/L reported in well DMW-1A.

COC Results in the Lower Surficial Aquifer

A total of nine wells installed in the lower surficial aquifer were sampled for VOCs. A summary of the four chemicals of concern detected in the lower surficial aquifer exceeding MDE groundwater cleanup standards is presented in Table 9-3.

Table 9-3
COCs Detected Above MDE Cleanup Standards in the Lower Surficial Aquifer

Monitoring Well	COC Detected	Concentration (µg/L)	MDE Standard (µg/L)
DMW-1B	Cadmium	86	5
	cis-1,2-Dichloroethene	6,700	70
	Trichloroethene	E250	5
	Vinyl Chloride	8,500	2
DMW-2B	Trichloroethene	13	5
DMW-3D	*No COC Detected Above Standards*	NA	NA
DMW-4D	Cadmium	14	5
	cis-1,2-Dichloroethene	E210	70
	Trichloroethene	8,400	5
	Vinyl Chloride	19	2
DMW-5D	*No COC Detected Above Standards*	NA	NA
DMW-6D	*No COC Detected Above Standards*	NA	NA
DMW-7D	*No COC Detected Above Standards*	NA	NA
DMW-8D	cis-1,2-Dichloroethene	140	70
	Trichloroethene	150	5
	Vinyl Chloride	62	2
DMW-9D	cis-1,2-Dichloroethene	760	70
	Trichloroethene	6,300	5

NA – Not Applicable
E – Estimated Value, Exceeds Calibration Range

As shown in Table 9-3, VOCs exceeding MDE cleanup standards were detected in five of the nine wells in the lower surficial aquifer. The VOC detected at the highest concentration was Vinyl Chloride at a maximum concentration of 8,500 µg/L in well DMW-1B. Dissolved cadmium was only detected in two wells with the highest concentration of 86 µg/L also reported in well DMW-1B.

Bio-Parameter Results in the Surficial Aquifer

Bio-parameters consisting of ferric iron, nitrate, and sulfate were analyzed at four deep well locations. A summary of the bio-parameter data is presented in Table 9-4.

Table 9-4
Summary of Bio-Parameter Data for Selected Deep Monitoring Wells

Bio-Parameters (mg/L)	Monitoring Well			
	DMW-1B	DMW-2B	DMW-4D	DMW-8D
Ferric Iron (Fe^{3+})	1.2	1.7	2.6	ND
Nitrate	ND	ND	ND	ND
Total Sulfate	489	3.9	450	71

Additional bio-parameter data may be collected during successive groundwater quarterly monitoring events to support remedial action plan development. Following collection of additional bio-parameter data, a comprehensive evaluation will be incorporated into the remedial action plan.

10.0 DATA EVALUATION

10.1 Evaluation of Groundwater Flow Data

Groundwater flow direction in the surficial aquifer is northeast toward Frog Mortar Creek. Horizontal groundwater gradients were calculated at 0.003 in the Upper Surficial Aquifer, 0.002 in Intermediate Surficial Aquifer, and 0.0018 in the Lower Surficial Aquifer. Vertical groundwater gradients range from 0.001 to 0.006. Figures 4 through 6 in Appendix A are groundwater elevation (head) contours for the Upper Surficial Aquifer, Intermediate Surficial Aquifer and Lower Surficial Aquifer, respectively. Groundwater contours are based on field measurements taken in March 2004. Table B-2 in Appendix B lists well groups and groundwater data used for contouring upper, intermediate and lower surficial groundwater. Some well groundwater elevation data were not used because of unusually high groundwater elevations that suggest isolated mounding. The groundwater flow patterns are consistent with the baseline data and December 2003 monitoring data.

10.2 Evaluation of Groundwater Chemical Data

The analytical data from the March 2004 monitoring event is generally consistent with the baseline sampling data and December 2003 monitoring event. This sampling event confirmed that TCE, cis-1,2-DCE, vinyl chloride, and dissolved cadmium are the primary chemicals of concern.

For each of these chemicals, depth-specific maps have been prepared to depict the distribution of chemicals of concern in the Upper, Intermediate, and Lower Surficial Aquifers (see Figures 7 through 18). Tables B-4a, B-4b, and B-4c in Appendix B summarize the concentrations of the chemicals of concern used to generate the iso-concentrations maps in each aquifer. Further description of the individual plumes is presented below.

Drum Area – Plume No. 1

Similar to the December 2003 data, TCE and cis-1,2-DCE concentrations greater than 10,000 µg/L were reported in the Upper Surficial Aquifer monitoring well samples down-gradient of the drum area – *see Figures 7, 10, and 13*. VOC concentrations were detected in the Intermediate Surficial Aquifer, but at much lower concentrations than in the Upper Surficial Aquifer. During this sampling round, the three primary VOC concentrations decreased in down-gradient well DMW-7I. Little to no VOC concentrations were detected in the Lower Surficial Aquifer at down-gradient wells DMW-5D and DMW-7D, which is consistent with the December 2003 monitoring data. The maximum concentration detected was 2 µg/L for TCE in DMW-5D. The areal extent of the VOC plume remained essentially unchanged compared to the December 2003 monitoring event.

As shown in Figure 16, a cadmium plume in the Upper Surficial Aquifer is located around the Drum Area. Cadmium was detected at a maximum concentration of 12 µg/L in a sample collected from well DMW-7S in the Upper Surficial Aquifer. No samples reported cadmium in the Intermediate Surficial Aquifer. In addition, all samples collected from the Lower Surficial Aquifer reported non-detectable concentrations of cadmium, which is consistent with the December 2003 monitoring data.

Petroleum Hydrocarbon and Pond #1 Area – Plume No. 2

The areal extent of the VOC plume remained essentially unchanged compared to the December 2003 monitoring event. Individual VOC concentrations (cis-1,2-DCE, vinyl chloride) were reported above 10,000 µg/L in Upper Surficial Aquifer monitoring well sample from DMW-9S located down-gradient of the Petroleum Hydrocarbon Area, which is consistent with the previous monitoring data. Two orders-of-magnitude decrease was noted in DMW-2S (from 12,000 µg/L to 170 µg/L). VOC concentrations above 10,000 µg/L were also detected in the Intermediate Surficial Aquifer (maximum 51,000 µg/L for TCE in DMW-2A). The maximum concentration

detected in the Lower Surficial Aquifer was 6,300 µg/L for TCE in DMW-9D. However, down-gradient location DMW-3D reported non-detectable VOC concentrations similar to the previous monitoring data. Generally, VOC concentrations in the Intermediate and Lower Surficial Aquifers were fairly consistent with the previous December 2003 data.

Cadmium was detected in one sample collected in the Upper Surficial Aquifer at down-gradient well DMW-2S at 200 µg/L, which represents an increase from the previous non-detectable concentration. Elevated cadmium concentrations were identified in the Intermediate Surficial Aquifer at down-gradient wells DMW-2A and DMW-3I. The maximum cadmium concentration detected was 760 µg/L in DMW-2A, which is consistent with the previous December 2003 monitoring data. The overall areal extent of the cadmium plume remained unchanged in the Intermediate Surficial Aquifer.

Taxiway Tango Area – Plume No. 3

The VOC contours show that two distinct releases have occurred: one near DMW-11 and one at DMW-1A/B. DMW-11S, located within the median area, reported TCE and cis-1,2-DCE concentrations above 10,000 µg/L. DMW-1A, located east of Taxiway Tango and screened in the Intermediate Surficial Aquifer, reported cis-1,2-DCE at 12,000 µg/L. VOC concentrations in both wells are similar to the December 2003 monitoring data. In the Lower Surficial Aquifer, the maximum concentration detected was 8,500 µg/L for vinyl chloride in DMW-1B. The areal extent of the VOC plume has essentially remained unchanged compared to the previous monitoring event.

As shown in Figures 16, 17, and 18, a cadmium plume is located down-gradient of the Taxiway Tango Area. The highest cadmium concentrations were detected in the Intermediate Surficial Aquifer, with a maximum concentration of 790 µg/L detected in DMW-1A. Overall, the cadmium concentrations and plume shape remained unchanged compared to the December 2003 monitoring event.

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APPENDIX A

FIGURES

FIGURE 8
TCE IN THE INTERMEDIATE SURFICIAL AQUIFER
(MARCH 2004)



FIGURE 9
TCE IN THE LOWER SURFICIAL AQUIFER
(MARCH 2004)

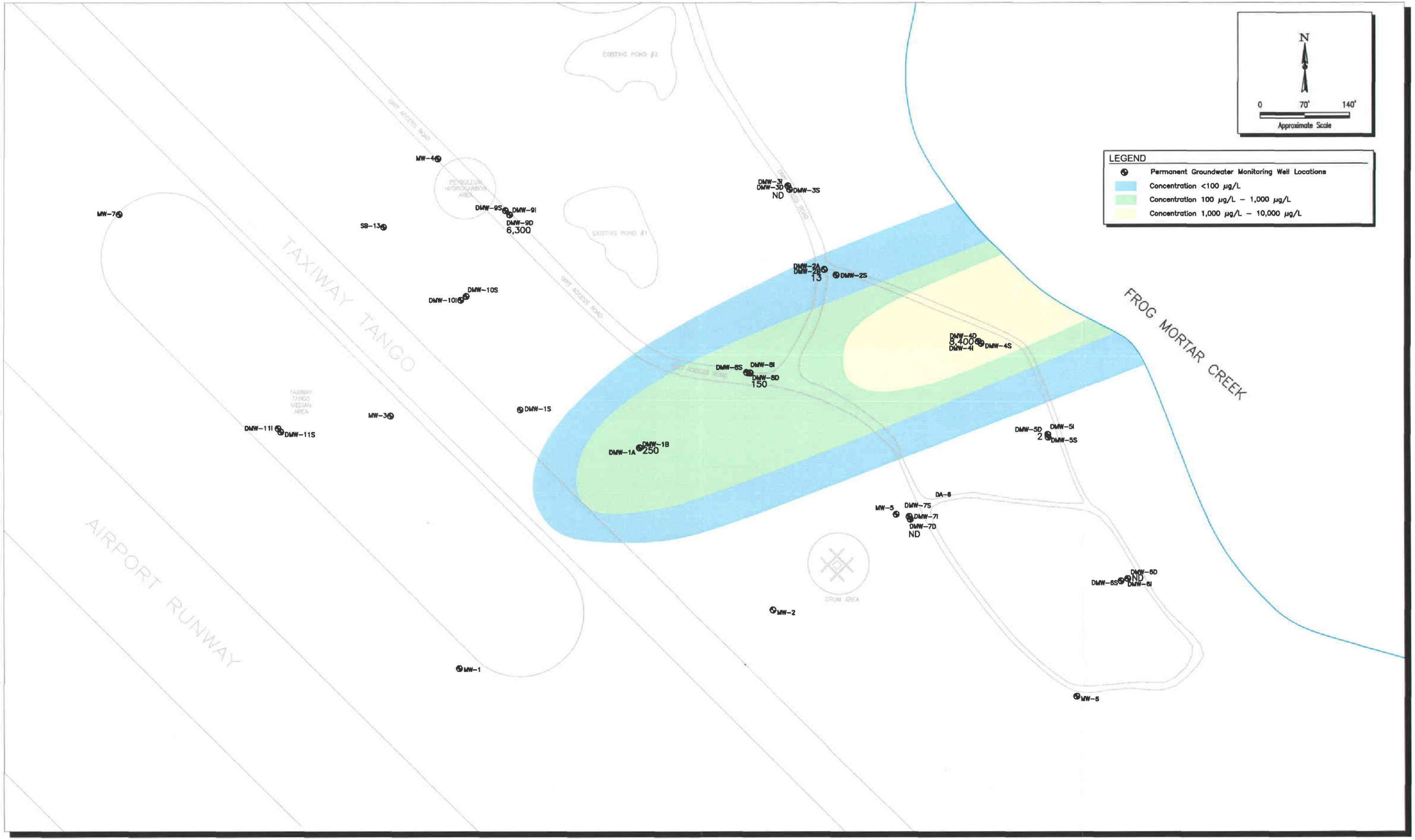


FIGURE 10
cis-1,2-DCE IN THE UPPER SURFICIAL AQUIFER
(MARCH 2004)

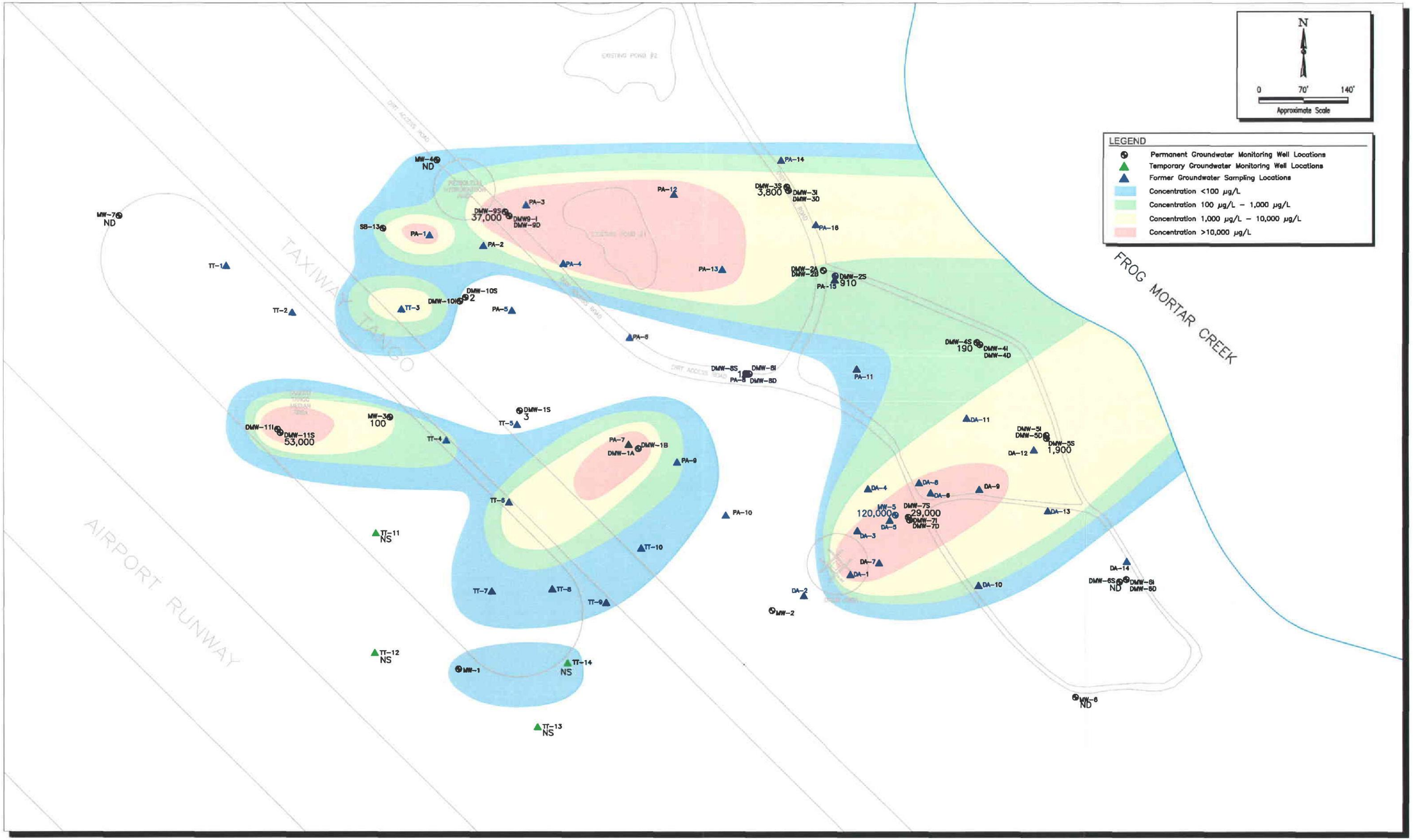


FIGURE 11
cis-1,2-DCE IN THE INTERMEDIATE SURFICIAL AQUIFER
(MARCH 2004)



FIGURE 12
cis-1,2-DCE IN THE LOWER SURFICIAL AQUIFER
(MARCH 2004)

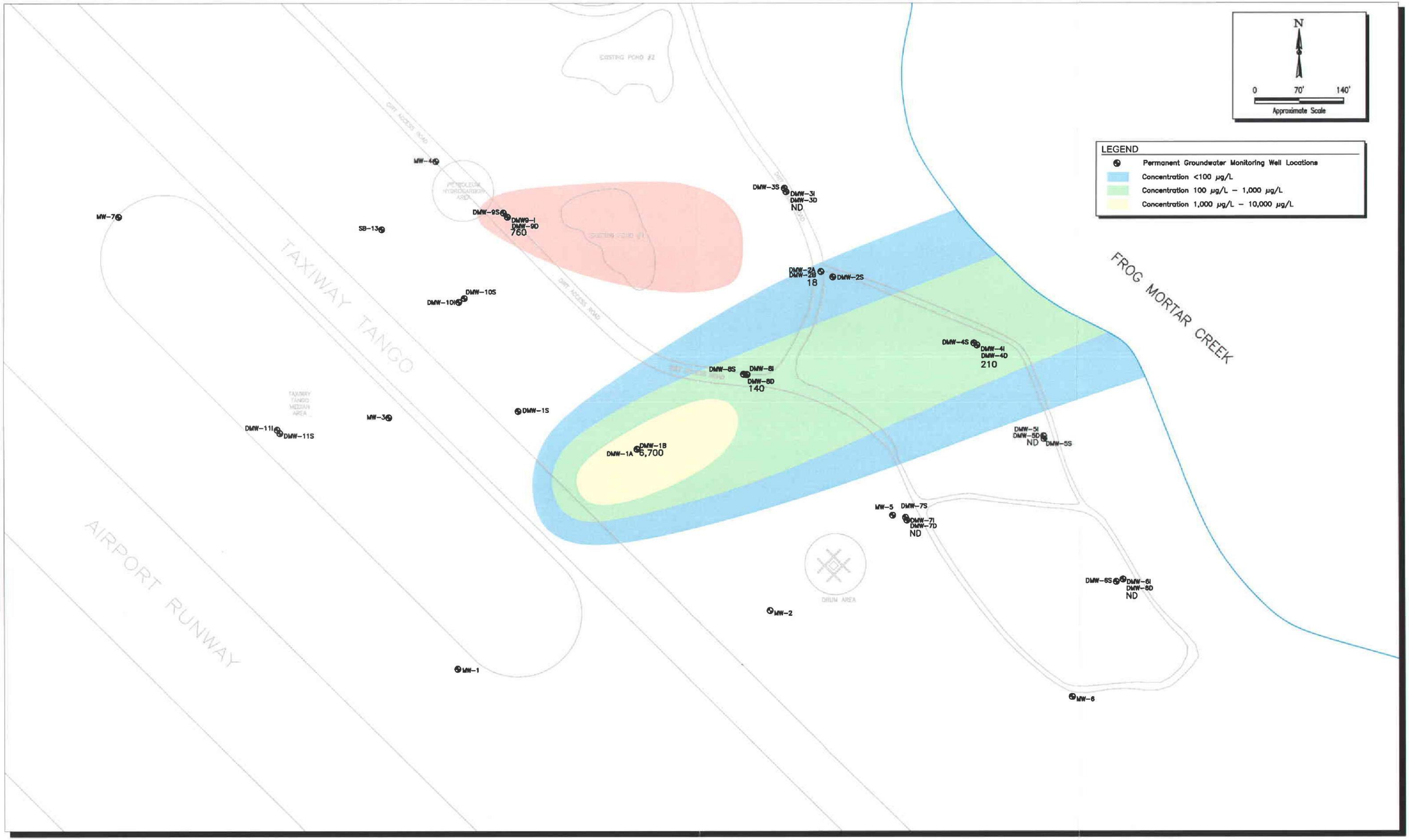


FIGURE 13
VINYL CHLORIDE IN THE UPPER SURFICIAL AQUIFER
(MARCH 2004)

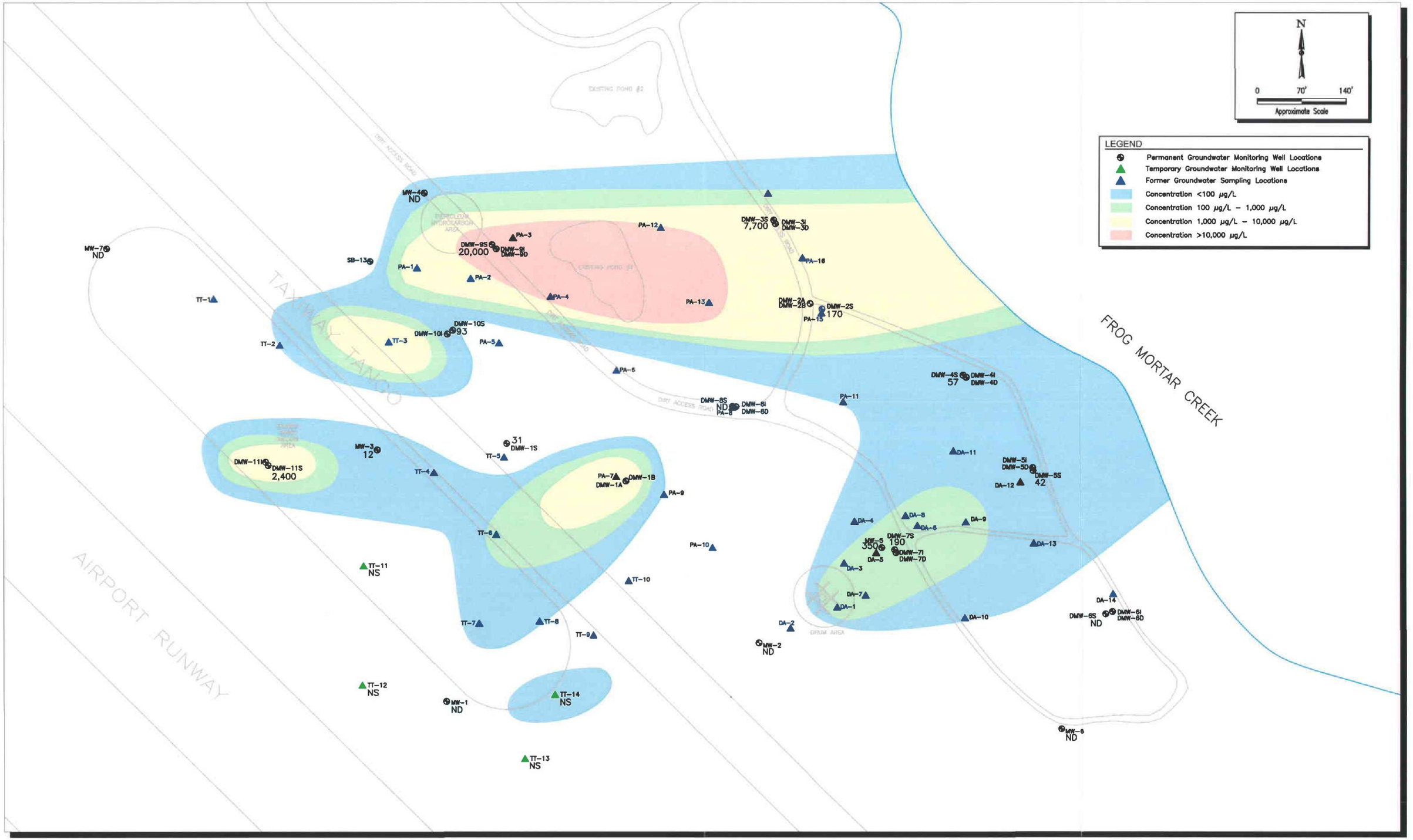


FIGURE 14
VINYL CHLORIDE IN THE INTERMEDIATE SURFICIAL AQUIFER
(MARCH 2004)



FIGURE 15
VINYL CHLORIDE IN THE LOWER SURFICIAL AQUIFER
(MARCH 2004)



FIGURE 16
DISSOLVED CADMIUM IN THE UPPER SURFICIAL AQUIFER
(MARCH 2004)

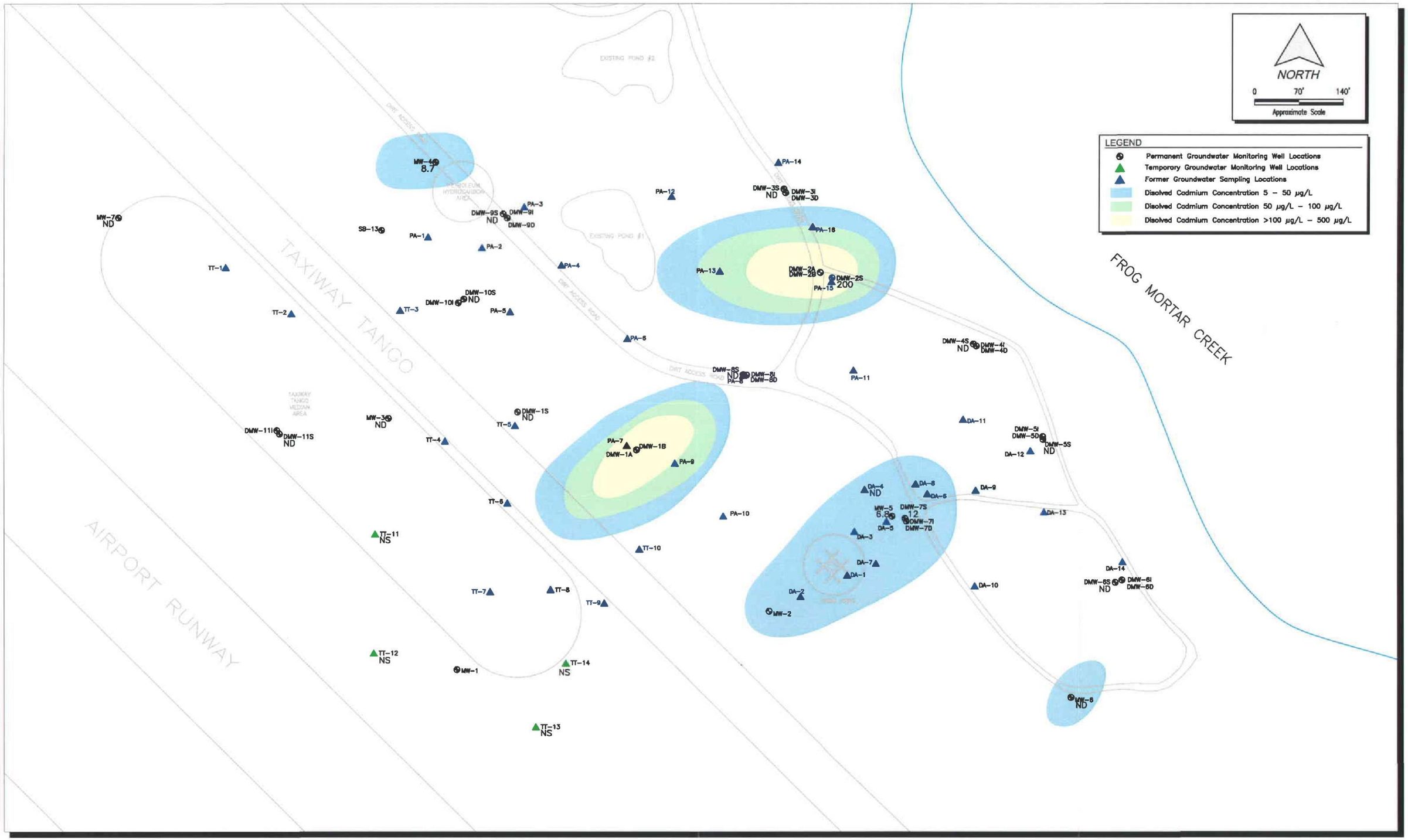


FIGURE 17
DISSOLVED CADMIUM IN THE INTERMEDIATE SURFICIAL AQUIFER
(MARCH 2004)

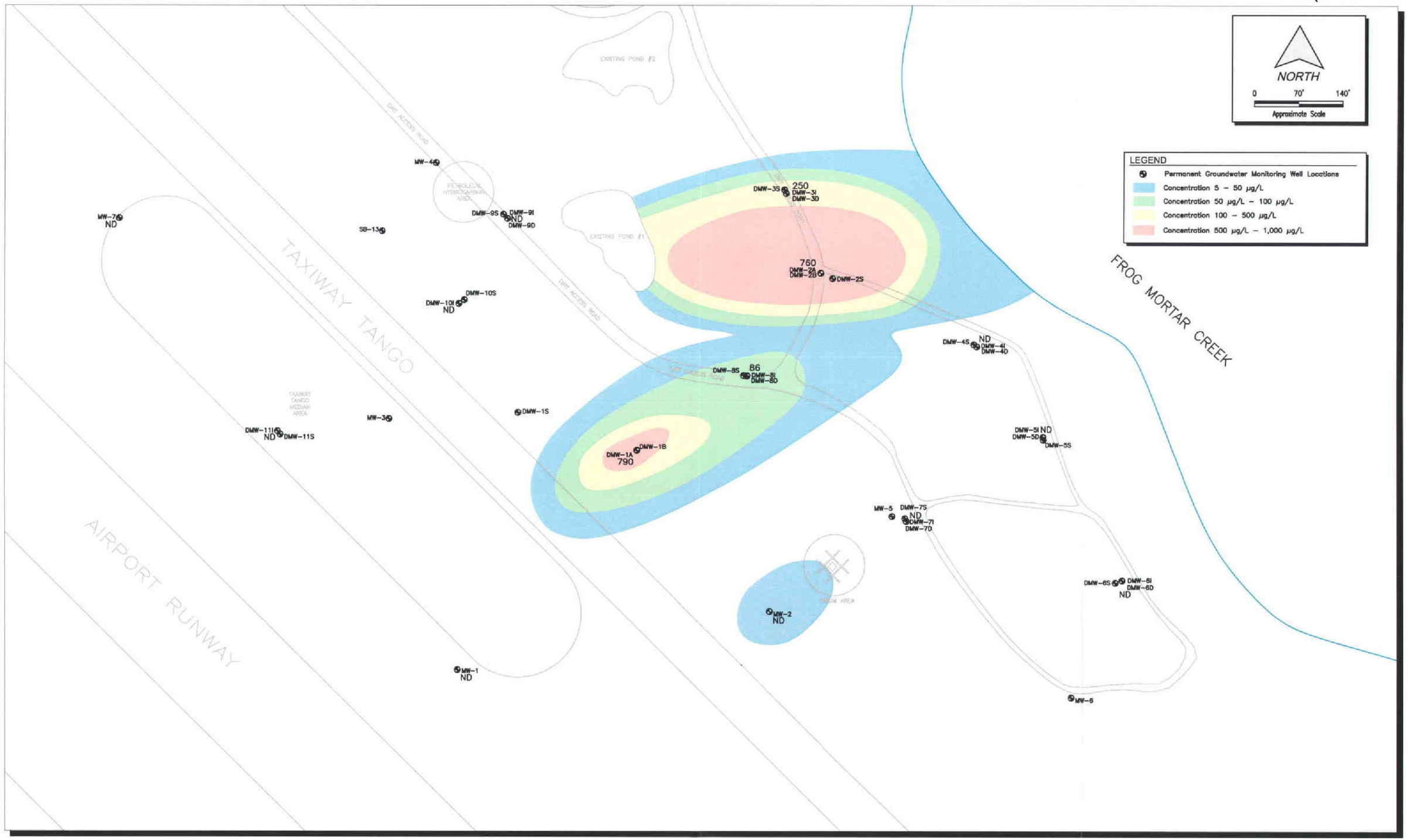
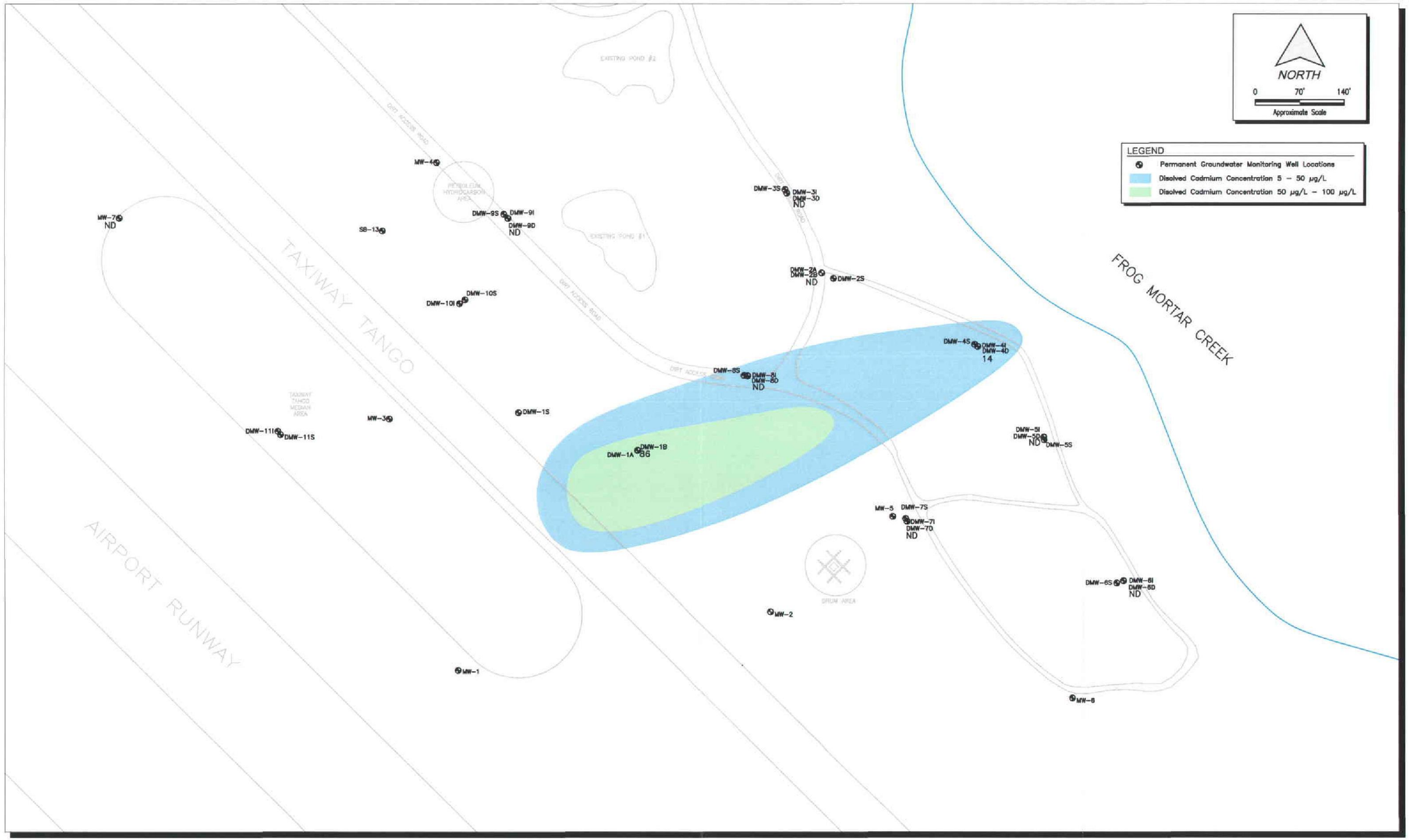


FIGURE18
DISSOLVED CADMIUM IN THE LOWER SURFICIAL AQUIFER
(MARCH2004)



APPENDIX B

TABLES

Table B-1
Summary of Groundwater Elevation Data
(Based on Field Measurements 3/22/2004)

Well ID	Well Screen Elevation (feet) msl	TOC Elevation (feet) msl	TOC to Groundwater (feet)	Groundwater Elevation (feet) msl
DMW-1S	3.33 to -6.67	11.99	8.12	3.87
DMW-1A	-34 to -44	13.02	9.35	3.67
DMW-1B	-72 to -77	13.01	9.66	3.35
DMW-2S	2.35 to -7.65	22.95	20.85	2.10
DMW-2A	-30 to -40	22.71	20.25	2.46
DMW-2B	-65 to -75	22.70	20.05	2.65
DMW-3S	0.65 to -9.35	17.61	10.4	7.21
DMW-3I	-30.73 to -40.73	17.53	15.29	2.24
DMW-3D	-57.71 to -67.71	17.55	15.31	2.24
DMW-4S	1.58 to -8.42	21.53	19.71	1.82
DMW-4I	-25.16 to -35.16	21.47	19.00	2.47
DMW-4D	-49.04 to -59.04	21.48	19.74	1.74
DMW-5S	1.96 to -8.04	22.41	20.36	2.05
DMW-5I	-23.96 to -33.96	22.49	20.25	2.24
DMW-5D	-48.56 to -58.56	22.49	20.3	2.19
DMW-6S	4.29 to -5.71	19.83	17.5	2.33
DMW-6I	-21.62 to -31.62	19.68	17.63	2.05
DMW-6D	-40.40 to -50.40	19.65	17.37	2.28
DMW-7S	3.02 to -6.98	22.79	20.32	2.47
DMW-7I	-21.11 to -31.11	23.00	20.60	2.40
DMW-7D	-46.20 to -56.20	22.95	20.47	2.48
DMW-8S	6.94 to -3.06	16.89	12.78	4.11
DMW-8I	-17.85 to -27.85	17.19	14.40	2.79
DMW-8D	-42.47 to -52.47	17.23	14.82	2.41
DMW-9S	3.04 to -6.96	12.49	9.00	3.49
DMW-9I	-22.21 to -32.21	12.49	9.00	3.49
DMW-9D	-47.71 to -57.71	12.49	9.35	3.14
DMW-10S	0.49 to -9.51	11.17	7.35	3.82
DMW-10I	-24.27 to -34.27	11.09	7.35	3.74
DMW-11S	0.17 to -9.83	10.18	4.02	6.16
DMW-11I	-20.46 to -30.46	10.10	5.90	4.20
MW-1	-24 to -34	10.69	6.93	3.76
MW-2	-22 to -32	9.38	6.30	3.08
MW-3	-7 to -17	12.18	8.2	3.98
MW-4	7 to -20	11.39	7.28	4.11
MW-5	6 to -14	23.77	21.2	2.57
MW-6	3 to -17	16.79	13.90	2.89
MW-7	0.14 to -10.14	11.92	6.42	5.50

TOC – Top of Casing

Table B-2
Groundwater Contour Data
(Based on Field Measurements 3/22/2004)

Upper Surficial Aquifer		Intermediate Surficial Aquifer		Lower Surficial Aquifer	
Well ID	**Groundwater Elevation (feet) msl**	**Well ID**	**Groundwater Elevation (feet) msl**	**Well ID**	**Groundwater Elevation (feet) msl**
DMW-1S	3.87	**DMW-1A**	3.67	**DMW-1B**	3.35
DMW-2S	2.10	**DMW-2A**	2.46	**DMW-2B**	2.65
DMW-3S	7.21*	**DMW-3I**	2.24	**DMW-3D**	2.24
DMW-4S	1.82	**DMW-4I**	2.47	**DMW-4D**	1.74
DMW-5S	2.05	**DMW-5I**	2.24	**DMW-5D**	2.19
DMW-6S	2.33	**DMW-6I**	2.05	**DMW-6D**	2.28
DMW-7S	2.47	**DMW-7I**	2.40	**DMW-7D**	2.48
DMW-8S	4.11*	**DMW-8I**	2.79	**DMW-8D**	2.41
DMW-9S	3.49	**DMW-9I**	3.49	**DMW-9D**	3.14
DMW-10S	3.82	**DMW-10I**	3.74		
DMW-11S	6.16*	**DMW-11I**	4.20		
MW-3	3.98	**MW-1**	3.76		
MW-4	4.11	**MW-2**	3.08		
MW-5	2.57				
MW-6	2.89				
MW-7	5.50				

*Data not used to in generation of groundwater contours

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-1S	**Benzene: 36** **Chlorobenzene: 980** cis-1,2-Dichloroethene: 3 Ethylbenzene: 1 Isopropylbenzene: 3 Toluene: 1 **Vinyl Chloride: 31**	As: 5.4 Cr: 8.3 Cu: 7.5	As: 5.5 Cr: 13 Cu:13 Pb: 18	NA
DMW-1A	**Benzene: 31** Carbon Tetrachloride: 1 Chlorobenzene: 7 Chloroform: 7 1,2-Dichlorobenzene: 1 **1,1-Dichloroethene: 20** **cis-1,2-Dichloroethene: 12,000** trans-1,2-Dichloroethene: 38 Ethylbenzene: 1 Methylene Chloride: b 160 Tetrachloroethene: 5 Toluene: 150 1,2,3-Trichlorobenzene: 2 1,2,4-Trichlorobenzene: 13 **Trichloroethene: 9,000** 1,2,4-Trimethylbenzene: 2 **Vinyl Chloride: 8,500** m&p-Xylene: 6 o-Xylene: 8	As: 8.3 **Cd: 790** **Cr: 200** Cu: 13 **Ni: 82** Zn: 300	As: 11 Cd: 840 Cr: 430 Cu: 18 Hg: 2.1 Ni: 110 Zn: 310	NA
DMW-1B	**Benzene: 41** Chlorobenzene: 7 Chloroform: 3 **1,1-Dichloroethene: 9** **cis-1,2-Dichloroethene: 6,700** trans-1,2-Dichloroethene: 8 Methylene Chloride: b 5 Tetrachloroethene: 1 Toluene: 8 1,2,4-Trichlorobenzene: 2 **Trichloroethene: E 250** **Vinyl Chloride: 8,500** o-Xylene: 7	As: 15 **Cd: 86** Cr: 19 Cu: 9.5 Ni: 24 Zn: 130	As: 17 Cd: 110 Cr: 47 Cu: 16 Ni: 37 Zn: 160	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-2S	Benzene: 4 Carbon Tetrachloride: 2 Chloroform: 7 **1,2-Dichloroethane: 16** **cis-1,2-Dichloroethene: 910** trans-1,2-Dichloroethene: 5 Methylene Chloride: b 16 Tetrachloroethene: 4 1,2,4-Trichlorobenzene: 4 1,1,2-Trichloroethane: 1 Toluene: 1 **Trichloroethene: 3,600** **Vinyl Chloride: 170**	**Cd: 200** Cu: 97 Pb: 11 **Ni: 82** Se: 16 Zn: 310	Cd: 220 Cu: 120 Pb: 10 Ni: 98 Se: 18 Zn: 290	NA
DMW-2A	**Benzene: 57** **Chlorobenzene: 17** **Chloroform: 170** 1,2-Dichlorobenzene: 13 **1,2-Dichloroethane: 310** **1,1-Dichloroethene: 78** **cis-1,2-Dichloroethene: 7,600** trans-1,2-Dichloroethene: 45 Ethylbenzene: 36 Methylene Chloride: b230 **Naphthalene: 15** **Tetrachloroethene: 100** Toluene: 960 1,2,3 -Trichlorobenzene: 260 **1,2,4-Trichlorobenzene: 1,600** **Trichloroethene: E 51,000** 1,2,4-Trimethylbenzene: 75 1,3,5-Trimethylbenzene: 27 **Vinyl Chloride: 910** m&p-Xylene: 160 o-Xylene: 68	**Cd: 760** Cr: 8.1 Cu: 40 **Ni: 120** Se: 12 Zn: 540	Cd: 870 Cr: 18 Cu: 210 Pb: 8.6 Ni: 150 Se: 14 Zn: 550	NA
DMW-2B	cis-1,2-Dichloroethene: 18 **Trichloroethene: 13**	Cu: 7.6 Pb: 5.4 Ni: 6.0	Cd: 13 Cr: 170 Cu: 86 Pb: 70 Ni: 57 Zn: 190	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-3S	**Benzene: 22** **cis-1,2-Dichloroethene: 3,800** **trans-1,2-Dichloroethene: 790** Ethylbenzene: 12 **Naphthalene: 27** Toluene: 80 1,2,3-Trichlorobenzene: 21 1,2,4-Trichlorobenzene: 68 **Trichloroethene: 76** **Vinyl Chloride: 7,700**	As: 27 Cu: 85 Se: 13	As: 24 Cu: 58 Se: 24	ND
DMW-3I	**Benzene: 77** **Chloroform: 200** **1,2-Dichloroethane: 300** **1,1-Dichloroethene: 84** **cis-1,2-Dichloroethene: 14,000** trans-1,2-Dichloroethene: 91 Ethylbenzene: 33 Methylene Chloride: b 32 **Tetrachloroethene: 56** Toluene: 280 1,2,3 -Trichlorobenzene: 180 **1,2,4-Trichlorobenzene: 1,200** **Trichloroethene: 16,000** **Vinyl Chloride: E 3,400** m&p-Xylene: 110 o-Xylene: 44	**Cd: 250** Cr: 6.9 Cu: 19 Ni: 62 Se: 7.0 Zn: 310	Cd: 350 Cr: 5.7 Cu: 39 Ni: 72 Se: 7.8 Zn: 310	NA
DMW-3D	ND	Ni: 55 Zn: 140	Cr: 5.1 Cu:23 Ni: 65 Zn: 200	NA
DMW-4S	Benzene: 2 1,1-Dichloroethane: 9 **1,2-Dichloroethane: 22** **1,1-Dichloroethene: 32** **cis-1,2-Dichloroethene: 190** trans-1,2-Dichloroethene: 4 Tetrachloroethene: 3 1,1,2-Trichloroethane: 2 **Trichloroethene: 3,300** **Vinyl Chloride: 57**	Cu: 10 Ni: 27 Se: 6.9 Zn: 120	Cr: 340 Cu: 18 Ni: 35 Se: 8.5 Zn: 120	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-4I	1,1-Dichloroethane: 40 **1,2-Dichloroethane: 20** **1,1-Dichloroethene: 98** **cis-1,2-Dichloroethene: 1,300** trans-1,2-Dichloroethene: 18 **Trichloroethene: 12,000** **Vinyl Chloride: 100**	Cr: 12 Cu: 7.2 Ni: 55 Se: 27 Zn: 180	Be: 7.1 Cd: 50 Cr: 54 Cu: 20 Ni: 72 Pb: 15 Se: 35 Zn: 380	NA
DMW-4D	Benzene: 1 Carbon Tetrachloride: 1 Chloroform: 2 1,1-Dichloroethane: 6 **1,2-Dichloroethane: 8** **1,1-Dichloroethene: 14** **cis-1,2-Dichloroethene: E 210** trans-1,2-Dichloroethene: 6 Methylene Chloride: b 13 Tetrachloroethene: 3 **Trichloroethene: 8,400** 1,2,4-Trimethylbenzene: 1 1,3,5-Trimethylbenzene: 2 **Vinyl Chloride: 19**	**Cd: 14** Cr: 5.4 Cu: 44 Ni: 65 Se: 14 Zn: 240	Cd:14 Cr: 13 Cu: 57 Ni: 83 Se: 25 Zn: 240	NA
DMW-5S	**1,2-Dichloroethane: 13** **cis-1,2-Dichloroethene: 1,900** trans-1,2-Dichloroethene: 21 Methylene Chloride: b 12 **Tetrachloroethene: 19** **Trichloroethene: 11,000** **Vinyl Chloride: 42**	Cr: 13 Cu: 9.1 Ni: 52 Se: 21 Zn:190	Be: 5.1 Cr: 250 Cu:17 Ni: 52 Se:30 Zn: 180	NA NA
DMW-5I	**cis-1,2-Dichloroethene: 120** **Trichloroethene: 460**	Cr: 12 Cu: 5.7 Ni: 36 Se: 14 Zn:110	Cr: 27 Cu:15 Ni: 45 Se: 19 Zn:140	NA
DMW-5D	Trichloroethene: 2	ND	Cr: 6.7	NA
DMW-6S	ND	As: 7.1 Cr: 18	As: 6.1	NA
DMW-6I	ND	**Be: 16** Cr: 9.8 Cu: 79 **Ni: 100** Se: 7.4 Zn: 530	As: 9.2 Be: 16 Cd: 130 Cr: 37 Cu: 480 Pb: 53 Ni: 180 Se: 8.2 Zn: 1,500	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-6D	ND	Ni: 25 Zn:100	Cr: 81 Cu: 12 Ni: 36 Zn: 120	NA
DMW-7S	**Benzene: 40** sec-Butylbenzene: 13 Chlorobenzene: 3 Chloroform: 15 **1,1-Dichloroethane: E 600** **1,1-Dichloroethene: E 990** **cis-1,2-Dichloroethene: 29,000** **trans-1,2-Dichloroethene: E 430** Ethylbenzene: 150 Isopropylbenzene: 15 Methylene Chloride: E b 390 4-Methyl-2-Pentnone: 21 **Naphthalene: 24** n-Propylbenzene: 36 **Tetrachloroethene: 39** **Toluene: 2,500** 1,2,3-Trichlorobenzene: 2 1,2,4-Trichlorobenzene: 8 **1,1,1-Trichloroethane: E 2,000** **1,1,2-Trichloroethane: 23** **Trichloroethene: 45,000** 1,2,4-Trimethylbenzene: E 300 1,3,5-Trimethylbenzene: 87 **Vinyl Chloride: 190** m&p-Xylene: 330 o-Xylene: 140	**Be: 6.1** **Cd: 12** Cu: 110 Pb: 6.6 **Ni: 78** Se: 36 Zn: 220	Be: 7.2 Cd: 12 Cu: 99 Pb: 7.4 Ni: 85 Se: 55 Zn: 230	NA
DMW-7I	Chlorobenzene: 2 1,2-Dichloroethane: 2 **cis-1,2-Dichloroethene: 140** trans-1,2-Dichloroethene: 6 1,2,4-Trichlorobenzene: 2 **Trichloroethene: E 220** **Vinyl Chloride: 19**	**Be: 5.6** Cr: 18 Pb: 5.1 Ni: 72 Se: 15 Zn: 270	Be: 6.6 Cd: 28 Cr: 20 Cu: 69 Pb: 100 Ni: 77 Se: 19 Zn: 290	NA
DMW-7D	ND	ND	Cu: 15 Pb: 17 Zn: 56	NA
DMW-8S	cis-1,2-Dichloroethene: 1	Ni: 22 Zn: 80	Cr: 130 Cu: 8.0 Ni: 26 Zn: 81	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-8I	Benzene: 2 Chloroform: 3 **1,2-Dichloroethane: 7** 1,1-Dichloroethene: 3 **cis-1,2-Dichloroethene: 500** trans-1,2-Dichloroethene: 3 Methylene Chloride: b 31 Toluene: 2 **Trichloroethene: 1,200** **Vinyl Chloride: 83**	**Be: 9.0** **Cd: 86** Cr: 88 Cu: 48 Pb: 11 **Ni: 140** Se: 31 Zn: 380	Be: 11 Cd: 93 **Cr: 930** Cu: 60 Pb: 14 Ni: 150 Se: 39 Zn: 370	NA
DMW-8D	Benzene: 1 1,1-Dichloroethene: 4 **cis-1,2-Dichloroethene: 140** Methylene Chloride: b 2 **Trichloroethene: 150** **Vinyl Chloride: 62**	Ni: 23 Zn: 110	Cd: 14 Cu: 5.4 Ni: 35 Zn: 130	NA
DMW-9S	**Benzene: 710** **Chloroform: 360** **1,1-Dichloroethene: 220** **cis-1,2-Dichloroethene: 37,000** **trans-1,2-Dichloroethene: 140** **Ethylbenzene: 3,200** **Toluene: 8,600** **1,1,2-Trichloroethane: 130** **Trichloroethene: 2,000** 1,2,4-Trimethylbenzene: 240 1,3,5-Trimethylbenzene: 240 **Vinyl Chloride: 20,000** **m&p-Xylene: 17,000** o-Xylene: 4,300	As: 5.1 Cu: 8.1	Cu: 16	**2,4 -Dimethylphenol: 76** **Naphthalene: 20**
DMW-9I	**Benzene: 110** **Chlorobenzene: 84** Chloroform: 68 **1,1-Dichloroethene: 57** **cis-1,2-Dichloroethene: 19,000** trans-1,2-Dichloroethene: 61 Ethylbenzene: 200 Isopropylbenzene: 15 **Naphthalene: 18** n-Propylbenzene: 10 Toluene: 77 1,2,4-Trichlorobenzene: 11 **Trichloroethene: 1,900** 1,2,4-Trimethylbenzene: 130 1,3,5-Trimethylbenzene: 59 **Vinyl Chloride: 6,400** m&p-Xylene: 590 o-Xylene: 45	Cr: 5.3 Cu: 8.1 Pb: 5.3	As: 11 Cr: 52 Cu: 79 Pb: 100 Ni: 31 Zn: 360	NA

Table B-3
Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
DMW-9D	**Chloroform: 540** **cis-1,2-Dichloroethene: 760** Methylene Chloride: b 120 **Trichloroethene: 6,300**	ND	As: 6.7 Cr: 11 Cu: 14 Pb: 17 Ni: 32 Zn: 140	NA
DMW-10S	Benzene: 3 trans-1,2-Dichloroethene: 2 **Vinyl Chloride: 93**	As:17	As: 22 Cu: 15 Zn: 110 Cr: 100 Pb: 5.6	NA
DMW-10I	**Carbon Tetrachloride: 150** Chloroform: 19 cis-1,2-Dichloroethene: 23 Methylene Chloride: b3 1,1,2-Trichloroethane: 3 **Trichloroethene: 480**	ND	ND	NA
DMW-11S	**Benzene: 17** **Carbon Tetrachloride: 130** **Chloroform: 2,300** **1,1-Dichloroethene: 84** **cis-1,2-Dichloroethene: E 53,000** **trans-1,2-Dichloroethene: 170** Ethylbenzene: 7 Isopropylbenzene: 1 Methylene Chloride: b 14 Naphthalene: 3 n-Propylbenzene: 1 **1,1,2,2-Tetrachloroethane: 12** **Tetrachloroethene: 12** Toluene: 840 **1,1,2-Trichloroethane: 53** **Trichloroethene: E 52,000** 1,2,4-Trimethylbenzene: 10 1,3,5-Trimethylbenzene: 3 **Vinyl Chloride: 2,400** m&p-Xylene: 20 o-Xylene: 18	Zn: 93	Cu:16 Zn: 96	NA
DMW-11I	cis-1,2-Dichloroethene: 4 Trichloroethene: 2	ND	Cu: 7.0 Hg: 2.5	NA
MW-1	**Trichloroethene: 100**	ND	Cu: 6.1	NA
MW-2	ND	Zn: 150	Cr: 300 Zn: 150	NA
MW-3	**cis-1,2-Dichloroethene: 100** **Trichloroethene: 110**	Zn: 63	Zn: 71	NA

Table B-3

Summary of Chemical Analytical Results from Monitoring Wells (March 2004)

Well Number	Results of Chemical Analyses			
	VOCs (ug/L)	Dissolved Metals (ug/L)	Total Metals (ug/L)	SVOCs (ug/L)
MW-4	cis-1,2-Dichloroethene: 1	**Cd: 8.7** Cu: 11 Zn: 700	Sb:29 Cd: 42 Cr: 8.2 Cu: 250 Pb: 68 Ni: 36 Zn: 1,800	NA
DMW-5	**Benzene: 85** Chlorobenzene: 6 **1,1-Dichloroethane: E 510** **1,2-Dichloroethane: 270** **1,1-Dichloroethene: E 950** **cis-1,2-Dichloroethene: E 120,000** **trans-1,2-Dichloroethene: E 1,100** Ethylbenzene:E 240 Isopropylbenzene: 12 Methylene Chloride: E b 500 4-Methyl-2-Pentnone: 14 **Naphthalene: 33** n-Propylbenzene: 28 **Tetrachloroethene: 28** **Toluene: 4,100** **1,1,1-Trichloroethane: E 840** **1,1,2-Trichloroethane: 16** **Trichloroethene: 31,000** 1,2,4-Trimethylbenzene: E 220 1,3,5-Trimethylbenzene: 59 **Vinyl Chloride: E 350** m&p-Xylene: 300 o-Xylene: 110	**Be: 6.8** **Cd: 6.8** Cr: 21 Cu: 150 Pb: 7.1 **Ni: 120** **Se: 64** Zn: 230	Be: 7.7 Cd: 7.0 Cr: 83 Cu: 140 Pb: 8.2 Ni: 130 Se: 110 Zn: 220	NA
MW-6	ND	Zn: 92	Cu: 6.0 Zn: 100	NA
MW-7	Acetone: 11	Cr: 32 Zn: 100	Cr: 22 Cu: 30 Se: 5.4 Zn: 87	NA

ND = Not Detected at a Concentration Greater Than the Practical Quantitation Limit (PQL)

Bold Font = Chemicals and Dissolved Metals Detected Above MDE Groundwater Cleanup Standards

E = Estimated Value, Exceeds Calibration Range

b = Found in the Method Blank

VOCs Were Not Detected in 4 of the 5 Trip Blanks.

One VOC (TCE) Was Detected in Only One Trip Blank, However It Was Qualified As a Suspected Instrument Carry-Over From Sample DMW-2A.

Table B-4a

Summary of Chemicals of Concern in the Upper Surficial Aquifer

Upper Surficial Aquifer				
Well ID	**TCE (µg/L)**	**cis-1,2-DCE (µg/L)**	**Vinyl Chloride (µg/L)**	**Dissolved Cadmium (µg/L)**
DMW-1S	ND	3	31	ND
DMW-2S	3,600	910	170	200
DMW-3S	76	3,800	7,700	ND
DMW-4S	3,300	190	57	ND
DMW-5S	11,000	1,900	42	ND
DMW-6S	ND	ND	ND	ND
DMW-7S	45,000	29,000	190	12
DMW-8S	ND	1	ND	ND
DMW-9S	2,000	37,000	20,000	ND
DMW-10S	ND	ND	93	ND
DMW-11S	52,000	53,000	2,400	ND
MW-3	110	100	ND	ND
MW-4	ND	1	ND	8.7
MW-5	31,000	120,000	350	6.8
MW-6	ND	ND	ND	ND
MW-7	ND	ND	ND	ND

Table B-4b

Summary of Chemicals of Concern in the Intermediate Surficial Aquifer

Intermediate Surficial Aquifer				
Well ID	**TCE (µg/L)**	**cis-1,2-DCE (µg/L)**	**Vinyl Chloride (µg/L)**	**Dissolved Cadmium (µg/L)**
DMW-1A	9,000	12,000	8,500	790
DMW-2A	51,000	7,600	910	760
DMW-3I	16,000	14,000	3,400	250
DMW-4I	12,000	1,300	100	ND
DMW-5I	460	120	ND	ND
DMW-6I	ND	ND	ND	ND
DMW-7I	220	140	19	ND
DMW-8I	1,200	500	83	86
DMW-9I	1,900	19,000	6,400	ND
DMW-10I	480	23	ND	ND
DMW-11I	2	4	ND	ND
MW-1	100	ND	ND	ND
MW-2	ND	ND	ND	ND

Table B-4c
Summary of Chemicals of Concern in the Lower Surficial

Lower Surficial Aquifer				
Well ID	**TCE (µg/L)**	**cis-1,2-DCE (µg/L)**	**Vinyl Chloride (µg/L)**	**Dissolved Cadmium (µg/L)**
DMW-1B	250	6,700	8,500	86
DMW-2B	13	18	ND	ND
DMW-3D	ND	ND	ND	ND
DMW-4D	8,400	210	19	14
DMW-5D	2	ND	ND	ND
DMW-6D	ND	ND	ND	ND
DMW-7D	ND	ND	ND	ND
DMW-8D	150	140	62	ND
DMW-9D	6,300	760	ND	ND

APPENDIX C

GROUNDWATER SAMPLE LOGS

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-7D-031704
Sample Location: DMW-7D
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/10/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/17/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0934	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Clear	6.14	0.135	11.09	25	0.85	34.4	—

PURGE DATA:

Date: 3/17/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			SEE	Low Flow	Purge			
Total Well Depth (TD): 81.81'			Data	Sheet				
Static Water Level (WL): 20.47'								
One Casing Volume (gal/L): 10.01								
Start Purge (hrs): 0810								
End Purge (hrs): 0934								
Total Purge Time (min): 84								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

81.81
−20.47
61.34 × (2)² × 0.0408 = 10.01 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Mark C. Ly III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 / Φ677D
WELL ID.: DMW-7D
DATE: 3/17/Φ4
Cloudy, 38°F, wet.

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. µS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
Φ81Φ	2Φ.47	—	—	—	—	—	—	—	—	INITIAL Reading
Φ824	2Φ.57	27Φ	8.12	115	65	5.Φ8	9.81	66.Φ	N/A	Slightly cloudy
Φ829	2Φ.51	15Φ	6.Φ1	119	55	2.16	1Φ.98	43.1	N/A	Slightly cloudy
Φ834	2Φ.51	15Φ	5.87	116	65	1.63	1Φ.86	54.Φ	N/A	Slightly cloudy
Φ839	2Φ.51	15Φ	5.97	122	95	1.4Φ	1Φ.91	39.5	N/A	Slightly cloudy
Φ844	2Φ.51	15Φ	6.Φ4	124	12Φ	1.28	1Φ.98	31.2	N/A	Slightly Cloudy
Φ849	2Φ.51	15Φ	6.Φ8	133	15Φ	1.17	11.Φ2	27.2	N/A	Slightly Cloudy
Φ854	2Φ.51	15Φ	6.11	135	13Φ	1.Φ8	11.Φ4	26.9	N/A	Slightly Cloudy
Φ859	2Φ.51	15Φ	6.14	137	12Φ	1.Φ2	11.Φ1	25.2	N/A	Slightly cloudy
Φ9Φ4	2Φ.51	15Φ	6.18	14Φ	9Φ	Φ.95	11.Φ5	21.3	N/A	Slightly cloudy
Φ9Φ9	2Φ.51	15Φ	6.19	141	65	Φ.93	11.Φ5	21.7	N/A	Slightly cloudy
Φ914	2Φ.51	15Φ	6.18	14Φ	45	Φ.91	11.Φ4	23.7	N/A	Slightly cloudy
Φ919	2Φ.51	15Φ	6.18	139	3Φ	Φ.9Φ	11.1Φ	25.2	N/A	Slightly cloudy
Φ924	2Φ.51	15Φ	6.17	138	25	Φ.88	11.Φ8	27.5	N/A	clear water
Φ929	2Φ.51	15Φ	6.15	137	25	Φ.87	11.Φ5	3Φ.8	N/A	clear water
Φ934	2Φ.51	15Φ	6.14	135	25	Φ.85	11.Φ9	34.4	N/A	clear water
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING	BEGIN					→

SIGNATURE(S): Thomas C. Smith

2.5 gallons out.

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-7I-031704
Sample Location: DMW-7I
Sampled By: CLL/WP
C.O.C. No.: PSS-Dated 3/18/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/17/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1105	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Clear	4.63	1.613	11.03	10	0.78	97.6	—

PURGE DATA:

Date: 3/17/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC	Sheet FOR WELL		SEE Low Flow	PARAMETERS	Purge Data			
Total Well Depth (TD): 56.81'								
Static Water Level (WL): 20.60'								
One Casing Volume (gal/L): 5.9								
Start Purge (hrs): 0950								
End Purge (hrs): 1105								
Total Purge Time (min): 75								
Total Vol. Purged (gal/L): 3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

56.81
−20.60
$36.21 \times (2)^2 \times 0.0408 = 5.9$ gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-7I
DATE: 3/17/04
cloudy, Flurries, 35°F

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm² (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0950	20.60'	-	-	-	-	-	-	-	-	INITIAL Reading
0955	20.60'	280	3.71	1649	140	2.78	11.05	345.2	N/A	Slightly cloudy water
1000	20.60'	280	4.58	1609	130	1.64	11.82	240.9	N/A	Slightly cloudy water
1005	20.60'	140	4.61	1610	140	1.41	11.40	163.1	N/A	Slightly cloudy water
1010	20.60'	140	4.62	1611	110	1.32	10.91	148.2	N/A	Slightly cloudy water
1015	20.60'	140	4.62	1612	90	1.23	10.83	139.6	N/A	Slightly cloudy water
1020	20.60'	140	4.62	1613	75	1.16	10.84	136.0	N/A	Slightly cloudy water
1025	20.60'	140	4.61	1613	50	1.08	10.84	131.3	N/A	Slightly cloudy water
1030	20.60'	140	4.61	1611	36	1.00	10.83	124.9	N/A	Slightly cloudy water
1035	20.60'	140	4.61	1611	30	0.98	10.80	121.4	N/A	Slightly cloudy water
1040	20.60'	140	4.61	1612	24	0.93	10.75	117.9	N/A	clear water
1045	20.60'	140	4.62	1611	20	0.89	10.84	111.0	N/A	clear water
1050	20.60'	140	4.63	1611	17	0.87	10.80	105.3	N/A	clear water
1055	20.60'	140	4.63	1612	13	0.83	10.99	102.2	N/A	clear water
1100	20.60'	140	4.63	1613	12	0.80	11.00	99.4	N/A	clear water
1105	20.60'	140	4.63	1613	10	0.78	11.03	97.6	N/A	clear water
←				WELL	PARAMETERS	STABILIZE				→
←					SAMPLING BEGINS					→

3.5 gallons Removed

SIGNATURE(S): Charles C. Fry III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-7S-Ø317Ø4
Sample Location: DMW-7S
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/18/Ø4
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 3/17/Ø4								
Time: 12Ø1								
Method: Bladder Pump	Clear	4.36	4.457	11.77	3.6	1.21	247.Ø	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/17/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC			See Low Flow		Purge			
Total Well Depth (TD): 32.16'			Data	Sheet				
Static Water Level (WL): 2Ø.32'								
One Casing Volume (gal/L): 1.93								
Start Purge (hrs): 112Ø								
End Purge (hrs): 12Ø1								
Total Purge Time (min): 41								
Total Vol. Purged (gal/L): 2.Ø								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

32.16
− 20.32
11.84 × (2)² × Ø.Ø4Ø8 = 1.93 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Charles C. [illegible] III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-7S
DATE: 3/17/04
Cloudy, 35°F ; 29.83 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. ~~mS/cm~~ uS/cm	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1120	20.32'	-	-	-	-	-	-	-	-	INITIAL Reading
1125	20.37'	90	4.75	3623	20	3.77	11.40	220.3	N/A	Clear water
1131	20.37'	90	4.81	3680	15	2.68	11.31	217.8	N/A	Clear water
1136	20.37'	90	4.85	3702	16	2.03	11.27	213.6	N/A	Clear water
1141	20.37'	90	4.58	3810	37	1.60	11.55	239.7	N/A	Slightly cloudy water
1146	20.37'	90	4.44	4036	20	1.43	11.79	247.3	N/A	Clear water
1151	20.37'	90	4.38	4296	8.8	1.29	11.89	248.5	N/A	Clear water
1156	20.37'	90	4.36	4427	4.7	1.21	11.86	247.1	N/A	Clear water
1201	20.37'	90	4.36	4457	3.6	1.21	11.77	247.0	N/A	Clear water
≤				WELL PARAMETERS			STABILIZE			
≤					SAMPLING BEGINS					

2.0 gallons out

SIGNATURE(S): Clark C. Tyler III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-5-Ø317Ø4
Sample Location: MW-5
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/18/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/17/Ø4	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1458								
Method: Bladder Pump	Slightly Cloudy	4.54	6.462	11.Ø7	27	1.15	21Ø.3	—

PURGE DATA:

Date: 3/17/Ø4	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 4" PVC			SEE	Low Flow				
Total Well Depth (TD): 46.86'		Purge	Data	Sheet				
Static Water Level (WL): 21.2Ø'								
One Casing Volume (gal/L): 4.18								
Start Purge (hrs): 141Ø								
End Purge (hrs): 1458								
Total Purge Time (min): 48								
Total Vol. Purged (gal/L): 2.Ø								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
SVOCs (8270C)	Ice	1 - 1 L Amber	1

OBSERVATIONS / NOTES:

46.86
-21.20
25.66 × (4)² × Ø.Ø4Ø8 = 4.18 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D

WELL ID.: MW-5
DATE: 3/17/04
Cloudy, 38°F; 29.76 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm² (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1410	21.20'	–	–	–	–	–	–	–	–	INITIAL Readings
1413	21.42'	270	4.10	6370	29	6.08	10.60	285.7	N/A	Slightly cloudy water
1418	21.55'	210	4.50	6446	75	2.66	11.42	228.0	N/A	Slightly cloudy water
1423	21.57'	150	4.53	6460	95	1.90	11.31	222.2	N/A	Slightly cloudy water
1428	21.57'	150	4.53	6457	85	1.68	11.09	217.4	N/A	Slightly cloudy water
1433	21.57'	150	4.53	6458	75	1.52	11.16	216.7	N/A	Slightly cloudy water
1438	21.57'	150	4.53	6460	50	1.41	11.09	214.0	N/A	Slightly cloudy water
1443	21.57'	150	4.53	6459	39	1.32	11.06	213.0	N/A	Slightly cloudy water
1448	21.57'	150	4.53	6458	29	1.25	11.14	211.8	N/A	Slightly cloudy water
1453	21.57'	150	4.53	6459	28	1.20	11.13	210.9	N/A	Slightly cloudy water
1458	21.57'	150	4.54	6462	27	1.15	11.07	210.3	N/A	Slightly cloudy water
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING		BEGINS				→

SIGNATURE(S): [signature] III

SVOCs collected Here
2.0 gallons out

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-8S-Ø317Ø4
Sample Location: DMW-8S
Sampled By: CCL/WP
C.O.C. No.: PSS - Dated 3/18/Ø4
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 3/17/Ø4								
Time: 1641								
Method: Bladder Pump	Clear	5.49	1.2Ø5	9.52	18	Ø.63	124.8	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/17/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 22.61'		SEE	Low	Flow				
Static Water Level (WL): 12.78'		Purge	Data	Sheet				
One Casing Volume (gal/L): 1.6								
Start Purge (hrs): 153Ø								
End Purge (hrs): 1641								
Total Purge Time (min): 71								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

22.61
−12.78
9.83 × (2)² × Ø.Ø4Ø8 = 1.6 gallons

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-8S
DATE: 3/17/04
Cloudy, Sleet, 34°F; 29.79 IN Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1530	12.78'	—	—	—	—	—	—	—	—	INITIAL Reading
1536	13.05'	140	6.02	1330	50	8.95	7.73	126.9	N/A	Slightly cloudy water
1541	13.21'	140	5.94	1253	300	4.58	9.01	81.3	N/A	cloudy water
1546	13.28'	150	5.73	1209	400	2.67	9.18	98.0	N/A	cloudy water
1551	13.30'	150	5.62	1185	390	1.74	9.26	111.8	N/A	cloudy water
1556	13.33'	150	5.56	1178	280	1.27	9.32	121.3	N/A	cloudy water
1601	13.37'	150	5.54	1184	150	1.05	9.39	125.3	N/A	cloudy water
1606	13.37'	150	5.53	1191	110	0.92	9.36	127.5	N/A	Slightly cloudy water
1611	13.39'	150	5.51	1198	70	0.84	9.40	128.9	N/A	Slightly cloudy water
1616	13.41'	150	5.51	1201	50	0.79	9.42	130.2	N/A	Slightly cloudy water
1621	13.42'	150	5.50	1204	34	0.73	9.44	131.0	N/A	Slightly cloudy water
1626	13.42'	150	5.50	1205	28	0.70	9.47	130.7	N/A	Clear water
1631	13.42'	150	5.50	1206	22	0.67	9.49	129.3	N/A	Clear water
1636	13.42'	150	5.49	1205	20	0.65	9.52	127.0	N/A	Clear water
1641	13.42'	150	5.49	1205	18	0.63	9.52	124.8	N/A	Clear water
←				WELL	PARAMETERS		STABILIZE			→
←					SAMPLING	BEGINS				→

SIGNATURE(S): Charles C. Ayy III

2.5 Gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-8I-031804
Sample Location: DMW-8I
Sampled By: CCC/WP
C.O.C. No.: PSS-Dated 3/18/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/18/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0833	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Slightly Cloudy	4.20	1.534	18.05	45	1.18	331.8	—

PURGE DATA:

Date: 3/18/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			SEE	LOW FLOW				
Total Well Depth (TD): 47.96'			PURGE DATA SHEET					
Static Water Level (WL): 14.40'								
One Casing Volume (gal/L): 5.47								
Start Purge (hrs): 0800								
End Purge (hrs): 0833								
Total Purge Time (min): 33								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

47.96
−14.40
33.56 × (2)² × 0.0408 ≈ 5.47 gallons

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Charles C. Pugh III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 /Φ677D
WELL ID.: DMW-8I
DATE: 3/18/Φ4
Partly cloudy, 40°F, 30.10 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
ΦΦΦΦ	14.4Φ'	—	—	—	—	—	—	—	—	INITIAL Reading
Φ8Φ3	14.4Φ'	24Φ	3.79	1543	34	7.Φ9	8.88	446.Φ	N/A	Slightly cloudy water
Φ8Φ8	14.4Φ'	14Φ	4.62	1541	85	3.42	1Φ.26	296.2	N/A	Slightly cloudy water
Φ813	14.4Φ'	14Φ	4.48	1553	7Φ	2.49	1Φ.Φ7	268.7	N/A	Slightly cloudy water
Φ818	14.4Φ'	14Φ	4.35	1548	5Φ	1.96	9.92	297.9	N/A	Slightly cloudy water
Φ823	14.4Φ'	14Φ	4.26	1542	4Φ	1.55	9.97	317.6	N/A	Slightly cloudy water
Φ828	14.4Φ'	14Φ	4.23	1537	4Φ	1.32	1Φ.Φ1	327.8	N/A	Slightly cloudy water
Φ833	14.4Φ'	14Φ	4.2Φ	1534	45	1.18	1Φ.Φ5	331.8	N/A	Slightly cloudy water
↓				WELL	PARAMETERS		STABILIZE			→
↓				SAMP	LING	BEGINS				→

SIGNATURE(S): Charles C. Smith III

1.5 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-2B-030404
Sample Location: DMW-2B
Sampled By: CCL/WP
C.O.C. No.: PSS - Dated 3/18/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/18/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1110	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Cloudy	5.95	0.075	12.17	>999	1.62	238.6	—

PURGE DATA:

Date: 3/18/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC			SEE	LOW FLOW				
Total Well Depth (TD): 95.16'		PURGE	DATA	SHEET				
Static Water Level (WL): 20.05'								
One Casing Volume (gal/L): 12.25								
Start Purge (hrs): 0910								
End Purge (hrs): 1110								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 6.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
Nitrate & Sulfate (300)	Ice	1 - 250 mL Poly	1
Iron III (6020)	HCL	2 - 40 mL VOAs	2
Iron III (6020)	HNO_3	1 - 250 mL Poly	1
SVOCs (8270C)	ICE	1 - 1L Amber	1

OBSERVATIONS / NOTES:

95.16
-20.05
75.11 x(2)^2 x 0.0408 = 12.25 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Walt C. Pyle III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MARTIN STATE AIRPORT
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-2B
DATE: 3/18/04
cloudy, 40°F, 30.04 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm mS/cm	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0910	20.05'	-	-	-	-	-	-	-	-	INITIAL READING
0920	20.48'	200	6.60	109	>999	9.67	8.16	229.4	N/A	cloudy water
0925	20.60'	200	7.25	98	>999	4.10	10.85	199.7	N/A	cloudy water
0930	20.66'	200	7.01	106	>999	2.77	11.40	183.3	N/A	cloudy water
0940	20.65'	200	6.69	117	>999	2.06	11.83	131.7	N/A	cloudy water
0950	20.65'	200	6.58	109	>999	2.10	12.08	160.9	N/A	cloudy water
1000	20.65'	200	6.41	94	>999	1.89	12.06	188.9	N/A	cloudy water
1010	20.65'	200	6.24	81	>999	1.76	12.20	207.1	N/A	cloudy water
1020	20.65'	200	6.14	76	>999	1.68	12.33	221.1	N/A	cloudy water
1030	20.65'	200	6.07	74	>999	1.64	12.59	228.2	N/A	cloudy water
1040	20.65'	200	6.03	74	>999	1.62	12.54	231.8	N/A	cloudy water
1045	20.65'	200	6.03	74	>999	1.61	12.34	235.0	N/A	cloudy water
1050	20.65'	200	6.02	74	>999	1.61	12.30	236.1	N/A	cloudy water
1055	20.65'	200	5.97	74	>999	1.62	12.26	237.0	N/A	cloudy water
1100	20.65'	200	5.96	74	>999	1.63	12.18	238.6	N/A	cloudy water
1105	20.65'	200	5.97	74	>999	1.62	12.15	238.9	N/A	cloudy water
1110	20.65'	200	5.95	75	>999	1.62	12.17	238.6	N/A	cloudy water
←				WELL	PARAMETERS		STABILIZE	→		
←					SAMPLING		BEGINS	→		

SIGNATURE(S): Mark C. Jr

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)

CLIENT: Tetra Tech PHONE NO.: (916) 276-7846

PROJECT MGR: Nisha Bansal FAX NO.: ( )

EMAIL: Nisha.bansal@TetraTech.com

PROJECT NAME: Marina State Airport - Quarterly Sampling

SITE LOCATION: Marina State Airport

PROJECT NO.: N7339-06770 P.O. NO.:

PSS Project #:

PAGE 1 OF ____

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used		HCl	HNO3		Ice	Ice	HCl				
							Analysis Required (3)	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs (8270C)	Nitrates & Sulfates	Ferric Iron					REMARKS
	TB-031704	3/17/04	0000	WATER	2	G	X											
	DMW-7D-031704		0934		4	G	X	X	X									
	DMW-7I-031704		1105		4	G	X	X	X									
	DMW-7S-031704		1201		4	G	X	X	X									
	MW-5-031704		1458		5	G	X	X	X	X								
	DMW-8S-031704		1641		4	G	X	X	X									
	DMW-8I-031804	3/18/04	0833		4	G	X	X	X									
	DMW-2B-031804		1110		9	G	X	X	X	X	X	X						

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date 3/18/04	Time 1125	Received By:

(4)

Requested Turnaround Time

☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt: (Good)

Custody Seal:

Shipping Carrier: (Hand)

Shipping Ticket No.:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-7-Ø322Ø4
Sample Location: MW-7
Sampled By: CCL/WP
C.O.C. No.: PSS-dated 3/23/Ø4
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/22/Ø4	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1Ø43								
Method: Bladder Pump	Slightly Cloudy	5.8Ø	Ø.Ø6Ø1	1Ø.Ø3	38	Ø.77	-34.5	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/22/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC			SEE LOW	FLOW	PURGE			
Total Well Depth (TD): 22.Ø6'			DATA	SHEET				
Static Water Level (WL): 6.42'								
One Casing Volume (gal/L): 2.55								
Start Purge (hrs): Ø94Ø								
End Purge (hrs): 1Ø43								
Total Purge Time (min): 63								
Total Vol. Purged (gal/L): 2.Ø								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

22.Ø6
−6.42
15.64 × (2)² × Ø.Ø4Ø8 = 2.55 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: MW-7
DATE: 3/22/04
SUNNY, WINDY, 40°F; 30.21 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. us/cm² (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0940	6.42'	—	—	—	—	—	—	—	—	INITIAL Reading
0946	7.40'	400	5.88	513	450	4.29	10.10	-16.9	NA	Cloudy water
0953	7.81'	170	5.84	515	400	2.62	9.70	-25.3	N/A	cloudy water
0958	8.00'	170	5.82	537	240	1.72	9.61	-26.6	N/A	cloudy water
1003	8.21'	170	5.79	537	180	1.28	10.04	-28.8	N/A	cloudy water
1008	8.35'	170	5.79	549	150	1.15	9.81	-30.3	N/A	cloudy water
1013	8.50'	170	5.80	572	100	1.05	10.22	-32.1	N/A	Slightly cloudy water
1018	8.65'	170	5.82	590	80	0.96	10.26	-33.6	N/A	Slightly cloudy water
1023	8.75'	170	5.82	598	56	0.91	10.25	-34.3	N/A	Slightly cloudy water
1028	8.85'	170	5.81	603	50	0.86	10.09	-34.9	N/A	Slightly cloudy water
1033	8.95'	170	5.82	605	39	0.84	10.18	-34.3	N/A	Slightly cloudy water
1038	9.01'	170	5.81	604	36	0.81	10.20	-34.2	N/A	Slightly cloudy water
1043	9.10'	170	5.80	601	38	0.77	10.03	-34.5	N/A	Slightly cloudy water
					WELL PARAMETERS STABILIZE					
					SAMPLING BEGINS					

SIGNATURE(S): Mark C. Ivy III

2.0 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-11S-032204
Sample Location: DMW-11S
Sampled By: CAL/WP
C.O.C. No.: PSS - Dated 3/23/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/22/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1154	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Slightly Cloudy	4.98	0.0474	9.76	88	1.01	243.8	—

PURGE DATA:

Date: 3/22/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC		SEE LOW FLOW PURGE						
Total Well Depth (TD): 20.01'		DATA SHEET						
Static Water Level (WL): 4.02'								
One Casing Volume (gal/L): 2.60								
Start Purge (hrs): 1110								
End Purge (hrs): 1154								
Total Purge Time (min): 44								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

20.01'
− 4.02'
15.99' × (2)² × 0.0408 ≈ 2.60 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Clark C. Ivy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0697D
WELL ID.: DMW-11S
DATE: 3/22/04
SUNNY, WINDY, 40°F, 30.06 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. µS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1110	4.02'	–	–	–	–	–	–	–	–	INITIAL Reading
1114	4.30'	150	5.87	558	150	6.29	8.92	111.5	N/A	Slightly cloudy water
1119	4.35'	150	5.58	498	220	5.17	9.38	171.8	N/A	Cloudy water
1124	4.35'	150	5.25	451	210	2.73	9.53	230.0	N/A	Cloudy water
1129	4.35'	150	5.09	435	180	1.80	9.66	267.6	N/A	Cloudy water
1134	4.35'	150	5.02	434	140	1.45	9.56	282.6	N/A	Cloudy water
1139	4.35'	150	5.00	440	110	1.24	9.70	274.6	N/A	Slightly cloudy water
1144	4.35'	150	5.00	451	85	1.15	9.63	256.9	N/A	Slightly cloudy water
1149	4.35'	150	4.98	461	85	1.06	9.67	249.0	N/A	Slightly cloudy water
1154	4.35'	150	4.98	470	88	1.01	9.76	243.8	N/A	Slightly cloudy water
				WELL PARAMETERS STABILIZE						→
				SAMPLING BEGINS						→

SIGNATURE(S): Charles C. Ivy III

2.0 gallons out

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-11I-032204
Sample Location: DMW-11I
Sampled By: CCL/WP
C.O.C. No.: PSS - Dated 3/23/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/22/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1408	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	cloudy	5.06	0.022	11.33	230	1.13	248.1	—

PURGE DATA:

Date: 3/22/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC		SEE LOW FLOW PURGE DATA SHEET						
Total Well Depth (TD): 40.56'								
Static Water Level (WL): 5.90'								
One Casing Volume (gal/L): 5.65								
Start Purge (hrs): 1330								
End Purge (hrs): 1408								
Total Purge Time (min): 38								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

40.56
−5.90
34.66 × (2)² × 0.0408 ≈ 5.65 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MARTIN STATE AIRPORT
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-11I
DATE: 3/22/04
SUNNY, WINDY, 40°F; 30.42 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1330	5.90	—	—	—	—	—	—	—	—	INITIAL Reading
1338	6.20	270	6.26	31	50	10.40	10.45	170.3	N/A	slightly cloudy water
1343	6.15	250	5.48	23	360	7.54	11.18	234.0	N/A	cloudy water
1348	6.10	250	5.13	22	270	2.93	11.13	247.5	N/A	cloudy water
1353	6.10	250	5.08	22	240	1.84	11.16	252.3	N/A	cloudy water
1358	6.10	250	5.06	22	210	1.43	11.20	255.1	N/A	cloudy water
1403	6.10	250	5.06	22	220	1.27	11.51	252.8	N/A	cloudy water
1408	6.10	250	5.06	22	230	1.13	11.33	248.1	N/A	cloudy water
↓				WELL PARAMETERS STABILIZE						
↓				SAMPLING BEGINS						

SIGNATURE(S): Chris C. Hoff

2.0 gallons out

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-3-Ø322Ø4
Sample Location: MW-3
Sampled By: CCL/WP
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/22/Ø4	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 15ØØ								
Method: Bladder Pump	Clear	6.25	Ø.132	12.Ø6	1.4	1.71	169.Ø	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/22/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material		SEE LOW FLOW PURGE SHEET						
Type: 4" PVC		FOR WELL PARAMETERS						
Total Well Depth (TD): 29.46'								
Static Water Level (WL): 8.2Ø'								
One Casing Volume (gal/L): 13.87								
Start Purge (hrs): 1425								
End Purge (hrs): 15ØØ								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

29.46
− 8.2Ø
21.26 × (4)² × Ø.Ø4Ø8 = 13.87 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Chuck C. [signature] III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D

WELL ID.: MW-3
DATE: 3/22/04
Sunny, windy, 40°F ; 30.06 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (~~mS/cm~~ uS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1425	8.20'	—	—	—	—	—	—	—	—	INITIAL Reading
1430	8.43'	250	6.20	229	12.0	5.88	11.38	188.1	N/A	clear water
1435	8.61'	250	6.24	174	5.9	3.76	11.88	191.0	N/A	clear water
1440	8.81'	250	6.28	137	2.2	2.15	12.04	187.6	N/A	clear water
1445	8.88'	200	6.25	133	2.0	1.90	12.06	185.0	N/A	clear water
1450	8.91'	200	6.28	133	2.2	1.80	12.02	182.8	N/A	clear water
1455	8.97'	200	6.25	132	1.5	1.75	12.04	177.6	N/A	clear water
1500	9.00'	200	6.25	132	1.4	1.71	12.06	169.0	N/A	clear water
← WELL PARAMETERS STABILIZE →										
← SAMPLING BEGINS →										

SIGNATURE(S): [signature]

1.5 gallons out

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-1-Ø322Ø4
Sample Location: MW-1
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/23/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/22/Ø4	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1626								
Method: Bladder Pump	Clear	6.79	Ø.526	1Ø.76	1Ø.Ø	5.34	138.9	—

PURGE DATA:

Date: 3/22/Ø4	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 4" Steel		SEE	Low	Flow	Purge			
Total Well Depth (TD): 43.16'		Data	Sheet					
Static Water Level (WL): 6.93'								
One Casing Volume (gal/L): 23.65								
Start Purge (hrs): 1529								
End Purge (hrs): 1626								
Total Purge Time (min): 57								
Total Vol. Purged (gal/L): 2.Ø								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

43.16
−6.93
36.23 × (4)² × Ø.Ø4Ø8 = 23.65 gallons

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: MW-1
DATE: 3/22/04
SUNNY, WINDY, 40°F, 30.13in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. ~~mS/cm~~ uS/cm	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1529	6.93'	—	—	—	—	—	—	—	—	INITIAL Reading
1531	6.93'	150	6.96	580	17.0	9.42	9.74	188.6	N/A	clear water
1536	6.93'	150	6.85	577	16.0	7.14	10.43	189.9	N/A	clear water
1541	6.93'	150	6.72	562	45.0	5.84	10.66	181.3	N/A	slightly cloudy water
1546	6.93'	150	6.80	563	35.0	5.78	10.77	174.1	N/A	Slighty cloudy water
1551	6.93'	150	6.85	561	30.0	5.83	10.89	168.1	N/A	Slighty cloudy water
1556	6.93'	150	6.87	555	23.0	5.79	11.02	163.2	N/A	clear water
1601	6.93'	150	6.86	546	19.0	5.74	10.97	159.8	N/A	clear water
1606	6.93'	150	6.85	541	16.0	5.67	10.93	154.9	N/A	clear water
1611	6.93'	150	6.85	536	14.0	5.57	10.92	154.6	N/A	clear water
1616	6.93'	150	6.81	534	13.0	5.45	10.68	147.4	N/A	clear water
1621	6.93'	150	6.81	532	12.0	5.42	10.78	143.2	N/A	clear water
1626	6.93'	150	6.79	526	10.0	5.34	10.76	138.9	N/A	clear water
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING	BEGINS					→

SIGNATURE(S): Charles C. Smith III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-8D-032304
Sample Location: DMW-8D
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/23/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/23/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1000	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Clear	4.86	0.257	11.77	4.4	1.15	82.4	—

PURGE DATA:

Date: 3/23/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC		SEE	Low	Flow	Purge			
Total Well Depth (TD): 72.66'			Data	Sheet				
Static Water Level (WL): 14.82'								
One Casing Volume (gal/L): 9.43								
Start Purge (hrs): 0800								
End Purge (hrs): 1000								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
Nitrate & Sulfate (300)	Ice	1 - 250 mL Poly	1
Iron III (6020)	HCL	2 - 40 mL VOAs	2
Iron III (6020)	HNO_3	1 - 250 mL Poly	1

OBSERVATIONS / NOTES:

72.66
−14.82
57.84 × (2)² × 0.0408 = 9.43 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MARTIN STATE AIRPORT
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-8D
DATE: 3/23/04
SUNNY, 40°F; 30.35 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (~~mS/cm~~ uS/cm²)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0840	14.82'	–	–	–	–	–	–	–	–	INITIAL Reading
0825	14.82'	100	5.54	334	5.7	9.92	6.27	203.0	N/A	CLEAR WATER
0830	14.82'	100	5.16	331	3.9	5.96	7.79	277.0	N/A	CLEAR WATER
0835	14.82'	100	5.14	332	4.0	4.66	8.55	239.5	N/A	CLEAR WATER
0840	14.82'	100	5.21	332	5.7	3.40	9.08	178.9	N/A	CLEAR WATER
0845	14.82'	100	5.28	331	5.5	2.55	9.60	196.0	N/A	CLEAR WATER
0850	14.82'	100	5.27	322	17.0	1.99	10.13	79.0	N/A	CLEAR WATER
0855	14.82'	100	5.17	309	38.0	1.67	10.50	77.0	N/A	CLEAR WATER
0900	14.82'	100	5.06	299	45.0	1.49	10.77	80.0	N/A	SLIGHTLY CLOUDY WATER
0910	14.82'	100	4.93	277	32.0	1.23	11.34	85.7	N/A	SLIGHTLY CLOUDY WATER
0920	14.82'	100	4.87	267	18.0	1.13	11.46	87.9	N/A	CLEAR WATER
0930	14.82'	100	4.86	262	11.0	1.07	11.56	86.4	N/A	CLEAR WATER
0935	14.82'	100	4.86	260	8.9	1.04	11.50	86.6	N/A	CLEAR WATER
0940	14.82'	100	4.85	260	6.7	1.03	11.49	85.4	N/A	CLEAR WATER
0945	14.82'	100	4.85	258	5.3	1.03	11.69	84.3	N/A	CLEAR WATER
0950	14.82'	100	4.86	258	5.0	1.06	11.67	83.5	N/A	CLEAR WATER
0955	14.82'	100	4.86	258	5.0	1.07	11.68	84.2	N/A	CLEAR WATER
1000	14.82'	100	4.86	257	4.4	1.15	11.77	82.4	N/A	CLEAR WATER
←			WELL PARAMETERS STABILIZE							→
←			SAMPLING BEGINS							→

SIGNATURE(S): Mike C. Jay III

1.5 gallons out
Nat. At. Parameters Taken Here

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-4D-032304
Sample Location: DMW-4D
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/23/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/23/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1230	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Slightly Cloudy	4.64	1.316	12.36	30.0	0.81	270.0	—

PURGE DATA:

Date: 3/23/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material		SEE	Low	Flow	Purge			
Type: 2" PVC		Data	Sheet					
Total Well Depth (TD): 83.26'								
Static Water Level (WL): 19.74'								
One Casing Volume (gal/L): 10.36								
Start Purge (hrs): 1030								
End Purge (hrs): 1230								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
Nitrate & Sulfate (300)	ICE	1-250 mL Poly	1
IRON III (6020)	HCL	2-40 mL VOAs	2
IRON III (6020)	HNO_3	1-250 mL Poly	1

OBSERVATIONS / NOTES:

83.26
- 19.74
63.52 x (2)² x 0.0408 = 10.36 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Mark C. Ivy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 / 0677D
WELL ID.: DMW-4D
DATE: 3/23/04
Sunny, Breezy, 40°F, 30.40 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. us/cm (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1030	19.74'	—	—	—	—	—	—	—	—	INITIAL Reading
1045	19.81'	140	4.35	1280	35.0	4.87	9.90	292.2	N/A	clear water
1050	19.77'	140	4.45	1281	35.0	3.05	10.38	279.0	N/A	clear water
1055	19.77'	140	4.57	1283	75.0	2.10	10.62	267.3	N/A	Slightly Cloudy water
1100	19.77'	140	4.57	1283	90.0	1.78	10.74	276.1	N/A	Slightly Cloudy water
1110	19.77'	140	4.61	1322	65.0	1.28	11.01	266.2	N/A	Slightly Cloudy water
1120	19.77'	140	4.62	1337	45.0	1.05	11.28	264.3	N/A	Slightly Cloudy water
1130	19.77'	140	4.62	1332	40.0	0.96	11.46	266.5	N/A	Slightly Cloudy water
1140	19.77'	140	4.63	1327	37.0	0.90	11.63	267.8	N/A	Slightly Cloudy water
1150	19.77'	140	4.63	1323	34.0	0.86	11.78	268.9	N/A	Slightly Cloudy water
1200	19.77'	140	4.63	1321	33.0	0.84	12.10	269.7	N/A	Slightly Cloudy water
1205	19.77'	140	4.62	1319	33.0	0.84	12.20	269.9	N/A	Slightly Cloudy water
1210	19.77'	140	4.63	1320	33.0	0.88	12.28	270.1	N/A	Slightly Cloudy water
1215	19.77'	140	4.64	1316	32.0	0.82	12.45	270.4	N/A	Slightly Cloudy water
1220	19.77'	140	4.64	1317	31.0	0.82	12.33	270.2	N/A	Slightly Cloudy water
1225	19.77'	140	4.64	1316	30.0	0.81	12.39	269.9	N/A	Slightly Cloudy water
1230	19.77'	140	4.64	1316	30.0	0.81	12.36	270.0	N/A	Slightly cloudy water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Mark C. Griffith

2.5 gallons Removed
Nat. Att. Param. Collected

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)

CLIENT: Tetra Tech PHONE NO.: (916) 276-7846

PROJECT MGR: Nisha Bansal FAX NO.: ( )

EMAIL: Nisha.bansal@TetraTech.com

PROJECT NAME: Martin State Airport - Quarterly Sampling

SITE LOCATION: Martin State Airport

PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	HCl	H2SO4	HNO3	ICE	HCl/MeOH					REMARKS
							(3) Analysis Required	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	Nitrates & Sulfates	Ferric Iron					
	TB0322Ø4	3/22/04	ØØØØ	WATER	2	G		X									
	MW-7-0322Ø4	|	1043		4	G		X	X	X							
	DMW-11S-0322Ø4	|	1154		4	G		X	X	X							
	DMW-11I-0322Ø4	|	1408		4	G		X	X	X							
	MW-3-0322Ø4	|	15ØØ		4	G		X	X	X							
	MW-1-0322Ø4	↓	1626		4	G		X	X	X							
	DMW-8D-0323Ø4	3/23/04	1ØØØ		8	G		X	X	X	X	X					
	DMW-4D-0323Ø4	↓	123Ø		8	G		X	X	X	X	X					

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Mark C. Fry II	3/23/04	1352	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date 3/23	Time 1:57	Received By: B. Dorr

(4)

Requested Turnaround Time

☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Sample Condition Upon Receipt:

Custody Seal:

Data Deliverables Required:

Shipping Carrier:

Shipping Ticket No.:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-SI-032404
Sample Location: DMW-SI
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/24/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1010								
Method: Bladder Pump	Slightly Cloudy	4.79	1455	12.12	70	0.62	50.2	—

PURGE DATA:

Date: 3/24/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" PVC			SEE	LOW FLOW				
Total Well Depth (TD): 59.16'		PURGE	DATA	SHEET				
Static Water Level (WL): 20.25'								
One Casing Volume (gal/L): 6.35								
Start Purge (hrs): 0850								
End Purge (hrs): 1010								
Total Purge Time (min): 80								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

59.16
- 20.25
38.91 × (2)² × 0.0408 = 6.35 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Mark C. Ivy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-5I
DATE: 3/24/04
SUNNY; 40°F; 30.38 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0850	20.25'	—	—	—	—	—	—	—	—	INITIAL Readings
0900	20.35'	260	3.96	1406	90	4.98	10.83	310.6	N/A	Slightly cloudy water
0905	20.35'	180	4.70	1393	260	1.90	11.52	107.9	N/A	Cloudy water
0910	24.27'	180	4.79	1420	370	1.58	11.60	80.5	N/A	Cloudy water
0915	20.27'	180	4.78	1446	700	1.27	11.62	67.6	N/A	Cloudy water
0920	20.27'	180	4.79	1453	650	1.09	11.63	62.5	N/A	Cloudy water
0925	20.27'	180	4.79	1452	600	0.94	11.96	63.5	N/A	Cloudy water
0930	20.27'	180	4.79	1454	400	0.87	12.27	63.7	N/A	Cloudy water
0935	20.27'	180	4.79	1453	260	0.82	12.33	60.8	N/A	Cloudy water
0940	20.27'	180	4.78	1458	170	0.78	12.28	59.3	N/A	Cloudy water
0945	20.27'	180	4.78	1453	120	0.74	12.22	57.2	N/A	Cloudy water
0950	20.27'	180	4.78	1453	95	0.71	12.27	55.6	N/A	Slightly cloudy water
0955	20.27'	180	4.79	1453	90	0.69	12.34	55.0	N/A	Slightly cloudy water
1000	20.27'	180	4.78	1453	75	0.66	12.28	53.0	N/A	Slightly Cloudy water
1005	20.27'	180	4.79	1454	70	0.63	12.20	51.1	N/A	Slightly cloudy water
1010	20.27'	180	4.79	1455	70	0.62	12.12	50.2	N/A	Slightly Cloudy water
	←		WELL PARAMETERS STABILIZE							→
	←				SAMPLING BEGINS					→

2.5 Gallons Removed

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-SD-032404
Sample Location: DMW-SD
Sampled By: CCL/WP
C.O.C. No.: PSS-Dared 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/24/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1102	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	clear	5.69 @ 39		13.23	0.50	2.18	177.6	—

PURGE DATA:

Date: 3/24/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material			SEE LOW FLOW					
Type: 2" PVC		PURGE DATA SHEET						
Total Well Depth (TD): 83.76'								
Static Water Level (WL): 20.30'								
One Casing Volume (gal/L): 10.35								
Start Purge (hrs): 1030								
End Purge (hrs): 1102								
Total Purge Time (min): 32								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

83.76
−20.30
$63.46 \times (2)^2 \times 0.0408 = 10.35$ gallons

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):
Charles C. Ng III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 / 0677D

WELL ID.: DMW-5D
DATE: 3/24/04
SUNNY; 45°F; 30.47 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1030	20.30'	—	—	—	—	—	—	—	—	INITIAL Reading
1032	20.30'	120	5.58	99	24	3.62	11.98	122.9	N/A	CLEAR WATER
1037	20.30'	120	5.70	41	4.9	2.79	12.25	138.2	N/A	CLEAR WATER
1042	20.32'	120	5.70	40	1.6	2.55	12.52	153.0	N/A	CLEAR WATER
1047	20.35'	120	5.70	39	1.1	2.36	12.82	161.8	N/A	CLEAR WATER
1052	20.36'	120	5.68	39	0.40	2.28	13.00	167.8	N/A	CLEAR WATER
1057	20.36'	120	5.70	39	0.55	2.21	13.11	174.3	N/A	CLEAR WATER
1102	20.36'	120	5.69	39	0.50	2.18	13.23	177.6	N/A	CLEAR WATER
⇐				WELL PARAMETERS STABILIZE						⇒
⇐				SAMPLING BEGINS						⇒

1.5 gallons Removed

SIGNATURE(S): Mark C. Byrd III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-SS-Ø324Ø4
Sample Location: DMW-SS
Sampled By: CCC/WP
C.O.C. No.: PSS- Dated 3/26/Ø4
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 3/26/Ø4								
Time: 1215								
Method: Bladder Pump	Clear	4.61	1.694	13.2Ø	1Ø	Ø.65	18Ø.2	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/26/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material		SEE LOW FLOW PURGE SHEET						
Type: 2" PVC		WELL PARAMETERS STABILIZE						
Total Well Depth (TD): 33.Ø1'								
Static Water Level (WL): 2Ø.36'								
One Casing Volume (gal/L): 2.Ø6								
Start Purge (hrs): 1115								
End Purge (hrs): 1215								
Total Purge Time (min): 6Ø								
Total Vol. Purged (gal/L): 2.Ø								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

33.Ø1
−20.36
12.65 × (2)² × Ø.Ø4Ø8 = 2.Ø6 gallons

Circle if Applicable:

MS/MSD —

Duplicate ID No.: —

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 / Φ677D
WELL ID.: DMW-5S
DATE: 3/24/Φ4
Partly cloudy; 50°F; 30.45 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1115	2Φ.36'	—	—	—	—	—	—	—	—	INITIAL Reading
1120	2Φ.82'	2ΦΦ	5.69	1654	45	7.21	12.47	2Φ8.9	N/A	Slightly cloudy water
1125	2Φ.9Φ'	2ΦΦ	5.85	168Φ	25Φ	4.71	12.39	84.1	N/A	Slightly cloudy water
1130	21.ΦΦ'	2ΦΦ	5.29	1666	45Φ	2.46	12.44	1Φ2.5	N/A	Cloudy water
1135	21.ΦΦ'	2ΦΦ	4.93	1678	31Φ	1.4Φ	12.48	14Φ.6	N/A	Cloudy water
1140	21.Φ5'	2ΦΦ	4.78	1688	15Φ	1.Φ3	12.53	168.8	N/A	Cloudy water
1145	21.ΦΦ'	2ΦΦ	4.73	1694	7Φ	Φ.88	12.53	174.4	N/A	Slightly cloudy water
1150	21.ΦΦ'	2ΦΦ	4.69	1697	45	Φ.79	12.63	175.6	N/A	Slightly cloudy water
1155	21.ΦΦ'	2ΦΦ	4.66	1697	29	Φ.74	12.53	173.7	N/A	Clear water
12ΦΦ	21.ΦΦ'	2ΦΦ	4.65	1693	23	Φ.71	12.95	178.8	N/A	Clear water
12Φ5	21.ΦΦ'	2ΦΦ	4.63	1695	19	Φ.69	13.17	182.1	N/A	Clear water
1210	21.ΦΦ'	2ΦΦ	4.62	1693	14	Φ.67	13.11	18Φ.9	N/A	Clear water
1215	21.ΦΦ'	2ΦΦ	4.61	1694	1Φ	Φ.65	13.2Φ	18Φ.2	N/A	Clear water
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING	BEGINS					→

SIGNATURE(S): John C. Hill

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-4S-032404
Sample Location: DMW-4S
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/24/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/24/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1523	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	clear	5.34	2.292	12.17	9.2	0.65	19.4	—

PURGE DATA:

Date: 3/24/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			See Low Flow		Purge			
Total Well Depth (TD): 32.76'			Data Sheet					
Static Water Level (WL): 19.95'								
One Casing Volume (gal/L): 2.09								
Start Purge (hrs): 1434								
End Purge (hrs): 1523								
Total Purge Time (min): 53								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

32.76
−19.95
12.81 × (2)² × 0.0408 ≈ 2.09 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Mark C. Ty III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-45
DATE: 3/24/04
Partly cloudy; 50°F; 30.40 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1430	19.95'	—	—	—	—	—	—	—	—	INITIAL Reading
1433	20.05'	210	5.30	2180	130	8.86	12.78	169.0	N/A	Cloudy water
1438	19.97'	210	5.69	2298	290	4.04	12.92	2.8	N/A	cloudy water
1443	19.97'	210	5.22	2283	270	1.98	12.68	24.1	N/A	Cloudy water
1448	19.97'	210	5.06	2270	100	1.23	12.56	41.7	N/A	Cloudy water
1453	19.97'	210	5.07	2270	45	1.01	12.58	43.6	N/A	Slightly cloudy water
1458	19.97'	210	5.12	2276	32	0.89	12.35	40.2	N/A	Slightly cloudy water
1503	19.97'	210	5.17	2282	21	0.79	12.22	35.3	N/A	Clear water
1508	19.97'	210	5.22	2285	15	0.74	12.11	30.8	N/A	Clear water
1513	19.97'	210	5.27	2288	11	0.70	12.04	25.8	N/A	Clear water
1518	19.97'	210	5.30	2290	10	0.67	12.14	23.1	N/A	Clear water
1523	19.97'	210	5.34	2292	9.2	0.65	12.17	19.4	N/A	Clear water
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING	BEGINS					→

SIGNATURE(S): Wade C. Long III

2.0 gallons Removed

Tetra Tech NUS, inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-4I-032404
Sample Location: DMW-4I
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/24/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1641								
Method: Bladder Pump	Cloudy	5.15	1.813	12.41	230	0.50	-3.3	—

PURGE DATA:

Date: 3/24/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			SEE Low Flow Purge					
Total Well Depth (TD): 59.36'			DATA SHEET					
Static Water Level (WL): 19.71'								
One Casing Volume (gal/L): 6.47								
Start Purge (hrs): 1537								
End Purge (hrs): 1641								
Total Purge Time (min): 64								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

59.36
-19.71
39.65 x (2)² x 0.0408 = 6.47 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Mark C. Loy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-4I
DATE: 3/24/04
Partly cloudy; 50°F; 30.36 IN. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. ~~(mS/cm)~~ uS/cm	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1537	19.71'	—	—	—	—	—	—	—	—	INITIAL Readings
1541	19.75'	200	6.02	1847	180	2.46	12.60	54.0	N/A	Cloudy water
1546	19.76'	200	5.94	1860	850	1.40	12.79	13.4	N/A	Cloudy water
1551	19.80'	200	5.33	1779	>999	1.06	12.65	26.3	N/A	Cloudy water
1556	19.77'	200	5.18	1754	>999	0.85	12.60	19.0	N/A	Cloudy water
1601	19.77'	200	5.22	1757	>999	0.74	12.66	10.1	N/A	Cloudy water
1606	19.77'	200	5.27	1766	>999	0.67	12.66	0.3	N/A	Cloudy water
1611	19.77'	200	5.29	1772	900	0.62	12.64	-4.9	N/A	Cloudy water
1616	19.77'	200	5.28	1782	550	0.58	12.53	-7.2	N/A	Cloudy water
1621	19.77'	200	5.27	1790	350	0.56	12.49	-7.4	N/A	Cloudy water
1626	19.77'	200	5.23	1797	290	0.54	12.47	-6.9	N/A	Cloudy water
1631	19.77'	200	5.20	1803	250	0.53	12.48	-4.9	N/A	Cloudy water
1636	19.77'	200	5.18	1810	230	0.51	12.43	-4.4	N/A	cloudy water
1641	19.77'	200	5.15	1813	230	0.50	12.41	-3.3	N/A	Cloudy water
←				WELL PARAMETERS		STABILIZE				→
←				—	SAMPLING	BEGINS				→

SIGNATURE(S): Mark C. Cyr III

2.5 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-4-032504
Sample Location: MW-4
Sampled By: CcL/WP
C.O.C. No.: PSS-Dated 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/25/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0942	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	cloudy	7.20	1.622	9.50	>999	1.63	89.7	—

PURGE DATA:

Date: 3/25/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 4" PVC			SEE	Low Flow Purge				
Total Well Depth (TD): 29.06'			Data	Sheet				
Static Water Level (WL): 7.28'								
One Casing Volume (gal/L): 14.21								
Start Purge (hrs): 0840								
End Purge (hrs): 0942								
Total Purge Time (min): 62								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

29.06
− 7.28
21.78 × $(4)^2$ × 0.0408 = 14.21 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Charles C. Lee III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339 / Φ677D

WELL ID.: MW-4
DATE: 3/25/Φ4

Cloudy, Drizzle, 35°F; 3Φ.52 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
ΦΦ84Φ	7.28	—	—	—	—	—	—	—	—	INITIAL Reading
Φ847	7.4Φ	16Φ	6.65	173Φ	5Φ	8.Φ1	8.67	148.Φ	N/A	Cloudy water
Φ852	7.43	16Φ	6.94	1687	16Φ	4.78	8.93	129.7	N/A	Cloudy water
Φ857	7.47	16Φ	7.Φ5	1639	28Φ	2.87	8.8Φ	117.3	N/A	Cloudy water
Φ9Φ2	7.48	16Φ	7.12	1625	28Φ	2.27	8.74	1Φ8.9	N/A	Cloudy water
Φ9Φ7	7.49	16Φ	7.15	162Φ	36Φ	2.19	8.74	1Φ3.1	N/A	Cloudy water
Φ912	7.49	16Φ	7.17	1617	55Φ	2.11	8.87	98.4	N/A	Cloudy water
Φ917	7.49	16Φ	7.17	1617	55Φ	2.Φ2	9.Φ9	95.Φ	N/A	Cloudy water
Φ922	7.49	16Φ	7.19	1617	6ΦΦ	1.99	9.24	92.4	N/A	Cloudy water
Φ927	7.49	16Φ	7.19	1615	75Φ	1.94	9.58	92.5	N/A	Cloudy water
Φ932	7.49	16Φ	7.2Φ	162Φ	>999	1.85	9.42	9Φ.6	N/A	Cloudy water
Φ937	7.49	16Φ	7.2Φ	162Φ	>999	1.74	9.54	89.6	N/A	Cloudy water
Φ942	7.49	16Φ	7.2Φ	1622	>999	1.63	9.5Φ	89.7	N/A	Cloudy water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Mark C. Ivy III

1.5 gallons Removed

PAGE 2 OF 2

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-9D-032504
Sample Location: DMW-9D
Sampled By: CCL/WP
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/25/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1200	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Cloudy	5.47	0.368	13.23	400	7.30	-7.2	—

PURGE DATA:

Date: 3/25/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC			SEE	Low Flow Purge				
Total Well Depth (TD): 72.81'			Data	Sheet				
Static Water Level (WL): 9.35'								
One Casing Volume (gal/L): 10.35								
Start Purge (hrs): 1000								
End Purge (hrs): 1200								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

$$\frac{72.81 - 9.35}{63.46} \times (2)^2 \times 0.0408 \approx 10.35 \text{ gallons}$$

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Clark C. Piper III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-9D
DATE: 3/25/04
Mostly cloudy, 50°F, 30.47 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1000	9.35'	–	–	–	–	–	–	–	–	INITIAL Reading
1010	9.37'	140	7.58	393	120	9.29	11.66	96.3	N/A	Cloudy WATER
1015	9.35'	140	6.31	412	340	9.37	12.10	30.6	N/A	Cloudy WATER
1020	9.35'	140	6.00	439	>999	8.19	12.50	47.6	N/A	Cloudy WATER
1025	9.35'	140	5.91	425	>999	7.43	12.70	6.7	N/A	Cloudy WATER
1030	9.35'	140	5.80	399	>999	6.40	12.61	0.3	N/A	Cloudy WATER
1040	9.35'	140	5.61	365	800	6.68	12.70	1.8	N/A	Cloudy WATER
1050	9.35'	140	5.52	364	500	6.67	12.86	2.7	N/A	Cloudy WATER
1100 →	9.35'	140	5.48	367	400	6.63	12.84	2.4	N/A	Cloudy WATER
1110	9.35'	140	5.46	368	400	6.62	12.82	1.4	N/A	Cloudy WATER
1120	9.35'	140	5.45	370	400	6.74	13.11	0.1	N/A	Cloudy WATER
1130	9.35	140	5.45	290	450	7.45	13.66	-3.3	N/A	Cloudy WATER
1145	9.35	140	5.45	371	400	7.36	13.39	-3.8	N/A	Cloudy WATER
1150	9.35	140	5.45	370	400	6.89	13.55	-5.2	N/A	Cloudy WATER
1155	9.35	140	5.46	369	390	7.43	13.22	-6.3	N/A	Cloudy WATER
1200	9.35	140	5.47	368	400	7.30	13.23	-7.2	N/A	Cloudy WATER
←				WELL	PARAMETERS		STABILIZE			→
←				SAMPLING	BEGINS					→

SIGNATURE(S): Luke C. Ley III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-9S-032504
Sample Location: DMW-9S
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/25/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1437	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Clear w/ Small Black Particles	6.35	1.774	11.49	4.4	0.26	-112.0	—

PURGE DATA:

Date: 3/25/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			SEE Low Flow Purge Data Sheet					
Total Well Depth (TD): 22.11'								
Static Water Level (WL): 9.00'								
One Casing Volume (gal/L): 2.13								
Start Purge (hrs): 1400								
End Purge (hrs): 1437								
Total Purge Time (min): 37								
Total Vol. Purged (gal/L): 3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
SVOCs (8270C)	Ice	1 - 1 L Amber	1

OBSERVATIONS / NOTES:

22.11
- 9.00
13.11 x (2)^2 x 0.0408 = 2.13 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Mark C. Ivy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-9S
DATE: 3/25/04
Partly cloudy; 55°F; 30.47 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. us/cmc (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1400	9.00'	—	—	—	—	—	—	—	—	INITIAL Reading
1402	9.00'	240	6.41	1680	100	6.62	11.33	48.0	N/A	Slightly cloudy water
1407	9.00'	240	6.35	1753	17	3.25	11.43	-38.8	N/A	Clear water
1412	9.00'	240	6.34	1771	9.1	1.07	11.41	-70.0	N/A	Clear w/small Black Particles
1417	9.00'	240	6.36	1761	7.0	0.69	11.39	-82.1	N/A	Clear w/small Black Particles
1422	9.00'	240	6.35	1769	4.8	0.66	11.43	-93.1	N/A	Clear w/small Black Particles
1427	9.00'	240	6.35	1773	5.5	0.30	11.45	-100.9	N/A	Clear w/small Black Particles
1432	9.00'	240	6.34	1774	5.3	0.28	11.48	-107.2	N/A	Clear w/small Black Particles
1437	9.00'	240	6.35	1774	4.4	0.26	11.49	-112.0	N/A	Clear w/small Black Particles
				WELL	PARAMETERS		STABILIZE			→
				SAMPLING	BEGINS					→

SIGNATURE(S): Clark C. Smith III

SVOCs Collected
3.0 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-2S-032504
Sample Location: DMW-2S
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/26/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/25/04	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1555								
Method: Bladder Pump	Clear	4.41	1.327	13.14	3.7	1.06	321.4	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/25/04								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC		SEE	LOW	Flow Purge				
Total Well Depth (TD): 32.76'			Data	Sheet				
Static Water Level (WL): 20.85'								
One Casing Volume (gal/L): 1.94								
Start Purge (hrs): 1500								
End Purge (hrs): 1555								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

32.76
-20.85
11.91 x (2)² x 0.0408 = 1.94 gallons

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-2S
DATE: 3/25/04
Cloudy, 55°F; 30.39 in Hg.

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. µs/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1500	20.85'	—	—	—	—	—	—	—	—	INITIAL Reading
1505	20.92'	160	6.84	1876	32.0	6.41	11.24	23.7	N/A	Slightly cloudy water
1510	20.89'	160	6.43	1762	21.0	4.89	12.45	77.3	N/A	Clear water
1515	20.89'	160	5.79	1505	23.0	2.99	12.95	153.7	N/A	Clear water
1520	20.89'	160	5.24	1374	16.0	2.40	13.10	199.9	N/A	Clear water
1525	20.89'	160	4.87	1341	11.0	1.85	13.35	223.3	N/A	Clear water
1530	20.89'	160	4.69	1332	8.5	1.56	13.52	245.0	N/A	Clear water
1535	20.89'	160	4.57	1327	6.8	1.61	13.38	267.9	N/A	Clear water
1540	20.89'	160	4.50	1327	5.5	1.41	13.33	287.9	N/A	Clear water
1545	20.89'	160	4.44	1327	4.9	1.19	13.26	302.9	N/A	Clear water
1550	20.89'	160	4.42	1327	4.1	1.13	13.21	314.2	N/A	Clear water
1555	20.89'	160	4.41	1327	3.7	1.06	13.14	321.4	N/A	Clear water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Wade C. Tyler III

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)

CLIENT: Tetra Tech PHONE NO.: (916) 276-7846

PROJECT MGR: Nisha Bansal FAX NO.: ( )

EMAIL: Nisha.bansal@TetraTech.com

PROJECT NAME: Martin State Airport - Quarterly Sampling

SITE LOCATION: N 7339-0677D

MARTIN State Airport

PROJECT NO.: ~~[illegible]~~ ~~PO NO.~~:

PSS Project #:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Volatile organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs						REMARKS
	TB032404	3/24/04	0000	GW	2	G	X									
	DMW-5I-032404	↓	1010	↓	4		X	X	X							
	DMW-5D-032404		1102		4		X	X	X							
	DMW-5S-032404		1215		4		X	X	X							
	DMW-4S-032404		1523		4		X	X	X							
	DMW-4I-032404	↓	1641		4		X	X	X							
	MW-4-032504	3/25/04	0942		4		X	X	X							
	DMW-9D-032504	↓	1200		4		X	X	X							
	DMW-9S-032504		1437		5		X	X	X	X						
	DMW-2S-032504	↓	1555	↓	4		X	X	X							

(3) Preservatives Used: HCL, HNO3, HNO3, ICE

(4)

Requested Turnaround Time

☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:

Custody Seal:

Shipping Carrier:

Shipping Ticket No.:

Special Instructions:

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4) [signature]	Date 3/26/04	Time 0815	Received By: [signature]

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-3D-Ø326Ø4
Sample Location: DMW-3D
Sampled By: CCL/WP
C.O.C. No.: PSS - Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/26/Ø4	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1Ø33	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	slightly cloudy	5.25	Ø.441	13.25	32	Ø.93	1.2	—

PURGE DATA:

Date: 3/26/Ø4	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material Type: 2" PVC			See Data	Low Flow Purge Sheet				
Total Well Depth (TD): 85.26'								
Static Water Level (WL): 15.31'								
One Casing Volume (gal/L): 11.4								
Start Purge (hrs): Ø93Ø								
End Purge (hrs): 1Ø33								
Total Purge Time (min): 63								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

85.26
- 15.31
69.95 x $(2)^2$ x Ø.Ø4Ø8 = 11.4 gallons

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

Clyde C. Ty III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MARTIN STATE AIRPORT - QUARTERLY SAMPLING. WELL ID.: DMW-3D
PROJECT NUMBER: N7339/0677D DATE: 3/26/04
Partly Sunny; 60°F; 30.44 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0936	15.31'	—	—	—	—	—	—	—	—	INITIAL Reading
0938	15.31'	150	5.96	443	60	4.24	12.60	161.8	N/A	Slightly cloudy water
0943	15.31'	150	5.98	436	55	2.68	12.89	139.5	N/A	Slightly cloudy water
0948	15.31'	150	5.72	446	140	1.54	12.88	-15.9	N/A	Cloudy water
0953	15.31'	150	5.64	452	160	2.16	12.85	-24.2	N/A	Cloudy water
0958	15.31'	150	5.46	447	100	1.15	12.83	-12.8	N/A	Cloudy water
1003	15.31'	150	5.35	445	60	0.98	13.05	-3.5	N/A	Cloudy water
1008	15.31'	150	5.31	446	55	0.86	13.11	-1.5	N/A	Slightly cloudy water
1018	15.31'	150	5.27	443	45	0.89	12.76	2.3	N/A	Slightly cloudy water
1023	15.31'	150	5.25	442	36	0.94	12.97	3.3	N/A	Slightly cloudy water
1028	15.31'	150	5.24	442	35	0.97	13.13	2.6	N/A	Slightly cloudy water
1033	15.31'	150	5.25	441	32	0.93	13.25	1.2	N/A	Slightly cloudy water
				WELL	PARAMETERS		STABILIZE			→
				SAMPLING	BEGINS					→

SIGNATURE(S): Mark C. Fay III

1.5 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-3I-032604
Sample Location: DMW-3I
Sampled By: CCL/WP
C.O.C. No.: PSS - Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/26/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1128	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Slightly Cloudy	4.98	1.679	13.49	34	0.36	145.2	—

PURGE DATA:

Date: 3/26/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			See Low Flow Data Sheet		Purge			
Total Well Depth (TD): 58.26'								
Static Water Level (WL): 15.29'								
One Casing Volume (gal/L): 7.0								
Start Purge (hrs): 1045								
End Purge (hrs): 1128								
Total Purge Time (min): 43								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

$$\frac{58.26 - 15.29}{42.97} \times (2)^2 \times 0.0408 \approx 7.0 \text{ gallons}$$

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Mark C. Loy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339-0677D
WELL ID.: DMW-3I
DATE: 3/26/04
Partly sunny; 60°F; 30.36 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1045	15.29'	—	—	—	—	—	—	—	—	INITIAL Reading
1048	15.35'	320	3.80	1706	70	3.60	13.07	245.2	N/A	Slightly cloudy water
1053	15.30'	200	3.77	1688	75	1.46	13.51	348.3	N/A	Slightly cloudy water
1058	15.30'	200	4.62	1654	50	0.85	13.44	215.6	N/A	Slightly cloudy water
1103	15.30'	200	4.92	1666	40	0.61	13.40	165.7	N/A	Slightly cloudy water
1108	15.30'	200	4.97	1672	39	0.48	13.43	152.2	N/A	Slightly cloudy water
1113	15.30'	200	4.97	1675	45	0.43	13.48	149.0	N/A	Slightly cloudy water
1118	15.30'	200	4.98	1676	36	0.39	13.48	147.3	N/A	Slightly cloudy water
1123	15.30'	200	4.98	1679	35	0.37	13.43	146.2	N/A	Slightly cloudy water
1128	15.30'	200	4.98	1679	34	0.36	13.49	145.2	N/A	Slightly cloudy water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Thomas C. Ty III

2.0 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-3S-032604
Sample Location: DMW-3S
Sampled By: CCL / WP
C.O.C. No.: PSS - Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 3/26/04	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1230								
Method: Bladder Pump	Clear w/ Black Particles	8.46	7.248	13.59	10.0	0.01	-242.9	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/26/04								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			See	Low Flow	Purge			
Total Well Depth (TD): 26.96'			Data	Sheet				
Static Water Level (WL): 10.40'								
One Casing Volume (gal/L): 2.7								
Start Purge (hrs): 1130								
End Purge (hrs): 1230								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 1.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
SVOCs (8270C)	ICE	1 - 1L Amber	1

OBSERVATIONS / NOTES:

26.96
-10.40
16.56 x (2)² x 0.0408 = 2.7 gallons

Circle If Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature] III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339-0677D

WELL ID.: DMW-3S
DATE: 3/26/04
Partly Sunny; 60°F; 30.38 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1130	10.40'	—	—	—	—	—	—	—	—	INITIAL Reading
1145	11.00'	170	7.18	7811	8.5	1.73	11.72	-83.6	N/A	Clear water
1150	11.35'	170	7.49	7912	4.5	0.37	12.91	-121.1	N/A	Clear water
1155	11.70'	170	7.54	8072	12.0	0.20	12.98	-155.9	N/A	Clear water
1200	12.10'	170	7.78	7951	22.0	0.07	13.05	-190.4	N/A	Clear w/Black Particles
1205	12.21'	70	7.95	7822	22.0	0.04	13.51	-210.1	N/A	Clear w/Black Particles
1210	12.31'	70	8.14	7701	20.0	0.02	13.59	-227.3	N/A	Clear w/Black Particles
1215	12.40'	70	8.34	7560	17.0	0.01	13.59	-239.3	N/A	Clear w/Black Particles
1220	12.60'	70	8.45	7442	14.0	0.02	13.65	-244.0	N/A	Clear w/Black Particles
1225	12.70'	70	8.48	7333	12.0	0.00	13.61	-244.3	N/A	Clear w/Black Particles
1230	12.85'	70	8.46	7248	10.0	0.01	13.59	-242.9	N/A	Clear w/Black Particles
← WELL PARAMETERS STABILIZE →										
← SAMPLING BEGINS →										

SIGNATURE(S): [signature] III

SVOCs Collected

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-9I-032604
Sample Location: DMW-9I
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/26/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1630	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Cloudy	6.13	1.47	13.63	>999	0.01	-61.3	—

PURGE DATA:

Date: 3/26/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC			See	Low Flow	Purge			
Total Well Depth (TD): 47.31'			Data	Sheet				
Static Water Level (WL): 9.00'								
One Casing Volume (gal/L): 6.25								
Start Purge (hrs): 1430								
End Purge (hrs): 1630								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

47.31
-9.00
38.31 x (2)² x 0.0408 = 6.25 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Mark C. Ly III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MARTIN STATE AIRPORT - QUARTERLY SAMPLING
PROJECT NUMBER: N7339/0677D
WELL ID.: DMW-9I
DATE: 3/26/04
SUNNY, 70°F; 30.26 IN Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1430	9.00'	—	—	—	—	—	—	—	—	INITIAL Reading
1448	9.20'	170	7.85	1407	23.0	2.15	16.03	-2.5	N/A	clear water
1453	9.15'	170	6.88	1405	>999	1.70	15.36	-84.7	N/A	Cloudy water
1500	9.15'	170	6.21	1540	>999	1.47	15.03	-31.1	N/A	cloudy water
1510	9.15'	170	6.12	1623	>999	0.72	14.55	-38.1	N/A	cloudy water
1520	9.15'	170	6.12	1596	>999	0.24	14.25	-44.0	N/A	cloudy water
1530	9.15'	170	6.13	1567	>999	0.13	14.13	-47.1	N/A	cloudy water
1540	9.15'	170	6.13	1546	>999	0.08	14.07	-49.7	N/A	cloudy water
1550	9.15'	170	6.13	1531	>999	0.06	13.92	-52.2	N/A	cloudy water
1600	9.15'	170	6.13	1513	>999	0.04	13.88	-55.0	N/A	cloudy water
1610	9.15'	170	6.14	1498	>999	0.03	13.68	-57.3	N/A	cloudy water
1615	9.15'	170	6.14	1492	>999	0.04	13.66	-58.3	N/A	Cloudy water
1620	9.15'	170	6.14	1489	>999	0.03	13.61	-59.3	N/A	cloudy water
1625	9.15'	170	6.13	1477	>999	0.02	13.65	-60.3	N/A	cloudy water
1630	9.15'	170	6.13	1470	>999	0.01	13.63	-61.3	N/A	cloudy water
↓				WELL	PARAMETERS		STABILIZE			→
↓				SAMPLING	BEGINS					→

SIGNATURE(S): Mark C. Ivy III

3.0 gallons Removed

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-1A-033004
Sample Location: DMW-1A
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/30/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0859	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	clear	5.27	1.074	11.71	29	0.24	168.9	—

PURGE DATA:

Date: 3/30/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 53.66'			See Low Flow		Purge			
Static Water Level (WL): 9.35'			Data	Sheet				
One Casing Volume (gal/L): 7.23								
Start Purge (hrs): 0800								
End Purge (hrs): 0859								
Total Purge Time (min): 59								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

53.66
−9.35
44.31 × (2)² × 0.0408 = 7.23 gallons

Circle if Applicable:

MS/MSD —

Duplicate ID No.: —

Signature(s):

Mark C. Loy III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339-0677D
WELL ID.: DMW-1I (A)
DATE: 3/30/04
cloudy, drizzle, 40°F ; 30.14 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. ~~mS/cm~~ uS/cm	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0800	9.35'	-	-	-	-	-	-	-	-	INITIAL Reading
0814	9.40'	200	6.52	1041	150	4.04	9.34	143.0	N/A	cloudy water
0819	9.37'	200	5.94	1067	75	3.30	10.75	154.2	N/A	Slightly cloudy water
0824	9.40'	200	5.75	1062	120	1.76	11.22	79.8	N/A	cloudy water
0829	9.40'	200	5.44	1041	75	1.06	11.40	111.7	N/A	Slightly cloudy water
0834	9.40'	200	5.32	1049	45	0.75	11.49	136.6	N/A	Slightly cloudy water
0839	9.40'	200	5.29	1058	36	0.57	11.58	149.9	N/A	Slightly cloudy water
0844	9.40'	200	5.28	1064	30	0.32	11.64	156.8	N/A	Slightly cloudy water
0849	9.40'	200	5.27	1068	31	0.40	11.66	161.0	N/A	Slightly cloudy water
0854	9.40'	200	5.27	1072	30	0.12	11.70	165.0	N/A	Slightly cloudy water
0859	9.40'	200	5.27	1074	29	0.24	11.71	168.9	N/A	Clear water
				WELL PARAMETERS STABILIZE						
				SAMPLING BEGINS						

1.5 gallons Removed

SIGNATURE(S): Andrew C. Ley III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-1B-ΦΦ33ΦΦ4
Sample Location: DMW-1B
Sampled By: CcL/WP
C.O.C. No.: PSS-Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/3Φ/Φ4	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 11ΦΦ	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Cloudy	5.35	1.118	12.3Φ	33Φ	Φ.Φ9	116.7	—

PURGE DATA:

Date: 3/3Φ/Φ4	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: 2" PVC			See	Low flow	Purge			
Total Well Depth (TD): 9Φ.36'			Data	Sheet				
Static Water Level (WL): 9.66'								
One Casing Volume (gal/L): 13.1								
Start Purge (hrs): ΦΦΦΦ								
End Purge (hrs): 11ΦΦ								
Total Purge Time (min): 12Φ								
Total Vol. Purged (gal/L): 5.Φ								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1
Nitrate & Sulfate (300)	Ice	1 - 250 mL Poly	1
Iron III (6020)	HCL	2 - 40 mL VOAs	2
Iron III (6020)	HNO_3	1 - 250 mL Poly	1

OBSERVATIONS / NOTES:

$$\begin{array}{l} 90.36 \\ -\ 9.66 \\ \hline 80.70 \end{array} \times (2)^2 \times Φ.ΦΦ8 = 13.1 \text{ gallons}$$

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Charles C. Ly III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339-0677D
WELL ID.: DMW-1D (B)
DATE: 3/30/04
Cloudy, Drizzle, 40°F ; 30.14 mHg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. us/cm² (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0900	9.66'	-	-	-	-	-	-	-	-	INITIAL Reading
0920	10.55'	330	3.63	1031	140	1.54	10.95	413.8	N/A	Cloudy water
0925	10.92'	200	5.21	999	150	0.83	11.81	172.8	N/A	Cloudy water
0930	10.97'	200	5.39	1025	950	0.41	11.82	131.0	N/A	Cloudy water
0935	10.97'	200	5.38	1074	650	0.28	11.87	124.8	N/A	Cloudy water
0940	10.97'	200	5.36	1097	290	0.20	11.90	123.2	N/A	Cloudy water
0950	10.97'	200	5.36	1107	240	0.16	12.00	121.3	N/A	Cloudy water
1000	10.97'	200	5.36	1109	320	0.14	12.02	119.8	N/A	Cloudy water
1010	10.97'	200	5.36	1111	600	0.12	12.10	118.7	N/A	Cloudy water
1020	10.97'	200	5.36	1113	600	0.11	12.18	117.9	N/A	Cloudy water
1030	10.97'	200	5.36	1116	450	0.10	12.26	117.6	N/A	Cloudy water
1040	[redacted]	200	5.35	1118	390	0.10	12.28	117.2	N/A	Cloudy water
1045	10.97'	200	5.35	1118	330	0.10	12.28	117.2	N/A	Cloudy water
1050	10.97'	200	5.35	1118	340	0.09	12.32	116.8	N/A	Cloudy water
1055	10.97'	200	5.35	1119	330	0.09	12.29	116.7	N/A	Cloudy water
1100	10.97'	200	5.35	1118	330	0.09	12.30	116.7	N/A	Cloudy water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Charles C Ivy III

5.0 gallons OUT

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW-2-033004
Sample Location: MW-2
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/30/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/30/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1159	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Clear	5.57	0.102	11.56	1.5	2.24	205.5	—

PURGE DATA:

Date: 3/30/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 4" PVC			See Low Flow		Purge			
Total Well Depth (TD): 32.66'			Data	Sheet				
Static Water Level (WL): 6.30'								
One Casing Volume (gal/L): 17.2								
Start Purge (hrs): 1120								
End Purge (hrs): 1159								
Total Purge Time (min): 39								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

32.66
− 6.30
26.36 x $(4)^2$ x 0.0408 ≈ 17.2 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Charles C. Pratt III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339-0677D
WELL ID.: MW-2
DATE: 3/30/04
Cloudy; 40°F; 30.14 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm2 ~~mS/cm~~	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1120	6.30'	—	—	—	—	—	—	—	—	INITIAL Reading
1124	6.30'	140	4.97	1468	55.0	1.07	11.76	340.4	NA	Slightly cloudy water
1129	6.30'	140	5.69	1135	100	1.10	11.58	109.8	N/A	Slightly cloudy water
1134	6.30'	140	5.78	677	80.0	1.31	11.48	87.0	N/A	Slightly cloudy water
1139	6.30'	140	5.73	322	28.0	1.73	11.47	108.4	N/A	Slightly cloudy water
1144	6.30'	140	5.66	180	11.0	2.00	11.45	137.2	N/A	Clear water
1149	6.30'	140	5.61	122	3.1	2.16	11.50	164.8	N/A	Clear water
1154	6.30'	140	5.57	108	2.9	2.17	11.53	187.4	N/A	Clear water
1159	6.30'	140	5.57	102	1.5	2.24	11.56	205.5	N/A	Clear water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Clark C. Ivy III

1.5 gallons out

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

1

CLIENT: Tetra Tech PHONE NO.: (916) 276-7846

PROJECT MGR: Nisha Bansal FAX NO.: ( )

EMAIL: Nisha.bansal@Tetratech.com

PROJECT NAME: Martin State Airport - Quarterly Sampling

SITE LOCATION: Martin State Airport

PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #:

PAGE 1 OF 1

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs (8270C)	Nitrates + Sulfates	Ferric Iron				REMARKS
	Preservatives Used						HCL	HNO3	HNO3	ICE	ICE	HCL HNO3				
	TB032604	3/26/04	0000	GW	2	G	X									
	DMW-3D-032604	↓	1033	↓	4	↓	X	X	X							
	DMW-3I-032604	↓	1128	↓	4	↓	X	X	X							
	DMW-3S-032604	↓	1230	↓	5	↓	X	X	X	X						
	DMW-9I-032604	↓	1630	↓	4	↓	X	X	X							
	DMW-1A-033004	3/30/04	0859	GW	4	G	X	X	X							
	DMW-1B-033004	↓	1100	↓	8	↓	X	X	X		X	X				
	MW-2-033004	↓	1159	↓	4	↓	X	X	X							

3

5

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4) [signature]	Date 3/30/04	Time 1350	Received By: [signature]

4

Requested Turnaround Time

☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:

Custody Seal:

Shipping Carrier:

Shipping Ticket No.:

Special Instructions:
STD TAT

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-10S-033004
Sample Location: DMW-10S
Sampled By: CCL/WP
C.O.C. No.: PSS-Duttal 3/31/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/30/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1541	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Bladder Pump	Cloudy	6.45	1.763	10.80	750	0.00	-67.0	—

PURGE DATA:

Date: 3/30/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material		SEE	LOW	FLOW DATA SHEET				
Type: 2" PVC		FOR	WELL	PARAMETERS				
Total Well Depth (TD): 20.68'								
Static Water Level (WL): 7.35'								
One Casing Volume (gal/L): 2.17								
Start Purge (hrs): 1500								
End Purge (hrs): 1541								
Total Purge Time (min): 41								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	Z
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	(
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	(

OBSERVATIONS / NOTES:

20.68'
− 7.35'
13.33 × (2)² × 0.0408 ≈ 2.17 gallons

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Wade C. Pyatt III

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0677D

WELL ID.: DMW-10S
DATE: 3/30/04
MISTY, 40°F ; 30.05 in. Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1500	7.35'	—	—	—	—	—	—	—	—	INITIAL Readings
1511	7.40'	200	6.33	2316	850	0.96	9.98	116.5	N/A	cloudy, TAN WATER
1516	7.37'	200	6.43	2055	800	0.63	10.55	-22.3	N/A	cloudy, TAN, water
1521	7.35'	200	6.43	1860	700	0.19	10.74	-49.3	N/A	cloudy, TAN, water
1526	7.35'	200	6.44	1804	650	0.00	10.79	-57.7	N/A	cloudy, TAN WATER
1531	7.35'	200	6.45	1786	800	0.00	10.83	-61.9	N/A	cloudy, TAN WATER
1536	7.35'	200	6.45	1774	750	0.00	10.82	-65.0	N/A	cloudy water
1541	7.35'	200	6.45	1763	750	0.00	10.80	-67.0	N/A	cloudy water
←				WELL	PARAMETERS		STABILIZE			→
←					SAMPLING	BEGINS				→

SIGNATURE(S): [signature]

1.5 gallons OUT

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-10I-033004
Sample Location: DMW-10I
Sampled By: acl/wp
C.O.C. No.: PSS-Dated 3/31/04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3/30/04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1630								
Method: Bladder Pump	clear	5.18	0.080	11.71	7.7	0.24	258.8	—

PURGE DATA:

Date: 3/30/04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material Type: 2" PVC			SEE	LOW FLOW PURGE				
Total Well Depth (TD): 44.96'			DATA	SHEET				
Static Water Level (WL): 7.35'								
One Casing Volume (gal/L): 6.13								
Start Purge (hrs): 1550								
End Purge (hrs): 1630								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

44.96
-7.35
37.61 x (2)² x 0.0408 = 6.13 gallons

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339/0697D
WELL ID.: DMW-10I
DATE: 3/30/04
Drizzle, 40°F ; 30.05 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (uS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1550	7.35'	—	—	—	—	—	—	—	—	INITIAL Reading
1600	7.50'	150	5.98	104	75	0.61	11.06	107.2	N/A	Slightly cloudy water
1605	7.50'	150	5.42	75	100	0.79	11.49	194.4	N/A	Slightly cloudy water
1610	7.50'	150	5.27	72	80	0.49	11.65	227.5	N/A	Slightly cloudy water
1615	7.50'	150	5.22	79	45	0.34	11.65	240.9	N/A	Slightly Cloudy water
1620	7.50'	150	5.21	81	24	0.29	11.68	248.7	N/A	clear water
1625	7.50'	150	5.19	81	12	0.26	11.70	254.8	N/A	clear water
1630	7.50'	150	5.18	80	7.7	0.24	11.71	258.8	N/A	clear water
←				WELL PARAMETERS STABILIZE						→
←				SAMPLING BEGINS						→

SIGNATURE(S): Charles C. Tripp III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339/0677D

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW-1S-Ø33ØØ4
Sample Location: DMW-1S
Sampled By: CCL/WP
C.O.C. No.: PSS-Dated 3/31/Ø4
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 3/3ØØ4								
Time: 1724								
Method: Bladder Pump	Slightly cloudy	6.73	1.ØØ7	11.46	46	Ø.ØØ	-76.9	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 3/3Ø/Ø4								
Method: Bladder Pump								
Monitor Reading (ppm): N/A								
Well Casing Diameter & Material								
Type: 2" PVC		SEE	LOW	FLOW	PURGE			
Total Well Depth (TD): 18.66'		DATA	SHEET					
Static Water Level (WL): 8.12'								
One Casing Volume (gal/L): 1.72								
Start Purge (hrs): 165Ø								
End Purge (hrs): 1724								
Total Purge Time (min): 34								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs (8260B)	HCL	2 - 40 mL VOAs	2
Priority Pollutant Metals (Total)	HNO_3	1 - 500 mL Poly	1
Priority Pollutant Metals (Filtered)	HNO_3	1 - 500 mL Poly	1

OBSERVATIONS / NOTES:

18.66'
− 8.12'
10.54 × (2)² × Ø.Ø4Ø8 = 1.72 gallons

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Marana State Airport
PROJECT NUMBER: N7339 - 0677D
WELL ID.: DMW-15
DATE: 3/30/04
MISTY, 40°F, 30.00 in Hg

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. uS/cm (~~mS/cm~~)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1650	8.12'	—	—	—	—	—	—	—	—	INITIAL Reading
1659	8.20'	200	7.20	880	110	0.35	10.90	-75.0	N/A	Slightly cloudy water
1704	8.12'	200	6.90	944	85	0.18	11.06	-78.5	N/A	Slightly cloudy water
1709	8.12'	200	6.79	984	65	0.04	11.20	-74.5	N/A	Slightly cloudy water
1714	8.12'	200	6.75	1002	50	0.00	11.32	-74.9	N/A	Slightly cloudy water
1719	8.12'	200	6.74	1006	48	0.00	11.41	-76.5	N/A	Slightly cloudy water
1724	8.12'	200	6.73	1007	46	0.00	11.46	-76.9	N/A	Slightly cloudy water
←				WELL PARAMETERS STABILIZE				→	→	→
←				SAMPLING BEGINS				→	→	→

SIGNATURE(S): Mark C. Tuff III

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339

Sample ID No.: DMW6-S 033104
Sample Location: DMW6-S
Sampled By: MP
C.O.C. No.: PSS-3-31-04

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3-31-04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA Sal
Method: Bladder Pump	Clear	6.33	880	11.56	0.00	-0.39	-60.1	0.00

PURGE DATA:

Date: 3-31-04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): 0.0			See	Low	Flow	Purge		
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 27.86			Data	Sheet				
Static Water Level (WL): [redacted]	17.50							
One Casing Volume(gal/L):								
Start Purge (hrs): 0945								
End Purge (hrs): 1015								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative		Container Requirements	Collected
TCL VOCs	HCl	4°C	2 - 40ml VOA Vials	✓
P.P. Total metals	HNO3	4°C	1 - Poly	✓
P.P Dissolved Filtered metals	HNO3	4°C	1 - Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD ✓ Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339
WELL ID.: OMW6-S-033104
DATE: 3-31-04

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0915	7.50	—	—	—	—	—	—	—	—	Initial, no data
0920	7.55	150	6.37	850	12	-0.32	11.20	-52.4	0.0	Clear water
0925	7.55	150	6.36	855	11	-0.36	11.21	-58.8	0.0	"
0930	7.55	150	6.36	862	7.8	-0.38	11.23	-59.8	0.0	"
0935	7.55	150	6.35	865	6.3	-0.43	11.25	-60.0	0.0	"
0940	7.55	150	6.35	870	4.3	-0.45	11.29	-60.0	0.0	"
0945	7.55	150	6.35	872	2.9	-0.46	11.32	-60.1	0.0	"
0950	7.55	150	6.34	875	2.0	-0.44	11.38	-60.2	0.0	"
0955	7.55	150	6.34	876	1.2	-0.42	11.41	-60.3	0.0	"
1000	7.55	150	6.33	877	0.35	-0.40	11.46	-60.1	0.0	"
1005	7.55	150	6.33	878	0.00	-0.39	11.50	-60.1	0.0	"
1010	7.55	150	6.33	879	0.00	-0.39	11.54	-60.1	0.0	"
1015	7.55	150	6.33	880	0.00	-0.39	11.56	-60.1	0.0	"

SIGNATURE(S): Walter R

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Manteo State Airport
Project No.: N735

Sample ID No.: DMW 6-I 033104
Sample Location: DMW 6-I
Sampled By: WP
C.O.C. No.: FSS-3-31-04

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3-31-04	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1205	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Bladder pump	Cloudy	4.07	654	12.71	>999	0.28	0.0	121.0

PURGE DATA:

Date: 3-31-04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Bladder Pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC		See Low Flow Purge Data sheet						
Total Well Depth (TD): 53.86								
Static Water Level (WL): 17.63								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1048								
End Purge (hrs): 1200								
Total Purge Time (min): 72								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl 4°C	2 - 40 ml VOA Vials	✓
P.P. Total Metals	HNO3 4°C	1 - Poly	✓
P.P. Dissolved Metals	HNO3 4°C	1 - Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

Walter E

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7335
WELL ID.: DMW 6-I 033104
DATE: 3-31-04

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1048	17.63	—	—	—	—	—	—	—	—	Initial, no odor
1050	17.66	190	6.25	353	70	-0.11	12.65	78.3	0.0	Slightly cloudy
1055	17.63	190	5.98	353	55	0.05	12.61	123.8	0.0	" "
1100	17.63	190	5.96	356	60	0.07	12.55	126.9	0.0	" "
1105	17.63	190	5.95	357	55	0.09	12.52	126.7	0.0	" "
1110	17.63	190	5.94	367	55	0.10	12.59	114.0	0.0	" "
1115	17.65	190	5.93	404	45	0.07	12.66	93.9	0.0	" "
1120	17.63	190	5.56	457	40	0.04	12.63	119.0	0.0	" "
1125	17.63	190	4.96	482	60	0.02	12.62	120.0	0.0	" "
1130	17.63	190	4.60	529	150	0.02	12.63	121.0	0.0	" "
1135	17.63	190	4.23	588	560	0.07	12.62	120.0	0.0	" "
1140	17.63	190	4.10	623	>999	0.16	12.62	115.0	0.0	Cloudy Water
1145	17.63	190	4.07	644	>999	0.24	12.74	122.1	0.0	" "
1150	17.63	190	4.07	656	>999	0.28	12.72	121.0	0.0	" "
1155	17.63	190	4.07	654	>999	0.28	12.74	119.0	0.0	" "
1200	17.63	190	4.07	654	>999	0.28	12.72	120.0	0.0	" "

SIGNATURE(S): Walter E Parker

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DMW 6 - D - 033104
Sample Location: DMW6-D
Sampled By: WP
C.O.C. No.: PSS - 3-31-04
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3-31-04	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1405	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	~~NA~~ Sal
Method: Bladder Pump	Cloudy	5.67	373	12.23	210	0.10	159.1	0.0

PURGE DATA:

Date: 3-31-04	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Bladder pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material		See	Low	Flow	Purge			
Type: 2" PVC								
Total Well Depth (TD): 72.61		Data	sheet					
Static Water Level (WL): 17.37								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1315								
End Purge (hrs): 1400								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Tce VOCs	HCl 4°C	2 - 40 ml VOA Vials	✓
P.P. Total Metals	HNO3 4°C	1 - Poly	✓
P.P. Dissolved Metals	HNO3 4°C	1 - Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Walter E Pe

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7337

WELL ID.: MW 6-D-033104
DATE: 3-31-04

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1315	17.37	—	—	—	—	—	—	—	—	Initial
1320	17.50	200	5.19	402	160	0.46	11.29	242.1	0.0	Slightly Cloudy Water
1325	17.47	200	5.18	406	290	0.36	11.72	245.3	0.0	Cloudy Water
1330	17.47	200	5.18	405	250	0.24	12.04	257.0	0.0	Cloudy Water
1335	17.47	200	5.48	385	450	0.20	12.10	209.0	0.0	Cloudy Water
1340	17.47	200	5.63	372	370	0.16	12.17	172.6	0.0	" "
1345	17.47	200	5.67	371	340	0.13	12.20	159.4	0.0	" "
1350	17.47	200	5.67	372	280	0.12	12.22	154.6	0.0	" "
1355	17.47	200	5.67	373	210	0.11	12.24	157.3	0.0	" "
1400	17.47	200	5.67	373	210	0.10	12.23	159.1	0.0	" "

SIGNATURE(S): Walter E Rue

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: N7339

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW 6 - 033104
Sample Location: MW6
Sampled By: MP
C.O.C. No.: PSS-3-31-04
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 3-31-04	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	~~Other~~ ORP
Time: 1520								
Method: Bladder pump	Clear	5.33	1251	11.61	22	0.04	0.0	144.0

PURGE DATA:

Date: 3-31-04	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Bladder pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2 4" PVC		See	Low	Flow	Purge			
Total Well Depth (TD): 33.31								
Static Water Level (WL): 13.90		Data	Sheet					
One Casing Volume(gal/L): —								
Start Purge (hrs): 1434								
End Purge (hrs): 1515								
Total Purge Time (min): 41								
Total Vol. Purged (GAL): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl 4°C	2 - 40ml Amb. Vials	✓
F.P. Total metals	HNO3 4°C	1 - Poly	✓
F.P. Dissolved metals	HNO3 4°C	1 - Poly	—

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: N7339
WELL ID.: MW6 - 033104
DATE: 3-31-04

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1434	13.50	—	—	—	—	—	—	—	—	Initial, no odor
1435	13.90	170	5.20	1120	75	0.20	11.57	165.5	0.0	Slightly cloudy Water
1440	13.90	170	5.20	1121	60	0.06	11.45	166.5	0.0	" "
1445	13.90	170	5.20	1126	50	0.05	11.47	167.8	0.0	" "
1450	13.90	170	5.21	1141	40	0.05	11.44	164.6	0.0	" "
1455	13.90	170	5.25	1184	28	0.06	11.52	158.0	0.0	Clear Water "
1500	13.90	170	5.29	1220	24	0.06	11.59	148.7	0.0	" "
1505	13.50	170	5.31	1257	20	0.05	11.60	142.0	0.0	" "
1510	13.50	170	5.32	1250	22	0.04	11.62	146.1	0.0	" "
1515	13.50	170	5.33	1254	22	0.04	11.61	144.0	0.0	" "

SIGNATURE(S): Katie Ek

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: 7339

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MW2-A-033104
Sample Location: MW2-A
Sampled By: LP
C.O.C. No.: PSS-3-31-04
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	~~Other~~ ORP
Date: 3-31-04								
Time: 1640								
Method: Bladder Pump	Cloudy	4.48	1254	12.12	450	0.06	0.0	230.1

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 3-31-04								
Method: Bladder Pump								
Monitor Reading (ppm): 0.0	See Low Flow Purge							
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 62.16	Data Sheet							
Static Water Level (WL): 20.25								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1548								
End Purge (hrs): 1640								
Total Purge Time (min): 52								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl 4°C	2 - 40 ml Vom Vials	✓
P.P. Total Metals	HNO3 4°C	1 - Poly	✓
P.P. Dissolved Metals	HNO3 4°C	1 - Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Walter R

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Manlin State Airport
PROJECT NUMBER: 7339
WELL ID.: DMW 2-A-033104
DATE: 3-31-04

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1548	20.25	—	—	—	—	—	—	—	—	Initial, no odor
1550	20.30	250	4.02	1428	65	0.12	11.92	272.0	0.0	Slightly Cloudy Water
1555	20.31	250	4.44	1373	330	0.12	12.10	238.3	0.0	Cloudy Water
1600	20.31	250	4.52	1303	160	0.09	12.07	231.4	0.0	" 4
1605	20.31	250	4.54	1293	130	0.08	12.02	231.7	0.0	" 6
1610	20.31	250	4.50	1283	260	0.07	12.04	231.9	0.0	Cloudy Water
1615	20.31	250	4.49	1265	400	0.06	12.09	231.5	0.0	" 6
1620	20.31	250	4.49	1258	450	0.06	12.09	231.3	0.0	" "
1625	20.31	250	4.48	1252	400	0.06	12.10	231.1	0.0	" "
1630	20.31	250	4.44	1254	450	0.06	12.12	230.5	0.0	" 4
1635	20.31	250	4.48	1253	450	0.06	12.11	231.5	0.0	" 4
1640	20.31	250	4.48	1254	450	0.06	12.12	230.1	0.0	" 7

SIGNATURE(S): Walter E

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)
CLIENT: Tetra Tech PHONE NO.: (916) 276-7846
PROJECT MGR: Nisha Bansal FAX NO.: ( )
EMAIL: Nisha.bansal@Tetratech.com
PROJECT NAME: Martin State Airport- Quarterly Sampling
SITE LOCATION: Martin State Airport
PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Volatile Organic Compounds (8260 B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)							REMARKS
							Preservatives Used: HCl	HNO3	HNO3							
	TB 033004	3/30/04	0000	GW	2	G	X									
	DMW-10S-033004	↓	1541	↓	4		X	X	X							
	DMW-10I-033004	↓	1630	↓	4		X	X	X							
	DMW-1S-033004	↓	1724	↓	4		X	X	X							
	DMW-6S-033104	3-31-04	1020	↓	4		X	X	X							
	DMW-6I-033104	↓	1205	↓	4		X	X	X							
	DMW-6D-033104	↓	1405	↓	4		X	X	X							
	DMW-6-033104	↓	1520	↓	4		X	X	X							
	DMW-2A-033104	↓	1640	↓	4		X	X	X							

(3) Analysis Required

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Walter [signature]	3-31-04	1845	[signature]
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date	Time	Received By:

(4) Requested Turnaround Time
☒ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:
Custody Seal:
Shipping Carrier:
Shipping Ticket No.:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

APPENDIX D

LABORATORY ANALYTICAL DATA REPORTS

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 18, 2004

PROJECT: Martin State Airport - Quarterly Sampling

Project #: N7339-0677D

CERTIFICATE OF ANALYSIS #: *04031814*

PREPARED FOR:

Tetra Tech, Inc.
10670 White Rock Rd., Ste. 100
Rancho Cordova, CA 95670

April 27, 2004

6630 Baltimore National Pike Baltimore, Maryland 21228 (410) 747-8770 (800) 932-9047 fax (410) 788-8723

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www.phaseonline.com

PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 1 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB031704 / 04031814-01						
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	ND	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 2 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB031704 / 04031814-01						
Volatile Organic Compounds						
Ethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/18/04
Naphthalene	ND	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/18/04
Toluene	ND	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
Trichloroethene	ND	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Vinyl chloride	ND	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/18/04
o-Xylene	ND	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 3 of 31
Tetra Tech, Inc.
April 27, 2004

Project:	Martin State Airport - Quarterly Sampling		
Site Location:	Martin State Airport		
Project Number:	N7339-0677D	Date Sampled:	03/17/04
Matrix:	Water	Date Received:	03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB031704 / 04031814-01						

Reviewed By: Matt Coker
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 4 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7D-031704 / 04031814-02						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**15**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**17**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**56**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	ND	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 5 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7D-031704 / 04031814-02						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/18/04
Naphthalene	ND	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/18/04
Toluene	ND	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
Trichloroethene	ND	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 6 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7D-031704 / 04031814-02						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/18/04
o-Xylene	ND	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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No. 04031814 Page 7 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7D-031704 Dis / 04031814-03						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	ND	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 8 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7I-031704 / 04031814-04						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**6.6**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**28**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**20**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**69**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**100**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**77**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**19**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**290**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	**2**	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	ND	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 9 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7I-031704 / 04031814-04						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	**2**	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	**140**	ug/L	EPA 8260	1		03/18/04
trans-1,2-Dichloroethene	**6**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/18/04
Naphthalene	ND	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/18/04
Toluene	ND	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	**2**	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
Trichloroethene	**E 220**	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 10 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7I-031704 / 04031814-04						
Volatile Organic Compounds						
Vinyl chloride	**19**	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/18/04
o-Xylene	ND	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
E - estimated value, exceeds calibration range.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 11 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7I-031704 Dis / 04031814-05						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**5.6**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**18**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**5.1**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**72**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**15**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**270**	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 12 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7S-031704 / 04031814-06						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**7.2**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**12**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**99**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**7.4**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**85**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**55**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**230**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	**40**	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	**13**	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	**3**	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	**15**	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 13 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7S-031704 / 04031814-06						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	**E 600**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	**E 990**	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	**29,000**	ug/L	EPA 8260	400		03/19/04
trans-1,2-Dichloroethene	**E 430**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Ethylbenzene	**150**	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	**15**	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	**E, b 390**	ug/L	EPA 8260	1		03/18/04
Naphthalene	**24**	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	**36**	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	**39**	ug/L	EPA 8260	1		03/18/04
Toluene	**2,500**	ug/L	EPA 8260	400		03/19/04
1,2,3-Trichlorobenzene	**2**	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	**8**	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	**E 2,000**	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	**23**	ug/L	EPA 8260	1		03/18/04
Trichloroethene	**45,000**	ug/L	EPA 8260	400		03/19/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	**E 300**	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	**87**	ug/L	EPA 8260	1		03/18/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 14 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7S-031704 / 04031814-06						
Volatile Organic Compounds						
Vinyl chloride	**190**	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	**330**	ug/L	EPA 8260	3		03/18/04
o-Xylene	**140**	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	**21**	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

Reviewed By: Matt Celuch
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact
E - estimated value, exceeds calibration range.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 15 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-7S-031704 Dis / 04031814-07						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**6.1**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**12**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**110**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**6.6**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**78**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**36**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**220**	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 16 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-5-031704 / 04031814-08						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**7.7**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**7.0**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**83**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**140**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**8.2**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**130**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**110**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**220**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	**85**	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	**6**	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	**11**	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 17 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-5-031704 / 04031814-08						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	**E 510**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	**270**	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	**E 950**	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	**E 120,000**	ug/L	EPA 8260	400		03/19/04
trans-1,2-Dichloroethene	**E 1,100**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Ethylbenzene	**E 240**	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	**12**	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	**E, b 500**	ug/L	EPA 8260	1		03/18/04
Naphthalene	**33**	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	**28**	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	**28**	ug/L	EPA 8260	1		03/18/04
Toluene	**4,100**	ug/L	EPA 8260	400		03/19/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	**E 840**	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	**16**	ug/L	EPA 8260	1		03/18/04
Trichloroethene	**31,000**	ug/L	EPA 8260	400		03/19/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	**E 220**	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	**59**	ug/L	EPA 8260	1		03/18/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 18 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-5-031704 / 04031814-08						
Volatile Organic Compounds						
Vinyl chloride	**E 350**	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	**300**	ug/L	EPA 8260	3		03/18/04
o-Xylene	**110**	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	**14**	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

Reviewed By:
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact
E - estimated value, exceeds calibration range.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 19 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-5-031704 Dis / 04031814-09						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**6.8**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**6.8**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**21**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**150**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**7.1**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**120**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**64**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**230**	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Cline
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 20 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8S-031704 / 04031814-10						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**130**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**8.0**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**26**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**81**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/19/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/19/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/19/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/19/04
Bromoform	ND	ug/L	EPA 8260	1		03/19/04
Bromomethane	ND	ug/L	EPA 8260	1		03/19/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/19/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
Chloroethane	ND	ug/L	EPA 8260	1		03/19/04
Chloroform	ND	ug/L	EPA 8260	1		03/19/04
Chloromethane	ND	ug/L	EPA 8260	1		03/19/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/19/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/19/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/19/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 21 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8S-031704 / 04031814-10						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/19/04
cis-1,2-Dichloroethene	1	ug/L	EPA 8260	1		03/19/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/19/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/19/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/19/04
Naphthalene	ND	ug/L	EPA 8260	1		03/19/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Styrene	ND	ug/L	EPA 8260	1		03/19/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/19/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/19/04
Toluene	ND	ug/L	EPA 8260	1		03/19/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/19/04
Trichloroethene	ND	ug/L	EPA 8260	1		03/19/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/19/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/19/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 22 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8S-031704 / 04031814-10						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/19/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/19/04
o-Xylene	ND	ug/L	EPA 8260	3		03/19/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/19/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/19/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/19/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/19/04
Acetone	ND	ug/L	EPA 8260	10		03/19/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/19/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/19/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/19/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/19/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 23 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/17/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8S-031704 Dis / 04031814-11						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**22**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**80**	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Ochee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8I-031804 / 04031814-12						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**11**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**93**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**930**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**60**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**14**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**150**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**39**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**370**	ug/L	EPA 6020	50	03/22/04	03/23/04
Volatile Organic Compounds						
Benzene	**2**	ug/L	EPA 8260	1		03/18/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/18/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/18/04
Bromoform	ND	ug/L	EPA 8260	1		03/18/04
Bromomethane	ND	ug/L	EPA 8260	1		03/18/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/18/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Chloroethane	ND	ug/L	EPA 8260	1		03/18/04
Chloroform	**3**	ug/L	EPA 8260	1		03/18/04
Chloromethane	ND	ug/L	EPA 8260	1		03/18/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/18/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/18/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8I-031804 / 04031814-12						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,2-Dichloroethane	**7**	ug/L	EPA 8260	1		03/18/04
1,1-Dichloroethene	**3**	ug/L	EPA 8260	1		03/18/04
cis-1,2-Dichloroethene	**500**	ug/L	EPA 8260	10		03/19/04
trans-1,2-Dichloroethene	**3**	ug/L	EPA 8260	1		03/18/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/18/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/18/04
Methylene chloride	**b 31**	ug/L	EPA 8260	1		03/18/04
Naphthalene	ND	ug/L	EPA 8260	1		03/18/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/18/04
Styrene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/18/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/18/04
Toluene	**2**	ug/L	EPA 8260	1		03/18/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/18/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/18/04
Trichloroethene	**1,200**	ug/L	EPA 8260	10		03/19/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/18/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/18/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8I-031804 / 04031814-12						
Volatile Organic Compounds						
Vinyl chloride	**83**	ug/L	EPA 8260	1		03/18/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/18/04
o-Xylene	ND	ug/L	EPA 8260	3		03/18/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/18/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/18/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/18/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/18/04
Acetone	ND	ug/L	EPA 8260	10		03/18/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/18/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/18/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/18/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/18/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/18/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 27 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8I-031804 Dis / 04031814-13						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	**9.0**	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**86**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**88**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**48**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**11**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**140**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	**31**	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**380**	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 28 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2B-031804 / 04031814-14						
Ferric Iron						
Iron (Fe3+)	**1.7**	mg/L	Mod. 7199	1		03/22/04
Nitrate Nitrogen						
Nitrate	ND	mg/L	EPA 300.0	0.2		03/19/04
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	**13**	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	**170**	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**86**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**70**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**57**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	**190**	ug/L	EPA 6020	50	03/22/04	03/23/04
Total Sulfate						
Sulfate	**3.9**	mg/L	EPA 300.0	1		03/19/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/19/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/19/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/19/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/19/04
Bromoform	ND	ug/L	EPA 8260	1		03/19/04
Bromomethane	ND	ug/L	EPA 8260	1		03/19/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/19/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
Chloroethane	ND	ug/L	EPA 8260	1		03/19/04
Chloroform	ND	ug/L	EPA 8260	1		03/19/04

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No. 04031814 Page 29 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2B-031804 / 04031814-14						
Volatile Organic Compounds						
Chloromethane	ND	ug/L	EPA 8260	1		03/19/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/19/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/19/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/19/04
Dibromomethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dic[illegible]robenzene	ND	ug/L	EPA 8260	1		03/19/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/19/04
cis-1,2-Dichloroethene	**18**	ug/L	EPA 8260	1		03/19/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/19/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/19/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/19/04
Methyl[illegible] chloride	ND	ug/L	EPA 8260	1		03/19/04
Naphthalene	ND	ug/L	EPA 8260	1		03/19/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Styrene	ND	ug/L	EPA 8260	1		03/19/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/19/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/19/04
Toluene	ND	ug/L	EPA 8260	1		03/19/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/19/04

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CERTIFICATE OF ANALYSIS
No. 04031814 Page 30 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2B-031804 / 04031814-14						
Volatile Organic Compounds						
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/19/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/19/04
Trichloroethene	**13**	ug/L	EPA 8260	1		03/19/04
1,2,3-T...chloropropane	ND	ug/L	EPA 8260	1		03/19/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/19/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/19/04
Vinyl chloride	ND	ug/L	EPA 8260	1		03/19/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/19/04
o-Xylene	ND	ug/L	EPA 8260	3		03/19/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/19/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/19/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/19/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/19/04
Acetone	ND	ug/L	EPA 8260	10		03/19/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/19/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/19/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/19/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/19/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/19/04

Reviewed By: Matt Ochee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04031814 Page 31 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/18/04
Date Received: 03/18/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2B-031804 Dis / 04031814-15						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Arsenic	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Beryllium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Cadmium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Chromium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Copper	**7.6**	ug/L	EPA 6020	5	03/22/04	03/23/04
Lead	**5.4**	ug/L	EPA 6020	5	03/22/04	03/23/04
Mercury	ND	ug/L	EPA 6020	1	03/22/04	03/23/04
Nickel	**6.0**	ug/L	EPA 6020	5	03/22/04	03/23/04
Selenium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Silver	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Thallium	ND	ug/L	EPA 6020	5	03/22/04	03/23/04
Zinc	ND	ug/L	EPA 6020	50	03/22/04	03/23/04

Reviewed By: Matt Colvin
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

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email: info@phaseonline.com

(1)
CLIENT: Tetra Tech PHONE NO.: (916) 276-7846
PROJECT MGR: Nisha Bansal FAX NO.: ( )
EMAIL: Nisha.bansal@TetraTech.com
PROJECT NAME: Martin State Airport - Quarterly Sampling
SITE LOCATION: Martin State Airport
PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #: CYC318.14

PAGE 1 OF _____

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	HCL	HNO3		ICE	ICE	HCL				REMARKS
							Analysis Required (3)	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs (8270C)	Nitrates & Sulfates	Ferric Iron				
	TB-031704	3/17/04	0000	WATER	2	G		X									
	DMW-7D-031704		0934		4	G		X	X	X							
	DMW-7I-031704		1105		4	G		X	X	X							
	DMW-7S-031704		1201		4	G		X	X	X							
	MW-5-031704		1458		5	G		X	X	X	X						
	DMW-8S-031704		1641		4	G		X	X	X							
	DMW-8I-031804	3/18/04	0833		4	G		X	X	X							
	DMW-2B-031804		1110		9	G		X	X	X	X	X	X				

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date	Time	Received By:
	3/18/04	1:25	

(4)
Requested Turnaround Time
☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Sample Condition Upon Receipt: (Cool)
Custody Seal:
Shipping Carrier: (Hand)
Shipping Ticket No.:

Data Deliverables Required:

Special Instructions:
DO NOT ANALYZE SVOC AS PER NISHA BANSAL 3/22/04 BZ

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The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

ENVIRO-CHEM LABORATORIES, INC.

100 Lakefront Drive, Hunt Valley, Maryland 21030 (410) 785-9739

FINAL REPORT OF ANALYSES

Phase Separation Science, Inc.
6630 Baltimore Nat. Pike
Baltimore, MD 21228-
Attn: Mr. John Richardson

PROJECT NAME: 04031814
REPORT DATE: 03/24/2004

SAMPLE NUMBER- 30862 SAMPLE ID- 04031814-14 SAMPLE MATRIX- WA
DATE SAMPLED- 03/18/04
DATE RECEIVED- 03/19/04 SAMPLER- NOT SPECIFIED RECEIVED BY- SES
TIME RECEIVED- 1015 DELIVERED BY- Courier

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	DET. LIMIT
NITRATE	EPA 300.0	03/19/04	SES	<0.2	mg/L as N	0.2
SULFATE	EPA 300.0	03/19/04	SES	3.9	mg/L	1.0

LABORATORY DIRECTOR

Order #: P0403457
Report Date: 03/23/04
Client Proj Name: Martin State Airport
Client Proj #: 04031814

Client Name: Phase Separation Science
Contact: Bryan Ridgell
Address: 6630 Baltimore National P
Baltimore, MD 21228

Lab Sample #: P0403457-01

Sample Description	Matrix	Sampled Date/Time	Received
04031814-14	Water	18 Mar. 04 0:00	19 Mar. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
WetChem						
Ferric Iron	1.7	1	mg/L	Mod._7199	md	3/22/04 19:20

N - NELAC certified analysis

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Volatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *BFB Tune Summary*

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/18/04 16:34	TCL-W, CCV 50ppb	100	100	104	
03/18/04 16:58	UNREG-W, CCV 50ppb	100	100	99	
03/18/04 17:22	Method Blank	100	99	103	
03/19/04 12:19	LCS / LCS 25ppb	101	101	100	
03/18/04 18:09	04031814-01 / TB031704	100	100	100	
03/18/04 18:33	04031814-02 / DMW-7D-031704	100	101	99	
03/18/04 18:57	04031814-04 / DMW-7I-031704	99	102	100	
03/18/04 19:21	04031814-06 / DMW-7S-031704	89	95	103	
03/18/04 19:45	04031814-08 / MW-5-031704	96	97	103	
03/18/04 20:33	04031814-12 / DMW-8I-031804	102	99	100	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/19/04 10:49	TCL-W, CCV 50ppb	99	101	100	
03/19/04 11:13	UNREG-W, CCV 50ppb	101	101	100	
03/19/04 11:37	Method Blank	100	102	100	
03/19/04 23:11	LCS / LCS 25ppb	101	101	100	
03/19/04 14:00	04031814-10 / DMW-8S-031704	102	103	101	
03/19/04 14:24	04031814-14 / DMW-2B-031804	100	101	102	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
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VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04031817.D**	**DATE/TIME ANALYZED:**	**03/18/04 17:22**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
04031814-01	TB031704	04031819.D	03/18/04 18:09
04031814-02	DMW-7D-031704	04031820.D	03/18/04 18:33
04031814-04	DMW-7I-031704	04031821.D	03/18/04 18:57
04031814-06	DMW-7S-031704	04031822.D	03/18/04 19:21
04031814-08	MW-5-031704	04031823.D	03/18/04 19:45
04031814-12	DMW-8I-031804	04031825.D	03/18/04 20:33

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031817.D Vial: 17
Acq On : 18 Mar 2004 5:22 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #348 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:33 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	128024	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	235284	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	194793	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	63645	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	76659	50.06	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.12%			
33) Toluene d-8 SS#2	6.28	98	301842	49.64	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.28%			
50) 4-Bromofluorobenzene SS#3	9.60	95	109616	51.32	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	0.00	94	0	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	2.26	43	273	Not Detected		
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.58	84	2277	1.00	ug/L	97
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	2.77	73	1722	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	3.56	43	572	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	0.00	56	0	Not Detected d		
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.35	78	594	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031817.D
Acq On : 18 Mar 2004 5:22 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Quant Time: Mar 19 10:33 2004

Vial: 17
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

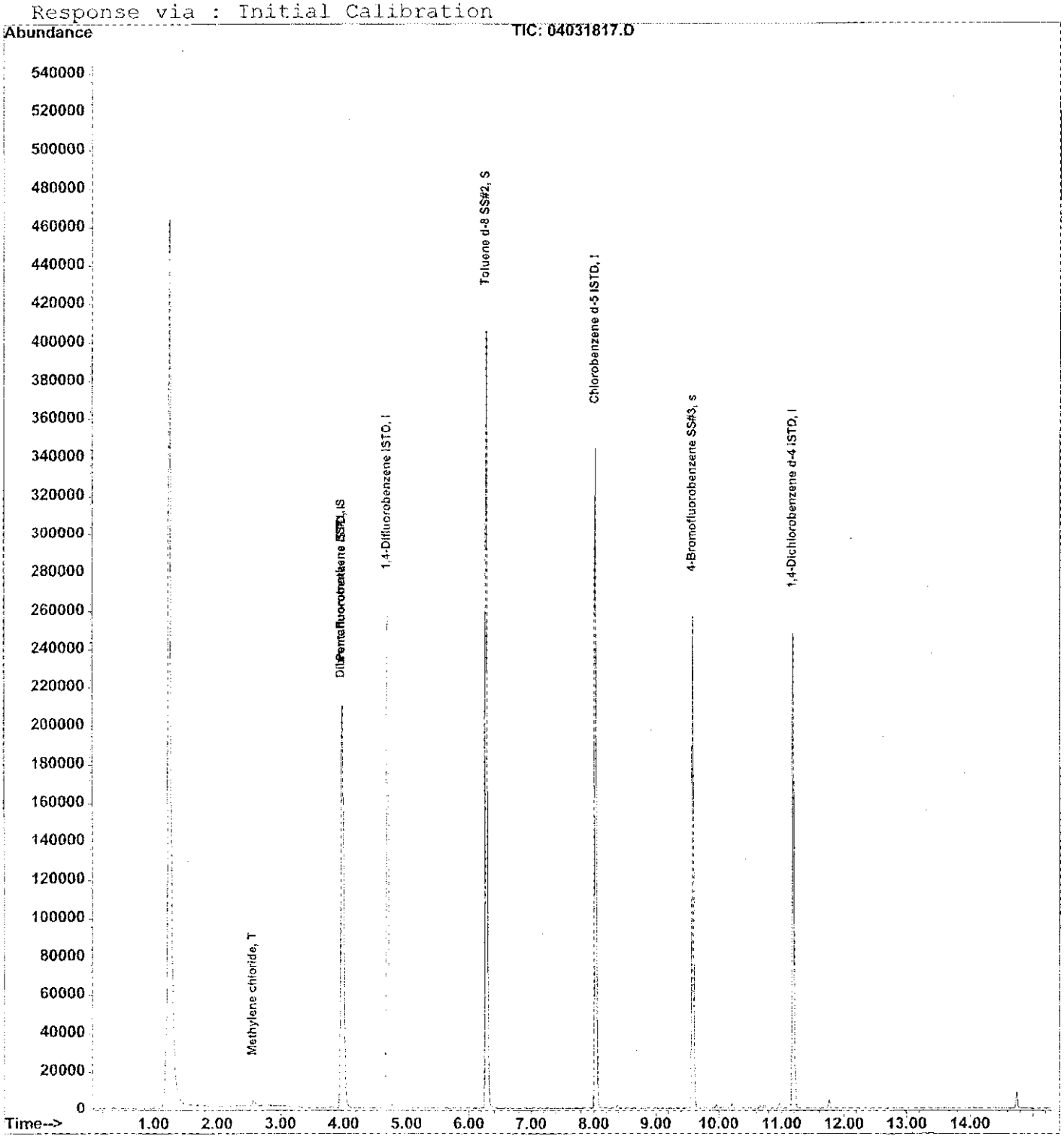
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	6.28	43	2021	Not Detected	
34) TOLUENE	6.37	92	181	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	0.00	166	0	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.22	91	729	Not Detected	
44) m&p-Xylene	8.39	106	576	Not Detected	
45) o-Xylene	8.89	106	108	Not Detected	
46) Styrene	8.92	104	61	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	9.39	105	225	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	0.00	146	0	Not Detected	d
53) 1,4-Dichlorobenzene	0.00	146	0	Not Detected	d
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	14.05	180	256	Not Detected	
57) Naphthalene	14.39	128	1293	Not Detected	

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040318\04031817.D
Acq On : 18 Mar 2004 5:22 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Quant Time: Mar 19 10:33 2004

Vial: 17
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04031904.D**	**DATE/TIME ANALYZED:**	**03/19/04 11:37**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
04031814-10	DMW-8S-031704	04031910.D	03/19/04 14:00
04031814-14	DMW-2B-031804	04031911.D	03/19/04 14:24

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031904.D
Acq On : 19 Mar 2004 11:37 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Quant Time: Mar 19 13:29 2004

Vial: 4
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	124186	50.00 ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	225780	50.00 ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	185672	50.00 ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	63129	50.00 ug/L	-0.03
System Monitoring Compounds					
20) Dibromofluoromethane SS#1	3.96	113	74118	49.90 ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.80%		
33) Toluene d-8 SS#2	6.28	98	296735	50.85 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.70%		
50) 4-Bromofluorobenzene SS#3	9.58	95	105902	49.98 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.96%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected	
3) Chloromethane	0.00	50	0	Not Detected	
4) VINYL CHLORIDE	0.00	62	0	Not Detected	
5) Bromomethane	0.00	94	0	Not Detected	
6) Chloroethane	0.00	64	0	Not Detected	
7) Trichlorofluoromethane	0.00	101	0	Not Detected	
8) Acetone	2.28	43	529	Not Detected	
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected	
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected	
11) Carbon Disulfide	0.00	76	0	Not Detected	
12) Methyl Acetate	0.00	74	0	Not Detected	
13) Methylene chloride	2.57	84	1015	Not Detected	
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected	
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected	
16) 1,1-Dichloroethane	0.00	63	0	Not Detected	
17) cis-1,2-Dichloroethene	3.55	96	389	Not Detected	
18) 2-Butanone (MEK)	0.00	43	0	Not Detected	
19) CHLOROFORM	0.00	83	0	Not Detected	
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected	
22) Cyclohexane	0.00	56	0	Not Detected	d
24) Carbon tetrachloride	0.00	117	0	Not Detected	
25) Benzene	4.34	78	526	Not Detected	
26) 1,2-Dichloroethane	0.00	62	0	Not Detected	
27) Trichloroethene	4.96	95	919	Not Detected	
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected	
29) Methylcyclohexane	5.18	83	130	Not Detected	
30) Bromodichloromethane	0.00	83	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031904.D Vial: 4
Acq On : 19 Mar 2004 11:37 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #348 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 13:29 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32)	4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34)	TOLUENE	6.36	92	481	Not Detected	
35)	trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36)	1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37)	Tetrachloroethene	0.00	166	0	Not Detected	
38)	2-Hexanone (MBK)	0.00	43	0	Not Detected	
40)	Dibromochloromethane	0.00	129	0	Not Detected	
41)	1,2-Dibromoethane	0.00	107	0	Not Detected	
42)	Chlorobenzene	0.00	112	0	Not Detected	
43)	ETHYLBENZENE	8.21	91	546	Not Detected	
44)	m&p-Xylene	8.37	106	433	Not Detected	
45)	o-Xylene	0.00	106	0	Not Detected	
46)	Styrene	0.00	104	0	Not Detected	
47)	Bromoform	0.00	173	0	Not Detected	
49)	Isopropylbenzene	9.40	105	333	Not Detected	
51)	1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52)	1,3-Dichlorobenzene	11.21	146	1113	Not Detected	
53)	1,4-Dichlorobenzene	11.21	146	1113	Not Detected	
54)	1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55)	1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56)	1,2,4-Trichlorobenzene	14.04	180	308	Not Detected	
57)	Naphthalene	14.38	128	1160	Not Detected	

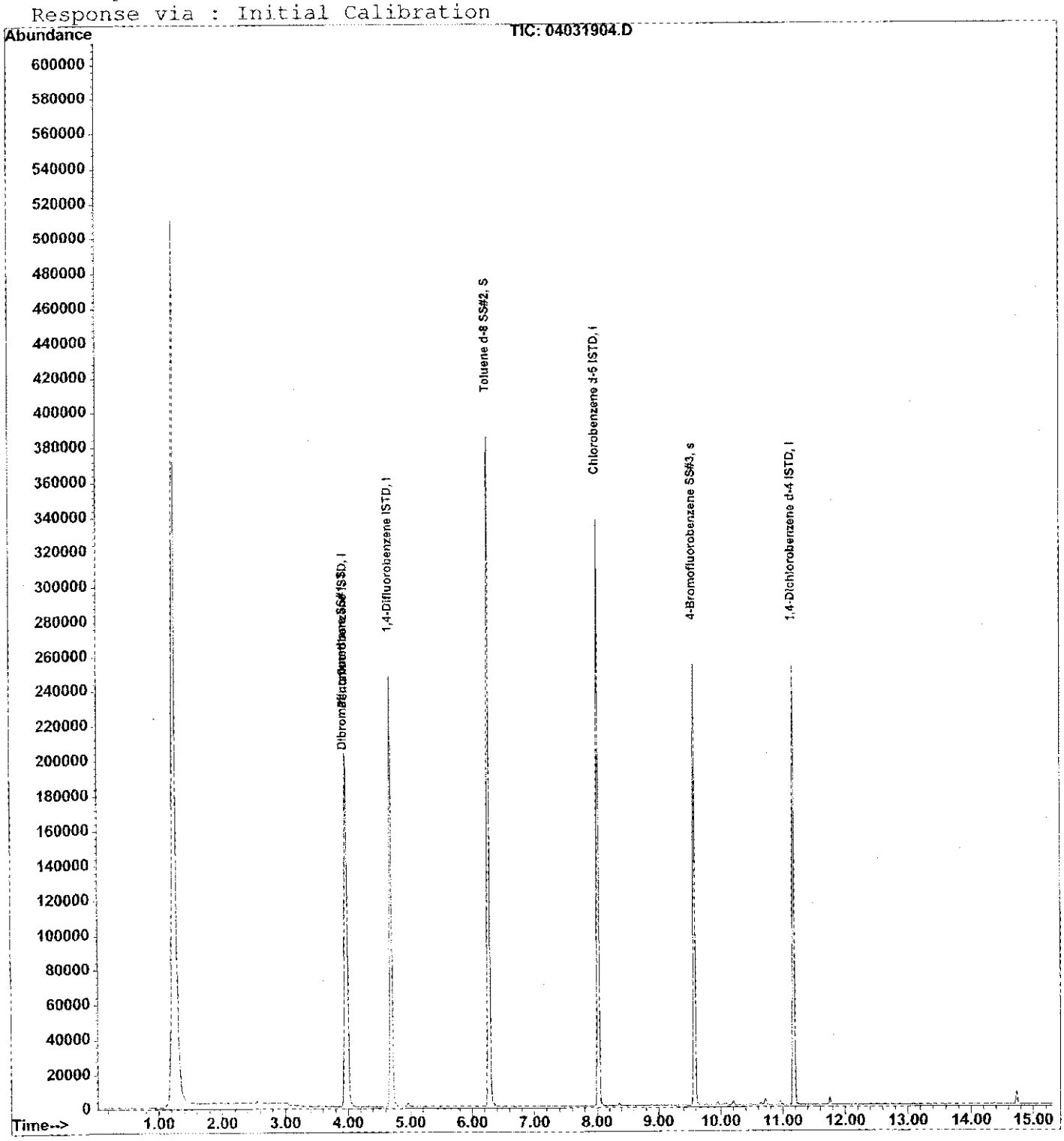
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031904.D
Acq On : 19 Mar 2004 11:37 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Quant Time: Mar 19 13:29 2004

Vial: 4
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031904.D Vial: 4
Acq On : 19 Mar 2004 11:37 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #348 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 13:30 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	3.99	168	124186	50.00	ug/L	-0.02
12) 1,4-Difluorobenzene	4.69	114	225780	50.00	ug/L	-0.02
19) Chlorobenzene d-5	8.02	117	185672	50.00	ug/L	-0.02
27) 1,4-Dichlorobenzene d-4	11.18	152	63129	50.00	ug/L	-0.02
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.96	113	74118	49.61	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.22%			
18) Toluene d-8 SS#2	6.28	98	296735	50.66	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.32%			
23) 4-Bromofluorobenzene SS#3	9.58	95	105902	50.14	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.28%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	2.62	59	57	Not Detected		
6) vinyl acetate	3.09	43	566	Not Detected		
7) diisopropyl ether	3.14	45	112	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	9.77	156	50	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.95	91	2298	Not Detected		
28) 2-Chlorotoluene	10.05	91	1187	Not Detected		
29) 4-Chlorotoluene	10.21	91	1154	Not Detected		
30) 1,3,5-Trimethylbenzene	10.21	105	1707	Not Detected		
31) tert-Butylbenzene	10.64	119	1041	Not Detected		
32) 1,2,4-Trimethylbenzene	10.72	105	2835	Not Detected		
33) sec-Butylbenzene	10.97	105	2616	Not Detected		
34) 4-Isopropyltoluene	11.18	119	1671	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031904.D Vial: 4
Acq On : 19 Mar 2004 11:37 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #348 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 13:30 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	0.00	91	0	Not Detected	d
36) 1,2,3-Trichlorobenzene	0.00	180	0	Not Detected	d

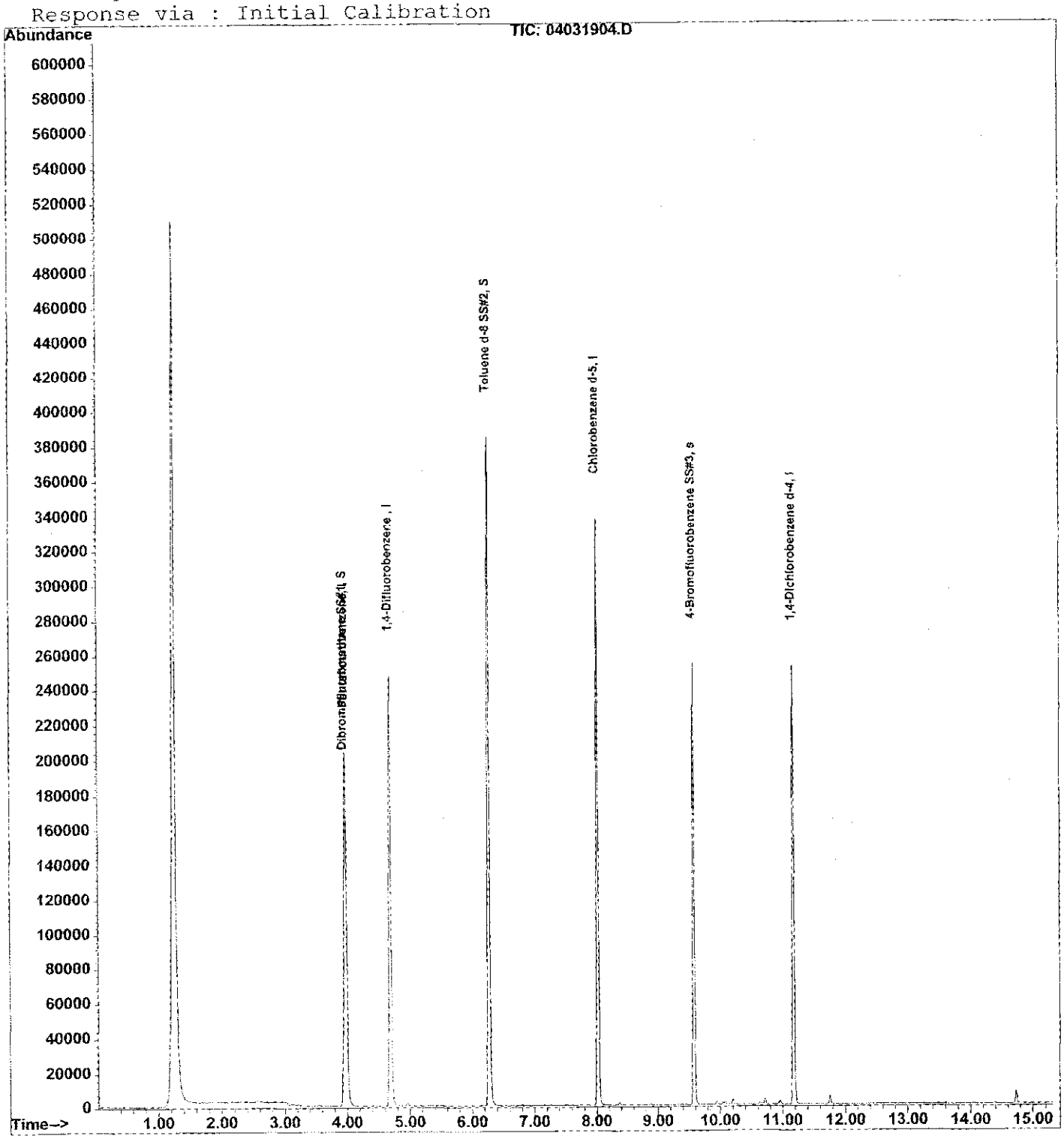
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031904.D
Acq On : 19 Mar 2004 11:37 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Quant Time: Mar 19 13:30 2004

Vial: 4
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/19/04 **BATCH NUMBER:** VOC040318

METHOD: EPA 8260 **LAB FILE IDs:** 04031834.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	24	95	61-145
Benzene	25	ND	24	97	76-127
Trichloroethene	25	ND	25	101	71-120
Toluene	25	ND	25	99	76-125
Chlorobenzene	25	ND	23	92	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031834.D Vial: 34
Acq On : 19 Mar 2004 12:19 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	125464	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	226999	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	189656	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	62956	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	75444	50.27	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.54%			
33) Toluene d-8 SS#2	6.29	98	296378	50.52	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.04%			
50) 4-Bromofluorobenzene SS#3	9.60	95	105222	49.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	50840	22.53	ug/L	100
3) Chloromethane	1.49	50	59864	24.79	ug/L	99
4) VINYL CHLORIDE	1.58	62	55195	23.04	ug/L	100
5) Bromomethane	1.76	94	45589	23.21	ug/L	100
6) Chloroethane	1.77	64	33255	26.99	ug/L	99
7) Trichlorofluoromethane	1.91	101	33277	23.90	ug/L	100
8) Acetone	2.27	43	14232	23.64	ug/L	93
9) 1,1-DICHLOROETHENE	2.27	96	43969	23.84	ug/L	96
10) 1,1,2-Trichlorotrifluoroet	2.26	101	37283	24.53	ug/L	99
11) Carbon Disulfide	2.46	76	164339	24.99	ug/L	99
12) Methyl Acetate	2.49	74	5364	23.18	ug/L	94
13) Methylene chloride	2.58	84	50726	22.84	ug/L	98
14) trans-1,2-Dichloroethene	2.78	96	47466	23.92	ug/L	99
15) Methyl-t-Butyl Ether	2.78	73	91509	24.30	ug/L	100
16) 1,1-Dichloroethane	3.10	63	81137	24.05	ug/L	100
17) cis-1,2-Dichloroethene	3.57	96	50007	25.22	ug/L	98
18) 2-Butanone (MEK)	3.56	43	25164	22.47	ug/L	100
19) CHLOROFORM	3.84	83	85160	23.52	ug/L	100
21) 1,1,1-Trichloroethane	4.02	97	59794	23.34	ug/L #	11
22) Cyclohexane	4.08	56	71793	24.54	ug/L	90
24) Carbon tetrachloride	4.17	117	41309	23.57	ug/L	99
25) Benzene	4.35	78	203772	24.15	ug/L	99
26) 1,2-Dichloroethane	4.36	62	64185	24.33	ug/L	99
27) Trichloroethene	4.98	95	48355	25.23	ug/L	98
28) 1,2-DICHLOROPROPANE	5.20	63	53308	23.96	ug/L	99
29) Methylcyclohexane	5.19	83	44918	22.67	ug/L	97
30) Bromodichloromethane	5.50	83	63115	23.87	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031834.D
Acq On : 19 Mar 2004 12:19 am
Sample : LCS 25ppb
Misc : IS/S 1uL #348, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Vial: 34
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

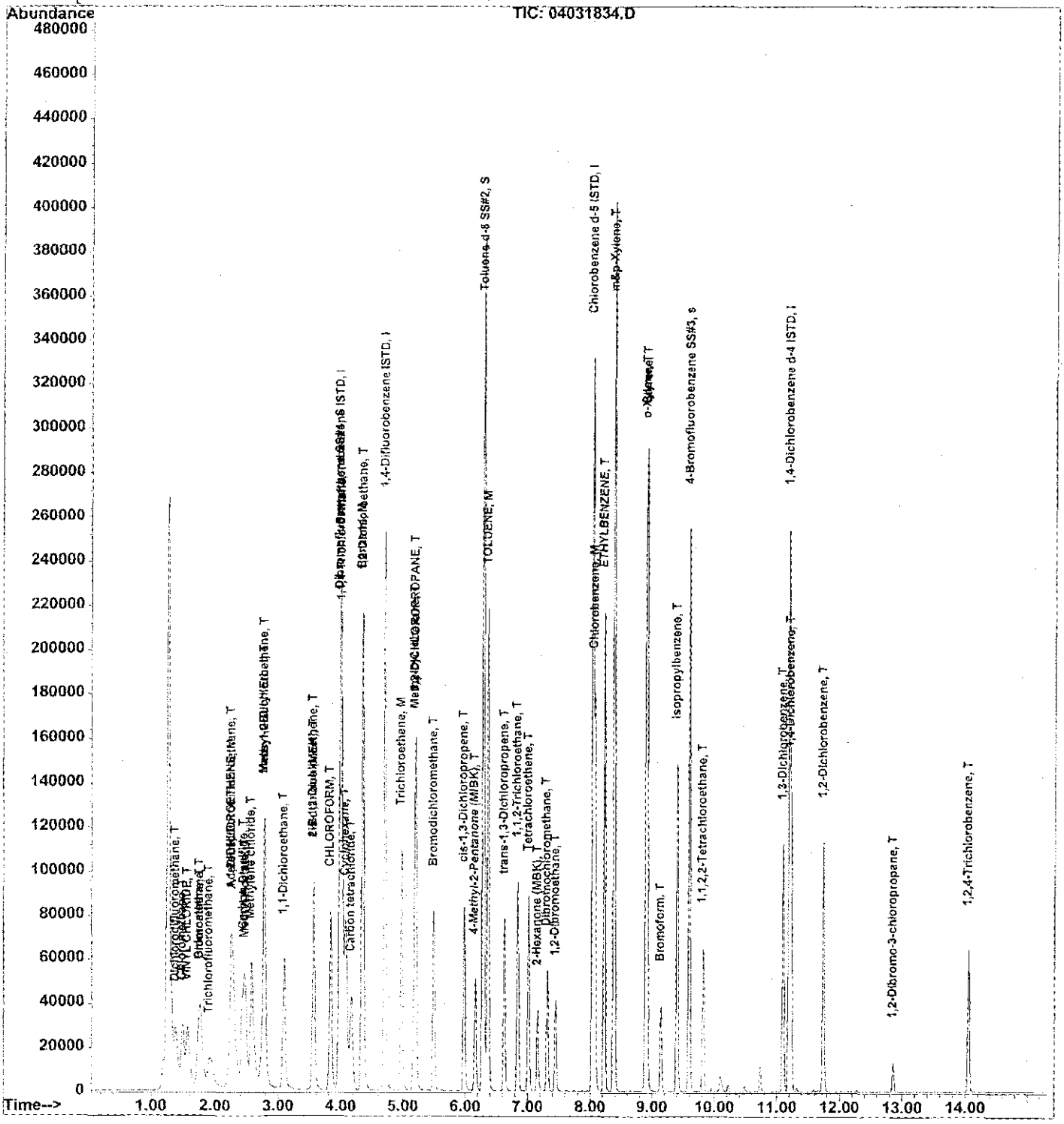
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.99	75	80217	22.75 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	53698	24.44 ug/L	100
34) TOLUENE	6.37	92	113629	24.86 ug/L	99
35) trans-1,3-Dichloropropene	6.63	75	66696	22.47 ug/L	99
36) 1,1,2-Trichloroethane	6.85	83	32656	24.12 ug/L	95
37) Tetrachloroethene	7.02	166	27538	22.69 ug/L	98
38) 2-Hexanone (MBK)	7.16	43	35880	23.83 ug/L	98
40) Dibromochloromethane	7.32	129	29509	23.01 ug/L	100
41) 1,2-Dibromoethane	7.45	107	32575	24.02 ug/L	99
42) Chlorobenzene	8.08	112	98885	22.97 ug/L	95
43) ETHYLBENZENE	8.23	91	186564	24.15 ug/L	99
44) m&p-Xylene	8.38	106	127649	48.61 ug/L	96
45) o-Xylene	8.90	106	62266	24.53 ug/L	98
46) Styrene	8.93	104	113139	24.14 ug/L	96
47) Bromoform	9.15	173	18281	23.68 ug/L	96
49) Isopropylbenzene	9.41	105	116841	23.68 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.82	83	43636	23.88 ug/L	99
52) 1,3-Dichlorobenzene	11.10	146	45195	23.07 ug/L	99
53) 1,4-Dichlorobenzene	11.23	146	47339	20.36 ug/L	99
54) 1,2-Dichlorobenzene	11.75	146	43497	23.48 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.86	75	6085	25.84 ug/L	93
56) 1,2,4-Trichlorobenzene	14.06	180	22535	22.46 ug/L	100
57) Naphthalene	14.39	128	279	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040318\04031834.D Vial: 34
Acq On : 19 Mar 2004 12:19 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/19/04 **BATCH NUMBER:** VOC0319

METHOD: EPA 8260 **LAB FILE IDs:** 04031923.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	93	61-145
Benzene	25	ND	24	94	76-127
Trichloroethene	25	ND	24	95	71-120
Toluene	25	ND	24	95	76-125
Chlorobenzene	25	ND	22	90	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031923.D Vial: 23
Acq On : 19 Mar 2004 8:11 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	120869	50.00	ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	220624	50.00	ug/L	-0.03
39) Chlorobenzene d-5 ISTD	8.02	117	185445	50.00	ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.17	152	63083	50.00	ug/L	-0.03
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.96	113	73025	50.51	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.02%			
33) Toluene d-8 SS#2	6.27	98	287874	50.49	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.98%			
50) 4-Bromofluorobenzene SS#3	9.58	95	105390	49.78	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.56%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	48226	22.19	ug/L	100
3) Chloromethane	1.48	50	56778	24.41	ug/L	99
4) VINYL CHLORIDE	1.56	62	52419	22.71	ug/L	100
5) Bromomethane	1.73	94	44018	23.26	ug/L	98
6) Chloroethane	1.78	64	31797	26.79	ug/L	99
7) Trichlorofluoromethane	1.90	101	30779	22.94	ug/L	99
8) Acetone	2.25	43	14709	25.36	ug/L	91
9) 1,1-DICHLOROETHENE	2.24	96	41409	23.30	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.26	101	35654	24.35	ug/L	98
11) Carbon Disulfide	2.44	76	156636	24.72	ug/L	99
12) Methyl Acetate	2.47	74	5759	25.83	ug/L	96
13) Methylene chloride	2.56	84	48546	22.69	ug/L	100
14) trans-1,2-Dichloroethene	2.76	96	46345	24.24	ug/L	98
15) Methyl-t-Butyl Ether	2.75	73	93208	25.69	ug/L	100
16) 1,1-Dichloroethane	3.07	63	76150	23.43	ug/L	99
17) cis-1,2-Dichloroethene	3.55	96	46954	24.58	ug/L	96
18) 2-Butanone (MEK)	3.53	43	27099	25.12	ug/L	98
19) CHLOROFORM	3.81	83	80962	23.21	ug/L	99
21) 1,1,1-Trichloroethane	4.00	97	57347	23.23	ug/L #	11
22) Cyclohexane	4.05	56	67892	24.09	ug/L	93
24) Carbon tetrachloride	4.15	117	38995	22.89	ug/L	99
25) Benzene	4.32	78	193610	23.61	ug/L	99
26) 1,2-Dichloroethane	4.33	62	62257	24.28	ug/L	99
27) Trichloroethene	4.96	95	44182	23.72	ug/L	98
28) 1,2-DICHLOROPROPANE	5.18	63	51058	23.61	ug/L	99
29) Methylcyclohexane	5.16	83	42391	22.01	ug/L	97
30) Bromodichloromethane	5.48	83	60761	23.64	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031923.D
Acq On : 19 Mar 2004 8:11 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #348, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Vial: 23
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

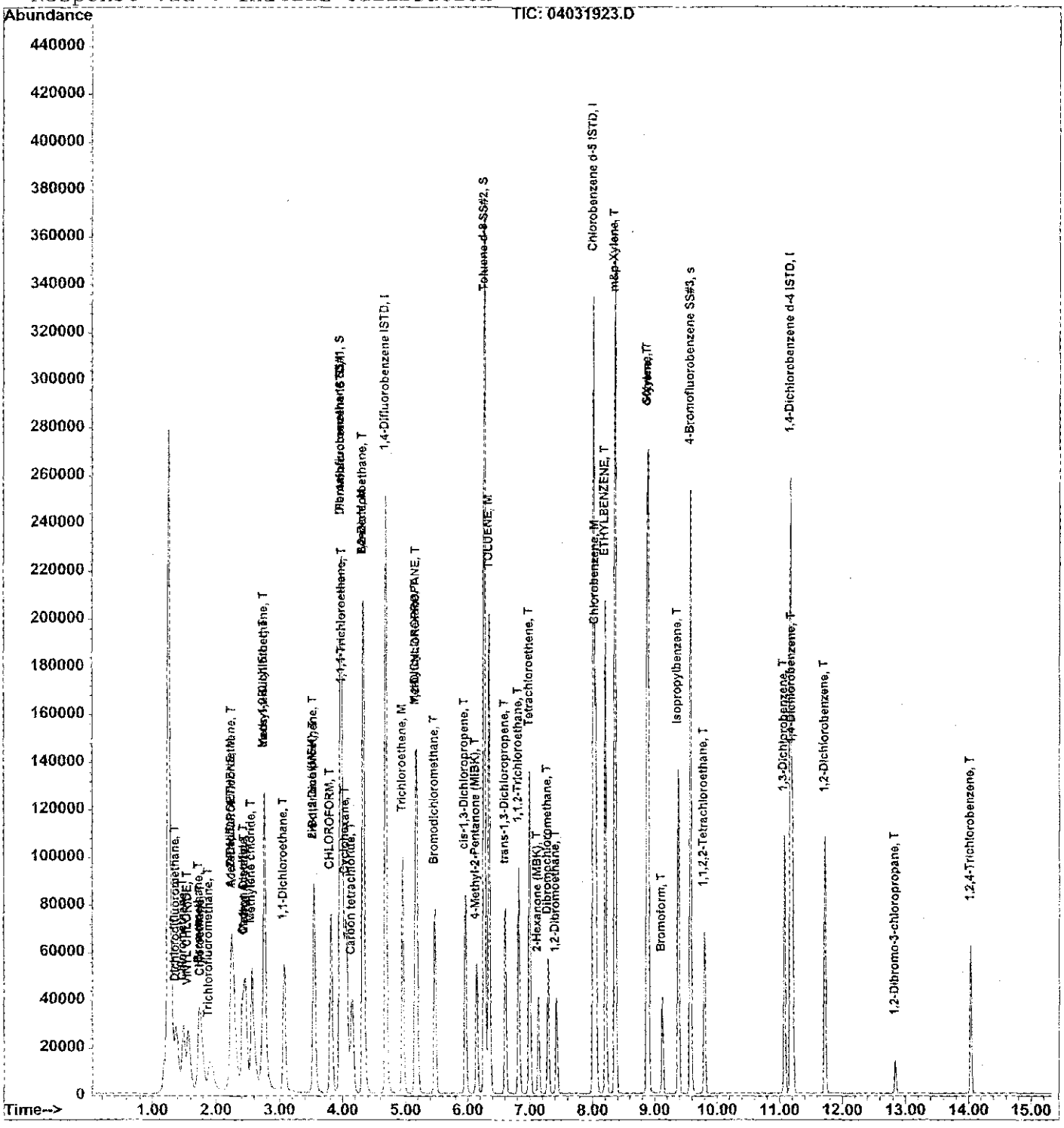
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.96	75	80130	23.38 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.14	43	57519	26.94 ug/L	100
34) TOLUENE	6.35	92	105850	23.83 ug/L	99
35) trans-1,3-Dichloropropene	6.61	75	67584	23.43 ug/L	99
36) 1,1,2-Trichloroethane	6.82	83	32436	24.65 ug/L	99
37) Tetrachloroethene	7.00	166	43526	36.90 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	38203	26.10 ug/L	99
40) Dibromochloromethane	7.30	129	29235	23.32 ug/L	100
41) 1,2-Dibromoethane	7.42	107	32428	24.46 ug/L	100
42) Chlorobenzene	8.06	112	94217	22.38 ug/L	96
43) ETHYLBENZENE	8.20	91	174838	23.14 ug/L	99
44) m&p-Xylene	8.36	106	117180	45.63 ug/L	95
45) o-Xylene	8.88	106	57009	22.97 ug/L	95
46) Styrene	8.90	104	107353	23.43 ug/L	96
47) Bromoform	9.13	173	18234	24.15 ug/L	99
49) Isopropylbenzene	9.39	105	108771	22.00 ug/L	98
51) 1,1,2,2-Tetrachloroethane	9.80	83	44336	24.21 ug/L	99
52) 1,3-Dichlorobenzene	11.07	146	43602	22.21 ug/L	99
53) 1,4-Dichlorobenzene	11.20	146	45901	19.70 ug/L	99
54) 1,2-Dichlorobenzene	11.72	146	41437	22.32 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.83	75	6425	27.23 ug/L	92
56) 1,2,4-Trichlorobenzene	14.03	180	21405	21.29 ug/L	96
57) Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031923.D Vial: 23
Acq On : 19 Mar 2004 8:11 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/18/04 **BATCH NUMBER:** VOC040318

METHOD: EPA 8260 **LAB FILE IDs:** 04031832.D
04031833.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	99	61-145
Benzene	25	ND	25	99	76-127
Trichloroethene	25	ND	27	107	71-120
Toluene	25	ND	27	106	76-125
Chlorobenzene	25	ND	24	95	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	99	0.5	14	61-145
Benzene	25	ND	25	98	1.1	11	76-127
Trichloroethene	25	ND	26	104	2.7	14	71-120
Toluene	25	ND	30	119	11.4	13	76-125
Chlorobenzene	25	ND	24	94	0.6	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031832.D Vial: 32
Acq On : 18 Mar 2004 11:31 pm Operator: MI
Sample : 04031604-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:18 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	126351	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	230780	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	191315	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	64253	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	75850	50.19	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.38%			
33) Toluene d-8 SS#2	6.30	98	296692	49.74	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.48%			
50) 4-Bromofluorobenzene SS#3	9.60	95	109306	50.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	50996	22.44	ug/L	100
3) Chloromethane	1.50	50	62777	25.81	ug/L	100
4) VINYL CHLORIDE	1.58	62	57818	23.96	ug/L	99
5) Bromomethane	1.75	94	46969	23.74	ug/L	99
6) Chloroethane	1.79	64	35484	28.60	ug/L	100
7) Trichlorofluoromethane	1.95	101	34977m	24.94	ug/L	
8) Acetone	2.27	43	14204	23.43	ug/L	96
9) 1,1-DICHLOROETHENE	2.26	96	45968	24.75	ug/L	96
10) 1,1,2-Trichlorotrifluoroet	2.28	101	38067	24.87	ug/L	99
11) Carbon Disulfide	2.47	76	171934	25.96	ug/L	98
12) Methyl Acetate	2.49	74	4968	21.31	ug/L	99
13) Methylene chloride	2.59	84	52776	23.60	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	50421	25.23	ug/L	97
15) Methyl-t-Butyl Ether	2.78	73	99310	26.18	ug/L	100
16) 1,1-Dichloroethane	3.10	63	85713	25.23	ug/L	99
17) cis-1,2-Dichloroethene	3.57	96	52550	26.32	ug/L	96
18) 2-Butanone (MEK)	3.56	43	26834	23.80	ug/L	98
19) CHLOROFORM	3.84	83	90185	24.73	ug/L	98
21) 1,1,1-Trichloroethane	4.02	97	63324	24.54	ug/L #	18
22) Cyclohexane	4.08	56	73949	25.10	ug/L	95
24) Carbon tetrachloride	4.18	117	43250	24.27	ug/L	97
25) Benzene	4.35	78	212924	24.82	ug/L	99
26) 1,2-Dichloroethane	4.36	62	67836	25.30	ug/L	98
27) Trichloroethene	4.98	95	51963	26.67	ug/L	98
28) 1,2-DICHLOROPROPANE	5.20	63	56848	25.13	ug/L	99
29) Methylcyclohexane	5.19	83	45639	22.66	ug/L	98
30) Bromodichloromethane	5.50	83	66694	24.81	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031832.D Vial: 32
Acq On : 18 Mar 2004 11:31 pm Operator: MI
Sample : 04031604-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:18 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

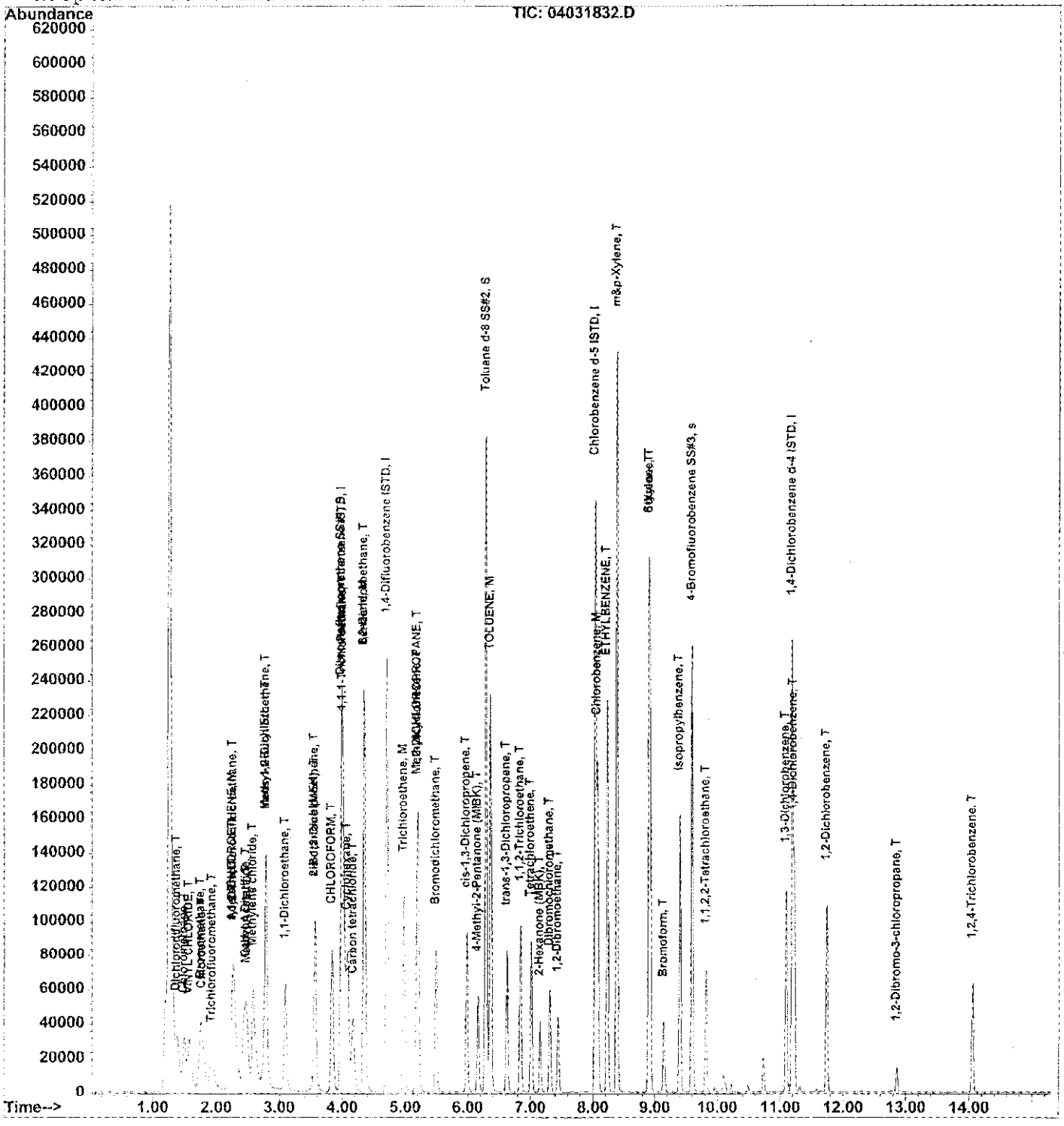
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.98	75	86815	24.21 ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	57867	25.91 ug/L	100
34)	TOLUENE	6.37	92	123560	26.59 ug/L	99
35)	trans-1,3-Dichloropropene	6.63	75	71868	23.81 ug/L	99
36)	1,1,2-Trichloroethane	6.85	83	34503	25.07 ug/L	97
37)	Tetrachloroethene	7.02	166	29140	23.62 ug/L	99
38)	2-Hexanone (MBK)	7.16	43	38861	25.38 ug/L	99
40)	Dibromochloromethane	7.32	129	31316	24.21 ug/L	99
41)	1,2-Dibromoethane	7.45	107	34009	24.86 ug/L	100
42)	Chlorobenzene	8.08	112	103174	23.76 ug/L	96
43)	ETHYLBENZENE	8.23	91	196754	25.24 ug/L	99
44)	m&p-Xylene	8.39	106	136725	51.61 ug/L	96
45)	o-Xylene	8.90	106	66602	26.01 ug/L	97
46)	Styrene	8.92	104	117079	24.76 ug/L	93
47)	Bromoform	9.15	173	19186	24.63 ug/L	99
49)	Isopropylbenzene	9.40	105	120408	23.91 ug/L	99
51)	1,1,2,2 Tetrachloroethane	9.82	83	46822	25.10 ug/L	99
52)	1,3-Dichlorobenzene	11.10	146	46592	23.31 ug/L	100
53)	1,4-Dichlorobenzene	11.23	146	49031	20.66 ug/L	99
54)	1,2-Dichlorobenzene	11.75	146	44330	23.44 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.86	75	5987	24.91 ug/L	98
56)	1,2,4-Trichlorobenzene	14.06	180	21566	21.06 ug/L	99
57)	Naphthalene	14.39	128	623	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040318\04031832.D Vial: 32
Acq On : 18 Mar 2004 11:31 pm Operator: MI
Sample : 04031604-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:18 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031833.D
Acq On : 18 Mar 2004 11:55 pm
Sample : 04031604-01 MSD 25ppb
Misc : IS/S 1uL #348, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Vial: 33
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	124935	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	227676	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	187437	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	64416	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	74578	49.91	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.82%			
33) Toluene d-8 SS#2	6.29	98	295221	50.17	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.34%			
50) 4-Bromofluorobenzene SS#3	9.60	95	107337	49.65	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	49771	22.15	ug/L	100
3) Chloromethane	1.49	50	58861	24.48	ug/L	100
4) VINYL CHLORIDE	1.58	62	54040	22.65	ug/L	99
5) Bromomethane	1.75	94	46650	23.85	ug/L	98
6) Chloroethane	1.79	64	33365	27.19	ug/L	99
7) Trichlorofluoromethane	1.90	101	33571	24.21	ug/L	99
8) Acetone	2.27	43	14564	24.29	ug/L	91
9) 1,1-DICHLOROETHENE	2.26	96	45677	24.87	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.27	101	38107	25.18	ug/L	99
11) Carbon Disulfide	2.46	76	166442	25.41	ug/L	97
12) Methyl Acetate	2.49	74	4528	19.65	ug/L	96
13) Methylene chloride	2.58	84	50874	23.01	ug/L	99
14) trans-1,2-Dichloroethene	2.78	96	49229	24.91	ug/L	99
15) Methyl-t-Butyl Ether	2.78	73	97083	25.88	ug/L	100
16) 1,1-Dichloroethane	3.10	63	82905	24.68	ug/L	100
17) cis-1,2-Dichloroethene	3.57	96	52464	26.57	ug/L	98
18) 2-Butanone (MEK)	3.56	43	26136	23.44	ug/L	96
19) CHLOROFORM	3.84	83	86186	23.90	ug/L	99
21) 1,1,1-Trichloroethane	4.02	97	61795	24.22	ug/L #	16
22) Cyclohexane	4.08	56	72871	25.02	ug/L	94
24) Carbon tetrachloride	4.17	117	41911	23.84	ug/L	99
25) Benzene	4.35	78	207744	24.54	ug/L	99
26) 1,2-Dichloroethane	4.35	62	66571	25.16	ug/L	98
27) Trichloroethene	4.98	95	49873	25.95	ug/L	99
28) 1,2-DICHLOROPROPANE	5.20	63	54831	24.57	ug/L	99
29) Methylcyclohexane	5.19	83	44669	22.48	ug/L	97
30) Bromodichloromethane	5.50	83	64211	24.21	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031833.D Vial: 33
Acq On : 18 Mar 2004 11:55 pm Operator: MI
Sample : 04031604-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

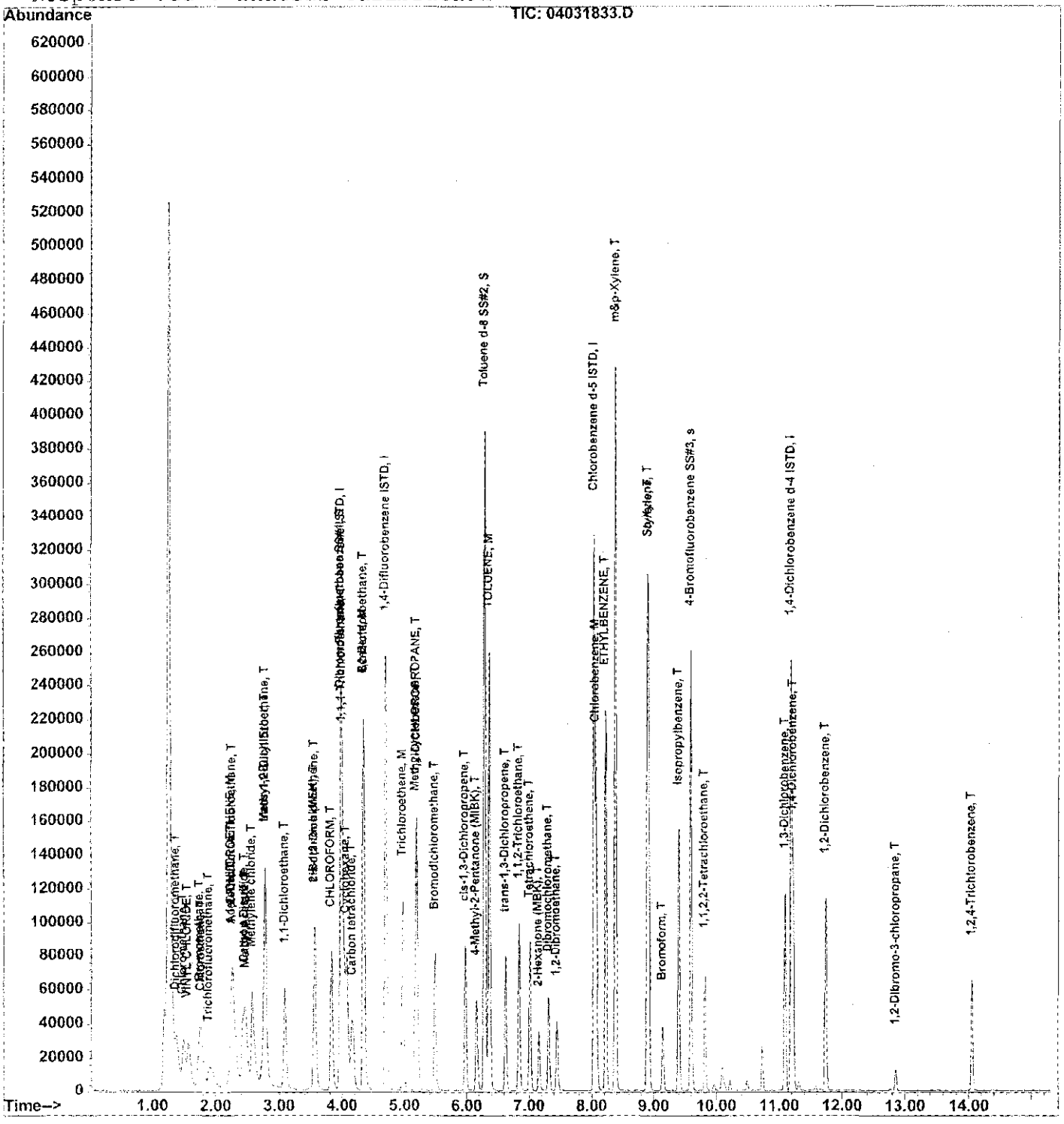
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.98	75	82522	23.33	ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.16	43	55388	25.14	ug/L	100
34)	TOLUENE	6.37	92	136645	29.81	ug/L	99
35)	trans-1,3-Dichloropropene	6.62	75	70841	23.79	ug/L	99
36)	1,1,2-Trichloroethane	6.85	83	32874	24.21	ug/L	98
37)	Tetrachloroethene	7.02	166	28386	23.32	ug/L	99
38)	2-Hexanone (MBK)	7.16	43	36472	24.15	ug/L	97
40)	Dibromochloromethane	7.32	129	29989	23.66	ug/L	100
41)	1,2-Dibromoethane	7.45	107	33436	24.95	ug/L	100
42)	Chlorobenzene	8.08	112	100461	23.61	ug/L	95
43)	ETHYLBENZENE	8.23	91	194342	25.45	ug/L	99
44)	m&p-Xylene	8.38	106	136508	52.60	ug/L	97
45)	o-Xylene	8.90	106	67158	26.77	ug/L	96
46)	Styrene	8.93	104	115415	24.92	ug/L	95
47)	Bromoform	9.15	173	18508	24.25	ug/L	98
49)	Isopropylbenzene	9.41	105	119451	23.66	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.82	83	45219	24.18	ug/L	99
52)	1,3-Dichlorobenzene	11.10	146	45431	22.67	ug/L	98
53)	1,4-Dichlorobenzene	11.23	146	48495	20.38	ug/L	98
54)	1,2-Dichlorobenzene	11.75	146	45476	23.99	ug/L	98
55)	1,2-Dibromo-3-chloropropan	12.86	75	5880	24.40	ug/L	99
56)	1,2,4-Trichlorobenzene	14.06	180	22832	22.24	ug/L	97
57)	Naphthalene	14.39	128	493	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040318\04031833.D Vial: 33
Acq On : 18 Mar 2004 11:55 pm Operator: MI
Sample : 04031604-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:36 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/19/04 **BATCH NUMBER:** VOC0319

METHOD: EPA 8260 **LAB FILE IDs:** 04031924.D
04031925.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	100	61-145
Benzene	25	ND	26	102	76-127
Trichloroethene	25	4.7	30	103	71-120
Toluene	25	ND	26	104	76-125
Chlorobenzene	25	ND	24	98	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	101	1.0	14	61-145
Benzene	25	ND	25	101	1.6	11	76-127
Trichloroethene	25	4.7	30	99	2.9	14	71-120
Toluene	25	ND	25	102	2.5	13	76-125
Chlorobenzene	25	ND	24	96	2.3	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031924.D Vial: 24
Acq On : 19 Mar 2004 8:35 pm Operator: MI
Sample : 04031909-02 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	121649	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	218288	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	182851	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.17	152	60622	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	73508	50.52	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.04%				
33) Toluene d-8 SS#2	6.27	98	289948	51.39	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.78%				
50) 4-Bromofluorobenzene SS#3	9.58	95	102213	50.24	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	51519	23.55	ug/L		100
3) Chloromethane	1.49	50	58397	24.94	ug/L		100
4) VINYL CHLORIDE	1.57	62	55167	23.75	ug/L		99
5) Bromomethane	1.74	94	46823	24.58	ug/L		99
6) Chloroethane	1.78	64	34341	28.75	ug/L		99
7) Trichlorofluoromethane	1.92	101	35281	26.13	ug/L		100
8) Acetone	2.25	43	15105	25.88	ug/L		97
9) 1,1-DICHLOROETHENE	2.25	96	44593	24.93	ug/L		95
10) 1,1,2-Trichlorotrifluoroet	2.26	101	37999	25.78	ug/L		97
11) Carbon Disulfide	2.43	76	168332	26.40	ug/L		98
12) Methyl Acetate	2.47	74	5501	24.51	ug/L		100
13) Methylene chloride	2.57	84	51447	23.89	ug/L		99
14) trans-1,2-Dichloroethene	2.77	96	48722	25.32	ug/L		96
15) Methyl-t-Butyl Ether	2.76	73	99242	27.18	ug/L		100
16) 1,1-Dichloroethane	3.08	63	82391	25.19	ug/L		100
17) cis-1,2-Dichloroethene	3.55	96	60031	31.23	ug/L		96
18) 2-Butanone (MEK)	3.54	43	26837	24.72	ug/L		99
19) CHLOROFORM	3.82	83	87650	24.97	ug/L		99
21) 1,1,1-Trichloroethane	4.00	97	61152	24.61	ug/L	#	17
22) Cyclohexane	4.06	56	73366	25.87	ug/L		94
24) Carbon tetrachloride	4.15	117	42203	25.04	ug/L		99
25) Benzene	4.33	78	207615	25.58	ug/L		100
26) 1,2-Dichloroethane	4.33	62	65054	25.65	ug/L		99
27) Trichloroethene	4.96	95	55980	30.38	ug/L		96
28) 1,2-DICHLOROPROPANE	5.18	63	54965	25.69	ug/L		99
29) Methylcyclohexane	5.16	83	46059	24.17	ug/L		97
30) Bromodichloromethane	5.48	83	65960	25.94	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031924.D Vial: 24
Acq On : 19 Mar 2004 8:35 pm Operator: MI
Sample : 04031909-02 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.96	75	85210	25.13 ug/L	97
32) 4-Methyl-2-Pentanone (MIBK	6.14	43	57647	27.29 ug/L	99
34) TOLUENE	6.35	92	114594	26.07 ug/L	100
35) trans-1,3-Dichloropropene	6.60	75	71994	25.22 ug/L	98
36) 1,1,2-Trichloroethane	6.82	83	33682	25.87 ug/L	98
37) Tetrachloroethene	7.00	166	75214	64.45 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	39681	27.40 ug/L	99
40) Dibromochloromethane	7.29	129	30854	24.96 ug/L	100
41) 1,2-Dibromoethane	7.42	107	33732	25.80 ug/L	99
42) Chlorobenzene	8.05	112	101645	24.49 ug/L	96
43) ETHYLBENZENE	8.21	91	183082	24.58 ug/L	98
44) m&p-Xylene	8.36	106	125411	49.53 ug/L	94
45) o-Xylene	8.88	106	62048	25.35 ug/L	96
46) Styrene	8.90	104	106932	23.66 ug/L	96
47) Bromoform	9.13	173	19133	25.70 ug/L	100
49) Isopropylbenzene	9.38	105	117896	24.81 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.80	83	46672	26.52 ug/L	99
52) 1,3-Dichlorobenzene	11.08	146	45490	24.12 ug/L	99
53) 1,4-Dichlorobenzene	11.21	146	47463	21.20 ug/L	98
54) 1,2-Dichlorobenzene	11.72	146	45311	25.40 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.83	75	6201	27.34 ug/L	97
56) 1,2,4-Trichlorobenzene	14.03	180	22700	23.49 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

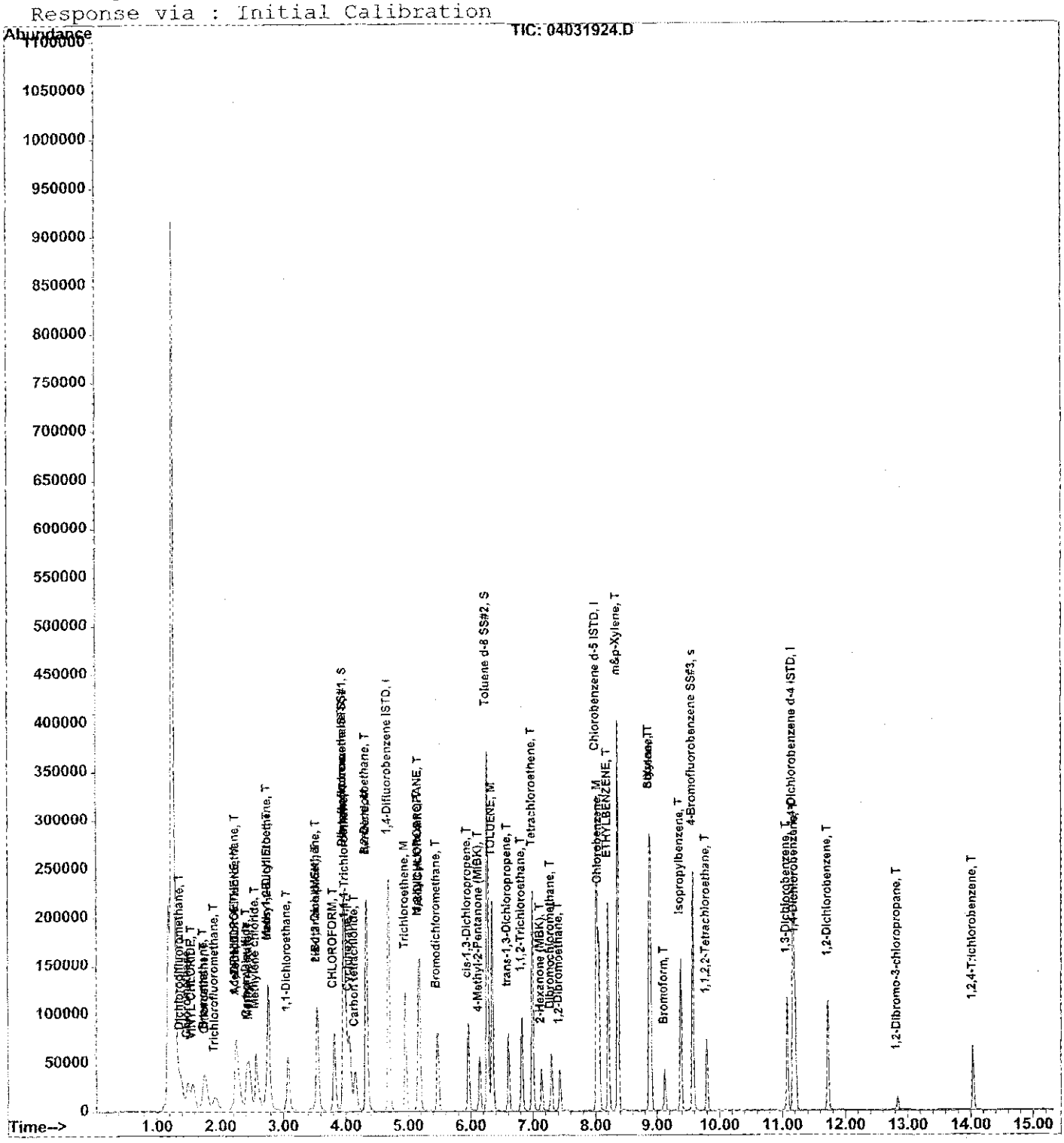
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031924.D
Acq On : 19 Mar 2004 8:35 pm
Sample : 04031909-02 MS 25ppb
Misc : IS/S 1uL #348, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 22 9:37 2004

Vial: 24
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031925.D Vial: 25
Acq On : 19 Mar 2004 8:58 pm Operator: MI
Sample : 04031909-02 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:52 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	119573	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	218605	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	184328	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.17	152	62641	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	73129	51.13	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.26%				
33) Toluene d-8 SS#2	6.27	98	282473	50.00	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.00%				
50) 4-Bromofluorobenzene SS#3	9.58	95	102377	48.70	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.37	85	51037	23.73	ug/L		100
3) Chloromethane	1.49	50	59516	25.86	ug/L		99
4) VINYL CHLORIDE	1.56	62	55275	24.20	ug/L		99
5) Bromomethane	1.74	94	46259	24.71	ug/L		98
6) Chloroethane	1.77	64	32990	28.09	ug/L		100
7) Trichlorofluoromethane	1.93	101	33686m	25.38	ug/L		
8) Acetone	2.25	43	16272	28.36	ug/L		96
9) 1,1-DICHLOROETHENE	2.25	96	44268	25.18	ug/L		97
10) 1,1,2-Trichlorotrifluoroet	2.25	101	36656	25.30	ug/L		99
11) Carbon Disulfide	2.45	76	165993	26.48	ug/L		98
12) Methyl Acetate	2.47	74	5430	24.62	ug/L		100
13) Methylene chloride	2.57	84	51637	24.40	ug/L		98
14) trans-1,2-Dichloroethene	2.76	96	48385	25.58	ug/L		96
15) Methyl-t-Butyl Ether	2.76	73	99667	27.77	ug/L		100
16) 1,1-Dichloroethane	3.08	63	81529	25.36	ug/L		99
17) cis-1,2-Dichloroethene	3.55	96	60206	31.86	ug/L		97
18) 2-Butanone (MEK)	3.54	43	29049	27.22	ug/L		99
19) CHLOROFORM	3.82	83	85449	24.76	ug/L		100
21) 1,1,1-Trichloroethane	4.00	97	60754	24.88	ug/L	#	17
22) Cyclohexane	4.05	56	72068	25.85	ug/L		93
24) Carbon tetrachloride	4.15	117	41675	24.69	ug/L		97
25) Benzene	4.33	78	204512	25.17	ug/L		99
26) 1,2-Dichloroethane	4.33	62	66889	26.33	ug/L		98
27) Trichloroethene	4.96	95	54472	29.52	ug/L		97
28) 1,2-DICHLOROPROPANE	5.18	63	53826	25.12	ug/L		99
29) Methylcyclohexane	5.16	83	44516	23.33	ug/L		97
30) Bromodichloromethane	5.48	83	65304	25.65	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031925.D Vial: 25
Acq On : 19 Mar 2004 8:58 pm Operator: MI
Sample : 04031909-02 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #348, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 9:52 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.96	75	84040	24.74 ug/L	99
32)	4-Methyl-2-Pentanone (MIBK	6.14	43	62240	29.42 ug/L	99
34)	TOLUENE	6.35	92	111879	25.42 ug/L	99
35)	trans-1,3-Dichloropropene	6.60	75	73437	25.69 ug/L	99
36)	1,1,2-Trichloroethane	6.82	83	33816	25.93 ug/L	99
37)	Tetrachloroethene	7.00	166	71382	61.08 ug/L	99
38)	2-Hexanone (MBK)	7.14	43	41082	28.33 ug/L	99
40)	Dibromochloromethane	7.29	129	31495	25.27 ug/L	99
41)	1,2-Dibromoethane	7.42	107	34505	26.18 ug/L	99
42)	Chlorobenzene	8.05	112	100178	23.94 ug/L	96
43)	ETHYLBENZENE	8.21	91	183204	24.40 ug/L	98
44)	m&p-Xylene	8.36	106	123801	48.50 ug/L	96
45)	o-Xylene	8.88	106	60379	24.47 ug/L	95
46)	Styrene	8.90	104	105905	23.25 ug/L	96
47)	Bromoform	9.13	173	19314	25.74 ug/L	97
49)	Isopropylbenzene	9.38	105	116601	23.75 ug/L	98
51)	1,1,2,2-Tetrachloroethane	9.80	83	48894	26.89 ug/L	99
52)	1,3-Dichlorobenzene	11.07	146	45815	23.51 ug/L	99
53)	1,4-Dichlorobenzene	11.21	146	48323	20.89 ug/L	98
54)	1,2-Dichlorobenzene	11.72	146	44741	24.27 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.83	75	6880	29.36 ug/L	96
56)	1,2,4-Trichlorobenzene	14.03	180	23161	23.20 ug/L	99
57)	Naphthalene	0.00	128	0	Not Detected	

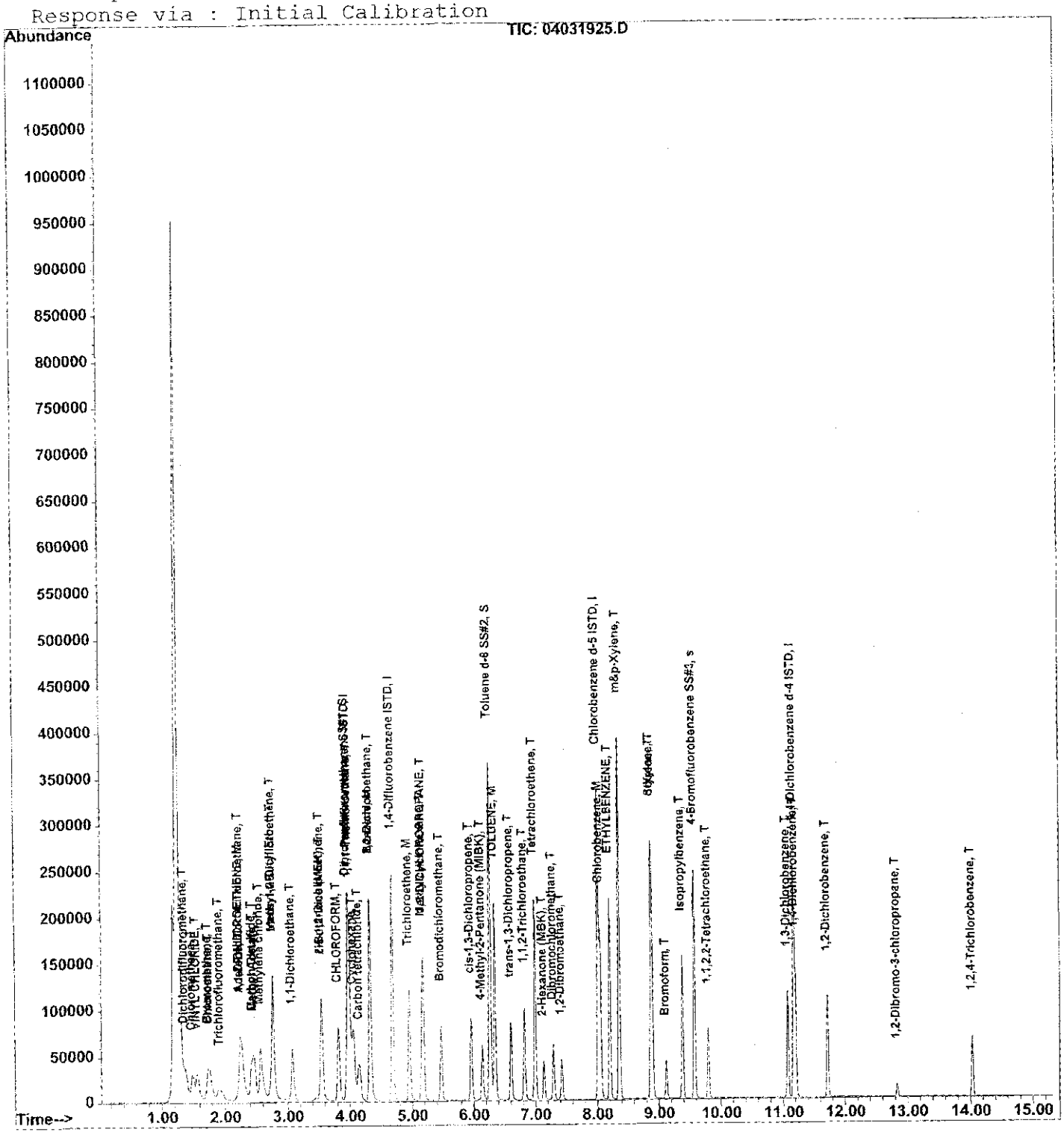
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031925.D
Acq On : 19 Mar 2004 8:58 pm
Sample : 04031909-02 MSD 25ppb
Misc : IS/S 1uL #348, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 22 9:52 2004

Vial: 25
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040318\04031815.D Vial: 15
Acq On : 18 Mar 2004 4:34 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	96	-0.02
2	T	Dichlorodifluoromethane	0.899	0.860	4.3	93	0.00
3	T	Chloromethane	0.962	0.912	5.2	93	0.00
4	T	VINYL CHLORIDE	0.955	0.899	5.9	91	0.00
5	T	Bromomethane	0.783	0.711	9.2	94	0.00
6	T	Chloroethane	0.491	0.491	0.0	94	0.00
7	T	Trichlorofluoromethane	0.555	0.575	-3.6	95	-0.03
8	T	Acetone	0.240	0.280	-16.7	116	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.701	4.6	93	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.597	1.5	93	0.00
11	T	Carbon Disulfide	2.621	2.503	4.5	93	-0.02
12	T	Methyl Acetate	0.092	0.085	7.6	85	0.00
13	T	Methylene chloride	0.885	0.807	8.8	93	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.748	5.4	92	0.00
15	T	Methyl-t-Butyl Ether	1.501	1.428	4.9	91	0.00
16	T	1,1-Dichloroethane	1.344	1.286	4.3	95	0.00
17	T	cis-1,2-Dichloroethene	0.790	0.764	3.3	94	-0.02
18	T	2-Butanone (MEK)	0.446	0.441	1.1	104	0.00
19	T	CHLOROFORM	1.443	1.358	5.9	93	-0.02
20	S	Dibromofluoromethane SS#1	0.598	0.597	0.2	96	-0.02
21	T	1,1,1-Trichloroethane	1.021	0.960	6.0	93	0.00
22	T	Cyclohexane	1.166	1.107	5.1	93	0.00
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	96	0.00
24	T	Carbon tetrachloride	0.386	0.373	3.4	93	-0.02
25	M	Benzene	1.859	1.770	4.8	94	-0.02
26	T	1,2-Dichloroethane	0.581	0.562	3.3	92	0.00
27	M	Trichloroethene	0.422	0.398	5.7	91	0.00
28	T	1,2-DICHLOROPROPANE	0.490	0.474	3.3	93	-0.02
29	T	Methylcyclohexane	0.436	0.423	3.0	96	-0.02
30	T	Bromodichloromethane	0.582	0.557	4.3	92	0.00
31	T	cis-1,3-Dichloropropene	0.777	0.768	1.2	95	0.00
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.441	8.9	87	-0.02
33	S	Toluene d-8 SS#2	1.292	1.292	0.0	97	0.00
34	M	TOLUENE	1.007	0.956	5.1	92	-0.02
35	T	trans-1,3-Dichloropropene	0.654	0.637	2.6	92	0.00
36	T	1,1,2-Trichloroethane	0.298	0.281	5.7	90	0.00
37	T	Tetrachloroethene	0.267	0.248	7.1	91	0.00
38	T	2-Hexanone (MBK)	0.332	0.333	-0.3	97	-0.02
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	95	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040318\04031815.D Vial: 15
Acq On : 18 Mar 2004 4:34 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.326	3.6	91	0.00
41	T	1,2-Dibromoethane	0.357	0.338	5.3	89	0.00
42	M	Chlorobenzene	1.135	1.054	7.1	92	0.00
43	T	ETHYLBENZENE	2.037	1.923	5.6	93	-0.02
44	T	m&p-Xylene	0.692	0.640	7.5	89	-0.02
45	T	o-Xylene	0.669	0.643	3.9	92	-0.02
46	T	Styrene	1.236	1.181	4.4	90	0.00
47	T	Bromoform	0.204	0.200	2.0	89	-0.02
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	93	-0.02
49	T	Isopropylbenzene	3.919	3.749	4.3	91	0.00
50	s	4-Bromofluorobenzene SS#3	1.678	1.745	-4.0	96	0.00
51	T	1,1,2,2-Tetrachloroethane	1.451	1.406	3.1	88	-0.02
52	T	1,3-Dichlorobenzene	1.556	1.502	3.5	91	0.00
53	T	1,4-Dichlorobenzene	1.847	1.553	15.9	92	-0.02
54	T	1,2-Dichlorobenzene	1.471	1.425	3.1	92	-0.02
55	T	1,2-Dibromo-3-chloropropane	0.187	0.180	3.7	82	0.00
56	T	1,2,4-Trichlorobenzene	0.797	0.734	7.9	89	-0.02
57	T	Naphthalene	1.591	1.355	14.8	79	-0.02

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	ISTD							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	ISTD							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	ISTD							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	ISTD							
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031815.D Vial: 15
Acq On : 18 Mar 2004 4:34 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	132192	50.00	ug/L	-0.02
23) 1,4-Difluorobenzene ISTD	4.70	114	237619	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.03	117	195376	50.00	ug/L	-0.02
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	63791	50.00	ug/L	-0.02
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	78853	49.87	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.74%			
33) Toluene d-8 SS#2	6.29	98	307058	50.00	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.00%			
50) 4-Bromofluorobenzene SS#3	9.59	95	111312	51.99	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	113693	47.83	ug/L	100
3) Chloromethane	1.50	50	120609	47.40	ug/L	100
4) VINYL CHLORIDE	1.57	62	118894	47.09	ug/L	99
5) Bromomethane	1.75	94	94034	45.43	ug/L	98
6) Chloroethane	1.78	64	64954	50.04	ug/L	99
7) Trichlorofluoromethane	1.93	101	76022	51.81	ug/L	100
8) Acetone	2.26	43	37009	58.34	ug/L	100
9) 1,1-DICHLOROETHENE	2.26	96	92611	47.65	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.27	101	78973	49.31	ug/L	99
11) Carbon Disulfide	2.46	76	330913	47.75	ug/L	99
12) Methyl Acetate	2.48	74	11181	45.85	ug/L	98
13) Methylene chloride	2.58	84	106665	45.59	ug/L	99
14) trans-1,2-Dichloroethene	2.78	96	98854	47.28	ug/L	97
15) Methyl-t-Butyl Ether	2.77	73	188768	47.57	ug/L	100
16) 1,1-Dichloroethane	3.09	63	169945	47.82	ug/L	99
17) cis-1,2-Dichloroethene	3.56	96	101022	48.36	ug/L	98
18) 2-Butanone (MEK)	3.55	43	58248	49.37	ug/L	100
19) CHLOROFORM	3.83	83	179505	47.05	ug/L	99
21) 1,1,1-Trichloroethane	4.02	97	126897	47.00	ug/L #	64
22) Cyclohexane	4.08	56	146397	47.50	ug/L	96
24) Carbon tetrachloride	4.17	117	88563	48.27	ug/L	100
25) Benzene	4.34	78	420700	47.63	ug/L	100
26) 1,2-Dichloroethane	4.36	62	133597	48.38	ug/L	99
27) Trichloroethene	4.97	95	94520	47.12	ug/L	99
28) 1,2-DICHLOROPROPANE	5.20	63	112671	48.37	ug/L	100
29) Methylcyclohexane	5.18	83	100398	48.40	ug/L	98
30) Bromodichloromethane	5.49	83	132298	47.80	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031815.D Vial: 15
Acq On : 18 Mar 2004 4:34 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

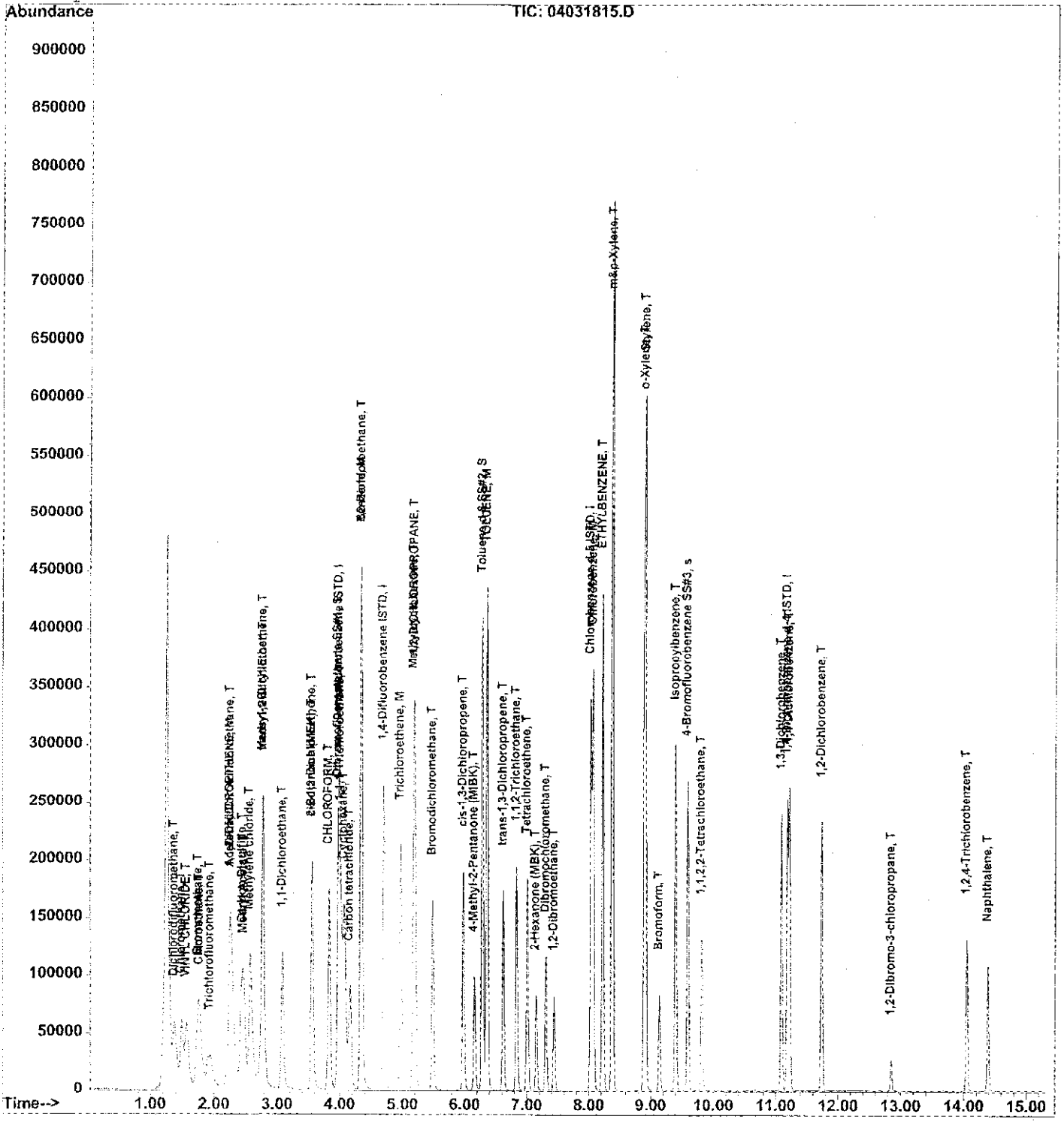
Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	182498	49.43	ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.16	43	104805	45.58	ug/L	100
34)	TOLUENE	6.36	92	227248	47.50	ug/L	100
35)	trans-1,3-Dichloropropene	6.63	75	151330	48.70	ug/L	99
36)	1,1,2-Trichloroethane	6.84	83	66881	47.19	ug/L	98
37)	Tetrachloroethene	7.01	166	58996	46.44	ug/L	99
38)	2-Hexanone (MBK)	7.15	43	79123	50.19	ug/L	99
40)	Dibromochloromethane	7.32	129	63781	48.28	ug/L	100
41)	1,2-Dibromoethane	7.45	107	66015	47.26	ug/L	99
42)	Chlorobenzene	8.07	112	205888	46.42	ug/L	97
43)	ETHYLBENZENE	8.22	91	375785	47.21	ug/L	99
44)	m&p-Xylene	8.38	106	250141	92.46	ug/L	97
45)	o-Xylene	8.90	106	125699	48.06	ug/L	99
46)	Styrene	8.92	104	230767	47.80	ug/L	96
47)	Bromoform	9.14	173	39144	49.21	ug/L	100
49)	Isopropylbenzene	9.41	105	239137	47.82	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.82	83	89682	48.43	ug/L	99
52)	1,3-Dichlorobenzene	11.10	146	95835	48.29	ug/L	100
53)	1,4-Dichlorobenzene	11.22	146	99059	42.04	ug/L	98
54)	1,2-Dichlorobenzene	11.74	146	90880	48.41	ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.86	75	11490	48.15	ug/L	98
56)	1,2,4-Trichlorobenzene	14.05	180	46805	46.03	ug/L	99
57)	Naphthalene	14.39	128	86424	42.57	ng/L	100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040318\04031815.D Vial: 15
Acq On : 18 Mar 2004 4:34 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040318\04031816.D Vial: 16
Acq On : 18 Mar 2004 4:58 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	94	0.00
2	t	acrolein	0.121	0.121	0.0	98	0.00
3	t	Iodomethne	0.985	0.944	4.2	92	0.00
4	t	acrylonitrile	0.212	0.200	5.7	91	0.00
5	t	tert-butanol	0.063	0.070	-11.1	100	0.00
6	t	vinyl acetate	3.201	3.104	3.0	92	-0.02
7	t	diisopropyl ether	3.077	3.021	1.8	92	-0.02
8	t	Ethyl tert-butyl ether	2.311	2.228	3.6	91	-0.02
9	T	2,2-Dichloropropane	0.998	0.977	2.1	94	0.00
10	T	Bromochloromethane	0.292	0.282	3.4	94	0.00
11	S	Dibromofluoromethane SS#1	0.602	0.603	-0.2	94	0.00
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
13	T	1,1-Dichloropropene	0.614	0.577	6.0	92	-0.02
14	t	tert-amyl methyl ether	1.158	1.098	5.2	90	-0.02
15	T	Dibromomethane	0.247	0.231	6.5	92	0.00
16	t	1,4-dioxane	0.002	0.001	50.0#	88	0.00
17	T	2-Chloroethylvinyl Ether	0.260	0.235	9.6	87	-0.02
18	S	Toluene d-8 SS#2	1.297	1.293	0.3	95	0.00
19	I	Chlorobenzene d-5	1.000	1.000	0.0	95	0.00
20	T	1,3-Dichloropropane	0.773	0.738	4.5	92	-0.02
21	T	1,1,1,2-Tetrachloroethane	0.310	0.291	6.1	93	0.00
22	T	1,2,3-Trichloropropane	0.106	0.096	9.4	91	0.00
23	s	4-Bromofluorobenzene SS#3	0.569	0.560	1.6	93	-0.02
24	T	Bromobenzene	0.338	0.315	6.8	91	-0.02
25	t	trans-1,4-dichloro-2-butene	0.396	0.378	4.5	89	0.00
26	T	n-Propylbenzene	1.777	1.676	5.7	91	-0.02
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	95	0.00
28	T	2-Chlorotoluene	3.453	3.247	6.0	92	-0.02
29	T	4-Chlorotoluene	3.987	3.767	5.5	90	-0.02
30	T	1,3,5-Trimethylbenzene	3.127	2.970	5.0	91	-0.02
31	T	tert-Butylbenzene	2.100	2.000	4.8	93	-0.02
32	T	1,2,4-Trimethylbenzene	3.245	3.111	4.1	91	-0.02
33	T	sec-Butylbenzene	3.482	3.426	1.6	95	-0.02
34	T	4-Isopropyltoluene	2.465	2.419	1.9	95	-0.02
35	T	n-Butylbenzene	2.785	2.778	0.3	95	0.00
36	T	1,2,3-Trichlorobenzene	0.558	0.491	12.0	84	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031816.D Vial: 16
Acq On : 18 Mar 2004 4:58 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	Qlon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.00	168	127190	50.00	ug/L	0.00
12) 1,4-Difluorobenzene	4.71	114	234460	50.00	ug/L	0.00
19) Chlorobenzene d-5	8.04	117	190993	50.00	ug/L	0.00
27) 1,4-Dichlorobenzene d-4	11.20	152	65435	50.00	ug/L	0.00
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.98	113	76721	50.14	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.28%			
18) Toluene d-8 SS#2	6.29	98	303246	49.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.70%			
23) 4-Bromofluorobenzene SS#3	9.59	95	107051	49.27	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.54%			
Target Compounds						Qvalue
2) acrolein	2.17	56	15407	50.17	ug/L	83
3) iodomethne	2.38	142	120098	47.94	ug/L	100
4) acrylonitrile	2.74	53	25454	47.14	ug/L	97
5) tert-butanol	2.65	59	8965	56.27	ug/L	100
6) vinyl acetate	3.10	43	394745	48.48	ug/L	99
7) diisopropyl ether	3.13	45	384216	49.08	ug/L	98
8) Ethyl tert-butyl ether	3.44	59	283354	48.20	ug/L	98
9) 2,2-Dichloropropane	3.58	77	124262	48.95	ug/L	99
10) Bromochloromethane	3.77	128	35841	48.32	ug/L	93
13) 1,1-Dichloropropene	4.15	75	135308	46.98	ug/L	98
14) tert-amyl methyl ether	4.45	73	257446	47.42	ug/L	99
15) Dibromomethane	5.33	93	54254	46.77	ug/L	98
16) 1,4-dioxane	5.36	58	220	30.68	ug/L #	17
17) 2-Chloroethylvinyl Ether	5.82	63	55107	45.25	ug/L	99
20) 1,3-Dichloropropane	7.04	76	140946	47.75	ug/L	98
21) 1,1,1,2-Tetrachloroethane	8.19	131	55567	46.91	ug/L	99
22) 1,2,3-Trichloropropane	9.86	110	18415	45.41	ug/L	100
24) Bromobenzene	9.78	156	60144	46.64	ug/L #	90
25) trans-1,4-dichloro-2-buten	9.86	75	72166	47.74	ug/L #	100
26) n-Propylbenzene	9.96	91	320128	47.16	ug/L	98
28) 2-Chlorotoluene	10.06	91	212438	47.01	ug/L	97
29) 4-Chlorotoluene	10.22	91	246515	47.24	ug/L	95
30) 1,3,5-Trimethylbenzene	10.22	105	194334	47.48	ug/L	97
31) tert-Butylbenzene	10.66	119	130889	47.63	ug/L	95
32) 1,2,4-Trimethylbenzene	10.74	105	203597	47.93	ug/L	98
33) sec-Butylbenzene	10.97	105	224180	49.20	ug/L	98
34) 4-Isopropyltoluene	11.19	119	158268	49.05	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040318\04031816.D Vial: 16
Acq On : 18 Mar 2004 4:58 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

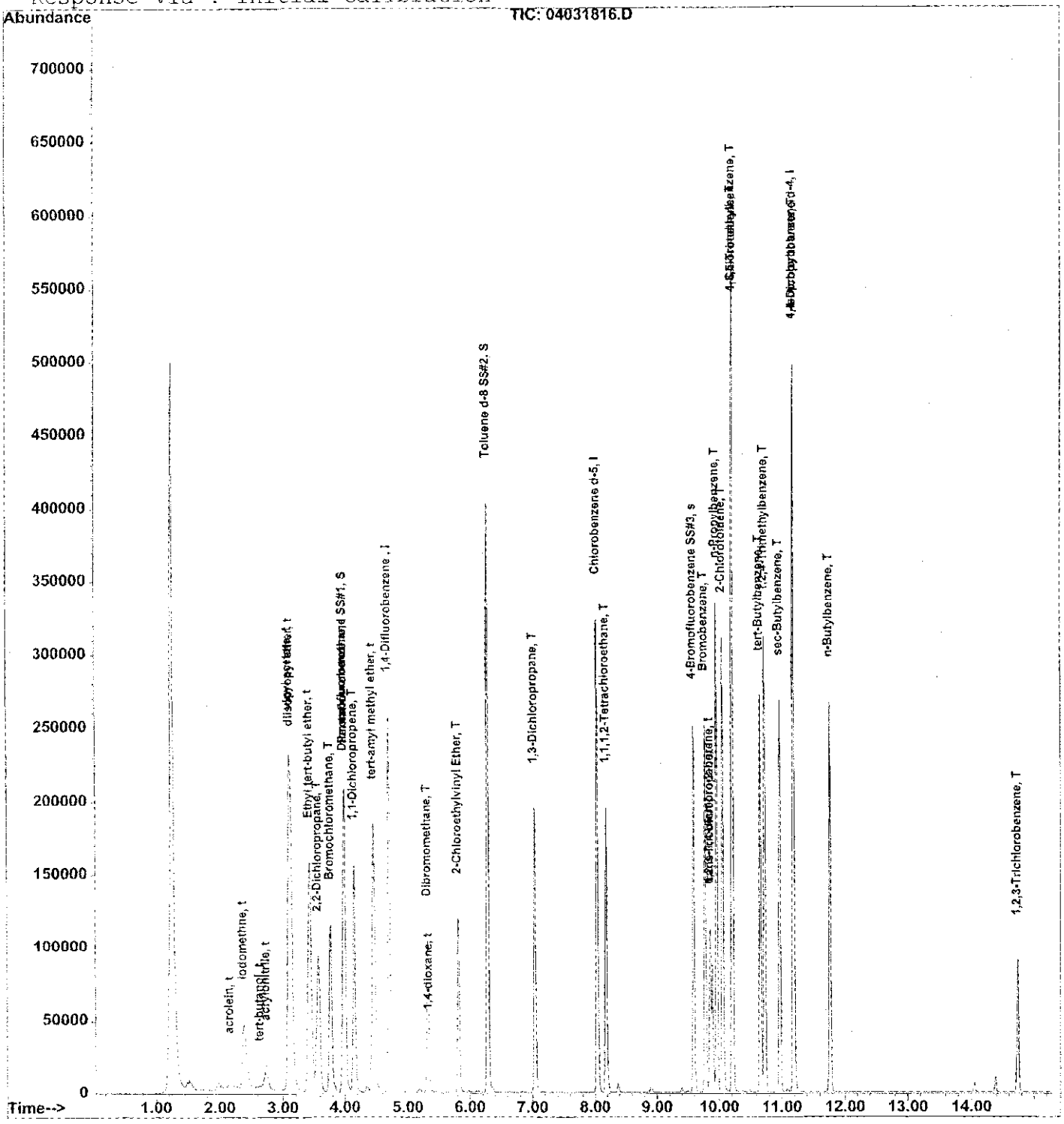
Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.77	91	181803	49.89 ug/L	98
36) 1,2,3-Trichlorobenzene	14.75	180	32138	44.02 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040318\04031816.D Vial: 16
Acq On : 18 Mar 2004 4:58 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:32 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040319\04031902.D
Acq On : 19 Mar 2004 10:49 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #348, CCV 10uL #415
MS Integration Params: rteint.p

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	91	-0.03
2	T	Dichlorodifluoromethane	0.899	0.896	0.3	91	-0.01
3	T	Chloromethane	0.962	0.915	4.9	88	0.00
4	T	VINYL CHLORIDE	0.955	0.936	2.0	89	-0.01
5	T	Bromomethane	0.783	0.724	7.5	90	-0.02
6	T	Chloroethane	0.491	0.488	0.6	88	-0.01
7	T	Trichlorofluoromethane	0.555	0.633	-14.1	98	-0.01
8	T	Acetone	0.240	0.250	-4.2	97	-0.01
9	M	1,1-DICHLOROETHENE	0.735	0.702	4.5	88	-0.01
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.601	0.8	88	-0.01
11	T	Carbon Disulfide	2.621	2.499	4.7	88	-0.02
12	T	Methyl Acetate	0.092	0.088	4.3	83	-0.02
13	T	Methylene chloride	0.885	0.804	9.2	87	-0.01
14	T	trans-1,2-Dichloroethene	0.791	0.751	5.1	87	-0.02
15	T	Methyl-t-Butyl Ether	1.501	1.477	1.6	89	-0.02
16	T	1,1-Dichloroethane	1.344	1.274	5.2	88	-0.01
17	T	cis-1,2-Dichloroethene	0.790	0.765	3.2	89	-0.02
18	T	2-Butanone (MEK)	0.446	0.418	6.3	93	-0.02
19	T	CHLOROFORM	1.443	1.345	6.8	87	-0.03
20	S	Dibromofluoromethane SS#1	0.598	0.594	0.7	90	-0.02
21	T	1,1,1-Trichloroethane	1.021	0.974	4.6	89	-0.02
22	T	Cyclohexane	1.166	1.110	4.8	88	-0.02
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	91	-0.02
24	T	Carbon tetrachloride	0.386	0.368	4.7	86	-0.03
25	M	Benzene	1.859	1.759	5.4	89	-0.03
26	T	1,2-Dichloroethane	0.581	0.565	2.8	88	-0.02
27	M	Trichloroethene	0.422	0.409	3.1	88	-0.02
28	T	1,2-DICHLOROPROPANE	0.490	0.481	1.8	89	-0.02
29	T	Methylcyclohexane	0.436	0.415	4.8	89	-0.02
30	T	Bromodichloromethane	0.582	0.569	2.2	89	-0.02
31	T	cis-1,3-Dichloropropene	0.777	0.771	0.8	90	-0.02
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.469	3.1	88	-0.02
33	S	Toluene d-8 SS#2	1.292	1.310	-1.4	93	-0.02
34	M	TOLUENE	1.007	0.957	5.0	88	-0.03
35	T	trans-1,3-Dichloropropene	0.654	0.639	2.3	87	-0.02
36	T	1,1,2-Trichloroethane	0.298	0.292	2.0	89	-0.02
37	T	Tetrachloroethene	0.267	0.255	4.5	88	-0.02
38	T	2-Hexanone (MBK)	0.332	0.328	1.2	90	-0.03
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	92	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040319\04031902.D Vial: 2
Acq On : 19 Mar 2004 10:49 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.324	4.1	87	-0.02
41	T	1,2-Dibromoethane	0.357	0.339	5.0	86	-0.02
42	M	Chlorobenzene	1.135	1.046	7.8	88	-0.02
43	T	ETHYLBENZENE	2.037	1.890	7.2	88	-0.03
44	T	m&p-Xylene	0.692	0.647	6.5	87	-0.03
45	T	o-Xylene	0.669	0.642	4.0	88	-0.03
46	T	Styrene	1.236	1.206	2.4	89	-0.02
47	T	Bromoform	0.204	0.204	0.0	87	-0.03
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	93	-0.03
49	T	Isopropylbenzene	3.919	3.514	10.3	86	-0.02
50	s	4-Bromofluorobenzene SS#3	1.678	1.677	0.1	93	-0.02
51	T	1,1,2,2-Tetrachloroethane	1.451	1.400	3.5	88	-0.03
52	T	1,3-Dichlorobenzene	1.556	1.432	8.0	87	-0.02
53	T	1,4-Dichlorobenzene	1.847	1.466	20.6	87	-0.03
54	T	1,2-Dichlorobenzene	1.471	1.354	8.0	88	-0.03
55	T	1,2-Dibromo-3-chloropropane	0.187	0.189	-1.1	86	-0.03
56	T	1,2,4-Trichlorobenzene	0.797	0.677	15.1	83	-0.03
57	T	Naphthalene	1.591	1.377	13.5	81	-0.03

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	----------	ISTD	----------					
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	----------	ISTD	----------					
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	----------	ISTD	----------					
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	ISTD	----------	----------	----------		
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031902.D Vial: 2
Acq On : 19 Mar 2004 10:49 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	124644	50.00 ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	224888	50.00 ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	188386	50.00 ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	64189	50.00 ug/L	-0.03
System Monitoring Compounds					
20) Dibromofluoromethane SS#1	3.97	113	74098	49.70 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.40%		
33) Toluene d-8 SS#2	6.28	98	294666	50.70 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.40%		
50) 4-Bromofluorobenzene SS#3	9.58	95	107655	49.97 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.94%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.38	85	111707	49.84 ug/L	100
3) Chloromethane	1.50	50	113994	47.51 ug/L	99
4) VINYL CHLORIDE	1.57	62	116663	49.01 ug/L	99
5) Bromomethane	1.74	94	90193	46.22 ug/L	99
6) Chloroethane	1.78	64	60821	49.69 ug/L	99
7) Trichlorofluoromethane	1.95	101	78950	57.07 ug/L	99
8) Acetone	2.26	43	31131	52.05 ug/L	99
9) 1,1-DICHLOROETHENE	2.25	96	87535	47.77 ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.26	101	74873	49.58 ug/L	99
11) Carbon Disulfide	2.46	76	311475	47.67 ug/L	99
12) Methyl Acetate	2.47	74	11004	47.86 ug/L	99
13) Methylene chloride	2.57	84	100193	45.42 ug/L	99
14) trans-1,2-Dichloroethene	2.77	96	93623	47.49 ug/L	98
15) Methyl-t-Butyl Ether	2.76	73	184068	49.19 ug/L	100
16) 1,1-Dichloroethane	3.09	63	158749	47.37 ug/L	100
17) cis-1,2-Dichloroethene	3.56	96	95413	48.44 ug/L	97
18) 2-Butanone (MEK)	3.54	43	52066	46.80 ug/L	100
19) CHLOROFORM	3.82	83	167654	46.61 ug/L	100
21) 1,1,1-Trichloroethane	4.01	97	121420	47.70 ug/L #	64
22) Cyclohexane	4.07	56	138398	47.62 ug/L	98
24) Carbon tetrachloride	4.16	117	82668	47.60 ug/L	100
25) Benzene	4.33	78	395677	47.33 ug/L	99
26) 1,2-Dichloroethane	4.35	62	126985	48.59 ug/L	98
27) Trichloroethene	4.96	95	91868	48.39 ug/L	97
28) 1,2-DICHLOROPROPANE	5.19	63	108276	49.12 ug/L	99
29) Methylcyclohexane	5.18	83	93331	47.54 ug/L	99
30) Bromodichloromethane	5.48	83	127870	48.81 ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031902.D Vial: 2
Acq On : 19 Mar 2004 10:49 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

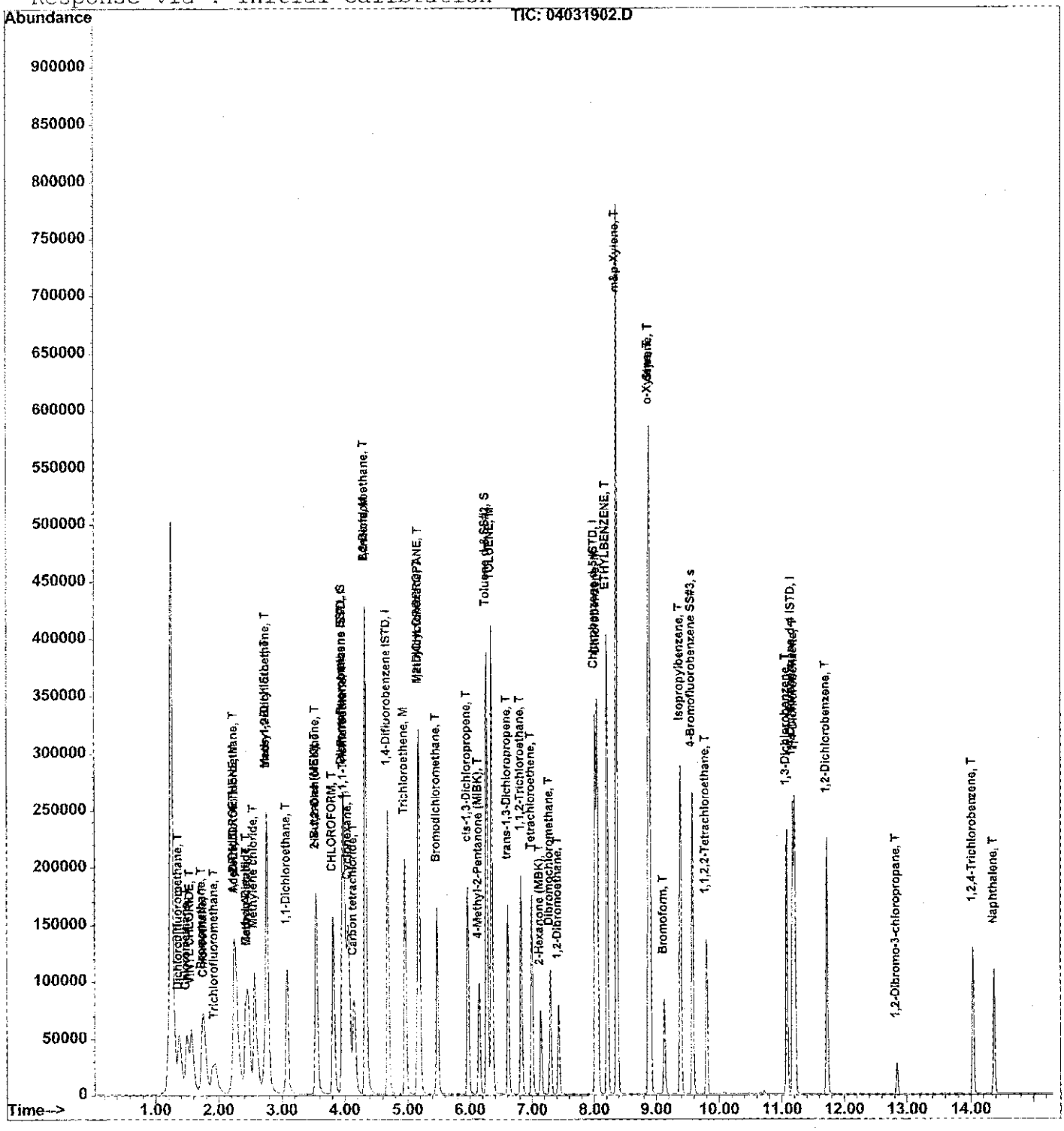
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.98	75	173478	49.65 ug/L	99
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	105398	48.43 ug/L	98
34) TOLUENE	6.35	92	215266	47.54 ug/L	99
35) trans-1,3-Dichloropropene	6.62	75	143801	48.90 ug/L	98
36) 1,1,2-Trichloroethane	6.83	83	65678	48.96 ug/L	99
37) Tetrachloroethene	7.00	166	57353	47.70 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	73816	49.48 ug/L	100
40) Dibromochloromethane	7.31	129	61028	47.91 ug/L	100
41) 1,2-Dibromoethane	7.44	107	63910	47.45 ug/L	99
42) Chlorobenzene	8.06	112	197060	46.08 ug/L	97
43) ETHYLBENZENE	8.21	91	356012	46.39 ug/L	99
44) m&p-Xylene	8.37	106	243886	93.50 ug/L	96
45) o-Xylene	8.89	106	120996	47.98 ug/L	97
46) Styrene	8.91	104	227205	48.80 ug/L	97
47) Bromoform	9.13	173	38478	50.17 ug/L	99
49) Isopropylbenzene	9.40	105	225543	44.83 ug/L	98
51) 1,1,2,2-Tetrachloroethane	9.81	83	89867	48.23 ug/L	100
52) 1,3-Dichlorobenzene	11.09	146	91929	46.03 ug/L	100
53) 1,4-Dichlorobenzene	11.21	146	94097	39.69 ug/L	99
54) 1,2-Dichlorobenzene	11.73	146	86909	46.01 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.84	75	12129	50.51 ug/L	98
56) 1,2,4-Trichlorobenzene	14.04	180	43459	42.48 ug/L	100
57) Naphthalene	14.38	128	88390	43.27 ng/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031902.D Vial: 2
Acq On : 19 Mar 2004 10:49 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040319\04031903.D Vial: 3
Acq On : 19 Mar 2004 11:13 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	91	-0.03
2	t	acrolein	0.121	0.121	0.0	95	-0.02
3	t	iodomethne	0.985	0.957	2.8	90	-0.03
4	t	acrylonitrile	0.212	0.214	-0.9	95	-0.03
5	t	tert-butanol	0.063	0.066	-4.8	90	-0.02
6	t	vinyl acetate	3.201	3.236	-1.1	93	-0.03
7	t	diisopropyl ether	3.077	3.160	-2.7	93	-0.03
8	t	Ethyl tert-butyl ether	2.311	2.349	-1.6	92	-0.03
9	T	2,2-Dichloropropane	0.998	0.990	0.8	92	-0.03
10	T	Bromochloromethane	0.292	0.282	3.4	91	-0.02
11	S	Dibromofluoromethane SS#1	0.602	0.606	-0.7	91	-0.03
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	93	-0.03
13	T	1,1-Dichloropropene	0.614	0.596	2.9	92	-0.03
14	t	tert-amyl methyl ether	1.158	1.122	3.1	89	-0.03
15	T	Dibromomethane	0.247	0.240	2.8	92	-0.03
16	t	1,4-dioxane	0.002	0.001	50.0#	51	-0.02
17	T	2-Chloroethylvinyl Ether	0.260	0.249	4.2	89	-0.03
18	S	Toluene d-8 SS#2	1.297	1.305	-0.6	93	-0.02
19	I	Chlorobenzene d-5	1.000	1.000	0.0	93	-0.03
20	T	1,3-Dichloropropane	0.773	0.754	2.5	92	-0.03
21	T	1,1,1,2-Tetrachloroethane	0.310	0.290	6.5	91	-0.03
22	T	1,2,3-Trichloropropane	0.106	0.102	3.8	94	-0.02
23	s	4-Bromofluorobenzene SS#3	0.569	0.571	-0.4	93	-0.03
24	T	Bromobenzene	0.338	0.320	5.3	91	-0.03
25	t	trans-1,4-dichloro-2-butene	0.396	0.520	-31.3#	120	-0.03
26	T	n-Propylbenzene	1.777	1.723	3.0	92	-0.03
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	92	-0.03
28	T	2-Chlorotoluene	3.453	3.345	3.1	93	-0.03
29	T	4-Chlorotoluene	3.987	3.810	4.4	89	-0.03
30	T	1,3,5-Trimethylbenzene	3.127	2.964	5.2	88	-0.03
31	T	tert-Butylbenzene	2.100	1.997	4.9	90	-0.03
32	T	1,2,4-Trimethylbenzene	3.245	3.197	1.5	91	-0.03
33	T	sec-Butylbenzene	3.482	3.404	2.2	92	-0.03
34	T	4-Isopropyltoluene	2.465	2.387	3.2	92	-0.03
35	T	n-Butylbenzene	2.785	2.742	1.5	91	-0.03
36	T	1,2,3-Trichlorobenzene	0.558	0.532	4.7	89	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------ISTD----------							
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------ISTD----------							
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------ISTD----------							
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------ISTD----------							
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031903.D Vial: 3
Acq On : 19 Mar 2004 11:13 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	3.98	168	123166	50.00	ug/L		-0.03
12) 1,4-Difluorobenzene	4.69	114	226708	50.00	ug/L		-0.03
19) Chlorobenzene d-5	8.02	117	187153	50.00	ug/L		-0.03
27) 1,4-Dichlorobenzene d-4	11.18	152	63753	50.00	ug/L		-0.03
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.96	113	74660	50.39	ug/L		-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.78%				
18) Toluene d-8 SS#2	6.28	98	295965	50.32	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.64%				
23) 4-Bromofluorobenzene SS#3	9.58	95	106817	50.17	ug/L		-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%				
Target Compounds							Qvalue
2) acrolein	2.16	56	14902	50.11	ug/L		85
3) iodomethne	2.37	142	117845	48.58	ug/L		99
4) acrylonitrile	2.73	53	26407	50.51	ug/L		98
5) tert-butanol	2.63	59	8088	52.42	ug/L		100
6) vinyl acetate	3.09	43	398519	50.55	ug/L		99
7) diisopropyl ether	3.12	45	389230	51.35	ug/L		97
8) Ethyl tert-butyl ether	3.43	59	289307	50.82	ug/L		99
9) 2,2-Dichloropropane	3.57	77	121914	49.60	ug/L		99
10) Bromochloromethane	3.76	128	34717	48.34	ug/L	#	91
13) 1,1-Dichloropropene	4.14	75	135126	48.52	ug/L		99
14) tert-amyl methyl ether	4.45	73	254328	48.45	ug/L		99
15) Dibromomethane	5.31	93	54501	48.59	ug/L		98
16) 1,4-dioxane	5.34	58	128	18.46	ug/L	#	1
17) 2-Chloroethylvinyl Ether	5.81	63	56503	47.98	ug/L		99
20) 1,3-Dichloropropane	7.03	76	141148	48.80	ug/L		99
21) 1,1,1,2-Tetrachloroethane	8.17	131	54230	46.72	ug/L		99
22) 1,2,3-Trichloropropane	9.85	110	19004	47.82	ug/L		100
24) Bromobenzene	9.77	156	59960	47.45	ug/L	#	91
25) trans-1,4-dichloro-2-buten	9.85	75	97278	65.67	ug/L	#	100
26) n-Propylbenzene	9.95	91	322486	48.48	ug/L		98
28) 2-Chlorotoluene	10.05	91	213270	48.44	ug/L		97
29) 4-Chlorotoluene	10.20	91	242930	47.78	ug/L		95
30) 1,3,5-Trimethylbenzene	10.21	105	188975	47.39	ug/L		97
31) tert-Butylbenzene	10.65	119	127296	47.54	ug/L		94
32) 1,2,4-Trimethylbenzene	10.72	105	203847	49.26	ug/L		98
33) sec-Butylbenzene	10.96	105	217045	48.89	ug/L		99
34) 4-Isopropyltoluene	11.18	119	152167	48.41	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040319\04031903.D Vial: 3
Acq On : 19 Mar 2004 11:13 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

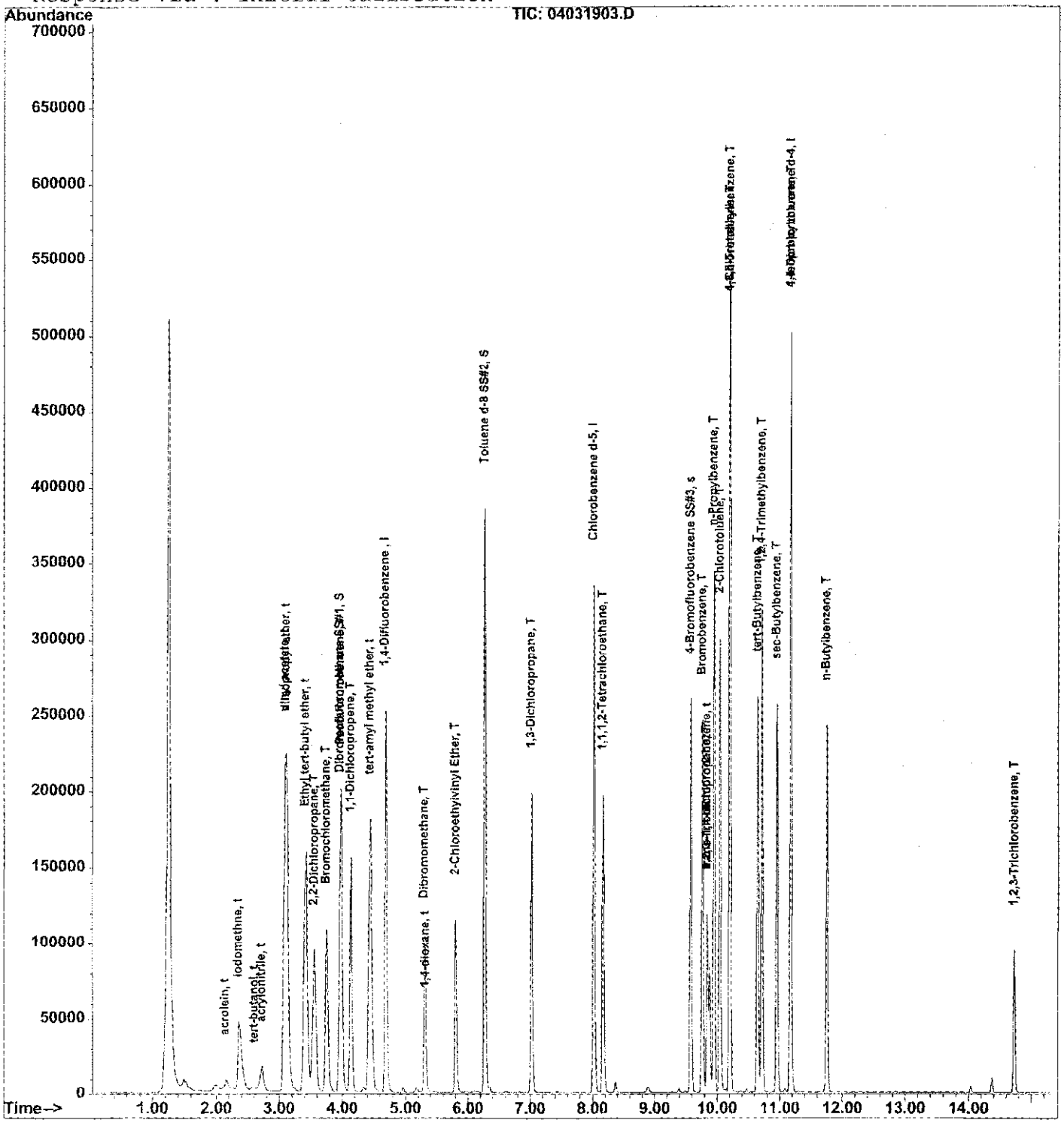
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.75	91	174817	49.24 ug/L	98
36) 1,2,3-Trichlorobenzene	14.74	180	33900	47.66 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040319\04031903.D Vial: 3
Acq On : 19 Mar 2004 11:13 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #348, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 11:33 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04031817.D**	**DATE/TIME ANALYZED:**	**03/18/04 17:22**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 60.0% of mass 95	48.5
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	64.8
175	5.0 - 9.0% of mass 174	7.3
176	Greater than 95.0%, but less than 101.0% of mass 174	98.8
177	5.0 - 9.0% of mass 176	6.5

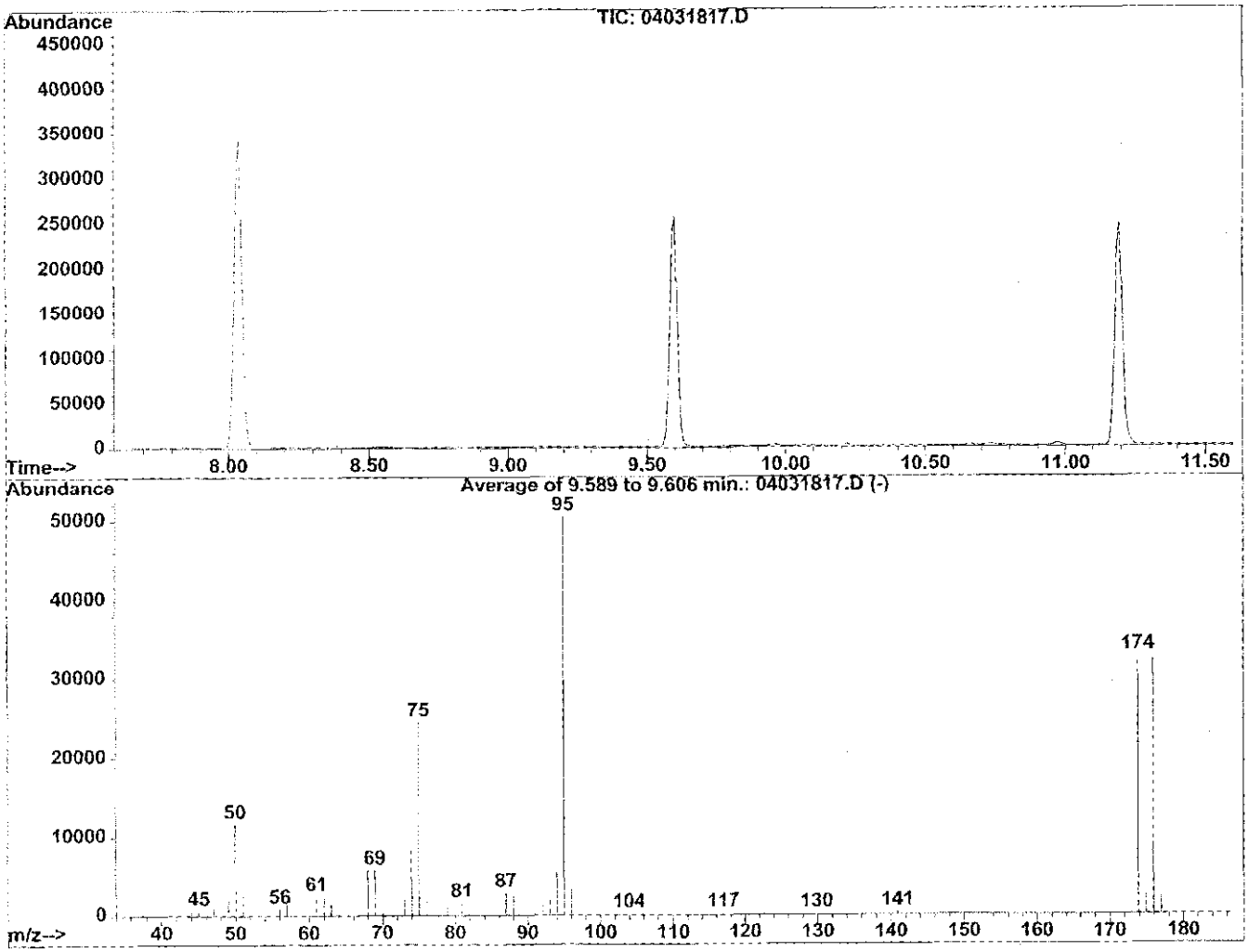
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
04031814-01	TB031704	04031819.D	03/18/04 18:09
04031814-02	DMW-7D-031704	04031820.D	03/18/04 18:33
04031814-04	DMW-7I-031704	04031821.D	03/18/04 18:57
04031814-06	DMW-7S-031704	04031822.D	03/18/04 19:21
04031814-08	MW-5-031704	04031823.D	03/18/04 19:45
04031814-12	DMW-8I-031804	04031825.D	03/18/04 20:33

BFB

Data File : C:\HPCHEM\1\DATA\040318\04031817.D
Acq On : 18 Mar 2004 5:22 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 17
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1162, 1163, 1164; Background Corrected with Scan 1155

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	11668	PASS
75	95	30	60	48.5	24467	PASS
95	95	100	100	100.0	50456	PASS
96	95	5	9	6.5	3283	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.8	32693	PASS
175	174	5	9	7.3	2378	PASS
176	174	95	101	98.8	32307	PASS
177	176	5	9	6.5	2107	PASS

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PHASE SEPARATION SCIENCE, INC.

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VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04031901.D**	**DATE/TIME ANALYZED:**	**03/19/04 10:25**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	24.0
75	30.0 - 60.0% of mass 95	50.2
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	60.3
175	5.0 - 9.0% of mass 174	7.8
176	Greater than 95.0%, but less than 101.0% of mass 174	98.9
177	5.0 - 9.0% of mass 176	6.8

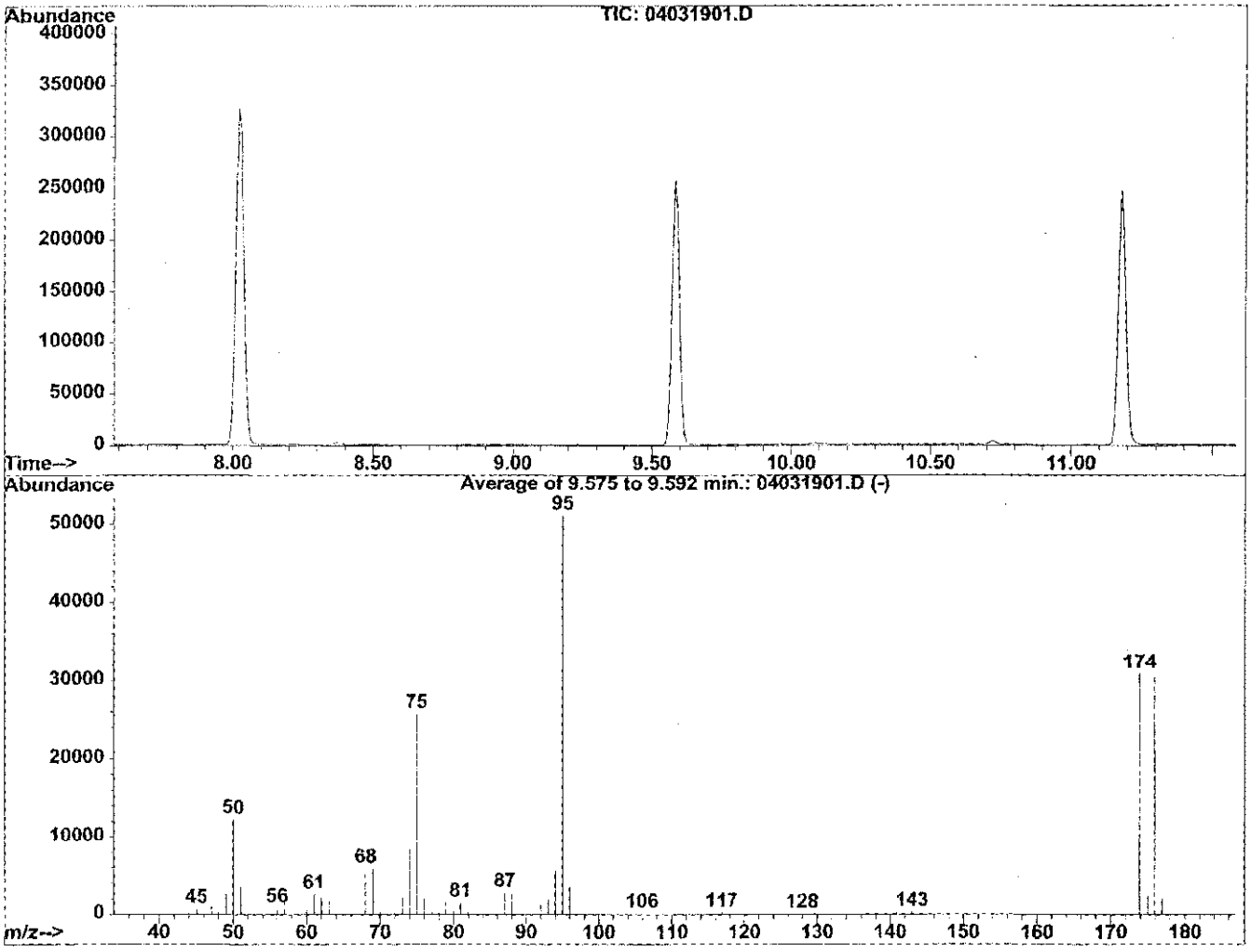
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
04031814-10	DMW-8S-031704	04031910.D	03/19/04 14:00
04031814-14	DMW-2B-031804	04031911.D	03/19/04 14:24

BFB

Data File : C:\HPCHEM\1\DATA\040319\04031901.D
Acq On : 19 Mar 2004 10:25 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #348
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1160, 1161, 1162; Background Corrected with Scan 1154

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	12259	PASS
75	95	30	60	50.2	25699	PASS
95	95	100	100	100.0	51149	PASS
96	95	5	9	6.8	3496	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	60.3	30848	PASS
175	174	5	9	7.8	2394	PASS
176	174	95	101	98.9	30501	PASS
177	176	5	9	6.8	2087	PASS

Injection Log

Directory: c:\hpchem\1\data\040318

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04031801.d	1.	BFB TUNE Water 5mL	IS/S 1uL #348	18 Mar 04 09:44
2	2	04031802.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #415	18 Mar 04 10:54
3	3	04031803.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #416	18 Mar 04 11:17
4	4	04031804.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	18 Mar 04 11:41
5	5	04031805.d	1.	04031621-04 TCLP 20D	IS/S 1uL #348	18 Mar 04 12:05
6	6	04031806.d	1.	04031516-02 200D	IS/S 1uL #348	18 Mar 04 12:29
7	7	04031807.d	1.	04031515-02 1000D	IS/S 1uL #348	18 Mar 04 12:53
8	8	04031808.d	1.	04031516-05 5mL	IS/S 1uL #348	18 Mar 04 13:17
9	9	04031809.d	1.	04031516-06 5mL	IS/S 1uL #348	18 Mar 04 13:41
10	10	04031810.d	1.	04031517-01 5mL	IS/S 1uL #348	18 Mar 04 14:05
11	11	04031811.d	1.	04031604-01 5mL	IS/S 1uL #348	18 Mar 04 14:29
12	12	04031812.d	1.	04031607-09 5mL	IS/S 1uL #348	18 Mar 04 14:53
13	13	04031813.d	1.	04031607-10 5mL	IS/S 1uL #348	18 Mar 04 15:16
14	14	04031814.d	1.	04031607-11 5mL	IS/S 1uL #348	18 Mar 04 15:40
15	15	04031815.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #415	18 Mar 04 16:34
16	16	04031816.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #416	18 Mar 04 16:58
17	17	04031817.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	18 Mar 04 17:22
18	18	04031818.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	18 Mar 04 17:45
19	19	04031819.d	1.	04031814-01 5mL	IS/S 1uL #348	18 Mar 04 18:09
20	20	04031820.d	1.	04031814-02 5mL	IS/S 1uL #348	18 Mar 04 18:33
21	21	04031821.d	1.	04031814-04 5mL	IS/S 1uL #348	18 Mar 04 18:57
22	22	04031822.d	1.	04031814-06 5mL	IS/S 1uL #348	18 Mar 04 19:21
23	23	04031823.d	1.	04031814-08 5mL	IS/S 1uL #348	18 Mar 04 19:45
24	24	04031824.d	1.	04031814-10 5mL	IS/S 1uL #348	18 Mar 04 20:09
25	25	04031825.d	1.	04031814-12 5mL	IS/S 1uL #348	18 Mar 04 20:33
26	26	04031826.d	1.	04031814-14 5mL	IS/S 1uL #348	18 Mar 04 20:57
27	27	04031827.d	1.	04031501-02 5mL	IS/S 1uL #348	18 Mar 04 21:21
28	28	04031828.d	1.	04031501-01 20D	IS/S 1uL #348	18 Mar 04 21:47
29	29	04031829.d	1.	PSS TCLP BLANK 3/17 20D	IS/S 1uL #348	18 Mar 04 22:14
30	30	04031830.d	1.	04031516-03 100D	IS/S 1uL #348	18 Mar 04 22:41
31	31	04031831.d	1.	04031516-04 100D	IS/S 1uL #348	18 Mar 04 23:07
32	32	04031832.d	1.	04031604-01 MS 25ppb	IS/S 1uL #348, MS 5uL #350	18 Mar 04 23:31
33	33	04031833.d	1.	04031604-01 MSD 25ppb	IS/S 1uL #348, MS 5uL #350	18 Mar 04 23:55
34	34	04031834.d	1.	LCS 25ppb	IS/S 1uL #348, LCS 5uL #350	19 Mar 04 00:19
35	35	04031835.d	1.	LCS-DUP 25ppb	IS/S 1uL #348, LCS 5uL #350	19 Mar 04 00:43
36	36	04031836.d	1.	LCS-1 25ppb	IS/S 1uL #348, LCS 5uL #350	19 Mar 04 01:07
37	37	04031837.d	1.	LCS-1, DUP 25ppb	IS/S 1uL #348, LCS 5uL #350	19 Mar 04 01:31
38	38	04031838.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	19 Mar 04 01:55
39	39	04031839.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	19 Mar 04 02:19

Injection Log

Directory: c:\hpchem\1\data\040319

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04031901.d	1.	BFB TUNE Water 5mL	IS/S 1uL #348	19 Mar 04 10:25
2	2	04031902.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #415	19 Mar 04 10:49
3	3	04031903.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #348, CCV 10uL #416	19 Mar 04 11:13
4	4	04031904.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	19 Mar 04 11:37
5	5	04031905.d	1.	04030501-01 500D	IS/S 1uL #348	19 Mar 04 12:01
6	6	04031906.d	1.	04031814-06 400D	IS/S 1uL #348	19 Mar 04 12:25
7	7	04031907.d	1.	04031814-08 400D	IS/S 1uL #348	19 Mar 04 12:49
8	8	04031908.d	1.	04031803-01 5mL	IS/S 1uL #348	19 Mar 04 13:13
9	9	04031909.d	1.	04031803-02 5mL	IS/S 1uL #348	19 Mar 04 13:37
10	10	04031910.d	1.	04031814-10 5mL	IS/S 1uL #348	19 Mar 04 14:00
11	11	04031911.d	1.	04031814-14 5mL	IS/S 1uL #348	19 Mar 04 14:24
12	12	04031912.d	1.	04031222-20 400D	IS/S 1uL #348	19 Mar 04 15:23
13	13	04031913.d	1.	04031222-21 400D	IS/S 1uL #348	19 Mar 04 15:47
14	14	04031914.d	1.	04031222-23 5mL	IS/S 1uL #348	19 Mar 04 16:11
15	15	04031915.d	1.	04031910-01 5mL	IS/S 1uL #348	19 Mar 04 16:56
16	16	04031916.d	1.	04031911-01 5mL	IS/S 1uL #348	19 Mar 04 17:20
17	17	04031917.d	1.	04031909-01 5mL	IS/S 1uL #348	19 Mar 04 17:44
18	18	04031918.d	1.	04031909-02 5mL	IS/S 1uL #348	19 Mar 04 18:08
19	19	04031919.d	1.	04031909-03 5mL	IS/S 1uL #348	19 Mar 04 18:32
20	20	04031920.d	1.	04031909-04 5mL	IS/S 1uL #348	19 Mar 04 18:56
21	21	04031921.d	1.	04031909-05 5mL	IS/S 1uL #348	19 Mar 04 19:20
22	22	04031922.d	1.	04031814-12 10D	IS/S 1uL #348	19 Mar 04 19:47
23	23	04031923.d	1.	LCS 25ppb	IS/S 1uL #348, LCS 5uL #350	19 Mar 04 20:11
24	24	04031924.d	1.	04031909-02 MS 25ppb	IS/S 1uL #348, MS 5uL #350	19 Mar 04 20:35
25	25	04031925.d	1.	04031909-02 MSD 25ppb	IS/S 1uL #348, MS 5uL #350	19 Mar 04 20:58
26	26	04031926.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	19 Mar 04 21:22
27	27	04031927.d	1.	METHOD BLANK 5mL	IS/S 1uL #348	19 Mar 04 21:46

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QA/QC SUMMARY DATA

Metals

- *Initial Calibration Verification Summary*
- *Continuing Calibration Verification Summary*
- *Duplicate Summary*
- *Matrix Spike Summary*
- *Method Blank Summary (LRB)*
- *LCS Summary (LFB)*

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ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\006ICV1.D\006ICV1.D#
Date Acquired: Mar 23 2004 01:07 pm
Acq. Method: 323.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 01:05 pm
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	50.03	ppb	3.54	50.00	90 - 110	
52 Cr	50.37	ppb	0.36	50.00	90 - 110	
60 Ni	50.21	ppb	1.10	50.00	90 - 110	
63 Cu	50.56	ppb	0.48	50.00	90 - 110	
66 Zn	50.44	ppb	1.16	50.00	90 - 110	
75 As	49.89	ppb	0.31	50.00	90 - 110	
82 Se	50.06	ppb	1.08	50.00	90 - 110	
107 Ag	49.37	ppb	0.55	50.00	90 - 110	
111 Cd	49.97	ppb	1.58	50.00	90 - 110	
121 Sb	49.61	ppb	0.97	50.00	90 - 110	
202 Hg	2.00	ppb	0.69	2.00	90 - 110	
205 Tl	50.74	ppb	1.35	50.00	90 - 110	
208 Pb	50.02	ppb	1.43	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2236754	3.01	2391799	93.5	30 - 140	
45 Sc	2484734	1.17	2567801	96.8	30 - 140	
72 Ge	454738	1.53	470215	96.7	30 - 140	
115 In	2701926	2.42	2790202	96.8	30 - 140	
159 Tb	2804355	2.13	2816649	99.6	30 - 140	
209 Bi	1144384	3.47	1152007	99.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

Calibration Report

Calibration : Z:\040323B.B\323.C
Last Calib: Mar 23, 2004 14:04
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040323b.b\002calb.d\	002calb.d#	Mar 23 2004 12:47 pm
2	...chem\1\data\040323b.b\003cals.d\	003cals.d#	Mar 23 2004 12:52 pm
3	...chem\1\data\040323b.b\004cals.d\	004cals.d#	Mar 23 2004 12:57 pm
4	...chem\1\data\040323b.b\005cals.d\	005cals.d#	Mar 23 2004 01:02 pm
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
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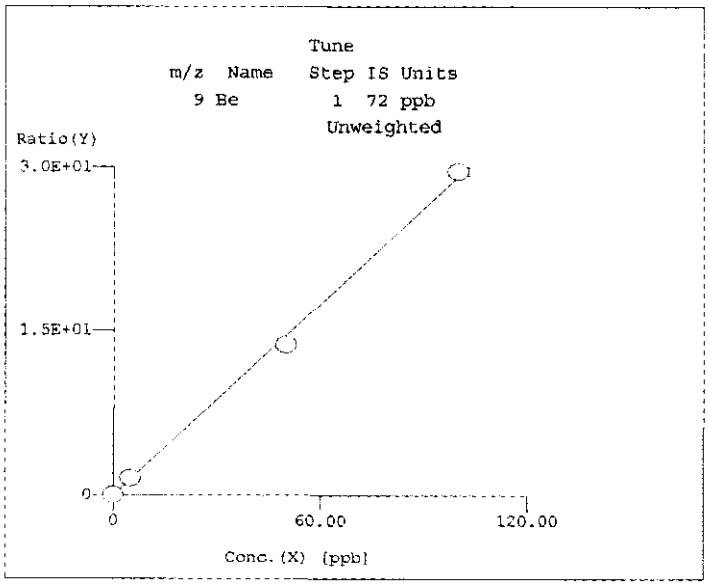
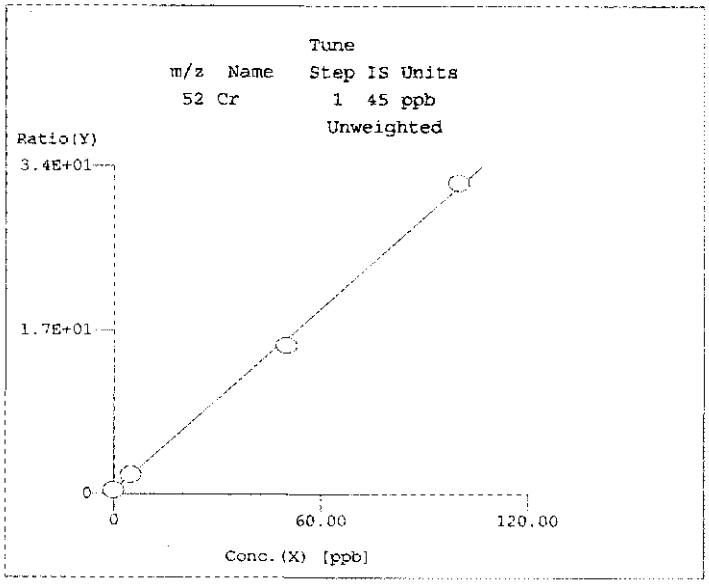
19	---		
20	---		



Lv.	Conc.	Ratio	RSD %
1	0.00	1.01E-2 P	20.30
2	5.00	1.55E+0 P	8.07E-1
3	50.00	1.37E+1 P	8.86E-1
4	100.00	2.96E+1 P	1.14
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9992
Y = 2.915E-1*X +1.014E-2
X = 3.431E+0*Y -3.481E-2

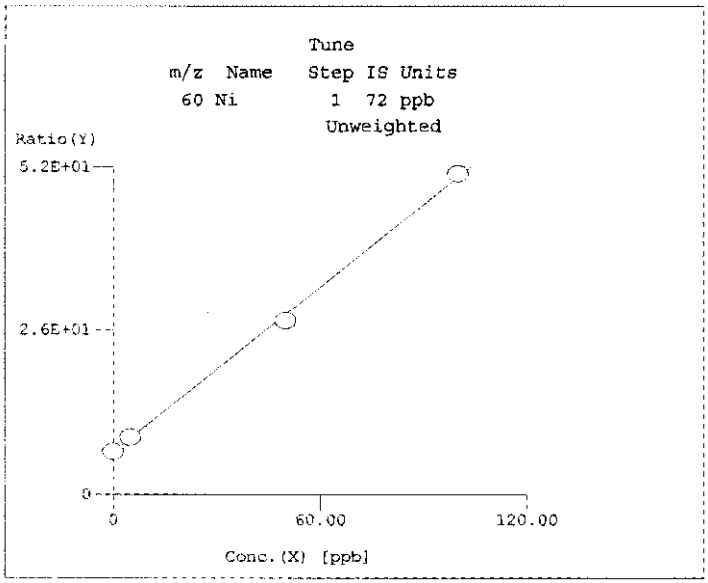
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.60E-1 P	1.56
2	5.00	1.97E+0 P	4.78E-1
3	50.00	1.54E+1 P	1.47
4	100.00	3.23E+1 P	6.86E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9995
Y = 3.155E-1*X +3.596E-1
X = 3.170E+0*Y -1.140E+0

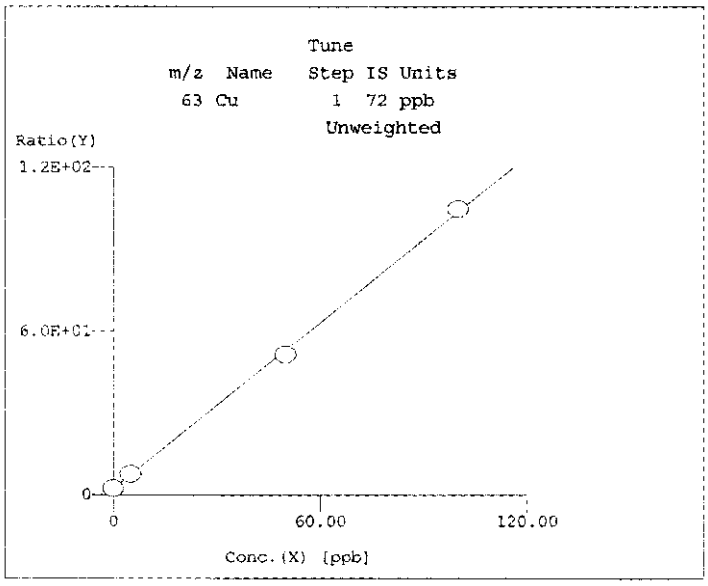
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.76E+0 P	1.93
2	5.00	9.06E+0 P	8.08E-1
3	50.00	2.75E+1 P	4.87E-1
4	100.00	5.09E+1 P	3.47E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9995
Y = 4.364E-1*X +6.761E+0
X = 2.291E+0*Y -1.549E+1

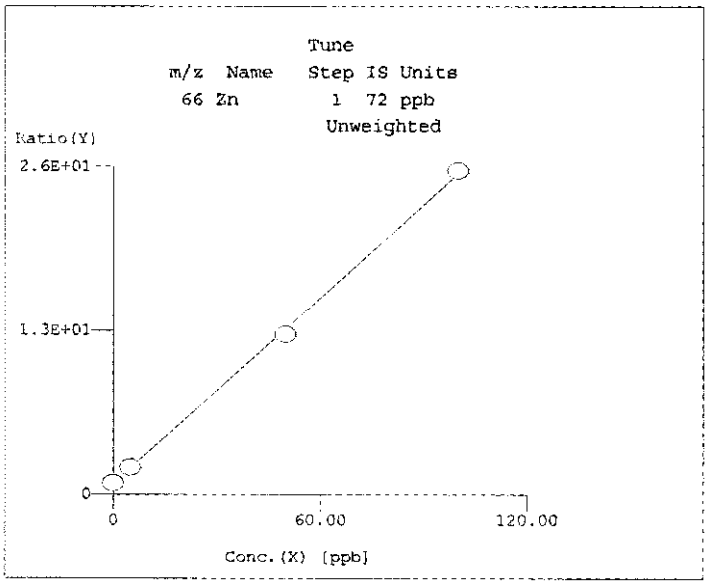
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.37E+0 P	7.35E-1
2	5.00	7.61E+0 P	1.42
3	50.00	5.11E+1 P	4.43E-1
4	100.00	1.05E+2 P	5.76E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 1.014E+0*X +2.368E+0
X = 9.859E-1*Y -2.335E+0

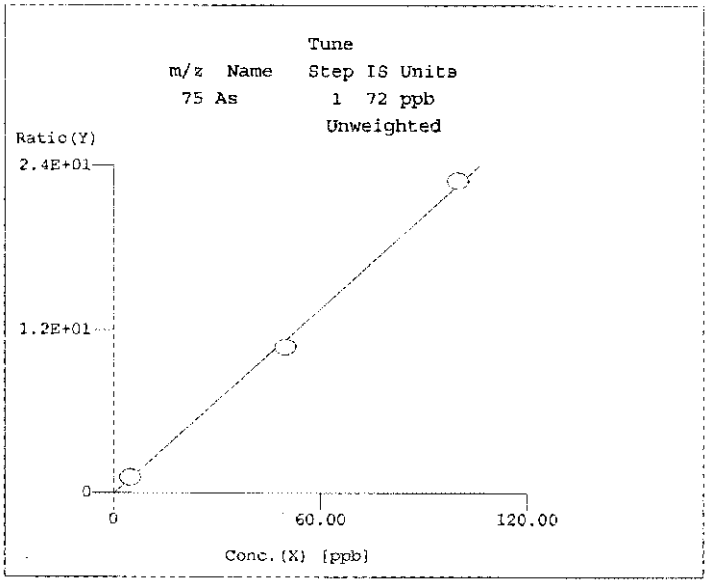
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	8.77E-1 P	2.18
2	5.00	2.13E+0 P	9.53E-1
3	50.00	1.27E+1 P	1.11
4	100.00	2.57E+1 P	5.13E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 2.458E-1*X +8.767E-1
X = 4.069E+0*Y -3.567E+0

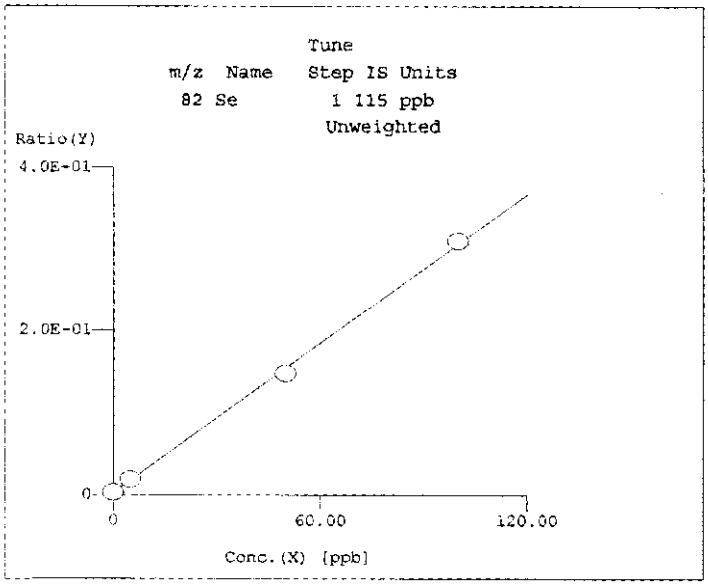
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	-6.73E-2 P	---
2	5.00	1.11E+0 P	2.19
3	50.00	1.07E+1 P	3.71E-1
4	100.00	2.29E+1 P	1.08E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9994
Y = 2.266E-1*X -6.726E-2
X = 4.413E+0*Y +2.968E-1

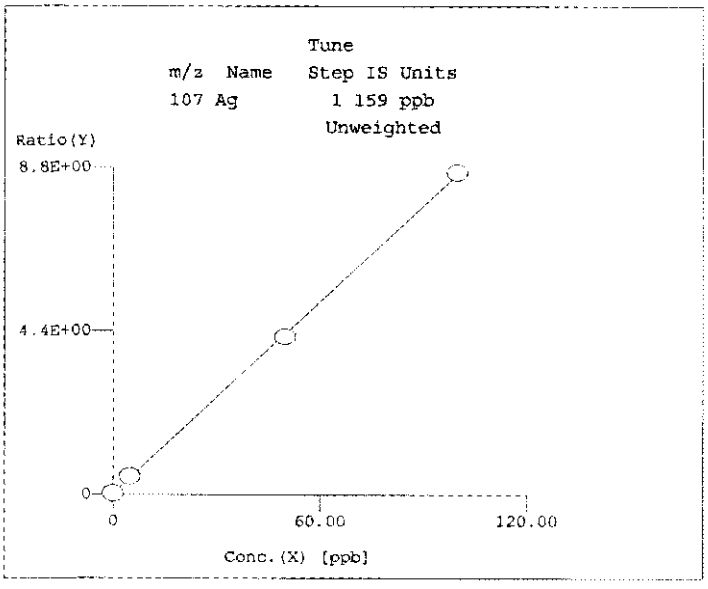
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.77E-3 P	13.90
2	5.00	1.86E-2 P	4.57
3	50.00	1.48E-1 P	4.49E-1
4	100.00	3.10E-1 P	1.03
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9995
Y = 3.035E-3*X +2.767E-3
X = 3.294E+2*Y -9.115E-1

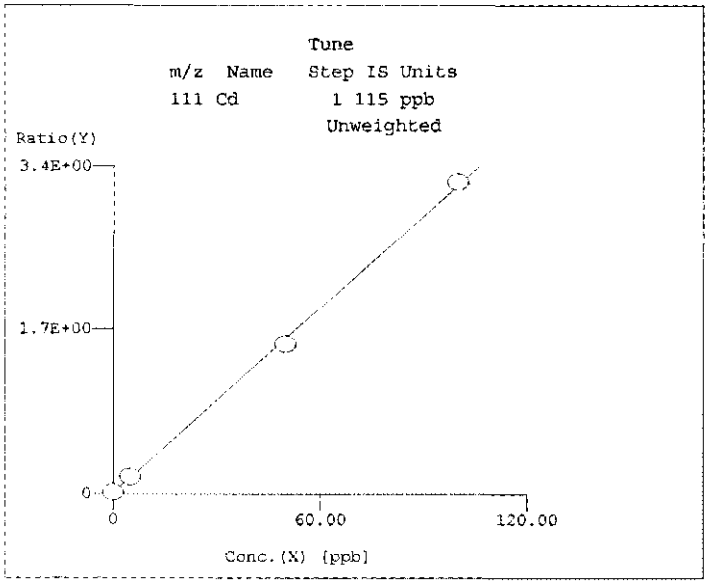
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.91E-2 P	3.81
2	5.00	4.81E-1 P	2.14
3	50.00	4.23E+0 P	2.04
4	100.00	8.65E+0 P	6.48E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 8.580E-2*X +2.913E-2
X = 1.165E+1*Y -3.395E-1

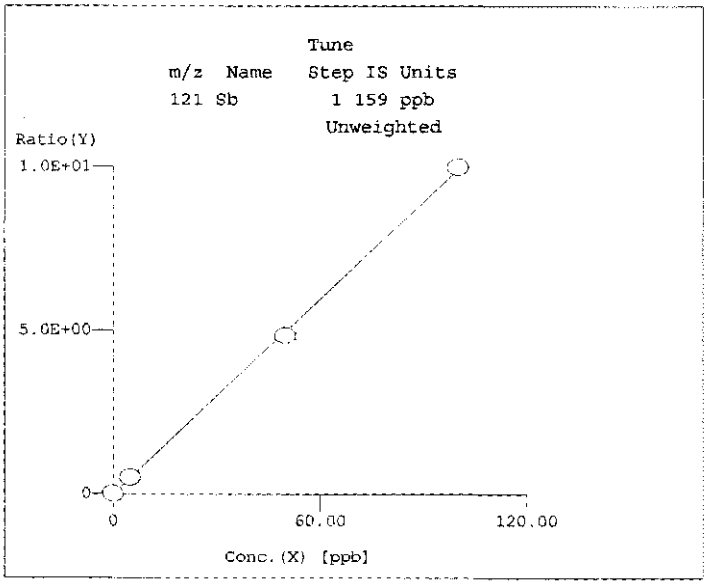
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.26E-2 P	5.04
2	5.00	1.78E-1 P	3.54
3	50.00	1.55E+0 P	1.53
4	100.00	3.24E+0 P	5.98E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 3.193E-2*X +1.255E-2
X = 3.132E+1*Y -3.930E-1

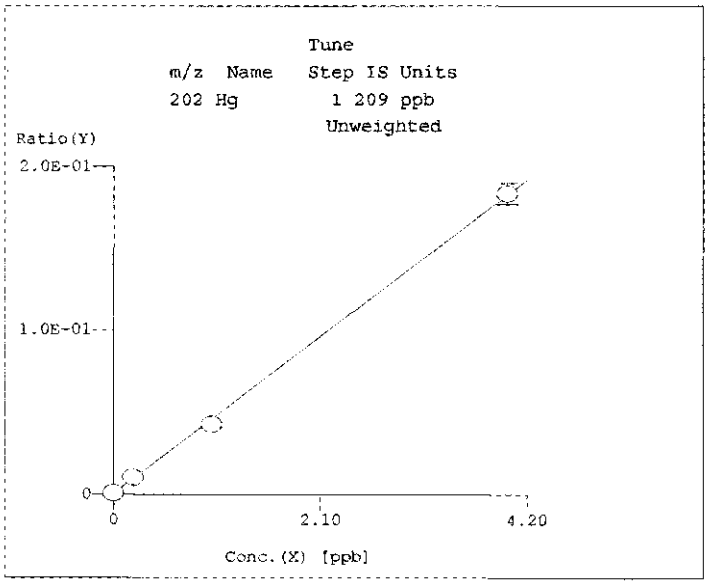
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.14E-2 P	10.30
2	5.00	5.15E-1 P	9.38E-1
3	50.00	4.84E+0 P	1.99
4	100.00	9.98E+0 P	7.82E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9998
Y = 9.909E-2*X +1.136E-2
X = 1.009E+1*Y -1.147E-1

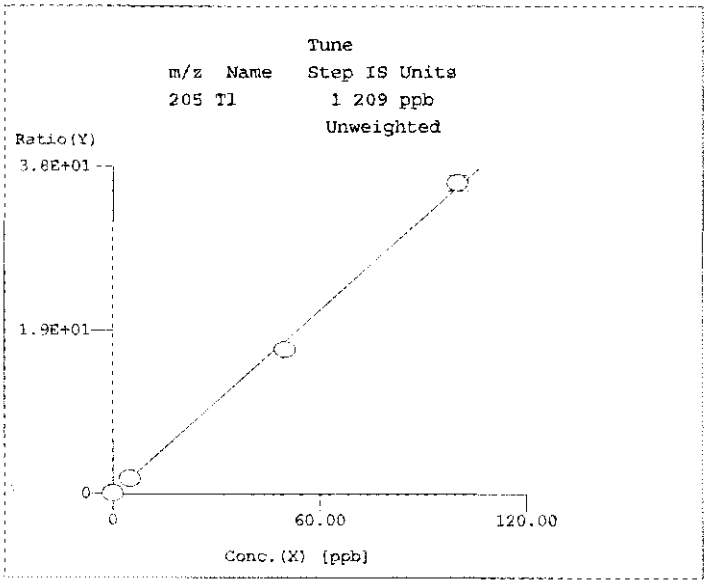
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.36E-4 P	10.30
2	2.00E-1	1.03E-2 P	7.94
3	1.00	4.28E-2 P	3.73
4	4.00	1.84E-1 P	3.53
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9998
Y = 4.555E-2*X +6.359E-4
X = 2.195E+1*Y -1.396E-2

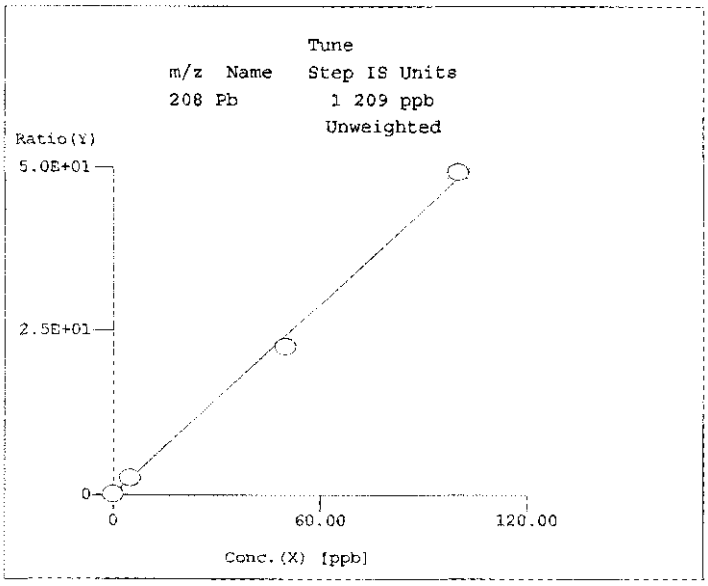
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.70E-2 P	12.90
2	5.00	1.80E+0 P	4.35
3	50.00	1.68E+1 P	1.39
4	100.00	3.61E+1 P	2.54
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9993
Y = 3.555E-1*X +3.704E-2
X = 2.813E+0*Y -1.042E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.10E-1 P	9.65
2	5.00	2.57E+0 P	1.01
3	50.00	2.25E+1 P	1.06
4	100.00	4.93E+1 P	1.78
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9989
Y = 4.828E-1*X +1.101E-1
X = 2.071E+0*Y -2.281E-1

MinConc: 0.00

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\023CCV1.D\023CCV1.D#
Date Acquired: Mar 23 2004 02:32 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	50.02	ppb	2.00	50.00	90 - 110	
52 Cr	48.63	ppb	1.25	50.00	90 - 110	
60 Ni	47.96	ppb	0.44	50.00	90 - 110	
63 Cu	48.29	ppb	0.73	50.00	90 - 110	
66 Zn	48.41	ppb	0.13	50.00	90 - 110	
75 As	47.69	ppb	0.25	50.00	90 - 110	
82 Se	48.29	ppb	1.52	50.00	90 - 110	
107 Ag	47.84	ppb	0.78	50.00	90 - 110	
111 Cd	48.29	ppb	2.04	50.00	90 - 110	
121 Sb	47.62	ppb	0.16	50.00	90 - 110	
202 Hg	0.95	ppb	0.85	1.00	90 - 110	
205 Tl	44.46	ppb	2.36	50.00	90 - 110	Fail
208 Pb	48.08	ppb	1.16	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2335169	3.80	2391799	97.6	30 - 140	
45 Sc	2542709	2.40	2567801	99.0	30 - 140	
72 Ge	462874	1.71	470215	98.4	30 - 140	
115 In	2718250	3.31	2790202	97.4	30 - 140	
159 Tb	2817179	2.65	2816649	100.0	30 - 140	
209 Bi	1139163	1.58	1152007	98.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\038CCV1.D\038CCV1.D#
Date Acquired: Mar 23 2004 03:47 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.42	ppb	1.24	50.00	90 - 110	
52 Cr	47.55	ppb	0.14	50.00	90 - 110	
60 Ni	47.89	ppb	1.60	50.00	90 - 110	
63 Cu	48.21	ppb	0.31	50.00	90 - 110	
66 Zn	47.45	ppb	0.97	50.00	90 - 110	
75 As	47.64	ppb	0.42	50.00	90 - 110	
82 Se	48.73	ppb	1.68	50.00	90 - 110	
107 Ag	48.15	ppb	1.31	50.00	90 - 110	
111 Cd	46.97	ppb	1.79	50.00	90 - 110	
121 Sb	48.30	ppb	1.21	50.00	90 - 110	
202 Hg	0.91	ppb	0.81	1.00	90 - 110	
205 Tl	46.28	ppb	0.49	50.00	90 - 110	
208 Pb	46.18	ppb	0.56	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2311852	3.33	2391799	96.7	30 - 140	
45 Sc	2490799	2.01	2567801	97.0	30 - 140	
72 Ge	443079	1.89	470215	94.2	30 - 140	
115 In	2589319	1.12	2790202	92.8	30 - 140	
159 Tb	2631763	2.79	2816649	93.4	30 - 140	
209 Bi	1067776	3.34	1152007	92.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\051CCV1.D\051CCV1.D#
Date Acquired: Mar 23 2004 04:52 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.48	ppb	1.75	50.00	90 - 110	
52 Cr	47.00	ppb	0.15	50.00	90 - 110	
60 Ni	47.82	ppb	2.04	50.00	90 - 110	
63 Cu	48.03	ppb	0.09	50.00	90 - 110	
66 Zn	47.31	ppb	0.66	50.00	90 - 110	
75 As	47.31	ppb	0.36	50.00	90 - 110	
82 Se	48.42	ppb	0.74	50.00	90 - 110	
107 Ag	48.42	ppb	2.47	50.00	90 - 110	
111 Cd	46.89	ppb	0.71	50.00	90 - 110	
121 Sb	48.23	ppb	2.07	50.00	90 - 110	
202 Hg	0.90	ppb	3.31	1.00	90 - 110	
205 Tl	48.07	ppb	0.50	50.00	90 - 110	
208 Pb	46.49	ppb	0.37	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2335201	2.34	2391799	97.6	30 - 140	
45 Sc	2456942	2.09	2567801	95.7	30 - 140	
72 Ge	434264	1.89	470215	92.4	30 - 140	
115 In	2526415	1.82	2790202	90.5	30 - 140	
159 Tb	2545879	3.92	2816649	90.4	30 - 140	
209 Bi	1008185	2.48	1152007	87.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\064CCV1.D\064CCV1.D#
Date Acquired: Mar 23 2004 05:58 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.02	ppb	0.86	50.00	90 - 110	
52 Cr	46.65	ppb	1.62	50.00	90 - 110	
60 Ni	47.27	ppb	0.14	50.00	90 - 110	
63 Cu	47.97	ppb	0.99	50.00	90 - 110	
66 Zn	46.93	ppb	0.60	50.00	90 - 110	
75 As	47.19	ppb	0.29	50.00	90 - 110	
82 Se	47.45	ppb	0.72	50.00	90 - 110	
107 Ag	46.50	ppb	0.28	50.00	90 - 110	
111 Cd	46.90	ppb	0.28	50.00	90 - 110	
121 Sb	46.76	ppb	0.89	50.00	90 - 110	
202 Hg	0.90	ppb	1.94	1.00	90 - 110	
205 Tl	48.83	ppb	2.79	50.00	90 - 110	
208 Pb	47.45	ppb	1.19	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2268684	1.38	2391799	94.9	30 - 140	
45 Sc	2431196	2.63	2567801	94.7	30 - 140	
72 Ge	433725	1.37	470215	92.2	30 - 140	
115 In	2578215	2.76	2790202	92.4	30 - 140	
159 Tb	2672532	1.66	2816649	94.9	30 - 140	
209 Bi	1081628	0.94	1152007	93.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\077CCV1.D\077CCV1.D#
Date Acquired: Mar 23 2004 07:04 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	56.35	ppb	0.58	50.00	90 - 110	Fail
52 Cr	46.07	ppb	2.24	50.00	90 - 110	
60 Ni	47.59	ppb	1.04	50.00	90 - 110	
63 Cu	49.56	ppb	1.06	50.00	90 - 110	
66 Zn	46.80	ppb	0.84	50.00	90 - 110	
75 As	46.90	ppb	0.49	50.00	90 - 110	
82 Se	47.48	ppb	2.55	50.00	90 - 110	
107 Ag	49.00	ppb	1.79	50.00	90 - 110	
111 Cd	46.49	ppb	1.04	50.00	90 - 110	
121 Sb	47.90	ppb	0.43	50.00	90 - 110	
202 Hg	0.92	ppb	1.14	1.00	90 - 110	
205 Tl	49.40	ppb	2.83	50.00	90 - 110	
208 Pb	47.16	ppb	1.70	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2437632	0.88	2391799	101.9	30 - 140	
45 Sc	2565886	2.47	2567801	99.9	30 - 140	
72 Ge	447456	1.54	470215	95.2	30 - 140	
115 In	2578101	2.11	2790202	92.4	30 - 140	
159 Tb	2565310	2.48	2816649	91.1	30 - 140	
209 Bi	1005364	0.92	1152007	87.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\091CCV1.D\091CCV1.D#
Date Acquired: Mar 23 2004 08:16 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal Update: Mar 23 2004 02:36 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	61.92	ppb	0.38	50.00	90 - 110	Fail
52 Cr	44.73	ppb	0.09	50.00	90 - 110	Fail
60 Ni	48.84	ppb	1.28	50.00	90 - 110	
63 Cu	50.59	ppb	0.72	50.00	90 - 110	
66 Zn	45.48	ppb	0.50	50.00	90 - 110	
75 As	46.43	ppb	0.68	50.00	90 - 110	
82 Se	49.13	ppb	4.40	50.00	90 - 110	
107 Ag	50.85	ppb	0.14	50.00	90 - 110	
111 Cd	46.89	ppb	2.76	50.00	90 - 110	
121 Sb	48.79	ppb	1.18	50.00	90 - 110	
202 Hg	0.87	ppb	5.34	1.00	90 - 110	Fail
205 Tl	48.11	ppb	6.26	50.00	90 - 110	
208 Pb	45.44	ppb	5.93	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2616546	1.74	2391799	109.4	30 - 140	
45 Sc	2592772	1.61	2567801	101.0	30 - 140	
72 Ge	433205	2.09	470215	92.1	30 - 140	
115 In	2385489	2.82	2790202	85.5	30 - 140	
159 Tb	2303602	2.58	2816649	81.8	30 - 140	
209 Bi	937449	10.22	1152007	81.4	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\062DUP1.D\062DUP1.D#
Date Acquired: Mar 23 2004 05:48 pm
Acq. Method: 323.M
Operator:
Sample Name: DUP
Misc Info: BATCH 406
Vial Number: 4102
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040323B.B\061AREF.D\061AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	0.15	ppb	14.70	0.13	16.45	20	<PQL
52 Cr	-0.18	ppb	19.42	-0.16	-14.25	20	<PQL
60 Ni	-4.18	ppb	3.32	-4.31	-2.94	20	<PQL
63 Cu	-0.57	ppb	10.24	-0.53	-7.26	20	<PQL
66 Zn	37.31	ppb	0.95	35.69	4.44	20	
75 As	0.49	ppb	6.45	0.51	2.53	20	<PQL
82 Se	-0.02	ppb	132.48	-0.03	-33.24	20	<PQL
107 Ag	-0.32	ppb	1.39	-0.31	-2.09	20	<PQL
111 Cd	0.70	ppb	3.97	0.70	0.77	20	<PQL
121 Sb	-0.02	ppb	56.32	-0.01	-33.39	20	<PQL
202 Hg	0.02	ppb	27.37	0.03	24.32	20	<PQL
205 Tl	0.08	ppb	40.27	0.11	34.62	20	<PQL
208 Pb	1.27	ppb	3.61	1.23	2.88	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2308096	2.79	2391799	96.5	30 - 140	
45 Sc	2598971	3.17	2567801	101.2	30 - 140	
72 Ge	474736	1.92	470215	101.0	30 - 140	
115 In	2836433	3.23	2790202	101.7	30 - 140	
159 Tb	2853328	4.70	2816649	101.3	30 - 140	
209 Bi	1151356	4.65	1152007	99.9	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	**C:\ICPCHEM\1\DATA\040323B.B\061AREF.D\061AREF.D#**
Date Acquired:	**Mar 23 2004 05:43 pm**
Acq. Method:	**323.M**
Operator:	**Lisa Miller**
Sample Name:	**04031814-03**
Misc Info:	**BATCH 406**
Vial Number:	**4101**
Current Method:	**C:\ICPCHEM\1\DATA\040323B.B\323.M**
Calibration File:	**C:\ICPCHEM\1\DATA\040323B.B\323.C**
Last Cal. Update:	**Mar 23 2004 02:36 pm**
Sample Type:	**AllRef**
Dilution Factor:	**1.00**
Autodil Factor:	**Undiluted**
Final Dil Factor:	**1.00**

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.13	0.13	ppb	9.67	8000.00	
52 Cr	-0.16	-0.16	ppb	3.36	40000.00	
60 Ni	-4.31	-4.31	ppb	3.42	8000.00	
63 Cu	-0.53	-0.53	ppb	10.48	8000.00	
66 Zn	35.69	35.69	ppb	1.09	8000.00	
75 As	0.51	0.51	ppb	0.79	8000.00	
82 Se	-0.03	-0.03	ppb	182.65	8000.00	
107 Ag	-0.31	-0.31	ppb	2.67	8000.00	
111 Cd	0.70	0.70	ppb	5.44	8000.00	
121 Sb	-0.01	-0.01	ppb	70.01	8000.00	
202 Hg	0.03	0.03	ppb	21.67	8.00	
205 Tl	0.11	0.11	ppb	12.98	8000.00	
208 Pb	1.23	1.23	ppb	7.03	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2284560	1.91	2391799	95.5	30 - 140	
45 Sc	2587857	1.56	2567801	100.8	30 - 140	
72 Ge	476755	1.62	470215	101.4	30 - 140	
115 In	2836520	2.00	2790202	101.7	30 - 140	
159 Tb	2899724	3.05	2816649	102.9	30 - 140	
209 Bi	1179083	1.71	1152007	102.4	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\080DUP1.D\080DUP1.D#
Date Acquired: Mar 23 2004 07:19 pm
Acq. Method: 323.M
Operator:
Sample Name: DUP
Misc Info: BATCH 406
Vial Number: 4201
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040323B.B\075AREF.D\075AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	0.30	ppb	17.23	0.33	11.38	20	<PQL
52 Cr	4.60	ppb	1.29	4.30	6.77	20	<PQL
60 Ni	-1.62	ppb	18.73	-1.44	-11.37	20	<PQL
63 Cu	14.68	ppb	0.06	15.45	5.11	20	
66 Zn	61.98	ppb	0.82	55.69	10.69	20	
75 As	0.40	ppb	38.68	0.63	44.24	20	<PQL
82 Se	0.18	ppb	39.53	0.25	33.71	20	<PQL
107 Ag	-0.21	ppb	6.44	-0.04	-138.74	20	<PQL
111 Cd	1.68	ppb	3.53	1.71	1.77	20	<PQL
121 Sb	0.19	ppb	15.65	0.22	17.08	20	<PQL
202 Hg	0.01	ppb	37.34	0.02	91.02	20	<PQL
205 Tl	0.13	ppb	27.66	0.81	142.63	20	<PQL
208 Pb	15.63	ppb	2.60	16.97	8.22	20	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2490013	0.31	2391799	104.1	30 - 140	
45 Sc	2583513	1.55	2567801	100.6	30 - 140	
72 Ge	445649	1.12	470215	94.8	30 - 140	
115 In	2532128	0.72	2790202	90.8	30 - 140	
159 Tb	2501958	1.37	2816649	88.8	30 - 140	
209 Bi	973676	7.85	1152007	84.5	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	**C:\ICPCHEM\1\DATA\040323B.B\075AREF.D\075AREF.D#**
Date Acquired:	**Mar 23 2004 06:54 pm**
Acq. Method:	**323.M**
Operator:	**Lisa Miller**
Sample Name:	**04031814-02**
Misc Info:	**BATCH 406**
Vial Number:	**4112**
Current Method:	**C:\ICPCHEM\1\DATA\040323B.B\323.M**
Calibration File:	**C:\ICPCHEM\1\DATA\040323B.B\323.C**
Last Cal. Update:	**Mar 23 2004 02:36 pm**
Sample Type:	**AllRef**
Dilution Factor:	**1.00**
Autodil Factor:	**Undiluted**
Final Dil Factor:	**1.00**

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.33	0.33	ppb	1.69	8000.00	
52 Cr	4.30	4.30	ppb	3.43	40000.00	
60 Ni	-1.44	-1.44	ppb	3.69	8000.00	
63 Cu	15.45	15.45	ppb	0.92	8000.00	
66 Zn	55.69	55.69	ppb	0.57	8000.00	
75 As	0.63	0.63	ppb	28.87	8000.00	
82 Se	0.25	0.25	ppb	13.28	8000.00	
107 Ag	-0.04	-0.04	ppb	95.57	8000.00	
111 Cd	1.71	1.71	ppb	5.86	8000.00	
121 Sb	0.23	0.23	ppb	13.58	8000.00	
202 Hg	0.02	0.02	ppb	8.75	8.00	
205 Tl	0.81	0.81	ppb	4.86	8000.00	
208 Pb	16.97	16.97	ppb	2.92	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2438555	3.17	2391799	102.0	30 - 140	
45 Sc	2444583	1.31	2567801	95.2	30 - 140	
72 Ge	413035	2.06	470215	87.8	30 - 140	
115 In	2332459	3.27	2790202	83.6	30 - 140	
159 Tb	2313892	3.19	2816649	82.2	30 - 140	
209 Bi	906102	6.61	1152007	78.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

LFM Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\066LFM1.D\066LFM1.D#
Date Acquired: Mar 23 2004 06:08 pm
Acq. Method: 323.M
Operator:
Sample Name: LFM
Misc Info: BATCH 406
Vial Number: 4103
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040323B.B\061AREF.D\061AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	48.23	ppb	0.13	3.06	50.00	96.2	75 - 125	
52 Cr	45.17	ppb	-0.16	1.64	50.00	90.7	75 - 125	
60 Ni	40.80	ppb	-4.31	0.06	50.00	90.2	75 - 125	
63 Cu	44.80	ppb	-0.53	0.18	50.00	90.7	75 - 125	
66 Zn	85.92	ppb	35.69	0.59	50.00	100.5	75 - 125	
75 As	49.08	ppb	0.51	0.16	50.00	97.1	75 - 125	
82 Se	52.40	ppb	-0.03	1.27	50.00	104.9	75 - 125	
107 Ag	39.23	ppb	-0.31	1.24	50.00	79.1	75 - 125	
111 Cd	48.18	ppb	0.70	1.20	50.00	95.0	75 - 125	
121 Sb	46.85	ppb	-0.01	0.81	50.00	93.7	75 - 125	
202 Hg	0.70	ppb	0.03	3.61	2.00	33.5	75 - 125	Fail
205 Tl	50.56	ppb	0.11	1.71	50.00	100.9	75 - 125	
208 Pb	47.46	ppb	1.23	2.43	50.00	92.5	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	2287836	2.97	2391799	95.7	30 - 140	
45 Sc	2590414	2.39	2567801	100.9	30 - 140	
72 Ge	468128	1.34	470215	99.6	30 - 140	
115 In	2781233	2.02	2790202	99.7	30 - 140	
159 Tb	2913100	1.88	2816649	103.4	30 - 140	
209 Bi	1183207	1.37	1152007	102.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

LFM Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\081LFM1.D\081LFM1.D#
Date Acquired: Mar 23 2004 07:24 pm
Acq. Method: 323.M
Operator:
Sample Name: LFM
Misc Info: BATCH 406
Vial Number: 4202
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040323B.B\075AREF.D\075AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	59.55	ppb	0.33	0.53	50.00	118.4	75 - 125	
52 Cr	49.94	ppb	4.30	0.89	50.00	91.3	75 - 125	
60 Ni	47.79	ppb	-1.44	1.20	50.00	98.5	75 - 125	
63 Cu	64.50	ppb	15.45	0.37	50.00	98.1	75 - 125	
66 Zn	103.10	ppb	55.69	0.50	50.00	94.8	75 - 125	
75 As	47.23	ppb	0.63	0.10	50.00	93.2	75 - 125	
82 Se	46.62	ppb	0.25	1.63	50.00	92.7	75 - 125	
107 Ag	51.04	ppb	-0.04	1.07	50.00	102.2	75 - 125	
111 Cd	49.77	ppb	1.71	2.47	50.00	96.1	75 - 125	
121 Sb	49.53	ppb	0.22	0.77	50.00	98.6	75 - 125	
202 Hg	1.89	ppb	0.02	2.75	2.00	93.2	75 - 125	
205 Tl	48.84	ppb	0.81	1.89	50.00	96.1	75 - 125	
208 Pb	64.61	ppb	16.97	1.46	50.00	95.3	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	2387116	2.78	2391799	99.8	30 - 140	
45 Sc	2434231	0.99	2567801	94.8	30 - 140	
72 Ge	420852	1.66	470215	89.5	30 - 140	
115 In	2377107	3.21	2790202	85.2	30 - 140	
159 Tb	2363343	2.10	2816649	83.9	30 - 140	
209 Bi	922144	4.79	1152007	80.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PDS Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\082PDS1.D\082PDS1.D#
Date Acquired: Mar 23 2004 07:29 pm
Acq. Method: 323.M
Operator:
Sample Name: PDS
Misc Info: BATCH 406
Vial Number: 4203
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: PDS1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040323B.B\075AREF.D\075AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	56.74	ppb	0.33	1.78	50.00	112.8	75 - 125	
52 Cr	46.57	ppb	4.30	2.56	50.00	84.5	75 - 125	
60 Ni	45.97	ppb	-1.44	1.07	50.00	94.8	75 - 125	
63 Cu	61.58	ppb	15.45	0.38	50.00	92.3	75 - 125	
66 Zn	95.03	ppb	55.69	0.60	50.00	78.7	75 - 125	
75 As	43.00	ppb	0.63	0.84	50.00	84.7	75 - 125	
82 Se	40.55	ppb	0.25	1.77	50.00	80.6	75 - 125	
107 Ag	51.11	ppb	-0.04	0.64	50.00	102.3	75 - 125	
111 Cd	45.13	ppb	1.71	0.55	50.00	86.8	75 - 125	
121 Sb	46.65	ppb	0.22	1.04	50.00	92.9	75 - 125	
202 Hg	1.78	ppb	0.02	1.81	2.00	87.9	75 - 125	
205 Tl	50.50	ppb	0.81	1.31	50.00	99.4	75 - 125	
208 Pb	64.70	ppb	16.97	2.31	50.00	95.5	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	2358932	1.56	2391799	98.6	30 - 140	
45 Sc	2439762	4.52	2567801	95.0	30 - 140	
72 Ge	407840	1.94	470215	86.7	30 - 140	
115 In	2295640	2.46	2790202	82.3	30 - 140	
159 Tb	2255667	3.27	2816649	80.1	30 - 140	
209 Bi	852469	6.96	1152007	74.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PB QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\073__PB.D\073__PB.D#
Date Acquired: Mar 23 2004 06:44 pm
Acq. Method: 323.M
Operator:
Sample Name: PB
Misc Info: BATCH 406
Vial Number: 4110
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: PB
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.01	ppb	4.26	0.50	
52 Cr	0.05	ppb	58.70	0.50	
60 Ni	2.43	ppb	5.81	0.50	
63 Cu	2.29	ppb	6.87	0.50	
66 Zn	-0.75	ppb	5.46	0.50	
75 As	0.04	ppb	523.27	0.50	
82 Se	0.05	ppb	231.88	0.50	
107 Ag	0.08	ppb	38.17	0.50	
111 Cd	0.07	ppb	77.75	0.50	
121 Sb	-0.01	ppb	230.20	0.50	
202 Hg	0.00	ppb	32.30	0.50	
205 Tl	0.00	ppb	240.24	0.50	
208 Pb	0.08	ppb	14.37	0.50	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2473274	3.13	2391799	103.4	30 - 140	
45 Sc	2526324	1.80	2567801	98.4	30 - 140	
72 Ge	420651	1.79	470215	89.5	30 - 140	
115 In	2363397	2.07	2790202	84.7	30 - 140	
159 Tb	2208711	1.85	2816649	78.4	30 - 140	
209 Bi	836222	6.37	1152007	72.6	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040323B.B\002CALB.D\002CALB.D

Traceability:

H202 # X44A01; HNO3 # 82; HCL # X13037; Au #174; IS # 168

LCS QC Report

Data File: C:\ICPCHEM\1\DATA\040323B.B\074_LCS.D\074_LCS.D#
Date Acquired: Mar 23 2004 06:49 pm
Acq. Method: 323.M
Operator:
Sample Name: LCS
Misc Info: BATCH 406
Vial Number: 4111
Current Method: C:\ICPCHEM\1\DATA\040323B.B\323.M
Calibration File: C:\ICPCHEM\1\DATA\040323B.B\323.C
Last Cal. Update: Mar 23 2004 02:36 pm
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Analyte Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	58.86	ppb	3.39	50.00	75 - 125	
52 Cr	47.70	ppb	0.90	50.00	75 - 125	
60 Ni	52.73	ppb	0.15	50.00	75 - 125	
63 Cu	52.04	ppb	0.35	50.00	75 - 125	
66 Zn	46.63	ppb	1.97	50.00	75 - 125	
75 As	48.19	ppb	0.08	50.00	75 - 125	
82 Se	48.64	ppb	1.25	50.00	75 - 125	
107 Ag	51.73	ppb	1.67	50.00	75 - 125	
111 Cd	48.35	ppb	1.16	50.00	75 - 125	
121 Sb	50.62	ppb	2.22	50.00	75 - 125	
202 Hg	1.88	ppb	2.01	2.00	75 - 125	
205 Tl	48.36	ppb	2.01	50.00	75 - 125	
208 Pb	49.04	ppb	1.20	50.00	75 - 125	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2426803	1.29	2391799	0.0	30 - 140	
45 Sc	2497668	1.73	2567801	0.0	30 - 140	
72 Ge	432107	1.34	470215	0.0	30 - 140	
115 In	2437579	1.54	2790202	0.0	30 - 140	
159 Tb	2405671	3.08	2816649	0.0	30 - 140	
209 Bi	950063	2.25	1152007	0.0	30 - 140	

ISTD Ref File :

Traceability:

W: 0.1 ML #A098; 0.1 ML # A100; 0.05 ML #115
S: 1.0 ML # A098; 1.0 ML #A100; 0.5 ML #115
HCL #X13037; AU #174; IS #168;HNO3 # 82; H2O2 #X44A01

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 23, 2004

PROJECT: Martin State Airport - Quarterly Sampling

Project #: N7339-0677D

CERTIFICATE OF ANALYSIS #: *04032310*

PREPARED FOR:

Tetra Tech, Inc.
10670 White Rock Rd., Ste. 100
Rancho Cordova, CA 95670

April 27, 2004

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 1 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032204 / 04032310-01						
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	ND	ug/L	EPA 8260	1		03/23/04
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 2 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032204 / 04032310-01						
Volatile Organic Compounds						
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Vinyl chloride	ND	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	ND	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 3 of 31
Tetra Tech, Inc.
April 27, 2004

Project:	Martin State Airport - Quarterly Sampling		
Site Location:	Martin State Airport		
Project Number:	N7339-0677D	Date Sampled:	03/22/04
Matrix:	Water	Date Received:	03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed

Sample ID: TB032204 / 04032310-01

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Cohee
Quality Assurance Chemist

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 4 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-7-032204 / 04032310-02						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	**22**	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**30**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	ND	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	**5.4**	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	**87**	ug/L	EPA 6020	50	03/29/04	03/30/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	ND	ug/L	EPA 8260	1		03/23/04
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-7-032204 / 04032310-02						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04

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April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-7-032204 / 04032310-02						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	ND	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	11	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11S-032204 / 04032310-03						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**16**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	ND	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	**96**	ug/L	EPA 6020	50	03/29/04	03/30/04
Volatile Organic Compounds						
Benzene	**17**	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	**130**	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	**2,300**	ug/L	EPA 8260	100		03/24/04
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11S-032204 / 04032310-03						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	**84**	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	**E 53,000**	ug/L	EPA 8260	100		03/24/04
trans-1,2-Dichloroethene	**170**	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	**7**	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	**1**	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	**b 14**	ug/L	EPA 8260	1		03/23/04
Naphthalene	**3**	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	**1**	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	**12**	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	**12**	ug/L	EPA 8260	1		03/23/04
Toluene	**840**	ug/L	EPA 8260	100		03/24/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	**53**	ug/L	EPA 8260	1		03/23/04
Trichloroethene	**E 52,000**	ug/L	EPA 8260	100		03/24/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	**10**	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	**3**	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11S-032204 / 04032310-03						
Volatile Organic Compounds						
Vinyl chloride	**2,400**	ug/L	EPA 8260	100		03/24/04
m&p-Xylene	**20**	ug/L	EPA 8260	3		03/23/04
o-Xylene	**18**	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	**j 1**	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact
E - estimated value, exceeds calibration range.
j - estimated value, less than quantitation limit.

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11I-032204 / 04032310-04						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**7.0**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	**2.5**	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	ND	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	ND	ug/L	EPA 6020	50	03/29/04	03/30/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/24/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/24/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/24/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/24/04
Bromoform	ND	ug/L	EPA 8260	1		03/24/04
Bromomethane	ND	ug/L	EPA 8260	1		03/24/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/24/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/24/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/24/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/24/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
Chloroethane	ND	ug/L	EPA 8260	1		03/24/04
Chloroform	ND	ug/L	EPA 8260	1		03/24/04
Chloromethane	ND	ug/L	EPA 8260	1		03/24/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/24/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/24/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/24/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/24/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/24/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11I-032204 / 04032310-04						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/24/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/24/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/24/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/24/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/24/04
cis-1,2-Dichloroethene	4	ug/L	EPA 8260	1		03/24/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/24/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/24/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/24/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/24/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/24/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/24/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/24/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/24/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/24/04
Naphthalene	ND	ug/L	EPA 8260	1		03/24/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/24/04
Styrene	ND	ug/L	EPA 8260	1		03/24/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/24/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/24/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/24/04
Toluene	ND	ug/L	EPA 8260	1		03/24/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/24/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/24/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/24/04
Trichloroethene	2	ug/L	EPA 8260	1		03/24/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/24/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/24/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/24/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11I-032204 / 04032310-04						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/24/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/24/04
o-Xylene	ND	ug/L	EPA 8260	3		03/24/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/24/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/24/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/24/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/24/04
Acetone	ND	ug/L	EPA 8260	10		03/24/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/24/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/24/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/24/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/24/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/24/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/24/04

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-3-032204 / 04032310-05						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	ND	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	71	ug/L	EPA 6020	50	03/29/04	03/30/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	ND	ug/L	EPA 8260	1		03/23/04
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-3-032204 / 04032310-05						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	**100**	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	**110**	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-3-032204 / 04032310-05						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	ND	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-1-032204 / 04032310-06						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**6.1**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	ND	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	ND	ug/L	EPA 6020	50	03/29/04	03/30/04
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	ND	ug/L	EPA 8260	1		03/23/04
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 17 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-1-032204 / 04032310-06						
Volatile Organic Compounds						
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	ND	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	100	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-1-032204 / 04032310-06						
Volatile Organic Compounds						
Vinyl chloride	ND	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	ND	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 19 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8D-032304 / 04032310-07						
Ferric Iron						
Iron (Fe3+)	ND	mg/L	Mod. 7199	1		03/24/04
Nitrite Nitrogen						
Nitrite	ND	mg/L	EPA 300.0	0.2		03/23/04
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	**14**	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**5.4**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	**35**	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	**130**	ug/L	EPA 6020	50	03/29/04	03/30/04
Total Sulfate						
Sulfate	**71**	mg/L	EPA 300.0	1		03/23/04
Volatile Organic Compounds						
Benzene	**1**	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	ND	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 20 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8D-032304 / 04032310-07						
Volatile Organic Compounds						
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	**4**	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	**140**	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	**b 2**	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	ND	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 21 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8D-032304 / 04032310-07						
Volatile Organic Compounds						
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	**150**	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Vinyl chloride	**62**	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	ND	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 22 of 31
Tetra Tech, Inc.
March 31, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID DMW-4D-032304 / 04032310-08						
Ferric Iron						
Iron (Fe3+)	ND	mg/L	Mod. 7199	1		03/24/04
Nitrate Nitrogen						
Nitrate	**2.6**	mg/L	EPA 300.0	0.2		03/23/04
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Arsenic	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Beryllium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Cadmium	**14**	ug/L	EPA 6020	5	03/29/04	03/30/04
Chromium	**13**	ug/L	EPA 6020	5	03/29/04	03/30/04
Copper	**57**	ug/L	EPA 6020	5	03/29/04	03/30/04
Lead	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Mercury	ND	ug/L	EPA 6020	1	03/29/04	03/30/04
Nickel	**83**	ug/L	EPA 6020	20	03/29/04	03/30/04
Selenium	**25**	ug/L	EPA 6020	5	03/29/04	03/30/04
Silver	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Thallium	ND	ug/L	EPA 6020	5	03/29/04	03/30/04
Zinc	**240**	ug/L	EPA 6020	50	03/29/04	03/30/04
Total Sulfate						
Sulfate	**450**	mg/L	EPA 300.0	1		03/25/04
Volatile Organic Compounds						
Benzene	**1**	ug/L	EPA 8260	1		03/23/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/23/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/23/04
Bromoform	ND	ug/L	EPA 8260	1		03/23/04
Bromomethane	ND	ug/L	EPA 8260	1		03/23/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Carbon tetrachloride	**1**	ug/L	EPA 8260	1		03/23/04
Chlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Chloroethane	ND	ug/L	EPA 8260	1		03/23/04
Chloroform	**2**	ug/L	EPA 8260	1		03/23/04

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4D-032304 / 04032310-08						
Volatile Organic Compounds						
Chloromethane	ND	ug/L	EPA 8260	1		03/23/04
2-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
4-Chlorotoluene	ND	ug/L	EPA 8260	1		03/23/04
Dibromochloromethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		03/23/04
Dibromomethane	ND	ug/L	EPA 8260	1		03/23/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethane	**6**	ug/L	EPA 8260	1		03/23/04
1,2-Dichloroethane	**8**	ug/L	EPA 8260	1		03/23/04
1,1-Dichloroethene	**14**	ug/L	EPA 8260	1		03/23/04
cis-1,2-Dichloroethene	**E 210**	ug/L	EPA 8260	1		03/23/04
trans-1,2-Dichloroethene	**6**	ug/L	EPA 8260	1		03/23/04
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Ethylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Isopropylbenzene	ND	ug/L	EPA 8260	1		03/23/04
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		03/23/04
Methylene chloride	**b 13**	ug/L	EPA 8260	1		03/23/04
Naphthalene	ND	ug/L	EPA 8260	1		03/23/04
n-Propylbenzene	ND	ug/L	EPA 8260	1		03/23/04
Styrene	ND	ug/L	EPA 8260	1		03/23/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		03/23/04
Tetrachloroethene	**3**	ug/L	EPA 8260	1		03/23/04
Toluene	ND	ug/L	EPA 8260	1		03/23/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		03/23/04

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No. 04032310 Page 24 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4D-032304 / 04032310-08						
Volatile Organic Compounds						
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		03/23/04
Trichloroethene	**8,400**	ug/L	EPA 8260	100		03/24/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		03/23/04
1,2,4-Trimethylbenzene	**1**	ug/L	EPA 8260	1		03/23/04
1,3,5-Trimethylbenzene	**2**	ug/L	EPA 8260	1		03/23/04
Vinyl chloride	**19**	ug/L	EPA 8260	1		03/23/04
m&p-Xylene	ND	ug/L	EPA 8260	3		03/23/04
o-Xylene	**j 2**	ug/L	EPA 8260	3		03/23/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		03/23/04
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		03/23/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		03/23/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		03/23/04
Acetone	ND	ug/L	EPA 8260	10		03/23/04
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		03/23/04
Carbon disulfide	ND	ug/L	EPA 8260	1		03/23/04
Vinyl acetate	ND	ug/L	EPA 8260	1		03/23/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		03/23/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		03/23/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact
E - estimated value, exceeds calibration range.
j - estimated value, less than quantitation limit.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 25 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-7-032204 (DISS) / 04032310-09						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	**32**	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	ND	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	**100**	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Ochee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 26 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11S-032204 (DISS) / 04032310-10						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	ND	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	**93**	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Celuch
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 27 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-11I-032204 (DISS) / 04032310-11						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	ND	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	ND	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Colee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 28 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-3-032204 (DISS) / 04032310-12						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	ND	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	**63**	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 29 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/22/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-1-032204 (DISS) / 04032310-13						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	ND	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	ND	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Cole
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032310 Page 30 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-8D-032304 (DISS) / 04032310-14						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	**23**	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	**110**	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032310 Page 31 of 31
Tetra Tech, Inc.
April 27, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/23/04
Date Received: 03/23/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4D-032304 (DISS) / 04032310-15						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Arsenic	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Beryllium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Cadmium	**14**	ug/L	EPA 6020	5	03/25/04	03/25/04
Chromium	**5.4**	ug/L	EPA 6020	5	03/25/04	03/25/04
Copper	**44**	ug/L	EPA 6020	5	03/25/04	03/25/04
Lead	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Mercury	ND	ug/L	EPA 6020	1	03/25/04	03/25/04
Nickel	**65**	ug/L	EPA 6020	20	03/25/04	03/25/04
Selenium	**14**	ug/L	EPA 6020	5	03/25/04	03/25/04
Silver	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Thallium	ND	ug/L	EPA 6020	5	03/25/04	03/25/04
Zinc	**240**	ug/L	EPA 6020	50	03/25/04	03/25/04

Reviewed By: Matt Cline
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)
CLIENT: Tetra Tech PHONE NO.: (916) 276-7846
PROJECT MGR: Nisha Bansal FAX NO.: ( )
EMAIL: Nisha.bansal@TetraTech.com
PROJECT NAME: Martin State Airport - Quarterly Sampling
SITE LOCATION: Martin State Airport
PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #: 04032310

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	HCl	HNO3	HNO3	ICE	HCl/HNO3	REMARKS
							(3) Analysis Required	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	Nitrates & Sulfates	Ferric Iron	
	TB0322Ø4	3/22/Ø4	ØØØØ	WATER	2	G		X					
	MW-7-Ø322Ø4		1Ø43		4	G		X	X	X			
	DMW-11S-Ø322Ø4		1154		4	G		X	X	X			
	DMW-11I-Ø322Ø4		14Ø8		4	G		X	X	X			
	MW-3-Ø322Ø4		15ØØ		4	G		X	X	X			
	MW-1-Ø322Ø4	↓	1626		4	G		X	X	X			
	DMW-8D-Ø323Ø4	3/23/Ø4	1ØØØ		8	G		X	X	X	X	X	
	DMW-4D-Ø323Ø4	↓	123Ø		8	G		X	X	X	X	X	

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
[signature]	3/23/Ø4	1352	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date 3-23	Time 1:57	Received By: B. Orr

(4)

Requested Turnaround Time
☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:
Custody Seal:
Shipping Carrier:
Shipping Ticket No.:

Special Instructions:

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The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.

Order #: P0403532
Report Date: 03/29/04
Client Proj Name: Martin State Airport
Client Proj #: 04032310

Client Name: Phase Separation Science
Contact: Bryan Ridgell
Address: 6630 Baltimore National P
Baltimore, MD 21228

Lab Sample #: P0403532-01

Sample Description	Matrix	Sampled Date/Time	Received
04032310-07	Water	23 Mar. 04 10:00	24 Mar. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
WetChem						
Ferric Iron	<1.0	1.0	mg/L	Mod._7199	md	3/24/04 20:09

N - NELAC certified analysis

Order #: P0403532
Report Date: 03/29/04
Client Proj Name: Martin State Airport
Client Proj #: 04032310

Client Name: Phase Separation Science
Contact: Bryan Ridgell
Address: 6630 Baltimore National P
Baltimore, MD 21228

Lab Sample #: P0403532-02

Sample Description	Matrix	Sampled Date/Time	Received
04032310-08	Water	23 Mar. 04 12:30	24 Mar. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
WetChem						
Ferric Iron	<1.0	1.0	mg/L	Mod._7199	md	3/24/04 20:26

N - NELAC certified analysis

ENVIRO-CHEM
LABORATORIES, INC.

100 Lakefront Drive, Hunt Valley, Maryland 21030 (410) 785-9739

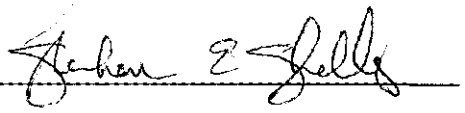
FINAL REPORT OF ANALYSES

Phase Separation Science, Inc.
6630 Baltimore Nat. Pike
Baltimore, MD 21228-
Attn: Mr. John Richardson

PROJECT NAME: 04032310
REPORT DATE: 03/30/2004

SAMPLE NUMBER- 30911 SAMPLE ID- 04032310-07 SAMPLE MATRIX- WA
DATE SAMPLED- 03/23/04
DATE RECEIVED- 03/23/04 SAMPLER- NOT SPECIFIED RECEIVED BY- SES
TIME RECEIVED- 1530 DELIVERED BY- Courier

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	DET. LIMIT
NITRITE	EPA 300.0	03/23/04	SES	<0.2	mg/L as N	0.2
SULFATE	EPA 300.0	03/23/04	SES	70.7	mg/L	1.0

LABORATORY DIRECTOR 

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LABORATORIES, INC.

100 Lakefront Drive, Hunt Valley, Maryland 21030 (410) 785-9739

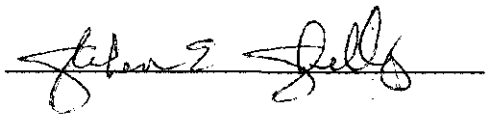
FINAL REPORT OF ANALYSES

Phase Separation Science, Inc.
6630 Baltimore Nat. Pike
Baltimore, MD 21228-
Attn: Mr. John Richardson

PROJECT NAME: 04032310
REPORT DATE: 03/30/2004

SAMPLE NUMBER- 30912 SAMPLE ID- 04032310-08 SAMPLE MATRIX- WA
DATE SAMPLED- 03/23/04
DATE RECEIVED- 03/23/04 SAMPLER- NOT SPECIFIED RECEIVED BY- SES
TIME RECEIVED- 1530 DELIVERED BY- Courier

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	DET. LIMIT
NITRITE	EPA 300.0	03/23/04	SES	<0.2	mg/L as N	0.2
SULFATE	EPA 300.0	03/25/04	AAA	453	mg/L	1.0

LABORATORY DIRECTOR 

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Volatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *MS/MSD Summary*
- *LCS/LCSD Summary*
- *BFB Tune Summary*

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/23/04 17:42	TCL-W, CCV 50ppb	101	99	101	
03/23/04 18:06	UNREG-W, CCV 50ppb	101	100	101	
03/23/04 18:30	Method Blank	101	102	101	
03/24/04 01:54	LCS / LCS 25ppb	101	101	101	
03/23/04 21:07	04032310-01 / TB032204	100	103	100	
03/23/04 21:31	04032310-02 / MW-7-032204	100	100	101	
03/23/04 21:55	04032310-03 / DMW-11S-032204	100	96	102	
03/23/04 22:43	04032310-05 / MW-3-032204	100	101	99	
03/23/04 23:07	04032310-06 / MW-1-032204	100	99	99	
03/23/04 23:31	04032310-07 / DMW-8D-032304	101	101	99	
03/23/04 23:55	04032310-08 / DMW-4D-032304	102	98	101	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/24/04 12:01	TCL-W, CCV 50ppb	101	102	104	
03/24/04 12:25	UNREG-W, CCV 50ppb	101	102	100	
03/24/04 13:12	Method Blank	100	101	103	
03/24/04 16:23	LCS / LCS 25ppb	100	101	102	
03/24/04 13:36	04032310-04 / DMW-11I-032204	100	100	101	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04032319.D**	**DATE/TIME ANALYZED:**	**03/23/04 18:30**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
04032310-01	TB032204	04032325.D	03/23/04 21:07
04032310-02	MW-7-032204	04032326.D	03/23/04 21:31
04032310-03	DMW-11S-032204	04032327.D	03/23/04 21:55
04032310-05	MW-3-032204	04032329.D	03/23/04 22:43
04032310-06	MW-1-032204	04032330.D	03/23/04 23:07
04032310-07	DMW-8D-032304	04032331.D	03/23/04 23:31
04032310-08	DMW-4D-032304	04032332.D	03/23/04 23:55

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032319.D Vial: 19
Acq On : 23 Mar 2004 6:30 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:11 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	127047	50.00 ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	228407	50.00 ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	187603	50.00 ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	63726	50.00 ug/L	-0.03
System Monitoring Compounds					
20) Dibromofluoromethane SS#1	3.96	113	76406	50.28 ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.56%		
33) Toluene d-8 SS#2	6.27	98	302172	51.19 ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.38%		
50) 4-Bromofluorobenzene SS#3	9.58	95	107508	50.27 ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.54%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected	
3) Chloromethane	0.00	50	0	Not Detected	
4) VINYL CHLORIDE	0.00	62	0	Not Detected	
5) Bromomethane	1.73	94	102	Not Detected	
6) Chloroethane	0.00	64	0	Not Detected	
7) Trichlorofluoromethane	0.00	101	0	Not Detected	
8) Acetone	0.00	43	0	Not Detected d	
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected	
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected	
11) Carbon Disulfide	0.00	76	0	Not Detected	
12) Methyl Acetate	0.00	74	0	Not Detected	
13) Methylene chloride	2.57	84	2450	1.09 ug/L	92
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected	
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected	
16) 1,1-Dichloroethane	0.00	63	0	Not Detected	
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected	
18) 2-Butanone (MEK)	3.55	43	441	Not Detected	
19) CHLOROFORM	0.00	83	0	Not Detected	
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected	
22) Cyclohexane	0.00	56	0	Not Detected d	
24) Carbon tetrachloride	0.00	117	0	Not Detected	
25) Benzene	4.33	78	1086	Not Detected	
26) 1,2-Dichloroethane	0.00	62	0	Not Detected	
27) Trichloroethene	0.00	95	0	Not Detected	
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected	
29) Methylcyclohexane	5.17	83	71	Not Detected	
30) Bromodichloromethane	0.00	83	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032319.D
Acq On : 23 Mar 2004 6:30 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 24 11:11 2004

Vial: 19
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

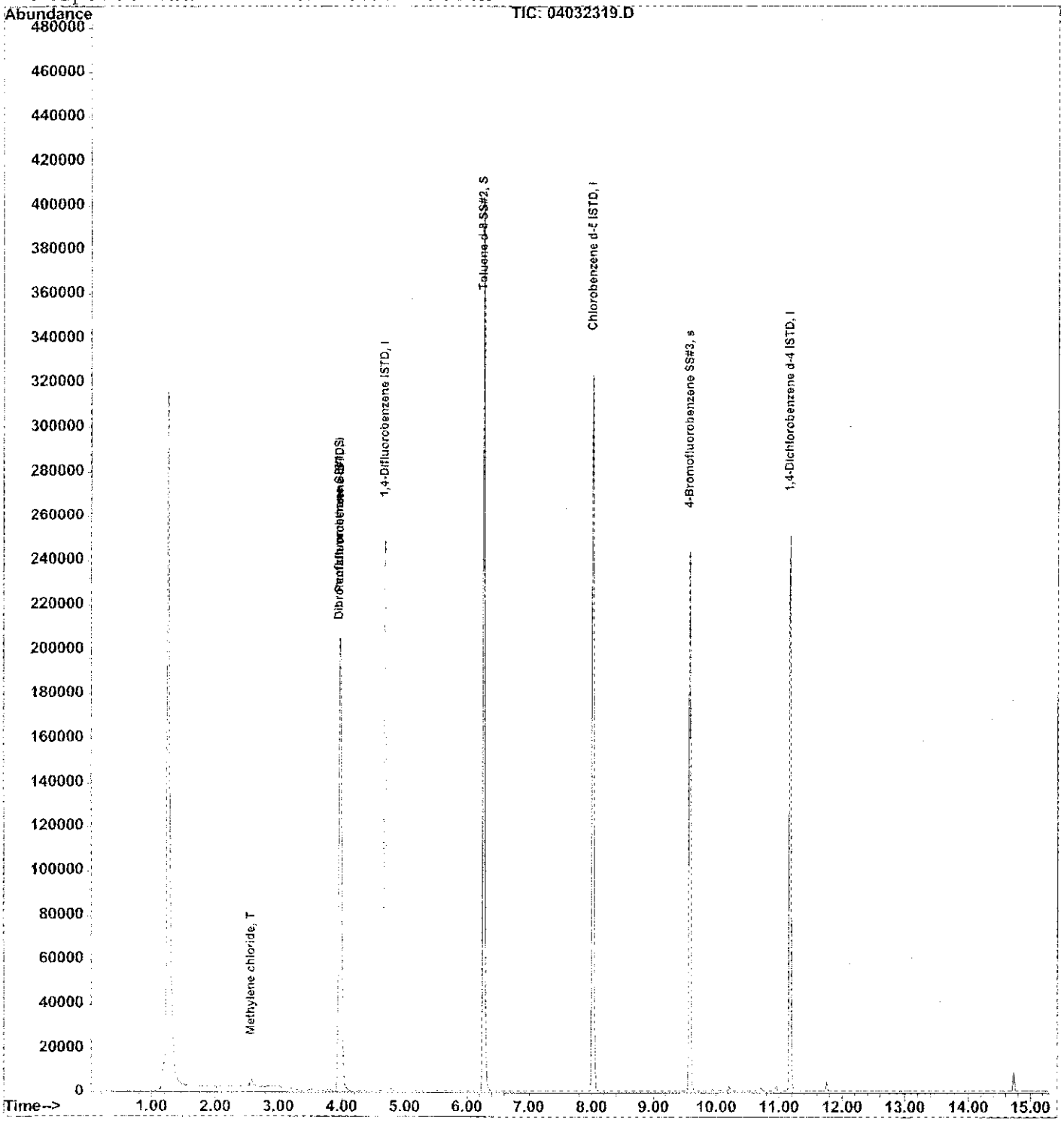
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34) TOLUENE	0.00	92	0	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	7.00	166	167	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.21	91	366	Not Detected	
44) m&p-Xylene	8.37	106	116	Not Detected	
45) o-Xylene	0.00	106	0	Not Detected	
46) Styrene	0.00	104	0	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	9.38	105	176	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	11.21	146	812	Not Detected	
53) 1,4-Dichlorobenzene	11.21	146	812	Not Detected	
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	14.04	180	387	Not Detected	
57) Naphthalene	14.38	128	1282	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040323\04032319.D Vial: 19
Acq On : 23 Mar 2004 6:30 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:11 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04032405.D**	**DATE/TIME ANALYZED:**	**03/24/04 13:12**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
04032310-04	DMW-11I-032204	04032406.D	03/24/04 13:36

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032405.D Vial: 5
Acq On : 24 Mar 2004 1:12 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 14:40 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	126251	50.00	ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	233282	50.00	ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	189517	50.00	ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.17	152	62270	50.00	ug/L	-0.03
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.96	113	75640	50.09	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.18%			
33) Toluene d-8 SS#2	6.27	98	303564	50.35	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.70%			
50) 4-Bromofluorobenzene SS#3	9.58	95	107316	51.35	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.70%			

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected
3) Chloromethane	0.00	50	0	Not Detected
4) VINYL CHLORIDE	0.00	62	0	Not Detected
5) Bromomethane	0.00	94	0	Not Detected
6) Chloroethane	0.00	64	0	Not Detected
7) Trichlorofluoromethane	0.00	101	0	Not Detected
8) Acetone	2.27	43	456	Not Detected
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected
11) Carbon Disulfide	0.00	76	0	Not Detected
12) Methyl Acetate	0.00	74	0	Not Detected
13) Methylene chloride	2.57	84	775	Not Detected
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected
16) 1,1-Dichloroethane	0.00	63	0	Not Detected
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected
18) 2-Butanone (MEK)	3.54	43	78	Not Detected
19) CHLOROFORM	0.00	83	0	Not Detected
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected
22) Cyclohexane	0.00	56	0	Not Detected d
24) Carbon tetrachloride	0.00	117	0	Not Detected
25) Benzene	4.33	78	60	Not Detected
26) 1,2-Dichloroethane	0.00	62	0	Not Detected
27) Trichloroethene	4.96	95	425	Not Detected
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected
29) Methylcyclohexane	0.00	83	0	Not Detected
30) Bromodichloromethane	0.00	83	0	Not Detected

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032405.D
Acq On : 24 Mar 2004 1:12 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 24 14:40 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

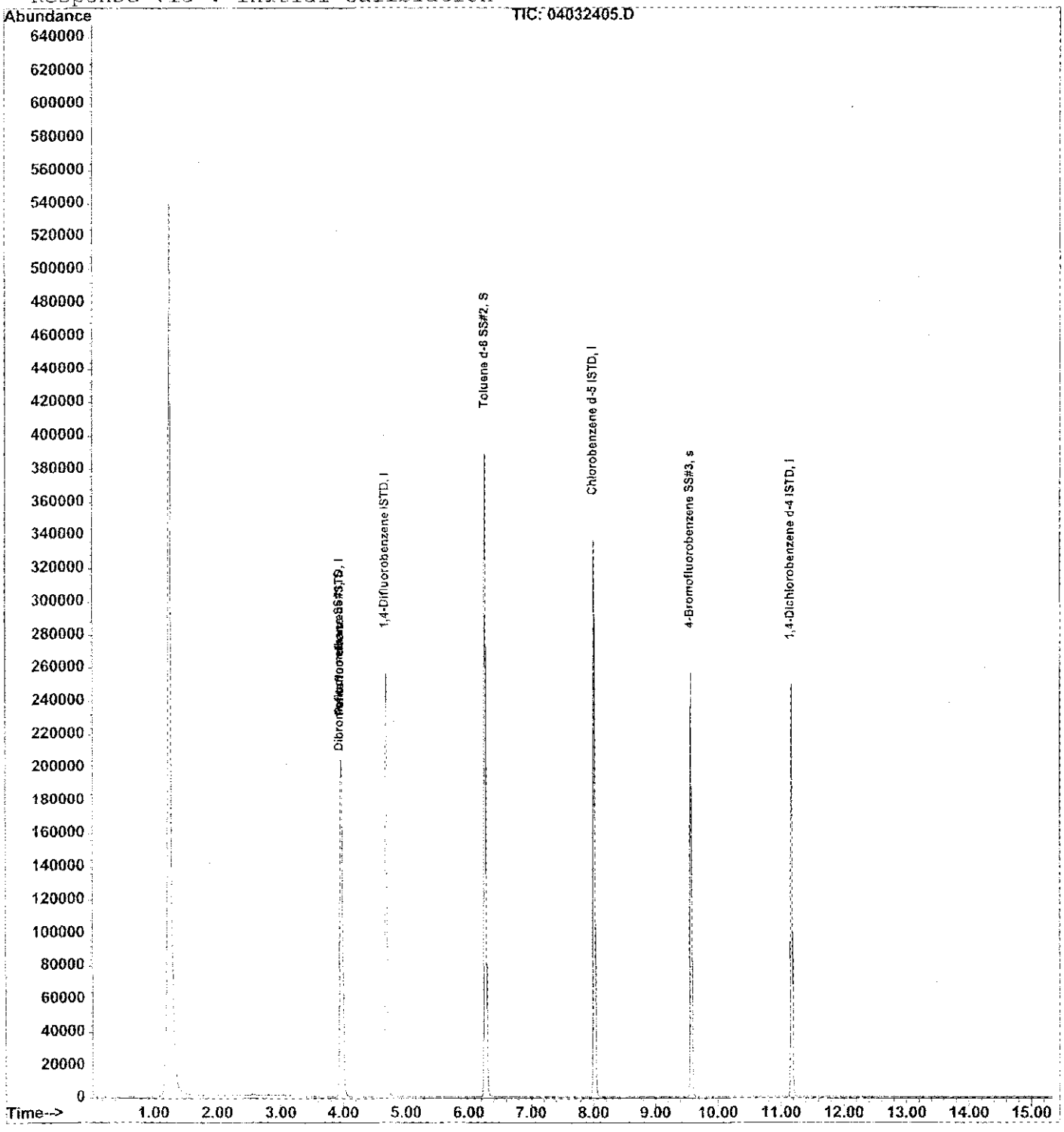
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34) TOLUENE	0.00	92	0	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	0.00	166	0	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.21	91	54	Not Detected	
44) m&p-Xylene	0.00	106	0	Not Detected	
45) o-Xylene	0.00	106	0	Not Detected	
46) Styrene	0.00	104	0	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	0.00	105	0	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	11.21	146	895	Not Detected	
53) 1,4-Dichlorobenzene	11.21	146	895	Not Detected	
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	0.00	180	0	Not Detected	
57) Naphthalene	14.37	128	242	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032405.D Vial: 5
Acq On : 24 Mar 2004 1:12 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 14:40 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032405.D
Acq On : 24 Mar 2004 1:12 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 24 14:41 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	3.98	168	126251	50.00	ug/L	-0.03
12) 1,4-Difluorobenzene	4.69	114	233282	50.00	ug/L	-0.03
19) Chlorobenzene d-5	8.02	117	189517	50.00	ug/L	-0.03
27) 1,4-Dichlorobenzene d-4	11.17	152	62270	50.00	ug/L	-0.03
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.96	113	75640	49.80	ug/L	-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.60%			
18) Toluene d-8 SS#2	6.27	98	303564	50.16	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.32%			
23) 4-Bromofluorobenzene SS#3	9.58	95	107316	49.77	ug/L	-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.54%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		
6) vinyl acetate	3.10	43	141	Not Detected		
7) diisopropyl ether	3.14	45	107	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.95	91	358	Not Detected		
28) 2-Chlorotoluene	10.04	91	101	Not Detected		
29) 4-Chlorotoluene	10.20	91	133	Not Detected		
30) 1,3,5-Trimethylbenzene	10.20	105	180	Not Detected		
31) tert-Butylbenzene	10.64	119	50	Not Detected		
32) 1,2,4-Trimethylbenzene	10.71	105	286	Not Detected		
33) sec-Butylbenzene	10.96	105	404	Not Detected		
34) 4-Isopropyltoluene	11.17	119	240	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032405.D
Acq On : 24 Mar 2004 1:12 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 24 14:41 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.75	91	513	Not Detected	
36) 1,2,3-Trichlorobenzene	14.73	180	337	Not Detected	

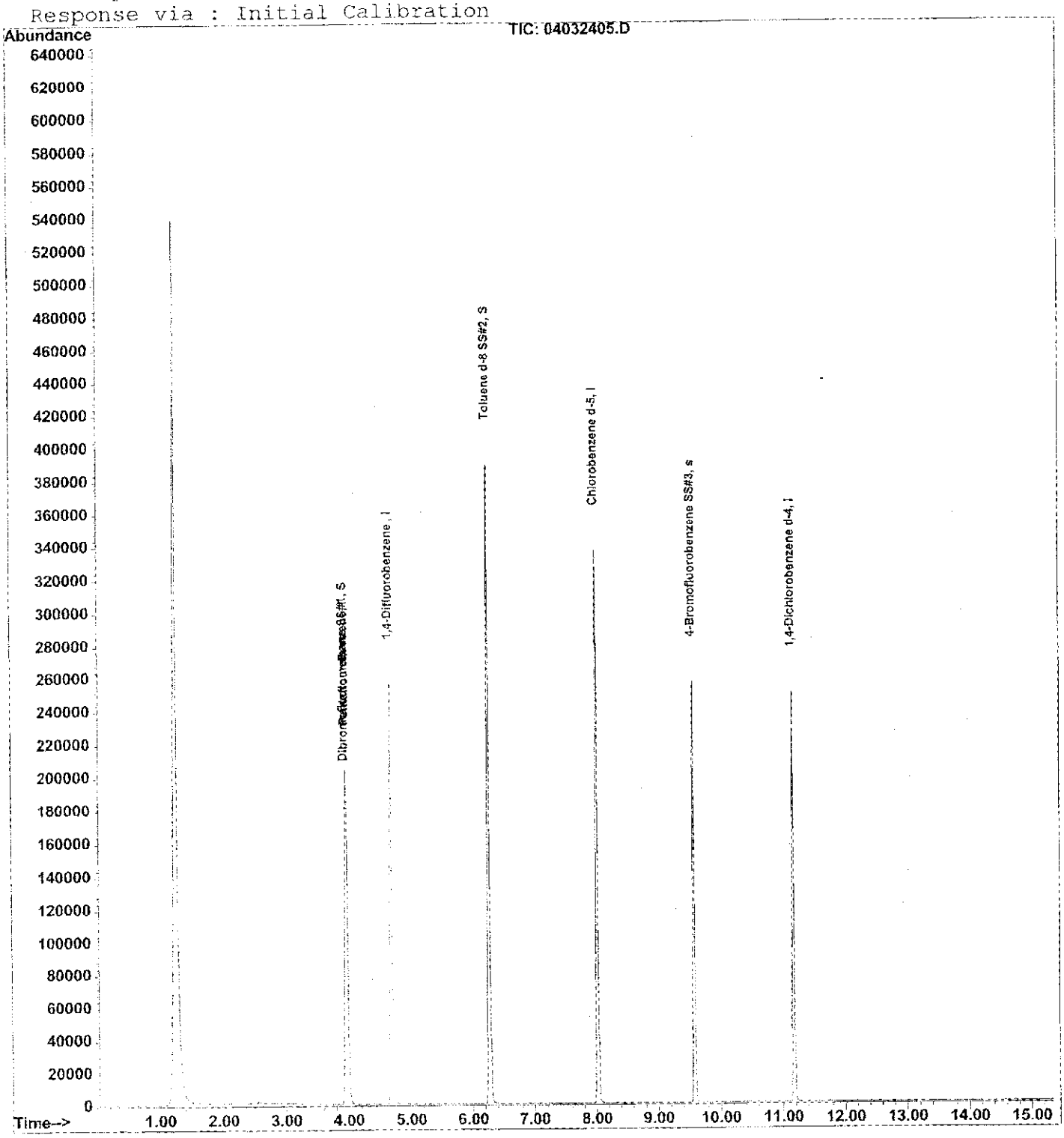
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032405.D
Acq On : 24 Mar 2004 1:12 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 24 14:41 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/24/04 **BATCH NUMBER:** VOC040323

METHOD: EPA 8260 **LAB FILE IDs:** 04032337.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	24	97	61-145
Benzene	25	ND	25	98	76-127
Trichloroethene	25	ND	25	101	71-120
Toluene	25	ND	25	99	76-125
Chlorobenzene	25	ND	24	96	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032337.D Vial: 37
Acq On : 24 Mar 2004 1:54 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:13 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	123036	50.00	ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	222906	50.00	ug/L	-0.03
39) Chlorobenzene d-5 ISTD	8.02	117	183231	50.00	ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.17	152	61533	50.00	ug/L	-0.03
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.96	113	74618	50.71	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.42%			
33) Toluene d-8 SS#2	6.27	98	291415	50.58	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.16%			
50) 4-Bromofluorobenzene SS#3	9.58	95	104348	50.53	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.06%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	49318	22.29	ug/L	100
3) Chloromethane	1.49	50	58823	24.84	ug/L	99
4) VINYL CHLORIDE	1.57	62	52890	22.51	ug/L	99
5) Bromomethane	1.74	94	45468	23.60	ug/L	97
6) Chloroethane	1.78	64	32779	27.13	ug/L	99
7) Trichlorofluoromethane	1.90	101	34470	25.24	ug/L	99
8) Acetone	2.25	43	14334	24.28	ug/L	93
9) 1,1-DICHLOROETHENE	2.24	96	43954	24.30	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.27	101	34792	23.34	ug/L	98
11) Carbon Disulfide	2.42	76	164087	25.44	ug/L	97
12) Methyl Acetate	2.47	74	5866	25.85	ug/L	96
13) Methylene chloride	2.56	84	50247	23.07	ug/L	97
14) trans-1,2-Dichloroethene	2.77	96	47558	24.44	ug/L	98
15) Methyl-t-Butyl Ether	2.76	73	94526	25.59	ug/L	100
16) 1,1-Dichloroethane	3.08	63	80885	24.45	ug/L	99
17) cis-1,2-Dichloroethene	3.55	96	49169	25.29	ug/L	99
18) 2-Butanone (MEK)	3.53	43	26740	24.35	ug/L	99
19) CHLOROFORM	3.81	83	85322	24.03	ug/L	99
21) 1,1,1-Trichloroethane	4.00	97	59553	23.70	ug/L #	12
22) Cyclohexane	4.06	56	71421	24.90	ug/L	92
24) Carbon tetrachloride	4.15	117	40842	23.73	ug/L	100
25) Benzene	4.32	78	203487	24.56	ug/L	100
26) 1,2-Dichloroethane	4.34	62	64805	25.02	ug/L	98
27) Trichloroethene	4.96	95	47425	25.20	ug/L	97
28) 1,2-DICHLOROPROPANE	5.18	63	52902	24.21	ug/L	99
29) Methylcyclohexane	5.16	83	44954	23.10	ug/L	98
30) Bromodichloromethane	5.48	83	63796	24.57	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032337.D Vial: 37
Acq On : 24 Mar 2004 1:54 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:13 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

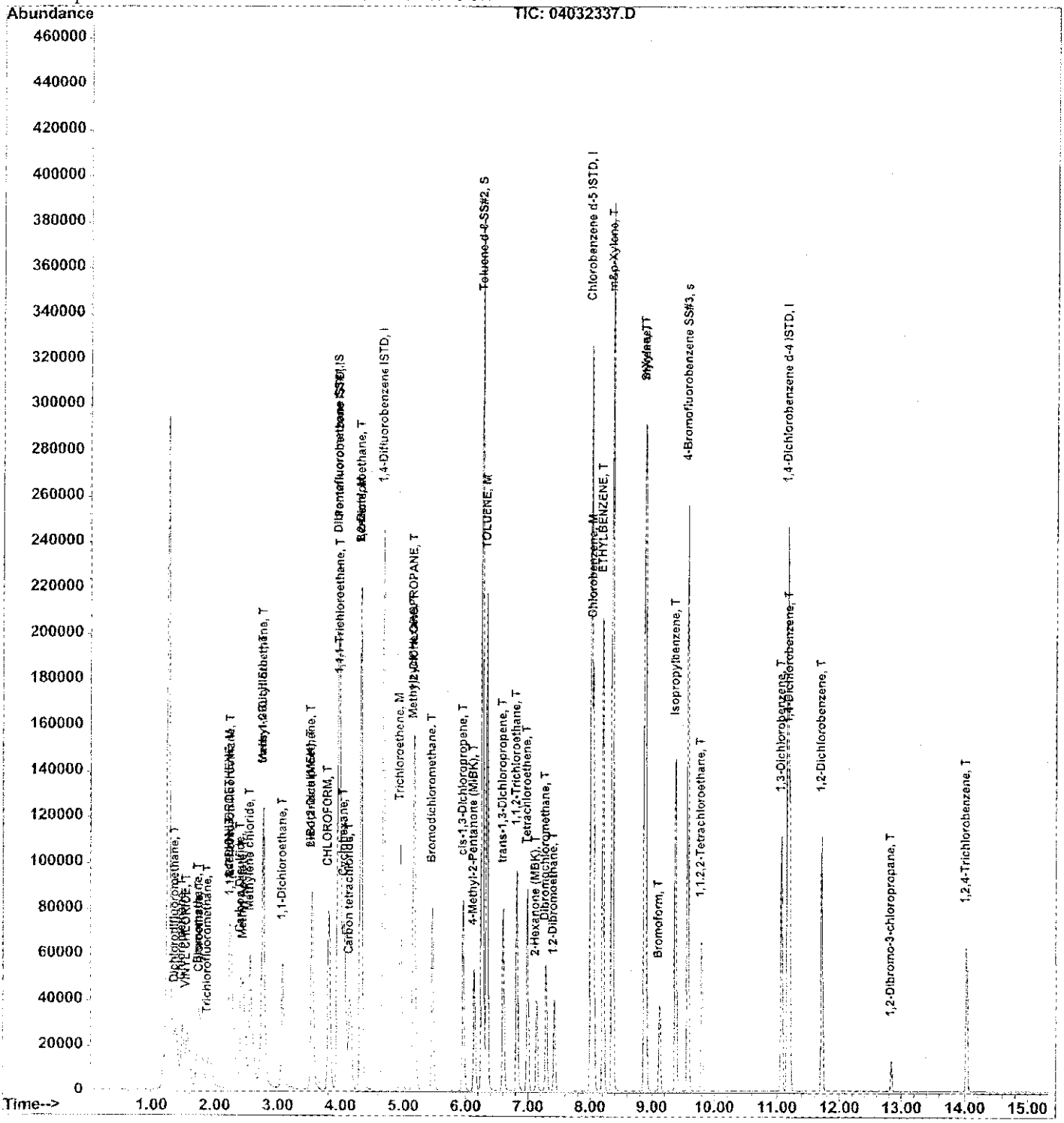
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.97	75	79507	22.96 ug/L	99
32)	4-Methyl-2-Pentanone (MIBK	6.14	43	56717	26.29 ug/L	98
34)	TOLUENE	6.35	92	111063	24.75 ug/L	100
35)	trans-1,3-Dichloropropene	6.61	75	68672	23.56 ug/L	98
36)	1,1,2-Trichloroethane	6.82	83	32235	24.25 ug/L	100
37)	Tetrachloroethene	7.00	166	28345	23.79 ug/L	99
38)	2-Hexanone (MBK)	7.14	43	37730	25.51 ug/L	98
40)	Dibromochloromethane	7.29	129	29649	23.93 ug/L	100
41)	1,2-Dibromoethane	7.42	107	32914	25.13 ug/L	99
42)	Chlorobenzene	8.06	112	99711	23.97 ug/L	96
43)	ETHYLBENZENE	8.20	91	180976	24.24 ug/L	99
44)	m&p-Xylene	8.36	106	121633	47.94 ug/L	95
45)	o-Xylene	8.88	106	60914	24.84 ug/L	97
46)	Styrene	8.90	104	113184	25.00 ug/L	96
47)	Bromoform	9.13	173	18339	24.58 ug/L	99
49)	Isopropylbenzene	9.39	105	115640	23.98 ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.80	83	44470	24.90 ug/L	100
52)	1,3-Dichlorobenzene	11.08	146	44744	23.37 ug/L	99
53)	1,4-Dichlorobenzene	11.20	146	49077	21.59 ug/L	99
54)	1,2-Dichlorobenzene	11.72	146	43324	23.92 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.83	75	6181	26.85 ug/L	94
56)	1,2,4-Trichlorobenzene	14.03	180	21957	22.39 ug/L	99
57)	Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040323\04032337.D Vial: 37
Acq On : 24 Mar 2004 1:54 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:13 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/24/04 **BATCH NUMBER:** VOC040324

METHOD: EPA 8260 **LAB FILE IDs:** 04032411.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	91	61-145
Benzene	25	ND	24	95	76-127
Trichloroethene	25	ND	24	96	71-120
Toluene	25	ND	24	96	76-125
Chlorobenzene	25	ND	23	92	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032411.D
Acq On : 24 Mar 2004 4:23 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 11
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	126882	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	230051	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	188762	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	62143	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	75942	50.04	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.08%				
33) Toluene d-8 SS#2	6.27	98	300859	50.60	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.20%				
50) 4-Bromofluorobenzene SS#3	9.58	95	106184	50.91	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	49285	21.60	ug/L		100
3) Chloromethane	1.49	50	55874	22.88	ug/L		99
4) VINYL CHLORIDE	1.57	62	52446	21.64	ug/L		100
5) Bromomethane	1.74	94	46077	23.19	ug/L		97
6) Chloroethane	1.78	64	31988	25.67	ug/L		98
7) Trichlorofluoromethane	1.91	101	34656	24.61	ug/L		99
8) Acetone	2.26	43	13009	21.37	ug/L		95
9) 1,1-DICHLOROETHENE	2.25	96	42522	22.79	ug/L		98
10) 1,1,2-Trichlorotrifluoroet	2.26	101	37630	24.48	ug/L		99
11) Carbon Disulfide	2.42	76	157946	23.75	ug/L		98
12) Methyl Acetate	2.47	74	5170	22.09	ug/L		97
13) Methylene chloride	2.57	84	50589	22.53	ug/L		99
14) trans-1,2-Dichloroethene	2.77	96	47243	23.54	ug/L		98
15) Methyl-t-Butyl Ether	2.76	73	89477	23.49	ug/L		100
16) 1,1-Dichloroethane	3.08	63	78032	22.87	ug/L		100
17) cis-1,2-Dichloroethene	3.55	96	47907	23.89	ug/L		98
18) 2-Butanone (MEK)	3.54	43	24593	21.72	ug/L		98
19) CHLOROFORM	3.82	83	83864	22.90	ug/L		100
21) 1,1,1-Trichloroethane	4.00	97	59299	22.88	ug/L	#	11
22) Cyclohexane	4.06	56	72155	24.39	ug/L		90
24) Carbon tetrachloride	4.15	117	40495	22.80	ug/L		100
25) Benzene	4.33	78	202138	23.64	ug/L		100
26) 1,2-Dichloroethane	4.34	62	63968	23.93	ug/L		98
27) Trichloroethene	4.96	95	46452	23.92	ug/L		97
28) 1,2-DICHLOROPROPANE	5.19	63	53315	23.64	ug/L		99
29) Methylcyclohexane	5.17	83	46921	23.37	ug/L		99
30) Bromodichloromethane	5.47	83	62982	23.50	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032411.D Vial: 11
Acq On : 24 Mar 2004 4:23 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

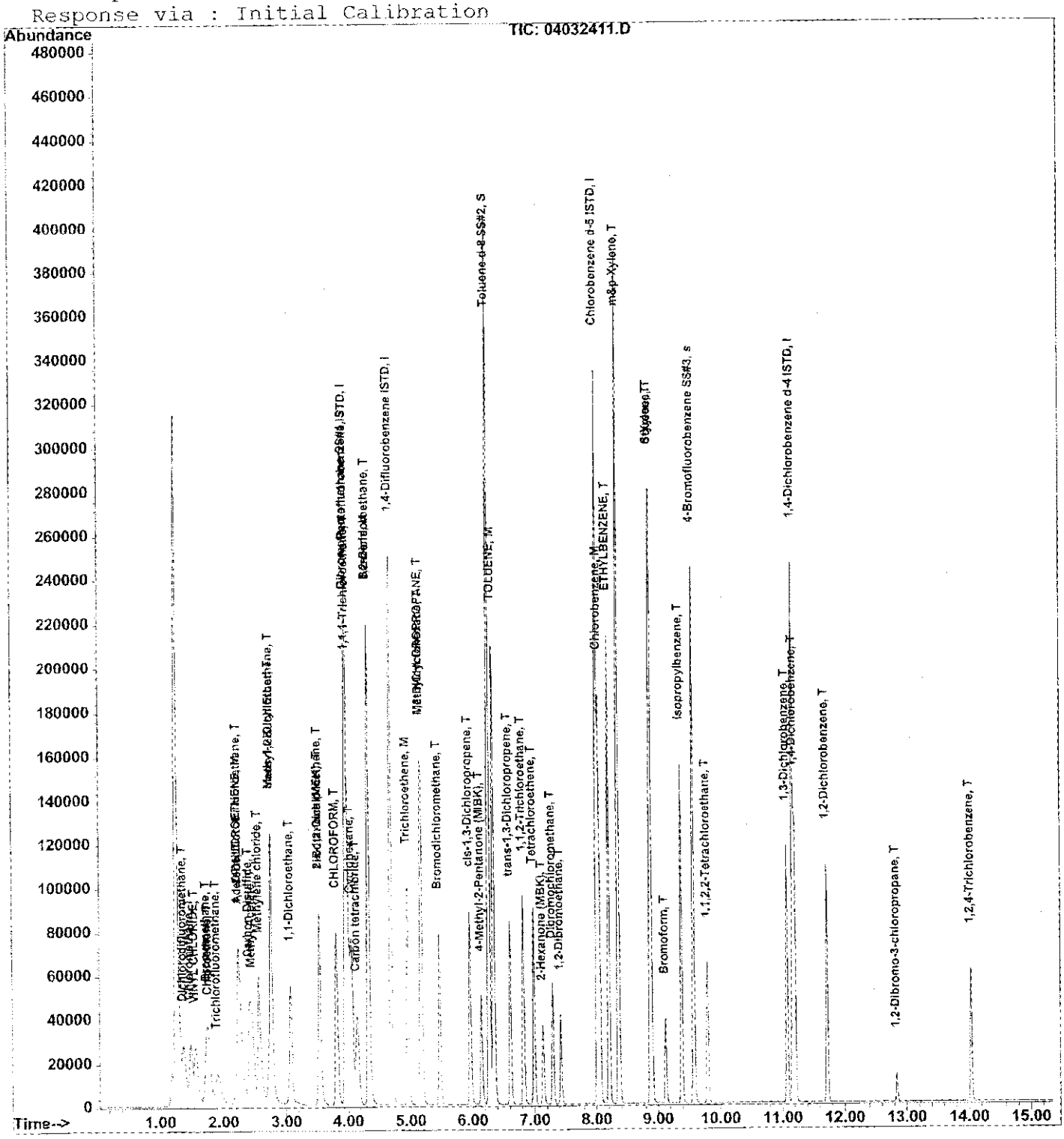
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.97	75	84567	23.66	ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.15	43	53384	23.98	ug/L	100
34)	TOLUENE	6.35	92	111063	23.98	ug/L	100
35)	trans-1,3-Dichloropropene	6.61	75	70889	23.56	ug/L	98
36)	1,1,2-Trichloroethane	6.82	83	32214	23.48	ug/L	96
37)	Tetrachloroethene	6.99	166	28517	23.19	ug/L	98
38)	2-Hexanone (MBK)	7.14	43	36040	23.61	ug/L	100
40)	Dibromochloromethane	7.30	129	29855	23.39	ug/L	99
41)	1,2-Dibromoethane	7.43	107	32138	23.81	ug/L	98
42)	Chlorobenzene	8.06	112	98530	22.99	ug/L	95
43)	ETHYLBENZENE	8.21	91	181905	23.66	ug/L	98
44)	m&p-Xylene	8.37	106	123422	47.22	ug/L	97
45)	o-Xylene	8.89	106	60198	23.82	ug/L	97
46)	Styrene	8.90	104	109927	23.57	ug/L	94
47)	Bromoform	9.13	173	18117	23.57	ug/L	99
49)	Isopropylbenzene	9.39	105	115894	23.79	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.81	83	42567	23.60	ug/L	99
52)	1,3-Dichlorobenzene	11.08	146	44558	23.05	ug/L	99
53)	1,4-Dichlorobenzene	11.21	146	47394	20.65	ug/L	97
54)	1,2-Dichlorobenzene	11.72	146	41962	22.94	ug/L	98
55)	1,2-Dibromo-3-chloropropan	12.84	75	5550	23.87	ug/L	98
56)	1,2,4-Trichlorobenzene	14.04	180	21609	21.82	ug/L	97
57)	Naphthalene	0.00	128	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040324\04032411.D
Acq On : 24 Mar 2004 4:23 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 11
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/24/04 **BATCH NUMBER:** VOC040323

METHOD: EPA 8260 **LAB FILE IDs:** 04032333.D
04032334.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	100	61-145
Benzene	25	ND	26	103	76-127
Trichloroethene	25	ND	33	133	71-120
Toluene	25	ND	25	102	76-125
Chlorobenzene	25	ND	24	97	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	98	2.1	14	61-145
Benzene	25	ND	25	100	3.3	11	76-127
Trichloroethene	25	ND	28	111	18.0	14	71-120
Toluene	25	ND	25	98	3.4	13	76-125
Chlorobenzene	25	ND	24	96	1.7	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032333.D Vial: 33
Acq On : 24 Mar 2004 12:19 am Operator: MI
Sample : 04032215-02 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	122068	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	223404	50.00	ug/L		-0.03
39) Chlorobenzene d-5 ISTD	8.02	117	183653	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	61125	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	74931	51.32	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.64%				
33) Toluene d-8 SS#2	6.27	98	292834	50.72	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.44%				
50) 4-Bromofluorobenzene SS#3	9.58	95	103125	50.27	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.54%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	49729	22.65	ug/L		100
3) Chloromethane	1.50	50	58781	25.02	ug/L		99
4) VINYL CHLORIDE	1.57	62	53867	23.11	ug/L		99
5) Bromomethane	1.75	94	46272	24.21	ug/L		98
6) Chloroethane	1.78	64	32587	27.18	ug/L		99
7) Trichlorofluoromethane	1.90	101	34094	25.16	ug/L		98
8) Acetone	2.26	43	18368	31.36	ug/L	#	88
9) 1,1-DICHLOROETHENE	2.24	96	44972	25.06	ug/L		98
10) 1,1,2-Trichlorotrifluoroet	2.25	101	37829	25.58	ug/L		98
11) Carbon Disulfide	2.43	76	165953	25.93	ug/L	#	86
12) Methyl Acetate	2.48	74	5959	26.46	ug/L		95
13) Methylene chloride	2.57	84	51736	23.95	ug/L		99
14) trans-1,2-Dichloroethene	2.77	96	47975	24.85	ug/L		97
15) Methyl-t-Butyl Ether	2.76	73	97094	26.50	ug/L		100
16) 1,1-Dichloroethane	3.08	63	82026	24.99	ug/L		99
17) cis-1,2-Dichloroethene	3.55	96	50871	26.37	ug/L		98
18) 2-Butanone (MEK)	3.54	43	34725	31.87	ug/L		97
19) CHLOROFORM	3.82	83	86502	24.55	ug/L		99
21) 1,1,1-Trichloroethane	4.00	97	61048	24.49	ug/L	#	16
22) Cyclohexane	4.06	56	73839	25.94	ug/L		95
24) Carbon tetrachloride	4.15	117	42124	24.42	ug/L		98
25) Benzene	4.33	78	214372	25.81	ug/L		100
26) 1,2-Dichloroethane	4.34	62	66680	25.68	ug/L		98
27) Trichloroethene	4.96	95	62711	33.25	ug/L		97
28) 1,2-DICHLOROPROPANE	5.19	63	55286	25.25	ug/L		99
29) Methylcyclohexane	5.17	83	45823	23.50	ug/L		99
30) Bromodichloromethane	5.48	83	65597	25.21	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032333.D Vial: 33
Acq On : 24 Mar 2004 12:19 am Operator: MI
Sample : 04032215-02 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

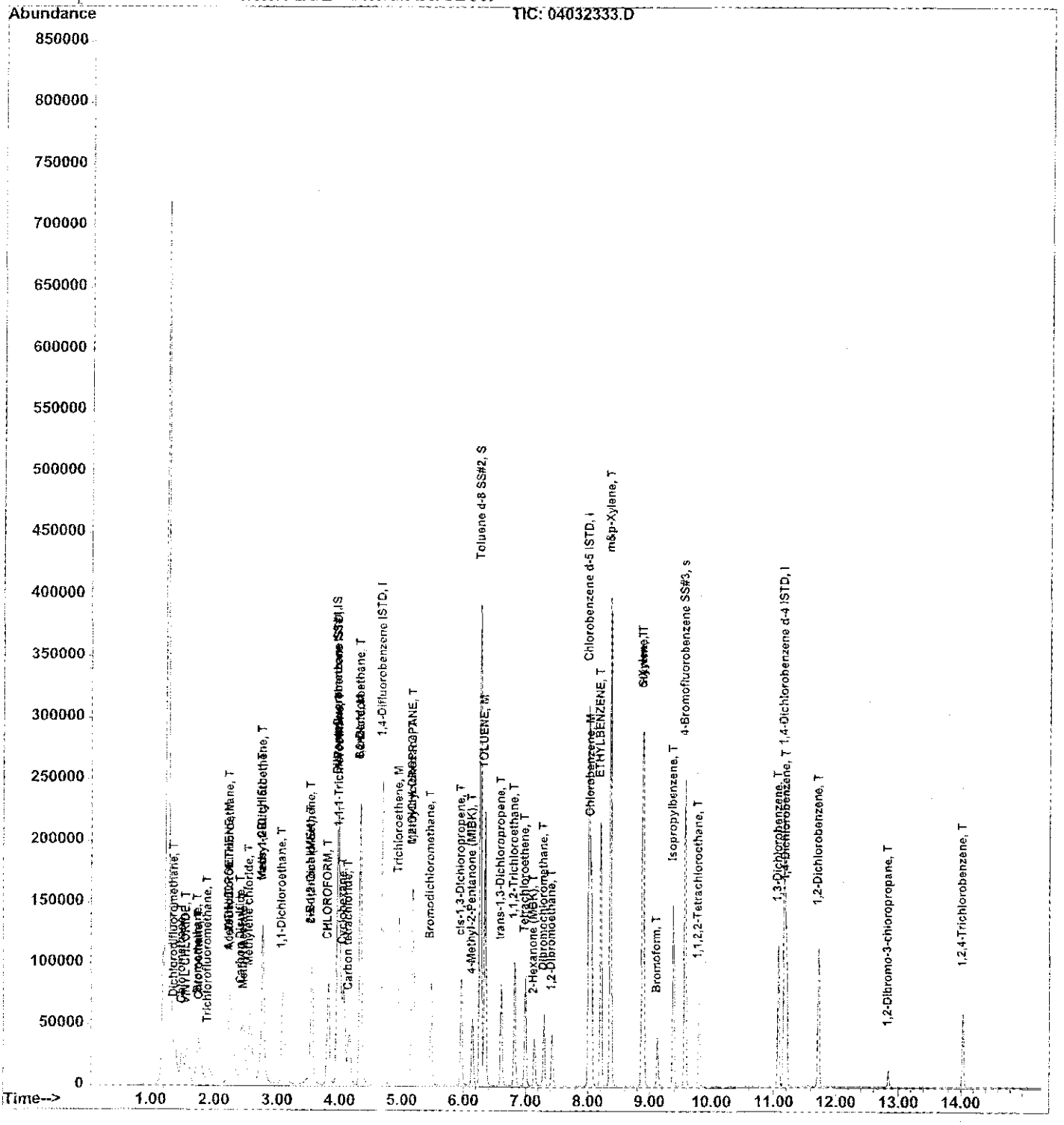
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.97	75	83465	24.05 ug/L	99
32)	4-Methyl-2-Pentanone (MIBK	6.15	43	58939	27.26 ug/L	99
34)	TOLUENE	6.35	92	114531	25.46 ug/L	99
35)	trans-1,3-Dichloropropene	6.61	75	71544	24.49 ug/L	98
36)	1,1,2-Trichloroethane	6.82	83	33873	25.42 ug/L	99
37)	Tetrachloroethene	7.00	166	28556	23.91 ug/L	98
38)	2-Hexanone (MBK)	7.14	43	39048	26.35 ug/L	100
40)	Dibromochloromethane	7.30	129	31262	25.18 ug/L	98
41)	1,2-Dibromoethane	7.43	107	33750	25.70 ug/L	99
42)	Chlorobenzene	8.06	112	101489	24.34 ug/L	96
43)	ETHYLBENZENE	8.20	91	187477	25.06 ug/L	98
44)	m&p-Xylene	8.36	106	126452	49.73 ug/L	95
45)	o-Xylene	8.88	106	61966	25.21 ug/L	96
46)	Styrene	8.90	104	114339	25.19 ug/L	97
47)	Bromoform	9.13	173	19205	25.69 ug/L	100
49)	Isopropylbenzene	9.39	105	117884	24.60 ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.80	83	45773	25.80 ug/L	99
52)	1,3-Dichlorobenzene	11.08	146	45524	23.94 ug/L	98
53)	1,4-Dichlorobenzene	11.21	146	46186	20.46 ug/L	98
54)	1,2-Dichlorobenzene	11.72	146	43491	24.18 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.84	75	6406	28.01 ug/L	93
56)	1,2,4-Trichlorobenzene	14.03	180	21508	22.07 ug/L	97
57)	Naphthalene	14.37	128	118	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040323\04032333.D Vial: 33
Acq On : 24 Mar 2004 12:19 am Operator: MI
Sample : 04032215-02 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032334.D Vial: 34
Acq On : 24 Mar 2004 12:43 am Operator: MI
Sample : 04032215-02 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	122705	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	224342	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	184655	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	61790	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	75080	51.16	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.32%				
33) Toluene d-8 SS#2	6.28	98	291298	50.24	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.48%				
50) 4-Bromofluorobenzene SS#3	9.58	95	104535	50.41	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	49348	22.36	ug/L		100
3) Chloromethane	1.49	50	59074	25.01	ug/L		99
4) VINYL CHLORIDE	1.57	62	54156	23.11	ug/L		100
5) Bromomethane	1.74	94	45933	23.91	ug/L		98
6) Chloroethane	1.78	64	33686	27.96	ug/L		99
7) Trichlorofluoromethane	1.90	101	33795	24.81	ug/L		99
8) Acetone	2.26	43	20027	34.01	ug/L	#	88
9) 1,1-DICHLOROETHENE	2.25	96	44271	24.54	ug/L		96
10) 1,1,2-Trichlorotrifluoroet	2.25	101	37011	24.90	ug/L		97
11) Carbon Disulfide	2.43	76	163383	25.40	ug/L		97
12) Methyl Acetate	2.47	74	6094	26.92	ug/L		95
13) Methylene chloride	2.57	84	51015	23.49	ug/L		98
14) trans-1,2-Dichloroethene	2.77	96	47894	24.68	ug/L		97
15) Methyl-t-Butyl Ether	2.76	73	101457	27.54	ug/L		100
16) 1,1-Dichloroethane	3.08	63	83099	25.19	ug/L		100
17) cis-1,2-Dichloroethene	3.55	96	49035	25.29	ug/L		96
18) 2-Butanone (MEK)	3.54	43	36762	33.57	ug/L		97
19) CHLOROFORM	3.82	83	85565	24.16	ug/L		100
21) 1,1,1-Trichloroethane	4.01	97	60734	24.24	ug/L	#	16
22) Cyclohexane	4.06	56	72851	25.46	ug/L		94
24) Carbon tetrachloride	4.15	117	41673	24.06	ug/L		98
25) Benzene	4.33	78	208196	24.96	ug/L		100
26) 1,2-Dichloroethane	4.34	62	66363	25.46	ug/L		99
27) Trichloroethene	4.96	95	52583	27.76	ug/L		97
28) 1,2-DICHLOROPROPANE	5.18	63	54799	24.92	ug/L		99
29) Methylcyclohexane	5.17	83	43491	22.21	ug/L		97
30) Bromodichloromethane	5.48	83	65179	24.94	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032334.D Vial: 34
Acq On : 24 Mar 2004 12:43 am Operator: MI
Sample : 04032215-02 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.96	75	81992	23.52 ug/L	100
32) 4-Methyl-2-Pentanone (MIBK	6.14	43	61549	28.35 ug/L	100
34) TOLUENE	6.35	92	111133	24.60 ug/L	99
35) trans-1,3-Dichloropropene	6.60	75	71176	24.26 ug/L	99
36) 1,1,2-Trichloroethane	6.83	83	34052	25.45 ug/L	100
37) Tetrachloroethene	7.00	166	27253	22.72 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	41921	28.17 ug/L	99
40) Dibromochloromethane	7.30	129	31474	25.21 ug/L	99
41) 1,2-Dibromoethane	7.43	107	34430	26.08 ug/L	99
42) Chlorobenzene	8.05	112	100317	23.93 ug/L	97
43) ETHYLBENZENE	8.21	91	183587	24.40 ug/L	99
44) m&p-Xylene	8.36	106	123559	48.32 ug/L	96
45) o-Xylene	8.88	106	61146	24.74 ug/L	98
46) Styrene	8.90	104	112252	24.60 ug/L	93
47) Bromoform	9.13	173	19543	26.00 ug/L	99
49) Isopropylbenzene	9.38	105	117236	24.20 ug/L	98
51) 1,1,2,2-Tetrachloroethane	9.80	83	47532	26.50 ug/L	100
52) 1,3-Dichlorobenzene	11.08	146	45995	23.92 ug/L	99
53) 1,4-Dichlorobenzene	11.21	146	47436	20.79 ug/L	98
54) 1,2-Dichlorobenzene	11.73	146	44238	24.33 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.84	75	6574	28.44 ug/L	97
56) 1,2,4-Trichlorobenzene	14.04	180	22070	22.41 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

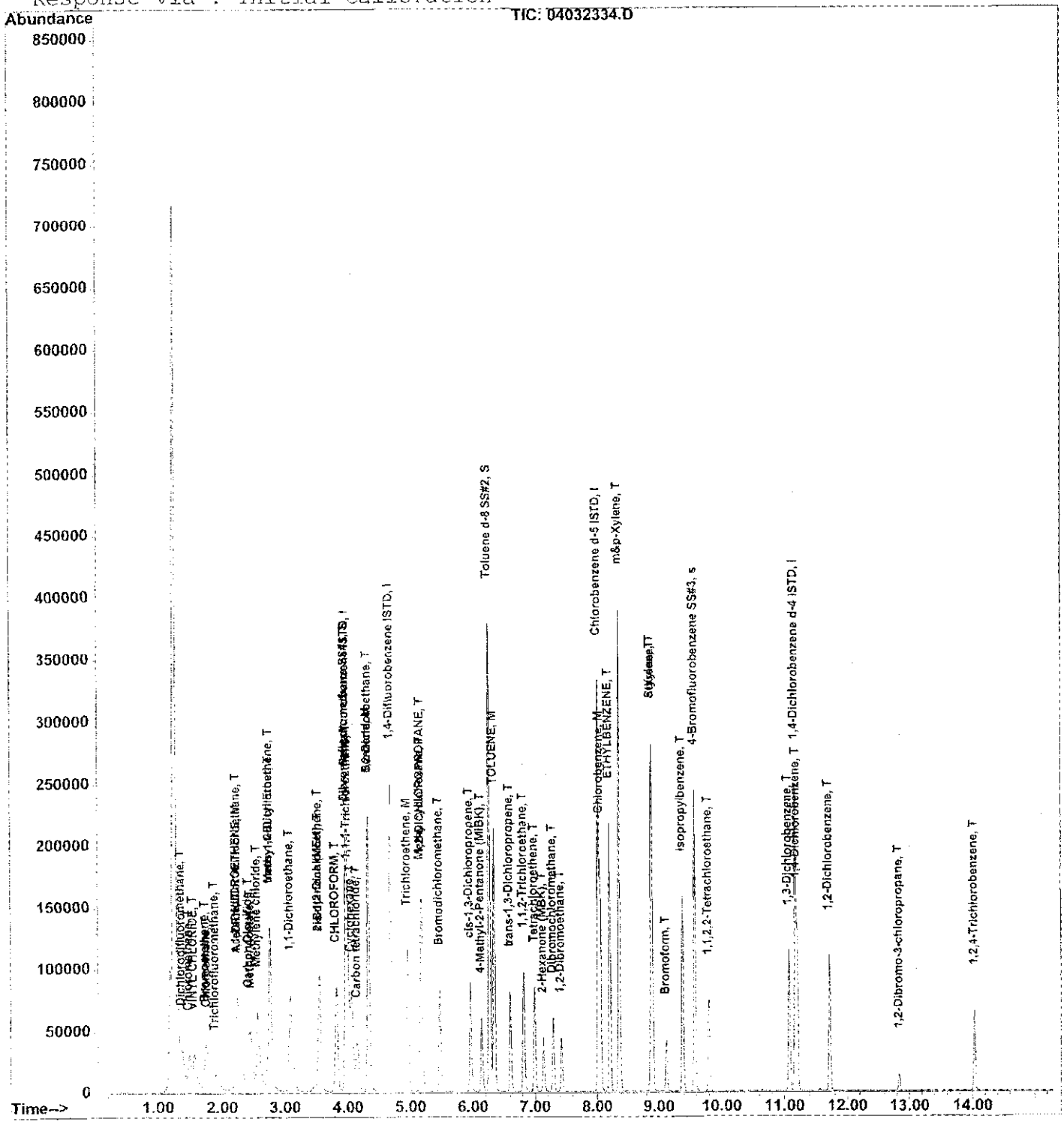
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040323\04032334.D
Acq On : 24 Mar 2004 12:43 am
Sample : 04032215-02 MSD 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 24 11:12 2004

Vial: 34
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/24/04 **BATCH NUMBER:** VOC040324

METHOD: EPA 8260 **LAB FILE IDs:** 04032412.D
04032413.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	99	61-145
Benzene	25	ND	25	99	76-127
Trichloroethene	25	2.6	25	90	71-120
Toluene	25	ND	26	102	76-125
Chlorobenzene	25	ND	24	97	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	93	6.1	14	61-145
Benzene	25	ND	24	97	2.6	11	76-127
Trichloroethene	25	ND	24	87	3.1	14	71-120
Toluene	25	ND	24	96	6.2	13	76-125
Chlorobenzene	25	ND	23	93	4.0	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032412.D
Acq On : 24 Mar 2004 4:47 pm
Sample : 04032314-01 MS 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 12
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	123082	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	222489	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	185807	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	60959	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	74620	50.69	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.38%				
33) Toluene d-8 SS#2	6.28	98	294932	51.29	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.58%				
50) 4-Bromofluorobenzene SS#3	9.58	95	104223	50.94	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	50511	22.82	ug/L		100
3) Chloromethane	1.49	50	59467	25.10	ug/L		100
4) VINYL CHLORIDE	1.57	62	53359	22.70	ug/L		99
5) Bromomethane	1.75	94	46137	23.94	ug/L		99
6) Chloroethane	1.77	64	32592	26.96	ug/L		97
7) Trichlorofluoromethane	1.90	101	35797	26.20	ug/L	#	57
8) Acetone	2.26	43	18335	31.04	ug/L		100
9) 1,1-DICHLOROETHENE	2.25	96	44802	24.76	ug/L		98
10) 1,1,2-Trichlorotrifluoroet	2.26	101	38823	26.03	ug/L		98
11) Carbon Disulfide	2.42	76	166536	25.81	ug/L		99
12) Methyl Acetate	2.48	74	5683	25.03	ug/L		94
13) Methylene chloride	2.57	84	51353	23.57	ug/L		99
14) trans-1,2-Dichloroethene	2.77	96	48337	24.83	ug/L		98
15) Methyl-t-Butyl Ether	2.76	73	95294	25.79	ug/L		100
16) 1,1-Dichloroethane	3.08	63	82111	24.81	ug/L		99
17) cis-1,2-Dichloroethene	3.56	96	49053	25.22	ug/L		97
18) 2-Butanone (MEK)	3.54	43	26815	24.41	ug/L		98
19) CHLOROFORM	3.82	83	86547	24.36	ug/L		99
21) 1,1,1-Trichloroethane	4.00	97	61336	24.40	ug/L	#	16
22) Cyclohexane	4.06	56	73503	25.61	ug/L		93
24) Carbon tetrachloride	4.16	117	42169	24.54	ug/L		98
25) Benzene	4.33	78	204975	24.78	ug/L		99
26) 1,2-Dichloroethane	4.34	62	64799	25.06	ug/L		98
27) Trichloroethene	4.96	95	47056	25.05	ug/L		98
28) 1,2-DICHLOROPROPANE	5.18	63	55914	25.64	ug/L		99
29) Methylcyclohexane	5.17	83	47516	24.47	ug/L		99
30) Bromodichloromethane	5.48	83	65479	25.27	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032412.D
Acq On : 24 Mar 2004 4:47 pm
Sample : 04032314-01 MS 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 12
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.96	75	86530	25.03 ug/L	99
32) 4-Methyl-2-Pentanone (MIBK	6.14	43	56976	26.46 ug/L	99
34) TOLUENE	6.35	92	114741	25.61 ug/L	100
35) trans-1,3-Dichloropropene	6.61	75	74316	25.54 ug/L	99
36) 1,1,2-Trichloroethane	6.83	83	33660	25.36 ug/L	98
37) Tetrachloroethene	7.00	166	28789	24.20 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	37684	25.53 ug/L	99
40) Dibromochloromethane	7.30	129	30575	24.34 ug/L	100
41) 1,2-Dibromoethane	7.43	107	32712	24.63 ug/L	99
42) Chlorobenzene	8.06	112	102110	24.21 ug/L	96
43) ETHYLBENZENE	8.21	91	183230	24.21 ug/L	99
44) m&p-Xylene	8.36	106	124970	48.57 ug/L	96
45) o-Xylene	8.88	106	61389	24.68 ug/L	96
46) Styrene	8.91	104	114384	24.91 ug/L	94
47) Bromoform	9.13	173	18716	24.74 ug/L	99
49) Isopropylbenzene	9.38	105	117765	24.65 ug/L	100
51) 1,1,2,2-Tetrachloroethane	9.80	83	45046	25.46 ug/L	99
52) 1,3-Dichlorobenzene	11.09	146	45911	24.21 ug/L	100
53) 1,4-Dichlorobenzene	11.21	146	47644	21.16 ug/L	99
54) 1,2-Dichlorobenzene	11.73	146	43412	24.20 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.84	75	6072	26.63 ug/L	97
56) 1,2,4-Trichlorobenzene	14.04	180	22553	23.21 ug/L	100
57) Naphthalene	14.37	128	441	Not Detected	

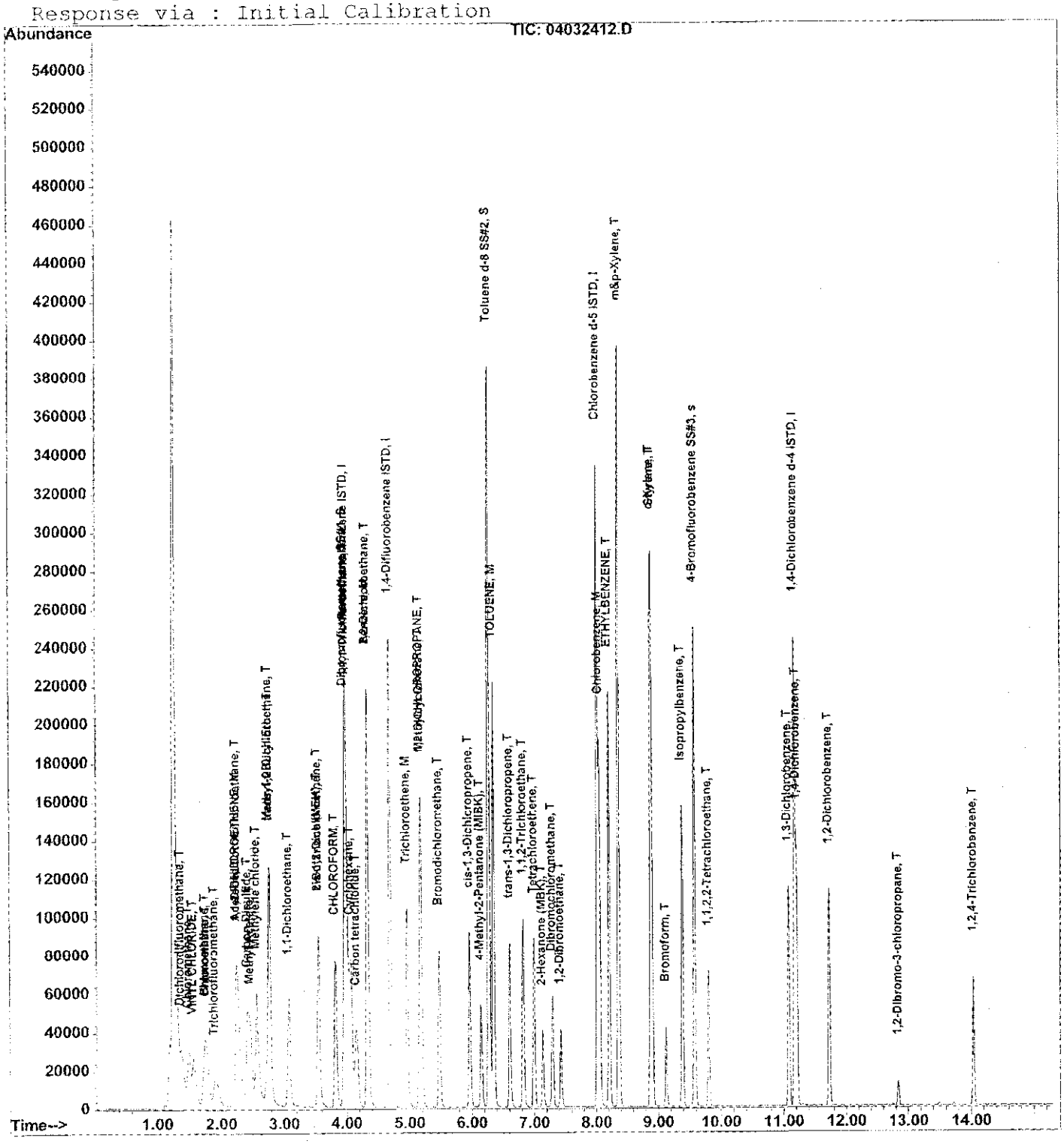
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032412.D
Acq On : 24 Mar 2004 4:47 pm
Sample : 04032314-01 MS 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 12
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032413.D
Acq On : 24 Mar 2004 5:11 pm
Sample : 04032314-01 MSD 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 13
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	124634	50.00	ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	222517	50.00	ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	183545	50.00	ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	62013	50.00	ug/L	-0.03
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.96	113	75908	50.92	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.84%			
33) Toluene d-8 SS#2	6.27	98	295135	51.32	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.64%			
50) 4-Bromofluorobenzene SS#3	9.58	95	105781	50.83	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.66%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	48995	21.86	ug/L	100
3) Chloromethane	1.49	50	58610	24.43	ug/L	99
4) VINYL CHLORIDE	1.56	62	52039	21.86	ug/L	99
5) Bromomethane	1.74	94	46294	23.72	ug/L	95
6) Chloroethane	1.78	64	32589	26.63	ug/L	99
7) Trichlorofluoromethane	1.90	101	35162	25.42	ug/L	100
8) Acetone	2.25	43	18993	31.76	ug/L	96
9) 1,1-DICHLOROETHENE	2.25	96	42687	23.30	ug/L	96
10) 1,1,2-Trichlorotrifluoroet	2.25	101	37022	24.52	ug/L	97
11) Carbon Disulfide	2.43	76	158638	24.28	ug/L	98
12) Methyl Acetate	2.47	74	5580	24.27	ug/L	92
13) Methylene chloride	2.57	84	48867	22.15	ug/L	97
14) trans-1,2-Dichloroethene	2.77	96	46586	23.63	ug/L	97
15) Methyl-t-Butyl Ether	2.76	73	96274	25.73	ug/L	100
16) 1,1-Dichloroethane	3.08	63	79740	23.80	ug/L	100
17) cis-1,2-Dichloroethene	3.55	96	47558	24.15	ug/L	97
18) 2-Butanone (MEK)	3.54	43	27150	24.41	ug/L	99
19) CHLOROFORM	3.82	83	84874	23.60	ug/L	99
21) 1,1,1-Trichloroethane	4.00	97	60142	23.63	ug/L #	13
22) Cyclohexane	4.06	56	71091	24.46	ug/L	93
24) Carbon tetrachloride	4.15	117	40898	23.80	ug/L	100
25) Benzene	4.32	78	199747	24.15	ug/L	100
26) 1,2-Dichloroethane	4.34	62	64169	24.82	ug/L	100
27) Trichloroethene	4.96	95	45625	24.29	ug/L	98
28) 1,2-DICHLOROPROPANE	5.18	63	53600	24.57	ug/L	99
29) Methylcyclohexane	5.16	83	44210	22.76	ug/L	98
30) Bromodichloromethane	5.48	83	64020	24.70	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032413.D Vial: 13
Acq On : 24 Mar 2004 5:13 pm Operator: MI
Sample : 04032314-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.97	75	85300	24.67 ug/L	99
32) 4-Methyl-2-Pentanone (MIBK	6.14	43	58200	27.03 ug/L	99
34) TOLUENE	6.35	92	107824	24.07 ug/L	98
35) trans-1,3-Dichloropropene	6.61	75	71927	24.72 ug/L	99
36) 1,1,2-Trichloroethane	6.82	83	32630	24.59 ug/L	98
37) Tetrachloroethene	7.00	166	27765	23.34 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	37967	25.72 ug/L	100
40) Dibromochloromethane	7.30	129	30169	24.31 ug/L	100
41) 1,2-Dibromoethane	7.43	107	33078	25.21 ug/L	100
42) Chlorobenzene	8.06	112	96940	23.27 ug/L	95
43) ETHYLBENZENE	8.21	91	177909	23.79 ug/L	98
44) m&p-Xylene	8.37	106	122245	48.10 ug/L	96
45) o-Xylene	8.88	106	61192	24.91 ug/L	97
46) Styrene	8.90	104	112546	24.81 ug/L	95
47) Bromoform	9.13	173	18881	25.27 ug/L	98
49) Isopropylbenzene	9.39	105	113207	23.29 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.80	83	45067	25.03 ug/L	99
52) 1,3-Dichlorobenzene	11.08	146	44278	22.95 ug/L	99
53) 1,4-Dichlorobenzene	11.21	146	46577	20.34 ug/L	99
54) 1,2-Dichlorobenzene	11.72	146	42412	23.24 ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.83	75	5897	25.42 ug/L	98
56) 1,2,4-Trichlorobenzene	14.03	180	21758	22.01 ug/L	97
57) Naphthalene	14.37	128	439	Not Detected	

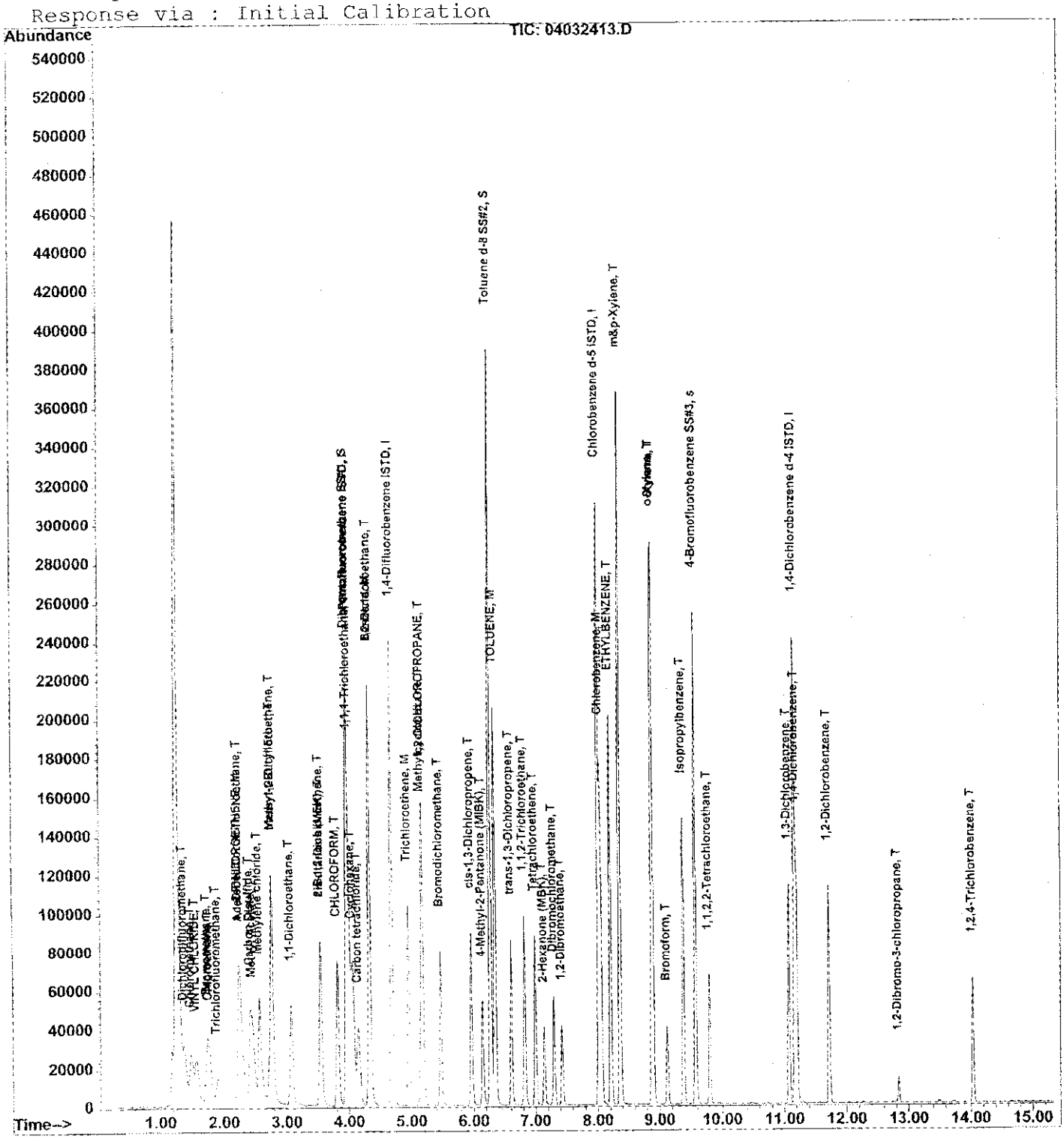
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032413.D
Acq On : 24 Mar 2004 5:11 pm
Sample : 04032314-01 MSD 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 25 10:04 2004

Vial: 13
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040323\04032317.D Vial: 17
Acq On : 23 Mar 2004 5:42 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	93	-0.03
2	T	Dichlorodifluoromethane	0.899	0.831	7.6	86	0.00
3	T	Chloromethane	0.962	0.894	7.1	88	0.00
4	T	VINYL CHLORIDE	0.955	0.891	6.7	87	0.00
5	T	Bromomethane	0.783	0.703	10.2	90	-0.02
6	T	Chloroethane	0.491	0.481	2.0	89	-0.02
7	T	Trichlorofluoromethane	0.555	0.561	-1.1	89	-0.06
8	T	Acetone	0.240	0.208	13.3	83	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.689	6.3	88	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.586	3.3	88	-0.02
11	T	Carbon Disulfide	2.621	2.483	5.3	89	-0.05
12	T	Methyl Acetate	0.092	0.091	1.1	88	0.00
13	T	Methylene chloride	0.885	0.811	8.4	90	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.735	7.1	88	-0.02
15	T	Methyl-t-Butyl Ether	1.501	1.468	2.2	90	0.00
16	T	1,1-Dichloroethane	1.344	1.277	5.0	91	-0.02
17	T	cis-1,2-Dichloroethene	0.790	0.748	5.3	89	-0.03
18	T	2-Butanone (MEK)	0.446	0.389	12.8	88	-0.02
19	T	CHLOROFORM	1.443	1.347	6.7	89	-0.03
20	S	Dibromofluoromethane SS#1	0.598	0.603	-0.8	94	-0.03
21	T	1,1,1-Trichloroethane	1.021	0.963	5.7	90	-0.03
22	T	Cyclohexane	1.166	1.095	6.1	89	-0.02
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	94	-0.02
24	T	Carbon tetrachloride	0.386	0.358	7.3	87	-0.03
25	M	Benzene	1.859	1.728	7.0	90	-0.03
26	T	1,2-Dichloroethane	0.581	0.559	3.8	90	-0.03
27	M	Trichloroethene	0.422	0.395	6.4	89	-0.02
28	T	1,2-DICHLOROPROPANE	0.490	0.469	4.3	90	-0.03
29	T	Methylcyclohexane	0.436	0.396	9.2	88	-0.03
30	T	Bromodichloromethane	0.582	0.551	5.3	89	-0.03
31	T	cis-1,3-Dichloropropene	0.777	0.745	4.1	90	-0.03
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.451	6.8	88	-0.03
33	S	Toluene d-8 SS#2	1.292	1.283	0.7	95	-0.03
34	M	TOLUENE	1.007	0.939	6.8	89	-0.03
35	T	trans-1,3-Dichloropropene	0.654	0.614	6.1	87	-0.03
36	T	1,1,2-Trichloroethane	0.298	0.285	4.4	90	-0.03
37	T	Tetrachloroethene	0.267	0.244	8.6	88	-0.02
38	T	2-Hexanone (MBK)	0.332	0.310	6.6	88	-0.03
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	89	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040323\04032317.D Vial: 17
Acq On : 23 Mar 2004 5:42 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.338	0.0	88	-0.03
41	T	1,2-Dibromoethane	0.357	0.357	0.0	88	-0.03
42	M	Chlorobenzene	1.135	1.088	4.1	88	-0.03
43	T	ETHYLBENZENE	2.037	1.975	3.0	89	-0.03
44	T	m&p-Xylene	0.692	0.665	3.9	86	-0.03
45	T	o-Xylene	0.669	0.654	2.2	87	-0.03
46	T	Styrene	1.236	1.212	1.9	87	-0.03
47	T	Bromoform	0.204	0.207	-1.5	86	-0.03
48	I	1,4-Dichlorobenzene d-4 1ST	1.000	1.000	0.0	92	-0.03
49	T	Isopropylbenzene	3.919	3.646	7.0	88	-0.03
50	s	4-Bromofluorobenzene SS#3	1.678	1.687	-0.5	92	-0.02
51	T	1,1,2,2-Tetrachloroethane	1.451	1.403	3.3	87	-0.03
52	T	1,3-Dichlorobenzene	1.556	1.444	7.2	87	-0.03
53	T	1,4-Dichlorobenzene	1.847	1.474	20.2	87	-0.03
54	T	1,2-Dichlorobenzene	1.471	1.375	6.5	88	-0.03
55	T	1,2-Dibromo-3-chloropropane	0.187	0.188	-0.5	85	-0.03
56	T	1,2,4-Trichlorobenzene	0.797	0.669	16.1	81	-0.03
57	T	Naphthalene	1.591	1.349	15.2	78	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032317.D Vial: 17
Acq On : 23 Mar 2004 5:42 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:09 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	127558	50.00	ug/L		-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	233097	50.00	ug/L		-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	182767	50.00	ug/L		-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	63335	50.00	ug/L		-0.03
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.96	113	76874	50.39	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.78%				
33) Toluene d-8 SS#2	6.27	98	299118	49.65	ug/L		-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.30%				
50) 4-Bromofluorobenzene SS#3	9.59	95	106816	50.25	ug/L		-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.38	85	105994	46.21	ug/L		100
3) Chloromethane	1.50	50	114067	46.46	ug/L		100
4) VINYL CHLORIDE	1.57	62	113654	46.65	ug/L		99
5) Bromomethane	1.74	94	89723	44.93	ug/L		99
6) Chloroethane	1.78	64	61374	49.00	ug/L		98
7) Trichlorofluoromethane	1.90	101	71532	50.52	ug/L		99
8) Acetone	2.26	43	26548	43.37	ug/L		96
9) 1,1-DICHLOROETHENE	2.25	96	87824	46.83	ug/L		98
10) 1,1,2-Trichlorotrifluoroet	2.25	101	74739	48.36	ug/L		98
11) Carbon Disulfide	2.43	76	316729	47.37	ug/L	#	86
12) Methyl Acetate	2.48	74	11649	49.51	ug/L		98
13) Methylene chloride	2.57	84	103424	45.81	ug/L		99
14) trans-1,2-Dichloroethene	2.77	96	93809	46.50	ug/L		97
15) Methyl-t-Butyl Ether	2.77	73	187213	48.89	ug/L		100
16) 1,1-Dichloroethane	3.08	63	162877	47.49	ug/L		99
17) cis-1,2-Dichloroethene	3.55	96	95421	47.34	ug/L		98
18) 2-Butanone (MEK)	3.54	43	49588	43.56	ug/L		99
19) CHLOROFORM	3.82	83	171844	46.68	ug/L		100
21) 1,1,1-Trichloroethane	4.00	97	122844	47.15	ug/L	#	63
22) Cyclohexane	4.07	56	139679	46.96	ug/L		97
24) Carbon tetrachloride	4.16	117	83501	46.39	ug/L		100
25) Benzene	4.33	78	402740	46.48	ug/L		100
26) 1,2-Dichloroethane	4.34	62	130265	48.09	ug/L		98
27) Trichloroethene	4.97	95	92012	46.76	ug/L		98
28) 1,2-DICHLOROPROPANE	5.19	63	109331	47.85	ug/L		99
29) Methylcyclohexane	5.17	83	92219	45.32	ug/L		98
30) Bromodichloromethane	5.48	83	128368	47.28	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032317.D Vial: 17
Acq On : 23 Mar 2004 5:42 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:09 2004

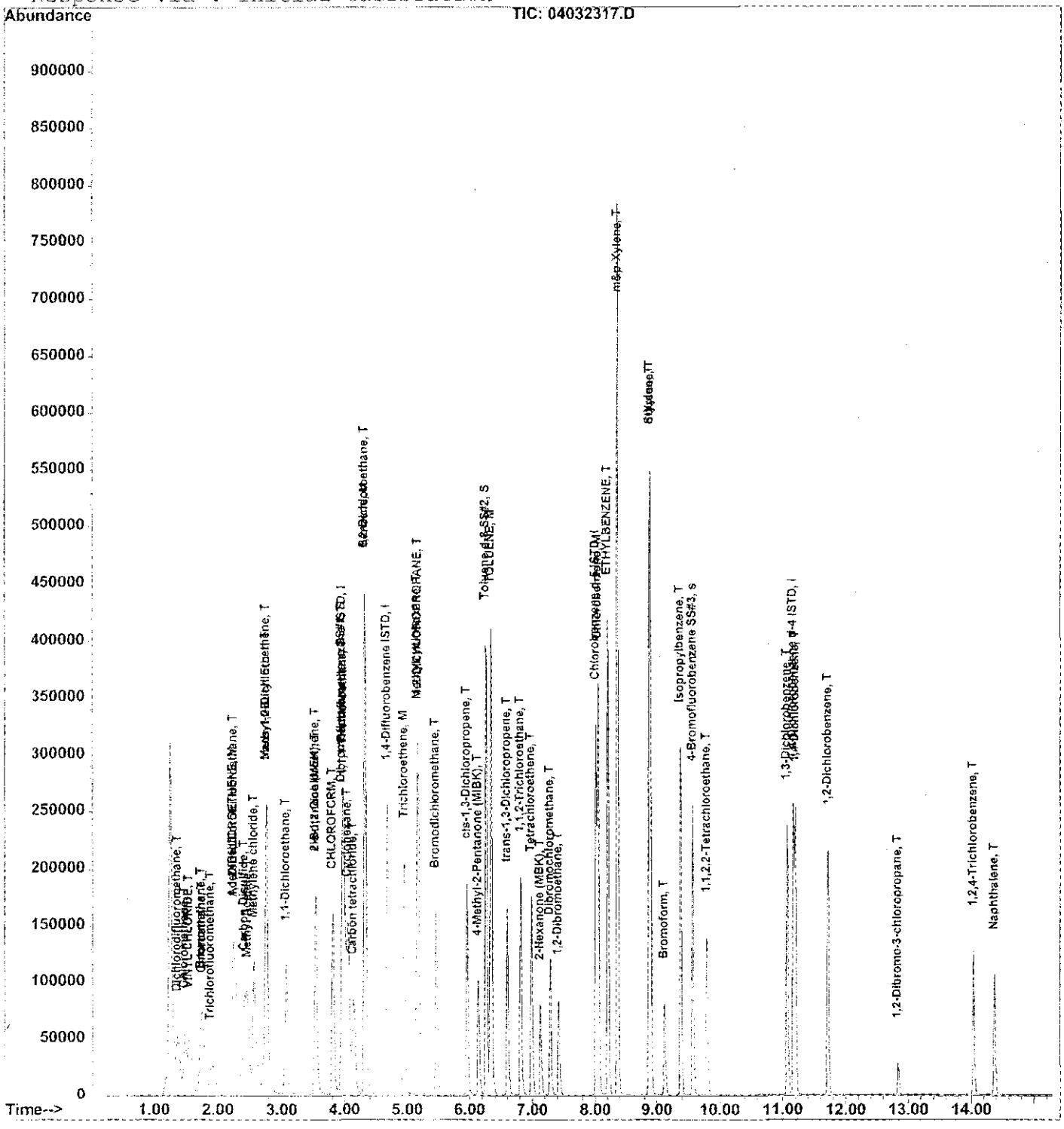
Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.97	75	173624	47.94 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.15	43	105238	46.65 ug/L	100
34) TOLUENE	6.35	92	218947	46.65 ug/L	100
35) trans-1,3-Dichloropropene	6.61	75	143161	46.97 ug/L	100
36) 1,1,2-Trichloroethane	6.82	83	66472	47.81 ug/L	97
37) Tetrachloroethene	7.00	166	56802	45.58 ug/L	99
38) 2-Hexanone (MBK)	7.14	43	72264	46.73 ug/L	100
40) Dibromochloromethane	7.30	129	61690	49.92 ug/L	99
41) 1,2-Dibromoethane	7.43	107	65253	49.94 ug/L	100
42) Chlorobenzene	8.06	112	198913	47.94 ug/L	98
43) ETHYLBENZENE	8.21	91	360918	48.47 ug/L	98
44) m&p-Xylene	8.37	106	242925	95.99 ug/L	97
45) o-Xylene	8.89	106	119581	48.88 ug/L	97
46) Styrene	8.90	104	221572	49.06 ug/L	96
47) Bromoform	9.13	173	37881	50.91 ug/L	99
49) Isopropylbenzene	9.39	105	230927	46.51 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.81	83	88849	48.32 ug/L	99
52) 1,3-Dichlorobenzene	11.08	146	91452	46.41 ug/L	100
53) 1,4-Dichlorobenzene	11.21	146	93377	39.92 ug/L	98
54) 1,2-Dichlorobenzene	11.73	146	87090	46.72 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.84	75	11921	50.31 ug/L	96
56) 1,2,4-Trichlorobenzene	14.04	180	42375	41.97 ug/L	99
57) Naphthalene	14.38	128	85442	42.39 ng/L	100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040323\04032317.D Vial: 17
Acq On : 23 Mar 2004 5:42 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:09 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040323\04032318.D Vial: 18
Acq On : 23 Mar 2004 6:06 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	93	-0.02
2	t	acrolein	0.121	0.124	-2.5	99	-0.01
3	t	iodomethne	0.985	0.925	6.1	89	-0.02
4	t	acrylonitrile	0.212	0.220	-3.8	100	-0.01
5	t	tert-butanol	0.063	0.079	-25.4#	111	-0.01
6	t	vinyl acetate	3.201	3.163	1.2	93	-0.02
7	t	diisopropyl ether	3.077	3.014	2.0	91	-0.03
8	t	Ethyl tert-butyl ether	2.311	2.241	3.0	90	-0.03
9	T	2,2-Dichloropropane	0.998	0.907	9.1	86	-0.02
10	T	Bromochloromethane	0.292	0.276	5.5	91	-0.02
11	S	Dibromofluoromethane SS#1	0.602	0.605	-0.5	93	-0.02
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	-0.02
13	T	1,1-Dichloropropene	0.614	0.574	6.5	90	-0.03
14	t	tert-amyl methyl ether	1.158	1.120	3.3	91	-0.02
15	T	Dibromomethane	0.247	0.238	3.6	93	-0.02
16	t	1,4-dioxane	0.002	0.002	0.0	174#	-0.02
17	T	2-Chloroethylvinyl Ether	0.260	0.242	6.9	88	-0.03
18	S	Toluene d-8 SS#2	1.297	1.303	-0.5	94	-0.02
19	I	Chlorobenzene d-5	1.000	1.000	0.0	94	-0.02
20	T	1,3-Dichloropropane	0.773	0.753	2.6	93	-0.03
21	T	1,1,1,2-Tetrachloroethane	0.310	0.286	7.7	91	-0.02
22	T	1,2,3-Trichloropropane	0.106	0.100	5.7	93	-0.02
23	s	4-Bromofluorobenzene SS#3	0.569	0.577	-1.4	95	-0.03
24	T	Bromobenzene	0.338	0.314	7.1	90	-0.03
25	t	trans-1,4-dichloro-2-butene	0.396	0.395	0.3	92	-0.02
26	T	n-Propylbenzene	1.777	1.660	6.6	89	-0.02
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	90	-0.02
28	T	2-Chlorotoluene	3.453	3.387	1.9	91	-0.03
29	T	4-Chlorotoluene	3.987	3.865	3.1	88	-0.03
30	T	1,3,5-Trimethylbenzene	3.127	2.977	4.8	86	-0.03
31	T	tert-Butylbenzene	2.100	2.015	4.0	89	-0.03
32	T	1,2,4-Trimethylbenzene	3.245	3.148	3.0	88	-0.03
33	T	sec-Butylbenzene	3.482	3.397	2.4	89	-0.03
34	T	4-Isopropyltoluene	2.465	2.301	6.7	86	-0.02
35	T	n-Butylbenzene	2.785	2.743	1.5	89	-0.02
36	T	1,2,3-Trichlorobenzene	0.558	0.505	9.5	82	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032318.D Vial: 18
Acq On : 23 Mar 2004 6:06 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:10 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	3.99	168	126075	50.00	ug/L		-0.02
12) 1,4-Difluorobenzene	4.70	114	230864	50.00	ug/L		-0.02
19) Chlorobenzene d-5	8.03	117	189223	50.00	ug/L		-0.02
27) 1,4-Dichlorobenzene d-4	11.18	152	62099	50.00	ug/L		-0.02
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.96	113	76239	50.27	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%				
18) Toluene d-8 SS#2	6.27	98	300921	50.24	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.48%				
23) 4-Bromofluorobenzene SS#3	9.58	95	109090	50.68	ug/L		-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.36%				
Target Compounds							Qvalue
2) acrolein	2.16	56	15613	51.29	ug/L		89
3) iodomethne	2.37	142	116675	46.98	ug/L		100
4) acrylonitrile	2.74	53	27739	51.83	ug/L		100
5) tert-butanol	2.63	59	9991	63.26	ug/L		100
6) vinyl acetate	3.09	43	398737	49.41	ug/L		99
7) diisopropyl ether	3.12	45	379979	48.97	ug/L		98
8) Ethyl tert-butyl ether	3.42	59	282494	48.48	ug/L		98
9) 2,2-Dichloropropane	3.57	77	114315	45.43	ug/L		99
10) Bromochloromethane	3.76	128	34778	47.30	ug/L	#	90
13) 1,1-Dichloropropene	4.14	75	132464	46.71	ug/L		98
14) tert-amyl methyl ether	4.45	73	258470	48.35	ug/L		99
15) Dibromomethane	5.31	93	54873	48.04	ug/L		97
16) 1,4-dioxane	5.34	58	433	61.33	ug/L	#	84
17) 2-Chloroethylvinyl Ether	5.81	63	55935	46.64	ug/L		99
20) 1,3-Dichloropropane	7.02	76	142408	48.69	ug/L		100
21) 1,1,1,2-Tetrachloroethane	8.17	131	54189	46.18	ug/L		99
22) 1,2,3-Trichloropropane	9.85	110	18912	47.07	ug/L		100
24) Bromobenzene	9.77	156	59359	46.46	ug/L	#	89
25) trans-1,4-dichloro-2-buten	9.85	75	74769	49.92	ug/L	#	100
26) n-Propylbenzene	9.96	91	314055	46.70	ug/L		98
28) 2-Chlorotoluene	10.05	91	210312	49.04	ug/L		97
29) 4-Chlorotoluene	10.20	91	240014	48.47	ug/L		96
30) 1,3,5-Trimethylbenzene	10.20	105	184865	47.60	ug/L		97
31) tert-Butylbenzene	10.65	119	125153	47.99	ug/L		95
32) 1,2,4-Trimethylbenzene	10.72	105	195463	48.49	ug/L		98
33) sec-Butylbenzene	10.96	105	210923	48.78	ug/L		99
34) 4-Isopropyltoluene	11.18	119	142865	46.66	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040323\04032318.D Vial: 18
Acq On : 23 Mar 2004 6:06 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 11:10 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.76	91	170357	49.26 ug/L	98
36) 1,2,3-Trichlorobenzene	14.73	180	31389	45.31 ug/L	100

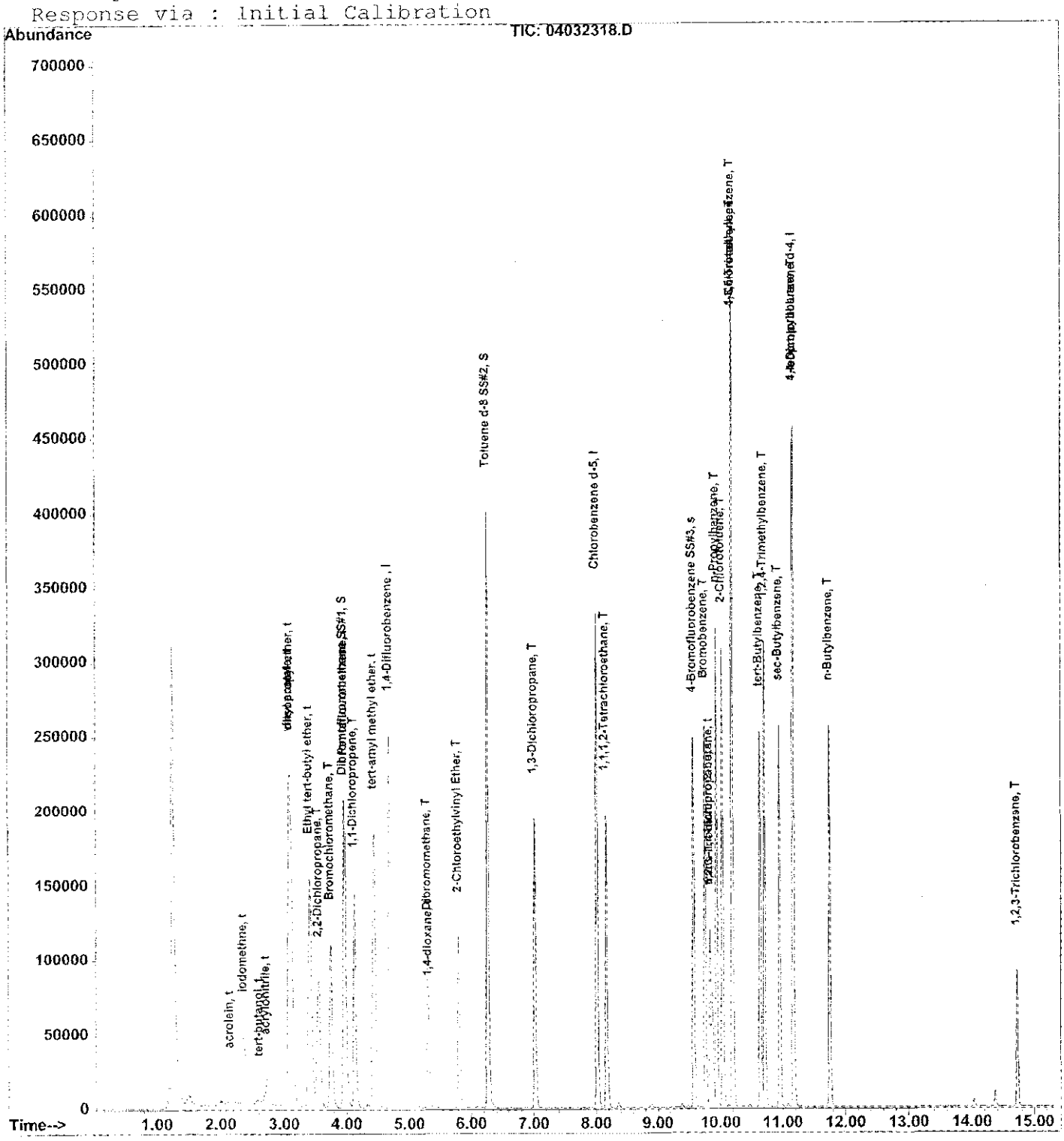
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040323\04032318.D
Acq On : 23 Mar 2004 6:06 pm
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 24 11:10 2004

Vial: 18
Operator: M1
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040324\04032402.D Vial: 2
Acq On : 24 Mar 2004 12:01 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	93	-0.03
2	T	Dichlorodifluoromethane	0.899	0.842	6.3	87	0.00
3	T	Chloromethane	0.962	0.884	8.1	87	-0.01
4	T	VINYL CHLORIDE	0.955	0.895	6.3	87	0.00
5	T	Bromomethane	0.783	0.701	10.5	89	-0.01
6	T	Chloroethane	0.491	0.472	3.9	87	-0.01
7	T	Trichlorofluoromethane	0.555	0.641	-15.5	102	-0.02
8	T	Acetone	0.240	0.245	-2.1	97	-0.01
9	M	1,1-DICHLOROETHENE	0.735	0.699	4.9	89	-0.01
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.596	1.7	89	-0.01
11	T	Carbon Disulfide	2.621	2.466	5.9	88	-0.06
12	T	Methyl Acetate	0.092	0.090	2.2	86	-0.01
13	T	Methylene chloride	0.885	0.793	10.4	88	-0.01
14	T	trans-1,2-Dichloroethene	0.791	0.745	5.8	88	-0.02
15	T	Methyl-t-Butyl Ether	1.501	1.484	1.1	91	-0.02
16	T	1,1-Dichloroethane	1.344	1.310	2.5	93	-0.02
17	T	cis-1,2-Dichloroethene	0.790	0.760	3.8	90	-0.02
18	T	2-Butanone (MEK)	0.446	0.414	7.2	94	-0.02
19	T	CHLOROFORM	1.443	1.369	5.1	90	-0.03
20	S	Dibromofluoromethane SS#1	0.598	0.605	-1.2	94	-0.03
21	T	1,1,1-Trichloroethane	1.021	0.953	6.7	88	-0.03
22	T	Cyclohexane	1.166	1.080	7.4	88	-0.03
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	93	-0.02
24	T	Carbon tetrachloride	0.386	0.367	4.9	88	-0.03
25	M	Benzene	1.859	1.772	4.7	91	-0.03
26	T	1,2-Dichloroethane	0.581	0.572	1.5	91	-0.03
27	M	Trichloroethene	0.422	0.407	3.6	90	-0.02
28	T	1,2-DICHLOROPROPANE	0.490	0.476	2.9	90	-0.03
29	T	Methylcyclohexane	0.436	0.404	7.3	89	-0.03
30	T	Bromodichloromethane	0.582	0.572	1.7	92	-0.03
31	T	cis-1,3-Dichloropropene	0.777	0.759	2.3	91	-0.03
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.484	0.0	93	-0.03
33	S	Toluene d-8 SS#2	1.292	1.312	-1.5	96	-0.03
34	M	TOLUENE	1.007	0.966	4.1	90	-0.03
35	T	trans-1,3-Dichloropropene	0.654	0.648	0.9	90	-0.03
36	T	1,1,2-Trichloroethane	0.298	0.296	0.7	92	-0.03
37	T	Tetrachloroethene	0.267	0.249	6.7	88	-0.02
38	T	2-Hexanone (MBK)	0.332	0.332	0.0	93	-0.03
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	93	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040324\04032402.D Vial: 2
Acq On : 24 Mar 2004 12:01 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.336	0.6	92	-0.03
41	T	1,2-Dibromoethane	0.357	0.346	3.1	89	-0.03
42	M	Chlorobenzene	1.135	1.039	8.5	88	-0.03
43	T	ETHYLBENZENE	2.037	1.877	7.9	88	-0.03
44	T	m&p-Xylene	0.692	0.655	5.3	89	-0.03
45	T	o-Xylene	0.669	0.641	4.2	89	-0.03
46	T	Styrene	1.236	1.182	4.4	88	-0.03
47	T	Bromoform	0.204	0.206	-1.0	89	-0.03
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	91	-0.03
49	T	Isopropylbenzene	3.919	3.697	5.7	88	-0.03
50	s	4-Bromofluorobenzene SS#3	1.678	1.737	-3.5	94	-0.02
51	T	1,1,2,2-Tetrachloroethane	1.451	1.457	-0.4	89	-0.03
52	T	1,3-Dichlorobenzene	1.556	1.454	6.6	86	-0.03
53	T	1,4-Dichlorobenzene	1.847	1.470	20.4	85	-0.03
54	T	1,2-Dichlorobenzene	1.471	1.409	4.2	89	-0.03
55	T	1,2-Dibromo-3-chloropropane	0.187	0.192	-2.7	86	-0.03
56	T	1,2,4-Trichlorobenzene	0.797	0.700	12.2	84	-0.03
57	T	Naphthalene	1.591	1.416	11.0	81	-0.03

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	ISTD							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	ISTD							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	ISTD							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	ISTD	----------	----------	----------		
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032402.D Vial: 2
Acq On : 24 Mar 2004 12:01 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 12:21 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.98	168	127119	50.00	ug/L	-0.03
23) 1,4-Difluorobenzene ISTD	4.69	114	229868	50.00	ug/L	-0.02
39) Chlorobenzene d-5 ISTD	8.02	117	190918	50.00	ug/L	-0.03
48) 1,4-Dichlorobenzene d-4 IS	11.18	152	62592	50.00	ug/L	-0.03
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.96	113	76864	50.55	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.10%			
33) Toluene d-8 SS#2	6.27	98	301558	50.76	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.52%			
50) 4-Bromofluorobenzene SS#3	9.58	95	108740	51.76	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	106976	46.80	ug/L	100
3) Chloromethane	1.49	50	112395	45.94	ug/L	99
4) VINYL CHLORIDE	1.57	62	113781	46.87	ug/L	99
5) Bromomethane	1.75	94	89154	44.80	ug/L	97
6) Chloroethane	1.78	64	60003	48.07	ug/L	100
7) Trichlorofluoromethane	1.94	101	81431	57.71	ug/L	100
8) Acetone	2.26	43	31149	51.06	ug/L	95
9) 1,1-DICHLOROETHENE	2.25	96	88841	47.54	ug/L	97
10) 1,1,2-Trichlorotrifluoroet	2.26	101	75790	49.21	ug/L	98
11) Carbon Disulfide	2.42	76	313525	47.05	ug/L	99
12) Methyl Acetate	2.48	74	11400	48.62	ug/L	99
13) Methylene chloride	2.57	84	100860	44.83	ug/L	99
14) trans-1,2-Dichloroethene	2.77	96	94720	47.11	ug/L	98
15) Methyl-t-Butyl Ether	2.76	73	188601	49.42	ug/L	100
16) 1,1-Dichloroethane	3.08	63	166497	48.72	ug/L	100
17) cis-1,2-Dichloroethene	3.55	96	96600	48.09	ug/L	99
18) 2-Butanone (MEK)	3.54	43	52594	46.36	ug/L	99
19) CHLOROFORM	3.82	83	174045	47.44	ug/L	100
21) 1,1,1-Trichloroethane	4.00	97	121159	46.67	ug/L #	62
22) Cyclohexane	4.06	56	137303	46.32	ug/L	97
24) Carbon tetrachloride	4.16	117	84334	47.51	ug/L	99
25) Benzene	4.33	78	407274	47.66	ug/L	100
26) 1,2-Dichloroethane	4.34	62	131513	49.23	ug/L	99
27) Trichloroethene	4.96	95	93552	48.21	ug/L	98
28) 1,2-DICHLOROPROPANE	5.18	63	109464	48.58	ug/L	99
29) Methylcyclohexane	5.17	83	92830	46.26	ug/L	98
30) Bromodichloromethane	5.47	83	131413	49.08	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032402.D
Acq On : 24 Mar 2004 12:01 pm
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Mar 24 12:21 2004

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

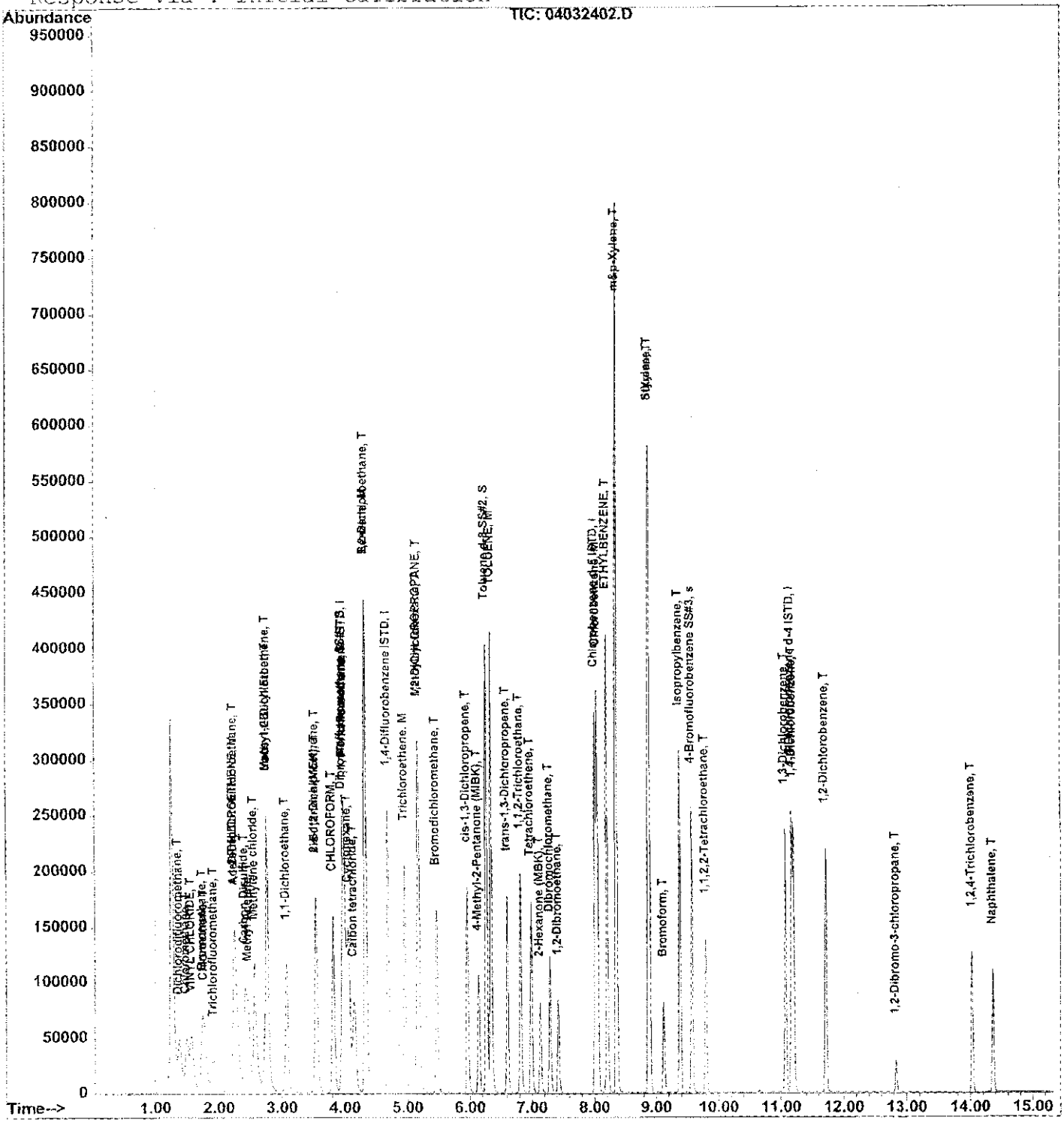
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.96	75	174459	48.85	ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.14	43	111317	50.04	ug/L	99
34)	TOLUENE	6.35	92	222042	47.98	ug/L	99
35)	trans-1,3-Dichloropropene	6.60	75	148989	49.56	ug/L	99
36)	1,1,2-Trichloroethane	6.82	83	68007	49.60	ug/L	98
37)	Tetrachloroethene	7.00	166	57232	46.57	ug/L	100
38)	2-Hexanone (MBK)	7.14	43	76428	50.12	ug/L	100
40)	Dibromochloromethane	7.30	129	64127	49.68	ug/L	99
41)	1,2-Dibromoethane	7.43	107	66076	48.41	ug/L	100
42)	Chlorobenzene	8.05	112	198353	45.77	ug/L	97
43)	ETHYLBENZENE	8.21	91	358370	46.08	ug/L	99
44)	m&p-Xylene	8.36	106	250106	94.61	ug/L	97
45)	o-Xylene	8.88	106	122401	47.89	ug/L	98
46)	Styrene	8.90	104	225695	47.84	ug/L	96
47)	Bromoform	9.13	173	39241	50.49	ug/L	99
49)	Isopropylbenzene	9.38	105	231419	47.17	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.80	83	91202	50.19	ug/L	99
52)	1,3-Dichlorobenzene	11.08	146	91034	46.75	ug/L	100
53)	1,4-Dichlorobenzene	11.21	146	91991	39.79	ug/L	99
54)	1,2-Dichlorobenzene	11.73	146	88185	47.87	ug/L	100
55)	1,2-Dibromo-3-chloropropan	12.84	75	11995	51.23	ug/L	99
56)	1,2,4-Trichlorobenzene	14.04	180	43818	43.92	ug/L	99
57)	Naphthalene	14.37	128	88614	44.48	ng/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032402.D Vial: 2
Acq On : 24 Mar 2004 12:01 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 24 12:21 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040324\04032403.D Vial: 3
Acq On : 24 Mar 2004 12:25 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	93	-0.03
2	t	acrolein	0.121	0.112	7.4	89	-0.01
3	t	iodomethne	0.985	0.926	6.0	89	-0.02
4	t	acrylonitrile	0.212	0.194	8.5	88	-0.02
5	t	tert-butanol	0.063	0.065	-3.2	91	0.00
6	t	vinyl acetate	3.201	3.037	5.1	90	-0.02
7	t	diisopropyl ether	3.077	2.914	5.3	88	-0.03
8	t	Ethyl tert-butyl ether	2.311	2.232	3.4	90	-0.03
9	T	2,2-Dichloropropane	0.998	0.941	5.7	89	-0.03
10	T	Bromochloromethane	0.292	0.274	6.2	90	-0.02
11	S	Dibromofluoromethane SS#1	0.602	0.605	-0.5	93	-0.02
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	-0.03
13	T	1,1-Dichloropropene	0.614	0.576	6.2	90	-0.03
14	t	tert-amyl methyl ether	1.158	1.101	4.9	88	-0.03
15	T	Dibromomethane	0.247	0.235	4.9	91	-0.03
16	t	1,4-dioxane	0.002	0.001	50.0#	77	-0.03
17	T	2-Chloroethylvinyl Ether	0.260	0.240	7.7	87	-0.03
18	S	Toluene d-8 SS#2	1.297	1.323	-2.0	95	-0.02
19	I	Chlorobenzene d-5	1.000	1.000	0.0	94	-0.03
20	T	1,3-Dichloropropane	0.773	0.731	5.4	90	-0.03
21	T	1,1,1,2-Tetrachloroethane	0.310	0.285	8.1	91	-0.03
22	T	1,2,3-Trichloropropane	0.106	0.097	8.5	91	-0.03
23	s	4-Bromofluorobenzene SS#3	0.569	0.571	-0.4	94	-0.03
24	T	Bromobenzene	0.338	0.307	9.2	88	-0.03
25	t	trans-1,4-dichloro-2-butene	0.396	0.370	6.6	86	-0.03
26	T	n-Propylbenzene	1.777	1.621	8.8	87	-0.03
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	91	-0.03
28	T	2-Chlorotoluene	3.453	3.279	5.0	90	-0.03
29	T	4-Chlorotoluene	3.987	3.791	4.9	88	-0.04
30	T	1,3,5-Trimethylbenzene	3.127	2.946	5.8	87	-0.03
31	T	tert-Butylbenzene	2.100	1.996	5.0	89	-0.03
32	T	1,2,4-Trimethylbenzene	3.245	3.055	5.9	87	-0.04
33	T	sec-Butylbenzene	3.482	3.361	3.5	90	-0.04
34	T	4-Isopropyltoluene	2.465	2.347	4.8	89	-0.03
35	T	n-Butylbenzene	2.785	2.727	2.1	90	-0.03
36	T	1,2,3-Trichlorobenzene	0.558	0.478	14.3	79	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------ISTD----------							
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------ISTD----------							
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------ISTD----------							
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------ISTD----------							
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032403.D
Acq On : 24 Mar 2004 12:25 pm
Sample : UNREG-W, CCV 50ppb
Misc : 1S/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 24 13:03 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	3.98	168	126197	50.00	ug/L		-0.03
12) 1,4-Difluorobenzene	4.69	114	228821	50.00	ug/L		-0.03
19) Chlorobenzene d-5	8.02	117	189185	50.00	ug/L		-0.03
27) 1,4-Dichlorobenzene d-4	11.17	152	63228	50.00	ug/L		-0.03
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.96	113	76339	50.28	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.56%				
18) Toluene d-8 SS#2	6.27	98	302665	50.98	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.96%				
23) 4-Bromofluorobenzene SS#3	9.58	95	108098	50.23	ug/L		-0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.46%				
Target Compounds							Qvalue
2) acrolein	2.16	56	14100	46.27	ug/L		90
3) iodomethne	2.37	142	116805	46.99	ug/L		100
4) acrylonitrile	2.73	53	24528	45.78	ug/L		98
5) tert-butanol	2.64	59	8207	51.91	ug/L		100
6) vinyl acetate	3.09	43	383242	47.44	ug/L		99
7) diisopropyl ether	3.12	45	367706	47.34	ug/L		99
8) Ethyl tert-butyl ether	3.42	59	281698	48.29	ug/L		98
9) 2,2-Dichloropropane	3.56	77	118753	47.15	ug/L		100
10) Bromochloromethane	3.76	128	34599	47.02	ug/L	#	92
13) 1,1-Dichloropropene	4.14	75	131901	46.92	ug/L		99
14) tert-amyl methyl ether	4.44	73	251931	47.55	ug/L		99
15) Dibromomethane	5.30	93	53751	47.48	ug/L		98
16) 1,4-dioxane	5.33	58	192	27.44	ug/L	#	1
17) 2-Chloroethylvinyl Ether	5.81	63	55020	46.29	ug/L		99
20) 1,3-Dichloropropane	7.02	76	138224	47.27	ug/L		99
21) 1,1,1,2-Tetrachloroethane	8.16	131	53870	45.92	ug/L		98
22) 1,2,3-Trichloropropane	9.84	110	18378	45.75	ug/L		100
24) Bromobenzene	9.77	156	58107	45.49	ug/L	#	89
25) trans-1,4-dichloro-2-buten	9.84	75	70064	46.79	ug/L	#	100
26) n-Propylbenzene	9.95	91	306585	45.60	ug/L		98
28) 2-Chlorotoluene	10.05	91	207320	47.48	ug/L		97
29) 4-Chlorotoluene	10.20	91	239704	47.54	ug/L		95
30) 1,3,5-Trimethylbenzene	10.20	105	186279	47.10	ug/L		97
31) tert-Butylbenzene	10.65	119	126224	47.53	ug/L		97
32) 1,2,4-Trimethylbenzene	10.71	105	193189	47.07	ug/L		98
33) sec-Butylbenzene	10.95	105	212540	48.27	ug/L		99
34) 4-Isopropyltoluene	11.17	119	148374	47.59	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040324\04032403.D
Acq On : 24 Mar 2004 12:25 pm
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 24 13:03 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.75	91	172395	48.96 ug/L	98
36) 1,2,3-Trichlorobenzene	14.73	180	30246	42.88 ug/L	98

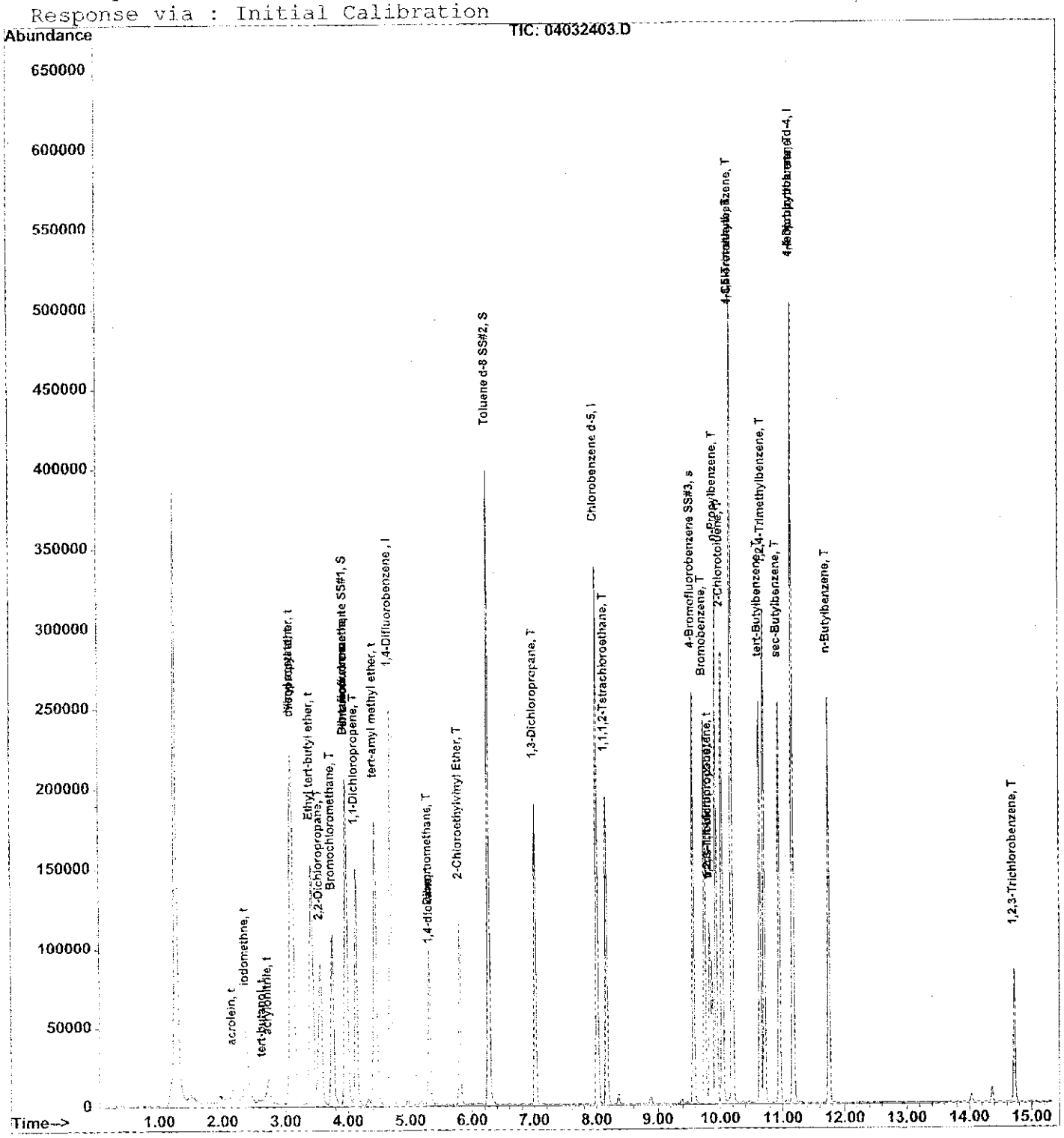
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040324\04032403.D
Acq On : 24 Mar 2004 12:25 pm
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 24 13:03 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04032301.D**	**DATE/TIME ANALYZED:**	**03/23/04 10:30**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.4
75	30.0 - 60.0% of mass 95	50.0
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	61.4
175	5.0 - 9.0% of mass 174	7.5
176	Greater than 95.0%, but less than 101.0% of mass 174	99.2
177	5.0 - 9.0% of mass 176	6.8

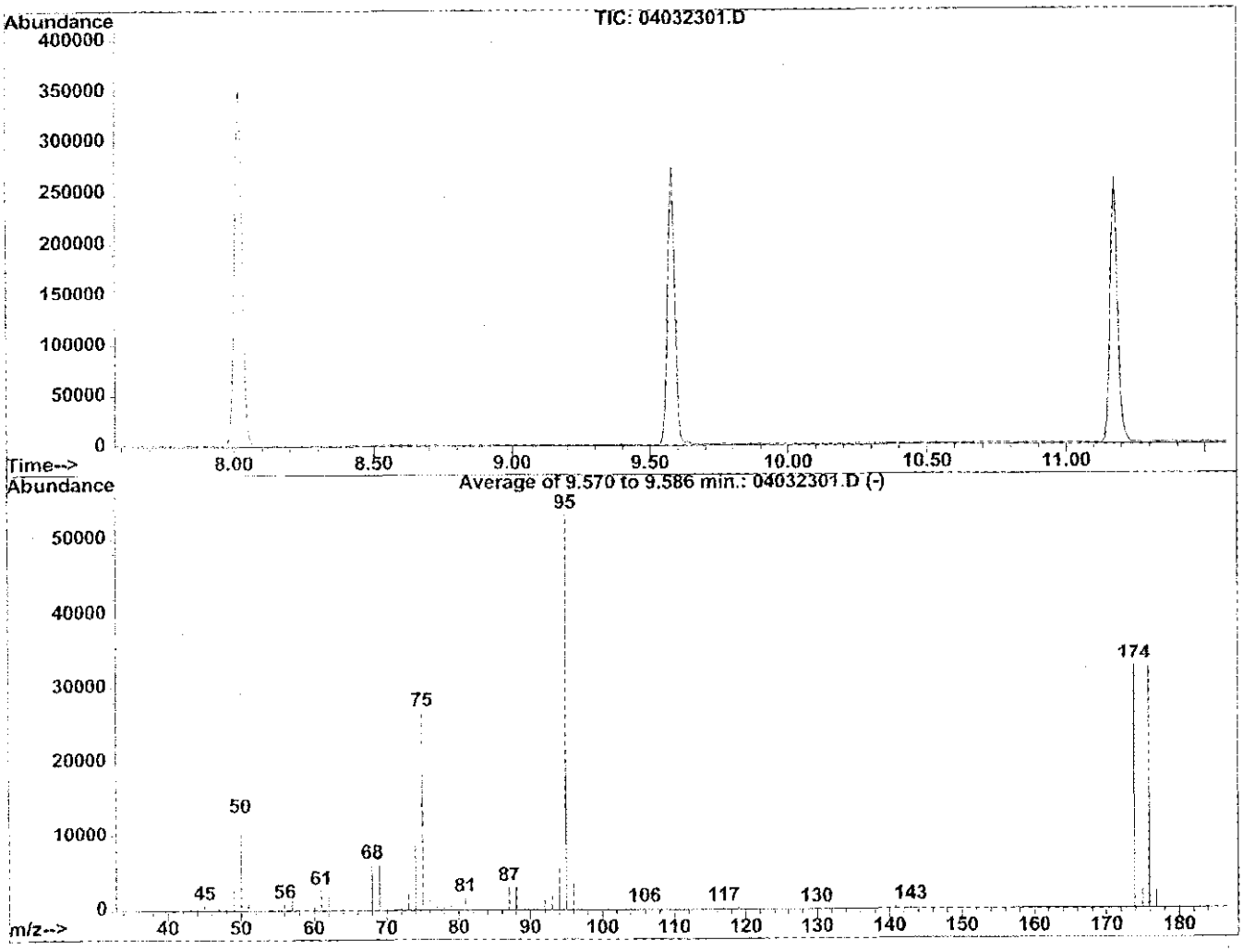
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
04032310-01	TB032204	04032325.D	03/23/04 21:07
04032310-02	MW-7-032204	04032326.D	03/23/04 21:31
04032310-03	DMW-11S-032204	04032327.D	03/23/04 21:55
04032310-05	MW-3-032204	04032329.D	03/23/04 22:43
04032310-06	MW-1-032204	04032330.D	03/23/04 23:07
04032310-07	DMW-8D-032304	04032331.D	03/23/04 23:31
04032310-08	DMW-4D-032304	04032332.D	03/23/04 23:55

BFB

Data File : C:\HPCHEM\1\DATA\040323\04032301.D
Acq On : 23 Mar 2004 10:30 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1160, 1161, 1162; Background Corrected with Scan 1153

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	12457	PASS
75	95	30	60	50.0	26589	PASS
95	95	100	100	100.0	53163	PASS
96	95	5	9	6.6	3519	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	61.4	32629	PASS
175	174	5	9	7.5	2451	PASS
176	174	95	101	99.2	32379	PASS
177	176	5	9	6.8	2187	PASS

04032301.D TCL-W.M Tue Mar 23 10:51:45 2004

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MARYLAND 21228
410-747-8770
800-932-9047
410-788-8723 Fax
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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04032401.D**	**DATE/TIME ANALYZED:**	**03/24/04 11:37**

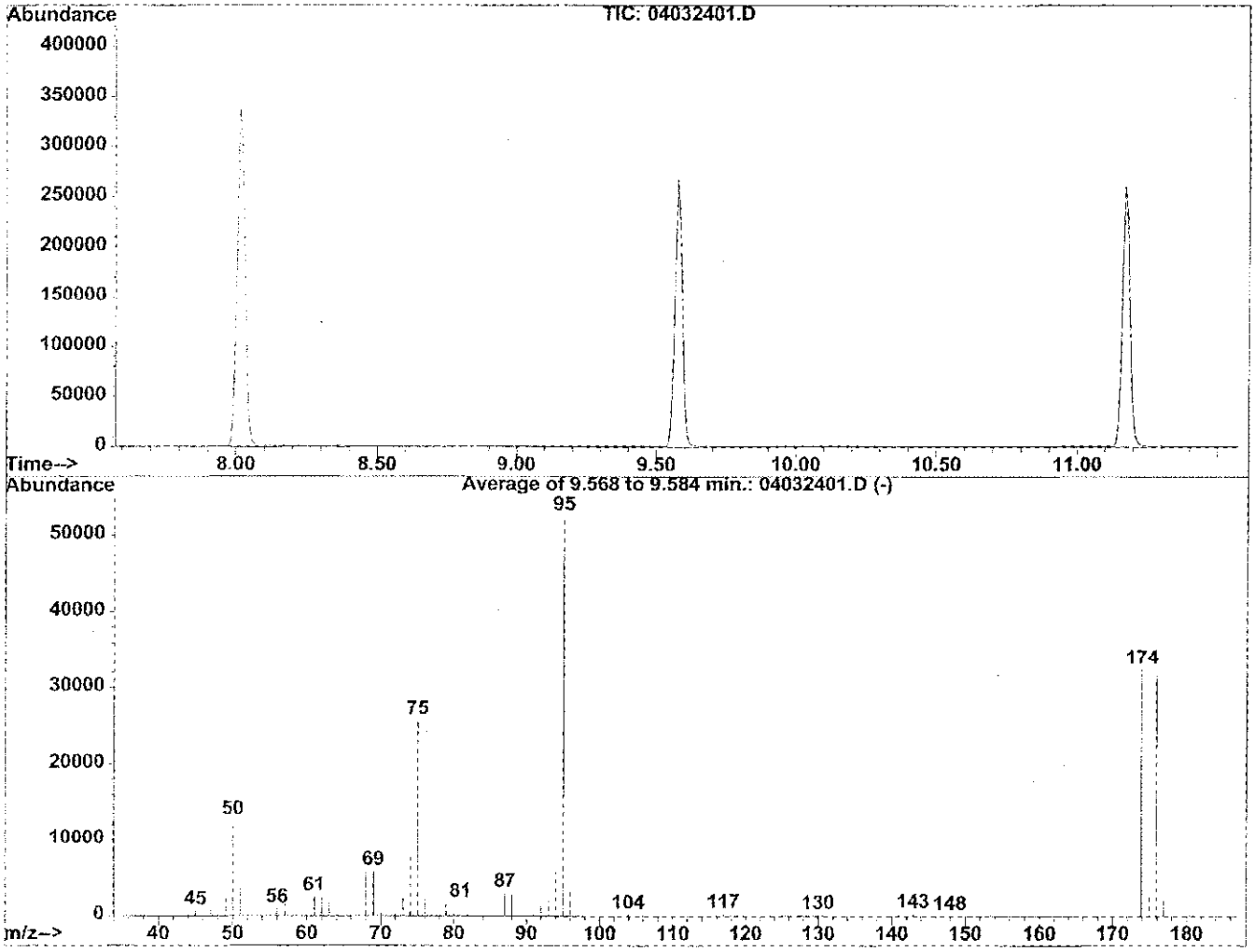
Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.9
75	30.0 - 60.0% of mass 95	48.8
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	61.7
175	5.0 - 9.0% of mass 174	7.7
176	Greater than 95.0%, but less than 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.7

This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
04032310-04	DMW-11I-032204	04032406.D	03/24/04 13:36

BFB

Data File : C:\HPCHEM\1\DATA\040324\04032401.D Vial: 1
Acq On : 24 Mar 2004 11:37 am Operator: MI
Sample : BFB TUNE Water 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics



AutoFind: Scans 1159, 1160, 1161; Background Corrected with Scan 1152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	12535	PASS
75	95	30	60	48.8	25624	PASS
95	95	100	100	100.0	52491	PASS
96	95	5	9	6.5	3420	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	61.7	32400	PASS
175	174	5	9	7.7	2494	PASS
176	174	95	101	97.3	31517	PASS
177	176	5	9	6.7	2119	PASS

04032401.D TCL-W.M Wed Mar 24 12:20:46 2004

Injection Log

Directory: c:\hpchem\1\data\040323

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1		04032339.d	1.			
2	1	04032301.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	23 Mar 04 10:30
3	2	04032302.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	23 Mar 04 10:54
4	3	04032303.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	23 Mar 04 11:18
5	4	04032304.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	23 Mar 04 11:42
6	5	04032305.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	23 Mar 04 12:06
7	6	04032306.d	1.	04032215-02 5mL	IS/S 1uL #423	23 Mar 04 12:30
8	7	04032307.d	1.	04032306-01 5mL	IS/S 1uL #423	23 Mar 04 12:54
9	8	04032308.d	1.	04032219-17 5mL	IS/S 1uL #423	23 Mar 04 13:18
10	9	04032309.d	1.	04032213-01 5mL	IS/S 1uL #423	23 Mar 04 14:03
11	10	04032310.d	1.	04032213-02 5mL	IS/S 1uL #423	23 Mar 04 14:27
12	11	04032311.d	1.	04032213-03 5mL	IS/S 1uL #423	23 Mar 04 14:51
13	12	04032312.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	23 Mar 04 15:24
14	13	04032313.d	1.	04032311-01 5mL	IS/S 1uL #423	23 Mar 04 16:06
15	14	04032314.d	1.	04032213-04 5mL	IS/S 1uL #423	23 Mar 04 16:30
16	15	04032315.d	1.	04032213-05 5mL	IS/S 1uL #423	23 Mar 04 16:54
17	16	04032316.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	23 Mar 04 17:18
18	17	04032317.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	23 Mar 04 17:42
19	18	04032318.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	23 Mar 04 18:06
20	19	04032319.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	23 Mar 04 18:30
21	20	04032320.d	1.	04032206-01 10D	IS/S 1uL #423	23 Mar 04 18:57
22	21	04032321.d	1.	04032206-02 10D	IS/S 1uL #423	23 Mar 04 19:23
23	22	04032322.d	1.	04032213-02 10D	IS/S 1uL #423	23 Mar 04 19:50
24	23	04032323.d	1.	04032213-01 20D	IS/S 1uL #423	23 Mar 04 20:17
25	24	04032324.d	1.	04032213-03 20D	IS/S 1uL #423	23 Mar 04 20:43
26	25	04032325.d	1.	04032310-01 5mL	IS/S 1uL #423	23 Mar 04 21:07
27	26	04032326.d	1.	04032310-02 5mL	IS/S 1uL #423	23 Mar 04 21:31
28	27	04032327.d	1.	04032310-03 5mL	IS/S 1uL #423	23 Mar 04 21:55
29	28	04032328.d	1.	04032310-04 5mL	IS/S 1uL #423	23 Mar 04 22:19
30	29	04032329.d	1.	04032310-05 5mL	IS/S 1uL #423	23 Mar 04 22:43
31	30	04032330.d	1.	04032310-06 5mL	IS/S 1uL #423	23 Mar 04 23:07
32	31	04032331.d	1.	04032310-07 5mL	IS/S 1uL #423	23 Mar 04 23:31
33	32	04032332.d	1.	04032310-08 5mL	IS/S 1uL #423	23 Mar 04 23:55
34	33	04032333.d	1.	04032215-02 MS 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 00:19
35	34	04032334.d	1.	04032215-02 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 00:43
36	35	04032335.d	1.	04032311-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 01:07
37	36	04032336.d	1.	04032311-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 01:30
38	37	04032337.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	24 Mar 04 01:54
39	38	04032338.d	1.	LCS-DUP 25ppb	IS/S 1uL #423, LCS 5uL #350	24 Mar 04 02:18

Injection Log

Directory: c:\hpchem\1\data\040324

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04032401.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	24 Mar 04 11:37
2	2	04032402.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	24 Mar 04 12:01
3	3	04032403.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	24 Mar 04 12:25
4	4	04032404.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 12:49
5	5	04032405.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 13:12
6	6	04032406.d	1.	04032310-04 5mL	IS/S 1uL #423	24 Mar 04 13:36
7	7	04032407.d	1.	04032213-05 10D	IS/S 1uL #423	24 Mar 04 14:03
8	8	04032408.d	1.	04032310-03 100D	IS/S 1uL #423	24 Mar 04 14:30
9	9	04032409.d	1.	04032310-08 100D	IS/S 1uL #423	24 Mar 04 14:56
10	10	04032410.d	1.	04032314-01 5mL	IS/S 1uL #423	24 Mar 04 15:59
11	11	04032411.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	24 Mar 04 16:23
12	12	04032412.d	1.	04032314-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 16:47
13	13	04032413.d	1.	04032314-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	24 Mar 04 17:11
14	14	04032414.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 17:35
15	15	04032415.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 17:59
16	16	04032416.d	1.	04032424-01 5mL	IS/S 1uL #423	24 Mar 04 18:23
17	17	04032417.d	1.	04032419-01 5mL	IS/S 1uL #423	24 Mar 04 18:47
18	18	04032418.d	1.	04032419-02 5mL	IS/S 1uL #423	24 Mar 04 19:11
19	19	04032419.d	1.	04032419-03 5mL	IS/S 1uL #423	24 Mar 04 19:35
20	20	04032420.d	1.	04032419-04 5mL	IS/S 1uL #423	24 Mar 04 19:59
21	21	04032421.d	1.	04032419-05 5mL	IS/S 1uL #423	24 Mar 04 20:23
22	22	04032422.d	1.	04032419-06 5mL	IS/S 1uL #423	24 Mar 04 20:47
23	23	04032423.d	1.	04032419-07 5mL	IS/S 1uL #423	24 Mar 04 21:10
24	24	04032424.d	1.	04032419-08 5mL	IS/S 1uL #423	24 Mar 04 21:34
25	25	04032425.d	1.	04032419-09 5mL	IS/S 1uL #423	24 Mar 04 21:58
26	26	04032426.d	1.	04032419-10 5mL	IS/S 1uL #423	24 Mar 04 22:22
27	27	04032427.d	1.	LCS-1 25ppb	IS/S 1uL #423, LCS 5uL #350	24 Mar 04 22:46
28	28	04032428.d	1.	LCS-1, DUP 25ppb	IS/S 1uL #423, LCS 5uL #350	24 Mar 04 23:10
29	29	04032429.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 23:34
30	30	04032430.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	24 Mar 04 23:58

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Metals

- *Initial Calibration Verification Summary*
- *Continuing Calibration Verification Summary*
- *Duplicate Summary*
- *Matrix Spike Summary*
- *Method Blank Summary (LRB)*
- *LCS Summary (LFB)*

6630 Baltimore National Pike Baltimore, MD 21228 (800) 932-9047 (410) 747-8770 FAX (410) 788-8723

Batch QC Summary Report

Batch ID:	469	Date:	03/29/04	QC Sample:	04032603-04

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec
Antimony	0	97	65 - 141	101.3	70 - 130	0.0	20	94.1
Arsenic	0	93	67 - 118	97.9	70 - 130	0.0	20	91.2
Beryllium	0	109	75 - 128	113.7	70 - 130	0.0	20	107.6
Cadmium	0	93	64 - 119	98.5	70 - 130	0.0	20	91.4
Chromium	0	94	66 - 118	102.1	70 - 130	1.6	20	95.2
Copper	2.61	116	56 - 140	104.7	70 - 130	16.6	20	99.0
Lead	0	99	65 - 123	105.6	70 - 130	0.0	20	99.5
Mercury	0.12	95	45 - 140	98.0	70 - 130	0.0	20	90.0
Nickel	4.69	110	54 - 144	102.5	70 - 130	0.0	20	95.2
Selenium	0	90	63 - 124	91.6	70 - 130	0.0	20	85.9
Silver	0	104	50 - 133	106.4	70 - 130	0.0	20	95.1
Thallium	0	97	74 - 114	102.8	70 - 130	0.0	20	99.0
Zinc	2.03	115	31 - 166	97.6	70 - 130	3.9	20	155.5

QC Comments:

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec

Associated Samples:

Lab ID	Client ID	Test Group
04032219-17	6937-S-17	PP Metals in Water
04032310-02	MW-7-032204	PP Metals in Water
04032310-03	DMW-11S-032204	PP Metals in Water
04032310-04	DMW-11I-032204	PP Metals in Water
04032310-05	MW-3-032204	PP Metals in Water
04032310-06	MW-1-032204	PP Metals in Water
04032310-07	DMW-8D-032304	PP Metals in Water
04032310-08	DMW-4D-032304	PP Metals in Water
04032603-02	DMW-5I-032404	PP Metals in Water
04032603-04	DMW-5D-032404	PP Metals in Water
04032603-06	DMW-5S-032404	PP Metals in Water
04032603-08	DMW-4I-032404	PP Metals in Water
04032603-10	MW-4-032504	PP Metals in Water
04032603-12	DMW-9D-032504	PP Metals in Water
04032603-14	DMW-9S-032504	PP Metals in Water
04032603-16	DMW-2S-032504	PP Metals in Water
04032603-18	DMW-4S-032404	PP Metals in Water
04032616-01	MW-5	PADEP Leaded/Aviation/Jet Fuel in Wate

QC Comments:

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\006ICV1.D\006ICV1.D#
Date Acquired: Mar 30 2004 09:33 am
Acq. Method: 330.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 09:31 am
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.07	ppb	2.95	50.00	90 - 110	
52 Cr	49.39	ppb	0.67	50.00	90 - 110	
60 Ni	49.88	ppb	0.24	50.00	90 - 110	
63 Cu	49.44	ppb	1.00	50.00	90 - 110	
66 Zn	50.55	ppb	0.52	50.00	90 - 110	
75 As	49.66	ppb	0.21	50.00	90 - 110	
82 Se	48.90	ppb	1.51	50.00	90 - 110	
107 Ag	48.76	ppb	1.07	50.00	90 - 110	
111 Cd	48.91	ppb	1.72	50.00	90 - 110	
121 Sb	49.55	ppb	0.44	50.00	90 - 110	
202 Hg	1.94	ppb	0.90	2.00	90 - 110	
205 Tl	49.22	ppb	4.50	50.00	90 - 110	
208 Pb	49.11	ppb	2.13	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3256934	3.45	3453125	94.3	30 - 140	
45 Sc	5658794	2.12	6062495	93.3	30 - 140	
72 Ge	1501504	1.33	1596533	94.0	30 - 140	
115 In	12223247	0.81	12954590	94.4	30 - 140	
159 Tb	17111600	1.60	17934468	95.4	30 - 140	
209 Bi	10129979	1.39	10533230	96.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

Calibration Report

Calibration : Z:\040330A.B\330.C
Last Calib: Mar 30, 2004 11:18
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040330a.b\002calb.d\	002calb.d#	Mar 30 2004 09:15 am
2	...chem\1\data\040330a.b\003cals.d\	003cals.d#	Mar 30 2004 09:19 am
3	...chem\1\data\040330a.b\004cals.d\	004cals.d#	Mar 30 2004 09:24 am
4	...chem\1\data\040330a.b\005cals.d\	005cals.d#	Mar 30 2004 09:29 am
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
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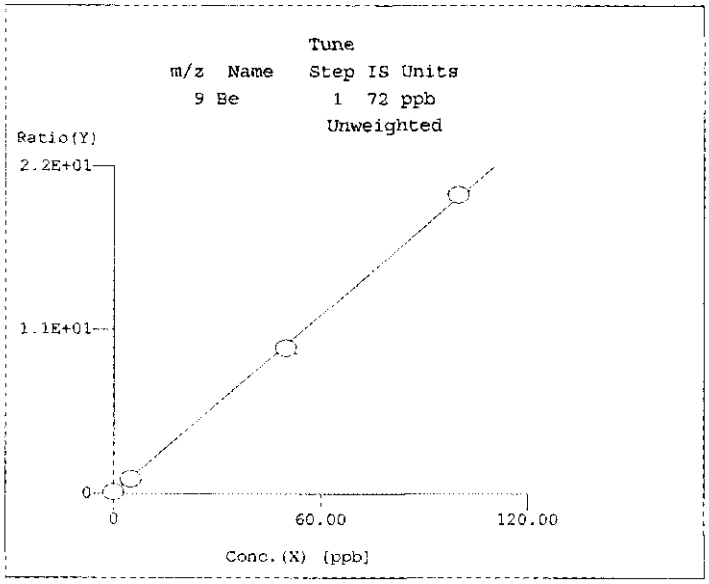
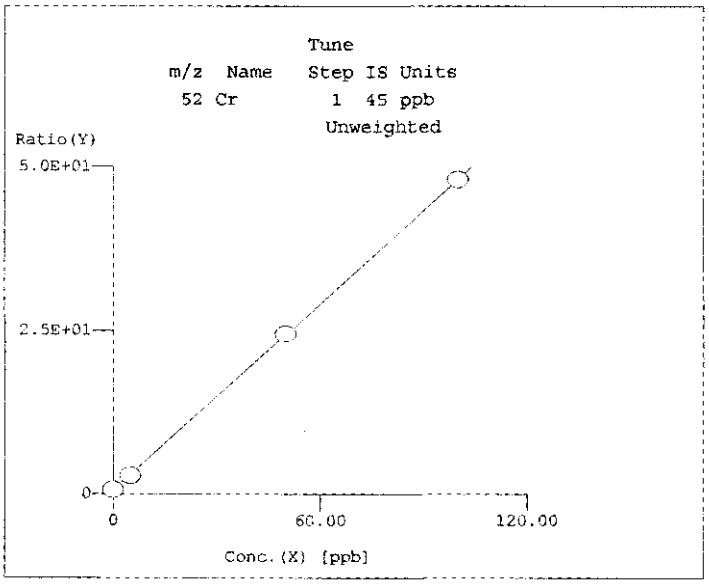
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		



Lv.	Conc.	Ratio		RSD %
1	0.00	8.23E-2	P	5.51
2	5.00	9.58E-1	P	2.31
3	50.00	9.76E+0	P	3.60
4	100.00	2.01E+1	P	1.57
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.987E-1*X +8.233E-2
X = 5.034E+0*Y -4.144E-1

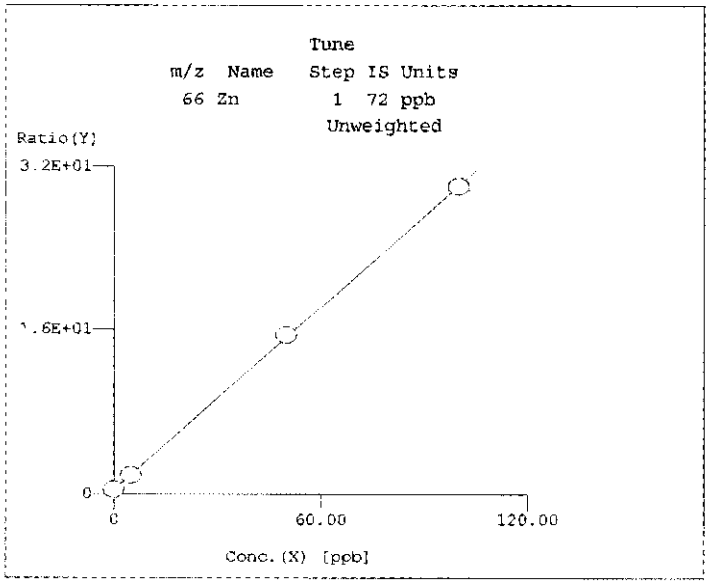
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	6.02E-1	P	8.47E-1
2	5.00	2.74E+0	P	4.51E-2
3	50.00	2.45E+1	A	1.16
4	100.00	4.80E+1	A	4.64E-1
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 4.749E-1*X +6.016E-1
X = 2.106E+0*Y -1.267E+0

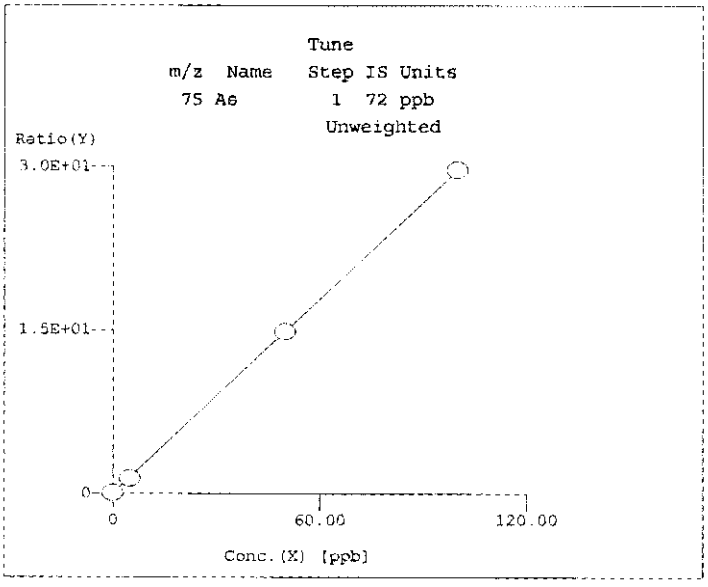
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.11E-1 P	2.69
2	5.00	1.81E+0 P	8.94E-1
3	50.00	1.55E+1 P	4.22E-1
4	100.00	3.01E+1 P	1.15
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.973E-1*X +4.110E-1
X = 3.363E+0*Y -1.382E+0

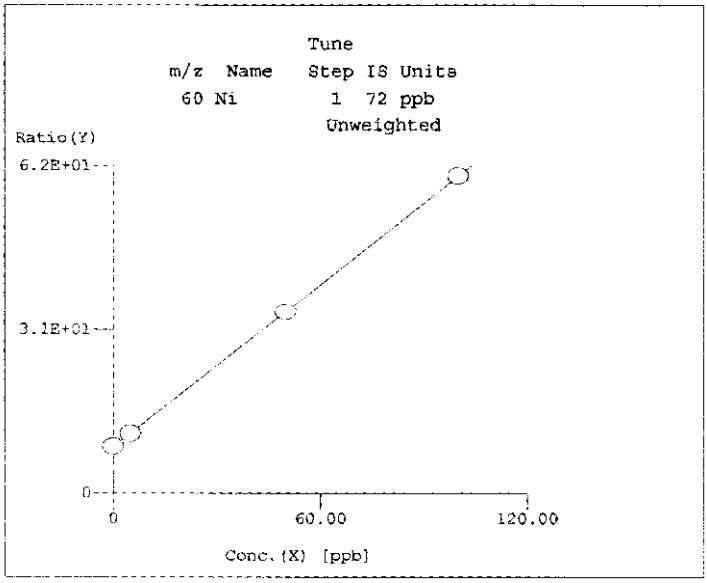
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.12E-2 P	40.40
2	5.00	1.39E+0 P	2.14
3	50.00	1.48E+1 P	6.14E-1
4	100.00	2.97E+1 P	1.01
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.961E-1*X +5.118E-2
X = 3.377E+0*Y -1.728E-1

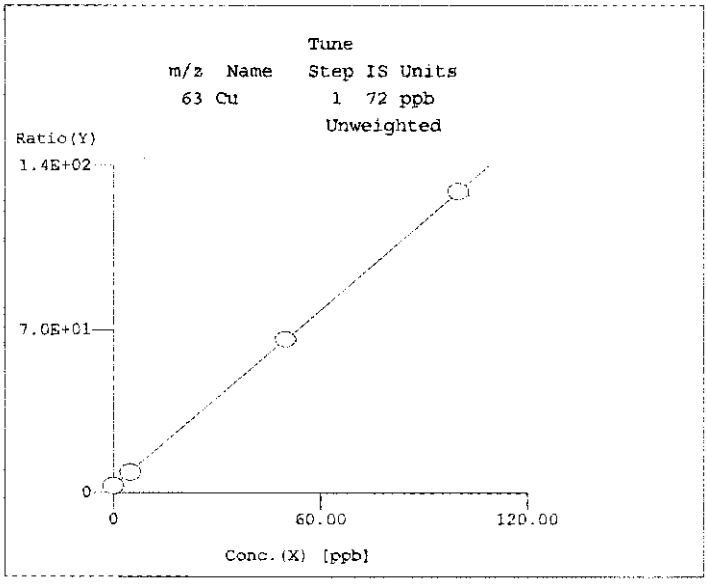
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	8.87E+0	P	9.22E-1
2	5.00	1.13E+1	P	2.49E-1
3	50.00	3.44E+1	P	1.17
4	100.00	6.01E+1	A	1.37
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 5.119E-1*X +8.874E+0
X = 1.953E+0*Y -1.733E+1

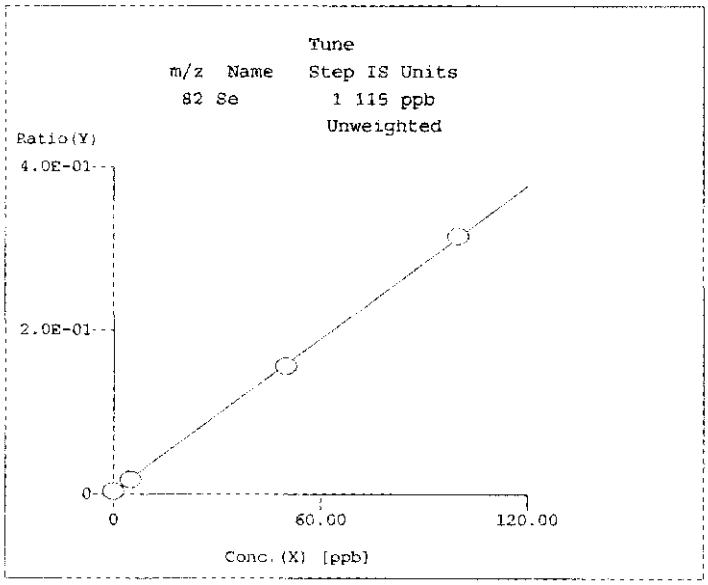
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.84E+0	P	1.05
2	5.00	8.66E+0	P	1.64
3	50.00	6.58E+1	A	1.41
4	100.00	1.29E+2	A	1.11
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.259E+0*X +2.844E+0
X = 7.940E-1*Y -2.258E+0

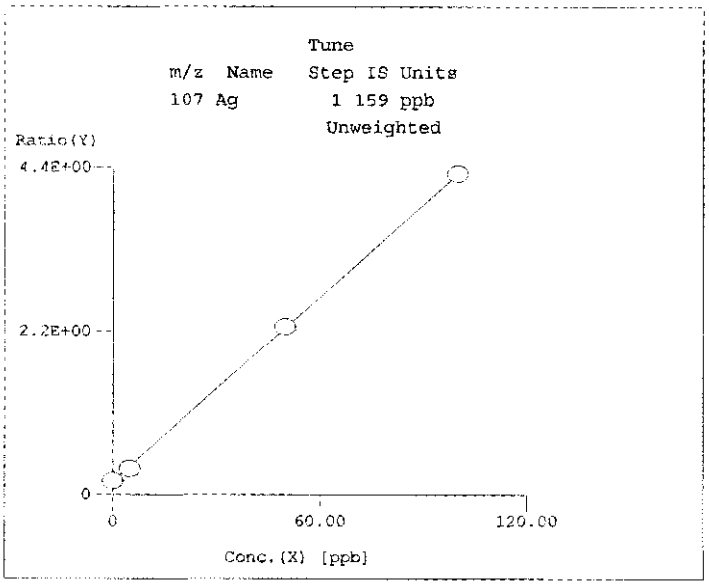
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.40E-3 P	2.23
2	5.00	1.74E-2 P	7.58E-1
3	50.00	1.56E-1 P	5.48E-1
4	100.00	3.16E-1 P	8.30E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.106E-3*X +3.404E-3
X = 3.220E+2*Y -1.096E+0

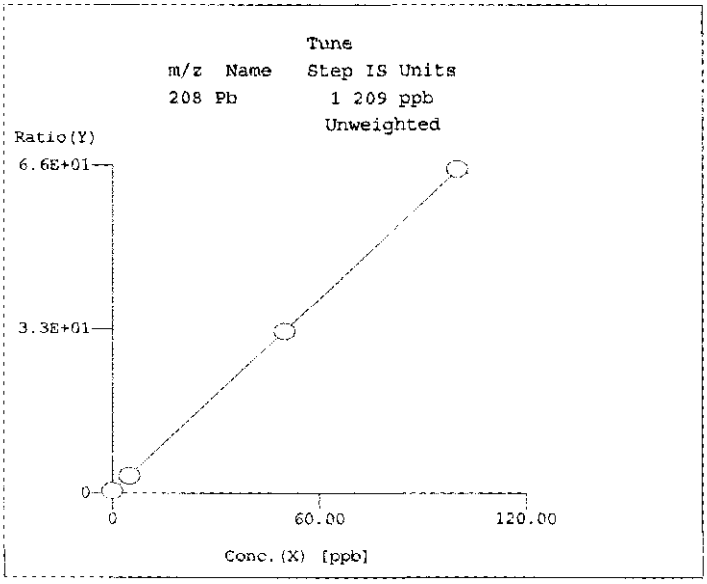
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.82E-1 P	5.84E-1
2	5.00	3.48E-1 P	3.78E-1
3	50.00	2.26E+0 P	1.99
4	100.00	4.31E+0 P	7.67E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.134E-2*X +1.819E-1
X = 2.419E+1*Y -4.399E+0

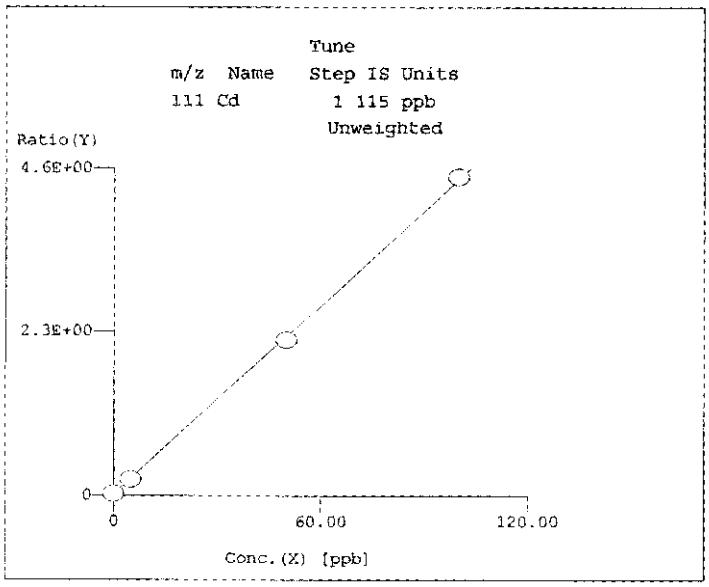
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.81E-1 P	1.26
2	5.00	3.36E+0 P	9.26E-1
3	50.00	3.25E+1 A	3.86E-1
4	100.00	6.52E+1 A	1.21
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 6.472E-1*X +3.812E-1
X = 1.545E+0*Y -5.890E-1

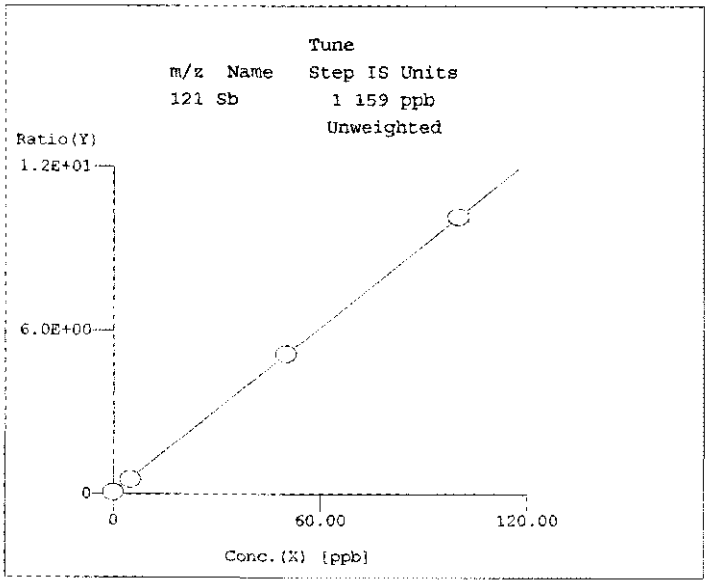
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.45E-2 P	2.69
2	5.00	2.24E-1 P	1.13
3	50.00	2.18E+0 P	5.66E-1
4	100.00	4.48E+0 P	5.18E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.425E-2*X +2.453E-2
X = 2.260E+1*Y -5.543E-1

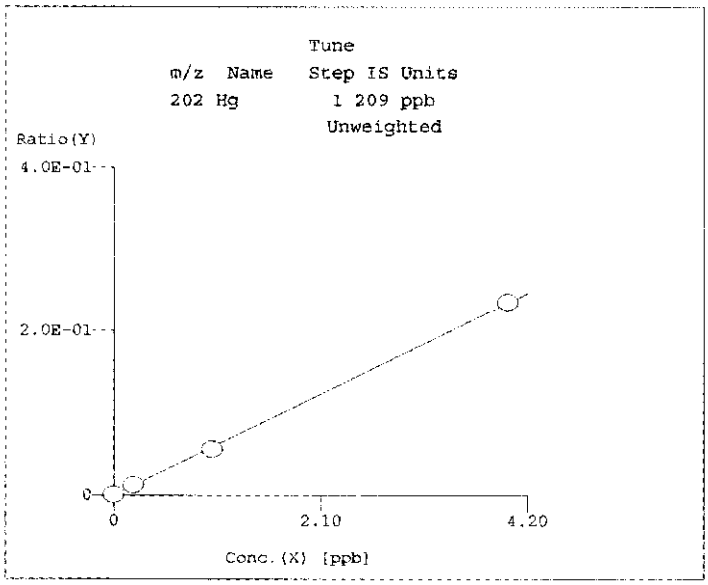
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.16E-2 P	2.02
2	5.00	5.13E-1 P	1.69
3	50.00	5.11E+0 P	1.45
4	100.00	1.02E+1 A	1.65
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.012E-1*X +5.159E-2
X = 9.886E+0*Y -5.100E-1

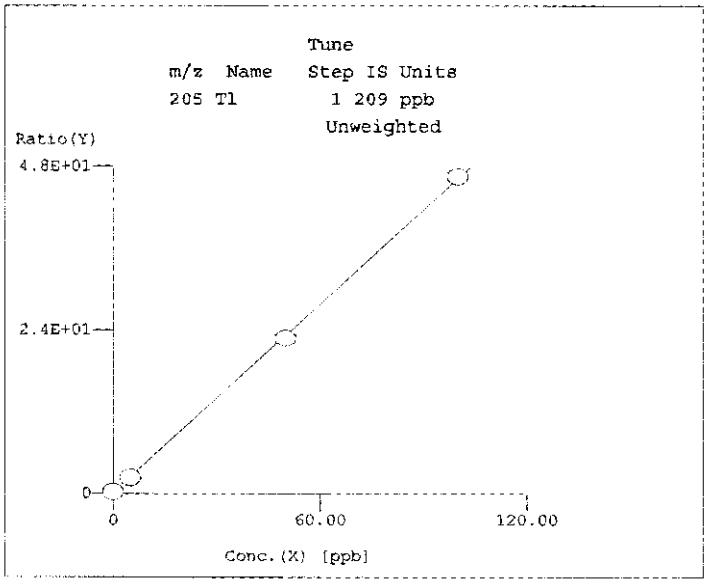
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	6.69E-4	P	6.29
2	2.00E-1	1.24E-2	P	3.75E-1
3	1.00	5.60E-2	P	3.42E-1
4	4.00	2.35E-1	P	1.81
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 5.845E-2*X +6.692E-4
X = 1.711E+1*Y -1.145E-2

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.22E-1	P	1.40
2	5.00	2.30E+0	P	1.94
3	50.00	2.28E+1	A	2.80
4	100.00	4.65E+1	A	1.49
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.600E-1*X +2.224E-1
X = 2.174E+0*Y -4.835E-1

MinConc: 0.00

CCV QC Report

Data File: z:\040330A.B\023CCV1.D\023CCV1.D#
Date Acquired: Mar 30 2004 10:57 am
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal Update: Mar 30 2004 11:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.68	ppb	2.34	50.00	90 - 110	Fail
52 Cr	48.72	ppb	2.88	50.00	90 - 110	
60 Ni	51.54	ppb	2.43	50.00	90 - 110	
63 Cu	51.29	ppb	2.00	50.00	90 - 110	
66 Zn	50.27	ppb	2.04	50.00	90 - 110	
75 As	49.80	ppb	1.14	50.00	90 - 110	
82 Se	52.12	ppb	0.81	50.00	90 - 110	
107 Ag	52.96	ppb	0.85	50.00	90 - 110	
111 Cd	49.97	ppb	0.72	50.00	90 - 110	
121 Sb	51.38	ppb	1.77	50.00	90 - 110	
202 Hg	1.92	ppb	0.64	2.00	90 - 110	
205 Tl	49.47	ppb	3.72	50.00	90 - 110	
208 Pb	50.49	ppb	0.21	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4180418	1.84	3453125	121.1	30 - 140	
45 Sc	6805005	1.13	6062495	112.2	30 - 140	
72 Ge	1689091	1.83	1596533	105.8	30 - 140	
115 In	12884429	1.44	12954590	99.5	30 - 140	
159 Tb	17437660	2.34	17934468	97.2	30 - 140	
209 Bi	10318802	1.66	10533230	98.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\038CCV1.D\038CCV1.D#
Date Acquired: Mar 30 2004 12:09 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.39	ppb	0.90	50.00	90 - 110	Fail
52 Cr	47.95	ppb	0.82	50.00	90 - 110	
60 Ni	50.93	ppb	0.97	50.00	90 - 110	
63 Cu	48.64	ppb	0.16	50.00	90 - 110	
66 Zn	49.30	ppb	0.19	50.00	90 - 110	
75 As	49.48	ppb	1.20	50.00	90 - 110	
82 Se	50.08	ppb	1.16	50.00	90 - 110	
107 Ag	48.61	ppb	1.00	50.00	90 - 110	
111 Cd	49.21	ppb	0.28	50.00	90 - 110	
121 Sb	49.96	ppb	1.13	50.00	90 - 110	
202 Hg	1.91	ppb	0.56	2.00	90 - 110	
205 Tl	48.68	ppb	1.41	50.00	90 - 110	
208 Pb	49.54	ppb	0.64	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3594259	1.76	3453125	104.1	30 - 140	
45 Sc	5761113	1.05	6062495	95.0	30 - 140	
72 Ge	1434554	1.33	1596533	89.9	30 - 140	
115 In	11301928	1.16	12954590	87.2	30 - 140	
159 Tb	15443765	2.04	17934468	86.1	30 - 140	
209 Bi	9485947	1.97	10533230	90.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\051CCV1.D\051CCV1.D#
Date Acquired: Mar 30 2004 01:11 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.85	ppb	0.65	50.00	90 - 110	Fail
52 Cr	49.02	ppb	0.85	50.00	90 - 110	
60 Ni	51.84	ppb	0.35	50.00	90 - 110	
63 Cu	49.89	ppb	1.11	50.00	90 - 110	
66 Zn	50.38	ppb	0.21	50.00	90 - 110	
75 As	50.34	ppb	0.36	50.00	90 - 110	
82 Se	50.95	ppb	2.07	50.00	90 - 110	
107 Ag	50.24	ppb	1.64	50.00	90 - 110	
111 Cd	50.02	ppb	1.74	50.00	90 - 110	
121 Sb	50.96	ppb	1.04	50.00	90 - 110	
202 Hg	1.94	ppb	0.28	2.00	90 - 110	
205 Tl	50.70	ppb	2.21	50.00	90 - 110	
208 Pb	50.72	ppb	0.24	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3494882	1.02	3453125	101.2	30 - 140	
45 Sc	5654023	2.26	6062495	93.3	30 - 140	
72 Ge	1397904	0.91	1596533	87.6	30 - 140	
115 In	11073134	2.39	12954590	85.5	30 - 140	
159 Tb	15158941	2.00	17934468	84.5	30 - 140	
209 Bi	9501835	1.88	10533230	90.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\064CCV1.D\064CCV1.D#
Date Acquired: Mar 30 2004 02:13 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	61.55	ppb	0.53	50.00	90 - 110	Fail
52 Cr	48.71	ppb	1.41	50.00	90 - 110	
60 Ni	51.29	ppb	0.50	50.00	90 - 110	
63 Cu	50.07	ppb	0.71	50.00	90 - 110	
66 Zn	50.19	ppb	0.80	50.00	90 - 110	
75 As	50.45	ppb	0.85	50.00	90 - 110	
82 Se	50.00	ppb	1.28	50.00	90 - 110	
107 Ag	48.43	ppb	1.60	50.00	90 - 110	
111 Cd	49.48	ppb	1.02	50.00	90 - 110	
121 Sb	50.08	ppb	1.28	50.00	90 - 110	
202 Hg	1.92	ppb	0.75	2.00	90 - 110	
205 Tl	49.99	ppb	1.93	50.00	90 - 110	
208 Pb	50.28	ppb	0.83	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3463691	2.25	3453125	100.3	30 - 140	
45 Sc	5100690	1.27	6062495	84.1	30 - 140	
72 Ge	1243472	1.09	1596533	77.9	30 - 140	
115 In	10143256	1.89	12954590	78.3	30 - 140	
159 Tb	14035936	1.95	17934468	78.3	30 - 140	
209 Bi	8964708	1.39	10533230	85.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\043DUP1.D\043DUP1.D#
Date Acquired: Mar 30 2004 12:32 pm
Acq. Method: 330.M
Operator:
Sample Name: DUP
Misc Info: BATCH 469
Vial Number: 2204
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: Dupl
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	-0.31	ppb	1.32	-0.29	-4.96	20	<PQL
52 Cr	6.78	ppb	0.91	6.67	1.61	20	
60 Ni	-2.45	ppb	8.94	-2.35	-4.04	20	<PQL
63 Cu	0.72	ppb	6.98	0.85	16.55	20	<PQL
66 Zn	20.65	ppb	0.92	19.86	3.90	20	
75 As	-0.50	ppb	4.07	-0.48	-3.87	20	<PQL
82 Se	-0.30	ppb	10.91	-0.23	-24.69	20	<PQL
107 Ag	-3.64	ppb	1.07	-3.54	-2.92	20	<PQL
111 Cd	-0.30	ppb	1.17	-0.28	-8.45	20	<PQL
121 Sb	-0.34	ppb	2.80	-0.34	-0.56	20	<PQL
202 Hg	0.01	ppb	23.60	0.01	27.73	20	<PQL
205 Tl	-0.31	ppb	6.33	-0.22	-32.77	20	<PQL
208 Pb	-0.37	ppb	0.40	-0.37	-0.40	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3358814	2.05	3453125	97.3	30 - 140	
45 Sc	5256583	1.28	6062495	86.7	30 - 140	
72 Ge	1325695	1.56	1596533	83.0	30 - 140	
115 In	10581527	1.13	12954590	81.7	30 - 140	
159 Tb	14798868	2.13	17934468	82.5	30 - 140	
209 Bi	9224531	1.51	10533230	87.6	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#
Date Acquired:	Mar 30 2004 12:28 pm
Acq. Method:	330.M
Operator:	Lisa Miller
Sample Name:	04032603-04
Misc Info:	BATCH 469
Vial Number:	2203
Current Method:	C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File:	C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update:	Mar 30 2004 10:18 am
Sample Type:	AllRef
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.29	-0.29	ppb	7.28	8000.00	
52 Cr	6.67	6.67	ppb	0.46	40000.00	
60 Ni	-2.35	-2.35	ppb	7.49	8000.00	
63 Cu	0.85	0.85	ppb	10.45	8000.00	
66 Zn	19.86	19.86	ppb	1.41	8000.00	
75 As	-0.48	-0.48	ppb	10.40	8000.00	
82 Se	-0.23	-0.23	ppb	3.60	8000.00	
107 Ag	-3.54	-3.54	ppb	0.59	8000.00	
111 Cd	-0.28	-0.28	ppb	2.72	8000.00	
121 Sb	-0.34	-0.34	ppb	0.46	8000.00	
202 Hg	0.01	0.01	ppb	4.66	8.00	
205 Tl	-0.22	-0.22	ppb	13.52	8000.00	
208 Pb	-0.37	-0.37	ppb	0.61	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3292478	1.19	3453125	95.3	30 - 140	
45 Sc	5396495	1.38	6062495	89.0	30 - 140	
72 Ge	1354252	1.58	1596533	84.8	30 - 140	
115 In	10806438	0.37	12954590	83.4	30 - 140	
159 Tb	14865526	2.09	17934468	82.9	30 - 140	
209 Bi	9192087	1.33	10533230	87.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

LFM Sample QC Report

Data File: z:\040330A.B\044LFM1.D\044LFM1.D#
Date Acquired: Mar 30 2004 12:37 pm
Acq. Method: 330.M
Operator:
Sample Name: LFM
Misc Info: BATCH 469
Vial Number: 2205
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal. Update: Mar 30 2004 11:18 am
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	56.86	ppb	-0.29	0.55	50.00	114.3	75 - 125	
52 Cr	57.74	ppb	6.67	0.96	50.00	102.1	75 - 125	
60 Ni	51.25	ppb	-2.35	0.90	50.00	107.2	75 - 125	
63 Cu	53.20	ppb	0.85	0.94	50.00	104.7	75 - 125	
66 Zn	68.65	ppb	19.86	0.63	50.00	97.6	75 - 125	
75 As	48.93	ppb	-0.48	0.95	50.00	98.8	75 - 125	
82 Se	45.81	ppb	-0.23	0.44	50.00	92.1	75 - 125	
107 Ag	53.22	ppb	-3.54	0.47	50.00	113.5	75 - 125	
111 Cd	49.23	ppb	-0.28	0.07	50.00	99.0	75 - 125	
121 Sb	50.66	ppb	-0.34	0.75	50.00	102.0	75 - 125	
202 Hg	0.99	ppb	0.01	2.06	1.00	98.1	75 - 125	
205 Tl	51.38	ppb	-0.22	1.70	50.00	103.2	75 - 125	
208 Pb	52.80	ppb	-0.37	1.33	50.00	106.3	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3317497	0.60	3453125	96.1	30 - 140	
45 Sc	5285478	1.71	6062495	87.2	30 - 140	
72 Ge	1301417	1.58	1596533	81.5	30 - 140	
115 In	10396163	1.14	12954590	80.3	30 - 140	
159 Tb	14412831	1.78	17934468	80.4	30 - 140	
209 Bi	8745192	1.98	10533230	83.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PDS Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\045PDS1.D\045PDS1.D#
Date Acquired: Mar 30 2004 12:42 pm
Acq. Method: 330.M
Operator:
Sample Name: PDS
Misc Info: BATCH 469
Vial Number: 2206
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: PDS1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	53.79	ppb	-0.29	1.99	50.00	108.2	75 - 125	
52 Cr	54.26	ppb	6.67	0.72	50.00	95.2	75 - 125	
60 Ni	47.59	ppb	-2.35	0.83	50.00	99.9	75 - 125	
63 Cu	50.35	ppb	0.85	0.15	50.00	99.0	75 - 125	
66 Zn	97.59	ppb	19.86	0.48	50.00	155.5	75 - 125	Fail
75 As	45.61	ppb	-0.48	0.32	50.00	92.2	75 - 125	
82 Se	42.96	ppb	-0.23	0.59	50.00	86.4	75 - 125	
107 Ag	47.56	ppb	-3.54	0.85	50.00	102.2	75 - 125	
111 Cd	45.71	ppb	-0.28	1.46	50.00	92.0	75 - 125	
121 Sb	47.07	ppb	-0.34	0.97	50.00	94.8	75 - 125	
202 Hg	1.81	ppb	0.01	0.58	2.00	90.2	75 - 125	
205 Tl	49.48	ppb	-0.22	2.09	50.00	99.4	75 - 125	
208 Pb	49.76	ppb	-0.37	0.14	50.00	100.3	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3402162	2.10	3453125	98.5	30 - 140	
45 Sc	5326666	1.54	6062495	87.9	30 - 140	
72 Ge	1309353	1.17	1596533	82.0	30 - 140	
115 In	10492439	1.52	12954590	81.0	30 - 140	
159 Tb	14488515	1.48	17934468	80.8	30 - 140	
209 Bi	8827008	1.30	10533230	83.8	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PB QC Report

Data File: z:\040330A.B\030__PB.D\030__PB.D#
Date Acquired: Mar 30 2004 11:31 am
Operator:
Sample Name: PB
Misc Info: BATCH 469
Vial Number: 2112
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal Update: Mar 30 2004 11:18 am
Sample Type: PB
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.39	ppb	1.25	2.50	
52 Cr	-0.20	ppb	10.32	2.50	
60 Ni	4.69	ppb	3.57	2.50	Fail
63 Cu	2.61	ppb	4.75	2.50	Fail
66 Zn	2.03	ppb	0.70	2.50	
75 As	-0.47	ppb	17.28	2.50	
82 Se	-0.22	ppb	20.08	2.50	
107 Ag	-1.85	ppb	0.91	2.50	
111 Cd	-0.33	ppb	7.73	2.50	
121 Sb	-0.31	ppb	4.33	2.50	
202 Hg	0.12	ppb	9.36	2.50	
205 Tl	-0.38	ppb	0.11	2.50	
208 Pb	-0.29	ppb	2.16	2.50	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3490681	2.62	3453125	101.1	30 - 140	
45 Sc	6182826	2.32	6062495	102.0	30 - 140	
72 Ge	1536275	1.28	1596533	96.2	30 - 140	
115 In	11949696	0.96	12954590	92.2	30 - 140	
159 Tb	15872645	2.04	17934468	88.5	30 - 140	
209 Bi	9471057	2.16	10533230	89.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au #174; IS #168

LCS QC Report

Data File: z:\040330A.B\040_LCS.D\040_LCS.D#
Date Acquired: Mar 30 2004 12:18 pm
Acq. Method: 330.M
Operator:
Sample Name: LCS
Misc Info: BATCH 469
Vial Number: 2201
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal. Update: Mar 30 2004 11:18 am
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Analyte Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	54.36	ppb	1.85	50.00	75 - 125	
52 Cr	46.80	ppb	1.86	50.00	75 - 125	
60 Ni	54.93	ppb	1.22	50.00	75 - 125	
63 Cu	58.07	ppb	0.67	50.00	75 - 125	
66 Zn	57.73	ppb	0.73	50.00	75 - 125	
75 As	46.49	ppb	0.59	50.00	75 - 125	
82 Se	44.80	ppb	0.77	50.00	75 - 125	
107 Ag	52.12	ppb	1.10	50.00	75 - 125	
111 Cd	46.59	ppb	1.53	50.00	75 - 125	
121 Sb	48.26	ppb	0.45	50.00	75 - 125	
202 Hg	0.95	ppb	0.29	1.00	75 - 125	
205 Tl	48.50	ppb	2.37	50.00	75 - 125	
208 Pb	49.36	ppb	1.14	50.00	75 - 125	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3529003	1.84	3453125	0.0	30 - 140	
45 Sc	5584355	1.04	6062495	0.0	30 - 140	
72 Ge	1366040	1.77	1596533	0.0	30 - 140	
115 In	10842810	0.90	12954590	0.0	30 - 140	
159 Tb	14693291	1.39	17934468	0.0	30 - 140	
209 Bi	8994921	0.71	10533230	0.0	30 - 140	

ISTD Ref File :

Traceability:

W: 0.1 ML #A098; 0.1 ML # A100; 0.05 ML #115
S: 1.0 ML # A098; 1.0 ML #A100; 0.5 ML #115
HCL #X13037; AU #174; IS #168;HNO3 # 82; H2O2 #X44A01

Batch QC Summary Report

Batch ID:	444	Date:	03/25/04	QC Sample:	

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC
Antimony			65 - 141	85.8	70 - 130	0.0	20			
Arsenic			67 - 118	90.5	70 - 130	0.0	20			
Beryllium			75 - 128	97.8	70 - 130	11.4	20			
Cadmium			64 - 119	88.8	70 - 130	0.1	20			
Chromium			66 - 118	88.2	70 - 130	0.0	20			
Copper			56 - 140	84.0	70 - 130	0.7	20			
Lead			65 - 123	94.0	70 - 130	1.3	20			
Mercury			45 - 140	0.5	70 - 130	0.0	20			
Nickel			54 - 144	77.2	70 - 130	2.3	20			
Selenium			63 - 124	90.6	70 - 130	3.1	20			
Silver			50 - 133	49.3	70 - 130	0.0	20			
Thallium			74 - 114	98.6	70 - 130	0.0	20			
Zinc			31 - 166	76.4	70 - 130	0.2	20			

Associated Samples:

Lab ID	Client ID	Test Group
04032310-09	MW-7-032204 (DISS)	PP Metals in Water Dissolved
04032310-10	DMW-11S-032204 (DISS)	PP Metals in Water Dissolved
04032310-11	DMW-11I-032204 (DISS)	PP Metals in Water Dissolved
04032310-12	MW-3-032204 (DISS)	PP Metals in Water Dissolved
04032310-13	MW-1-032204 (DISS)	PP Metals in Water Dissolved
04032310-14	DMW-8D-032304 (DISS)	PP Metals in Water Dissolved
04032310-15	DMW-4D-032304 (DISS)	PP Metals in Water Dissolved

QC Comments:

Poor silver recovery in LFM (matrix spike). In the presence of chloride ions silver precipitates out of solution. Mercury not added to LFM.

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\006ICV1.D\006ICV1.D#
Date Acquired: Mar 25 2004 12:25 pm
Acq. Method: 325.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal. Update: Mar 25 2004 12:23 pm
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.71	ppb	4.64	50.00	90 - 110	
52 Cr	50.31	ppb	1.45	50.00	90 - 110	
60 Ni	47.95	ppb	1.22	50.00	90 - 110	
63 Cu	48.98	ppb	1.91	50.00	90 - 110	
66 Zn	48.41	ppb	1.16	50.00	90 - 110	
75 As	50.60	ppb	0.26	50.00	90 - 110	
82 Se	50.36	ppb	1.48	50.00	90 - 110	
107 Ag	50.95	ppb	0.59	50.00	90 - 110	
111 Cd	50.81	ppb	1.05	50.00	90 - 110	
121 Sb	50.72	ppb	1.06	50.00	90 - 110	
202 Hg	2.05	ppb	2.13	2.00	90 - 110	
205 Tl	49.78	ppb	0.17	50.00	90 - 110	
208 Pb	50.28	ppb	1.11	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	309967	3.67	330698	93.7	30 - 140	
45 Sc	1082811	1.86	1105254	98.0	30 - 140	
72 Ge	346604	0.83	355691	97.4	30 - 140	
115 In	3392840	1.02	3464209	97.9	30 - 140	
159 Tb	4816669	1.50	4851636	99.3	30 - 140	
209 Bi	2387614	3.37	2338811	102.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

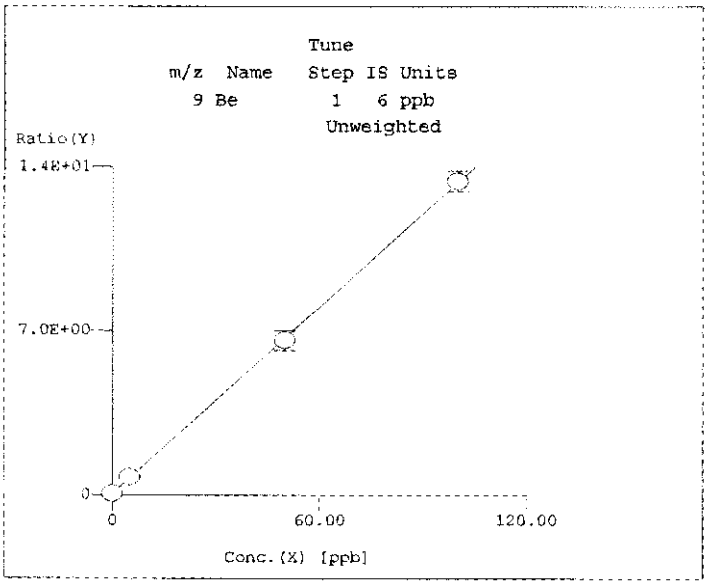
Calibration Report

Calibration : Z:\040325A.B\325.C
Last Calib: Mar 25, 2004 15:01
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040325a.b\002calb.d\	002calb.d#	Mar 25 2004 12:06 pm
2	...chem\1\data\040325a.b\003cals.d\	003cals.d#	Mar 25 2004 12:11 pm
3	...chem\1\data\040325a.b\004cals.d\	004cals.d#	Mar 25 2004 12:16 pm
4	...chem\1\data\040325a.b\005cals.d\	005cals.d#	Mar 25 2004 12:21 pm
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

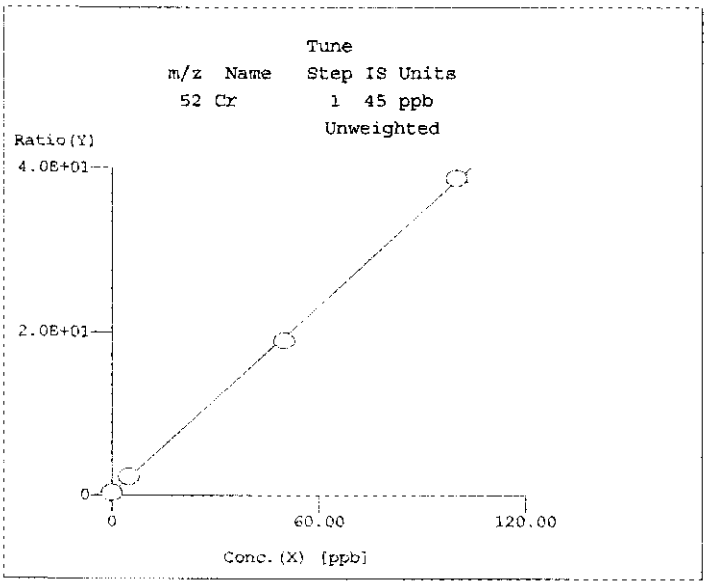
Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		



Lv.	Conc.	Ratio	RSD %
1	0.00	6.29E-2 P	22.80
2	5.00	7.66E-1 P	4.68
3	50.00	6.60E+0 P	6.36
4	100.00	1.34E+1 P	3.32
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.329E-1*X +6.288E-2
X = 7.527E+0*Y -4.733E-1

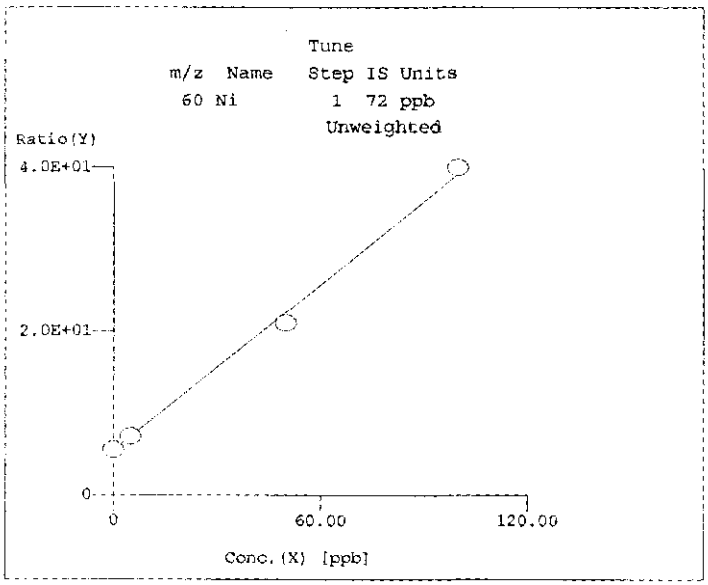
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.77E-1 P	4.46
2	5.00	2.24E+0 P	1.66
3	50.00	1.89E+1 P	3.47E-1
4	100.00	3.87E+1 P	1.19
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.818E-1*X +2.774E-1
X = 2.619E+0*Y -7.264E-1

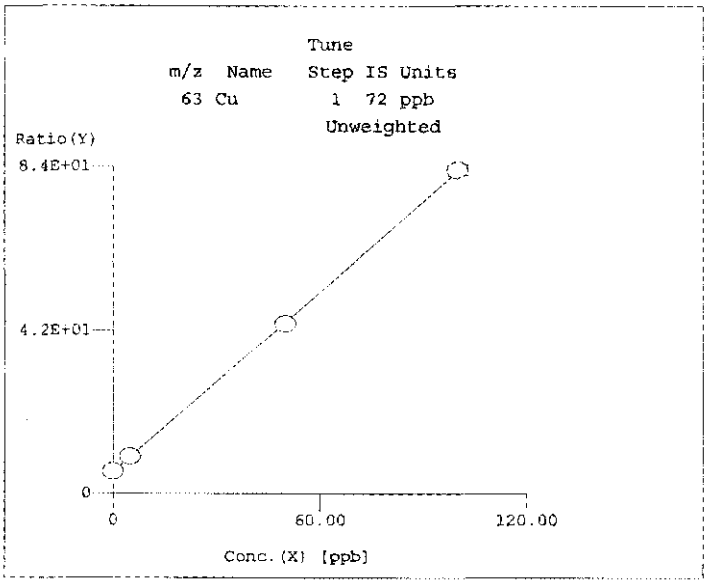
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.50E+0 P	1.32
2	5.00	7.15E+0 P	1.88
3	50.00	2.10E+1 P	4.70E-1
4	100.00	3.99E+1 P	1.10
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9986
Y = 3.376E-1*X +5.499E+0
X = 2.962E+0*Y -1.629E+1

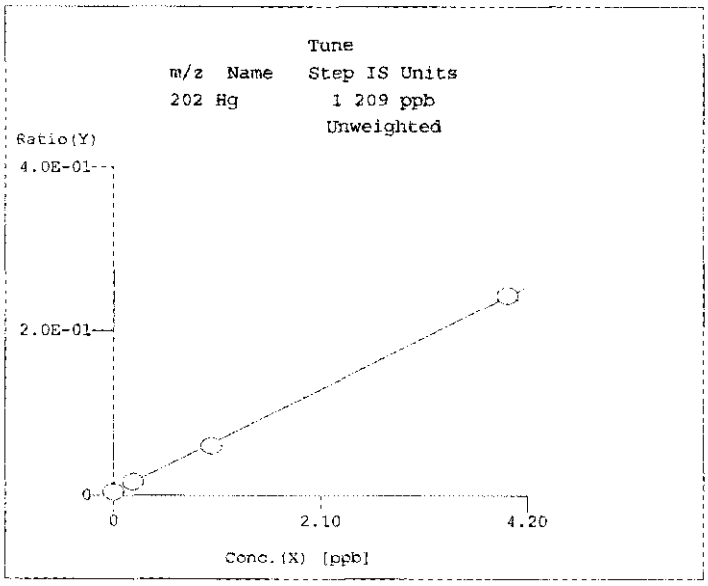
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.58E+0 P	1.87
2	5.00	9.43E+0 P	1.94
3	50.00	4.37E+1 P	2.51E-1
4	100.00	8.30E+1 P	1.55
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 7.720E-1*X +5.584E+0
X = 1.295E+0*Y -7.233E+0

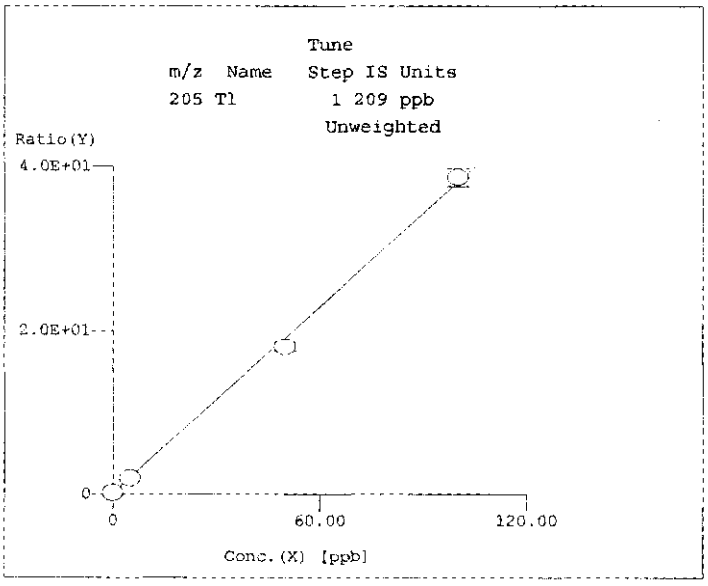
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.09E-3 P	9.96
2	2.00E-1	1.62E-2 P	3.63
3	1.00	6.04E-2 P	4.08E-1
4	4.00	2.43E-1 P	1.95
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 5.964E-2*X +4.094E-3
X = 1.677E+1*Y -6.864E-2

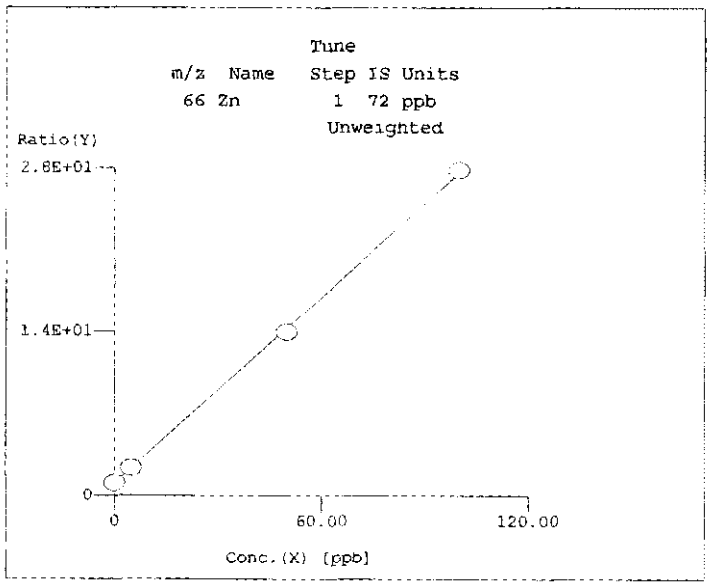
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.59E-1 P	7.49
2	5.00	1.96E+0 P	2.56
3	50.00	1.80E+1 P	2.60
4	100.00	3.87E+1 A	2.93
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9993
Y = 3.795E-1*X +1.595E-1
X = 2.635E+0*Y -4.202E-1

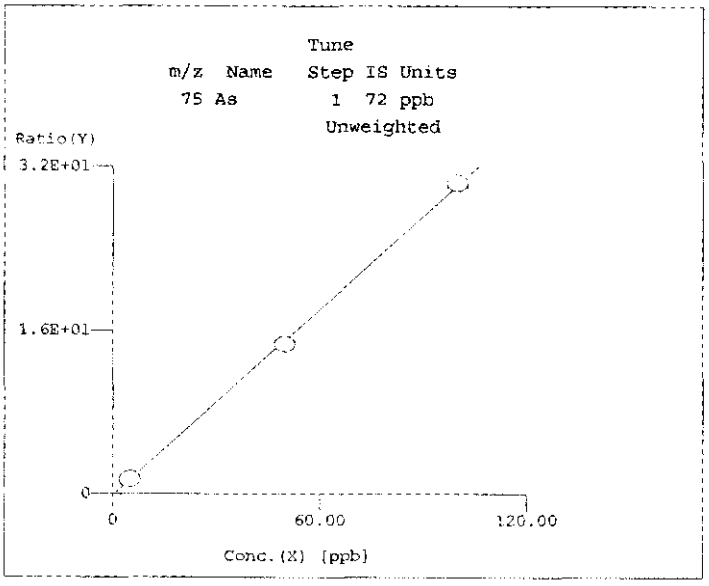
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.06E+0 P	2.37
2	5.00	2.34E+0 P	2.37
3	50.00	1.39E+1 P	4.28E-1
4	100.00	2.78E+1 P	4.65E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9998
Y = 2.654E-1*X +1.055E+0
X = 3.768E+0*Y -3.976E+0

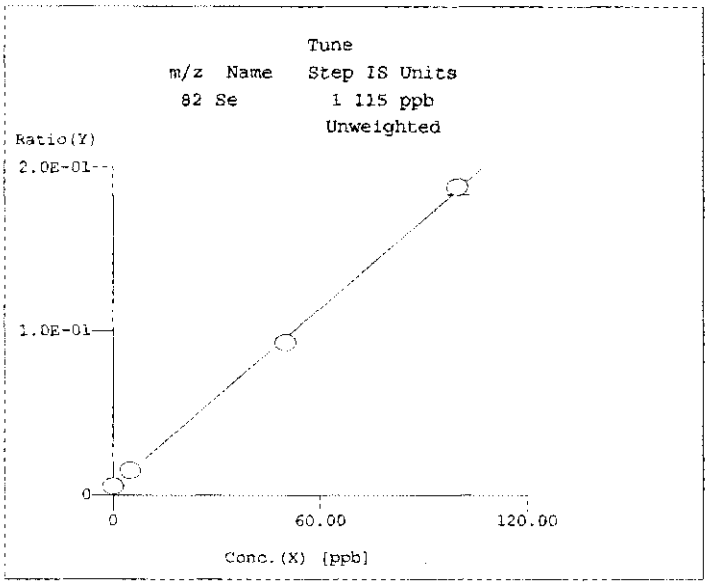
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	-1.68E-1 P	---
2	5.00	1.39E+0 P	1.31
3	50.00	1.46E+1 P	2.12E-1
4	100.00	3.04E+1 P	1.28
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.035E-1*X -1.682E-1
X = 3.295E+0*Y +5.543E-1

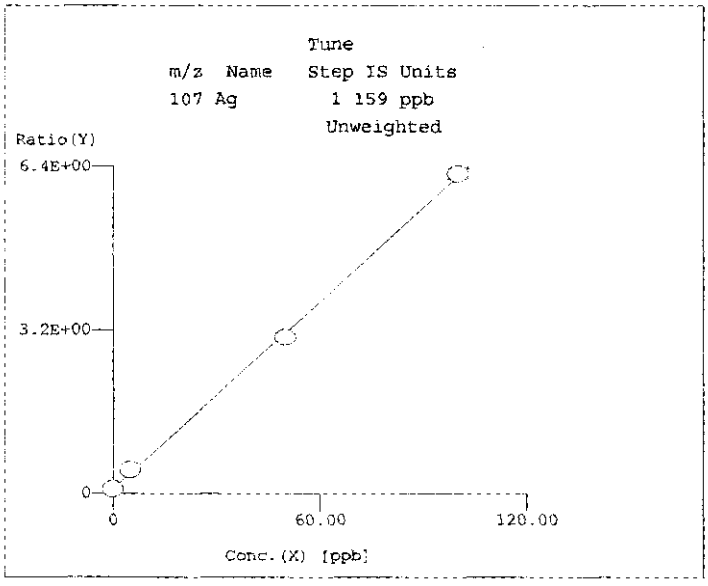
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.22E-3 P	3.25
2	5.00	1.50E-2 P	2.15
3	50.00	9.29E-2 P	8.56E-1
4	100.00	1.88E-1 P	2.35
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 1.815E-3*X +5.224E-3
X = 5.511E+2*Y -2.879E+0

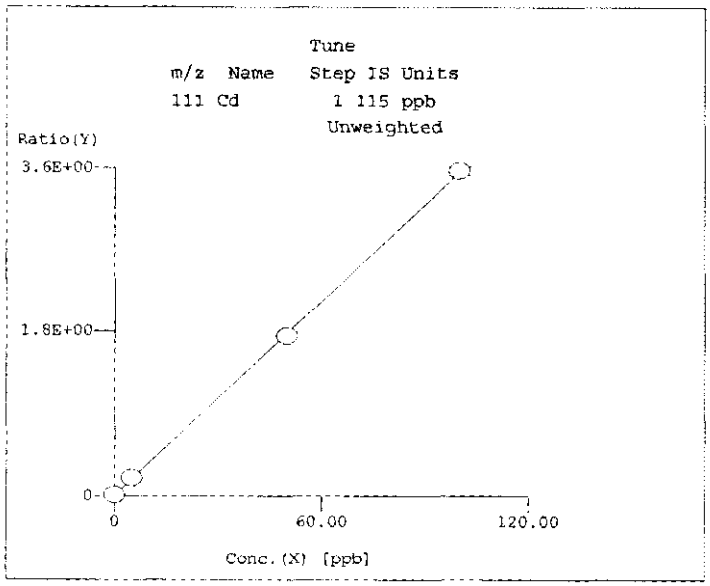
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	8.19E-2 P	6.18
2	5.00	4.54E-1 P	1.55E-1
3	50.00	3.06E+0 P	2.17E-1
4	100.00	6.26E+0 P	1.60
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 6.131E-2*X +8.193E-2
X = 1.631E+1*Y -1.336E+0

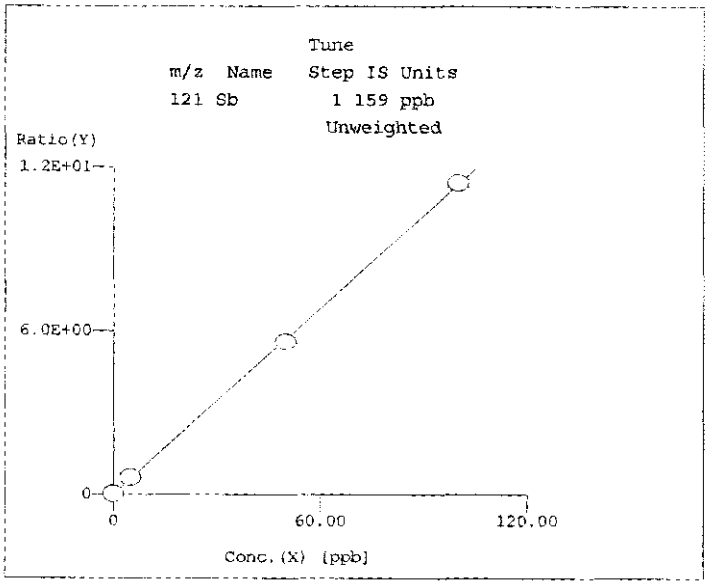
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	9.87E-3	P	7.09
2	5.00	1.97E-1	P	1.43
3	50.00	1.75E+0	P	1.26
4	100.00	3.57E+0	P	1.42
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.542E-2*X +9.873E-3
X = 2.823E+1*Y -2.788E-1

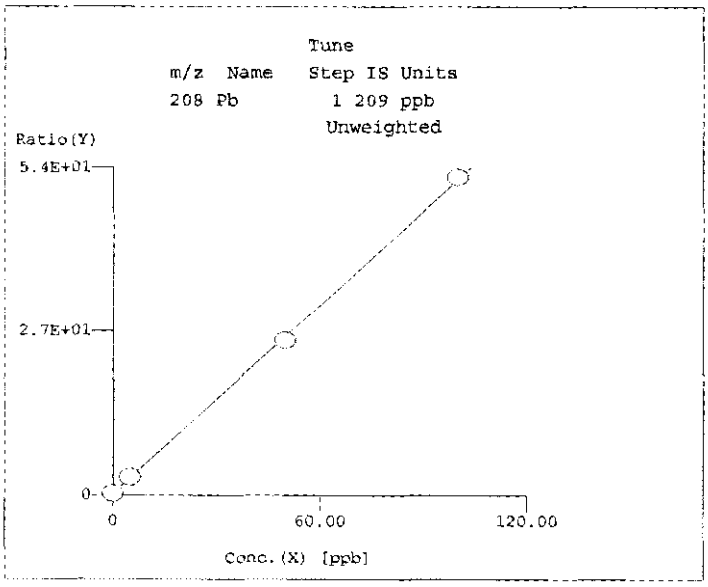
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.84E-2	P	8.21E-1
2	5.00	6.17E-1	P	1.44
3	50.00	5.59E+0	P	1.46
4	100.00	1.14E+1	P	1.28
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.135E-1*X +1.839E-2
X = 8.810E+0*Y -1.620E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.58E-1 P	3.16
2	5.00	2.92E+0 P	6.44E-1
3	50.00	2.55E+1 P	1.32
4	100.00	5.24E+1 P	6.44E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9998
Y = 5.182E-1*X +2.576E-1
X = 1.930E+0*Y -4.972E-1

MinConc: 0.00

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\022CCV1.D\022CCV1.D#
Date Acquired: Mar 25 2004 01:47 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal Update: Mar 25 2004 02:01 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	48.24	ppb	0.37	50.00	90 - 110	
52 Cr	49.53	ppb	1.68	50.00	90 - 110	
60 Ni	45.10	ppb	1.36	50.00	90 - 110	
63 Cu	49.19	ppb	0.91	50.00	90 - 110	
66 Zn	48.14	ppb	0.77	50.00	90 - 110	
75 As	49.00	ppb	0.65	50.00	90 - 110	
82 Se	48.95	ppb	1.90	50.00	90 - 110	
107 Ag	48.76	ppb	0.53	50.00	90 - 110	
111 Cd	48.89	ppb	0.43	50.00	90 - 110	
121 Sb	50.05	ppb	0.55	50.00	90 - 110	
202 Hg	0.96	ppb	2.09	1.00	90 - 110	
205 Tl	48.71	ppb	3.80	50.00	90 - 110	
208 Pb	49.20	ppb	2.02	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	277986	2.35	330698	84.1	30 - 140	
45 Sc	1054786	1.31	1105254	95.4	30 - 140	
72 Ge	347188	0.75	355691	97.6	30 - 140	
115 In	3395123	1.10	3464209	98.0	30 - 140	
159 Tb	4675026	1.06	4851636	96.4	30 - 140	
209 Bi	2239175	4.41	2338811	95.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\037CCV1.D\037CCV1.D#
Date Acquired: Mar 25 2004 03:01 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal Update: Mar 25 2004 02:01 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.01	ppb	1.33	50.00	90 - 110	
52 Cr	49.18	ppb	1.35	50.00	90 - 110	
60 Ni	45.38	ppb	1.35	50.00	90 - 110	
63 Cu	48.15	ppb	1.41	50.00	90 - 110	
66 Zn	47.28	ppb	0.61	50.00	90 - 110	
75 As	48.83	ppb	0.55	50.00	90 - 110	
82 Se	48.96	ppb	1.55	50.00	90 - 110	
107 Ag	50.49	ppb	0.86	50.00	90 - 110	
111 Cd	47.23	ppb	0.71	50.00	90 - 110	
121 Sb	51.17	ppb	0.95	50.00	90 - 110	
202 Hg	0.96	ppb	0.32	1.00	90 - 110	
205 Tl	46.39	ppb	1.46	50.00	90 - 110	
208 Pb	47.23	ppb	1.19	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	271094	3.72	330698	82.0	30 - 140	
45 Sc	1085824	2.31	1105254	98.2	30 - 140	
72 Ge	356212	1.27	355691	100.1	30 - 140	
115 In	3424824	1.34	3464209	98.9	30 - 140	
159 Tb	4461145	0.92	4851636	92.0	30 - 140	
209 Bi	2083627	1.94	2338811	89.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\050CCV1.D\050CCV1.D#
Date Acquired: Mar 25 2004 04:04 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal Update: Mar 25 2004 02:01 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.86	ppb	1.38	50.00	90 - 110	
52 Cr	50.17	ppb	1.00	50.00	90 - 110	
60 Ni	43.65	ppb	0.30	50.00	90 - 110	Fail
63 Cu	47.52	ppb	0.76	50.00	90 - 110	
66 Zn	47.92	ppb	1.54	50.00	90 - 110	
75 As	48.67	ppb	0.59	50.00	90 - 110	
82 Se	46.96	ppb	1.09	50.00	90 - 110	
107 Ag	47.00	ppb	0.82	50.00	90 - 110	
111 Cd	47.77	ppb	0.73	50.00	90 - 110	
121 Sb	49.25	ppb	0.70	50.00	90 - 110	
202 Hg	0.93	ppb	2.28	1.00	90 - 110	
205 Tl	46.08	ppb	1.82	50.00	90 - 110	
208 Pb	46.90	ppb	1.32	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	213831	5.14	330698	64.7	30 - 140	
45 Sc	896115	1.05	1105254	81.1	30 - 140	
72 Ge	307500	0.87	355691	86.5	30 - 140	
115 In	3148992	0.69	3464209	90.9	30 - 140	
159 Tb	4263654	0.83	4851636	87.9	30 - 140	
209 Bi	2129682	1.73	2338811	91.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\059CCV1.D\059CCV1.D#
Date Acquired: Mar 25 2004 04:49 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal Update: Mar 25 2004 02:01 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	48.99	ppb	4.61	50.00	90 - 110	
52 Cr	49.26	ppb	0.48	50.00	90 - 110	
60 Ni	45.25	ppb	1.47	50.00	90 - 110	
63 Cu	47.68	ppb	1.19	50.00	90 - 110	
66 Zn	47.26	ppb	0.47	50.00	90 - 110	
75 As	47.82	ppb	0.57	50.00	90 - 110	
82 Se	47.31	ppb	2.17	50.00	90 - 110	
107 Ag	47.71	ppb	2.05	50.00	90 - 110	
111 Cd	46.96	ppb	0.86	50.00	90 - 110	
121 Sb	49.08	ppb	2.43	50.00	90 - 110	
202 Hg	0.96	ppb	2.19	1.00	90 - 110	
205 Tl	47.25	ppb	3.01	50.00	90 - 110	
208 Pb	47.59	ppb	1.52	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	247276	4.92	330698	74.8	30 - 140	
45 Sc	924757	1.75	1105254	83.7	30 - 140	
72 Ge	305871	0.73	355691	86.0	30 - 140	
115 In	3026373	1.82	3464209	87.4	30 - 140	
159 Tb	4118441	2.14	4851636	84.9	30 - 140	
209 Bi	1922919	2.45	2338811	82.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\048DUP1.D\048DUP1.D#
Date Acquired: Mar 25 2004 03:55 pm
Acq. Method: 325.M
Operator:
Sample Name: DUP
Misc Info: BATCH 444
Vial Number: 2205
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal. Update: Mar 25 2004 02:01 pm
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040325A.B\047AREF.D\047AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	3.35	ppb	10.28	2.99	11.31	20	<PQL
52 Cr	5.40	ppb	1.59	5.40	0.06	20	
60 Ni	63.32	ppb	0.72	64.79	2.29	20	
63 Cu	43.35	ppb	1.40	43.67	0.74	20	
66 Zn	240.40	ppb	0.66	240.80	0.17	20	
75 As	0.35	ppb	33.75	0.38	7.04	20	<PQL
82 Se	14.02	ppb	0.45	13.59	3.11	20	
107 Ag	-1.29	ppb	0.83	-1.29	0.00	20	<PQL
111 Cd	13.89	ppb	1.18	13.88	0.07	20	
121 Sb	-0.09	ppb	8.35	-0.09	-4.02	20	<PQL
202 Hg	0.01	ppb	54.68	0.00	104.31	20	<PQL
205 Tl	-0.15	ppb	13.13	-0.13	-15.78	20	<PQL
208 Pb	3.95	ppb	2.85	4.00	1.33	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	211184	7.63	330698	63.9	30 - 140	
45 Sc	968608	2.74	1105254	87.6	30 - 140	
72 Ge	342585	1.79	355691	96.3	30 - 140	
115 In	3372751	1.39	3464209	97.4	30 - 140	
159 Tb	4975025	1.32	4851636	102.5	30 - 140	
209 Bi	2017621	2.15	2338811	86.3	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040325A.B\047AREF.D\047AREF.D#
Date Acquired:	Mar 25 2004 03:50 pm
Acq. Method:	325.M
Operator:	Lisa Miller
Sample Name:	04032310-15
Misc Info:	BATCH 444
Vial Number:	2204
Current Method:	C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File:	C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal. Update:	Mar 25 2004 02:01 pm
Sample Type:	AllRef
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	2.99	2.99	ppb	12.01	8000.00	
52 Cr	5.40	5.40	ppb	0.83	40000.00	
60 Ni	64.79	64.79	ppb	2.40	8000.00	
63 Cu	43.67	43.67	ppb	1.73	8000.00	
66 Zn	240.80	240.80	ppb	1.33	8000.00	
75 As	0.38	0.38	ppb	20.95	8000.00	
82 Se	13.59	13.59	ppb	1.84	8000.00	
107 Ag	-1.29	-1.29	ppb	0.18	8000.00	
111 Cd	13.88	13.88	ppb	1.84	8000.00	
121 Sb	-0.09	-0.09	ppb	2.76	8000.00	
202 Hg	0.00	0.00	ppb	87.86	8.00	
205 Tl	-0.13	-0.13	ppb	7.65	8000.00	
208 Pb	4.00	4.00	ppb	4.45	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	219384	4.17	330698	66.3	30 - 140	
45 Sc	967984	2.88	1105254	87.6	30 - 140	
72 Ge	345207	2.01	355691	97.1	30 - 140	
115 In	3406707	1.06	3464209	98.3	30 - 140	
159 Tb	5094845	2.63	4851636	105.0	30 - 140	
209 Bi	2034451	3.36	2338811	87.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

LFM Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040325A.B\052LFM1.D\052LFM1.D#
Date Acquired: Mar 25 2004 04:14 pm
Acq. Method: 325.M
Operator:
Sample Name: LFM
Misc Info: BATCH 444
Vial Number: 2206
Current Method: C:\ICPCHEM\1\DATA\040325A.B\325.M
Calibration File: C:\ICPCHEM\1\DATA\040325A.B\325.C
Last Cal. Update: Mar 25 2004 02:01 pm
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040325A.B\047AREF.D\047AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	51.87	ppb	2.99	3.61	50.00	97.8	75 - 125	
52 Cr	49.52	ppb	5.40	1.11	50.00	88.2	75 - 125	
60 Ni	103.40	ppb	64.79	1.11	50.00	77.2	75 - 125	
63 Cu	85.69	ppb	43.67	0.75	50.00	84.0	75 - 125	
66 Zn	279.00	ppb	240.80	0.41	50.00	76.4	75 - 125	
75 As	45.62	ppb	0.38	1.10	50.00	90.5	75 - 125	
82 Se	58.89	ppb	13.59	1.62	50.00	90.6	75 - 125	
107 Ag	24.64	ppb	-1.29	5.52	50.00	51.9	75 - 125	Fail
111 Cd	58.26	ppb	13.88	1.04	50.00	88.8	75 - 125	
121 Sb	42.92	ppb	-0.09	1.48	50.00	86.0	75 - 125	
202 Hg	0.01	ppb	0.00	24.29	2.00	0.3	75 - 125	Fail
205 Tl	49.29	ppb	-0.13	3.18	50.00	98.8	75 - 125	
208 Pb	50.99	ppb	4.00	4.13	50.00	94.0	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	211108	1.47	330698	63.8	30 - 140	
45 Sc	988586	1.67	1105254	89.4	30 - 140	
72 Ge	340992	1.23	355691	95.9	30 - 140	
115 In	3369284	0.64	3464209	97.3	30 - 140	
159 Tb	5019904	1.30	4851636	103.5	30 - 140	
209 Bi	2081903	3.99	2338811	89.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040325A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 26, 2004

PROJECT: Martin State Airport - Quarterly Sampling

Project #: N7339-0677D

CERTIFICATE OF ANALYSIS #: *04032603*

PREPARED FOR:

Tetra Tech, Inc.
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April 2, 2004

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04032603 Page 1 of 5
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5I-032404 (DISS) / 04032603-03 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**12**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**5.7**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**36**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**14**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**110**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Sample ID: DMW-5D-032404 (DISS) / 04032603-05 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	ND	ug/L	EPA 6020	50	3/29/2004	3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Celuch
Quality Assurance Chemist

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CERTIFICATE OF ANALYSIS
No. 04032603 Page 2 of 5
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5S-032404 (DISS) / 04032603-07 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**13**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**9.1**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**52**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**21**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**190**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Sample ID: DMW-4I-032404 (DISS) / 04032603-09 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**12**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**7.2**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**55**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**27**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**180**	ug/L	EPA 6020	50	3/29/2004	3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Calvi
Quality Assurance Chemist

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CERTIFICATE OF ANALYSIS
No. 04032603 Page 3 of 5
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-4-032504 (DISS) / 04032603-11 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	**8.7**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**11**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**700**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Sample ID: DMW-9D-032504 (DISS) / 04032603-13 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	ND	ug/L	EPA 6020	50	3/29/2004	3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Cohn
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CERTIFICATE OF ANALYSIS
No. 04032603 Page 4 of 5
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 (DISS) / 04032603-15 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	**5.1**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**8.1**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	ND	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Sample ID: DMW-2S-032504 (DISS) / 04032603-17 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	**200**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**97**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	**11**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**82**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**16**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**310**	ug/L	EPA 6020	50	3/29/2004	3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04032603 Page 5 of 5
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4S-032404 (DISS) / 04032603-19 / Water						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**10**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**27**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**6.9**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**120**	ug/L	EPA 6020	50	3/29/2004	3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Cahue
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CERTIFICATE OF ANALYSIS
No. 04032603 Page 1 of 32
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032404 / 04032603-01						
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromoform	ND	ug/L	EPA 8260	1		3/29/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/29/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/29/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Chloroform	ND	ug/L	EPA 8260	1		3/29/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/29/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/29/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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CERTIFICATE OF ANALYSIS
No. 04032603 Page 2 of 32
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032404 / 04032603-01						
Volatile Organic Compounds						
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/29/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/29/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/29/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Styrene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/29/2004
Toluene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Trichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/29/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/29/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/29/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/29/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/29/2004
Acetone	ND	ug/L	EPA 8260	10		3/29/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/29/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/29/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/29/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032404 / 04032603-01						
Volatile Organic Compounds						
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5I-032404 / 04032603-02						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**27**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**15**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**45**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**19**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**140**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	ND	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5I-032404 / 04032603-02						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**120**	ug/L	EPA 8260	10		3/30/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	10		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	10		3/30/2004
Toluene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**460**	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5I-032404 / 04032603-02						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	ND	ug/L	EPA 8260	10		3/30/2004
m&p-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5D-032404 / 04032603-04						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**6.7**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	ND	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromoform	ND	ug/L	EPA 8260	1		3/29/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/29/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/29/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Chloroform	ND	ug/L	EPA 8260	1		3/29/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/29/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Matrix: Water
Date Sampled: 3/24/2004
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	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5D-032404 / 04032603-04						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/29/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/29/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/29/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/29/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Styrene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/29/2004
Toluene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Trichloroethene	2	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Matrix: Water

Date Sampled: 3/24/2004
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	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5D-032404 / 04032603-04						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/29/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/29/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/29/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/29/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/29/2004
Acetone	ND	ug/L	EPA 8260	10		3/29/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/29/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/29/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/29/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Cohee
Quality Assurance Chemist

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Site Location: Martin State Airport
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Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5S-032404 / 04032603-06						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	**5.1**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**250**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**17**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**52**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**30**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**180**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	ND	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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CERTIFICATE OF ANALYSIS
No. 04032603 Page 11 of 32
Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5S-032404 / 04032603-06						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	**13**	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**1,900**	ug/L	EPA 8260	200		3/31/2004
trans-1,2-Dichloroethene	**21**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	**b 12**	ug/L	EPA 8260	10		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	**19**	ug/L	EPA 8260	10		3/30/2004
Toluene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**11,000**	ug/L	EPA 8260	200		3/31/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-5S-032404 / 04032603-06						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	**42**	ug/L	EPA 8260	10		3/30/2004
m&p-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: Matt Collier
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4I-032404 / 04032603-08						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	**7.1**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	**50**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**54**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**20**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	**15**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**72**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**35**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**380**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	ND	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4I-032404 / 04032603-08						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	**40**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	**20**	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	**98**	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**1,300**	ug/L	EPA 8260	10		3/30/2004
trans-1,2-Dichloroethene	**18**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	10		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	10		3/30/2004
Toluene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**12,000**	ug/L	EPA 8260	100		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4I-032404 / 04032603-08						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	**100**	ug/L	EPA 8260	10		3/30/2004
m&p-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-4-032504 / 04032603-10						
Priority Pollutant Metals						
Antimony	**29**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	**42**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**8.2**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**250**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	**68**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**36**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**1,800**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromoform	ND	ug/L	EPA 8260	1		3/29/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/29/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/29/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Chloroform	ND	ug/L	EPA 8260	1		3/29/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/29/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-4-032504 / 04032603-10						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/29/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
cis-1,2-Dichloroethene	1	ug/L	EPA 8260	1		3/29/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/29/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/29/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/29/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Styrene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/29/2004
Toluene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Trichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-4-032504 / 04032603-10						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/29/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/29/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/29/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/29/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/29/2004
Acetone	ND	ug/L	EPA 8260	10		3/29/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/29/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/29/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/29/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9D-032504 / 04032603-12						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	**6.7**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**11**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**14**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	**17**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**32**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**140**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	100		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	100		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	100		3/30/2004
Bromoform	ND	ug/L	EPA 8260	100		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	100		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	100		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	100		3/30/2004
Chloroform	**540**	ug/L	EPA 8260	100		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	100		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	100		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	100		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	100		3/30/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9D-032504 / 04032603-12						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	100		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	100		3/30/2004
cis-1,2-Dichloroethene	**760**	ug/L	EPA 8260	100		3/30/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	100		3/30/2004
Methylene chloride	**b 120**	ug/L	EPA 8260	100		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	100		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Styrene	ND	ug/L	EPA 8260	100		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	100		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	100		3/30/2004
Toluene	ND	ug/L	EPA 8260	100		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
Trichloroethene	**6,300**	ug/L	EPA 8260	100		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	100		3/30/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9D-032504 / 04032603-12						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Vinyl chloride	ND	ug/L	EPA 8260	100		3/30/2004
m&p-Xylene	ND	ug/L	EPA 8260	300		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	300		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	100		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	1000		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	1000		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	1000		3/30/2004
Acetone	ND	ug/L	EPA 8260	1000		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	500		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	100		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	100		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	100		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact

Reviewed By: Matt Cohee
Quality Assurance Chemist

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 / 04032603-14						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**16**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	ND	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	ND	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Semi-Volatile Organic Compounds						
Phenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Bis (2-chloroethyl) ether	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Chlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Methylphenol	**j 10**	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Bis (2-chloroisopropyl) ether	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Acetophenone	**j 7**	ug/L	EPA 8270	10	4/1/2004	4/1/2004
3,4-Methylphenol	**j 7**	ug/L	EPA 8270	10	4/1/2004	4/1/2004
N-Nitroso-di-n-propylamine	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Hexachloroethane	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Nitrobenzene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Isophorone	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Nitrophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4-Dimethylphenol	**76**	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Bis (2-chloroethoxy) methane	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4-Dichlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Naphthalene`	**20**	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4-Chloroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Hexachlorobutadiene`	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 / 04032603-14						
Semi-Volatile Organic Compounds						
Caprolactam	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4-Chloro-3-methylphenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Methylnaphthalene	j 1	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Hexachlorocyclopentadiene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4,6-Trichlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4,5-Trichlorophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
1,1-Biphenyl	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Chloronaphthalene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2-Nitroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Dimethyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,6-Dinitrotoluene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Acenaphthylene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
3-Nitroaniline	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
Acenaphthene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4-Dinitrophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
4-Nitrophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
Dibenzofuran	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
2,4-Dinitrotoluene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Diethyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Fluorene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4-Chlorophenyl phenyl ether	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4-Nitroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4,6-Dinitro-2-methylphenol	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
N-Nitrosodiphenylamine	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
4-Bromophenyl phenyl ether	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Hexachlorobenzene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Atrazine	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Pentachlorophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/1/2004
Phenanthrene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Carbazole	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Di-n-butyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004

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April 2, 2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 / 04032603-14						
Semi-Volatile Organic Compounds						
Fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Butyl benzyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
3,3-Dichlorobenzidine	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Benzo (a) anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Chrysene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Bis (2-ethylhexyl) phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Di-n-octyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Benzo (b) fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Benzo (k) fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Benzo (a) pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Indeno (1,2,3-cd) pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Dibenzo (a,h) anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Benzo (g,h,i) perylene	ND	ug/L	EPA 8270	10	4/1/2004	4/1/2004
Volatile Organic Compounds						
Benzene	**710**	ug/L	EPA 8260	100		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	100		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	100		3/30/2004
Bromoform	ND	ug/L	EPA 8260	100		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	100		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	100		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	100		3/30/2004
Chloroform	**360**	ug/L	EPA 8260	100		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	100		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	100		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	100		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	100		3/30/2004

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Tetra Tech, Inc.
April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 / 04032603-14						
Volatile Organic Compounds						
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dibromoethane	ND	ug/L	EPA 8260	100		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloroethene	**220**	ug/L	EPA 8260	100		3/30/2004
cis-1,2-Dichloroethene	**37,000**	ug/L	EPA 8260	500		3/30/2004
trans-1,2-Dichloroethene	**140**	ug/L	EPA 8260	100		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004
Ethylbenzene	**3,200**	ug/L	EPA 8260	100		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	100		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	100		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	100		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	100		3/30/2004
Styrene	ND	ug/L	EPA 8260	100		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	100		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	100		3/30/2004
Toluene	**8,600**	ug/L	EPA 8260	100		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	100		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	100		3/30/2004
1,1,2-Trichloroethane	**130**	ug/L	EPA 8260	100		3/30/2004
Trichloroethene	**2,000**	ug/L	EPA 8260	100		3/30/2004

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April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9S-032504 / 04032603-14						
Volatile Organic Compounds						
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	100		3/30/2004
1,2,4-Trimethylbenzene	**240**	ug/L	EPA 8260	100		3/30/2004
1,3,5-Trimethylbenzene	**240**	ug/L	EPA 8260	100		3/30/2004
Vinyl chloride	**20,000**	ug/L	EPA 8260	500		3/30/2004
m&p-Xylene	**17,000**	ug/L	EPA 8260	300		3/30/2004
o-Xylene	**4,300**	ug/L	EPA 8260	300		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	100		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	1000		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	1000		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	1000		3/30/2004
Acetone	ND	ug/L	EPA 8260	1000		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	500		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	100		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	100		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	100		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	100		3/30/2004

Reviewed By: Matt Colee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
j - estimated value, less than quantitation limit.

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April 2, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2S-032504 / 04032603-16						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	**220**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**120**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	**10**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**98**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**18**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**290**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	**4**	ug/L	EPA 8260	1		3/29/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromoform	ND	ug/L	EPA 8260	1		3/29/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/29/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Carbon tetrachloride	**2**	ug/L	EPA 8260	1		3/29/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Chloroform	**7**	ug/L	EPA 8260	1		3/29/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/29/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Site Location: Martin State Airport
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Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2S-032504 / 04032603-16						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/29/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloroethane	**16**	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/29/2004
cis-1,2-Dichloroethene	**910**	ug/L	EPA 8260	20		3/30/2004
trans-1,2-Dichloroethene	**5**	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/29/2004
Methylene chloride	**b 16**	ug/L	EPA 8260	1		3/29/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/29/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Styrene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Tetrachloroethene	**4**	ug/L	EPA 8260	1		3/29/2004
Toluene	**1**	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trichlorobenzene	**4**	ug/L	EPA 8260	1		3/29/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2-Trichloroethane	**1**	ug/L	EPA 8260	1		3/29/2004
Trichloroethene	**3,600**	ug/L	EPA 8260	20		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Matrix: Water
Date Sampled: 3/25/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2S-032504 / 04032603-16						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl chloride	**170**	ug/L	EPA 8260	1		3/29/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
o-Xylene	**j 2**	ug/L	EPA 8260	3		3/29/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/29/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/29/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/29/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/29/2004
Acetone	ND	ug/L	EPA 8260	10		3/29/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/29/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/29/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/29/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact
j - estimated value, less than quantitation limit.

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4S-032404 / 04032603-18						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Arsenic	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Beryllium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Cadmium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Chromium	**340**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Copper	**18**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Lead	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Mercury	ND	ug/L	EPA 6020	1	3/29/2004	3/30/2004
Nickel	**35**	ug/L	EPA 6020	20	3/29/2004	3/30/2004
Selenium	**8.5**	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Silver	ND	ug/L	EPA 6020	10	3/29/2004	3/30/2004
Thallium	ND	ug/L	EPA 6020	5	3/29/2004	3/30/2004
Zinc	**120**	ug/L	EPA 6020	50	3/29/2004	3/30/2004
Volatile Organic Compounds						
Benzene	**2**	ug/L	EPA 8260	1		3/29/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/29/2004
Bromoform	ND	ug/L	EPA 8260	1		3/29/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/29/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/29/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Chloroform	ND	ug/L	EPA 8260	1		3/29/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/29/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/29/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4S-032404 / 04032603-18						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/29/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/29/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethane	**9**	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloroethane	**22**	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloroethene	**32**	ug/L	EPA 8260	1		3/29/2004
cis-1,2-Dichloroethene	**190**	ug/L	EPA 8260	1		3/29/2004
trans-1,2-Dichloroethene	**4**	ug/L	EPA 8260	1		3/29/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/29/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/29/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/29/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/29/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Styrene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/29/2004
Tetrachloroethene	**3**	ug/L	EPA 8260	1		3/29/2004
Toluene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/29/2004
1,1,2-Trichloroethane	**2**	ug/L	EPA 8260	1		3/29/2004
Trichloroethene	**3,300**	ug/L	EPA 8260	20		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/29/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/24/2004
Date Received: 3/26/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-4S-032404 / 04032603-18						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl chloride	**57**	ug/L	EPA 8260	1		3/29/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/29/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/29/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/29/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/29/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/29/2004
Acetone	ND	ug/L	EPA 8260	10		3/29/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/29/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/29/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/29/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/29/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/29/2004

Reviewed By: Matt Cole
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1) CLIENT: Tetra Tech PHONE NO.: (916) 276-7846
PROJECT MGR: Nisha Bansal FAX NO.: ( )
EMAIL: Nisha.bansal@TetraTech.com
PROJECT NAME: Martin State Airport - Quarterly Sampling
SITE LOCATION: TN7339-0677D → Martin State Airport
PROJECT NO.: [redacted]

PSS Project #: 040326O3

PAGE 1 OF 1

(2) (3)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE (C = COMP, G = GRAB)	Preservatives Used	HCl	HNO_3	HNO_3	ICE						REMARKS
							Analysis Required	Volatile Organic Compounds (8260B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs						
	TB0324Ø4	3/24/04	ØØØØ	GW	2	G		X									
	DMW-5I-Ø324Ø4		1Ø1Ø		4			X	X	X							
	DMW-5D-Ø324Ø4		11Ø2		4			X	X	X							
	DMW-5S-Ø324Ø4		1215		4			X	X	X							
	DMW-4S-Ø324Ø4		1523		4			X	X	X							
	DMW-4I-Ø324Ø4	↓	1641		4			X	X	X							
	MW-4-Ø325Ø4	3/25/Ø4	Ø942		4			X	X	X							
	DMW-9D-Ø325Ø4		12ØØ		4			X	X	X							
	DMW-9S-Ø325Ø4		1437		5			X	X	X	X						
	DMW-2S-Ø325Ø4	↓	1555	↓	4			X	X	X							

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4) Chad C. Ly III	Date 3/26/04	Time 0815	Received By: [signature]

(4)

Requested Turnaround Time
☒ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt: ON ICE 8C
Custody Seal:
Shipping Carrier: HAND
Shipping Ticket No.:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Volatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *BFB Tune Summary*

6630 Baltimore National Pike Baltimore, MD 21228 (800) 932-9047 (410) 747-8770 FAX (410) 788-8723

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032944.D Vial: 44
Acq On : 30 Mar 2004 5:02 am Operator: MI
Sample : 04032613-01 MSD 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:30 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

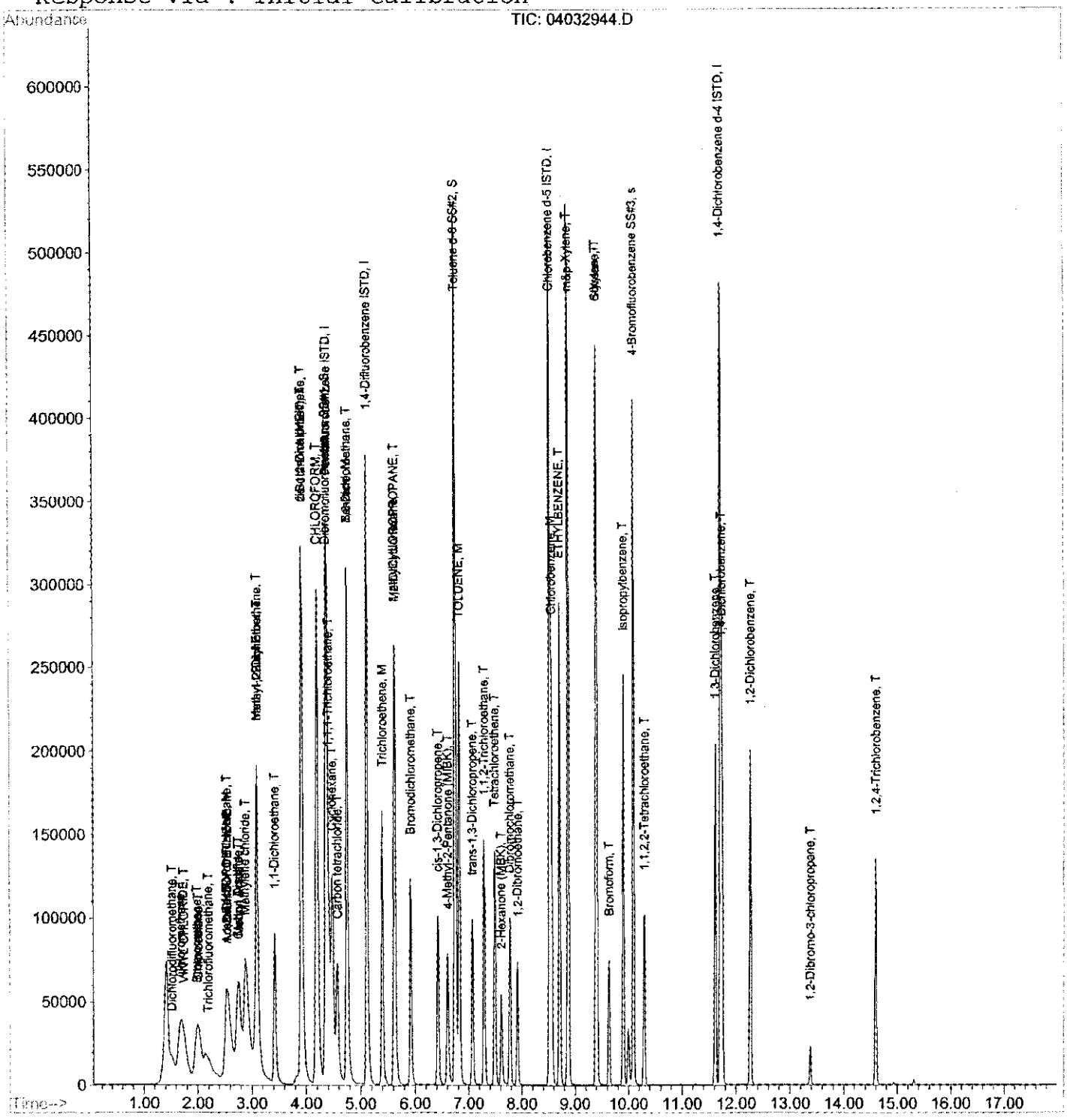
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) Trichloroethene	5.40	95	69174	22.17 ug/L	98
28) 1,2-DICHLOROPROPANE	5.62	63	75293	24.36 ug/L	99
29) Methylcyclohexane	5.63	83	66948	22.98 ug/L	99
30) Bromodichloromethane	5.91	83	90013	24.53 ug/L	100
31) cis-1,3-Dichloropropene	6.42	75	95457	22.85 ug/L	99
32) 4-Methyl-2-Pentanone (MIBK	6.60	43	98017	31.18 ug/L	100
34) TOLUENE	6.82	92	131670	24.48 ug/L	99
35) trans-1,3-Dichloropropene	7.06	75	83540	23.48 ug/L	100
36) 1,1,2-Trichloroethane	7.29	83	50428	25.94 ug/L	98
37) Tetrachloroethene	7.49	166	45169	22.95 ug/L	98
38) 2-Hexanone (MBK)	7.61	43	62686	32.14 ug/L	99
40) Dibromochloromethane	7.78	129	55522	24.35 ug/L	100
41) 1,2-Dibromoethane	7.92	107	60124	26.09 ug/L	99
42) Chlorobenzene	8.56	112	135138	23.80 ug/L	95
43) ETHYLBENZENE	8.71	91	240996	24.36 ug/L	99
44) m&p-Xylene	8.86	106	169021	24.49 ug/L	99
45) o-Xylene	9.39	106	83433	24.76 ug/L	98
46) Styrene	9.41	104	142756	24.56 ug/L	92
47) Bromoform	9.64	173	35101	26.04 ug/L	99
49) Isopropylbenzene	9.90	105	178379	23.99 ug/L	99
51) 1,1,2,2-Tetrachloroethane	10.30	83	67060	37.84 ug/L	99
52) 1,3-Dichlorobenzene	11.62	146	84485	23.62 ug/L	100
53) 1,4-Dichlorobenzene	11.74	146	87885	24.80 ug/L	99
54) 1,2-Dichlorobenzene	12.27	146	82838	24.07 ug/L	99
55) 1,2-Dibromo-3-chloropropan	13.37	75	8507	34.22 ug/L	94
56) 1,2,4-Trichlorobenzene	14.60	180	44554	27.14 ug/L	100
57) Naphthalene	14.94	128	1448	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\040329\04032944.D Vial: 44
Acq On : 30 Mar 2004 5:02 am Operator: MI
Sample : 04032613-01 MSD 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:30 2004

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration



OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MARYLAND 21228
410-747-8770
800-932-9047
410-788-8723 Fax
www.phaseonline.com

PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/30/04 **BATCH NUMBER:** VOC040330

METHOD: EPA 8260 **LAB FILE IDs:** 04033029.D
04033030.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	22	88	61-145
Benzene	25	ND	24	95	76-127
Trichloroethene	25	ND	24	94	71-120
Toluene	25	ND	23	93	76-125
Chlorobenzene	25	ND	22	87	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	92	3.8	14	61-145
Benzene	25	ND	24	97	1.4	11	76-127
Trichloroethene	25	ND	24	96	1.3	14	71-120
Toluene	25	ND	24	97	4.2	13	76-125
Chlorobenzene	25	ND	22	89	2.9	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033029.D Vial: 29
Acq On : 30 Mar 2004 10:33 pm Operator: MI
Sample : 04033017-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	111306	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	205264	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	173809	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	58711	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	68850	51.72	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.44%			
33) Toluene d-8 SS#2	6.29	98	271094	51.10	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.20%			
50) 4-Bromofluorobenzene SS#3	9.60	95	98066	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.54%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	38144	19.06	ug/L	100
3) Chloromethane	1.49	50	50305	23.48	ug/L	99
4) VINYL CHLORIDE	1.57	62	45703	21.50	ug/L	99
5) Bromomethane	1.75	94	39135	22.46	ug/L	98
6) Chloroethane	1.79	64	27801	25.43	ug/L	100
7) Trichlorofluoromethane	1.91	101	27995	22.66	ug/L	100
8) Acetone	2.27	43	13261	24.83	ug/L	93
9) 1,1-DICHLOROETHENE	2.26	96	36104	22.06	ug/L	94
10) 1,1,2-Trichlorotrifluoroet	2.26	101	27105	20.10	ug/L	99
11) Carbon Disulfide	2.44	76	137704	23.60	ug/L	97
12) Methyl Acetate	2.49	74	4424	21.55	ug/L	96
13) Methylene chloride	2.59	84	42772	21.71	ug/L	97
14) trans-1,2-Dichloroethene	2.78	96	40338	22.91	ug/L	96
15) Methyl-t-Butyl Ether	2.78	73	82345	24.64	ug/L	100
16) 1,1-Dichloroethane	3.10	63	70517	23.56	ug/L	100
17) cis-1,2-Dichloroethene	3.56	96	43192	24.56	ug/L	94
18) 2-Butanone (MEK)	3.56	43	24713	24.88	ug/L	97
19) CHLOROFORM	3.84	83	76178	23.71	ug/L	100
21) 1,1,1-Trichloroethane	4.02	97	52419	23.06	ug/L #	8
22) Cyclohexane	4.08	56	58415	22.51	ug/L	92
24) Carbon tetrachloride	4.16	117	34782	21.94	ug/L	99
25) Benzene	4.34	78	182043	23.86	ug/L	99
26) 1,2-Dichloroethane	4.35	62	59149	24.80	ug/L	98
27) Trichloroethene	4.98	95	40855	23.58	ug/L	97
28) 1,2-DICHLOROPROPANE	5.20	63	48711	24.21	ug/L	99
29) Methylcyclohexane	5.18	83	34710	19.37	ug/L	97
30) Bromodichloromethane	5.50	83	58133	24.31	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033029.D Vial: 29
Acq On : 30 Mar 2004 10:33 pm Operator: MI
Sample : 04033017-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.98	75	74650	23.41 ug/L	97
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	51666	26.01 ug/L	99
34) TOLUENE	6.37	92	95658	23.15 ug/L	98
35) trans-1,3-Dichloropropene	6.62	75	62587	23.32 ug/L	98
36) 1,1,2-Trichloroethane	6.84	83	29330	23.96 ug/L	96
37) Tetrachloroethene	7.02	166	22130	20.17 ug/L	99
38) 2-Hexanone (MBK)	7.16	43	34632	25.43 ug/L	99
40) Dibromochloromethane	7.31	129	27133	23.09 ug/L	99
41) 1,2-Dibromoethane	7.44	107	29781	23.97 ug/L	99
42) Chlorobenzene	8.08	112	85333	21.63 ug/L	93
43) ETHYLBENZENE	8.23	91	155620	21.98 ug/L	98
44) m&p-Xylene	8.38	106	100240	41.65 ug/L	92
45) o-Xylene	8.90	106	52257	22.46 ug/L	97
46) Styrene	8.92	104	95888	22.32 ug/L	91
47) Bromoform	9.15	173	16757	23.68 ug/L	100
49) Isopropylbenzene	9.40	105	93930	20.41 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.82	83	40660	23.86 ug/L	99
52) 1,3-Dichlorobenzene	11.09	146	36363	19.91 ug/L	100
53) 1,4-Dichlorobenzene	11.23	146	38266	17.65 ug/L	98
54) 1,2-Dichlorobenzene	11.74	146	35580	20.59 ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.85	75	5332	24.28 ug/L	96
56) 1,2,4-Trichlorobenzene	14.05	180	17180	18.36 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

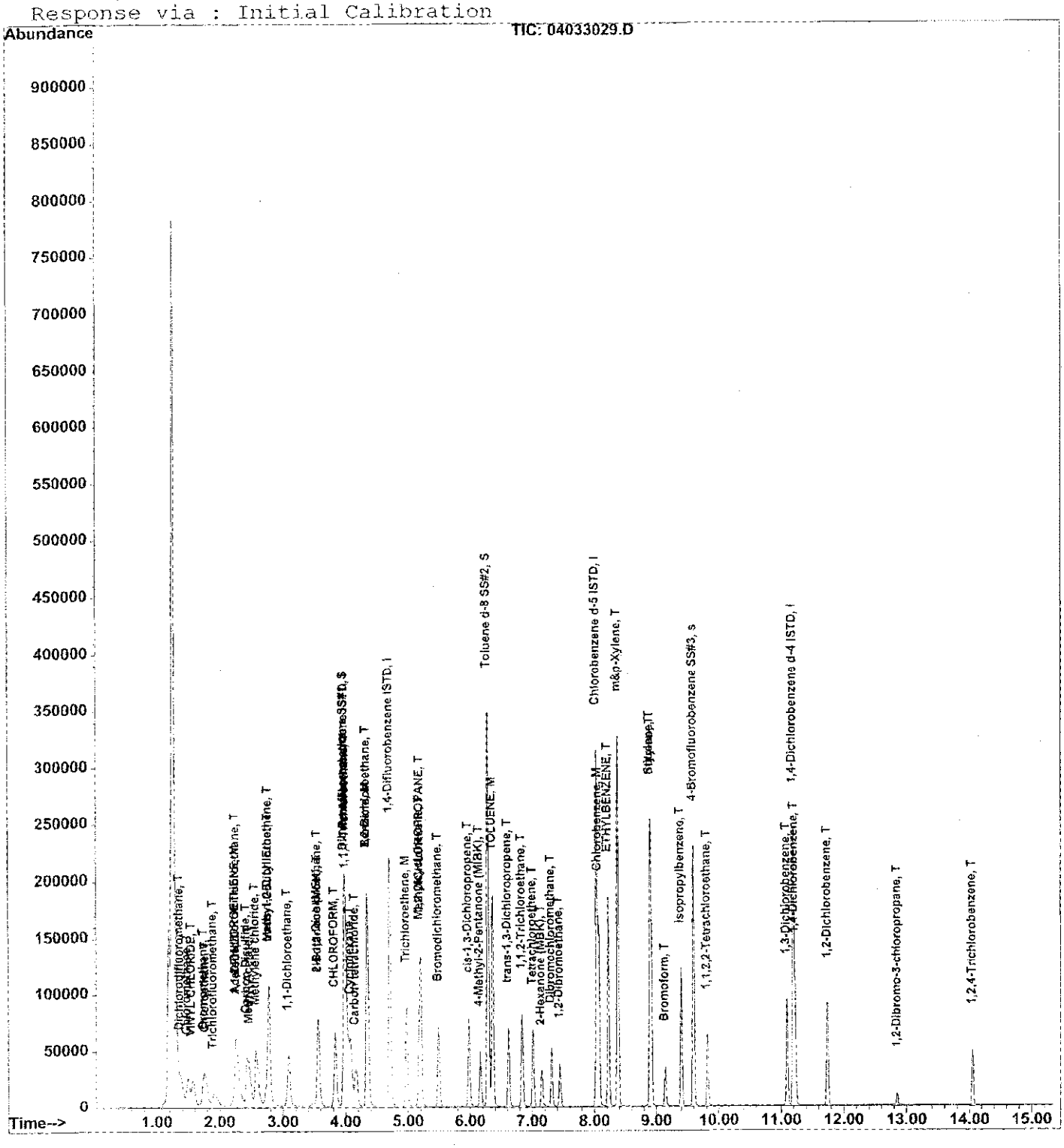
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033029.D
Acq On : 30 Mar 2004 10:33 pm
Sample : 04033017-01 MS 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Vial: 29
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033030.D Vial: 30
Acq On : 30 Mar 2004 10:57 pm Operator: MI
Sample : 04033017-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	110885	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	206093	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	172758	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	59482	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	67666	51.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.04%			
33) Toluene d-8 SS#2	6.29	98	270566	50.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.60%			
50) 4-Bromofluorobenzene SS#3	9.59	95	99976	50.08	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	38366	19.24	ug/L	100
3) Chloromethane	1.50	50	49381	23.14	ug/L	99
4) VINYL CHLORIDE	1.57	62	46348	21.89	ug/L	100
5) Bromomethane	1.75	94	39757	22.90	ug/L	96
6) Chloroethane	1.78	64	28669	26.33	ug/L	96
7) Trichlorofluoromethane	1.92	101	29945	24.33	ug/L	100
8) Acetone	2.27	43	13322	25.04	ug/L	97
9) 1,1-DICHLOROETHENE	2.26	96	37374	22.92	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	28260	21.04	ug/L	99
11) Carbon Disulfide	2.43	76	139507	24.00	ug/L	97
12) Methyl Acetate	2.48	74	4142	20.25	ug/L	99
13) Methylene chloride	2.58	84	43825	22.33	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	40874	23.31	ug/L	95
15) Methyl-t-Butyl Ether	2.78	73	84889	25.50	ug/L	100
16) 1,1-Dichloroethane	3.10	63	72493	24.32	ug/L	99
17) cis-1,2-Dichloroethene	3.57	96	44860	25.60	ug/L	98
18) 2-Butanone (MEK)	3.55	43	23834	24.08	ug/L	99
19) CHLOROFORM	3.84	83	79302	24.78	ug/L	100
21) 1,1,1-Trichloroethane	4.02	97	53264	23.52	ug/L #	10
22) Cyclohexane	4.08	56	60012	23.21	ug/L	90
24) Carbon tetrachloride	4.17	117	36766	23.10	ug/L	98
25) Benzene	4.35	78	185407	24.20	ug/L	100
26) 1,2-Dichloroethane	4.36	62	59907	25.01	ug/L	97
27) Trichloroethene	4.97	95	41552	23.88	ug/L	97
28) 1,2-DICHLOROPROPANE	5.20	63	50736	25.11	ug/L	99
29) Methylcyclohexane	5.19	83	35055	19.49	ug/L	97
30) Bromodichloromethane	5.49	83	60226	25.09	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033030.D
Acq On : 30 Mar 2004 10:57 pm
Sample : 04033017-01 MSD 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Vial: 30
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

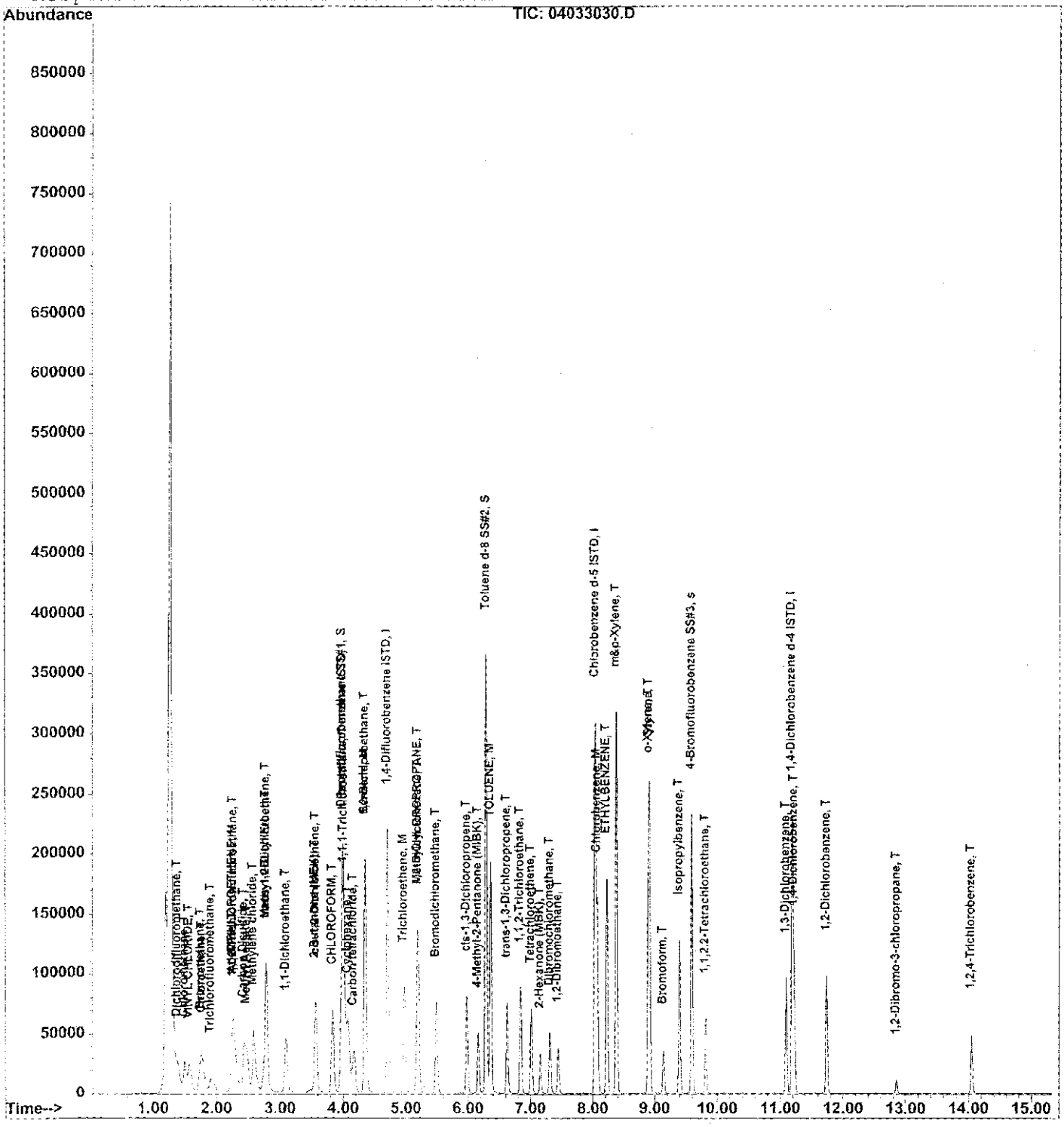
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.99	75	76717	23.96 ug/L	97
32) 4-Methyl-2-Pentanone (MIBK	6.17	43	52466	26.31 ug/L	100
34) TOLUENE	6.36	92	100183	24.14 ug/L	99
35) trans-1,3-Dichloropropene	6.63	75	65009	24.12 ug/L	96
36) 1,1,2-Trichloroethane	6.84	83	30249	24.61 ug/L	97
37) Tetrachloroethene	7.01	166	22571	20.49 ug/L	100
38) 2-Hexanone (MBK)	7.16	43	34103	24.94 ug/L	99
40) Dibromochloromethane	7.32	129	27387	23.45 ug/L	100
41) 1,2-Dibromoethane	7.45	107	29513	23.90 ug/L	98
42) Chlorobenzene	8.07	112	87310	22.26 ug/L	95
43) ETHYLBENZENE	8.23	91	160793	22.85 ug/L	98
44) m&p-Xylene	8.39	106	105407	44.06 ug/L	95
45) o-Xylene	8.90	106	53451	23.11 ug/L	96
46) Styrene	8.92	104	99147	23.22 ug/L	93
47) Bromoform	9.15	173	17366	24.69 ug/L	100
49) Isopropylbenzene	9.41	105	97196	20.85 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.82	83	41003	23.75 ug/L	99
52) 1,3-Dichlorobenzene	11.10	146	37673	20.36 ug/L	99
53) 1,4-Dichlorobenzene	11.23	146	39013	17.76 ug/L	97
54) 1,2-Dichlorobenzene	11.74	146	36805	21.03 ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.86	75	5490	24.67 ug/L	94
56) 1,2,4-Trichlorobenzene	14.06	180	17156	18.09 ug/L	100
57) Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033030.D Vial: 30
Acq On : 30 Mar 2004 10:57 pm Operator: MI
Sample : 04033017-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040329\04032922.D Vial: 22
Acq On : 29 Mar 2004 7:24 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	0.836	0.798	4.5	95	0.00
3	T	Chloromethane	1.262	1.186	6.0	99	-0.02
4	T	VINYL CHLORIDE	1.146	1.176	-2.6	99	0.00
5	T	Bromomethane	0.819	0.753	8.1	94	0.00
6	T	Chloroethane	0.593	0.590	0.5	97	0.00
7	T	Trichlorofluoromethane	0.703	0.714	-1.6	96	0.00
8	T	Acetone	0.234	0.211	9.8	111	0.00
9	M	1,1-DICHLOROETHENE	0.673	0.715	-6.2	99	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.496	0.494	0.4	110	0.00
11	T	Carbon Disulfide	2.754	2.803	-1.8	98	0.00
12	T	Methyl Acetate	0.089	0.097	-9.0	102	0.00
13	T	Methylene chloride	0.901	0.878	2.6	98	0.00
14	T	trans-1,2-Dichloroethene	0.780	0.755	3.2	99	0.00
15	T	Methyl-t-Butyl Ether	1.476	1.409	4.5	97	0.00
16	T	1,1-Dichloroethane	1.570	1.510	3.8	97	0.00
17	T	cis-1,2-Dichloroethene	0.780	0.761	2.4	98	0.00
18	T	2-Butanone (MEK)	0.393	0.368	6.4	107	0.00
19	T	CHLOROFORM	1.444	1.394	3.5	97	0.00
20	S	Dibromofluoromethane SS#1	0.806	0.813	-0.9	98	0.00
21	T	1,1,1-Trichloroethane	1.003	0.975	2.8	96	0.00
22	T	Cyclohexane	1.270	1.207	5.0	96	0.00
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	97	0.00
24	T	Carbon tetrachloride	0.403	0.392	2.7	96	0.00
25	M	Benzene	1.442	1.399	3.0	96	0.00
26	T	1,2-Dichloroethane	0.604	0.586	3.0	96	0.00
27	M	Trichloroethene	0.458	0.430	6.1	94	0.00
28	T	1,2-DICHLOROPROPANE	0.454	0.444	2.2	96	0.00
29	T	Methylcyclohexane	0.428	0.408	4.7	95	0.00
30	T	Bromodichloromethane	0.539	0.531	1.5	96	0.00
31	T	cis-1,3-Dichloropropene	0.614	0.600	2.3	95	0.00
32	T	4-Methyl-2-Pentanone (MIBK)	0.462	0.476	-3.0	101	0.00
33	S	Toluene d-8 SS#2	1.195	1.183	1.0	96	0.00
34	M	TOLUENE	0.790	0.763	3.4	96	0.00
35	T	trans-1,3-Dichloropropene	0.522	0.523	-0.2	97	0.00
36	T	1,1,2-Trichloroethane	0.286	0.286	0.0	99	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040329\04032922.D Vial: 22
Acq On : 29 Mar 2004 7:24 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
37	T	Tetrachloroethene	0.289	0.278	3.8	96	0.00
38	T	2-Hexanone (MBK)	0.286	0.297	-3.8	104	0.00
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	98	0.00
40	T	Dibromochloromethane	0.378	0.375	0.8	96	0.00
41	T	1,2-Dibromoethane	0.382	0.384	-0.5	99	0.00
42	M	Chlorobenzene	0.940	0.898	4.5	97	0.00
43	T	ETHYLBENZENE	1.639	1.595	2.7	97	0.00
44	T	m&p-Xylene	1.143	1.139	0.3	98	0.00
45	T	o-Xylene	0.558	0.551	1.3	98	0.00
46	T	Styrene	0.963	0.977	-1.5	97	0.00
47	T	Bromoform	0.223	0.236	-5.8	99	0.00
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	98	0.00
49	T	Isopropylbenzene	2.889	2.782	3.7	96	0.00
50	s	4-Bromofluorobenzene SS#3	1.296	1.287	0.7	99	0.00
51	T	1,1,2,2-Tetrachloroethane	0.689	0.804	-16.7	117	0.00
52	T	1,3-Dichlorobenzene	1.390	1.348	3.0	99	0.00
53	T	1,4-Dichlorobenzene	1.659	1.371	17.4	99	0.00
54	T	1,2-Dichlorobenzene	1.337	1.291	3.4	99	0.00
55	T	1,2-Dibromo-3-chloropropane	0.086	0.102	-18.6	112	0.00
56	T	1,2,4-Trichlorobenzene	0.638	0.646	-1.3	99	0.00
57	t	Naphthalene	1.541	1.299	15.7	92	0.00

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	ISTD							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	ISTD							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	ISTD							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	----------	ISTD	----------	----------	----------	
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032922.D
Acq On : 29 Mar 2004 7:24 pm
Sample : TCL-W, CCV 50ppb
Misc : IS/Surr 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Mar 30 12:26 2004

Vial: 22
Operator: MI
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.37	168	185101	50.00 ug/L	0.00
23) 1,4-Difluorobenzene ISTD	5.11	114	347297	50.00 ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.52	117	304179	50.00 ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.71	152	132369	50.00 ug/L	0.00
System Monitoring Compounds					
20) Dibromofluoromethane SS#1	4.34	113	150427	50.41 ug/L	0.00
Spiked Amount 50.000			Recovery = 100.82%		
33) Toluene d-8 SS#2	6.74	98	410897	49.49 ug/L	0.00
Spiked Amount 50.000			Recovery = 98.98%		
50) 4-Bromofluorobenzene SS#3	10.10	95	170380	49.67 ug/L	0.00
Spiked Amount 50.000			Recovery = 99.34%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.53	85	147764	47.76 ug/L	100
3) Chloromethane	1.68	50	219527	46.98 ug/L	100
4) VINYL CHLORIDE	1.74	62	217711	51.30 ug/L	100
5) Bromomethane	1.99	94	139425	46.00 ug/L	100
6) Chloroethane	2.01	64	109142	49.74 ug/L	99
7) Trichlorofluoromethane	2.18	101	132174m	50.82 ug/L	
8) Acetone	2.51	43	39089	65.35 ug/L	99
9) 1,1-DICHLOROETHENE	2.56	96	132402	53.15 ug/L	100
10) 1,1,2-Trichlorotrifluoroet	2.55	101	91402	49.82 ug/L	96
11) Carbon Disulfide	2.74	76	518854	50.88 ug/L	99
12) Methyl Acetate	2.75	74	17904	54.25 ug/L	99
13) Methylene chloride	2.87	84	162593	48.73 ug/L	100
14) trans-1,2-Dichloroethene	3.09	96	139665	48.34 ug/L	97
15) Methyl-t-Butyl Ether	3.09	73	260875	47.75 ug/L	100
16) 1,1-Dichloroethane	3.42	63	279549	48.09 ug/L	100
17) cis-1,2-Dichloroethene	3.92	96	140898	48.77 ug/L	99
18) 2-Butanone (MEK)	3.90	43	68036	46.81 ug/L	99
19) CHLOROFORM	4.20	83	258061	48.26 ug/L	99
21) 1,1,1-Trichloroethane	4.40	97	180496	48.60 ug/L #	44
22) Cyclohexane	4.47	56	223428	47.51 ug/L	99
24) Carbon tetrachloride	4.57	117	136037	48.60 ug/L	98
25) Benzene	4.74	78	485902	48.52 ug/L	98
26) 1,2-Dichloroethane	4.75	62	203547	48.55 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032922.D Vial: 22
Acq On : 29 Mar 2004 7:24 pm Operator: MI
Sample : TCL-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:26 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27)	Trichloroethene	5.40	95	149431	46.94	ug/L	99
28)	1,2-DICHLOROPROPANE	5.62	63	154283	48.93	ug/L	99
29)	Methylcyclohexane	5.63	83	141805	47.71	ug/L	98
30)	Bromodichloromethane	5.91	83	184260	49.22	ug/L	100
31)	cis-1,3-Dichloropropene	6.41	75	208390	48.90	ug/L	100
32)	4-Methyl-2-Pentanone (MIBK	6.60	43	165377	51.57	ug/L	99
34)	TOLUENE	6.82	92	265030	48.29	ug/L	99
35)	trans-1,3-Dichloropropene	7.06	75	181495	50.01	ug/L	100
36)	1,1,2-Trichloroethane	7.29	83	99345	50.09	ug/L	100
37)	Tetrachloroethene	7.49	166	96702	48.16	ug/L	100
38)	2-Hexanone (MBK)	7.61	43	103183	51.86	ug/L	98
40)	Dibromochloromethane	7.77	129	114121	49.67	ug/L	99
41)	1,2-Dibromoethane	7.92	107	116790	50.29	ug/L	99
42)	Chlorobenzene	8.56	112	273093	47.74	ug/L	96
43)	ETHYLBENZENE	8.71	91	485272	48.68	ug/L	98
44)	m&p-Xylene	8.87	106	346536	49.83	ug/L	100
45)	o-Xylene	9.39	106	167482	49.32	ug/L	98
46)	Styrene	9.41	104	297222	50.74	ug/L	93
47)	Bromoform	9.64	173	71924	52.94	ug/L	98
49)	Isopropylbenzene	9.90	105	368255	48.14	ug/L	100
51)	1,1,2,2-Tetrachloroethane	10.30	83	106469	58.40	ug/L	99
52)	1,3-Dichlorobenzene	11.62	146	178428	48.50	ug/L	99
53)	1,4-Dichlorobenzene	11.75	146	181500	49.78	ug/L	99
54)	1,2-Dichlorobenzene	12.26	146	170893	48.27	ug/L	99
55)	1,2-Dibromo-3-chloropropan	13.37	75	13557	53.01	ug/L	95
56)	1,2,4-Trichlorobenzene	14.60	180	85447	50.59	ug/L	100
57)	Naphthalene	14.93	128	171989	42.15	ug/L	100

(#) = qualifier out of range (m) = manual integration

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040329\04032923.D Vial: 23
Acq On : 29 Mar 2004 7:49 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	100	0.00
2	t	acrolein	0.144	0.131	9.0	96	0.00
3	t	iodomethne	0.900	0.995	-10.6	95	0.00
4	t	acrylonitrile	0.281	0.260	7.5	96	0.00
5	t	tert-butanol	0.063	0.052	17.5	78	0.00
6	t	vinyl acetate	3.873	3.663	5.4	98	0.00
7	t	diisopropyl ether	4.017	3.795	5.5	98	0.00
8	t	Ethyl tert-butyl ether	2.385	2.291	3.9	98	0.00
9	T	2,2-Dichloropropane	0.867	0.780	10.0	90	0.00
10	T	Bromochloromethane	0.364	0.353	3.0	98	0.00
11	S	Dibromofluoromethane SS#1	0.811	0.814	-0.4	101	0.00
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
13	T	1,1-Dichloropropene	0.553	0.519	6.1	97	0.00
14	t	tert-amyl methyl ether	1.027	0.974	5.2	97	0.00
15	T	Dibromomethane	0.297	0.281	5.4	96	0.00
16	t	1,4-dioxane	0.001	0.000	100.0#	0#	-0.13
17	T	2-Chloroethylvinyl Ether	0.235	0.228	3.0	94	0.00
18	S	Toluene d-8 SS#2	1.181	1.179	0.2	99	0.00
19	I	Chlorobenzene d-5	1.000	1.000	0.0	99	0.00
20	T	1,3-Dichloropropane	0.672	0.638	5.1	95	0.00
21	T	1,1,1,2-Tetrachloroethane	0.299	0.294	1.7	98	0.00
22	T	1,2,3-Trichloropropane	0.112	0.107	4.5	96	0.00
23	s	4-Bromofluorobenzene SS#3	0.548	0.553	-0.9	99	0.00
24	T	Bromobenzene	0.357	0.346	3.1	97	0.00
25	t	trans-1,4-dichloro-2-butene	0.444	0.431	2.9	94	0.00
26	T	n-Propylbenzene	1.709	1.661	2.8	98	0.00
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	98	0.00
28	T	2-Chlorotoluene	3.942	3.778	4.2	98	0.00
29	T	4-Chlorotoluene	2.560	2.410	5.9	97	0.00
30	T	1,3,5-Trimethylbenzene	2.509	2.455	2.2	98	0.00
31	T	tert-Butylbenzene	0.263	0.260	1.1	98	0.00
32	T	1,2,4-Trimethylbenzene	2.509	2.455	2.2	98	0.00
33	T	sec-Butylbenzene	2.528	2.480	1.9	98	0.00
34	T	4-Isopropyltoluene	1.726	1.673	3.1	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040329\04032923.D Vial: 23
Acq On : 29 Mar 2004 7:49 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
35	T	n-Butylbenzene	0.582	0.525	9.8	97	0.00
36	T	1,2,3-Trichlorobenzene	0.564	0.563	0.2	96	0.00

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration

Calibration Files
C1 =04032906.D C2 =04032907.D C3 =04032908.D
C4 =04032909.D C5 =04032910.D C6 =04032911.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	----------ISTD----------							
2)	T	Dichlorodifluoromet	0.798	0.900	0.882	0.844	0.823	0.767	0.836	6.02
3)	T	Chloromethane	1.400	1.393	1.290	1.218	1.171	1.101	1.262	9.59
4)	T	VINYL CHLORIDE	0.994	1.193	1.223	1.194	1.162	1.114	1.146	7.27
5)	T	Bromomethane	0.990	0.771	0.813	0.783	0.786	0.769	0.819	10.43
6)	T	Chloroethane	0.575	0.646	0.565	0.614	0.593	0.562	0.593	5.49
7)	T	Trichlorofluorometh	0.596	0.708	0.738	0.733	0.726	0.715	0.703	7.60
8)	T	Acetone		0.342	0.263	0.217	0.187	0.159	0.234	30.78
9)	M	1,1-DICHLOROETHENE		0.662	0.613	0.702	0.710	0.678	0.673	5.73
10)	T	1,1,2-Trichlorotrif	0.442	0.538	0.496	0.478	0.439	0.579	0.496	11.12
11)	T	Carbon Disulfide	2.206	2.976	2.953	2.859	2.810	2.722	2.754	10.33
12)	T	Methyl Acetate	0.062	0.094	0.096	0.101	0.093	0.089	0.089	15.46
13)	T	Methylene chloride		0.973	0.947	0.897	0.873	0.817	0.901	6.81
14)	T	trans-1,2-Dichloroe	0.772	0.825	0.809	0.782	0.746	0.748	0.780	4.11
15)	T	Methyl-t-Butyl Ethe	1.472	1.582	1.538	1.497	1.427	1.339	1.476	5.81
16)	T	1,1-Dichloroethane	1.569	1.641	1.614	1.566	1.530	1.501	1.570	3.29
17)	T	cis-1,2-Dichloroeth	0.782	0.806	0.798	0.781	0.760	0.755	0.780	2.55
18)	T	2-Butanone (MEK)	0.503	0.443	0.375	0.380	0.337	0.317	0.393	17.66
19)	T	CHLOROFORM	1.464	1.501	1.486	1.437	1.407	1.372	1.444	3.41
20)	S	Dibromofluoromethan	0.801	0.795	0.808	0.812	0.811	0.809	0.806	0.83
21)	T	1,1,1-Trichloroetha	0.955	1.044	1.059	1.011	0.992	0.959	1.003	4.28
22)	T	Cyclohexane	1.384	1.275	1.316	1.248	1.227	1.172	1.270	5.79
23)	I	1,4-Difluorobenzene I	----------ISTD----------							
24)	T	Carbon tetrachlorid	0.401	0.408	0.407	0.400	0.398	0.404	0.403	0.97
25)	M	Benzene	1.447	1.464	1.457	1.427	1.418	1.437	1.442	1.23
26)	T	1,2-Dichloroethane	0.613	0.634	0.623	0.606	0.591	0.555	0.604	4.65
27)	M	Trichloroethene	0.457	0.484	0.472	0.458	0.446	0.433	0.458	3.97
28)	T	1,2-DICHLOROPROPANE	0.455	0.463	0.466	0.454	0.448	0.438	0.454	2.26
29)	T	Methylcyclohexane	0.446	0.434	0.439	0.420	0.419	0.410	0.428	3.25
30)	T	Bromodichloromethan	0.515	0.553	0.548	0.541	0.537	0.539	0.539	2.38
31)	T	cis-1,3-Dichloropro	0.580	0.621	0.626	0.616	0.613	0.626	0.614	2.80
32)	T	4-Methyl-2-Pentanon	0.434	0.478	0.470	0.477	0.456	0.456	0.462	3.63
33)	S	Toluene d-8 SS#2	1.182	1.179	1.207	1.195	1.202	1.209	1.195	1.06
34)	M	TOLUENE	0.778	0.802	0.805	0.786	0.774	0.796	0.790	1.60
35)	T	trans-1,3-Dichlorop	0.488	0.520	0.531	0.528	0.525	0.543	0.522	3.56
36)	T	1,1,2-Trichloroetha	0.272	0.292	0.296	0.288	0.281	0.283	0.286	3.03
37)	T	Tetrachloroethene	0.279	0.301	0.298	0.290	0.281	0.285	0.289	3.11
38)	T	2-Hexanone (MBK)	0.305	0.290	0.286	0.287	0.278	0.274	0.286	3.80

(#) = Out of Range

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration

Calibration Files
C1 =04032906.D C2 =04032907.D C3 =04032908.D
C4 =04032909.D C5 =04032910.D C6 =04032911.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
39)	I	Chlorobenzene d-5 IST	----------	ISTD	----------					
40)	T	Dibromochloromethan	0.351	0.374	0.380	0.385	0.385	0.392	0.378	3.83
41)	T	1,2-Dibromoethane	0.353	0.400	0.389	0.390	0.380	0.378	0.382	4.29
42)	M	Chlorobenzene	0.943	0.970	0.950	0.932	0.915	0.931	0.940	2.02
43)	T	ETHYLBENZENE	1.619	1.662	1.666	1.607	1.618	1.661	1.639	1.63
44)	T	m&p-Xylene	1.074	1.163	1.153	1.142	1.145	1.181	1.143	3.21
45)	T	o-Xylene	0.540	0.567	0.569	0.553	0.554	0.565	0.558	1.97
46)	T	Styrene	0.884	0.942	0.972	0.962	0.988	1.030	0.963	5.07
47)	T	Bromoform	0.178	0.214	0.230	0.233	0.236	0.249	0.223	11.09
48)	I	1,4-Dichlorobenzene d	----------	ISTD	----------					
49)	T	Isopropylbenzene	2.795	2.961	2.964	2.868	2.838	2.909	2.889	2.35
50)	s	4-Bromofluorobenzen	1.303	1.303	1.323	1.291	1.276	1.279	1.296	1.34
51)	T	1,1,2,2-Tetrachloro	0.657	0.675	0.687	0.689	0.676	0.748	0.689	4.56
52)	T	1,3-Dichlorobenzene	1.393	1.424	1.417	1.381	1.340	1.384	1.390	2.16
53)	T	1,4-Dichlorobenzene	2.359	1.787	1.606	1.460	1.367	1.376	1.659	22.78
54)	T	1,2-Dichlorobenzene	1.320	1.379	1.387	1.332	1.284	1.321	1.337	2.94
55)	T	1,2-Dibromo-3-chlor	0.050	0.094	0.090	0.093	0.090	0.097	0.086	20.52
56)	T	1,2,4-Trichlorobenz	0.624	0.621	0.633	0.640	0.640	0.670	0.638	2.73
57)	t	Naphthalene	2.183	1.395	1.417	1.439	1.395	1.420	1.541	20.42

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032923.D
Acq On : 29 Mar 2004 7:49 pm
Sample : UNREG-W, CCV 50ppb
Misc : IS/Surr 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 30 12:27 2004

Vial: 23
Operator: MI
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentaflourobenzene	4.37	168	186209	50.00 ug/L	0.00
12) 1,4-Difluorobenzene	5.11	114	352051	50.00 ug/L	0.00
19) Chlorobenzene d-5	8.52	117	299400	50.00 ug/L	0.00
27) 1,4-Dichlorobenzene d-4	11.71	152	131633	50.00 ug/L	0.00
System Monitoring Compounds					
11) Dibromofluoromethane SS#1	4.34	113	151581	50.17 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%		
18) Toluene d-8 SS#2	6.74	98	414937	49.88 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.76%		
23) 4-Bromofluorobenzene SS#3	10.09	95	165461	50.40 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.80%		
Target Compounds					Qvalue
2) acrolein	2.41	56	24470	45.55 ug/L #	100
3) iodomethne	2.67	142	185249	55.25 ug/L	99
4) acrylonitrile	3.02	53	48373	46.17 ug/L	100
5) tert-butanol	2.99	59	9674	41.38 ug/L	100
6) vinyl acetate	3.42	43	682001	47.29 ug/L	100
7) diisopropyl ether	3.47	45	706680	47.24 ug/L	100
8) Ethyl tert-butyl ether	3.79	59	426585	48.03 ug/L	100
9) 2,2-Dichloropropane	3.93	77	145199	44.98 ug/L	99
10) Bromochloromethane	4.13	128	65800	48.59 ug/L	97
13) 1,1-Dichloropropene	4.54	75	182541	46.84 ug/L	99
14) tert-amyl methyl ether	4.86	73	342867	47.40 ug/L	98
15) Dibromomethane	5.74	93	98799	47.20 ug/L	99
16) 1,4-dioxane	5.65	58	0	Not Detected	
17) 2-Chloroethylvinyl Ether	6.24	63	80231	48.49 ug/L	100
20) 1,3-Dichloropropane	7.49	76	191049	47.48 ug/L	100
21) 1,1,1,2-Tetrachloroethane	8.67	131	88067	49.16 ug/L	100
22) 1,2,3-Trichloropropane	10.34	110	32002	47.76 ug/L	100
24) Bromobenzene	10.28	156	103489	48.47 ug/L	97
25) trans-1,4-dichloro-2-buten	10.34	75	129061	48.53 ug/L #	100
26) n-Propylbenzene	10.47	91	497349	48.61 ug/L	100
28) 2-Chlorotoluene	10.47	91	497349	47.93 ug/L #	100
29) 4-Chlorotoluene	10.56	91	317173	47.06 ug/L	100
30) 1,3,5-Trimethylbenzene	10.72	105	323206	48.93 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032923.D Vial: 23
Acq On : 29 Mar 2004 7:49 pm Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:27 2004

Quant Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) tert-Butylbenzene	10.72	119	34163	49.43 ug/L	97
32) 1,2,4-Trimethylbenzene	10.72	105	323206	48.93 ug/L	99
33) sec-Butylbenzene	11.24	105	326500	49.05 ug/L #	100
34) 4-Isopropyltoluene	11.17	119	220167	48.45 ug/L	97
35) n-Butylbenzene	11.70	91	69113	45.13 ug/L	96
36) 1,2,3-Trichlorobenzene	15.30	180	74107	49.93 ug/L	100

(#) = qualifier out of range (m) = manual integration

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	87	-0.02
2	T	Dichlorodifluoromethane	0.899	0.824	8.3	81	0.00
3	T	Chloromethane	0.962	0.842	12.5	78	0.00
4	T	VINYL CHLORIDE	0.955	0.877	8.2	80	0.00
5	T	Bromomethane	0.783	0.682	12.9	82	-0.01
6	T	Chloroethane	0.491	0.467	4.9	81	0.00
7	T	Trichlorofluoromethane	0.555	0.697	-25.6#	104	0.00
8	T	Acetone	0.240	0.264	-10.0	99	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.680	7.5	82	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.582	4.0	82	0.00
11	T	Carbon Disulfide	2.621	2.416	7.8	81	-0.04
12	T	Methyl Acetate	0.092	0.084	8.7	76	0.00
13	T	Methylene chloride	0.885	0.771	12.9	80	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.734	7.2	82	0.00
15	T	Methyl-t-Butyl Ether	1.501	1.409	6.1	81	0.00
16	T	1,1-Dichloroethane	1.344	1.259	6.3	84	-0.01
17	T	cis-1,2-Dichloroethene	0.790	0.760	3.8	85	-0.01
18	T	2-Butanone (MEK)	0.446	0.420	5.8	90	-0.01
19	T	CHLOROFORM	1.443	1.389	3.7	86	-0.02
20	S	Dibromofluoromethane SS#1	0.598	0.607	-1.5	89	-0.02
21	T	1,1,1-Trichloroethane	1.021	0.965	5.5	84	-0.01
22	T	Cyclohexane	1.166	1.117	4.2	85	-0.01
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	89	-0.01
24	T	Carbon tetrachloride	0.386	0.371	3.9	86	-0.02
25	M	Benzene	1.859	1.759	5.4	87	-0.02
26	T	1,2-Dichloroethane	0.581	0.564	2.9	86	-0.02
27	M	Trichloroethene	0.422	0.397	5.9	84	-0.01
28	T	1,2-DICHLOROPROPANE	0.490	0.481	1.8	87	-0.02
29	T	Methylcyclohexane	0.436	0.418	4.1	89	-0.01
30	T	Bromodichloromethane	0.582	0.577	0.9	89	-0.01
31	T	cis-1,3-Dichloropropene	0.777	0.765	1.5	88	-0.02
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.452	6.6	83	-0.02
33	S	Toluene d-8 SS#2	1.292	1.334	-3.3	94	-0.02
34	M	TOLUENE	1.007	0.956	5.1	86	-0.02
35	T	trans-1,3-Dichloropropene	0.654	0.643	1.7	86	-0.02
36	T	1,1,2-Trichloroethane	0.298	0.285	4.4	85	-0.01
37	T	Tetrachloroethene	0.267	0.255	4.5	87	-0.01
38	T	2-Hexanone (MBK)	0.332	0.318	4.2	86	-0.02
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	91	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.317	6.2	85	-0.02
41	T	1,2-Dibromoethane	0.357	0.334	6.4	85	-0.02
42	M	Chlorobenzene	1.135	1.030	9.3	86	-0.01
43	T	ETHYLBENZENE	2.037	1.870	8.2	86	-0.02
44	T	m&p-Xylene	0.692	0.615	11.1	82	-0.02
45	T	o-Xylene	0.669	0.612	8.5	84	-0.02
46	T	Styrene	1.236	1.133	8.3	83	-0.02
47	T	Bromoform	0.204	0.203	0.5	86	-0.02
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	88	-0.02
49	T	Isopropylbenzene	3.919	3.720	5.1	86	-0.02
50	s	4-Bromofluorobenzene SS#3	1.678	1.761	-4.9	92	-0.01
51	T	1,1,2,2-Tetrachloroethane	1.451	1.382	4.8	82	-0.02
52	T	1,3-Dichlorobenzene	1.556	1.448	6.9	83	-0.02
53	T	1,4-Dichlorobenzene	1.847	1.501	18.7	84	-0.02
54	T	1,2-Dichlorobenzene	1.471	1.339	9.0	82	-0.02
55	T	1,2-Dibromo-3-chloropropane	0.187	0.182	2.7	78	-0.02
56	T	1,2,4-Trichlorobenzene	0.797	0.697	12.5	81	-0.02
57	T	Naphthalene	1.591	1.237	22.3	69	-0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	119866	50.00	ug/L	-0.02
23) 1,4-Difluorobenzene ISTD	4.70	114	221003	50.00	ug/L	-0.01
39) Chlorobenzene d-5 ISTD	8.03	117	187457	50.00	ug/L	-0.02
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	60546	50.00	ug/L	-0.02
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	72816	50.79	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.58%			
33) Toluene d-8 SS#2	6.28	98	294924	51.63	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.26%			
50) 4-Bromofluorobenzene SS#3	9.59	95	106624	52.47	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	98822	45.85	ug/L	100
3) Chloromethane	1.50	50	100974	43.77	ug/L	99
4) VINYL CHLORIDE	1.58	62	105151	45.93	ug/L	100
5) Bromomethane	1.75	94	81692	43.53	ug/L	98
6) Chloroethane	1.79	64	55971	47.55	ug/L	99
7) Trichlorofluoromethane	1.96	101	83589	62.83	ug/L	99
8) Acetone	2.27	43	31690	55.09	ug/L	95
9) 1,1-DICHLOROETHENE	2.26	96	81558	46.28	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	69706	48.00	ug/L	99
11) Carbon Disulfide	2.43	76	289545	46.08	ug/L	99
12) Methyl Acetate	2.49	74	10086	45.61	ug/L	99
13) Methylene chloride	2.58	84	92474	43.59	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	87983	46.41	ug/L	97
15) Methyl-t-Butyl Ether	2.78	73	168875	46.93	ug/L	100
16) 1,1-Dichloroethane	3.09	63	150903	46.82	ug/L	100
17) cis-1,2-Dichloroethene	3.57	96	91135	48.12	ug/L	97
18) 2-Butanone (MEK)	3.55	43	50403	47.12	ug/L	98
19) CHLOROFORM	3.83	83	166500	48.13	ug/L	99
21) 1,1,1-Trichloroethane	4.02	97	115627	47.23	ug/L #	62
22) Cyclohexane	4.08	56	133858	47.89	ug/L	98
24) Carbon Tetrachloride	4.17	117	81954	48.02	ug/L	100
25) Benzene	4.34	78	388777	47.32	ug/L	100
26) 1,2-Dichloroethane	4.35	62	124664	48.54	ug/L	98
27) Trichloroethene	4.97	95	87761	47.04	ug/L	98
28) 1,2-DICHLOROPROPANE	5.19	63	106398	49.11	ug/L	100
29) Methylcyclohexane	5.19	83	92422	47.91	ug/L	98
30) Bromodichloromethane	5.49	83	127565	49.55	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033002.D
Acq On : 30 Mar 2004 11:05 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2V0A

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.98	75	169121	49.26 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	99796	46.66 ug/L	99
34) TOLUENE	6.36	92	211186	47.46 ug/L	99
35) trans-1,3-Dichloropropene	6.62	75	142121	49.18 ug/L	99
36) 1,1,2-Trichloroethane	6.84	83	62925	47.74 ug/L	98
37) Tetrachloroethene	7.01	166	56416	47.75 ug/L	100
38) 2-Hexanone (MBK)	7.15	43	70279	47.93 ug/L	99
40) Dibromochloromethane	7.31	129	59457	46.91 ug/L	100
41) 1,2-Dibromoethane	7.44	107	62546	46.67 ug/L	99
42) Chlorobenzene	8.07	112	193086	45.37 ug/L	96
43) ETHYLBENZENE	8.22	91	350555	45.90 ug/L	99
44) m&p-Xylene	8.38	106	230755	88.90 ug/L	96
45) o-Xylene	8.89	106	114708	45.71 ug/L	95
46) Styrene	8.91	104	212444	45.86 ug/L	94
47) Bromoform	9.14	173	38038	49.84 ug/L	99
49) Isopropylbenzene	9.40	105	225203	47.45 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.81	83	83646	47.59 ug/L	99
52) 1,3-Dichlorobenzene	11.09	146	87662	46.53 ug/L	100
53) 1,4-Dichlorobenzene	11.22	146	90900	40.65 ug/L	99
54) 1,2-Dichlorobenzene	11.74	146	81046	45.49 ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.85	75	10998	48.56 ug/L	96
56) 1,2,4-Trichlorobenzene	14.05	180	42193	43.72 ug/L	98
57) Naphthalene	14.39	128	74892	38.86 ng/L	100

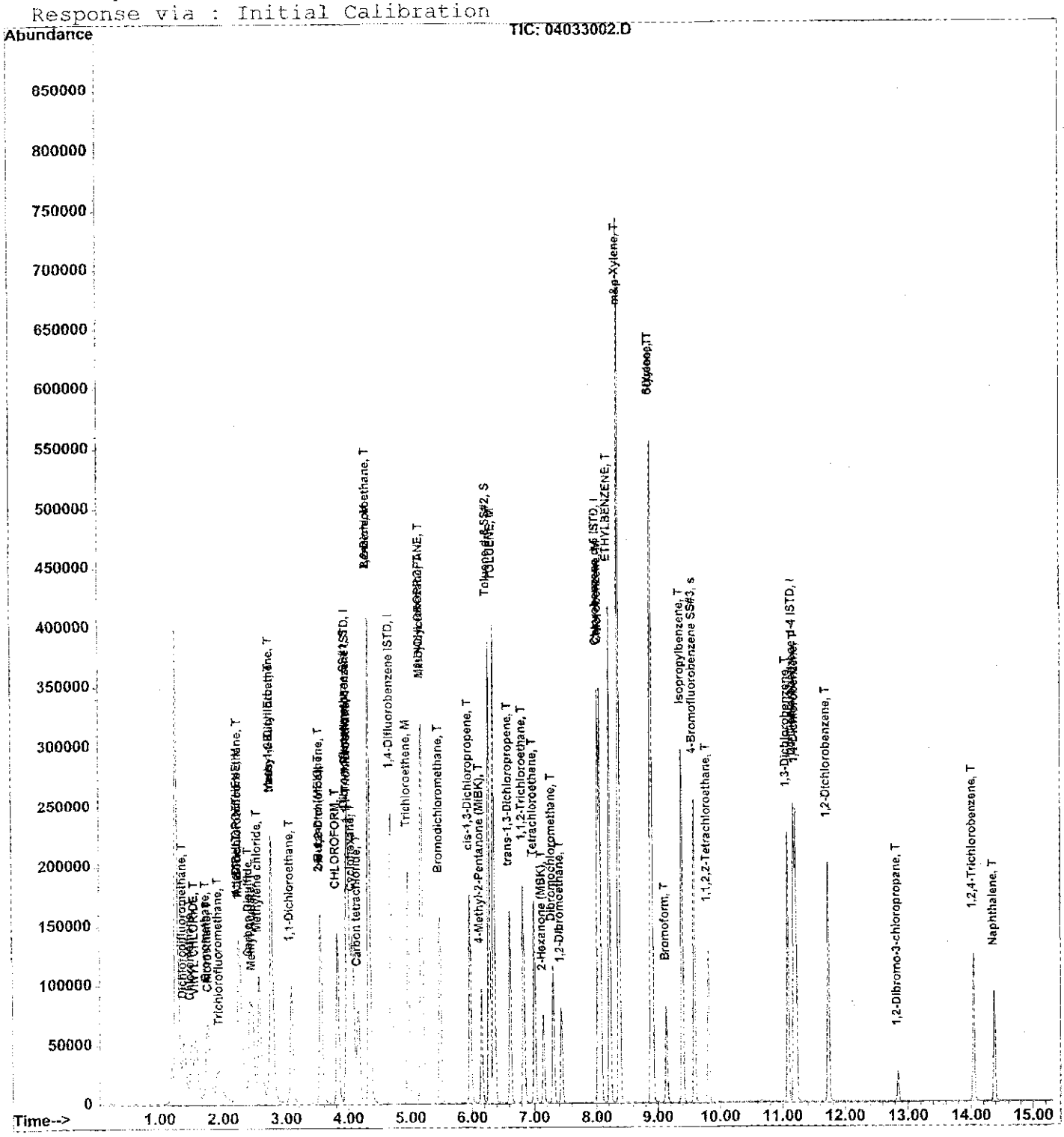
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D
Acq On : 30 Mar 2004 11:05 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033003.D
Acq On : 30 Mar 2004 11:29 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	86	-0.01
2	t	acrolein	0.121	0.112	7.4	83	0.00
3	t	iodomethne	0.985	0.933	5.3	83	-0.01
4	t	acrylonitrile	0.212	0.196	7.5	82	0.00
5	t	tert-butanol	0.063	0.065	-3.2	84	0.00
6	t	vinyl acetate	3.201	3.084	3.7	84	-0.01
7	t	diisopropyl ether	3.077	2.935	4.6	82	-0.02
8	t	Ethyl tert-butyl ether	2.311	2.330	-0.8	87	-0.01
9	T	2,2-Dichloropropane	0.998	1.021	-2.3	89	-0.02
10	T	Bromochloromethane	0.292	0.280	4.1	85	-0.01
11	S	Dibromofluoromethane SS#1	0.602	0.610	-1.3	86	-0.01
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	-0.01
13	T	1,1-Dichloropropene	0.614	0.613	0.2	90	-0.02
14	t	tert-amyl methyl ether	1.158	1.096	5.4	82	-0.01
15	T	Dibromomethane	0.247	0.240	2.8	87	-0.01
16	t	1,4-dioxane	0.002	0.001	50.0#	72	-0.02
17	T	2-Chloroethylvinyl Ether	0.260	0.243	6.5	82	-0.02
18	S	Toluene d-8 SS#2	1.297	1.319	-1.7	89	-0.01
19	I	Chlorobenzene d-5	1.000	1.000	0.0	91	-0.01
20	T	1,3-Dichloropropane	0.773	0.756	2.2	90	-0.01
21	T	1,1,1,2-Tetrachloroethane	0.310	0.286	7.7	87	-0.01
22	T	1,2,3-Trichloropropane	0.106	0.100	5.7	90	-0.01
23	s	4-Bromofluorobenzene SS#3	0.569	0.569	0.0	90	-0.02
24	T	Bromobenzene	0.338	0.312	7.7	86	-0.02
25	t	trans-1,4-dichloro-2-butene	0.396	0.400	-1.0	89	-0.01
26	T	n-Propylbenzene	1.777	1.678	5.6	87	-0.02
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	87	-0.01
28	T	2-Chlorotoluene	3.453	3.389	1.9	89	-0.02
29	T	4-Chlorotoluene	3.987	3.898	2.2	86	-0.02
30	T	1,3,5-Trimethylbenzene	3.127	3.008	3.8	85	-0.02
31	T	tert-Butylbenzene	2.100	2.032	3.2	87	-0.02
32	T	1,2,4-Trimethylbenzene	3.245	3.085	4.9	83	-0.02
33	T	sec-Butylbenzene	3.482	3.449	0.9	88	-0.02
34	T	4-Isopropyltoluene	2.465	2.402	2.6	87	-0.02
35	T	n-Butylbenzene	2.785	2.831	-1.7	89	-0.01
36	T	1,2,3-Trichlorobenzene	0.558	0.479	14.2	76	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------	ISTD	----------					
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------	ISTD	----------					
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------	ISTD	----------					
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------	ISTD	----------					
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033003.D
Acq On : 30 Mar 2004 11:29 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	4.00	168	116355	50.00	ug/L		-0.01
12) 1,4-Difluorobenzene	4.70	114	214623	50.00	ug/L		-0.01
19) Chlorobenzene d-5	8.03	117	181462	50.00	ug/L		-0.01
27) 1,4-Dichlorobenzene d-4	11.19	152	60220	50.00	ug/L		-0.01
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.97	113	70965	50.70	ug/L		-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.40%				
18) Toluene d-8 SS#2	6.28	98	283181	50.86	ug/L		-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.72%				
23) 4-Bromofluorobenzene SS#3	9.59	95	103185	49.98	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%				
Target Compounds							Qvalue
2) acrolein	2.17	56	13017	46.33	ug/L		87
3) iodomethne	2.38	142	108576	47.38	ug/L		98
4) acrylonitrile	2.75	53	22768	46.09	ug/L		98
5) tert-butanol	2.65	59	7528	51.65	ug/L		100
6) vinyl acetate	3.10	43	358885	48.18	ug/L		99
7) diisopropyl ether	3.13	45	341447	47.68	ug/L		98
8) Ethyl tert-butyl ether	3.44	59	271116	50.41	ug/L		98
9) 2,2-Dichloropropane	3.57	77	118760	51.14	ug/L		98
10) Bromochloromethane	3.77	128	32624	48.08	ug/L	#	88
13) 1,1-Dichloropropene	4.14	75	131520	49.88	ug/L		98
14) tert-amyl methyl ether	4.46	73	235156	47.32	ug/L		99
15) Dibromomethane	5.32	93	51451	48.45	ug/L		97
16) 1,4-dioxane	5.34	58	180	27.42	ug/L	#	3
17) 2-Chloroethylvinyl Ether	5.81	63	52136	46.76	ug/L		98
20) 1,3-Dichloropropane	7.04	76	137209	48.92	ug/L		98
21) 1,1,1,2-Tetrachloroethane	8.18	131	51819	46.05	ug/L		99
22) 1,2,3-Trichloropropane	9.86	110	18208	47.26	ug/L		100
24) Bromobenzene	9.78	156	56597	46.19	ug/L	#	86
25) trans-1,4-dichloro-2-buten	9.86	75	72645	50.58	ug/L	#	100
26) n-Propylbenzene	9.96	91	304575	47.23	ug/L		98
28) 2-Chlorotoluene	10.06	91	204060	49.07	ug/L		96
29) 4-Chlorotoluene	10.21	91	234767	48.89	ug/L		95
30) 1,3,5-Trimethylbenzene	10.21	105	181144	48.09	ug/L		97
31) tert-Butylbenzene	10.66	119	122395	48.39	ug/L		95
32) 1,2,4-Trimethylbenzene	10.73	105	185788	47.53	ug/L		98
33) sec-Butylbenzene	10.97	105	207689	49.53	ug/L		98
34) 4-Isopropyltoluene	11.18	119	144637	48.71	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033003.D
Acq On : 30 Mar 2004 11:29 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.77	91	170462	50.83 ug/L	97
36) 1,2,3-Trichlorobenzene	14.74	180	28853	42.95 ug/L	99

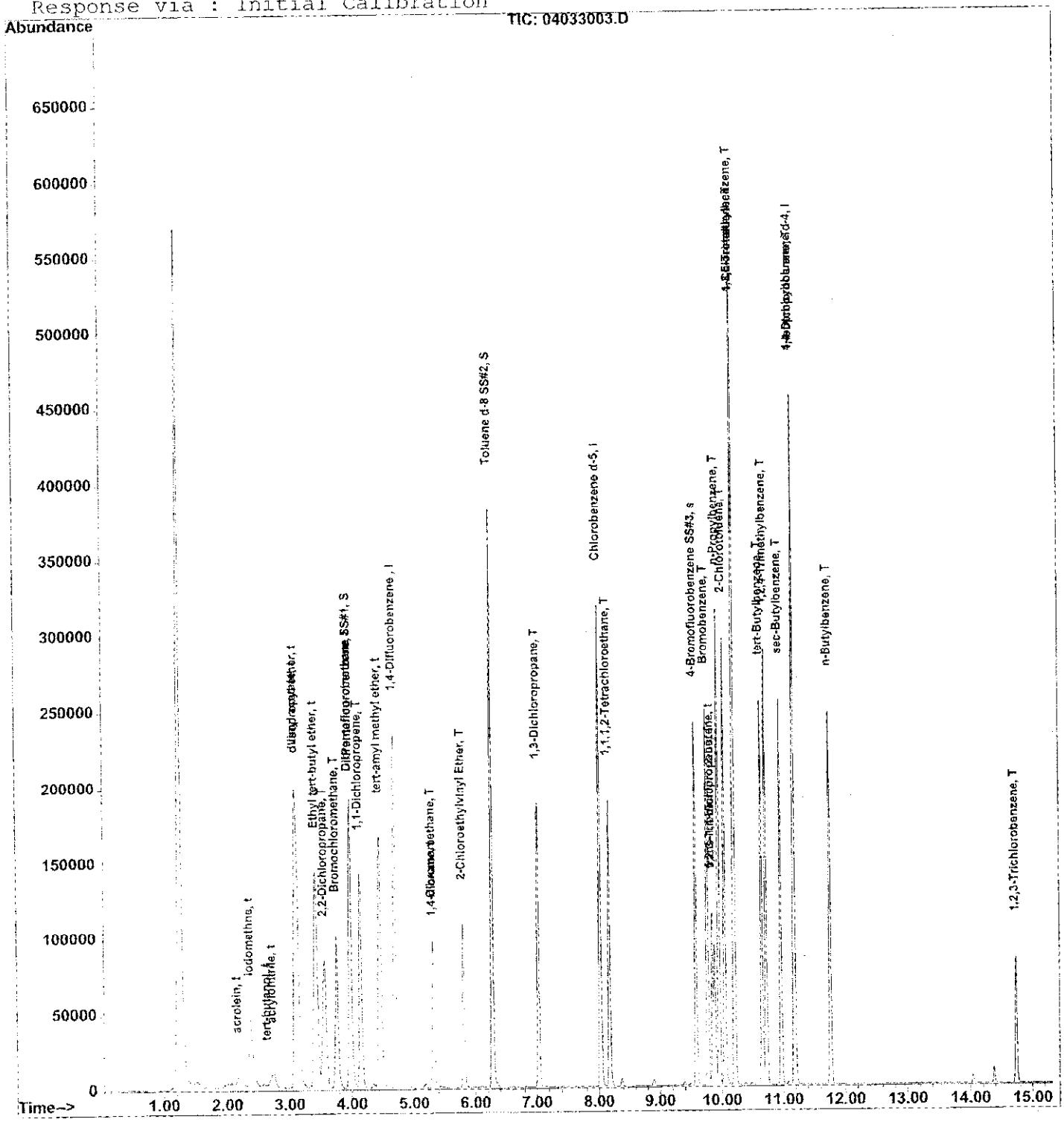
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033003.D
Acq On : 30 Mar 2004 11:29 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04032920.D**	**DATE/TIME ANALYZED:**	**03/29/04 18:33**

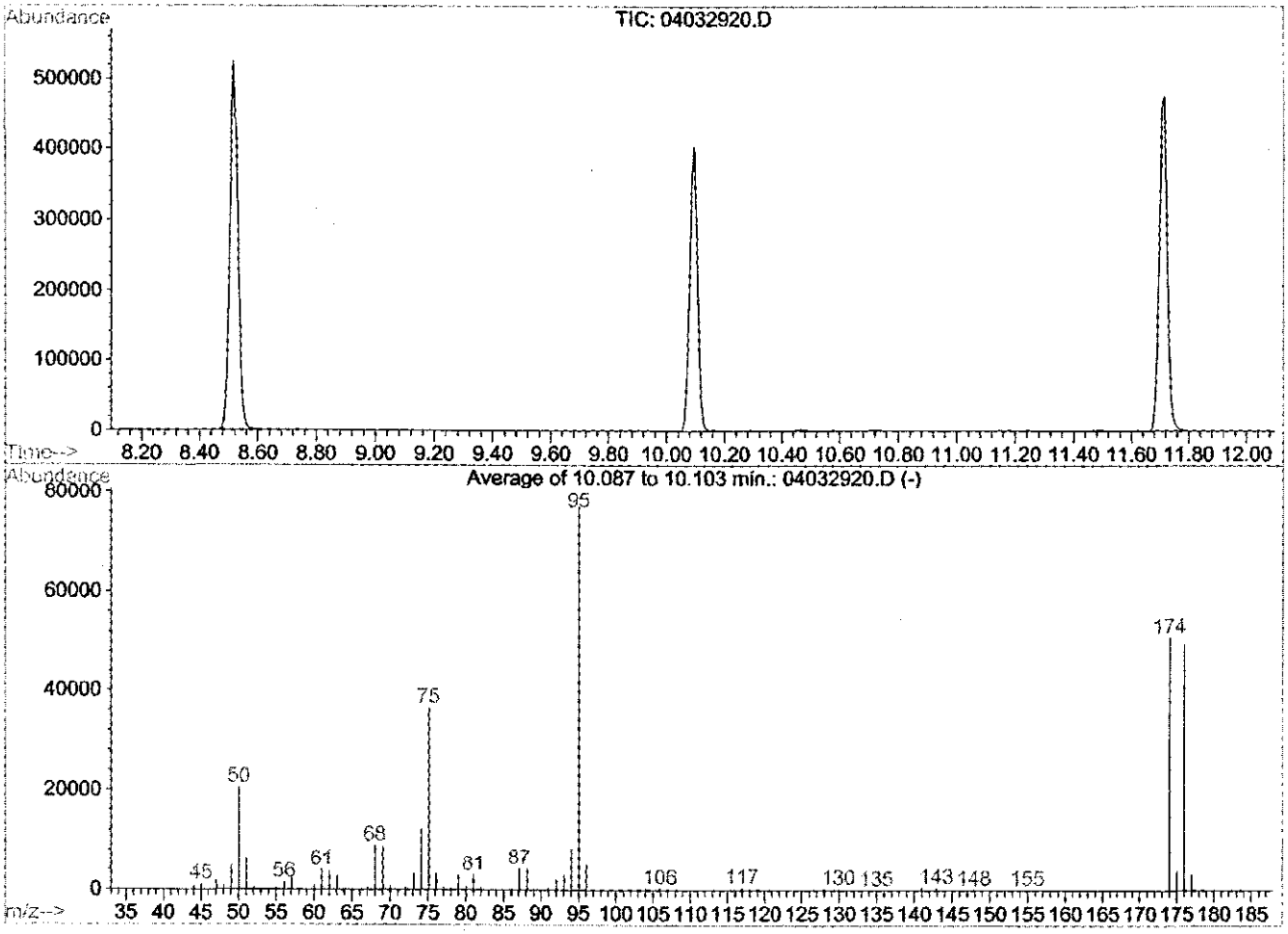
Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	26.6
75	30.0 - 60.0% of mass 95	47.6
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	66.3
175	5.0 - 9.0% of mass 174	7.3
176	Greater than 95.0%, but less than 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	6.6

This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB032404	04032603-01	04032928.D	03/29/04 21:56
DMW-5I-032404	04032603-02	04032937.D	03/30/04 01:55
DMW-5D-032404	04032603-04	04032929.D	03/29/04 22:20
DMW-5S-032404	04032603-06	04032938.D	03/30/04 02:23
DMW-4I-032404	04032603-08	04032939.D	03/30/04 02:51
MW-4-032504	04032603-10	04032930.D	03/29/04 22:46
DMW-9S-032504	04032603-14	04032941.D	03/30/04 03:47
DMW-2S-032504	04032603-16	04032931.D	03/29/04 23:11
DMW-4S-032404	04032603-18	04032932.D	03/29/04 23:36

BFB

Data File : C:\HPCHEM\2\DATA\040329\04032920.D Vial: 20
Acq On : 29 Mar 2004 6:33 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics



AutoFind: Scans 1224, 1225, 1226; Background Corrected with Scan 1217

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.6	20429	PASS
75	95	30	60	47.6	36560	PASS
95	95	100	100	100.0	76816	PASS
96	95	5	9	6.6	5033	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.3	50893	PASS
175	174	5	9	7.3	3712	PASS
176	174	95	101	97.5	49643	PASS
177	176	5	9	6.6	3264	PASS

04032920.D TCL-W.M Tue Mar 30 12:25:16 2004

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04033001.D**	**DATE/TIME ANALYZED:**	**03/30/04 09:49**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.9
75	30.0 - 60.0% of mass 95	51.1
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	59.6
175	5.0 - 9.0% of mass 174	7.7
176	Greater than 95.0%, but less than 101.0% of mass 174	99.6
177	5.0 - 9.0% of mass 176	6.7

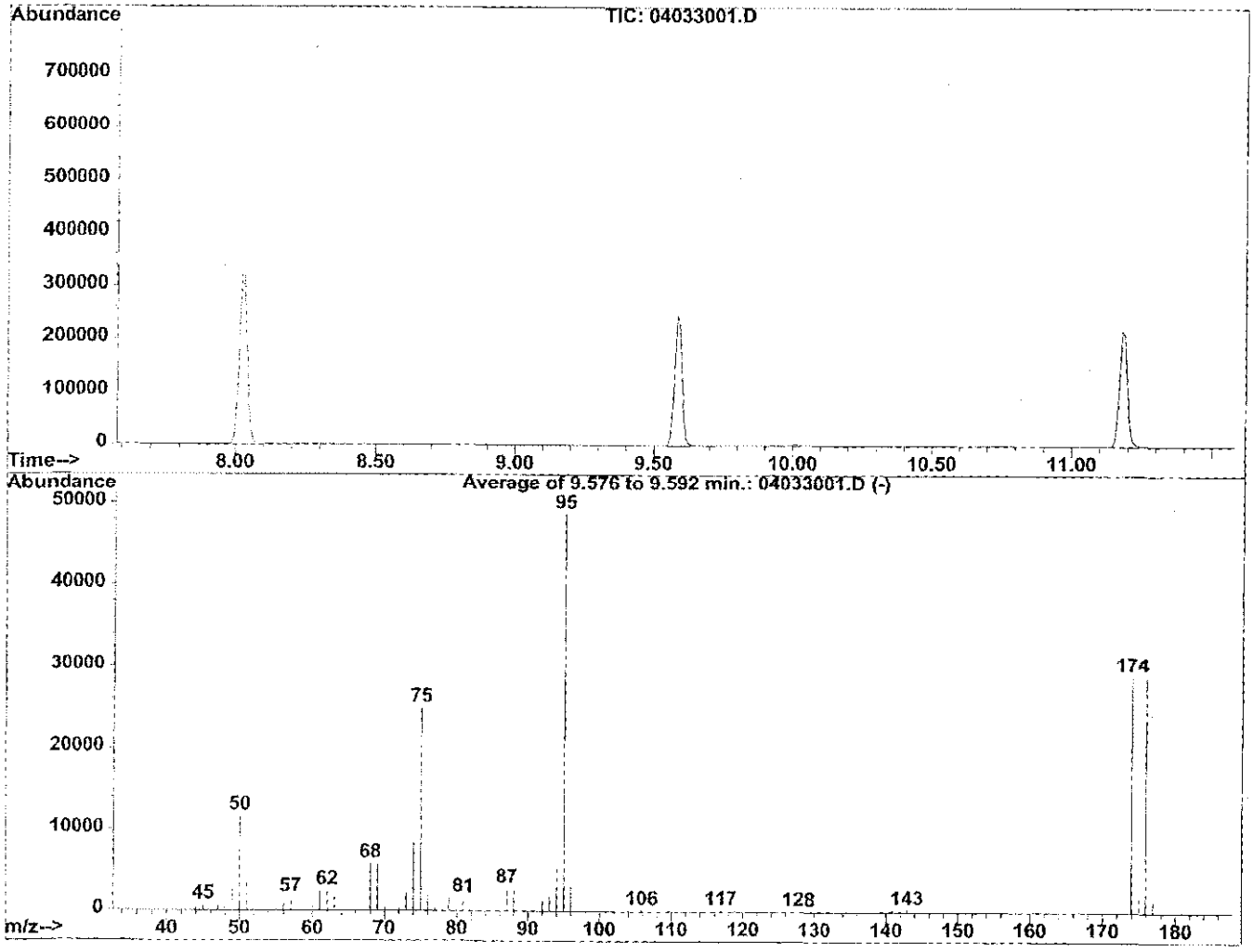
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-9D-032504	04032603-12	04033014.D	03/30/04 16:17

BFB

Data File : C:\HPCHEM\1\DATA\040330\04033001.D
Acq On : 30 Mar 2004 9:49 am
Sample : BFB TUNE Water 5mL
Misc : FS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1160, 1161, 1162; Background Corrected with Scan 1154

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	11661	PASS
75	95	30	60	51.1	24901	PASS
95	95	100	100	100.0	48693	PASS
96	95	5	9	6.5	3177	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	59.6	29016	PASS
175	174	5	9	7.7	2222	PASS
176	174	95	101	99.6	28893	PASS
177	176	5	9	6.7	1930	PASS

Injection Log

Directory: g:\040329

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04032901.d	1.	BFB TUNE Water 5mL	IS/Surr 1uL #423	29 Mar 04 09:52
2	2	04032902.d	1.	TCL-W, CCV 50ppb	IS/Surr 1uL #423, CCV 10uL #415	29 Mar 04 10:29
3	3	04032903.d	1.	UNREG-W, CCV 50ppb	IS/Surr 1uL #423, CCV 2uL #416	29 Mar 04 10:54
4	4	04032904.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 11:19
5	5	04032905.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 11:45
6	6	04032906.d	1.	ICal STD TCL-Water 1ppb	IS/Surr 1uL #423, 2uL #415 (10D)	29 Mar 04 12:31
7	7	04032907.d	1.	ICal STD TCL-Water 5ppb	IS/Surr 1uL #423, 1uL #415	29 Mar 04 12:56
8	8	04032908.d	1.	ICal STD TCL-Water 10ppb	IS/Surr 1uL #423, 2uL #415	29 Mar 04 13:22
9	9	04032909.d	1.	ICal STD TCL-Water 20ppb	IS/Surr 1uL #423, 4uL #415	29 Mar 04 13:47
10	10	04032910.d	1.	ICal STD TCL-Water 50ppb	IS/Surr 1uL #423, 10uL #415	29 Mar 04 14:12
11	11	04032911.d	1.	ICal STD TCL-Water 200ppb	IS/Surr 1uL #423, 40uL #415	29 Mar 04 14:38
12	12	04032912.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 15:03
13	13	04032913.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 15:28
14	14	04032914.d	1.	ICal STD UNREG-Water 5ppb	IS/Surr 1uL #423, ICal 1uL #416	29 Mar 04 16:02
15	15	04032915.d	1.	ICal STD UNREG-Water 10ppb	IS/Surr 1uL #423, ICal 2uL #416	29 Mar 04 16:27
16	16	04032916.d	1.	ICal STD UNREG-Water 20ppb	IS/Surr 1uL #423, ICal 4uL #416	29 Mar 04 16:53
17	17	04032917.d	1.	ICal STD UNREG-Water 50ppb	IS/Surr 1uL #423, ICal 10uL #416	29 Mar 04 17:17
18	18	04032918.d	1.	ICal STD UNREG-Water 200ppb	IS/Surr 1uL #423, ICal 40uL #416	29 Mar 04 17:43
19	19	04032919.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 18:08
20	20	04032920.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 18:33
21	21	04032921.d	1.	ICV-W, 50ppb	IS/Surr 1uL #423, ICV 10uL #350	29 Mar 04 18:59
22	22	04032922.d	1.	TCL-W, CCV 50ppb	IS/Surr 1uL #423, CCV 10uL #415	29 Mar 04 19:24
23	23	04032923.d	1.	UNREG-W, CCV 50ppb	IS/Surr 1uL #423, CCV 10uL #416	29 Mar 04 19:49
24	24	04032924.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 20:15
25	25	04032925.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	29 Mar 04 20:40
26	26	04032926.d	1.	04032613-01 5mL	IS/Surr 1uL #423	29 Mar 04 21:05
27	27	04032927.d	1.	04032613-02 5mL	IS/Surr 1uL #423	29 Mar 04 21:30
28	28	04032928.d	1.	04032603-01 5mL	IS/Surr 1uL #423	29 Mar 04 21:56
29	29	04032929.d	1.	04032603-04 5mL	IS/Surr 1uL #423	29 Mar 04 22:20
30	30	04032930.d	1.	04032603-10 5mL	IS/Surr 1uL #423	29 Mar 04 22:46
31	31	04032931.d	1.	04032603-16 5mL	IS/Surr 1uL #423	29 Mar 04 23:11
32	32	04032932.d	1.	04032603-18 5mL	IS/Surr 1uL #423	29 Mar 04 23:36
33	33	04032933.d	1.	UNREG-W, 1ppb	IS/Surr 1uL #423, 2uL #416 (10D)	30 Mar 04 00:03
34	34	04032934.d	1.	04032618-01 10D	IS/Surr 1uL #423	30 Mar 04 00:31
35	35	04032935.d	1.	04032619-01 10D	IS/Surr 1uL #423	30 Mar 04 00:59
36	36	04032936.d	1.	04032613-03 10D	IS/Surr 1uL #423	30 Mar 04 01:27
37	37	04032937.d	1.	04032603-02 10D	IS/Surr 1uL #423	30 Mar 04 01:55
38	38	04032938.d	1.	04032603-06 10D	IS/Surr 1uL #423	30 Mar 04 02:23
39	39	04032939.d	1.	04032603-08 10D	IS/Surr 1uL #423	30 Mar 04 02:51
40	40	04032940.d	1.	04032603-12 10D	IS/Surr 1uL #423	30 Mar 04 03:19
41	41	04032941.d	1.	04032603-14 100D	IS/Surr 1uL #423	30 Mar 04 03:47
42	42	04032942.d	1.	LCS 25ppb	IS/Surr 1uL #423, LCS 5uL #350	30 Mar 04 04:12
43	43	04032943.d	1.	04032613-01 MS 25ppb	IS/Surr 1uL #423, MS 5uL #350	30 Mar 04 04:37
44	44	04032944.d	1.	04032613-01 MSD 25ppb	IS/Surr 1uL #423, MS 5uL #350	30 Mar 04 05:02

Injection Log

Directory: g:\040329

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
45	45	04032945.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	30 Mar 04 05:28
46	46	04032946.d	1.	METHOD BLANK 5mL	IS/Surr 1uL #423	30 Mar 04 05:53

Injection Log

Directory: c:\hpchem\1\data\040330

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04033001.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	30 Mar 04 09:49
2	2	04033002.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	30 Mar 04 11:05
3	3	04033003.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	30 Mar 04 11:29
4	4	04033004.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 11:53
5	5	04033005.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 12:17
6	6	04033006.d	1.	04032606-04 5mL	IS/S 1uL #423	30 Mar 04 12:41
7	7	04033007.d	1.	04032606-05 5mL	IS/S 1uL #423	30 Mar 04 13:05
8	8	04033008.d	1.	04032603-14 500D	IS/S 1uL #423	30 Mar 04 13:29
9	9	04033009.d	1.	04032606-09 10D	IS/S 1uL #423	30 Mar 04 13:55
10	10	04033010.d	1.	04032603-16 20D	IS/S 1uL #423	30 Mar 04 14:22
11	11	04033011.d	1.	04032603-18 20D	IS/S 1uL #423	30 Mar 04 14:49
12	12	04033012.d	1.	04032603-06 100D	IS/S 1uL #423	30 Mar 04 15:24
13	13	04033013.d	1.	04032603-08 100D	IS/S 1uL #423	30 Mar 04 15:50
14	14	04033014.d	1.	04032603-12 100D	IS/S 1uL #423	30 Mar 04 16:17
15	15	04033015.d	1.	04032606-03 100D	IS/S 1uL #423	30 Mar 04 16:44
16	16	04033016.d	1.	04032618-01 100D	IS/S 1uL #423	30 Mar 04 17:11
17	17	04033017.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 17:35
18	18	04033018.d	1.	04033017-01 5mL	IS/S 1uL #423	30 Mar 04 17:58
19	19	04033019.d	1.	04032419-08 5mL	IS/S 1uL #423	30 Mar 04 18:22
20	20	04033020.d	1.	04033013-01 5mL	IS/S 1uL #423	30 Mar 04 18:46
21	21	04033021.d	1.	04033013-10 5mL	IS/S 1uL #423	30 Mar 04 19:10
22	22	04033022.d	1.	04033013-12 5mL	IS/S 1uL #423	30 Mar 04 19:34
23	23	04033023.d	1.	04033013-14 5mL	IS/S 1uL #423	30 Mar 04 19:58
24	24	04033024.d	1.	04033013-02 10D	IS/S 1uL #423	30 Mar 04 20:25
25	25	04033025.d	1.	04033013-04 10D	IS/S 1uL #423	30 Mar 04 20:52
26	26	04033026.d	1.	04033013-06 10D	IS/S 1uL #423	30 Mar 04 21:18
27	27	04033027.d	1.	04033013-08 10D	IS/S 1uL #423	30 Mar 04 21:45
28	28	04033028.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	30 Mar 04 22:09
29	29	04033029.d	1.	04033017-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	30 Mar 04 22:33
30	30	04033030.d	1.	04033017-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	30 Mar 04 22:57
31	31	04033031.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 23:21
32	32	04033032.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 02:58

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/29/04 19:24	TCL-W, CCV 50ppb	101	99	99	
03/29/04 19:49	UNREG-W, CCV 50ppb	100	100	101	
03/29/04 20:40	Method Blank	100	101	102	
03/30/04 04:12	LCS / LCS 25ppb	101	100	100	
03/29/04 21:56	TB032404 / 04032603-01	100	100	101	
03/30/04 01:55	DMW-5I-032404 / 04032603-02	101	101	100	
03/29/04 22:20	DMW-5D-032404 / 04032603-04	101	99	101	
03/30/04 02:23	DMW-5S-032404 / 04032603-06	101	98	100	
03/30/04 02:51	DMW-4I-032404 / 04032603-08	101	97	100	
03/29/04 22:46	MW-4-032504 / 04032603-10	100	100	102	
03/30/04 03:47	DMW-9S-032504 / 04032603-14	101	101	101	
03/29/04 23:11	DMW-2S-032504 / 04032603-16	100	101	100	
03/29/04 23:36	DMW-4S-032404 / 04032603-18	102	99	100	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/30/04 11:05	TCL-W, CCV 50ppb	102	103	105	
03/30/04 11:29	UNREG-W, CCV 50ppb	101	102	100	
03/30/04 12:17	Method Blank	103	102	103	
03/30/04 22:09	LCS / LCS 25ppb	101	101	103	
03/30/04 16:17	DMW-9D-032504 / 04032603-12	103	101	108	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04032925.D**	**DATE/TIME ANALYZED:**	**03/29/04 20:40**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB032404	04032603-01	04032928.D	03/29/04 21:56
DMW-5I-032404	04032603-02	04032937.D	03/30/04 01:55
DMW-5D-032404	04032603-04	04032929.D	03/29/04 22:20
DMW-5S-032404	04032603-06	04032938.D	03/30/04 02:23
DMW-4I-032404	04032603-08	04032939.D	03/30/04 02:51
MW-4-032504	04032603-10	04032930.D	03/29/04 22:46
DMW-9S-032504	04032603-14	04032941.D	03/30/04 03:47
DMW-2S-032504	04032603-16	04032931.D	03/29/04 23:11
DMW-4S-032404	04032603-18	04032932.D	03/29/04 23:36

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032925.D Vial: 25
Acq On : 29 Mar 2004 8:40 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:28 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.37	168	185881	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	5.11	114	352568	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.52	117	307869	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.71	152	125442	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.34	113	149379	49.85	ug/L	0.00
Spiked Amount 50.000			Recovery =	99.70%		
33) Toluene d-8 SS#2	6.74	98	426509	50.60	ug/L	0.00
Spiked Amount 50.000			Recovery =	101.20%		
50) 4-Bromofluorobenzene SS#3	10.09	95	166260	51.14	ug/L	0.00
Spiked Amount 50.000			Recovery =	102.28%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	0.00	94	0	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	0.00	43	0	Not Detected		d
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.89	84	5045	1.51	ug/L #	87
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	3.91	43	654	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	4.45	56	230	Not Detected		
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	0.00	78	0	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032925.D Vial: 25
Acq On : 29 Mar 2004 8:40 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:28 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

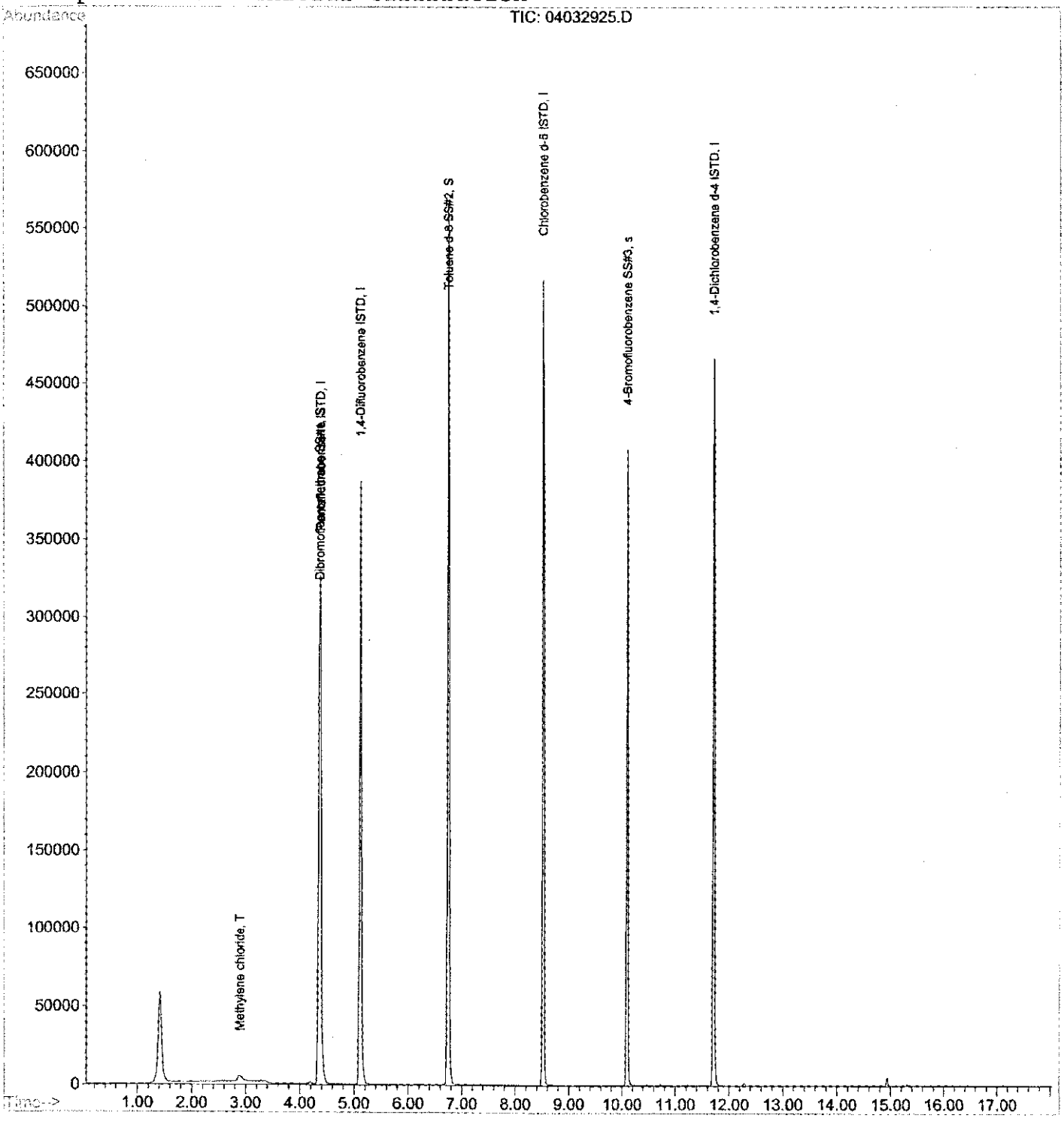
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27)	Trichloroethene	0.00	95	0	Not Detected	
28)	1,2-DICHLOROPROPANE	0.00	63	0	Not Detected	
29)	Methylcyclohexane	0.00	83	0	Not Detected	
30)	Bromodichloromethane	0.00	83	0	Not Detected	
31)	cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32)	4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34)	TOLUENE	0.00	92	0	Not Detected	
35)	trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36)	1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37)	Tetrachloroethene	0.00	166	0	Not Detected	
38)	2-Hexanone (MBK)	7.60	43	50	Not Detected	
40)	Dibromochloromethane	0.00	129	0	Not Detected	
41)	1,2-Dibromoethane	0.00	107	0	Not Detected	
42)	Chlorobenzene	8.56	112	180	Not Detected	
43)	ETHYLBENZENE	8.71	91	151	Not Detected	
44)	m&p-Xylene	0.00	106	0	Not Detected	
45)	o-Xylene	0.00	106	0	Not Detected	
46)	Styrene	9.40	104	183	Not Detected	
47)	Bromoform	0.00	173	0	Not Detected	
49)	Isopropylbenzene	9.90	105	190	Not Detected	
51)	1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52)	1,3-Dichlorobenzene	11.60	146	115	Not Detected	
53)	1,4-Dichlorobenzene	0.00	146	0	Not Detected	d
54)	1,2-Dichlorobenzene	12.26	146	109	Not Detected	
55)	1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56)	1,2,4-Trichlorobenzene	14.59	180	143	Not Detected	
57)	Naphthalene	0.00	128	0	Not Detected	d

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\040329\04032925.D Vial: 25
Acq On : 29 Mar 2004 8:40 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:28 2004

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032925.D Vial: 25
Acq On : 29 Mar 2004 8:40 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:38 2004

Quant Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.37	168	185881	50.00	ug/L	0.00
12) 1,4-Difluorobenzene	5.11	114	352568	50.00	ug/L	0.00
19) Chlorobenzene d-5	8.52	117	307869	50.00	ug/L	0.00
27) 1,4-Dichlorobenzene d-4	11.71	152	125442	50.00	ug/L	0.00
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	4.34	113	149379	49.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.06%			
18) Toluene d-8 SS#2	6.74	98	426509	51.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.40%			
23) 4-Bromofluorobenzene SS#3	10.09	95	166260	49.25	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.50%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	2.95	59	53	Not Detected		
6) vinyl acetate	3.39	43	50	Not Detected		
7) diisopropyl ether	0.00	45	0	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected d		
26) n-Propylbenzene	10.46	91	886	Not Detected		
28) 2-Chlorotoluene	10.46	91	886	Not Detected		
29) 4-Chlorotoluene	10.57	91	232	Not Detected		
30) 1,3,5-Trimethylbenzene	10.73	105	229	Not Detected		

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\2\DATA\040329\04032925.D Vial: 25
Acq On : 29 Mar 2004 8:40 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : GC/MS Ins
Misc : IS/Surr 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:38 2004

Quant Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	tert-Butylbenzene	0.00	119	0	Not Detected	
32)	1,2,4-Trimethylbenzene	10.73	105	229	Not Detected	
33)	sec-Butylbenzene	11.23	105	511	Not Detected	
34)	4-Isopropyltoluene	11.17	119	140	Not Detected	
35)	n-Butylbenzene	11.70	91	552	Not Detected	
36)	1,2,3-Trichlorobenzene	15.31	180	492	Not Detected	

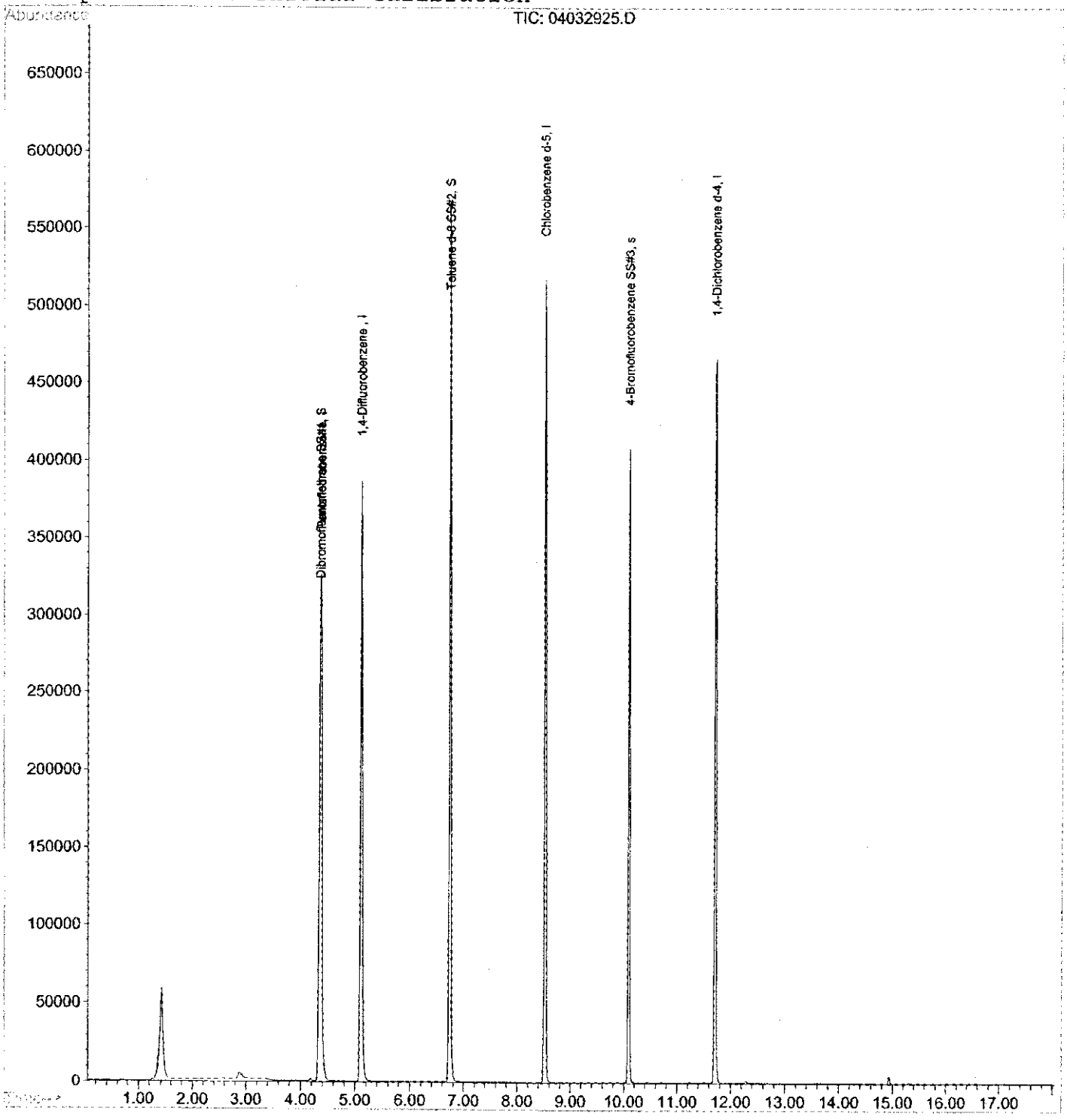
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\040329\04032925.D
Acq On : 29 Mar 2004 8:40 pm
Sample : METHOD BLANK 5mL
Misc : IS/Surr 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 30 12:38 2004

Vial: 25
Operator: MI
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 12:14:52 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04033005.D**	**DATE/TIME ANALYZED:**	**03/30/04 12:17**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-9D-032504	04032603-12	04033014.D	03/30/04 16:17

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	114279	50.00	ug/L	-0.02
23) 1,4-Difluorobenzene ISTD	4.70	114	214245	50.00	ug/L	-0.01
39) Chlorobenzene d-5 ISTD	8.03	117	177259	50.00	ug/L	-0.02
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	60418	50.00	ug/L	-0.02
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	70498	51.58	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.16%			
33) Toluene d-8 SS#2	6.29	98	281034	50.75	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.50%			
50) 4-Bromofluorobenzene SS#3	9.59	95	104209	51.39	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.78%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	1.76	94	59	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	0.00	43	0	Not Detected		d
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.57	84	567	Not Detected		
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	0.00	43	0	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	0.00	56	0	Not Detected		d
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.32	78	114	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D
Acq On : 30 Mar 2004 12:17 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

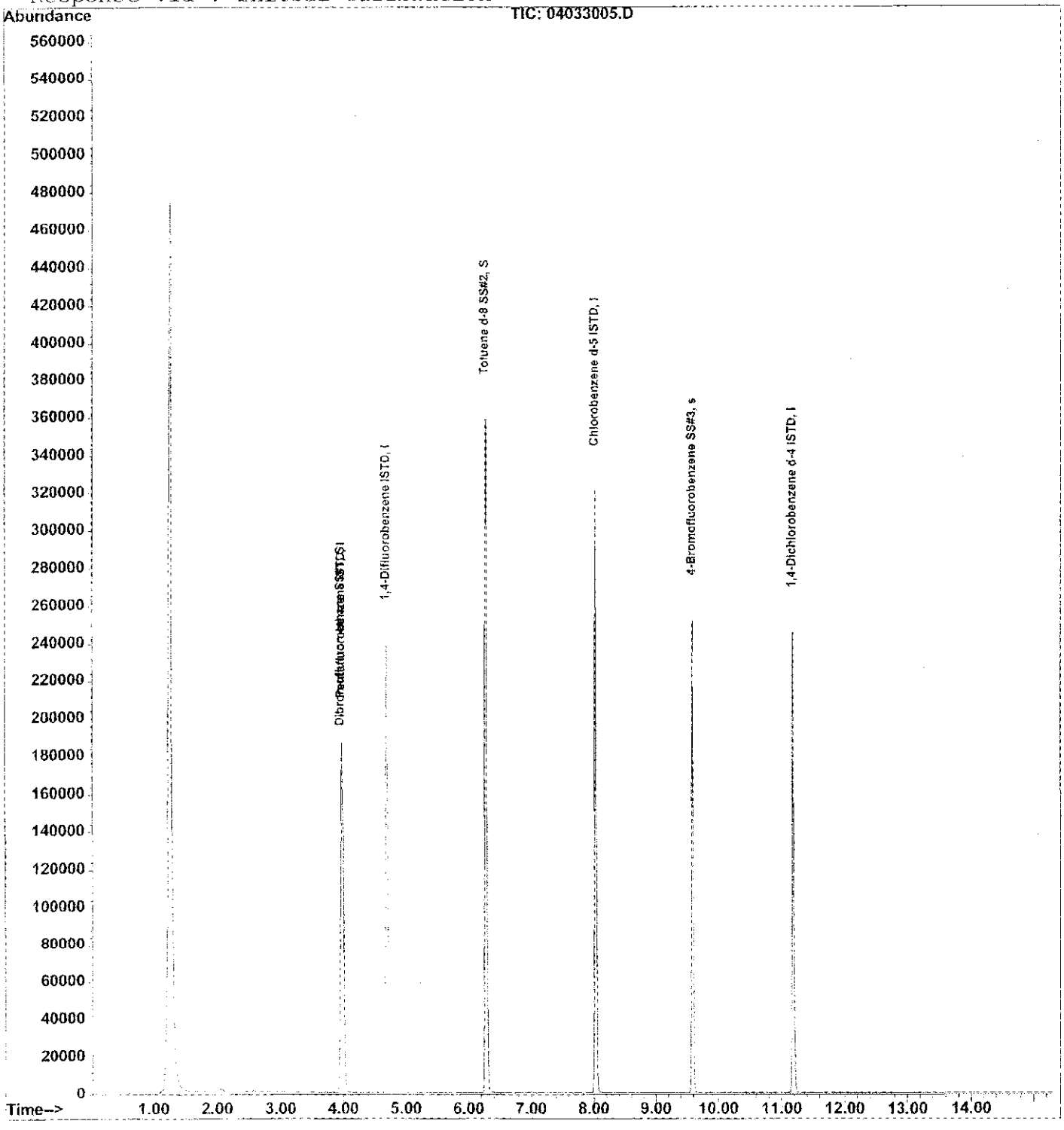
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34) TOLUENE	0.00	92	0	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	7.00	166	247	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.22	91	49	Not Detected	
44) m&p-Xylene	0.00	106	0	Not Detected	
45) o-Xylene	0.00	106	0	Not Detected	
46) Styrene	0.00	104	0	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	0.00	105	0	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	11.22	146	1426	Not Detected	
53) 1,4-Dichlorobenzene	11.22	146	1426	Not Detected	
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	0.00	180	0	Not Detected	
57) Naphthalene	14.38	128	242	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	3.99	168	114279	50.00	ug/L	-0.02
12) 1,4-Difluorobenzene	4.70	114	214245	50.00	ug/L	-0.02
19) Chlorobenzene d-5	8.03	117	177259	50.00	ug/L	-0.02
27) 1,4-Dichlorobenzene d-4	11.19	152	60418	50.00	ug/L	-0.02
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.97	113	70498	51.28	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.56%			
18) Toluene d-8 SS#2	6.29	98	281034	50.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.12%			
23) 4-Bromofluorobenzene SS#3	9.59	95	104209	51.68	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.36%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		
6) vinyl acetate	3.12	43	294	Not Detected		
7) diisopropyl ether	0.00	45	0	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.95	91	308	Not Detected		
28) 2-Chlorotoluene	9.95	91	308	Not Detected		
29) 4-Chlorotoluene	10.21	91	123	Not Detected		
30) 1,3,5-Trimethylbenzene	10.22	105	169	Not Detected		
31) tert-Butylbenzene	0.00	119	0	Not Detected		
32) 1,2,4-Trimethylbenzene	10.73	105	241	Not Detected		
33) sec-Butylbenzene	10.96	105	296	Not Detected		
34) 4-Isopropyltoluene	11.19	119	246	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

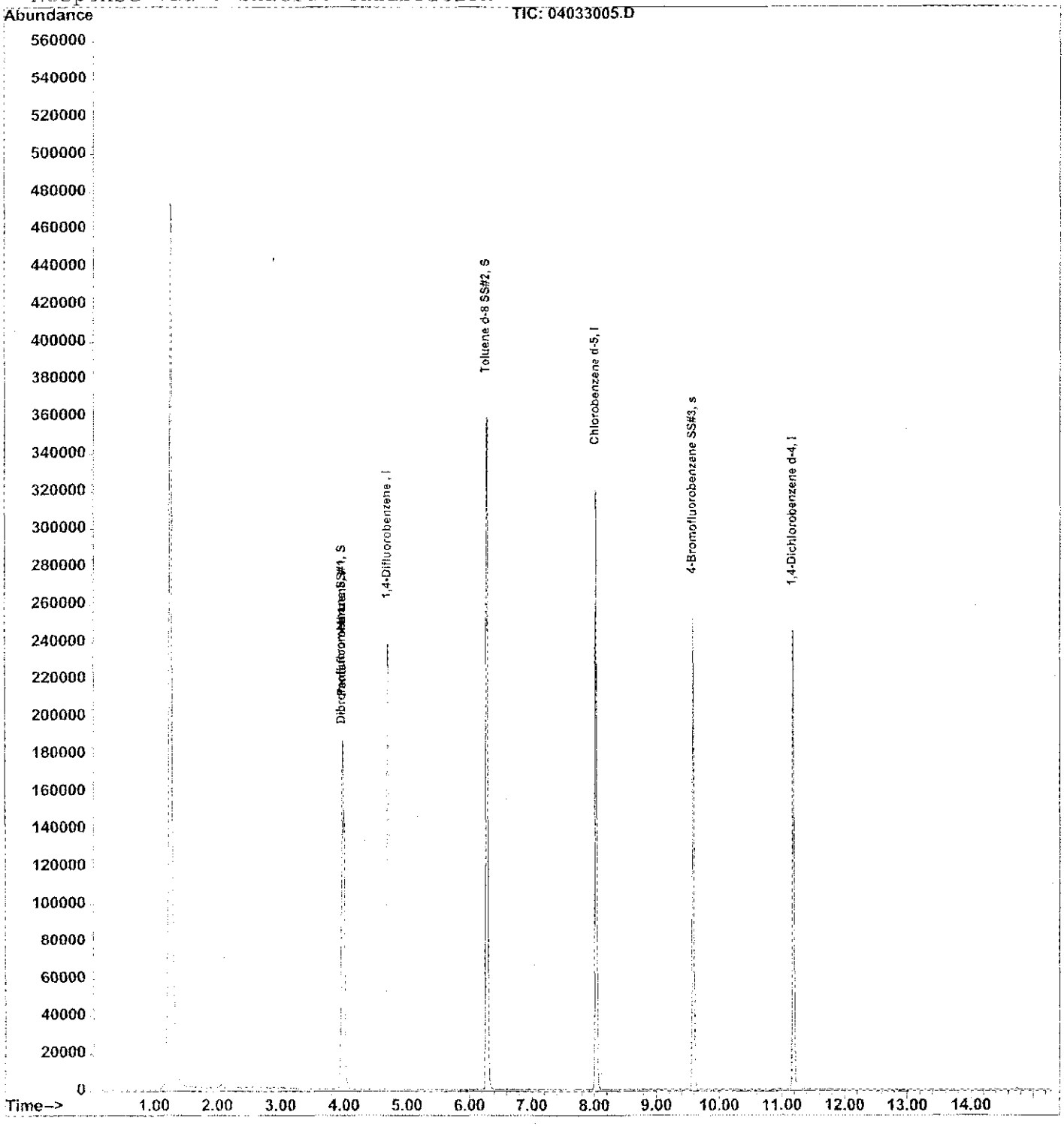
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.76	91	477	Not Detected	
36) 1,2,3-Trichlorobenzene	14.75	180	503	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: **03/30/04** **BATCH NUMBER:** **VOC040329**

METHOD: **EPA 8260** **LAB FILE IDs:** **04032942.D**

MATRIX: **Water**

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	91	61-145
Benzene	25	ND	24	94	76-127
Trichloroethene	25	ND	22	88	71-120
Toluene	25	ND	24	97	76-125
Chlorobenzene	25	ND	23	91	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032942.D Vial: 42
Acq On : 30 Mar 2004 4:12 am Operator: MI
Sample : LCS 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.38	168	180729	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	5.11	114	343344	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.52	117	300465	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.71	152	125968	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.35	113	147527	50.64	ug/L	0.00
Spiked Amount 50.000			Recovery = 101.28%			
33) Toluene d-8 SS#2	6.74	98	411979	50.19	ug/L	0.00
Spiked Amount 50.000			Recovery = 100.38%			
50) 4-Bromofluorobenzene SS#3	10.09	95	162715	49.84	ug/L	0.00
Spiked Amount 50.000			Recovery = 99.68%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.53	85	64551	21.37	ug/L	100
3) Chloromethane	1.66	50	107178	23.49	ug/L	100
4) VINYL CHLORIDE	1.75	62	96603	23.31	ug/L	100
5) Bromomethane	1.98	94	65044	21.98	ug/L	98
6) Chloroethane	2.01	64	56234	26.25	ug/L	99
7) Trichlorofluoromethane	2.19	101	61534m	24.23	ug/L	
8) Acetone	2.53	43	23498	40.23	ug/L	94
9) 1,1-DICHLOROETHENE	2.57	96	60756	24.98	ug/L	100
10) 1,1,2-Trichlorotrifluoroet	2.53	101	40854	22.81	ug/L	96
11) Carbon Disulfide	2.74	76	250142	25.12	ug/L	99
12) Methyl Acetate	2.76	74	9676	30.03	ug/L	97
13) Methylene chloride	2.88	84	74414	22.84	ug/L	100
14) trans-1,2-Dichloroethene	3.09	96	63753	22.60	ug/L	95
15) Methyl-t-Butyl Ether	3.09	73	125731	23.57	ug/L	100
16) 1,1-Dichloroethane	3.42	63	129424	22.80	ug/L	100
17) cis-1,2-Dichloroethene	3.92	96	68852	24.41	ug/L	98
18) 2-Butanone (MEK)	3.91	43	41553	29.28	ug/L	98
19) CHLOROFORM	4.20	83	119198	22.83	ug/L	99
21) 1,1,1-Trichloroethane	4.40	97	82131	22.65	ug/L #	4
22) Cyclohexane	4.47	56	104421	22.74	ug/L	100
24) Carbon tetrachloride	4.56	117	61823	22.34	ug/L	98
25) Benzene	4.75	78	232989	23.54	ug/L	99
26) 1,2-Dichloroethane	4.75	62	98184	23.69	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032942.D Vial: 42
Acq On : 30 Mar 2004 4:12 am Operator: MI
Sample : LCS 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

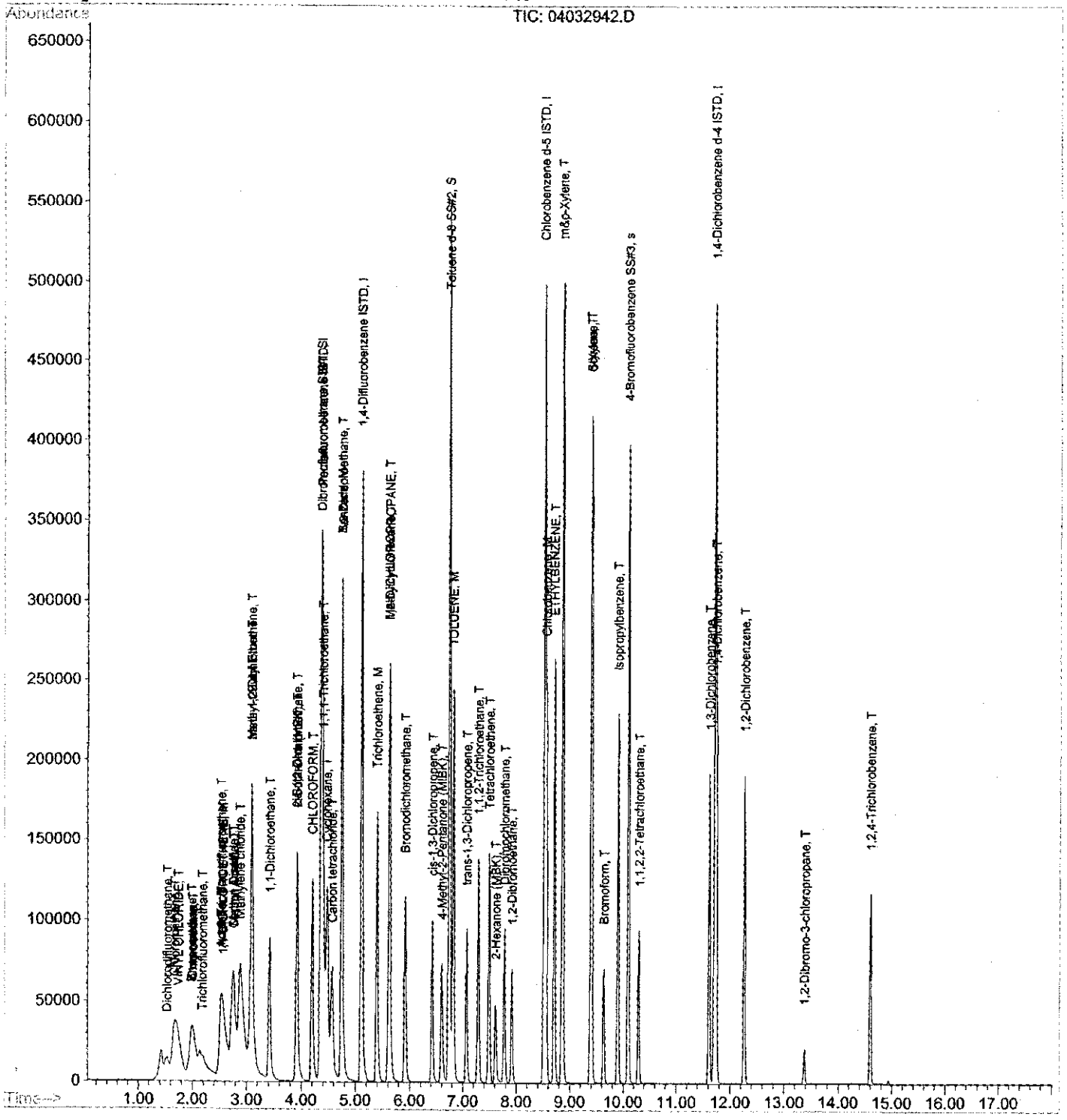
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27)	Trichloroethene	5.39	95	68916	21.90	ug/L	100
28)	1,2-DICHLOROPROPANE	5.62	63	73092	23.45	ug/L	99
29)	Methylcyclohexane	5.62	83	66021	22.47	ug/L	98
30)	Bromodichloromethane	5.91	83	86221	23.30	ug/L	100
31)	cis-1,3-Dichloropropene	6.42	75	91860	21.80	ug/L	100
32)	4-Methyl-2-Pentanone (MIBK	6.60	43	92513	29.18	ug/L	100
34)	TOLUENE	6.82	92	130957	24.14	ug/L	98
35)	trans-1,3-Dichloropropene	7.07	75	78455	21.87	ug/L	100
36)	1,1,2-Trichloroethane	7.28	83	48714	24.85	ug/L	99
37)	Tetrachloroethene	7.49	166	45326	22.83	ug/L	99
38)	2-Hexanone (MBK)	7.61	43	57388	29.17	ug/L	96
40)	Dibromochloromethane	7.78	129	53271	23.47	ug/L	99
41)	1,2-Dibromoethane	7.92	107	57361	25.00	ug/L	100
42)	Chlorobenzene	8.56	112	129022	22.83	ug/L	94
43)	ETHYLBENZENE	8.71	91	230083	23.37	ug/L	99
44)	m&p-Xylene	8.87	106	167322	24.36	ug/L	100
45)	o-Xylene	9.39	106	79212	23.62	ug/L	99
46)	Styrene	9.40	104	133653	23.10	ug/L	91
47)	Bromoform	9.63	173	32877	24.50	ug/L	100
49)	Isopropylbenzene	9.90	105	171563	23.57	ug/L	99
51)	1,1,2,2-Tetrachloroethane	10.30	83	61085	35.21	ug/L	99
52)	1,3-Dichlorobenzene	11.61	146	79642	22.75	ug/L	99
53)	1,4-Dichlorobenzene	11.75	146	85493	24.64	ug/L	97
54)	1,2-Dichlorobenzene	12.26	146	77606	23.03	ug/L	99
55)	1,2-Dibromo-3-chloropropan	13.37	75	7711	31.68	ug/L	97
56)	1,2,4-Trichlorobenzene	14.60	180	37381	23.26	ug/L	99
57)	Naphthalene	14.93	128	2150	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\040329\04032942.D Vial: 42
Acq On : 30 Mar 2004 4:12 am Operator: MI
Sample : LCS 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/30/04 **BATCH NUMBER:** VOC040330

METHOD: EPA 8260 **LAB FILE IDs:** 04033028.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	93	61-145
Benzene	25	ND	25	100	76-127
Trichloroethene	25	ND	26	105	71-120
Toluene	25	ND	25	98	76-125
Chlorobenzene	25	ND	23	92	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033028.D
Acq On : 30 Mar 2004 10:09 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Vial: 28
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	113072	50.00	ug/L		-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	207094	50.00	ug/L		0.00
39) Chlorobenzene d-5 ISTD	8.04	117	173386	50.00	ug/L		-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	58741	50.00	ug/L		-0.01
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.98	113	68460	50.62	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.24%				
33) Toluene d-8 SS#2	6.29	98	270706	50.58	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.16%				
50) 4-Bromofluorobenzene SS#3	9.59	95	101623	51.55	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.39	85	43524	21.40	ug/L		100
3) Chloromethane	1.49	50	51230	23.54	ug/L		99
4) VINYL CHLORIDE	1.58	62	49349	22.85	ug/L		100
5) Bromomethane	1.76	94	39901	22.54	ug/L		99
6) Chloroethane	1.77	64	28887	26.02	ug/L		99
7) Trichlorofluoromethane	1.93	101	32865	26.19	ug/L	#	58
8) Acetone	2.28	43	13179	24.29	ug/L		95
9) 1,1-DICHLOROETHENE	2.26	96	38595	23.22	ug/L		93
10) 1,1,2-Trichlorotrifluoroet	2.28	101	33390	24.37	ug/L		97
11) Carbon Disulfide	2.44	76	144824	24.43	ug/L		99
12) Methyl Acetate	2.49	74	4929	23.63	ug/L		98
13) Methylene chloride	2.59	84	45169	22.57	ug/L		98
14) trans-1,2-Dichloroethene	2.79	96	42534	23.78	ug/L		94
15) Methyl-t-Butyl Ether	2.78	73	85220	25.11	ug/L		100
16) 1,1-Dichloroethane	3.10	63	73921	24.32	ug/L		99
17) cis-1,2-Dichloroethene	3.57	96	48015	26.87	ug/L		94
18) 2-Butanone (MEK)	3.56	43	24907	24.68	ug/L		99
19) CHLOROFORM	3.84	83	79899	24.48	ug/L		100
21) 1,1,1-Trichloroethane	4.02	97	56048	24.27	ug/L	#	15
22) Cyclohexane	4.08	56	67015	25.42	ug/L	#	88
24) Carbon tetrachloride	4.17	117	37921	23.71	ug/L		98
25) Benzene	4.35	78	192186	24.96	ug/L		99
26) 1,2-Dichloroethane	4.36	62	61649	25.62	ug/L		97
27) Trichloroethene	4.98	95	45859	26.23	ug/L		97
28) 1,2-DICHLOROPROPANE	5.20	63	51764	25.50	ug/L		99
29) Methylcyclohexane	5.19	83	40769	22.55	ug/L		97
30) Bromodichloromethane	5.49	83	59212	24.55	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033028.D Vial: 28
Acq On : 30 Mar 2004 10:09 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.98	75	77300	24.02 ug/L	97
32)	4-Methyl-2-Pentanone (MIBK	6.16	43	52459	26.18 ug/L	100
34)	TOLUENE	6.37	92	102588	24.60 ug/L	99
35)	trans-1,3-Dichloropropene	6.62	75	64369	23.77 ug/L	97
36)	1,1,2-Trichloroethane	6.84	83	30893	25.01 ug/L	98
37)	Tetrachloroethene	7.01	166	25389	22.93 ug/L	99
38)	2-Hexanone (MBK)	7.16	43	35491	25.83 ug/L	97
40)	Dibromochloromethane	7.31	129	27602	23.54 ug/L	99
41)	1,2-Dibromoethane	7.45	107	31389	25.32 ug/L	98
42)	Chlorobenzene	8.07	112	90722	23.05 ug/L	93
43)	ETHYLBENZENE	8.23	91	169431	23.99 ug/L	98
44)	m&p-Xylene	8.38	106	113124	47.12 ug/L	94
45)	o-Xylene	8.90	106	55921	24.09 ug/L	94
46)	Styrene	8.92	104	102384	23.90 ug/L	93
47)	Bromoform	9.15	173	17373	24.61 ug/L	100
49)	Isopropylbenzene	9.40	105	104524	22.70 ug/L	100
51)	1,1,2,2-Tetrachloroethane	9.82	83	41202	24.16 ug/L	98
52)	1,3-Dichlorobenzene	11.10	146	39246	21.47 ug/L	97
53)	1,4-Dichlorobenzene	11.23	146	44503	20.51 ug/L	98
54)	1,2-Dichlorobenzene	11.75	146	38712	22.39 ug/L	100
55)	1,2-Dibromo-3-chloropropan	12.86	75	5227	23.79 ug/L	97
56)	1,2,4-Trichlorobenzene	14.06	180	18900	20.19 ug/L	100
57)	Naphthalene	14.39	128	437	Not Detected	

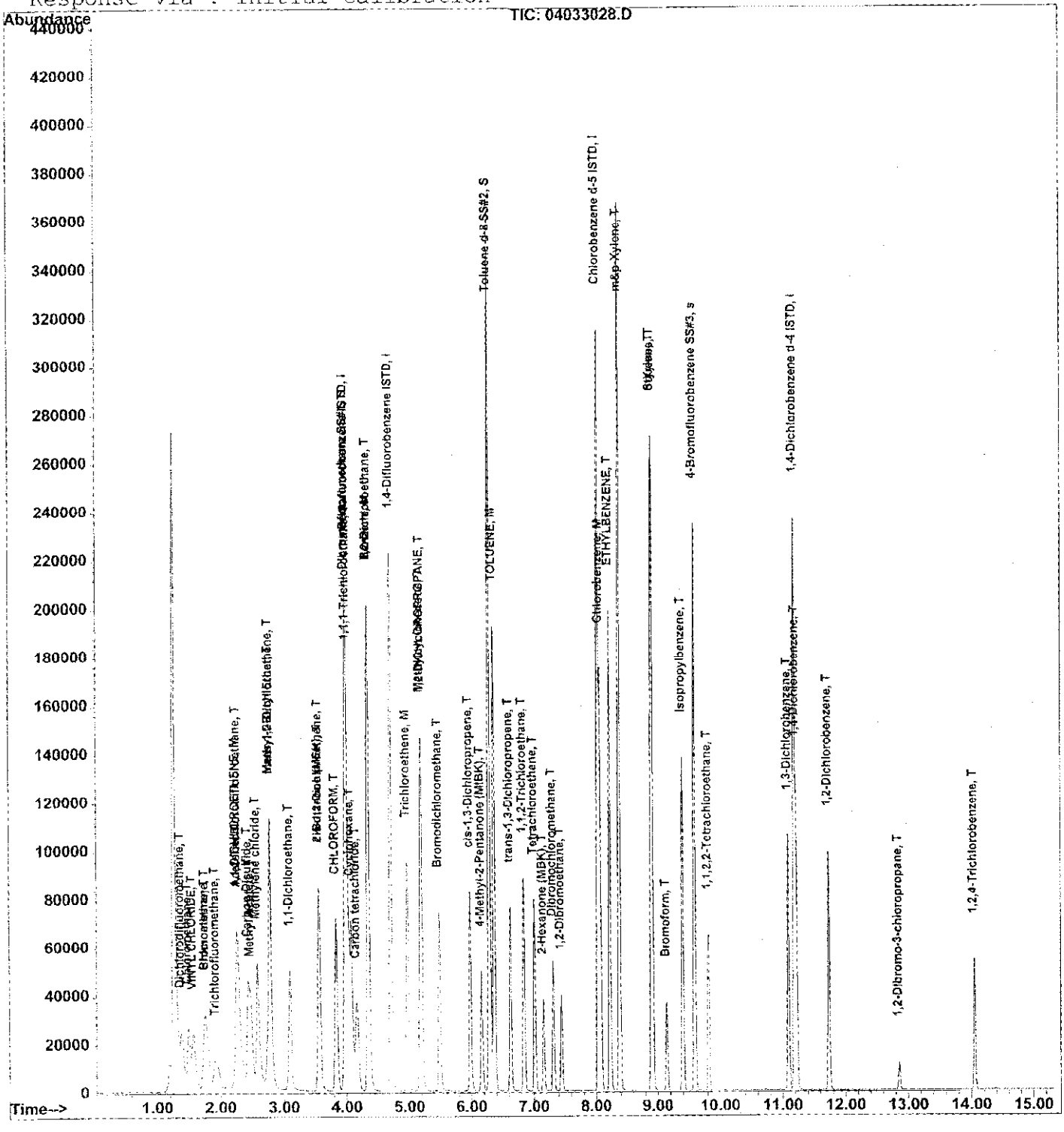
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033028.D
Acq On : 30 Mar 2004 10:09 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Vial: 28
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/30/04 **BATCH NUMBER:** VOC040329

METHOD: EPA 8260 **LAB FILE IDs:** 04032943.D
04032944.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	27	106	61-145
Benzene	25	ND	25	99	76-127
Trichloroethene	25	ND	22	90	71-120
Toluene	25	ND	25	100	76-125
Chlorobenzene	25	ND	24	96	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	26	103	3.1	14	61-145
Benzene	25	ND	24	97	1.4	11	76-127
Trichloroethene	25	ND	22	89	1.1	14	71-120
Toluene	25	ND	24	98	2.3	13	76-125
Chlorobenzene	25	ND	24	95	1.2	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032943.D Vial: 43
Acq On : 30 Mar 2004 4:37 am Operator: MI
Sample : 04032613-01 MS 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.37	168	176382	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	5.11	114	335045	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.52	117	292033	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.71	152	123909	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.35	113	144828	50.93	ug/L	0.00
Spiked Amount 50.000			Recovery =	101.86%		
33) Toluene d-8 SS#2	6.74	98	403984	50.43	ug/L	0.00
Spiked Amount 50.000			Recovery =	100.86%		
50) 4-Bromofluorobenzene SS#3	10.09	95	159382	49.63	ug/L	0.00
Spiked Amount 50.000			Recovery =	99.26%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.54	85	67390	22.86	ug/L	100
3) Chloromethane	1.66	50	112668	25.30	ug/L	99
4) VINYL CHLORIDE	1.73	62	95475	23.61	ug/L	97
5) Bromomethane	1.99	94	69416	24.03	ug/L	100
6) Chloroethane	2.02	64	59330	28.37	ug/L	96
7) Trichlorofluoromethane	2.19	101	61869m	24.96	ug/L	
8) Acetone	2.52	43	26259	46.07	ug/L	99
9) 1,1-DICHLOROETHENE	2.56	96	63065	26.57	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.54	101	57917m	33.13	ug/L	
11) Carbon Disulfide	2.75	76	263111	27.08	ug/L	99
12) Methyl Acetate	2.75	74	6487	20.63	ug/L	87
13) Methylene chloride	2.88	84	77358	24.33	ug/L	99
14) trans-1,2-Dichloroethene	3.09	96	66759	24.25	ug/L	95
15) Methyl-t-Butyl Ether	3.09	73	127875	24.56	ug/L	100
16) 1,1-Dichloroethane	3.42	63	134497	24.28	ug/L	99
17) cis-1,2-Dichloroethene	3.92	96	69633	25.29	ug/L	97
18) 2-Butanone (MEK)	3.90	43	463215	334.47	ug/L	96
19) CHLOROFORM	4.20	83	122899	24.12	ug/L	99
21) 1,1,1-Trichloroethane	4.40	97	86657	24.49	ug/L #	11
22) Cyclohexane	4.47	56	109133	24.35	ug/L	98
24) Carbon tetrachloride	4.57	117	66069	24.47	ug/L	100
25) Benzene	4.74	78	238521	24.69	ug/L	98
26) 1,2-Dichloroethane	4.74	62	99853	24.69	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032943.D
Acq On : 30 Mar 2004 4:37 am
Sample : 04032613-01 MS 25ppb
Misc : IS/Surr 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Vial: 43
Operator: MI
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) Trichloroethene	5.39	95	68821	22.41 ug/L	99
28) 1,2-DICHLOROPROPANE	5.62	63	73942	24.31 ug/L	99
29) Methylcyclohexane	5.62	83	67911	23.68 ug/L	98
30) Bromodichloromethane	5.92	83	89020	24.65 ug/L	99
31) cis-1,3-Dichloropropene	6.42	75	96171	23.39 ug/L	99
32) 4-Methyl-2-Pentanone (MIBK	6.60	43	91969	29.73 ug/L	100
34) TOLUENE	6.82	92	132545	25.04 ug/L	98
35) trans-1,3-Dichloropropene	7.07	75	82258	23.50 ug/L	99
36) 1,1,2-Trichloroethane	7.29	83	48815	25.51 ug/L	99
37) Tetrachloroethene	7.49	166	45533	23.50 ug/L	98
38) 2-Hexanone (MBK)	7.61	43	57632	30.02 ug/L	98
40) Dibromochloromethane	7.77	129	53559	24.28 ug/L	99
41) 1,2-Dibromoethane	7.91	107	56443	25.31 ug/L	98
42) Chlorobenzene	8.55	112	132278	24.09 ug/L	95
43) ETHYLBENZENE	8.71	91	234030	24.45 ug/L	99
44) m&p-Xylene	8.87	106	166099	24.88 ug/L	100
45) o-Xylene	9.39	106	80249	24.62 ug/L	99
46) Styrene	9.41	104	136271	24.23 ug/L	92
47) Bromoform	9.63	173	33754	25.88 ug/L	99
49) Isopropylbenzene	9.90	105	174906	24.43 ug/L	99
51) 1,1,2,2-Tetrachloroethane	10.30	83	63279	37.08 ug/L	99
52) 1,3-Dichlorobenzene	11.62	146	82288	23.89 ug/L	98
53) 1,4-Dichlorobenzene	11.74	146	83864	24.57 ug/L	97
54) 1,2-Dichlorobenzene	12.27	146	80361	24.25 ug/L	99
55) 1,2-Dibromo-3-chloropropan	13.38	75	8026	33.52 ug/L	93
56) 1,2,4-Trichlorobenzene	14.60	180	44092	27.89 ug/L	98
57) Naphthalene	14.94	128	1519	Not Detected	

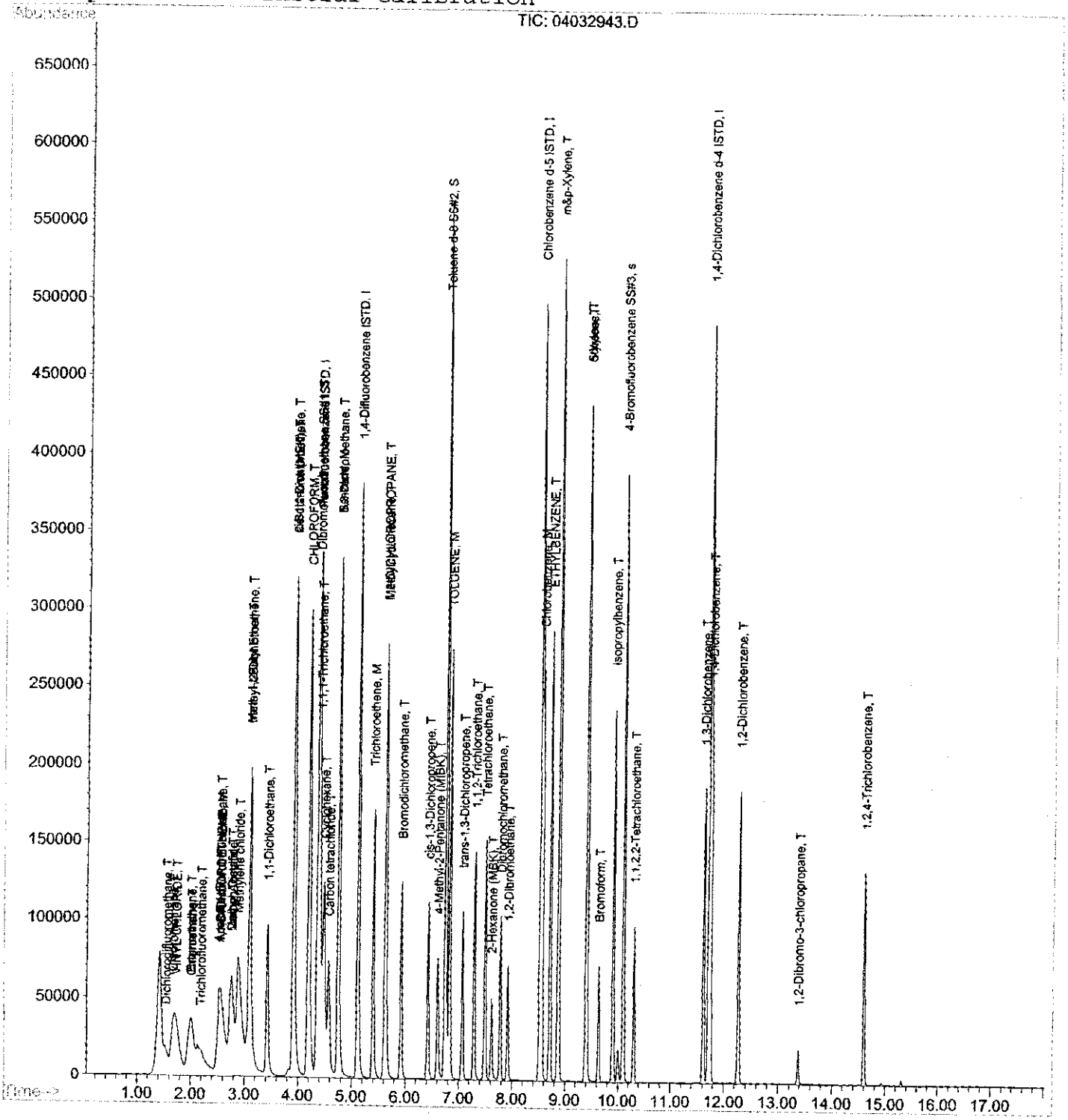
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\2\DATA\040329\04032943.D
Acq On : 30 Mar 2004 4:37 am
Sample : 04032613-01 MS 25ppb
Misc : IS/Surr 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 30 12:39 2004

Vial: 43
Operator: MI
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040329\04032944.D Vial: 44
Acq On : 30 Mar 2004 5:02 am Operator: MI
Sample : 04032613-01 MSD 25ppb Inst : GC/MS Ins
Misc : IS/Surr 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 12:30 2004

Quant Method : C:\HPCHEM\2\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Mar 30 11:53:40 2004
Response via : Initial Calibration
DataAcq Meth : RTX1VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.37	168	179650	50.00	ug/L		0.00
23) 1,4-Difluorobenzene ISTD	5.11	114	340443	50.00	ug/L		0.00
39) Chlorobenzene d-5 ISTD	8.52	117	301868	50.00	ug/L		0.00
48) 1,4-Dichlorobenzene d-4 IS	11.71	152	128666	50.00	ug/L		0.00
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	4.34	113	145738	50.32	ug/L		0.00
Spiked Amount 50.000			Recovery = 100.64%				
33) Toluene d-8 SS#2	6.74	98	409916	50.36	ug/L		0.00
Spiked Amount 50.000			Recovery = 100.72%				
50) 4-Bromofluorobenzene SS#3	10.10	95	167051	50.10	ug/L		0.00
Spiked Amount 50.000			Recovery = 100.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.53	85	65753	21.90	ug/L		100
3) Chloromethane	1.67	50	110130	24.28	ug/L		99
4) VINYL CHLORIDE	1.74	62	96669	23.47	ug/L		100
5) Bromomethane	1.97	94	68275	23.21	ug/L		100
6) Chloroethane	2.01	64	58849	27.63	ug/L		98
7) Trichlorofluoromethane	2.18	101	55777	22.10	ug/L		97
8) Acetone	2.52	43	28414	48.94	ug/L		96
9) 1,1-DICHLOROETHENE	2.55	96	62267	25.75	ug/L	#	85
10) 1,1,2-Trichlorotrifluoroet	2.53	101	43613	24.50	ug/L		96
11) Carbon Disulfide	2.73	76	259489	26.22	ug/L		97
12) Methyl Acetate	2.75	74	7026	21.94	ug/L		91
13) Methylene chloride	2.87	84	77340	23.88	ug/L		99
14) trans-1,2-Dichloroethene	3.09	96	66029	23.55	ug/L		95
15) Methyl-t-Butyl Ether	3.09	73	129059	24.34	ug/L		100
16) 1,1-Dichloroethane	3.42	63	132511	23.49	ug/L		100
17) cis-1,2-Dichloroethene	3.92	96	69952	24.95	ug/L		97
18) 2-Butanone (MEK)	3.90	43	500420	354.76	ug/L		96
19) CHLOROFORM	4.20	83	123169	23.73	ug/L		100
21) 1,1,1-Trichloroethane	4.40	97	85633	23.76	ug/L	#	42
22) Cyclohexane	4.47	56	106599	23.36	ug/L		98
24) Carbon tetrachloride	4.57	117	63523	23.15	ug/L		100
25) Benzene	4.75	78	238936	24.34	ug/L		98
26) 1,2-Dichloroethane	4.75	62	101035	24.58	ug/L		98

(#) = qualifier out of range (m) = manual integration

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Semivolatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *DFTPP Tune Summary*

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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Semi-Volatiles **LAB CODE:** SURR

METHOD NO.: EPA 8270

Date/Time Analyzed	Sample ID	S1 A (2FP) #	S2 A (PHL) #	S1 BN (NBZ) #	S2 BN (FBP) #	S3 A (TBP) #	S3 BN (TPH) #	Total Out
	Upper Limit	110	110	114	116	123	141	
	Lower Limit	21	10	35	43	10	33	
04/01/04 22:57	Calibration Verification	103	106	104	103	100	99	
04/02/04 16:44	Method Blank	92	91	102	107	83	93	
04/01/04 23:57	DMW-9S-032504	41	62	65	70	77	87	

	Control Limits: Water	Soil
S1 A (2FP) = 2-Fluorophenol	21-110	25-121
S2 A (PHL) = Phenol-d6	10-110	24-113
S1 BN (NBZ) = Nitrobenzene-d5	35-114	23-120
S2 BN (FBP) = 2-Fluorobiphenyl	43-116	30-115
S3 A (TBP) = 2,4,6-Tribromophenol	10-123	19-122
S3 BN (TPH) = Terphenyl-d14	33-141	18-137

Column used to flag recovery values
* = Values outside QC limits. Affected by 100 fold dilution.
D: Surrogate diluted out

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SEMI-VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Semi-Volatiles**	**LAB CODE:**	**MBW**
METHOD NO.:	**EPA 8270**	**LAB SAMPLE ID:**	**METHOD BLANK 504**
LAB FILE ID:	**04040206.D**	**DATE/TIME ANALYZED:**	**4/2/04 16:44**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-9S-032504	04032603-14	04040111.D	04/01/04 23:57

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.05	152	230453	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	954125	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.88	164	469707	40.00	mg/L	-0.01
59) Phenanthrene-d10 ISTD	9.96	188	663085	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.08	240	565430	40.00	mg/L	-0.02
81) Perylene-d12 ISTD	18.33	264	386181	40.00	mg/L	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.94	112	1292074	184.19	mg/L	0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 92.10%			
5) Phenol-d6 Acid SS 2	4.71	99	1609142	181.96	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 90.98%			
19) Nitrobenzene-d5 BN SS 1	5.54	82	797426	102.43	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 102.43%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1471106	107.26	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 107.26%			
58) 2,4,6-Tribromophenol Acid	8.91	330	298225	165.61	mg/L	-0.01
Spiked Amount 200.000	Range 10 - 123		Recovery = 82.81%			
74) Terphenyl-d14 BN SS 3	12.86	244	1552925	92.92	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 92.92%			

Target Compounds				Qvalue
2) Pyridine	0.00	79	0	Not Detected
3) N-Nitrosodimethylamine	0.00	74	0	Not Detected
6) PHENOL	4.72	94	302	Not Detected
7) Bis(2-chloroethyl)ether	4.71	63	3135	Not Detected
8) 2-Chlorophenol	0.00	128	0	Not Detected
9) 1,4'-DICHLOROBENZENE	0.00	146	0	Not Detected
10) 1,3'-Dichlorobenzene	0.00	146	0	Not Detected
11) 1,2'-Dichlorobenzene	0.00	146	0	Not Detected
12) Benzyl Alcohol	5.05	108	315	Not Detected
13) 2-Methylphenol	0.00	107	0	Not Detected
14) bis(2-chloroisopropyl)ethe	0.00	45	0	Not Detected
15) 3,4-Methylphenol	0.00	107	0	Not Detected
16) N-Nitrosodi-n-propyl amine	0.00	70	0	Not Detected
17) Hexachloroethane	0.00	117	0	Not Detected
20) Nitrobenzene	5.54	77	2342	Not Detected

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21)	Isophorone	0.00	82	0	Not Detected	
22)	2-NITROPHENOL	0.00	139	0	Not Detected	
23)	2,4-dimethylphenol	0.00	122	0	Not Detected	
24)	Bis(2-chloroethoxy)methane	0.00	93	0	Not Detected	
25)	2,4-DICHLOROPHENOL	0.00	162	0	Not Detected	
26)	1,2,4'-Trichlorobenzene	0.00	180	0	Not Detected	
27)	Naphthalene`	6.14	128	95	Not Detected	
28)	4-Chloroaniline	0.00	127	0	Not Detected	
29)	HEXACHLOROBUTADIENE`	0.00	225	0	Not Detected	
30)	4-CHLORO-3-METHYLPHENOL	0.00	107	0	Not Detected	
31)	2-Methylnaphthalene	0.00	142	0	Not Detected	
32)	1-Methylnaphthalene	0.00	142	0	Not Detected	
34)	Hexachlorocyclopentadiene	0.00	237	0	Not Detected	
35)	2,4,6-TRICHLOROPHENOL	6.99	97	94	Not Detected	
36)	2,4,5-trichlorophenol	0.00	97	0	Not Detected	d
38)	2-Chloronaphthalene	0.00	162	0	Not Detected	
39)	2-Nitroaniline	0.00	65	0	Not Detected	
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected	
41)	1,3-dinitrobenzene	0.00	168	0	Not Detected	
42)	1,2-dinitrobenzene	0.00	168	0	Not Detected	
43)	3-Nitroaniline	0.00	138	0	Not Detected	
44)	4-Nitroaniline	0.00	138	0	Not Detected	
45)	Dimethylphthalate	0.00	163	0	Not Detected	
46)	2,6-Dinitrotoluene	0.00	165	0	Not Detected	
47)	Acenaphthylene	0.00	152	0	Not Detected	
48)	ACENAPHTHENE	7.88	154	1460	Not Detected	
49)	2,4-Dinitrophenol	0.00	184	0	Not Detected	
50)	4-nitrophenol	0.00	139	0	Not Detected	
51)	2,4-Dinitrotoluene	8.14	165	126	Not Detected	
52)	Dibenzofuran	0.00	168	0	Not Detected	
53)	2,3,5,6-tetrachlorophenol	0.00	232	0	Not Detected	
54)	2,3,4,6-tetrachlorophenol	0.00	232	0	Not Detected	
55)	Diethylphthalate	0.00	149	0	Not Detected	
56)	4-chlorophenyl phenyl ethe	0.00	204	0	Not Detected	
57)	Fluorene	0.00	166	0	Not Detected	
60)	4,6-Dinitro-2-methylphenol	0.00	198	0	Not Detected	
61)	N-NITROSODI-N-PHENYLAMINE	0.00	169	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

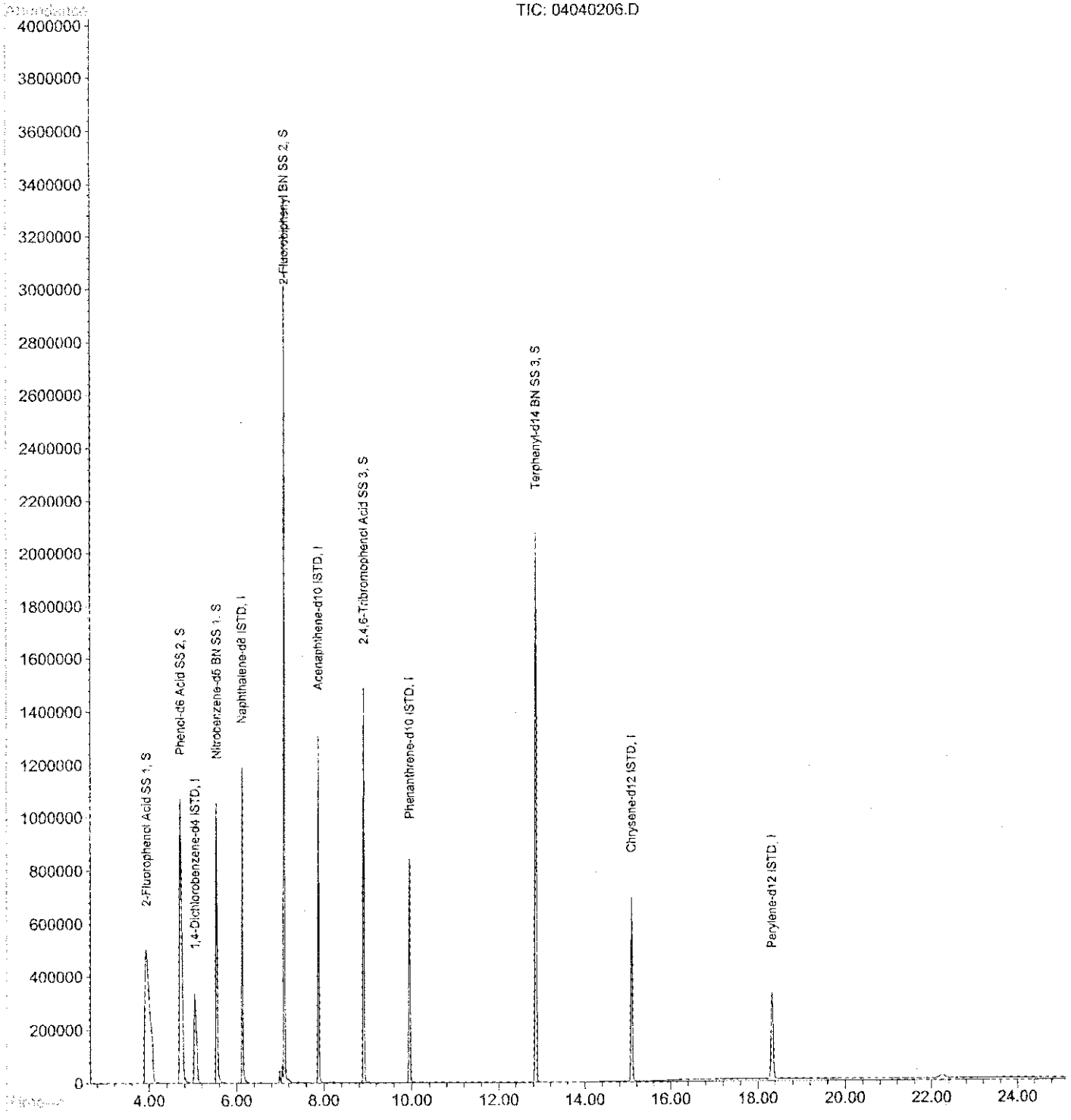
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) Azobenzene	0.00	77	0	Not Detected	
63) 4-bromophenyl phenyl ether	0.00	248	0	Not Detected	
64) Hexachlorobenzene	0.00	142	0	Not Detected	
65) PENTACHLOROPHENOL	0.00	266	0	Not Detected	
66) Phenanthrene	9.95	178	118	Not Detected	
67) Anthracene	0.00	178	0	Not Detected	
68) Carbazole	0.00	167	0	Not Detected	
69) Di-n-Butylphthalate	0.00	149	0	Not Detected	
70) FLUORANTHENE	0.00	202	0	Not Detected	
72) Benzidine	0.00	184	0	Not Detected	
73) Pyrene	0.00	202	0	Not Detected	
75) Butylbenzylphthalate	0.00	149	0	Not Detected	
76) Bis 2-ethylhexyl adipate	0.00	129	0	Not Detected	
77) 3,3'-Dichlorobenzidine	0.00	252	0	Not Detected	
78) Bis(2-ethylhexyl)phthalate	15.08	149	423	Not Detected	
79) Benzo[a]anthracene	15.08	228	1137	Not Detected	
80) Chrysene	15.08	228	1137	Not Detected	
82) DI-N-OCTYLPHTHALATE	16.31	149	210	Not Detected	
83) Benzo[b]fluoranthene	0.00	252	0	Not Detected	
84) Benzo[k]fluoranthene	0.00	252	0	Not Detected	
85) BENZO[A]PYRENE	18.32	252	754	Not Detected	
86) Indeno(1,2,3-c,d)pyrene	0.00	276	0	Not Detected	
87) Dibenzo[a,h]anthracene	0.00	278	0	Not Detected	
88) Benzo[g,h,i]perylene	0.00	276	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004 Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.05	152	230079	40.00	mg/L	-0.02
4) Naphthalene-D8 ISTD	6.13	136	954125	40.00	mg/L	-0.05
8) Acenaphthene-d10 ISTD	7.88	164	469707	40.00	mg/L	-0.07

System Monitoring Compounds

Target Compounds				Qvalue
2) n-Decane	0.00	43	0	Not Detected
3) Acetophenone	0.00	105	0	Not Detected
5) Benzoic Acid	0.00	105	0	Not Detected
6) e-Caprolactam	6.55	55	132	Not Detected
7) Biphenyl	7.20	154	4165	Not Detected
9) Atrazine	0.00	200	0	Not Detected
10) Octadecane	9.54	57	755	Not Detected

(#) = qualifier out of range (m) = manual integration

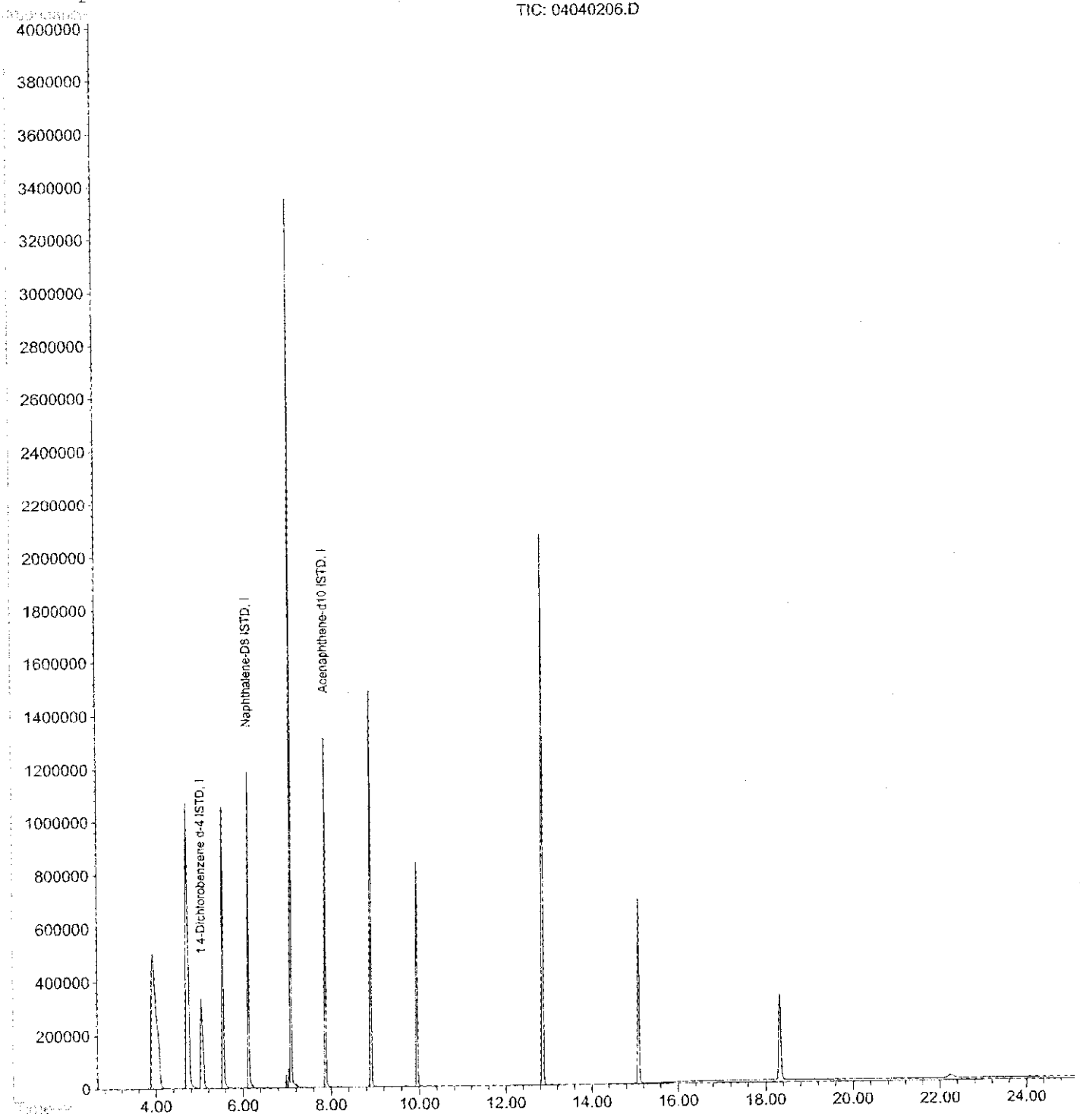
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANICS COMPOUNDS
LCS & LCS DUPLICATE SUMMARY

DATE ANALYZED: 04/02/04 **Analytical Lot Number:** 504

METHOD: EPA 8270 **Lab File IDs:** 04040204.D
04040205.D

Matrix: Water

Sample ID: LCS 1000C MS

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)		LCL (%)	UCL (%)
Phenol	40	ND	30	75		12	110
2-Chlorophenol	40	ND	30	75		27	123
1,4-Dichlorobenzene	40	ND	32	79		36	97
N-Nitroso-di-n-propylamine	40	ND	34	85		41	116
1,2,4-Trichlorobenzene	40	ND	32	79		39	98
4-Chloro-3-methylphenol	40	ND	35	88		23	97
Acenaphthene	40	ND	38	94		46	118
4-Nitrophenol	40	ND	39	98	*	10	80
2,4-Dinitrotoluene	40	ND	39	97	*	24	96
Pentachlorophenol	40	ND	41	102		9	103
Pyrene	40	ND	37	93		26	127

Sample ID: LCSD 1000C MSD

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)		RPD (%)	QC RPD (%)	LCL (%)	UCL (%)
Phenol	40	ND	31	76		1.8	42	12	110
2-Chlorophenol	40	ND	30	76		1.2	40	27	123
1,4-Dichlorobenzene	40	ND	32	79		0.0	28	36	97
N-Nitroso-di-n-propylamine	40	ND	32	79		6.6	38	41	116
1,2,4-Trichlorobenzene	40	ND	31	77		2.4	28	39	98
4-Chloro-3-methylphenol	40	ND	35	86		1.5	42	23	97
Acenaphthene	40	ND	35	89		6.0	31	46	118
4-Nitrophenol	40	ND	42	105	*	0.0	50	10	80
2,4-Dinitrotoluene	40	ND	39	98	*	1.2	38	24	96
Pentachlorophenol	40	ND	44	111	*	0.0	50	9	103
Pyrene	40	ND	35	89		4.9	31	26	127

D = Spike compound diluted out
# - Column used to flag out of control recoveries
* = Values outside QC limits.
Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.03	152	225034	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	911161	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.89	164	481599	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	9.96	188	679742	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.10	240	504023	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.35	264	402978	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.91	112	891864	130.20	mg/L	-0.01
Spiked Amount 200.000	Range 21 - 100		Recovery = 65.10%			
5) Phenol-d6 Acid SS 2	4.70	99	1219148	141.18	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 70.59%			
19) Nitrobenzene-d5 BN SS 1	5.54	82	588338	79.14	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 79.14%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1117615	79.48	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 79.48%			
58) 2,4,6-Tribromophenol Acid	8.92	330	301996	163.95	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 81.97%			
74) Terphenyl-d14 BN SS 3	12.86	244	1299671	87.24	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 87.24%			
Target Compounds						Qvalue
2) Pyridine	2.75	79	219358m	25.07	mg/L	
3) N-Nitrosodimethylamine	2.79	74	150600	28.37	mg/L	98
6) PHENOL	4.71	94	308831	30.05	mg/L	80
7) Bis(2-chloroethyl)ether	4.81	63	172175	41.47	mg/L #	73
8) 2-Chlorophenol	4.88	128	238839	30.06	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.04	146	384776m	31.71	mg/L	
10) 1,3'-Dichlorobenzene	5.00	146	158763m	28.35	mg/L	
11) 1,2'-Dichlorobenzene	5.22	146	247136	30.49	mg/L	99
12) Benzyl Alcohol	5.15	108	138403	30.82	mg/L	99
13) 2-Methylphenol	5.23	107	175278	33.00	mg/L	97
14) bis(2-chloroisopropyl)ethe	5.27	45	276132	32.55	mg/L	98
15) 3,4-Methylphenol	5.35	107	252837	36.05	mg/L	90
16) N-Nitrosodi-n-propyl amine	5.39	70	178631	33.89	mg/L	98
17) Hexachloroethane	5.48	117	87629	30.56	mg/L	100
20) Nitrobenzene	5.55	77	259440	35.31	mg/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
21)	Isophorone	5.73	82	500916	32.80	mg/L		100
22)	2-NITROPHENOL	5.81	139	158780	32.97	mg/L		97
23)	2,4-dimethylphenol	5.79	122	164854	24.36	mg/L		98
24)	Bis(2-chloroethoxy)methane	5.88	93	291319	33.90	mg/L		98
25)	2,4-DICHLOROPHENOL	6.01	162	185411	31.55	mg/L		100
26)	1,2,4'-Trichlorobenzene	6.09	180	179457	31.60	mg/L		100
27)	Naphthalene`	6.15	128	742034	33.49	mg/L	#	98
28)	4-Chloroaniline	6.18	127	332250	28.31	mg/L		98
29)	HEXACHLOROBUTADIENE`	6.27	225	103102	30.93	mg/L		100
30)	4-CHLORO-3-METHYLPHENOL	6.57	107	198866	35.06	mg/L		99
31)	2-Methylnaphthalene	6.75	142	553869	35.74	mg/L		99
32)	1-Methylnaphthalene	6.86	142	519650	34.34	mg/L		100
34)	Hexachlorocyclopentadiene	6.96	237	15213	25.07	mg/L		95
35)	2,4,6-TRICHLOROPHENOL	7.03	97	74726	38.35	mg/L		91
36)	2,4,5-trichlorophenol	7.08	97	64780	35.43	mg/L		99
38)	2-Chloronaphthalene	7.25	162	423001	32.39	mg/L		99
39)	2-Nitroaniline	7.34	65	122722	35.43	mg/L		98
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected			
41)	1,3-dinitrobenzene	7.62	168	101	Not Detected			
42)	1,2-dinitrobenzene	7.80	168	400	Not Detected			
43)	3-Nitroaniline	7.80	138	135996	33.27	mg/L		99
44)	4-Nitroaniline	8.58	138	96166	29.47	mg/L		99
45)	Dimethylphthalate	7.52	163	589986	37.94	mg/L		100
46)	2,6-Dinitrotoluene	7.63	165	141453	36.51	mg/L		89
47)	Acenaphthylene	7.71	152	784141	33.61	mg/L		100
48)	ACENAPHTHENE	7.93	154	524191	37.64	mg/L		99
49)	2,4-Dinitrophenol	7.93	184	39220	50.16	mg/L	#	71
50)	4-nitrophenol	7.93	139	92033	39.26	mg/L		96
51)	2,4-Dinitrotoluene	8.10	165	180723	38.70	mg/L		100
52)	Dibenzofuran	8.11	168	617744	35.97	mg/L		99
53)	2,3,5,6-tetrachlorophenol	8.29	232	1481	Not Detected			
54)	2,3,4,6-tetrachlorophenol	8.29	232	1481	Not Detected			
55)	Diethylphthalate	8.36	149	689757	40.03	mg/L		100
56)	4-chlorophenyl phenyl ethe	8.50	204	242363	36.85	mg/L		100
57)	Fluorene	8.56	166	533203	38.59	mg/L		99
60)	4,6-Dinitro-2-methylphenol	8.65	198	70759	49.18	mg/L		88
61)	N-NITROSODI-N-PHENYLAMINE	8.66	169	424010	36.98	mg/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

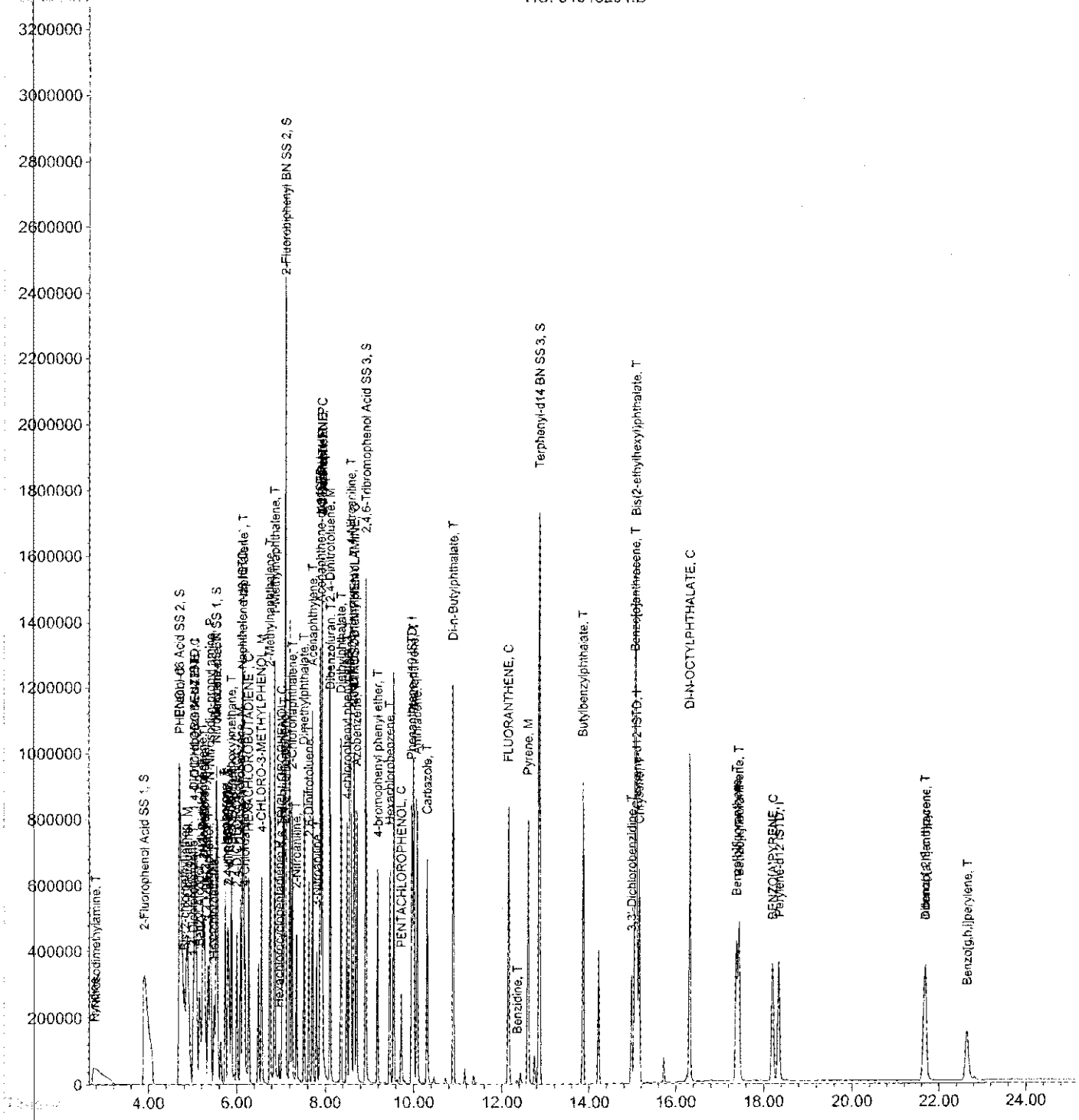
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62)	Azobenzene	8.71	77	574935	37.62 mg/L	100
63)	4-bromophenyl phenyl ether	9.19	248	153823	37.40 mg/L	99
64)	Hexachlorobenzene	9.47	142	71222	38.37 mg/L	99
65)	PENTACHLOROPHENOL	9.73	266	65398	40.81 mg/L #	99
66)	Phenanthrene	10.00	178	661149	38.97 mg/L	100
67)	Anthracene	10.07	178	640852	37.91 mg/L	100
68)	Carbazole	10.31	167	540354	43.34 mg/L	100
69)	Di-n-Butylphthalate	10.89	149	1258293	40.99 mg/L	100
70)	FLUORANTHENE	12.16	202	709395	43.81 mg/L	99
72)	Benzidine	12.35	184	15670	2.83 mg/L	98
73)	Pyrene	12.61	202	686012	37.20 mg/L	100
75)	Butylbenzylphthalate	13.86	149	480387	37.07 mg/L	100
76)	Bis 2-ethylhexyl adipate	13.85	129	105	Not Detected	
77)	3,3'-Dichlorobenzidine	14.98	252	161455	37.22 mg/L	92
78)	Bis(2-ethylhexyl)phthalate	15.08	149	695349	37.38 mg/L	99
79)	Benzo[a]anthracene	15.06	228	588808	38.85 mg/L	95
80)	Chrysene	15.15	228	498712	39.24 mg/L	97
82)	DI-N-OCTYLPHTHALATE	16.32	149	1071028	40.92 mg/L	100
83)	Benzo[b]fluoranthene	17.39	252	489540	36.43 mg/L	98
84)	Benzo[k]fluoranthene	17.44	252	496489	42.07 mg/L #	100
85)	BENZO[A]PYRENE	18.21	252	429867	39.61 mg/L #	100
86)	Indeno(1,2,3-c,d)pyrene	21.68	276	345736	39.51 mg/L #	87
87)	Dibenzo[a,h]anthracene	21.68	278	294503	39.91 mg/L	96
88)	Benzo[g,h,i]perylene	22.65	276	264378	38.91 mg/L	84

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration

TIC: 04040204.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00
Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.03	152	225034	40.00	mg/L		-0.03
4) Naphthalene-D8 ISTD	6.13	136	911161	40.00	mg/L		-0.05
8) Acenaphthene-d10 ISTD	7.89	164	481599	40.00	mg/L		-0.06
System Monitoring Compounds							
Target Compounds							Qvalue
2) n-Decane	4.85	43	199068	28.71	mg/L		99
3) Acetophenone	5.39	105	272538	26.36	mg/L	#	75
5) Benzoic Acid	5.94	105	14496	7.10	mg/L		91
6) e-Caprolactam	6.50	55	105894	35.88	mg/L		88
7) Biphenyl	7.20	154	612546	33.11	mg/L		92
9) Atrazine	0.00	200	0	Not Detected			
10) Octadecane	9.55	57	361903	42.77	mg/L		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

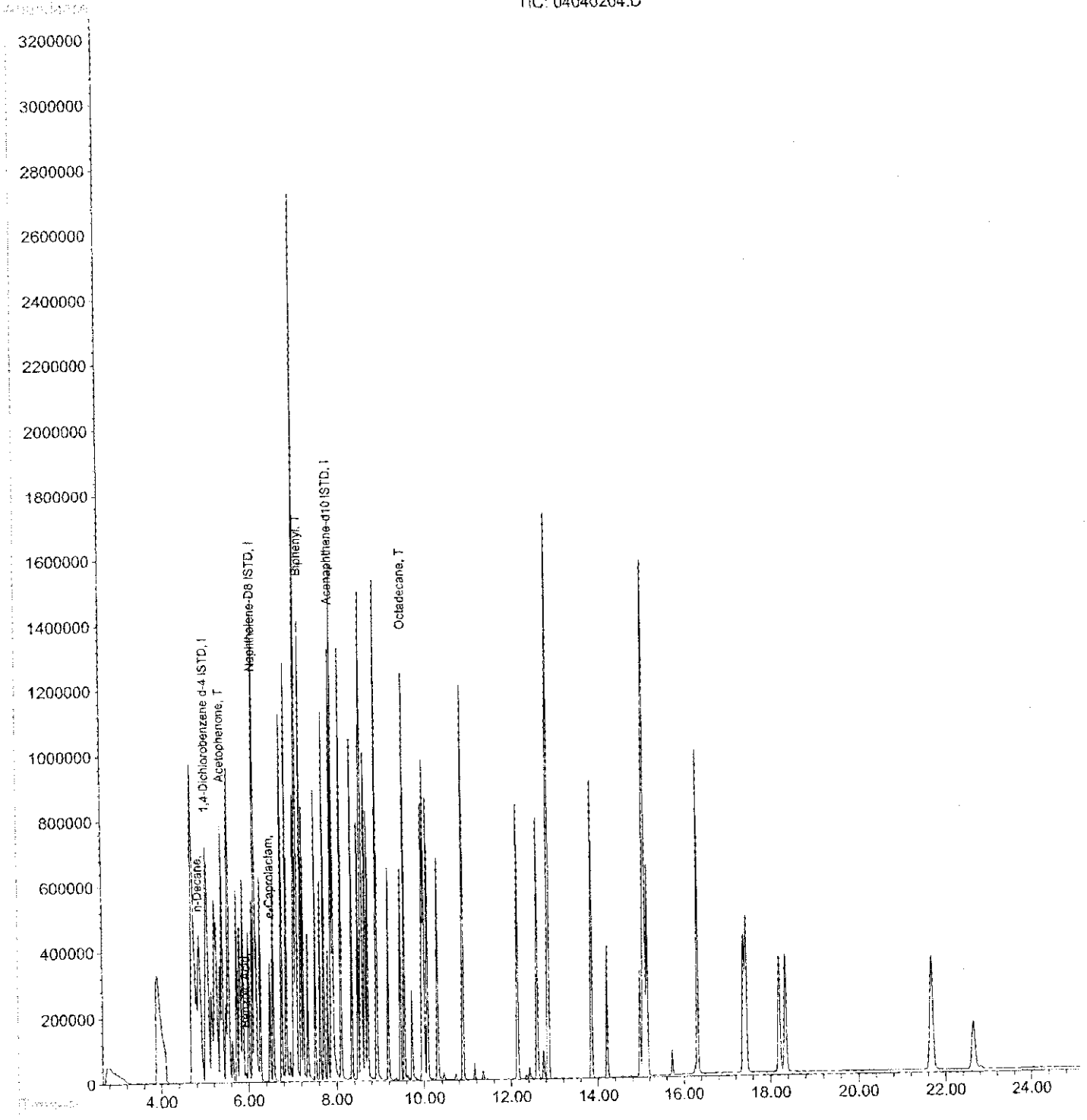
Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration

TIC: 04040204.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.04	152	236467	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	947274	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.89	164	492200	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	9.96	188	697330	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.10	240	552656	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.35	264	448714	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	954481	132.61	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 66.31%			
5) Phenol-d6 Acid SS 2	4.70	99	1276517	140.68	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 70.34%			
19) Nitrobenzene-d5 BN SS 1	5.53	82	570652	73.83	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 73.83%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1036992	72.16	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 72.16%			
58) 2,4,6-Tribromophenol Acid	8.92	330	314558	166.49	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 83.25%			
74) Terphenyl-d14 BN SS 3	12.86	244	1319458	80.77	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 80.77%			
Target Compounds						Qvalue
2) Pyridine	2.78	79	231218	25.15	mg/L	99
3) N-Nitrosodimethylamine	2.81	74	159900	28.66	mg/L	98
6) PHENOL	4.72	94	330393	30.59	mg/L	82
7) Bis(2-chloroethyl)ether	4.81	63	179778	41.21	mg/L #	72
8) 2-Chlorophenol	4.88	128	253961	30.42	mg/L	100
9) 1,4'-DICHLOROBENZENE	5.04	146	404454m	31.72	mg/L	
10) 1,3'-Dichlorobenzene	5.01	146	153901m	26.15	mg/L	
11) 1,2'-Dichlorobenzene	5.22	146	256850	30.15	mg/L	100
12) Benzyl Alcohol	5.15	108	142853	30.27	mg/L	98
13) 2-Methylphenol	5.23	107	181394	32.50	mg/L #	92
14) bis(2-chloroisopropyl)ethe	5.27	45	286366	32.13	mg/L #	84
15) 3,4-Methylphenol	5.35	107	266173	36.11	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.40	70	175596	31.71	mg/L	98
17) Hexachloroethane	5.48	117	92563	30.72	mg/L	98
20) Nitrobenzene	5.56	77	265891	34.81	mg/L	93

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21)	Isophorone	5.73	82	507380	31.96 mg/L	99
22)	2-NITROPHENOL	5.82	139	166459	33.25 mg/L	95
23)	2,4-dimethylphenol	5.79	122	150765	21.43 mg/L	98
24)	Bis(2-chloroethoxy)methane	5.88	93	293176	32.82 mg/L	98
25)	2,4-DICHLOROPHENOL	6.00	162	195728	32.04 mg/L	99
26)	1,2,4'-Trichlorobenzene	6.09	180	182212	30.86 mg/L	99
27)	Naphthalene`	6.15	128	754892	32.77 mg/L #	98
28)	4-Chloroaniline	6.18	127	337174	27.63 mg/L	99
29)	HEXACHLOROBUTADIENE`	6.27	225	104594	30.18 mg/L	99
30)	4-CHLORO-3-METHYLPHENOL	6.57	107	203730	34.55 mg/L	98
31)	2-Methylnaphthalene	6.75	142	549447	34.10 mg/L	99
32)	1-Methylnaphthalene	6.86	142	514444	32.70 mg/L	99
34)	Hexachlorocyclopentadiene	6.96	237	15461	24.97 mg/L	99
35)	2,4,6-TRICHLOROPHENOL	7.03	97	73522	36.92 mg/L	94
36)	2,4,5-trichlorophenol	7.08	97	64349	34.44 mg/L	97
38)	2-Chloronaphthalene	7.24	162	420398	31.49 mg/L	99
39)	2-Nitroaniline	7.34	65	122336	34.56 mg/L	99
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected	
41)	1,3-dinitrobenzene	7.63	168	93	Not Detected	
42)	1,2-dinitrobenzene	7.80	168	455	Not Detected	
43)	3-Nitroaniline	7.80	138	139422	33.37 mg/L	99
44)	4-Nitroaniline	8.58	138	106051	31.80 mg/L	95
45)	Dimethylphthalate	7.52	163	586804	36.92 mg/L	100
46)	2,6-Dinitrotoluene	7.63	165	142083	35.88 mg/L	89
47)	Acenaphthylene	7.71	152	760028	31.87 mg/L	100
48)	ACENAPHTHENE	7.93	154	504511	35.45 mg/L	99
49)	2,4-Dinitrophenol	7.93	184	42686	52.64 mg/L #	66
50)	4-nitrophenol	7.93	139	100804	41.89 mg/L	98
51)	2,4-Dinitrotoluene	8.10	165	186905	39.17 mg/L	99
52)	Dibenzofuran	8.11	168	600624	34.22 mg/L	99
53)	2,3,5,6-tetrachlorophenol	8.29	232	1680	Not Detected	
54)	2,3,4,6-tetrachlorophenol	8.29	232	1680	Not Detected	
55)	Diethylphthalate	8.36	149	697395	39.60 mg/L	100
56)	4-chlorophenyl phenyl ethe	8.50	204	238068	35.42 mg/L	100
57)	Fluorene	8.55	166	526818	37.31 mg/L	99
60)	4,6-Dinitro-2-methylphenol	8.65	198	77090	51.72 mg/L #	85
61)	N-NITROSODI-N-PHENYLAMINE	8.66	169	417971	35.54 mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

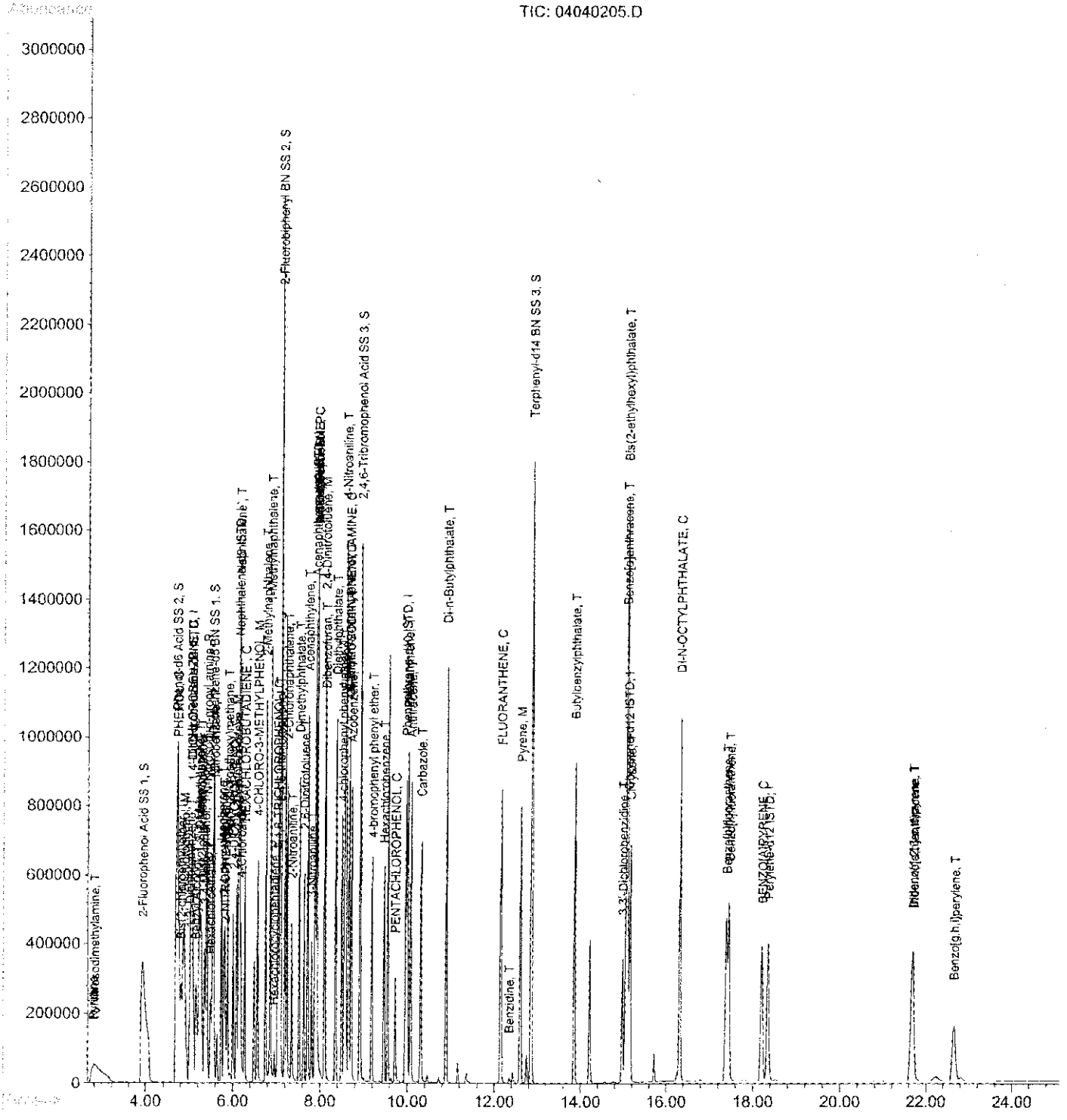
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
62)	Azobenzene	8.71	77	579383	36.96	mg/L		99
63)	4-bromophenyl phenyl ether	9.19	248	151908	36.00	mg/L		99
64)	Hexachlorobenzene	9.46	142	72504	38.08	mg/L		98
65)	PENTACHLOROPHENOL	9.72	266	73881	44.36	mg/L	#	99
66)	Phenanthrene	10.00	178	668223	38.40	mg/L		100
67)	Anthracene	10.07	178	654133	37.72	mg/L		100
68)	Carbazole	10.31	167	568969	44.48	mg/L		100
69)	Di-n-Butylphthalate	10.89	149	1288286	40.91	mg/L		100
70)	FLUORANTHENE	12.16	202	732633	44.11	mg/L		100
72)	Benzidine	12.35	184	18003	2.96	mg/L		98
73)	Pyrene	12.61	202	716448	35.43	mg/L		99
75)	Butylbenzylphthalate	13.86	149	508430	35.78	mg/L		99
76)	Bis 2-ethylhexyl adipate	13.86	129	102	Not Detected			
77)	3,3'-Dichlorobenzidine	14.98	252	177281	37.27	mg/L		92
78)	Bis(2-ethylhexyl)phthalate	15.08	149	732945	35.94	mg/L		99
79)	Benzo[a]anthracene	15.06	228	638011	38.39	mg/L		94
80)	Chrysene	15.15	228	536773	38.52	mg/L		96
82)	DI-N-OCTYLPHTHALATE	16.32	149	1161726	39.86	mg/L		100
83)	Benzo[b]fluoranthene	17.39	252	539660	36.07	mg/L		98
84)	Benzo[k]fluoranthene	17.45	252	549498	41.82	mg/L	#	100
85)	BENZO[A]PYRENE	18.21	252	470961	38.97	mg/L	#	100
86)	Indeno(1,2,3-c,d)pyrene	21.68	276	380984	39.10	mg/L		89
87)	Dibenzo[a,h]anthracene	21.69	278	325640	39.63	mg/L		97
88)	Benzo[g,h,i]perylene	22.65	276	289043	38.21	mg/L		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D
Acq On : 2 Apr 2004 4:13 pm
Sample : LCSD 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 5
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.04	152	236366	40.00	mg/L	-0.02
4) Naphthalene-D8 ISTD	6.13	136	947274	40.00	mg/L	-0.05
8) Acenaphthene-d10 ISTD	7.89	164	492762	40.00	mg/L	-0.06
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.86	43	206211	28.32	mg/L	99
3) Acetophenone	5.39	105	276251	25.44	mg/L	97
5) Benzoic Acid	5.93	105	13434	6.36	mg/L	91
6) e-Caprolactam	6.50	55	107001	34.87	mg/L	91
7) Biphenyl	7.20	154	598204	31.10	mg/L	92
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.55	57	360057	41.59	mg/L	89

(#) = qualifier out of range (m) = manual integration

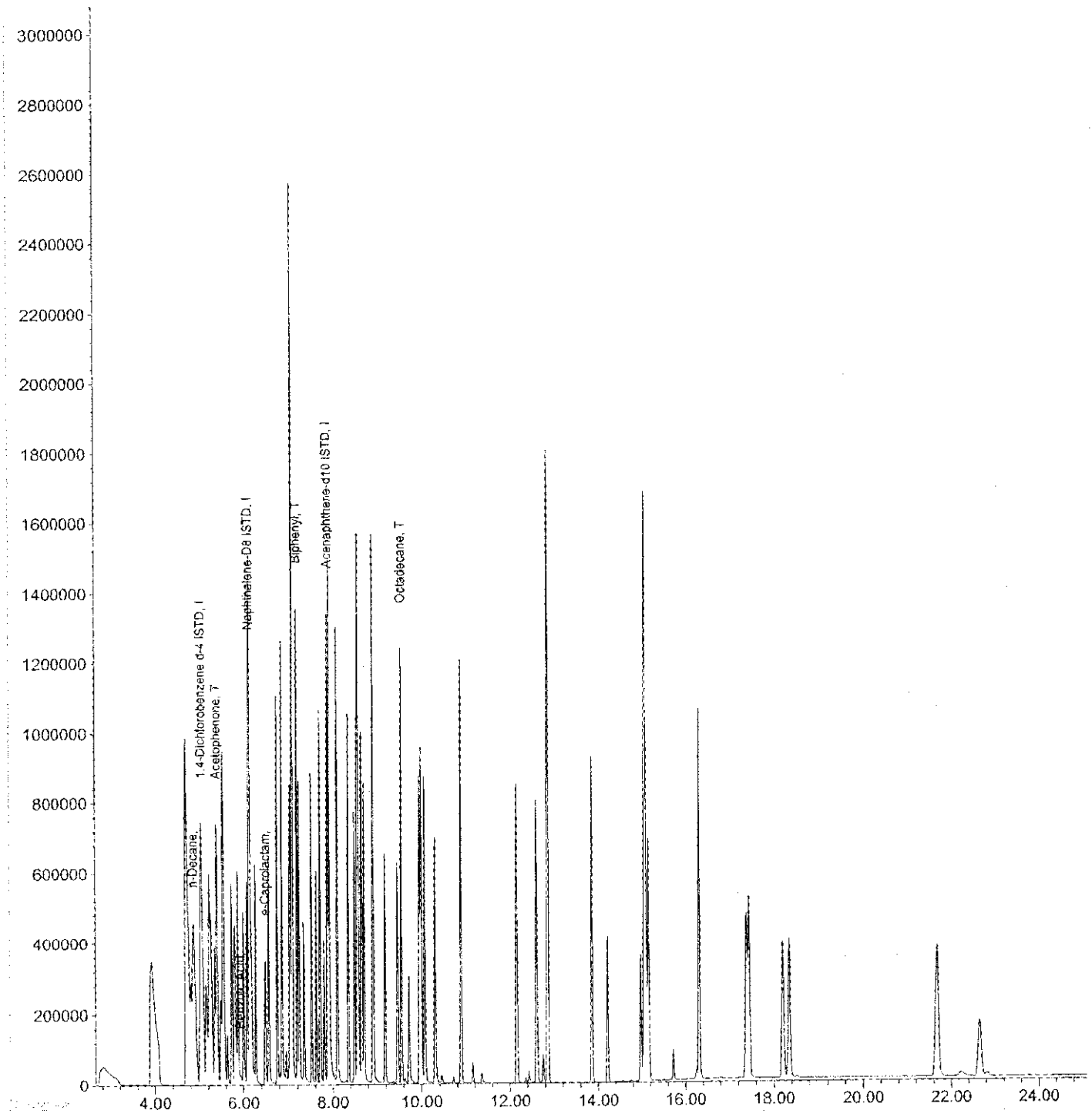
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040205.D
Acq On : 2 Apr 2004 4:13 pm
Sample : LCSD 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 5
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00
Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration

TIC: 04040205.D



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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

SEMI-VOLATILE ORGANICS COMPOUNDS
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 04/02/04 **Analytical Lot Number:** 504

METHOD: EPA 8270 **Lab File IDs:** 04040128.D
04040129.D

Matrix: Water

Sample ID: BATCH MS 1000mL MS

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)		LCL (%)	UCL (%)
Phenol	40	ND	25	61		12	110
2-Chlorophenol	40	ND	24	61		27	123
1,4-Dichlorobenzene	40	ND	24	61		36	97
N-Nitroso-di-n-propylamine	40	ND	25	64		41	116
1,2,4-Trichlorobenzene	40	ND	24	60		39	98
4-Chloro-3-methylphenol	40	ND	31	78		23	97
Acenaphthene	40	ND	31	77		46	118
4-Nitrophenol	40	ND	36	90	*	10	80
2,4-Dinitrotoluene	40	ND	33	83		24	96
Pentachlorophenol	40	ND	42	105	*	9	103
Pyrene	40	ND	35	89		26	127

Sample ID: BATCH MSD 1000mL MSD

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)		RPD (%)	QC RPD (%)	LCL (%)	UCL (%)
Phenol	40	ND	25	63		3.1	42	12	110
2-Chlorophenol	40	ND	25	61		1.0	40	27	123
1,4-Dichlorobenzene	40	ND	27	68		11.1	28	36	97
N-Nitroso-di-n-propylamine	40	ND	28	70		9.5	38	41	116
1,2,4-Trichlorobenzene	40	ND	26	66		9.7	28	39	98
4-Chloro-3-methylphenol	40	ND	32	81		4.0	42	23	97
Acenaphthene	40	ND	34	85		11.0	31	46	118
4-Nitrophenol	40	ND	39	97	*	0.0	50	10	80
2,4-Dinitrotoluene	40	ND	39	98	*	16.4	38	24	96
Pentachlorophenol	40	ND	45	111	*	0.0	50	9	103
Pyrene	40	ND	39	98		10.2	31	26	127

D = Spike compound diluted out
# - Column used to flag out of control recoveries
* = Values outside QC limits.
Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.07	152	249995	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.17	136	1001375	40.00	mg/L	-0.02
33) Acenaphthene-d10 ISTD	7.95	164	518789	40.00	mg/L	-0.02
59) Phenanthrene-d10 ISTD	10.04	188	689041	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.18	240	459266	40.00	mg/L	-0.03
81) Perylene-d12 ISTD	18.47	264	372016	40.00	mg/L	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	858408	112.81	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 56.41%			
5) Phenol-d6 Acid SS 2	4.73	99	1180598	123.07	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 61.54%			
19) Nitrobenzene-d5 BN SS 1	5.57	82	489403	59.90	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 59.90%			
37) 2-Fluorobiphenyl BN SS 2	7.15	172	1007790	66.53	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 66.53%			
58) 2,4,6-Tribromophenol Acid	8.99	330	336322	168.43	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 84.22%			
74) Terphenyl-d14 BN SS 3	12.94	244	1205239	88.78	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 88.78%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	179055m	18.42	mg/L	
3) N-Nitrosodimethylamine	2.79	74	128535m	21.79	mg/L	
6) PHENOL	4.74	94	279836	24.51	mg/L	82
7) Bis(2-chloroethyl)ether	4.83	63	109560	23.75	mg/L #	71
8) 2-Chlorophenol	4.91	128	214544	24.31	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.08	146	329808m	24.46	mg/L	
10) 1,3'-Dichlorobenzene	5.04	146	135224m	21.73	mg/L	
11) 1,2'-Dichlorobenzene	5.25	146	208582	23.16	mg/L	99
12) Benzyl Alcohol	5.18	108	111866	22.42	mg/L	90
13) 2-Methylphenol	5.26	107	157019	26.61	mg/L	99
14) bis(2-chloroisopropyl)ethe	5.30	45	226397	24.02	mg/L	98
15) 3,4-Methylphenol	5.38	107	232230	29.80	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.42	70	149213	25.49	mg/L	99
17) Hexachloroethane	5.52	117	72381	22.72	mg/L	99
20) Nitrobenzene	5.59	77	220844	27.35	mg/L	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
21)	Isophorone	5.77	82	416714	24.83	mg/L		99
22)	2-NITROPHENOL	5.85	139	140827	26.61	mg/L		99
23)	2,4-dimethylphenol	5.83	122	160665	21.60	mg/L		97
24)	Bis(2-chloroethoxy)methane	5.91	93	238929	25.30	mg/L		99
25)	2,4-DICHLOROPHENOL	6.05	162	169709	26.28	mg/L		99
26)	1,2,4'-Trichlorobenzene	6.13	180	148600	23.81	mg/L		99
27)	Naphthalene`	6.19	128	626761	25.74	mg/L	#	99
28)	4-Chloroaniline	6.22	127	278098	21.56	mg/L		97
29)	HEXACHLOROBUTADIENE`	6.31	225	84945	23.19	mg/L		98
30)	4-CHLORO-3-METHYLPHENOL	6.61	107	193755	31.09	mg/L		99
31)	2-Methylnaphthalene	6.80	142	449662	26.40	mg/L		99
32)	1-Methylnaphthalene	6.92	142	437269	26.29	mg/L		98
34)	Hexachlorocyclopentadiene	7.01	237	7471	13.76	mg/L		91
35)	2,4,6-TRICHLOROPHENOL	7.08	97	68998	32.87	mg/L		94
36)	2,4,5-trichlorophenol	7.14	97	65091	33.05	mg/L		99
38)	2-Chloronaphthalene	7.30	162	361832	25.72	mg/L		99
39)	2-Nitroaniline	7.41	65	110368	29.58	mg/L		97
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected			
41)	1,3-dinitrobenzene	0.00	168	0	Not Detected			
42)	1,2-dinitrobenzene	7.86	168	386	Not Detected			
43)	3-Nitroaniline	7.87	138	114897	26.09	mg/L		99
44)	4-Nitroaniline	8.65	138	88490	25.18	mg/L		99
45)	Dimethylphthalate	7.58	163	545520	32.57	mg/L		99
46)	2,6-Dinitrotoluene	7.68	165	129668	31.07	mg/L		89
47)	Acenaphthylene	7.77	152	671260	26.71	mg/L		100
48)	ACENAPHTHENE	7.98	154	459532	30.63	mg/L		99
49)	2,4-Dinitrophenol	7.99	184	45999	53.54	mg/L	#	52
50)	4-nitrophenol	8.00	139	90342	35.98	mg/L		94
51)	2,4-Dinitrotoluene	8.16	165	166757	33.15	mg/L		100
52)	Dibenzofuran	8.17	168	546219	29.53	mg/L		99
53)	2,3,5,6-tetrachlorophenol	8.36	232	1278	Not Detected			
54)	2,3,4,6-tetrachlorophenol	8.36	232	1278	Not Detected			
55)	Diethylphthalate	8.41	149	652312	35.14	mg/L		100
56)	4-chlorophenyl phenyl ethe	8.56	204	211781	29.89	mg/L		99
57)	Fluorene	8.62	166	484237	32.53	mg/L		98
60)	4,6-Dinitro-2-methylphenol	8.71	198	77564	52.50	mg/L	#	72
61)	N-NITROSODI-N-PHENYLAMINE	8.72	169	395311	34.02	mg/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

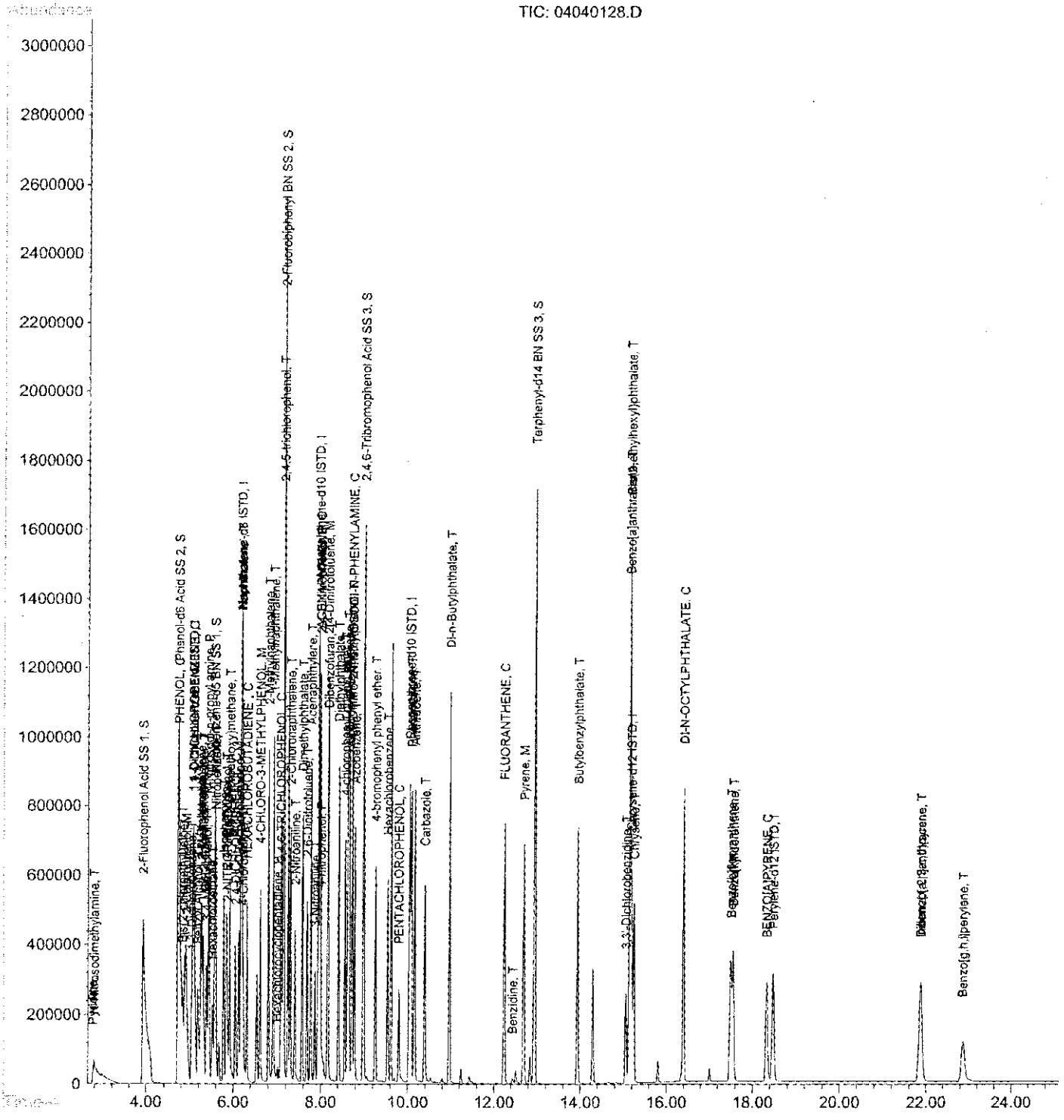
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
62)	Azobenzene	8.79	77	527350	34.04	mg/L		100
63)	4-bromophenyl phenyl ether	9.26	248	137449	32.97	mg/L		99
64)	Hexachlorobenzene	9.54	142	64996	34.55	mg/L		94
65)	PENTACHLOROPHENOL	9.80	266	68588	42.03	mg/L	#	97
66)	Phenanthrene	10.08	178	605277	35.20	mg/L		100
67)	Anthracene	10.15	178	590504	34.46	mg/L		100
68)	Carbazole	10.39	167	504159	39.89	mg/L		100
69)	Di-n-Butylphthalate	10.97	149	1178725	37.88	mg/L		100
70)	FLUORANTHENE	12.24	202	618377	37.68	mg/L		100
72)	Benzidine	12.43	184	17170	3.40	mg/L		95
73)	Pyrene	12.69	202	596017	35.47	mg/L		99
75)	Butylbenzylphthalate	13.95	149	420668	35.62	mg/L		100
76)	Bis 2-ethylhexyl adipate	13.95	129	94	Not Detected			
77)	3,3'-Dichlorobenzidine	15.06	252	130303	32.96	mg/L		99
78)	Bis(2-ethylhexyl)phthalate	15.15	149	614435	36.25	mg/L		100
79)	Benzo[a]anthracene	15.14	228	497460	36.02	mg/L		99
80)	Chrysene	15.24	228	420214	36.29	mg/L		100
82)	DI-N-OCTYLPHTHALATE	16.40	149	914221	37.83	mg/L		99
83)	Benzo[b]fluoranthene	17.50	252	421858m	34.01	mg/L		
84)	Benzo[k]fluoranthene	17.55	252	397420	36.48	mg/L		100
85)	BENZO[A]PYRENE	18.33	252	355581	35.49	mg/L		99
86)	Indeno(1,2,3-c,d)pyrene	21.88	276	301754	37.36	mg/L		97
87)	Dibenzo[a,h]anthracene	21.88	278	253123	37.16	mg/L		99
88)	Benzo[g,h,i]perylene	22.87	276	234464	37.38	mg/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

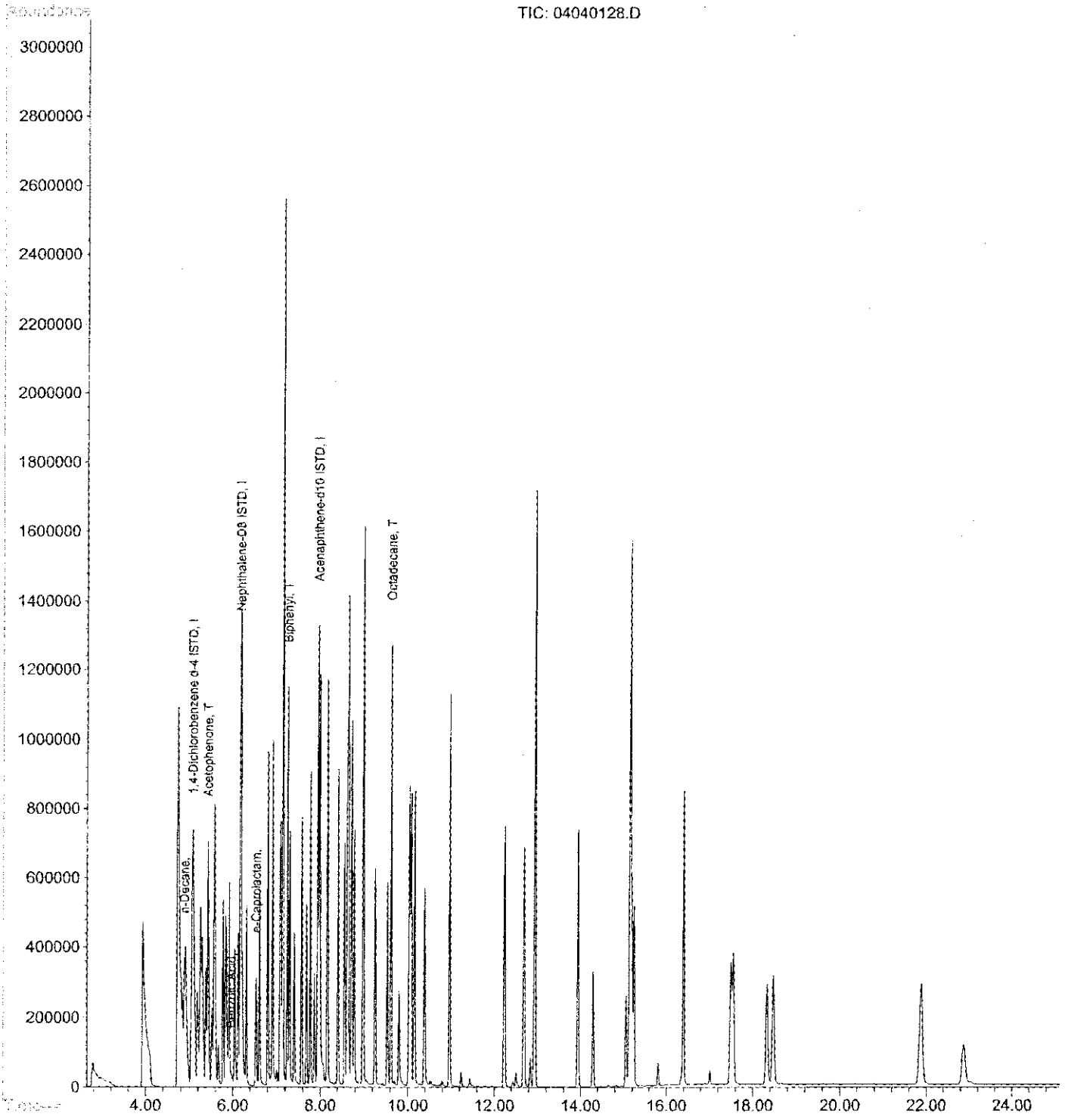
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.07	152	249189	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.17	136	1001375	40.00	mg/L	-0.01
8) Acenaphthene-d10 ISTD	7.95	164	518265	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	165550	21.57	mg/L	98
3) Acetophenone	5.42	105	224805	19.64	mg/L	99
5) Benzoic Acid	5.96	105	19557	8.62	mg/L	88
6) e-Caprolactam	6.54	55	97091	29.93	mg/L	86
7) Biphenyl	7.25	154	520319	25.59	mg/L	93
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.62	57	324174	35.60	mg/L	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.06	152	258187	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.17	136	1018674	40.00	mg/L	-0.02
33) Acenaphthene-d10 ISTD	7.95	164	522267	40.00	mg/L	-0.02
59) Phenanthrene-d10 ISTD	10.04	188	702035	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.18	240	479740	40.00	mg/L	-0.03
81) Perylene-d12 ISTD	18.47	264	383542	40.00	mg/L	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	900597	114.60	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 57.30%			
5) Phenol-d6 Acid SS 2	4.73	99	1230719	124.22	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 62.11%			
19) Nitrobenzene-d5 BN SS 1	5.57	82	517499	62.26	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 62.26%			
37) 2-Fluorobiphenyl BN SS 2	7.15	172	1034300	67.82	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 67.82%			
58) 2,4,6-Tribromophenol Acid	8.99	330	344437	170.79	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 85.40%			
74) Terphenyl-d14 BN SS 3	12.94	244	1266966	89.35	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 89.35%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	213587m	21.28	mg/L	
3) N-Nitrosodimethylamine	2.78	74	148773	24.42	mg/L	99
6) PHENOL	4.74	94	298198	25.29	mg/L	85
7) Bis(2-chloroethyl)ether	4.84	63	125717	26.39	mg/L #	72
8) 2-Chlorophenol	4.91	128	223889	24.56	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.07	146	380489m	27.33	mg/L	
10) 1,3'-Dichlorobenzene	5.03	146	146956m	22.87	mg/L	
11) 1,2'-Dichlorobenzene	5.25	146	238133	25.60	mg/L	100
12) Benzyl Alcohol	5.18	108	139137	27.01	mg/L	99
13) 2-Methylphenol	5.26	107	167862	27.55	mg/L #	81
14) bis(2-chloroisopropyl)ethe	5.30	45	258060	26.52	mg/L	98
15) 3,4-Methylphenol	5.38	107	241464	30.01	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.43	70	169479	28.03	mg/L	99
17) Hexachloroethane	5.51	117	82954	25.22	mg/L	100
20) Nitrobenzene	5.59	77	247473	30.13	mg/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) Isophorone	5.77	82	471175	27.60 mg/L	99
22) 2-NITROPHENOL	5.85	139	149690	27.80 mg/L	96
23) 2,4-dimethylphenol	5.83	122	154101	20.37 mg/L	99
24) Bis(2-chloroethoxy)methane	5.91	93	271331	28.24 mg/L	98
25) 2,4-DICHLOROPHENOL	6.05	162	180342	27.45 mg/L	99
26) 1,2,4'-Trichlorobenzene	6.13	180	166634	26.25 mg/L	100
27) Naphthalene`	6.19	128	710118	28.67 mg/L #	99
28) 4-Chloroaniline	6.22	127	318475	24.27 mg/L	97
29) HEXACHLOROBUTADIENE`	6.31	225	94340	25.31 mg/L	100
30) 4-CHLORO-3-METHYLPHENOL	6.62	107	205222	32.37 mg/L	100
31) 2-Methylnaphthalene	6.80	142	520389	30.04 mg/L	100
32) 1-Methylnaphthalene	6.91	142	488227	28.86 mg/L	100
34) Hexachlorocyclopentadiene	7.01	237	10123	17.38 mg/L #	86
35) 2,4,6-TRICHLOROPHENOL	7.09	97	72684	34.40 mg/L	94
36) 2,4,5-trichlorophenol	7.14	97	68431	34.52 mg/L	97
38) 2-Chloronaphthalene	7.30	162	404986	28.59 mg/L	98
39) 2-Nitroaniline	7.40	65	128873	34.31 mg/L	98
40) 1,4-dinitrobenzene	0.00	168	0	Not Detected	
41) 1,3-dinitrobenzene	0.00	168	0	Not Detected	
42) 1,2-dinitrobenzene	7.86	168	447	Not Detected	
43) 3-Nitroaniline	7.86	138	143224	32.31 mg/L	100
44) 4-Nitroaniline	8.65	138	111478	31.51 mg/L	98
45) Dimethylphthalate	7.58	163	627062	37.18 mg/L	100
46) 2,6-Dinitrotoluene	7.69	165	151381	36.03 mg/L	90
47) Acenaphthylene	7.77	152	756091	29.88 mg/L	100
48) ACENAPHTHENE	7.99	154	516298	34.19 mg/L	99
49) 2,4-Dinitrophenol	8.00	184	49505	56.31 mg/L #	54
50) 4-nitrophenol	8.00	139	98860	38.92 mg/L	92
51) 2,4-Dinitrotoluene	8.16	165	197918	39.09 mg/L	97
52) Dibenzofuran	8.17	168	631308	33.90 mg/L	99
53) 2,3,5,6-tetrachlorophenol	8.36	232	1537	Not Detected	
54) 2,3,4,6-tetrachlorophenol	8.36	232	1537	Not Detected	
55) Diethylphthalate	8.42	149	738415	39.52 mg/L	100
56) 4-chlorophenyl phenyl ethe	8.56	204	246985	34.63 mg/L	99
57) Fluorene	8.62	166	550361	36.73 mg/L	99
60) 4,6-Dinitro-2-methylphenol	8.71	198	83570	54.99 mg/L #	74
61) N-NITROSODI-N-PHENYLAMINE	8.72	169	445898	37.66 mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

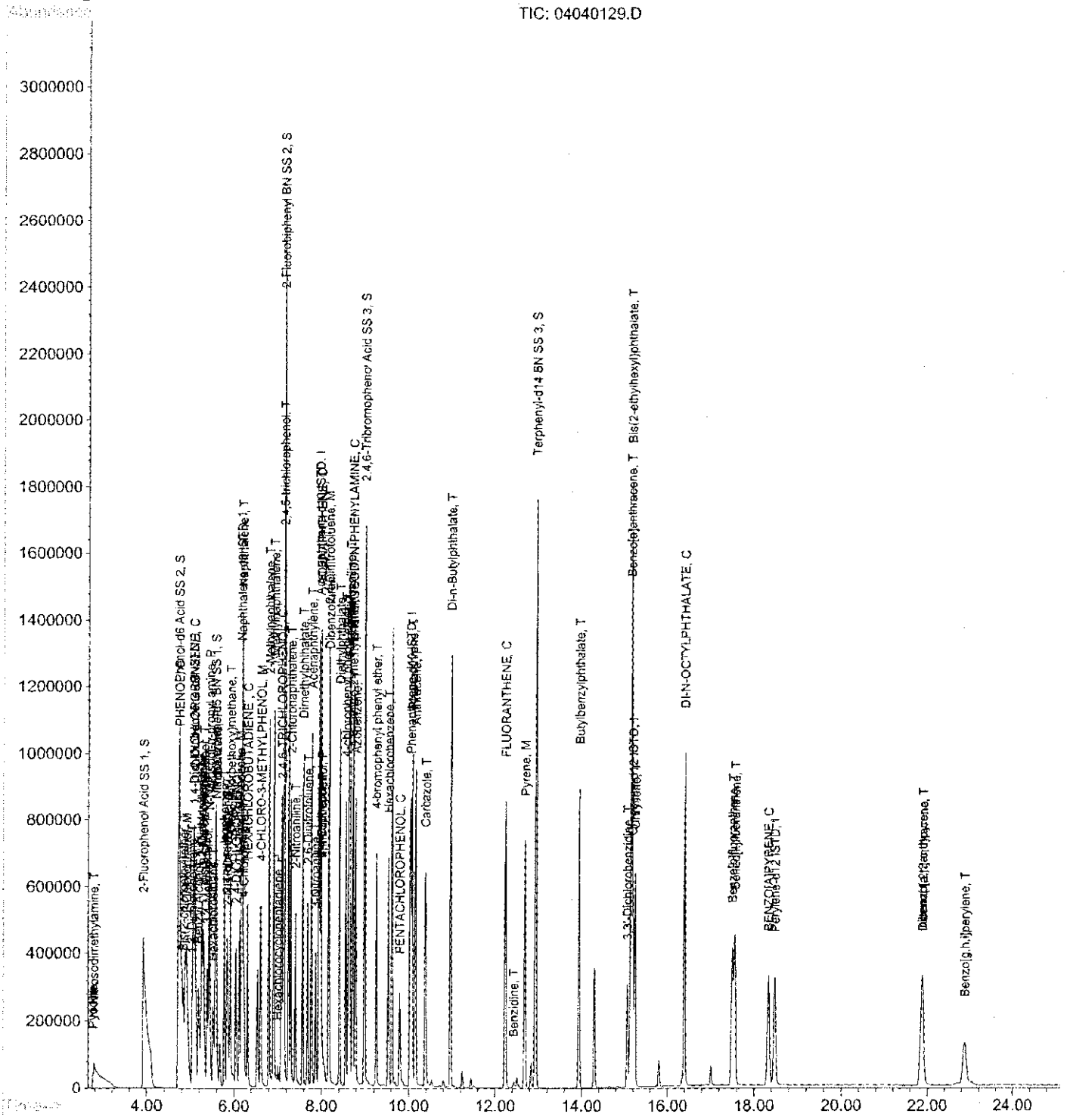
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
62)	Azobenzene	8.78	77	599096	37.96	mg/L		100
63)	4-bromophenyl phenyl ether	9.25	248	157927	37.18	mg/L		99
64)	Hexachlorobenzene	9.54	142	72718	37.93	mg/L		91
65)	PENTACHLOROPHENOL	9.81	266	74797	44.57	mg/L		98
66)	Phenanthrene	10.08	178	690902	39.43	mg/L		100
67)	Anthracene	10.15	178	677629	38.81	mg/L		99
68)	Carbazole	10.39	167	570159	44.27	mg/L		99
69)	Di-n-Butylphthalate	10.97	149	1315761	41.50	mg/L		100
70)	FLUORANTHENE	12.24	202	712638	42.62	mg/L		100
72)	Benzidine	12.43	184	19831	3.76	mg/L		98
73)	Pyrene	12.69	202	689686	39.29	mg/L		99
75)	Butylbenzylphthalate	13.94	149	484223	39.25	mg/L		100
76)	Bis 2-ethylhexyl adipate	13.95	129	109	Not Detected			
77)	3,3'-Dichlorobenzidine	15.06	252	154535	37.43	mg/L		99
78)	Bis(2-ethylhexyl)phthalate	15.15	149	701628	39.63	mg/L		100
79)	Benzo[a]anthracene	15.14	228	580025	40.21	mg/L		99
80)	Chrysene	15.24	228	493742	40.82	mg/L		99
82)	DI-N-OCTYLPHTHALATE	16.40	149	1058407	42.48	mg/L		100
83)	Benzo[b]fluoranthene	17.50	252	525827	41.12	mg/L		97
84)	Benzo[k]fluoranthene	17.56	252	424419	37.79	mg/L		98
85)	BENZO[A]PYRENE	18.33	252	410812	39.77	mg/L		100
86)	Indeno(1,2,3-c,d)pyrene	21.88	276	342808	41.16	mg/L	#	98
87)	Dibenzo[a,h]anthracene	21.88	278	289756	41.25	mg/L		99
88)	Benzo[g,h,i]perylene	22.88	276	263693	40.78	mg/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

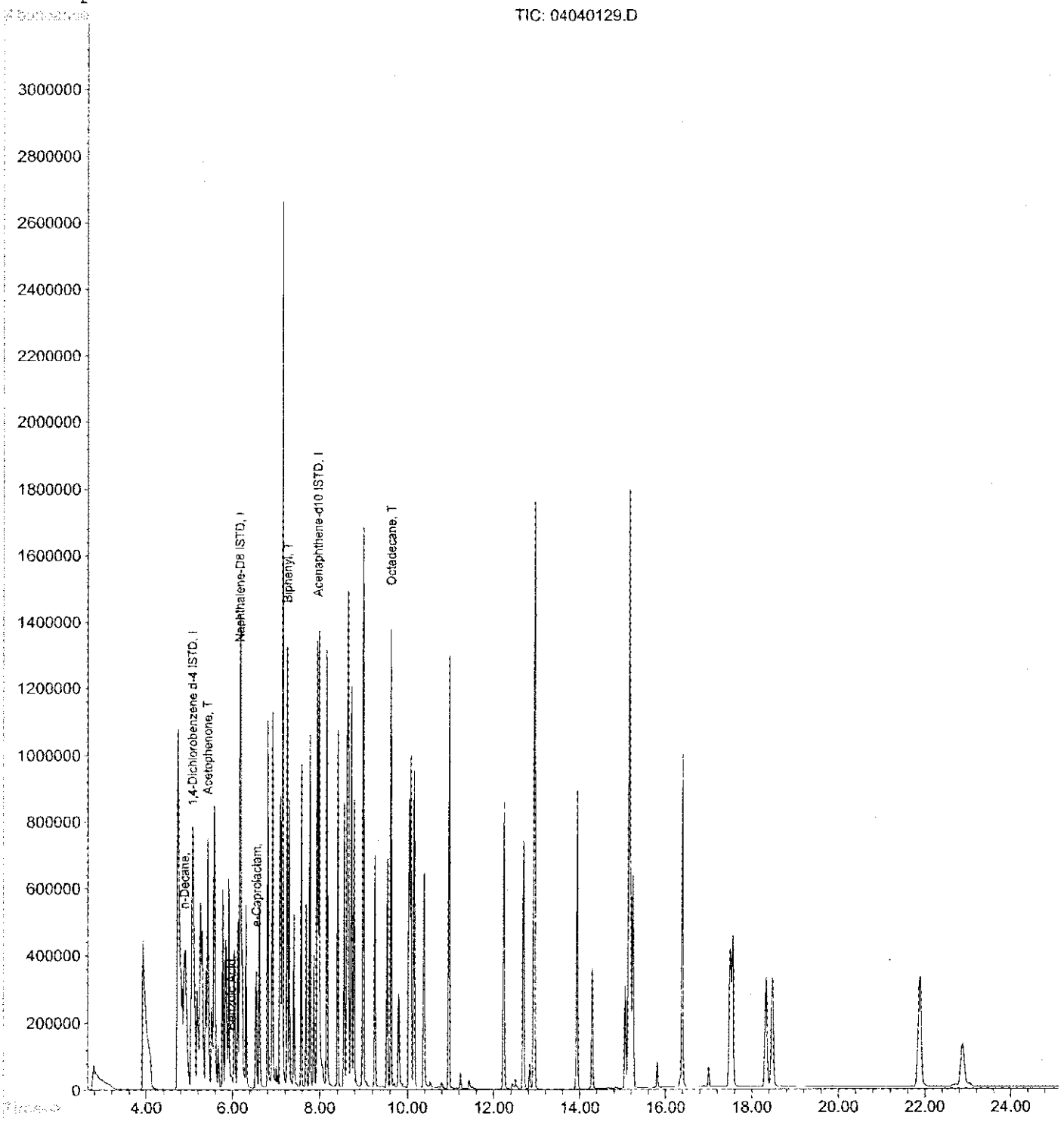
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.06	152	257425	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.17	136	1018674	40.00	mg/L	-0.01
8) Acenaphthene-d10 ISTD	7.95	164	521666	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	188862	23.81	mg/L	98
3) Acetophenone	5.42	105	263005	22.24	mg/L	99
5) Benzoic Acid	5.97	105	24924	10.65	mg/L	89
6) e-Caprolactam	6.55	55	116360	35.26	mg/L	89
7) Biphenyl	7.25	154	588667	28.46	mg/L	94
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.62	57	367937	40.14	mg/L	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 ISTD	1.000	1.000	0.0	96	0.00
2		Pyridine	1.555	1.543	0.8	94	0.00
3	T	N-Nitrosodimethylamine	0.944	0.838	11.2	85	0.00
4	S	2-Fluorophenol Acid SS 1	1.218	1.257	-3.2	98	0.00
5	S	Phenol-d6 Acid SS 2	1.535	1.628	-6.1	99	0.00
6	C	PHENOL	1.827	1.856	-1.6	94	0.00
7	T	Bis(2-chloroethyl)ether	0.738	0.763	-3.4	93	0.00
8	M	2-Chlorophenol	1.412	1.391	1.5	93	0.00
9	C	1,4'-DICHLOROBENZENE	2.157	2.081	3.5	88	0.00
10	T	1,3'-Dichlorobenzene	0.996	1.072	-7.6	111	0.00
11	T	1,2'-Dichlorobenzene	1.441	1.439	0.1	94	0.00
12	T	Benzyl Alcohol	0.798	0.805	-0.9	92	0.00
13	T	2-Methylphenol	0.944	0.948	-0.4	94	0.00
14	T	bis(2-chloroisopropyl)ether	1.508	1.597	-5.9	96	0.00
15	T	3,4-Methylphenol	1.247	1.228	1.5	92	0.00
16	P	N-Nitrosodi-n-propyl amine	0.937	0.954	-1.8	94	0.00
17	T	Hexachloroethane	0.510	0.517	-1.4	94	0.00
18	I	Naphthalene-d8 ISTD	1.000	1.000	0.0	96	0.00
19	S	Nitrobenzene-d5 BN SS 1	0.326	0.341	-4.6	97	0.00
20	T	Nitrobenzene	0.323	0.330	-2.2	96	0.00
21	T	Isophorone	0.670	0.677	-1.0	95	0.00
22	C	2-NITROPHENOL	0.211	0.212	-0.5	94	0.00
23	T	2,4-dimethylphenol	0.297	0.305	-2.7	95	0.00
24	T	Bis(2-chloroethoxy)methane	0.377	0.384	-1.9	94	0.00
25	C	2,4-DICHLOROPHENOL	0.258	0.247	4.3	91	0.00
26	M	1,2,4'-Trichlorobenzene	0.249	0.248	0.4	95	0.00
27	T	Naphthalene`	0.973	0.988	-1.5	96	0.00
28	T	4-Chloroaniline	0.515	0.520	-1.0	95	0.00
29	C	HEXACHLOROBUTADIENE`	0.146	0.145	0.7	96	0.00
30	M	4-CHLORO-3-METHYLPHENOL	0.249	0.248	0.4	93	0.00
31	T	2-Methylnaphthalene	0.680	0.696	-2.4	96	0.00
32	T	1-Methylnaphthalene	0.664	0.670	-0.9	95	0.00
33	I	Acenaphthene-d10 ISTD	1.000	1.000	0.0	97	0.00
34	P	Hexachlorocyclopentadiene	0.091	0.057	37.4#	88	0.00
35	C	2,4,6-TRICHLOROPHENOL	0.162	0.159	1.9	91	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	T	2,4,5-trichlorophenol	0.152	0.147	3.3	94	0.00
37	S	2-Fluorobiphenyl BN SS 2	1.168	1.200	-2.7	99	0.00
38	T	2-Chloronaphthalene	1.085	1.086	-0.1	96	0.00
39	T	2-Nitroaniline	0.288	0.289	-0.3	96	0.00
40	T	1,4-dinitrobenzene	0.213	0.211	0.9	94	0.00
41	T	1,3-dinitrobenzene	0.236	0.240	-1.7	97	0.00
42	T	1,2-dinitrobenzene	0.167	0.166	0.6	95	0.00
43	T	3-Nitroaniline	0.340	0.338	0.6	95	0.00
44	T	4-Nitroaniline	0.271	0.284	-4.8	102	0.00
45	T	Dimethylphthalate	1.292	1.301	-0.7	96	0.00
46	T	2,6-Dinitrotoluene	0.322	0.328	-1.9	98	0.00
47	T	Acenaphthylene	1.938	1.940	-0.1	95	0.00
48	C	ACENAPHTHENE	1.157	1.159	-0.2	97	0.00
49	P	2,4-Dinitrophenol	0.075	0.059	21.3	93	0.00
50	P	4-nitrophenol	0.194	0.192	1.0	93	0.00
51	M	2,4-Dinitrotoluene	0.388	0.399	-2.8	96	0.00
52	T	Dibenzofuran	1.426	1.438	-0.8	96	0.00
53	T	2,3,5,6-tetrachlorophenol	0.255	0.248	2.7	93	0.00
54	T	2,3,4,6-tetrachlorophenol	0.256	0.254	0.8	95	0.00
55	T	Diethylphthalate	1.431	1.442	-0.8	96	0.00
56	T	4-chlorophenyl phenyl ether	0.546	0.538	1.5	95	0.00
57	T	Fluorene	1.148	1.141	0.6	95	0.00
58	S	2,4,6-Tribromophenol Acid S	0.122	0.129	-5.7	98	0.00
59	I	Phenanthrene-d10 ISTD	1.000	1.000	0.0	98	0.00
60	T	4,6-Dinitro-2-methylphenol	0.084	0.082	2.4	101	0.00
61	C	N-NITROSODI-N-PHENYLAMINE	0.675	0.669	0.9	96	0.00
62	T	Azobenzene	0.899	0.875	2.7	97	0.00
63	T	4-bromophenyl phenyl ether	0.242	0.235	2.9	96	0.00
64	T	Hexachlorobenzene	0.109	0.109	0.0	93	0.00
65	C	PENTACHLOROPHENOL	0.106	0.085	19.8	88	0.00
66	T	Phenanthrene	0.998	0.996	0.2	98	0.00
67	T	Anthracene	0.995	0.992	0.3	97	0.00
68	T	Carbazole	0.734	0.761	-3.7	102	0.00
69	T	Di-n-Butylphthalate	1.806	1.819	-0.7	97	0.00
70	C	FLUORANTHENE	0.953	0.968	-1.6	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
72	T	Benzidine	0.440	0.434	1.4	113	0.00
73	M	Pyrene	1.463	1.398	4.4	98	0.00
74	S	Terphenyl-d14 BN SS 3	1.182	1.172	0.8	101	0.00
75	T	Butylbenzylphthalate	1.029	0.993	3.5	98	0.00
76	T	Bis 2-ethylhexyl adipate	1.045	0.997	4.6	96	0.00
77	T	3,3'-Dichlorobenzidine	0.344	0.342	0.6	110	0.00
78	T	Bis(2-ethylhexyl)phthalate	1.476	1.427	3.3	99	0.00
79	T	Benzo[a]anthracene	1.203	1.177	2.2	101	0.00
80	T	Chrysene	1.009	0.986	2.3	101	0.00
81	I	Perylene-d12 ISTD	1.000	1.000	0.0	105	0.00
82	C	DI-N-OCTYLPHTHALATE	2.598	2.486	4.3	100	0.00
83	T	Benzo[b]fluoranthene	1.334	1.199	10.1	99	0.00
84	T	Benzo[k]fluoranthene	1.171	1.227	-4.8	106	0.00
85	C	BENZO[A]PYRENE	1.077	1.044	3.1	102	0.00
86	T	Indeno(1,2,3-c,d)pyrene	0.869	0.843	3.0	102	0.00
87	T	Dibenzo[a,h]anthracene	0.733	0.714	2.6	103	0.00
88	T	Benzo[g,h,i]perylene	0.674	0.652	3.3	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.07	152	241333	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.18	136	953829	40.00	mg/L	0.00
33) Acenaphthene-d10 ISTD	7.96	164	490771	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	10.05	188	694051	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.20	240	461269	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.49	264	369784	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.94	112	379253	51.63	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 25.82%			
5) Phenol-d6 Acid SS 2	4.73	99	491248	53.05	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 26.53%			
19) Nitrobenzene-d5 BN SS 1	5.58	82	406270	52.20	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 52.20%			
37) 2-Fluorobiphenyl BN SS 2	7.16	172	735937	51.36	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 51.36%			
58) 2,4,6-Tribromophenol Acid	8.99	330	79225	50.23	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 25.12%			
74) Terphenyl-d14 BN SS 3	12.94	244	675852	49.57	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 49.57%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	465456	49.60	mg/L	100
3) N-Nitrosodimethylamine	2.78	74	252773	44.40	mg/L	98
6) PHENOL	4.74	94	559990	50.80	mg/L	98
7) Bis(2 chloroethyl)ether	4.84	63	230084	51.68	mg/L	97
8) 2-Chlorophenol	4.91	128	419503	49.24	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.08	146	627737	48.24	mg/L	75
10) 1,3'-Dichlorobenzene	5.05	146	323331	53.83	mg/L	11
11) 1,2'-Dichlorobenzene	5.25	146	433976	49.92	mg/L	100
12) Benzyl Alcohol	5.19	108	242960	50.45	mg/L	99
13) 2-Methylphenol	5.26	107	285930	50.20	mg/L #	89
14) bis(2-chloroisopropyl)ethe	5.31	45	481875	52.97	mg/L	97
15) 3,4-Methylphenol	5.38	107	370492	49.25	mg/L	99
16) N-Nitrosodi-n-propyl amine	5.43	70	287920	50.94	mg/L	99
17) Hexachloroethane	5.52	117	155851	50.69	mg/L	100
20) Nitrobenzene	5.59	77	393788	51.19	mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
21)	Isophorone	5.78	82	807773	50.53 mg/L		100
22)	2-NITROPHENOL	5.86	139	252620	50.11 mg/L		99
23)	2,4-dimethylphenol	5.84	122	363780	51.35 mg/L		100
24)	Bis(2-chloroethoxy)methane	5.92	93	457322	50.84 mg/L		99
25)	2,4-DICHLOROPHENOL	6.05	162	294967	47.95 mg/L		99
26)	1,2,4'-Trichlorobenzene	6.13	180	295603	49.72 mg/L		99
27)	Naphthalene`	6.20	128	1178190	50.79 mg/L	#	98
28)	4-Chloroaniline	6.23	127	620254	50.48 mg/L		99
29)	HEXACHLOROBUTADIENE`	6.32	225	172295	49.37 mg/L		100
30)	4-CHLORO-3-METHYLPHENOL	6.61	107	296235	49.90 mg/L		100
31)	2-Methylnaphthalene	6.81	142	829905	51.16 mg/L		100
32)	1-Methylnaphthalene	6.93	142	798787	50.43 mg/L		100
34)	Hexachlorocyclopentadiene	7.01	237	34819	43.94 mg/L		95
35)	2,4,6-TRICHLOROPHENOL	7.09	97	97376	49.04 mg/L		100
36)	2,4,5-trichlorophenol	7.13	97	90418	48.53 mg/L		98
38)	2-Chloronaphthalene	7.30	162	666196	50.05 mg/L		100
39)	2-Nitroaniline	7.42	65	177579	50.31 mg/L		99
40)	1,4-dinitrobenzene	7.53	168	129285	49.56 mg/L		99
41)	1,3-dinitrobenzene	7.66	168	147052	50.86 mg/L		99
42)	1,2-dinitrobenzene	7.80	168	101558	49.44 mg/L		99
43)	3-Nitroaniline	7.88	138	207591	49.83 mg/L		100
44)	4-Nitroaniline	8.66	138	174467	52.47 mg/L		98
45)	Dimethylphthalate	7.59	163	797882	50.35 mg/L		99
46)	2,6-Dinitrotoluene	7.70	165	201303	50.99 mg/L		99
47)	Acenaphthylene	7.78	152	1190146	50.06 mg/L		100
48)	ACENAPHTHENE	8.00	154	710972	50.10 mg/L		100
49)	2,4-Dinitrophenol	8.01	184	35954	46.22 mg/L		94
50)	4-nitrophenol	8.00	139	117887	48.57 mg/L		98
51)	2,4-Dinitrotoluene	8.17	165	244640	51.41 mg/L		99
52)	Dibenzofuran	8.18	168	882453	50.43 mg/L		99
53)	2,3,5,6-tetrachlorophenol	8.31	232	152020	48.87 mg/L		98
54)	2,3,4,6-tetrachlorophenol	8.37	232	155588	48.05 mg/L		97
55)	Diethylphthalate	8.43	149	884378	50.36 mg/L		100
56)	4-chlorophenyl phenyl ethe	8.57	204	329864	49.22 mg/L		99
57)	Fluorene	8.63	166	699895	49.71 mg/L		99
60)	4,6-Dinitro-2-methylphenol	8.72	198	70950	48.44 mg/L		96
61)	N-NITROSODI-N-PHENYLAMINE	8.73	169	580536	49.59 mg/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

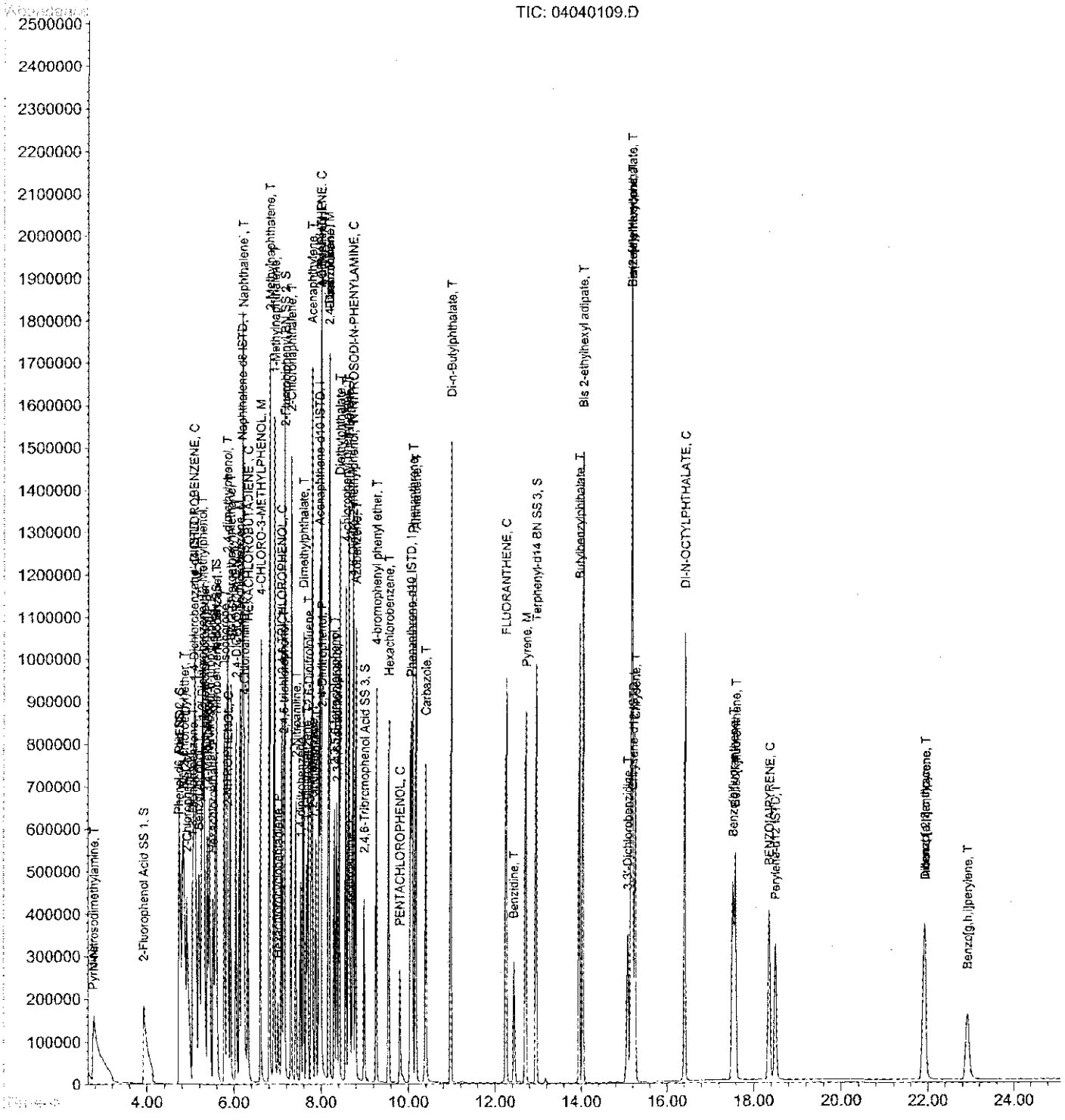
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62)	Azobenzene	8.80	77	759058	48.65 mg/L	100
63)	4-bromophenyl phenyl ether	9.27	248	204301	48.65 mg/L	99
64)	Hexachlorobenzene	9.55	142	94734	49.99 mg/L	96
65)	PENTACHLOROPHENOL	9.81	266	73471	44.32 mg/L	97
66)	Phenanthrene	10.09	178	863750	49.87 mg/L	100
67)	Anthracene	10.17	178	860259	49.84 mg/L	99
68)	Carbazole	10.39	167	660204	51.86 mg/L	100
69)	Di-n-Butylphthalate	10.98	149	1578472	50.36 mg/L	100
70)	FLUORANTHENE	12.25	202	839513	50.78 mg/L	99
72)	Benzidine	12.43	184	250120	49.31 mg/L	99
73)	Pyrene	12.71	202	806338	47.78 mg/L	100
75)	Butylbenzylphthalate	13.96	149	572517	48.27 mg/L	100
76)	Bis 2-ethylhexyl adipate	14.04	129	574964	47.71 mg/L	100
77)	3,3'-Dichlorobenzidine	15.08	252	197428	49.73 mg/L	99
78)	Bis(2-ethylhexyl)phthalate	15.16	149	822521	48.32 mg/L	100
79)	Benzo[a]anthracene	15.16	228	678537	48.92 mg/L	100
80)	Chrysene	15.25	228	568664	48.89 mg/L	100
82)	DI-N-OCTYLPHTHALATE	16.41	149	1149315	47.85 mg/L	100
83)	Benzo[b]fluoranthene	17.52	252	554405	44.96 mg/L	96
84)	Benzo[k]fluoranthene	17.57	252	567111	52.37 mg/L	96
85)	BENZO[A]PYRENE	18.35	252	482381	48.43 mg/L	100
86)	Indeno(1,2,3-c,d)pyrene	21.93	276	389744	48.54 mg/L	100
87)	Dibenzo[a,h]anthracene	21.93	278	330150	48.75 mg/L	100
88)	Benzo[g,h,i]perylene	22.92	276	301427	48.35 mg/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040110.D Vial: 10
Acq On : 1 Apr 2004 11:27 pm Operator: DJP
Sample : MDE-CH CCV @ 50ppm Inst : SVOC GC/M
Misc : 02-06-04 A201 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	125	0.00
2		n-Decane	1.232	1.223	0.7	123	0.00
3	T	Acetophenone	1.838	1.590	13.5	105	0.00
4	I	Naphthalene-D8 ISTD	1.000	1.000	0.0	135	0.00
5		Benzoic Acid	0.114	0.081	28.9	91	0.00
6		e-Caprolactam	0.130	0.121	6.9	125	0.00
7	T	Biphenyl	0.812	0.753	7.3	124	0.00
8	I	Acenaphthene-d10 ISTD	1.000	1.000	0.0	104	0.00
9	T	Atrazine	0.364	0.296	18.7	83	0.00
10	T	Octadecane	0.703	0.735	-4.6	109	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040110.D Vial: 10
Acq On : 1 Apr 2004 11:27 pm Operator: DJP
Sample : MDE-CH CCV @ 50ppm Inst : SVOC GC/M
Misc : 02-06-04 A201 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:11 2004 Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

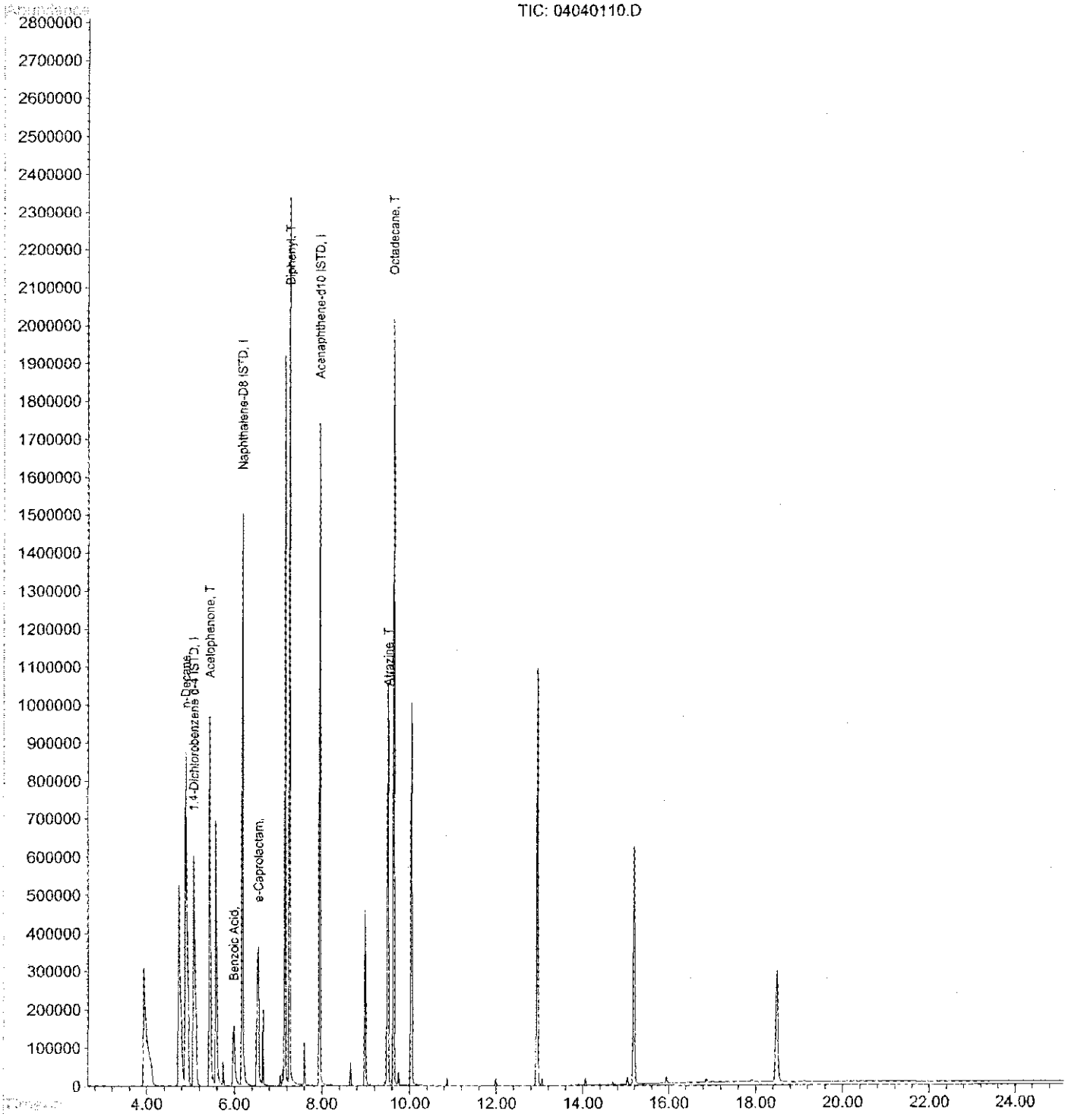
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.06	152	333609	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.18	136	1295982	40.00	mg/L	0.00
8) Acenaphthene-d10 ISTD	7.95	164	643681	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	510115	49.63	mg/L	99
3) Acetophenone	5.43	105	663181	43.27	mg/L	99
5) Benzoic Acid	5.98	105	130617	37.03	mg/L	92
6) e-Caprolactam	6.55	55	195710	46.62	mg/L	89
7) Biphenyl	7.26	154	1220575	46.39	mg/L	95
9) Atrazine	9.51	200	238507	40.73	mg/L	79
10) Octadecane	9.63	57	591394	52.29	mg/L	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040110.D Vial: 10
Acq On : 1 Apr 2004 11:27 pm Operator: DJP
Sample : MDE-CH CCV @ 50ppm Inst : SVOC GC/M
Misc : 02-06-04 A201 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

ANALYSIS:	**GC/MS Semi-Volatiles**	**LAB CODE:**	**DFTPPW**
METHOD NO.:	**EPA 8270**	**LAB SAMPLE ID:**	**DFTPP Tune**
LAB FILE ID:	**04040108.d**	**DATE/TIME ANALYZED:**	**4/1/04 22:26**

Target Mass	Ion Abundance Criteria	% Relative Abundance
51	30.0 - 60.0% of mass 198	35.2
68	0 - 2.0% of mass 69	0.0
69	0 - 100.0% of mass 198	53.3
70	0 - 2.0% of mass 69	0.3
127	40.0 - 60.0% of mass 198	53.3
197	0 - 1.0% of mass 198	0.0
198	100% of mass 198	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	22.5
365	1.0 - 100.0% of mass 198	2.3
441	Present but less than mass 443	76.9
442	40.0 - 100.0% of mass 198	67.2
443	17.0 - 23.0% of mass 442	19.5

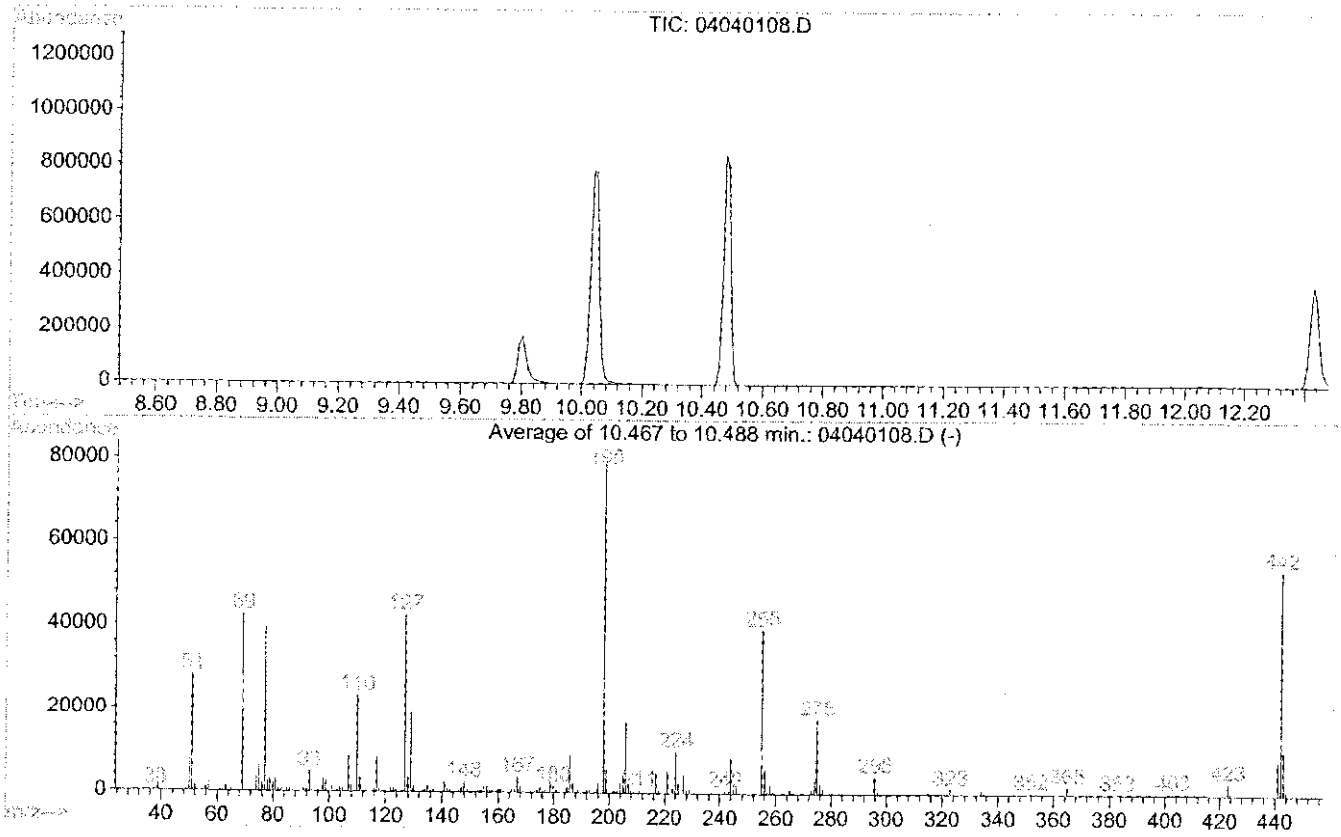
This Tune applies to the following samples:

Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-9S-032504	04032603-14	04040111.D	04/01/04 23:57

DFTPP

Data File : C:\HPCHEM\1\DATA\040401\04040108.D
Acq On : 1 Apr 2004 10:26 pm
Sample : ULTRA Tune Solution @ 50ppm
Misc : 04-01-04 A214 DJP
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TUNE.M (RTE Integrator)
Title : ALS8270.M

Vial: 8
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00



AutoFind: Scans 766, 767, 768; Background Corrected with Scan 761

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.2	28061	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	53.3	42491	PASS
70	69	0.00	2	0.3	148	PASS
127	198	40	60	53.3	42480	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	79723	PASS
199	198	5	9	6.9	5520	PASS
275	198	10	30	22.5	17927	PASS
365	198	1	100	2.3	1796	PASS
441	443	0.01	100	76.9	8047	PASS
442	198	40	100	67.2	53612	PASS
443	442	17	23	19.5	10464	PASS

Injection Log

Directory: p:\svochp~1\1\data\040401

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04040101.d	1.	ULTRA Tune Solution @ 50ppm	04-01-04 A214 DJP	1 Apr 04 18:52
2	2	04040102.d	1.	HPBNA ICAL L1 @ 10ppm	04-01-04 A216 DJP	1 Apr 04 19:23
3	3	04040103.d	1.	HPBNA ICAL L2 @ 20ppm	04-01-04 A217 DJP	1 Apr 04 19:54
4	4	04040104.d	1.	HPBNA ICAL L3 @ 50ppm	04-01-04 A218 DJP	1 Apr 04 20:24
5	5	04040105.d	1.	HPBNA ICAL L4 @ 80ppm	04-01-04 A219 DJP	1 Apr 04 20:55
6	6	04040106.d	1.	HPBNA ICAL L5 @ 120ppm	04-01-04 A220 DJP	1 Apr 04 21:25
7	7	04040107.d	1.	HPBNA ICAL L6 @ 160ppm	04-01-04 A221 DJP	1 Apr 04 21:56
8	8	04040108.d	1.	ULTRA Tune Solution @ 50ppm	04-01-04 A214 DJP	1 Apr 04 22:26
9	10	04040110.d	1.	MDE-CH CCV @ 50ppm	02-06-04 A201 DJP	1 Apr 04 23:27
10	11	04040111.d	1.	04032603-14 1000mL	Batch #504	1 Apr 04 23:57
11	12	04040112.d	1.	04032702-01 1000mL	Batch #504	2 Apr 04 00:28
12	13	04040113.d	1.	04032702-02 1000mL	Batch #504	2 Apr 04 00:58
13	14	04040114.d	1.	04032702-03 1000mL	Batch #504	2 Apr 04 01:28
14	15	04040115.d	1.	04032702-04 1000mL	Batch #504	2 Apr 04 01:57
15	16	04040116.d	1.	04032913-21 1000mL	Batch #504	2 Apr 04 02:27
16	17	04040117.d	1.	04033013-06 1000mL	Batch #504	2 Apr 04 02:57
17	18	04040118.d	1.	04033026-02 1000mL	Batch #504	2 Apr 04 03:26
18	19	04040119.d	1.	04033026-04 1000mL	Batch #504	2 Apr 04 03:55
19	20	04040120.d	1.	04033026-06 1000mL	Batch #504	2 Apr 04 04:24
20	21	04040121.d	1.	04033026-08 800mL	Batch #504	2 Apr 04 04:53
21	22	04040122.d	1.	04033026-09 1000mL	Batch #504	2 Apr 04 05:22
22	23	04040123.d	1.	04033026-10 1000mL	Batch #504	2 Apr 04 05:50
23	24	04040124.d	1.	04033026-11 1000mL	Batch #504	2 Apr 04 06:19
24	25	04040125.d	1.	04033026-12 1000mL	Batch #504	2 Apr 04 06:47
25	26	04040126.d	1.	04033026-13 1000mL	Batch #504	2 Apr 04 07:17
26	27	04040127.d	1.	04033026-14 1000mL	Batch #504	2 Apr 04 07:47
27	28	04040128.d	1.	04033026-15 MS 1000mL	Batch #504	2 Apr 04 08:17
28	29	04040129.d	1.	04033026-16 MSD 1000mL	Batch #504	2 Apr 04 08:47
29	30	04040130.d	1.	04033026-17 1000mL	Batch #504	2 Apr 04 09:16
30	31	04040131.d	1.	04033026-18 1000mL	Batch #504	2 Apr 04 09:45
31	32	04040132.d	1.	04032623-01 1050mL	Batch #504	2 Apr 04 10:15

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Metals

- *Initial Calibration Verification Summary*
- *Continuing Calibration Verification Summary*
- *Duplicate Summary*
- *Matrix Spike Summary*
- *Method Blank Summary (LRB)*
- *LCS Summary (LFB)*

6630 Baltimore National Pike Baltimore, MD 21228 (800) 932-9047 (410) 747-8770 FAX (410) 788-8723

Batch QC Summary Report

Batch ID:	469	Date:	03/29/04	QC Sample:	04032603-04

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec
Antimony	0	97	65 - 141	101.3	70 - 130	0.0	20	94.1
Arsenic	0	93	67 - 118	97.9	70 - 130	0.0	20	91.2
Beryllium	0	109	75 - 128	113.7	70 - 130	0.0	20	107.6
Cadmium	0	93	64 - 119	98.5	70 - 130	0.0	20	91.4
Chromium	0	94	66 - 118	102.1	70 - 130	1.6	20	95.2
Copper	2.61	116	56 - 140	104.7	70 - 130	16.6	20	99.0
Lead	0	99	65 - 123	105.6	70 - 130	0.0	20	99.5
Mercury	0.12	95	45 - 140	98.0	70 - 130	0.0	20	90.0
Nickel	4.69	110	54 - 144	102.5	70 - 130	0.0	20	95.2
Selenium	0	90	63 - 124	91.6	70 - 130	0.0	20	85.9
Silver	0	104	50 - 133	106.4	70 - 130	0.0	20	95.1
Thallium	0	97	74 - 114	102.8	70 - 130	0.0	20	99.0
Zinc	2.03	115	31 - 166	97.6	70 - 130	3.9	20	155.5

QC Comments:

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec

Associated Samples:

Lab ID	Client ID	Test Group
04032219-17	6937-S-17	PP Metals in Water
04032310-02	MW-7-032204	PP Metals in Water
04032310-03	DMW-11S-032204	PP Metals in Water
04032310-04	DMW-11I-032204	PP Metals in Water
04032310-05	MW-3-032204	PP Metals in Water
04032310-06	MW-1-032204	PP Metals in Water
04032310-07	DMW-8D-032304	PP Metals in Water
04032310-08	DMW-4D-032304	PP Metals in Water
04032603-02	DMW-5I-032404	PP Metals in Water
04032603-04	DMW-5D-032404	PP Metals in Water
04032603-06	DMW-5S-032404	PP Metals in Water
04032603-08	DMW-4I-032404	PP Metals in Water
04032603-10	MW-4-032504	PP Metals in Water
04032603-12	DMW-9D-032504	PP Metals in Water
04032603-14	DMW-9S-032504	PP Metals in Water
04032603-16	DMW-2S-032504	PP Metals in Water
04032603-18	DMW-4S-032404	PP Metals in Water
04032616-01	MW-5	PADEP Leaded/Aviation/Jet Fuel in Wate

QC Comments:

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\006ICV1.D\006ICV1.D#
Date Acquired: Mar 30 2004 09:33 am
Acq. Method: 330.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 09:31 am
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.07	ppb	2.95	50.00	90 - 110	
52 Cr	49.39	ppb	0.67	50.00	90 - 110	
60 Ni	49.88	ppb	0.24	50.00	90 - 110	
63 Cu	49.44	ppb	1.00	50.00	90 - 110	
66 Zn	50.55	ppb	0.52	50.00	90 - 110	
75 As	49.66	ppb	0.21	50.00	90 - 110	
82 Se	48.90	ppb	1.51	50.00	90 - 110	
107 Ag	48.76	ppb	1.07	50.00	90 - 110	
111 Cd	48.91	ppb	1.72	50.00	90 - 110	
121 Sb	49.55	ppb	0.44	50.00	90 - 110	
202 Hg	1.94	ppb	0.90	2.00	90 - 110	
205 Tl	49.22	ppb	4.50	50.00	90 - 110	
208 Pb	49.11	ppb	2.13	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3256934	3.45	3453125	94.3	30 - 140	
45 Sc	5658794	2.12	6062495	93.3	30 - 140	
72 Ge	1501504	1.33	1596533	94.0	30 - 140	
115 In	12223247	0.81	12954590	94.4	30 - 140	
159 Tb	17111600	1.60	17934468	95.4	30 - 140	
209 Bi	10129979	1.39	10533230	96.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

Calibration Report

Calibration : Z:\040330A.B\330.C
Last Calib: Mar 30, 2004 11:18
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040330a.b\002calb.d\	002calb.d#	Mar 30 2004 09:15 am
2	...chem\1\data\040330a.b\003cals.d\	003cals.d#	Mar 30 2004 09:19 am
3	...chem\1\data\040330a.b\004cals.d\	004cals.d#	Mar 30 2004 09:24 am
4	...chem\1\data\040330a.b\005cals.d\	005cals.d#	Mar 30 2004 09:29 am
5	---		
6	---		
7	---		
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Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
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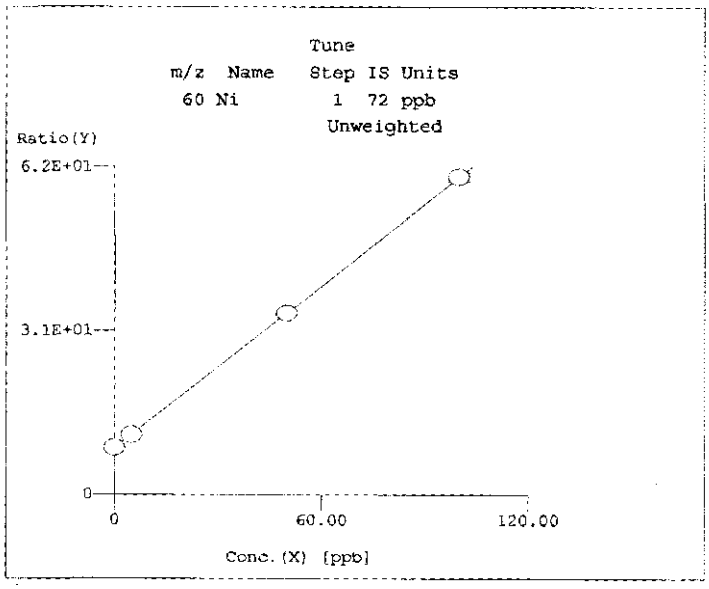

Lv.	Conc.	Ratio		RSD %
1	0.00	8.87E+0	P	9.22E-1
2	5.00	1.13E+1	P	2.49E-1
3	50.00	3.44E+1	P	1.17
4	100.00	6.01E+1	A	1.37
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
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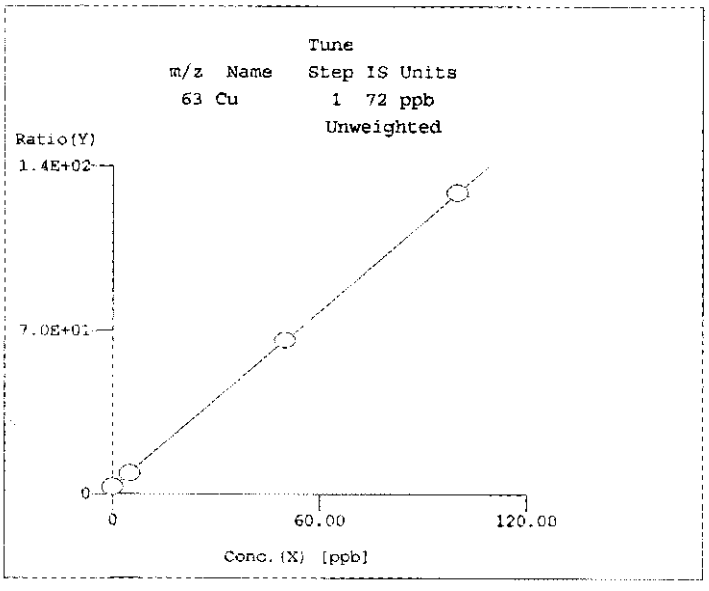
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 5.119E-1*X +8.874E+0
X = 1.953E+0*Y -1.733E+1

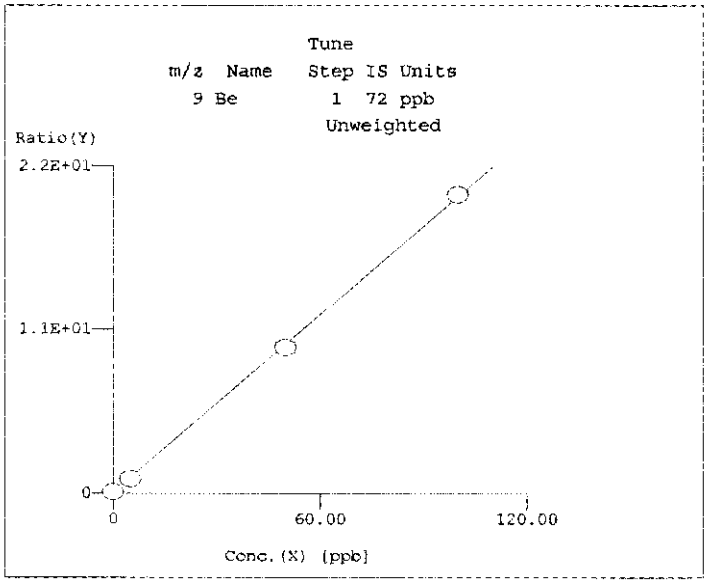
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.84E+0	P	1.05
2	5.00	8.66E+0	P	1.64
3	50.00	6.58E+1	A	1.41
4	100.00	1.29E+2	A	1.11
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.259E+0*X +2.844E+0
X = 7.940E-1*Y -2.258E+0

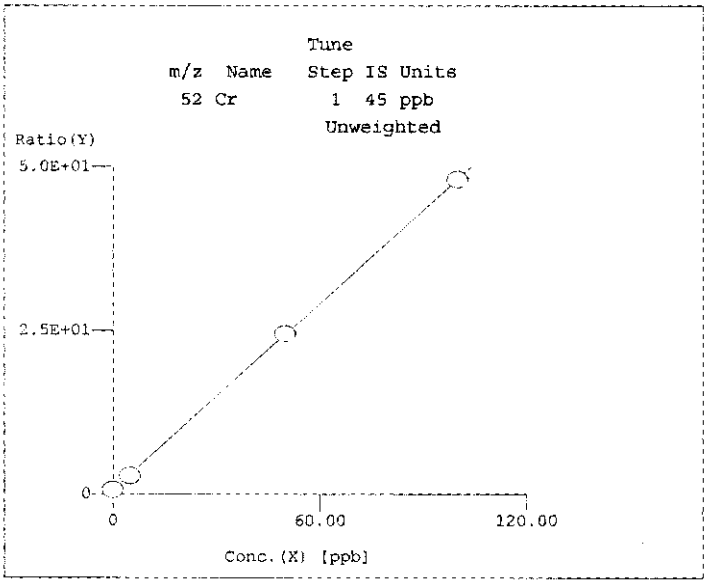
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	8.23E-2 P	5.51
2	5.00	9.58E-1 P	2.31
3	50.00	9.76E+0 P	3.60
4	100.00	2.01E+1 P	1.57
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.987E-1*X +8.233E-2
X = 5.034E+0*Y -4.144E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.02E-1 P	8.47E-1
2	5.00	2.74E+0 P	4.51E-2
3	50.00	2.45E+1 A	1.16
4	100.00	4.80E+1 A	4.64E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
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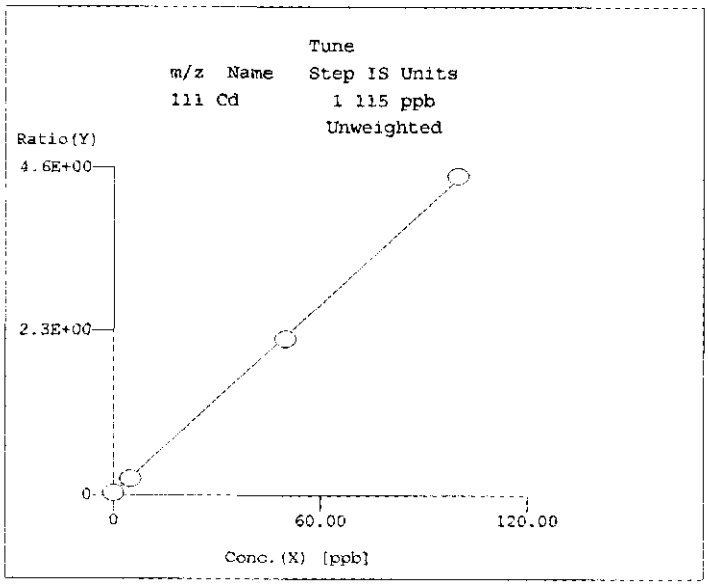
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 4.749E-1*X +6.016E-1
X = 2.106E+0*Y -1.267E+0

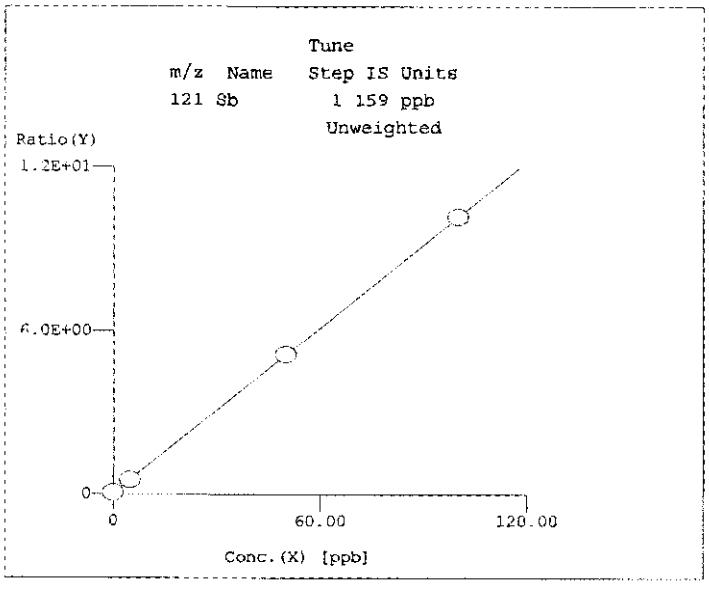
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.45E-2	P	2.69
2	5.00	2.24E-1	P	1.13
3	50.00	2.18E+0	P	5.66E-1
4	100.00	4.48E+0	P	5.18E-1
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.425E-2*X +2.453E-2
X = 2.260E+1*Y -5.543E-1

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	5.16E-2	P	2.02
2	5.00	5.13E-1	P	1.69
3	50.00	5.11E+0	P	1.45
4	100.00	1.02E+1	A	1.65
*5	---	---		---
*6	---	---		---
*7	---	---		---
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*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
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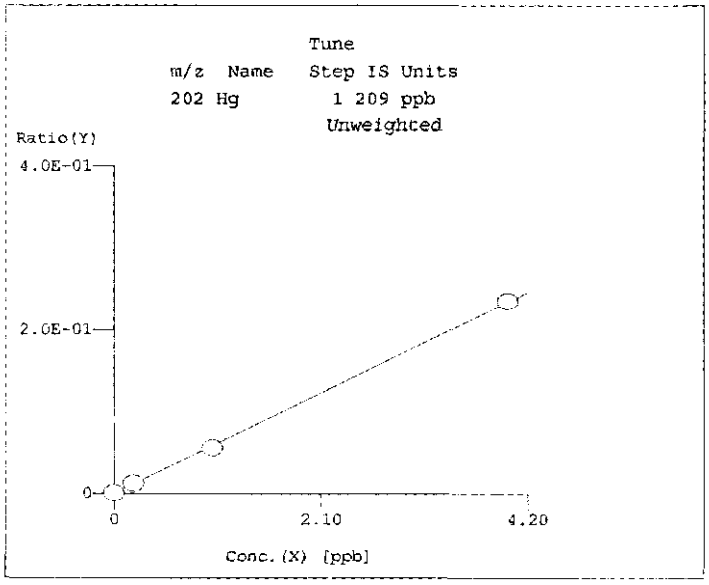
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.012E-1*X +5.159E-2
X = 9.886E+0*Y -5.100E-1

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	6.69E-4	P	6.29
2	2.00E-1	1.24E-2	P	3.75E-1
3	1.00	5.60E-2	P	3.42E-1
4	4.00	2.35E-1	P	1.81
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
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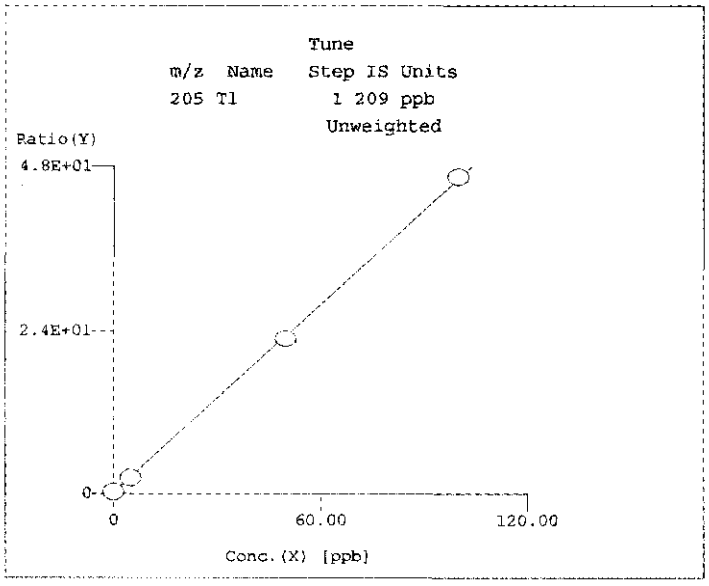
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 5.845E-2*X +6.692E-4
X = 1.711E+1*Y -1.145E-2

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.22E-1	P	1.40
2	5.00	2.30E+0	P	1.94
3	50.00	2.28E+1	A	2.80
4	100.00	4.65E+1	A	1.49
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
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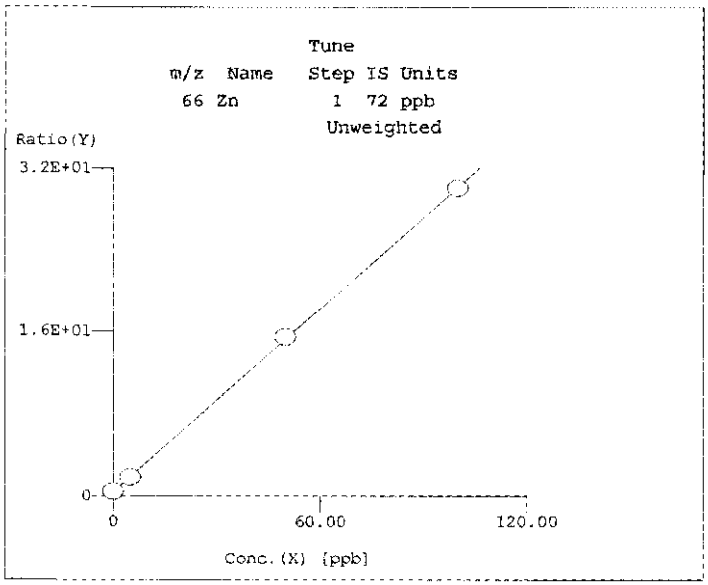
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.600E-1*X +2.224E-1
X = 2.174E+0*Y -4.835E-1

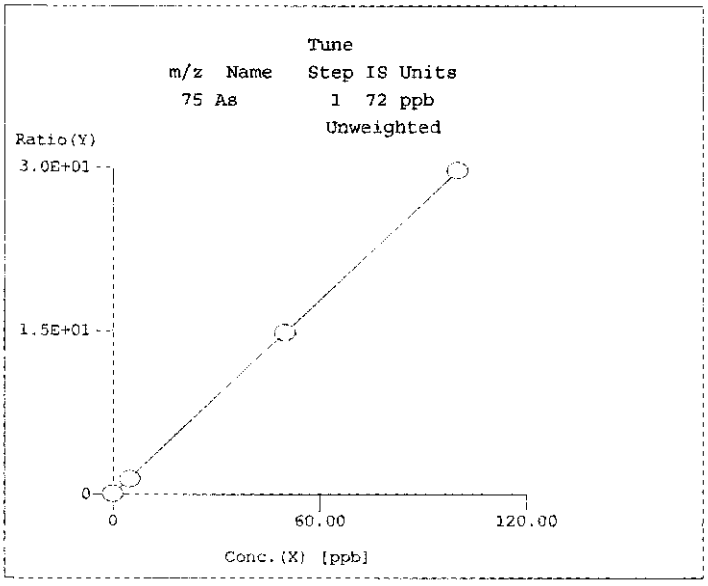
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.11E-1 P	2.69
2	5.00	1.81E+0 P	8.94E-1
3	50.00	1.55E+1 P	4.22E-1
4	100.00	3.01E+1 P	1.15
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.973E-1*X +4.110E-1
X = 3.363E+0*Y -1.382E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.12E-2 P	40.40
2	5.00	1.39E+0 P	2.14
3	50.00	1.48E+1 P	6.14E-1
4	100.00	2.97E+1 P	1.01
*5	---	---	---
*6	---	---	---
*7	---	---	---
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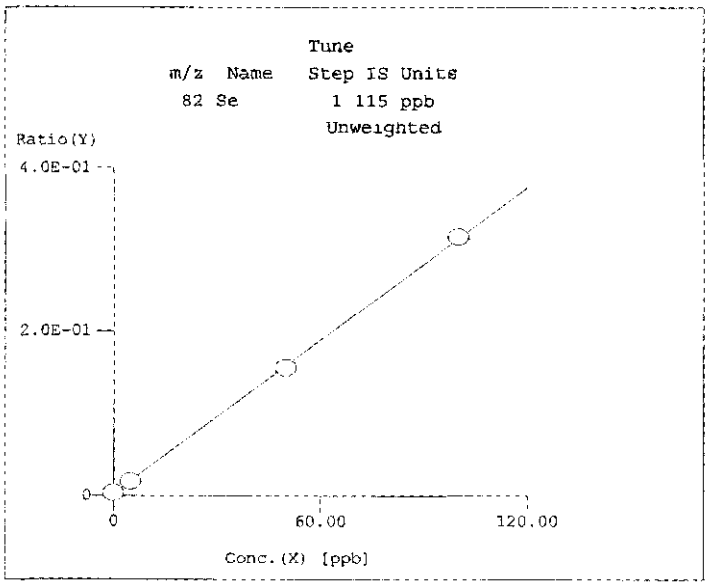
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.961E-1*X +5.118E-2
X = 3.377E+0*Y -1.728E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.40E-3 P	2.23
2	5.00	1.74E-2 P	7.58E-1
3	50.00	1.56E-1 P	5.48E-1
4	100.00	3.16E-1 P	8.30E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
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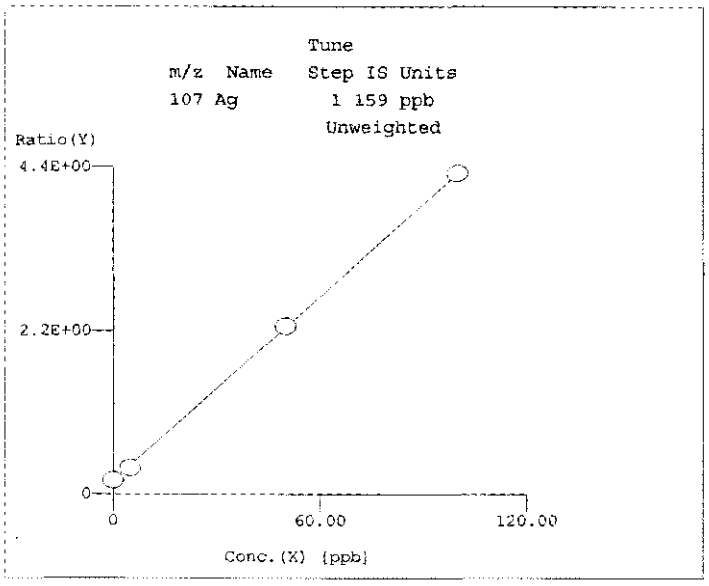
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.106E-3*X +3.404E-3
X = 3.220E+2*Y -1.096E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.82E-1 P	5.84E-1
2	5.00	3.48E-1 P	3.78E-1
3	50.00	2.26E+0 P	1.99
4	100.00	4.31E+0 P	7.67E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
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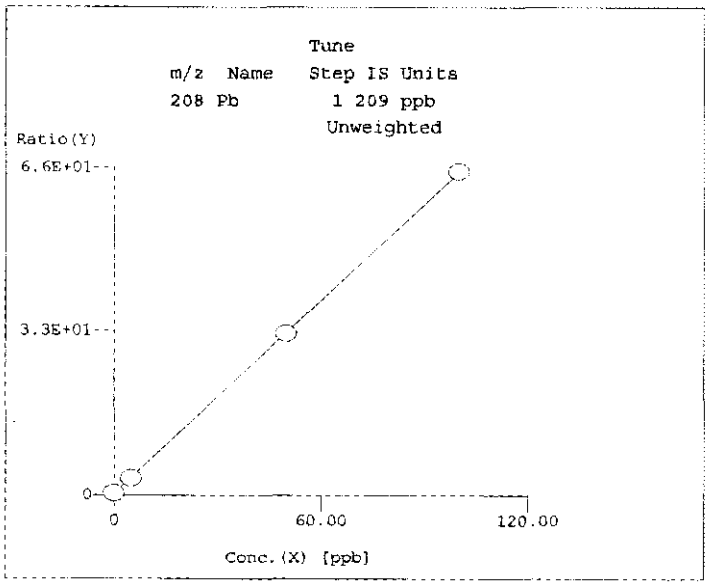
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.134E-2*X +1.819E-1
X = 2.419E+1*Y -4.399E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.81E-1 P	1.26
2	5.00	3.36E+0 P	9.26E-1
3	50.00	3.25E+1 A	3.86E-1
4	100.00	6.52E+1 A	1.21
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
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*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 6.472E-1*X +3.812E-1
X = 1.545E+0*Y -5.890E-1

MinConc: 0.00

CCV QC Report

Data File: z:\040330A.B\023CCV1.D\023CCV1.D#
Date Acquired: Mar 30 2004 10:57 am
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal Update: Mar 30 2004 11:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.68	ppb	2.34	50.00	90 - 110	Fail
52 Cr	48.72	ppb	2.88	50.00	90 - 110	
60 Ni	51.54	ppb	2.43	50.00	90 - 110	
63 Cu	51.29	ppb	2.00	50.00	90 - 110	
66 Zn	50.27	ppb	2.04	50.00	90 - 110	
75 As	49.80	ppb	1.14	50.00	90 - 110	
82 Se	52.12	ppb	0.81	50.00	90 - 110	
107 Ag	52.96	ppb	0.85	50.00	90 - 110	
111 Cd	49.97	ppb	0.72	50.00	90 - 110	
121 Sb	51.38	ppb	1.77	50.00	90 - 110	
202 Hg	1.92	ppb	0.64	2.00	90 - 110	
205 Tl	49.47	ppb	3.72	50.00	90 - 110	
208 Pb	50.49	ppb	0.21	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4180418	1.84	3453125	121.1	30 - 140	
45 Sc	6805005	1.13	6062495	112.2	30 - 140	
72 Ge	1689091	1.83	1596533	105.8	30 - 140	
115 In	12884429	1.44	12954590	99.5	30 - 140	
159 Tb	17437660	2.34	17934468	97.2	30 - 140	
209 Bi	10318802	1.66	10533230	98.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\038CCV1.D\038CCV1.D#
Date Acquired: Mar 30 2004 12:09 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.39	ppb	0.90	50.00	90 - 110	Fail
52 Cr	47.95	ppb	0.82	50.00	90 - 110	
60 Ni	50.93	ppb	0.97	50.00	90 - 110	
63 Cu	48.64	ppb	0.16	50.00	90 - 110	
66 Zn	49.30	ppb	0.19	50.00	90 - 110	
75 As	49.48	ppb	1.20	50.00	90 - 110	
82 Se	50.08	ppb	1.16	50.00	90 - 110	
107 Ag	48.61	ppb	1.00	50.00	90 - 110	
111 Cd	49.21	ppb	0.28	50.00	90 - 110	
121 Sb	49.96	ppb	1.13	50.00	90 - 110	
202 Hg	1.91	ppb	0.56	2.00	90 - 110	
205 Tl	48.68	ppb	1.41	50.00	90 - 110	
208 Pb	49.54	ppb	0.64	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3594259	1.76	3453125	104.1	30 - 140	
45 Sc	5761113	1.05	6062495	95.0	30 - 140	
72 Ge	1434554	1.33	1596533	89.9	30 - 140	
115 In	11301928	1.16	12954590	87.2	30 - 140	
159 Tb	15443765	2.04	17934468	86.1	30 - 140	
209 Bi	9485947	1.97	10533230	90.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\051CCV1.D\051CCV1.D#
Date Acquired: Mar 30 2004 01:11 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.85	ppb	0.65	50.00	90 - 110	Fail
52 Cr	49.02	ppb	0.85	50.00	90 - 110	
60 Ni	51.84	ppb	0.35	50.00	90 - 110	
63 Cu	49.89	ppb	1.11	50.00	90 - 110	
66 Zn	50.38	ppb	0.21	50.00	90 - 110	
75 As	50.34	ppb	0.36	50.00	90 - 110	
82 Se	50.95	ppb	2.07	50.00	90 - 110	
107 Ag	50.24	ppb	1.64	50.00	90 - 110	
111 Cd	50.02	ppb	1.74	50.00	90 - 110	
121 Sb	50.96	ppb	1.04	50.00	90 - 110	
202 Hg	1.94	ppb	0.28	2.00	90 - 110	
205 Tl	50.70	ppb	2.21	50.00	90 - 110	
208 Pb	50.72	ppb	0.24	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3494882	1.02	3453125	101.2	30 - 140	
45 Sc	5654023	2.26	6062495	93.3	30 - 140	
72 Ge	1397904	0.91	1596533	87.6	30 - 140	
115 In	11073134	2.39	12954590	85.5	30 - 140	
159 Tb	15158941	2.00	17934468	84.5	30 - 140	
209 Bi	9501835	1.88	10533230	90.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\064CCV1.D\064CCV1.D#
Date Acquired: Mar 30 2004 02:13 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	61.55	ppb	0.53	50.00	90 - 110	Fail
52 Cr	48.71	ppb	1.41	50.00	90 - 110	
60 Ni	51.29	ppb	0.50	50.00	90 - 110	
63 Cu	50.07	ppb	0.71	50.00	90 - 110	
66 Zn	50.19	ppb	0.80	50.00	90 - 110	
75 As	50.45	ppb	0.85	50.00	90 - 110	
82 Se	50.00	ppb	1.28	50.00	90 - 110	
107 Ag	48.43	ppb	1.60	50.00	90 - 110	
111 Cd	49.48	ppb	1.02	50.00	90 - 110	
121 Sb	50.08	ppb	1.28	50.00	90 - 110	
202 Hg	1.92	ppb	0.75	2.00	90 - 110	
205 Tl	49.99	ppb	1.93	50.00	90 - 110	
208 Pb	50.28	ppb	0.83	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3463691	2.25	3453125	100.3	30 - 140	
45 Sc	5100690	1.27	6062495	84.1	30 - 140	
72 Ge	1243472	1.09	1596533	77.9	30 - 140	
115 In	10143256	1.89	12954590	78.3	30 - 140	
159 Tb	14035936	1.95	17934468	78.3	30 - 140	
209 Bi	8964708	1.39	10533230	85.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\043DUP1.D\043DUP1.D#
Date Acquired: Mar 30 2004 12:32 pm
Acq. Method: 330.M
Operator:
Sample Name: DUP
Misc Info: BATCH 469
Vial Number: 2204
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	-0.31	ppb	1.32	-0.29	-4.96	20	<PQL
52 Cr	6.78	ppb	0.91	6.67	1.61	20	
60 Ni	-2.45	ppb	8.94	-2.35	-4.04	20	<PQL
63 Cu	0.72	ppb	6.98	0.85	16.55	20	<PQL
66 Zn	20.65	ppb	0.92	19.86	3.90	20	
75 As	-0.50	ppb	4.07	-0.48	-3.87	20	<PQL
82 Se	-0.30	ppb	10.91	-0.23	-24.69	20	<PQL
107 Ag	-3.64	ppb	1.07	-3.54	-2.92	20	<PQL
111 Cd	-0.30	ppb	1.17	-0.28	-8.45	20	<PQL
121 Sb	-0.34	ppb	2.80	-0.34	-0.56	20	<PQL
202 Hg	0.01	ppb	23.60	0.01	27.73	20	<PQL
205 Tl	-0.31	ppb	6.33	-0.22	-32.77	20	<PQL
208 Pb	-0.37	ppb	0.40	-0.37	-0.40	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3358814	2.05	3453125	97.3	30 - 140	
45 Sc	5256583	1.28	6062495	86.7	30 - 140	
72 Ge	1325695	1.56	1596533	83.0	30 - 140	
115 In	10581527	1.13	12954590	81.7	30 - 140	
159 Tb	14798868	2.13	17934468	82.5	30 - 140	
209 Bi	9224531	1.51	10533230	87.6	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#
Date Acquired:	Mar 30 2004 12:28 pm
Acq. Method:	330.M
Operator:	Lisa Miller
Sample Name:	04032603-04
Misc Info:	BATCH 469
Vial Number:	2203
Current Method:	C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File:	C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update:	Mar 30 2004 10:18 am
Sample Type:	AllRef
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.29	-0.29	ppb	7.28	8000.00	
52 Cr	6.67	6.67	ppb	0.46	40000.00	
60 Ni	-2.35	-2.35	ppb	7.49	8000.00	
63 Cu	0.85	0.85	ppb	10.45	8000.00	
66 Zn	19.86	19.86	ppb	1.41	8000.00	
75 As	-0.48	-0.48	ppb	10.40	8000.00	
82 Se	-0.23	-0.23	ppb	3.60	8000.00	
107 Ag	-3.54	-3.54	ppb	0.59	8000.00	
111 Cd	-0.28	-0.28	ppb	2.72	8000.00	
121 Sb	-0.34	-0.34	ppb	0.46	8000.00	
202 Hg	0.01	0.01	ppb	4.66	8.00	
205 Tl	-0.22	-0.22	ppb	13.52	8000.00	
208 Pb	-0.37	-0.37	ppb	0.61	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3292478	1.19	3453125	95.3	30 - 140	
45 Sc	5396495	1.38	6062495	89.0	30 - 140	
72 Ge	1354252	1.58	1596533	84.8	30 - 140	
115 In	10806438	0.37	12954590	83.4	30 - 140	
159 Tb	14865526	2.09	17934468	82.9	30 - 140	
209 Bi	9192087	1.33	10533230	87.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

LFM Sample QC Report

Data File: z:\040330A.B\044LFM1.D\044LFM1.D#
Date Acquired: Mar 30 2004 12:37 pm
Acq. Method: 330.M
Operator:
Sample Name: LFM
Misc Info: BATCH 469
Vial Number: 2205
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal. Update: Mar 30 2004 11:18 am
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	56.86	ppb	-0.29	0.55	50.00	114.3	75 - 125	
52 Cr	57.74	ppb	6.67	0.96	50.00	102.1	75 - 125	
60 Ni	51.25	ppb	-2.35	0.90	50.00	107.2	75 - 125	
63 Cu	53.20	ppb	0.85	0.94	50.00	104.7	75 - 125	
66 Zn	68.65	ppb	19.86	0.63	50.00	97.6	75 - 125	
75 As	48.93	ppb	-0.48	0.95	50.00	98.8	75 - 125	
82 Se	45.81	ppb	-0.23	0.44	50.00	92.1	75 - 125	
107 Ag	53.22	ppb	-3.54	0.47	50.00	113.5	75 - 125	
111 Cd	49.23	ppb	-0.28	0.07	50.00	99.0	75 - 125	
121 Sb	50.66	ppb	-0.34	0.75	50.00	102.0	75 - 125	
202 Hg	0.99	ppb	0.01	2.06	1.00	98.1	75 - 125	
205 Tl	51.38	ppb	-0.22	1.70	50.00	103.2	75 - 125	
208 Pb	52.80	ppb	-0.37	1.33	50.00	106.3	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3317497	0.60	3453125	96.1	30 - 140	
45 Sc	5285478	1.71	6062495	87.2	30 - 140	
72 Ge	1301417	1.58	1596533	81.5	30 - 140	
115 In	10396163	1.14	12954590	80.3	30 - 140	
159 Tb	14412831	1.78	17934468	80.4	30 - 140	
209 Bi	8745192	1.98	10533230	83.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PDS Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\045PDS1.D\045PDS1.D#
Date Acquired: Mar 30 2004 12:42 pm
Acq. Method: 330.M
Operator:
Sample Name: PDS
Misc Info: BATCH 469
Vial Number: 2206
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: PDS1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040330A.B\042AREF.D\042AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	53.79	ppb	-0.29	1.99	50.00	108.2	75 - 125	
52 Cr	54.26	ppb	6.67	0.72	50.00	95.2	75 - 125	
60 Ni	47.59	ppb	-2.35	0.83	50.00	99.9	75 - 125	
63 Cu	50.35	ppb	0.85	0.15	50.00	99.0	75 - 125	
66 Zn	97.59	ppb	19.86	0.48	50.00	155.5	75 - 125	Fail
75 As	45.61	ppb	-0.48	0.32	50.00	92.2	75 - 125	
82 Se	42.96	ppb	-0.23	0.59	50.00	86.4	75 - 125	
107 Ag	47.56	ppb	-3.54	0.85	50.00	102.2	75 - 125	
111 Cd	45.71	ppb	-0.28	1.46	50.00	92.0	75 - 125	
121 Sb	47.07	ppb	-0.34	0.97	50.00	94.8	75 - 125	
202 Hg	1.81	ppb	0.01	0.58	2.00	90.2	75 - 125	
205 Tl	49.48	ppb	-0.22	2.09	50.00	99.4	75 - 125	
208 Pb	49.76	ppb	-0.37	0.14	50.00	100.3	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3402162	2.10	3453125	98.5	30 - 140	
45 Sc	5326666	1.54	6062495	87.9	30 - 140	
72 Ge	1309353	1.17	1596533	82.0	30 - 140	
115 In	10492439	1.52	12954590	81.0	30 - 140	
159 Tb	14488515	1.48	17934468	80.8	30 - 140	
209 Bi	8827008	1.30	10533230	83.8	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

Batch QC Summary Report

Batch ID:	470	Date:	03/29/04	QC Sample:	04032603-19

Analysis	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit
Antimony	83.1	70 - 130	0.0	20
Arsenic	88.0	70 - 130	7.5	20
Barium	83.7	70 - 130	6.0	20
Beryllium	79.7	70 - 130	0.0	20
Cadmium	80.1	70 - 130	0.0	20
Chromium	80.7	70 - 130	0.2	20
Copper	78.5	70 - 130	2.2	20
Lead	91.0	70 - 130	1.2	20
Mercury	19.0	70 - 130	0.0	20
Nickel	81.6	70 - 130	1.5	20
Selenium	94.9	70 - 130	0.4	20
Silver	26.7	70 - 130	0.0	20
Thallium	95.6	70 - 130	0.0	20
Zinc	72.8	70 - 130	0.3	20

QC Comments:

Poor LFM (matrix spike) recoveries for silver and mercury. Silver precipitates out of solution in the presence of chloride ions.

Analysis	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit

Associated Samples:

Lab ID	Client ID	Test Group
04032323-01	S-1 / 2'	TCLP - 8 Metals - EPA 1311/200.8
04032323-02	S-4 / 8'	TCLP - 8 Metals - EPA 1311/200.8
04032505-01	Carter Composite	TCLP - 8 Metals - EPA 1311/200.8
04032603-03	DMW-5I-032404 (DISS)	PP Metals in Water Dissolved
04032603-05	DMW-5D-032404 (DISS)	PP Metals in Water Dissolved
04032603-07	DMW-5S-032404 (DISS)	PP Metals in Water Dissolved
04032603-09	DMW-4I-032404 (DISS)	PP Metals in Water Dissolved
04032603-11	MW-4-032504 (DISS)	PP Metals in Water Dissolved
04032603-13	DMW-9D-032504 (DISS)	PP Metals in Water Dissolved
04032603-15	DMW-9S-032504 (DISS)	PP Metals in Water Dissolved
04032603-17	DMW-2S-032504 (DISS)	PP Metals in Water Dissolved
04032603-19	DMW-4S-032404 (DISS)	PP Metals in Water Dissolved

QC Comments:

Poor LFM (matrix spike) recoveries for silver and mercury. Silver precipitates out of solution in the presence of chloride ions.

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\006ICV1.D\006ICV1.D#
Date Acquired: Mar 30 2004 09:33 am
Acq. Method: 330.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 09:31 am
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.07	ppb	2.95	50.00	90 - 110	
52 Cr	49.39	ppb	0.67	50.00	90 - 110	
60 Ni	49.88	ppb	0.24	50.00	90 - 110	
63 Cu	49.44	ppb	1.00	50.00	90 - 110	
66 Zn	50.55	ppb	0.52	50.00	90 - 110	
75 As	49.66	ppb	0.21	50.00	90 - 110	
82 Se	48.90	ppb	1.51	50.00	90 - 110	
107 Ag	48.76	ppb	1.07	50.00	90 - 110	
111 Cd	48.91	ppb	1.72	50.00	90 - 110	
121 Sb	49.55	ppb	0.44	50.00	90 - 110	
202 Hg	1.94	ppb	0.90	2.00	90 - 110	
205 Tl	49.22	ppb	4.50	50.00	90 - 110	
208 Pb	49.11	ppb	2.13	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3256934	3.45	3453125	94.3	30 - 140	
45 Sc	5658794	2.12	6062495	93.3	30 - 140	
72 Ge	1501504	1.33	1596533	94.0	30 - 140	
115 In	12223247	0.81	12954590	94.4	30 - 140	
159 Tb	17111600	1.60	17934468	95.4	30 - 140	
209 Bi	10129979	1.39	10533230	96.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

Calibration Report

Calibration : Z:\040330A.B\330.C
Last Calib: Mar 30, 2004 11:18
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040330a.b\002calb.d\	002calb.d#	Mar 30 2004 09:15 am
2	...chem\1\data\040330a.b\003cals.d\	003cals.d#	Mar 30 2004 09:19 am
3	...chem\1\data\040330a.b\004cals.d\	004cals.d#	Mar 30 2004 09:24 am
4	...chem\1\data\040330a.b\005cals.d\	005cals.d#	Mar 30 2004 09:29 am
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Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
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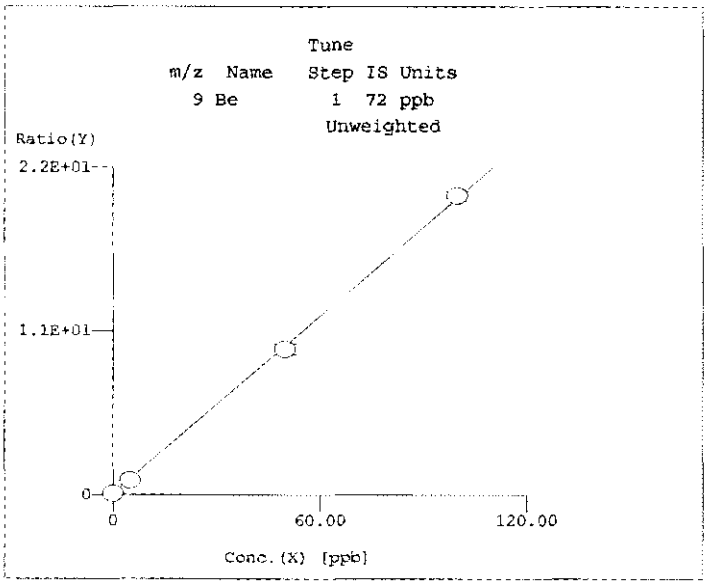

Lv.	Conc.	Ratio	RSD %
1	0.00	8.23E-2 P	5.51
2	5.00	9.58E-1 P	2.31
3	50.00	9.76E+0 P	3.60
4	100.00	2.01E+1 P	1.57
*5	---	---	---
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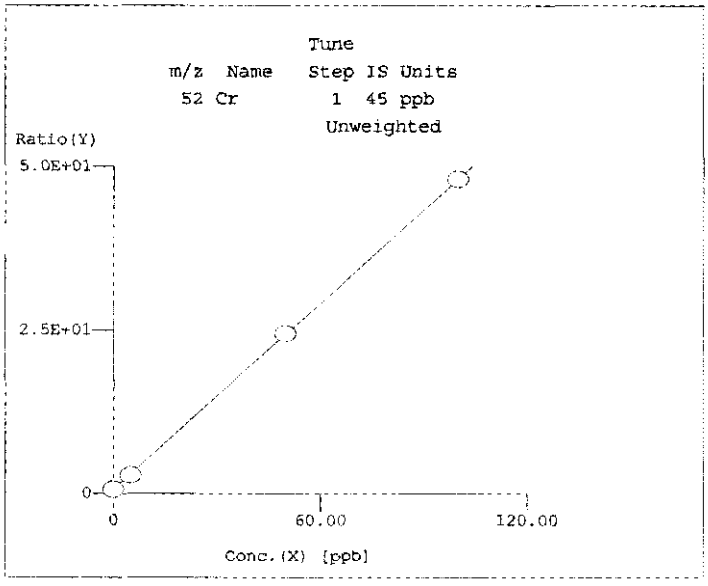
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.987E-1*X +8.233E-2
X = 5.034E+0*Y -4.144E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.02E-1 P	8.47E-1
2	5.00	2.74E+0 P	4.51E-2
3	50.00	2.45E+1 A	1.16
4	100.00	4.80E+1 A	4.64E-1
*5	---	---	---
*6	---	---	---
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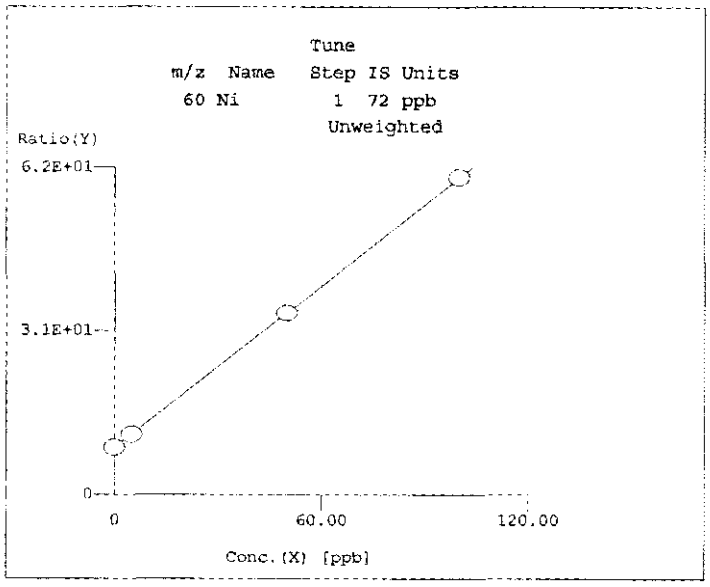
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 4.749E-1*X +6.016E-1
X = 2.106E+0*Y -1.267E+0

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	8.87E+0	P	9.22E-1
2	5.00	1.13E+1	P	2.49E-1
3	50.00	3.44E+1	P	1.17
4	100.00	6.01E+1	A	1.37
*5	---	---		---
*6	---	---		---
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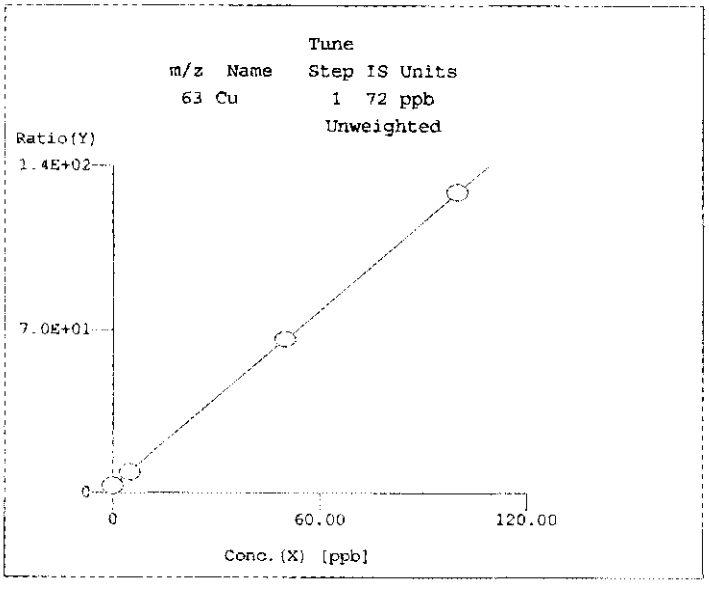
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 5.119E-1*X +8.874E+0
X = 1.953E+0*Y -1.733E+1

MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	2.84E+0	P	1.05
2	5.00	8.66E+0	P	1.64
3	50.00	6.58E+1	A	1.41
4	100.00	1.29E+2	A	1.11
*5	---	---		---
*6	---	---		---
*7	---	---		---
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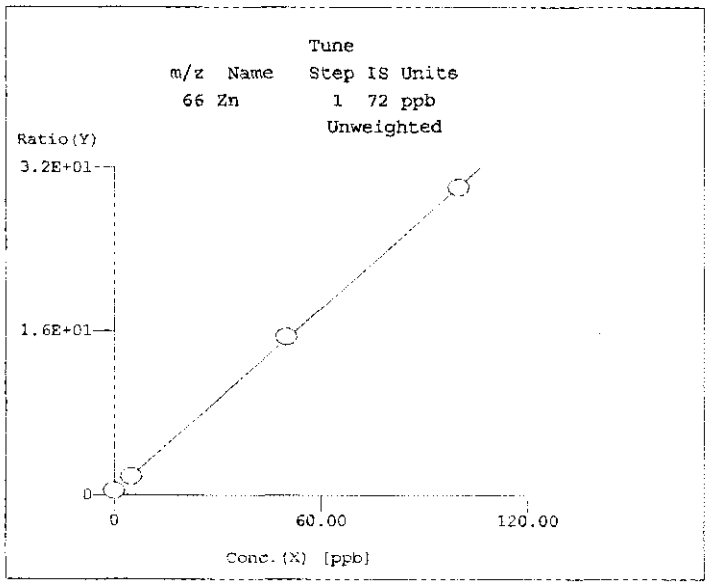
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.259E+0*X +2.844E+0
X = 7.940E-1*Y -2.258E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.11E-1 P	2.69
2	5.00	1.81E+0 P	8.94E-1
3	50.00	1.55E+1 P	4.22E-1
4	100.00	3.01E+1 P	1.15
*5	---	---	---
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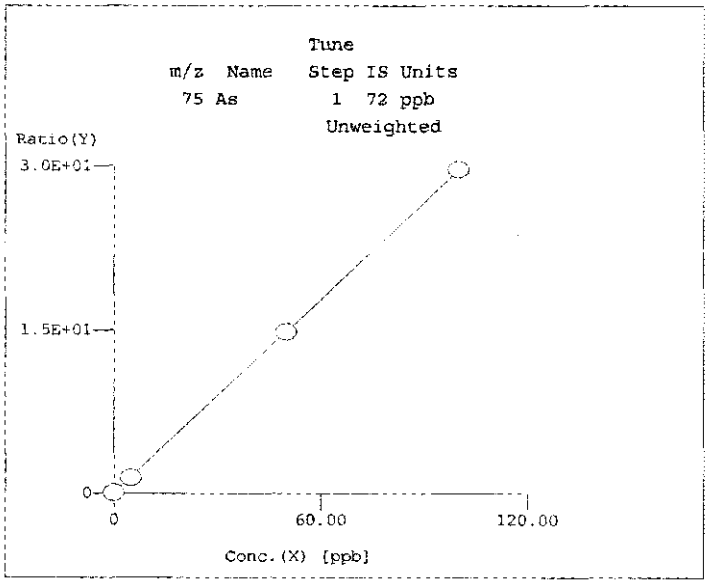
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.973E-1*X +4.110E-1
X = 3.363E+0*Y -1.382E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.12E-2 P	40.40
2	5.00	1.39E+0 P	2.14
3	50.00	1.48E+1 P	6.14E-1
4	100.00	2.97E+1 P	1.01
*5	---	---	---
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*18	---	---	---
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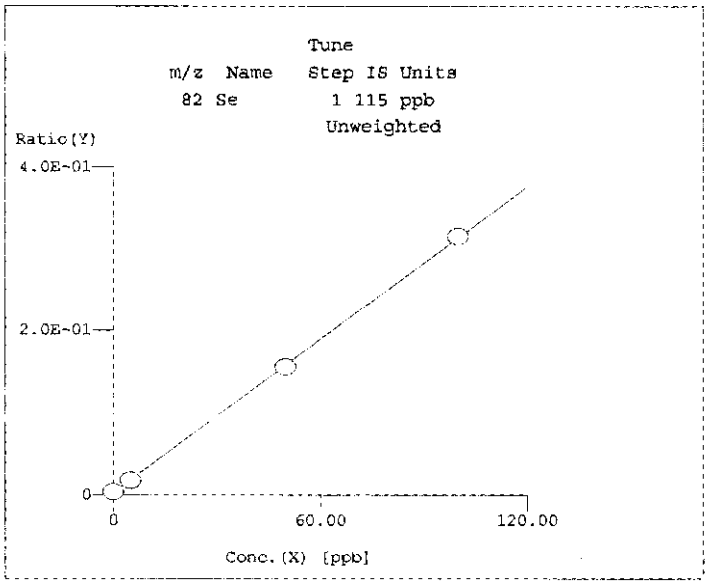
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.961E-1*X +5.118E-2
X = 3.377E+0*Y -1.728E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.40E-3 P	2.23
2	5.00	1.74E-2 P	7.58E-1
3	50.00	1.56E-1 P	5.48E-1
4	100.00	3.16E-1 P	8.30E-1
*5	---	---	---
*6	---	---	---
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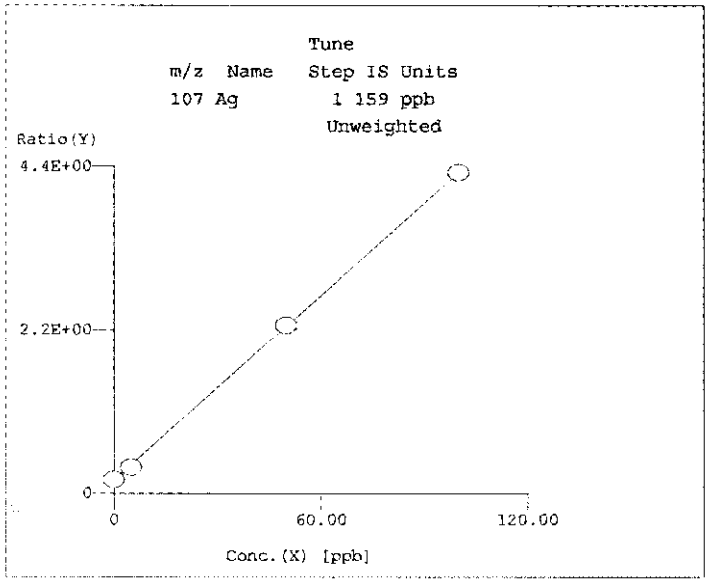
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 3.106E-3*X +3.404E-3
X = 3.220E+2*Y -1.096E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.82E-1 P	5.84E-1
2	5.00	3.48E-1 P	3.78E-1
3	50.00	2.26E+0 P	1.99
4	100.00	4.31E+0 P	7.67E-1
*5	---	---	---
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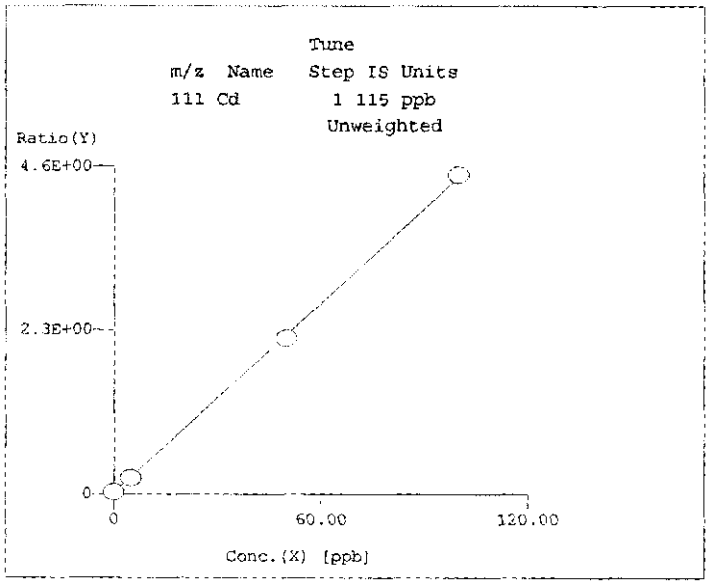
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.134E-2*X +1.819E-1
X = 2.419E+1*Y -4.399E+0

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.45E-2 P	2.69
2	5.00	2.24E-1 P	1.13
3	50.00	2.18E+0 P	5.66E-1
4	100.00	4.48E+0 P	5.18E-1
*5	---	---	---
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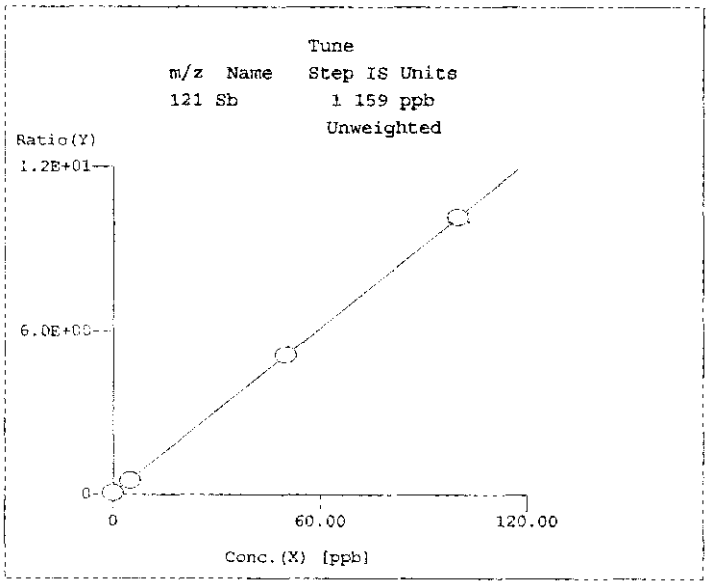
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.425E-2*X +2.453E-2
X = 2.260E+1*Y -5.543E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.16E-2 P	2.02
2	5.00	5.13E-1 P	1.69
3	50.00	5.11E+0 P	1.45
4	100.00	1.02E+1 A	1.65
*5	---	---	---
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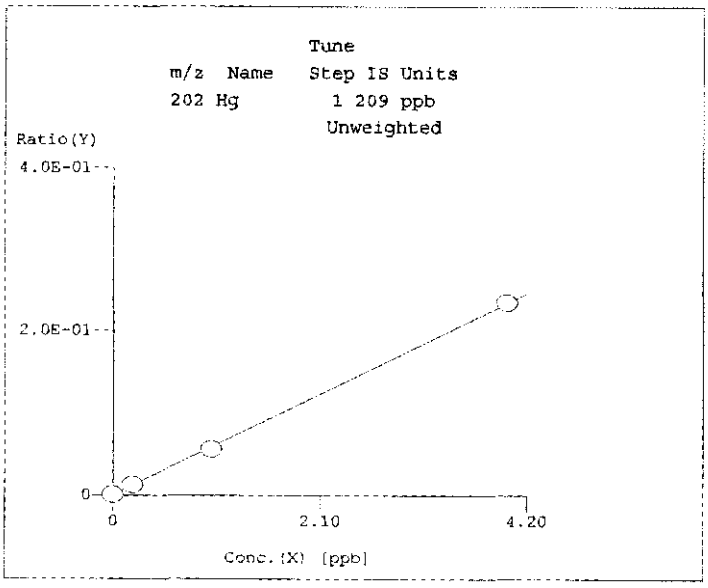
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.012E-1*X +5.159E-2
X = 9.886E+0*Y -5.100E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.69E-4 P	6.29
2	2.00E-1	1.24E-2 P	3.75E-1
3	1.00	5.60E-2 P	3.42E-1
4	4.00	2.35E-1 P	1.81
*5	---	---	---
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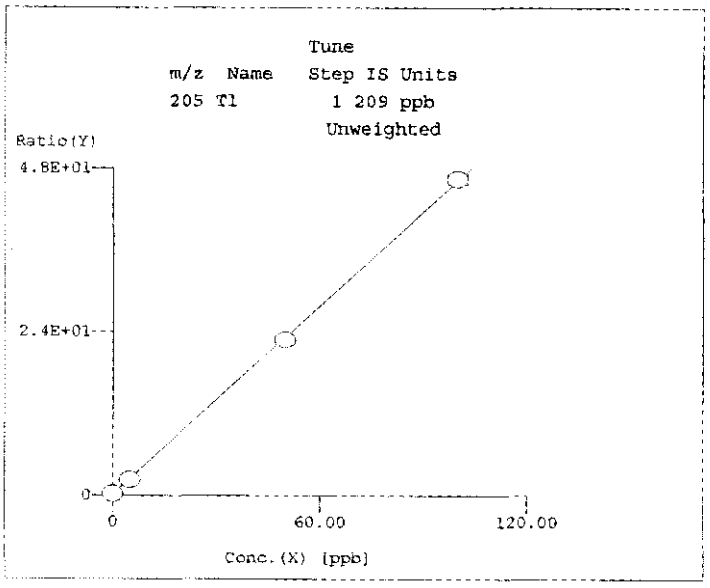
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 5.845E-2*X +6.692E-4
X = 1.711E+1*Y -1.145E-2

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.22E-1 P	1.40
2	5.00	2.30E+0 P	1.94
3	50.00	2.28E+1 A	2.80
4	100.00	4.65E+1 A	1.49
*5	---	---	---
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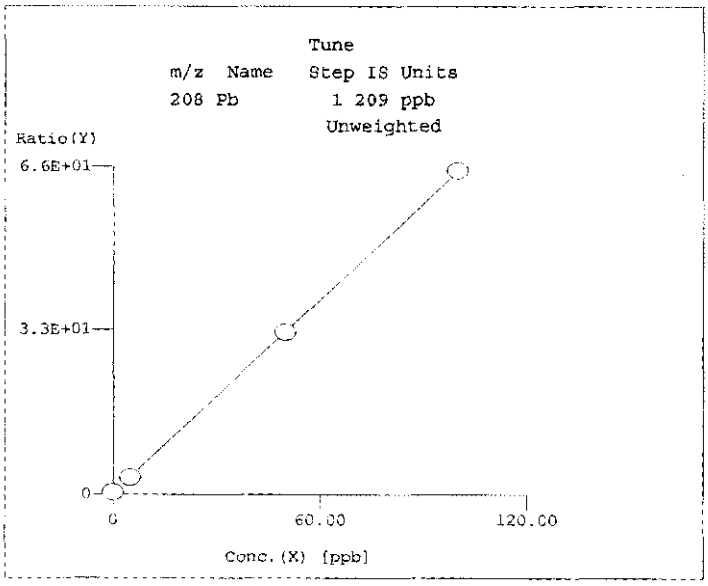
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 4.600E-1*X +2.224E-1
X = 2.174E+0*Y -4.835E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.81E-1 P	1.26
2	5.00	3.36E+0 P	9.26E-1
3	50.00	3.25E+1 A	3.86E-1
4	100.00	6.52E+1 A	1.21
*5	---	---	---
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*16	---	---	---
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*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 6.472E-1*X +3.812E-1
X = 1.545E+0*Y -5.890E-1

MinConc: 0.00

CCV QC Report

Data File: z:\040330A.B\023CCV1.D\023CCV1.D#
Date Acquired: Mar 30 2004 10:57 am
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: z:\040330A.B\330.M
Calibration File: z:\040330A.B\330.C
Last Cal Update: Mar 30 2004 11:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.68	ppb	2.34	50.00	90 - 110	Fail
52 Cr	48.72	ppb	2.88	50.00	90 - 110	
60 Ni	51.54	ppb	2.43	50.00	90 - 110	
63 Cu	51.29	ppb	2.00	50.00	90 - 110	
66 Zn	50.27	ppb	2.04	50.00	90 - 110	
75 As	49.80	ppb	1.14	50.00	90 - 110	
82 Se	52.12	ppb	0.81	50.00	90 - 110	
107 Ag	52.96	ppb	0.85	50.00	90 - 110	
111 Cd	49.97	ppb	0.72	50.00	90 - 110	
121 Sb	51.38	ppb	1.77	50.00	90 - 110	
202 Hg	1.92	ppb	0.64	2.00	90 - 110	
205 Tl	49.47	ppb	3.72	50.00	90 - 110	
208 Pb	50.49	ppb	0.21	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4180418	1.84	3453125	121.1	30 - 140	
45 Sc	6805005	1.13	6062495	112.2	30 - 140	
72 Ge	1689091	1.83	1596533	105.8	30 - 140	
115 In	12884429	1.44	12954590	99.5	30 - 140	
159 Tb	17437660	2.34	17934468	97.2	30 - 140	
209 Bi	10318802	1.66	10533230	98.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\038CCV1.D\038CCV1.D#
Date Acquired: Mar 30 2004 12:09 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal Update: Mar 30 2004 10:18 am
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	55.39	ppb	0.90	50.00	90 - 110	Fail
52 Cr	47.95	ppb	0.82	50.00	90 - 110	
60 Ni	50.93	ppb	0.97	50.00	90 - 110	
63 Cu	48.64	ppb	0.16	50.00	90 - 110	
66 Zn	49.30	ppb	0.19	50.00	90 - 110	
75 As	49.48	ppb	1.20	50.00	90 - 110	
82 Se	50.08	ppb	1.16	50.00	90 - 110	
107 Ag	48.61	ppb	1.00	50.00	90 - 110	
111 Cd	49.21	ppb	0.28	50.00	90 - 110	
121 Sb	49.96	ppb	1.13	50.00	90 - 110	
202 Hg	1.91	ppb	0.56	2.00	90 - 110	
205 Tl	48.68	ppb	1.41	50.00	90 - 110	
208 Pb	49.54	ppb	0.64	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3594259	1.76	3453125	104.1	30 - 140	
45 Sc	5761113	1.05	6062495	95.0	30 - 140	
72 Ge	1434554	1.33	1596533	89.9	30 - 140	
115 In	11301928	1.16	12954590	87.2	30 - 140	
159 Tb	15443765	2.04	17934468	86.1	30 - 140	
209 Bi	9485947	1.97	10533230	90.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040330A.B\028DUP1.D\028DUP1.D#
Date Acquired: Mar 30 2004 11:21 am
Acq. Method: 330.M
Operator:
Sample Name: DUP
Misc Info: BATCH 470
Vial Number: 2110
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040330A.B\027AREF.D\027AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	1.78	ppb	2.88	1.78	0.17	20	<PQL
52 Cr	4.25	ppb	0.98	4.26	0.07	20	<PQL
60 Ni	26.99	ppb	0.64	26.59	1.49	20	
63 Cu	10.69	ppb	0.77	10.46	2.17	20	
66 Zn	117.00	ppb	0.46	116.60	0.34	20	
75 As	1.28	ppb	2.83	1.38	6.92	20	<PQL
82 Se	6.93	ppb	1.76	6.90	0.35	20	
107 Ag	-4.35	ppb	0.18	-4.34	-0.14	20	<PQL
111 Cd	0.27	ppb	14.54	0.26	5.31	20	<PQL
121 Sb	-0.43	ppb	0.42	-0.43	-0.77	20	<PQL
202 Hg	0.01	ppb	15.24	0.01	1.56	20	<PQL
205 Tl	-0.35	ppb	2.29	-0.33	-6.10	20	<PQL
208 Pb	0.83	ppb	2.49	0.84	0.74	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3378815	2.76	3453125	97.8	30 - 140	
45 Sc	6436904	2.76	6062495	106.2	30 - 140	
72 Ge	1639543	2.50	1596533	102.7	30 - 140	
115 In	12474574	2.08	12954590	96.3	30 - 140	
159 Tb	17803276	2.11	17934468	99.3	30 - 140	
209 Bi	9150108	3.43	10533230	86.9	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

LFM Sample QC Report

Data [redacted]: C:\ICPCHEM\1\DATA\040330A.B\029LFM1.D\029LFM1.D#
Date Acquired: Mar 30 2004 11:26 am
Acq. Method: 330.M
Operator:
Sample Name: LFM
Misc Info: BATCH 470
Vial Number: 2111
Current Method: C:\ICPCHEM\1\DATA\040330A.B\330.M
Calibration File: C:\ICPCHEM\1\DATA\040330A.B\330.C
Last Cal. Update: Mar 30 2004 10:18 am
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040330A.B\027AREF.D\027AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	41.61	ppb	1.78	0.99	50.00	79.7	75 - 125	
52 Cr	44.61	ppb	4.26	1.24	50.00	80.7	75 - 125	
60 Ni	67.39	ppb	26.59	1.68	50.00	81.6	75 - 125	
63 Cu	49.72	ppb	10.46	0.63	50.00	78.5	75 - 125	
66 Zn	153.00	ppb	116.60	0.21	50.00	72.8	75 - 125	Fail
75 As	45.36	ppb	1.38	0.82	50.00	88.0	75 - 125	
82 Se	54.36	ppb	6.90	1.12	50.00	94.9	75 - 125	
107 Ag	13.33	ppb	-4.34	7.12	50.00	35.3	75 - 125	Fail
111 Cd	40.33	ppb	0.26	0.76	50.00	80.1	75 - 125	
121 Sb	41.54	ppb	-0.43	1.16	50.00	83.9	75 - 125	
202 Hg	0.39	ppb	0.01	11.23	2.00	18.9	75 - 125	Fail
205 Tl	47.81	ppb	-0.33	0.79	50.00	96.3	75 - 125	
208 Pb	46.32	ppb	0.84	1.23	50.00	91.0	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3321924	2.67	3453125	96.2	30 - 140	
45 Sc	6405974	1.88	6062495	105.7	30 - 140	
72 Ge	1621917	1.23	1596533	101.6	30 - 140	
115 In	12254786	1.21	12954590	94.6	30 - 140	
159 Tb	17634250	2.18	17934468	98.3	30 - 140	
209 Bi	9085935	2.30	10533230	86.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040330A.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

VOLUME II OF II

FINAL
MARCH 2004
QUARTERLY GROUNDWATER MONITORING REPORT
Martin State Airport: Middle River, Maryland



LOCKHEED MARTIN

Tetra Tech
Environmental Engineers & Scientists
TC#10825-10/June 2004

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 30, 2004

PROJECT: Martin State Airport - Quarterly Sampling

Project #: N7339-0677D

CERTIFICATE OF ANALYSIS #: *04033013*

PREPARED FOR:

Tetra Tech, Inc.
10670 White Rock Rd., Ste. 100
Rancho Cordova, CA 95670

April 7, 2004

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033013 Page 1 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032604 / 04033013-01						
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/30/2004
Bromoform	ND	ug/L	EPA 8260	1		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Chloroform	ND	ug/L	EPA 8260	1		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/30/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/30/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 2 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water

Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032604 / 04033013-01						
Volatile Organic Compounds						
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Styrene	ND	ug/L	EPA 8260	1		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/30/2004
Toluene	ND	ug/L	EPA 8260	1		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Trichloroethene	ND	ug/L	EPA 8260	1		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/30/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/30/2004
Acetone	ND	ug/L	EPA 8260	10		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/30/2004

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 3 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB032604 / 04033013-01						
Volatile Organic Compounds						
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 4 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3D-032604 / 04033013-02						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**5.1**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**23**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**65**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**200**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/31/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/31/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/31/2004
Bromoform	ND	ug/L	EPA 8260	1		3/31/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/31/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/31/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Chloroform	ND	ug/L	EPA 8260	1		3/31/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/31/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/31/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/31/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/31/2004

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 5 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3D-032604 / 04033013-02						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/31/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/31/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/31/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/31/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Styrene	ND	ug/L	EPA 8260	1		3/31/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/31/2004
Toluene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Trichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/31/2004

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 6 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3D-032604 / 04033013-02						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/31/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/31/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/31/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/31/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/31/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/31/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/31/2004
Acetone	ND	ug/L	EPA 8260	10		3/31/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/31/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/31/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/31/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/31/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004

Reviewed By: Dan Pennell
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 7 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3D-032604 (DISS) / 04033013-03						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**55**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**140**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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No. 04033013 Page 8 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3I-032604 / 04033013-04						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	**350**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**5.7**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**39**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**72**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	**7.8**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**310**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**77**	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	**200**	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3I-032604 / 04033013-04						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	**300**	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	**84**	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**14,000**	ug/L	EPA 8260	200		3/31/2004
trans-1,2-Dichloroethene	**91**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	**33**	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	**b 32**	ug/L	EPA 8260	10		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	**56**	ug/L	EPA 8260	10		3/30/2004
Toluene	**280**	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	**180**	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	**1,200**	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**16,000**	ug/L	EPA 8260	200		3/31/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3I-032604 / 04033013-04						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	**E 3,400**	ug/L	EPA 8260	10		3/30/2004
m&p-Xylene	**110**	ug/L	EPA 8260	30		3/30/2004
o-Xylene	**44**	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	**j 60**	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact.
E - estimated value, exceeds calibration range.
j - estimated value, less than quantitation limit.

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3I-032604 (DISS) / 04033013-05						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	**250**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**6.9**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**19**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**62**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	**7.0**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**310**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 / 04033013-06						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**24**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**58**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	**24**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	ND	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Semi-Volatile Organic Compounds						
Phenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Bis (2-chloroethyl) ether	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Chlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Methylphenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Bis (2-chloroisopropyl) ether	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Acetophenone	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
3,4-Methylphenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
N-Nitroso-di-n-propylamine	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Hexachloroethane	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Nitrobenzene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Isophorone	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Nitrophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4-Dimethylphenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Bis (2-chloroethoxy) methane	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4-Dichlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Naphthalene`	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4-Chloroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Hexachlorobutadiene`	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 / 04033013-06						
Semi-Volatile Organic Compounds						
Caprolactam	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4-Chloro-3-methylphenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Methylnaphthalene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Hexachlorocyclopentadiene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4,6-Trichlorophenol	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4,5-Trichlorophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
1,1-Biphenyl	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Chloronaphthalene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2-Nitroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Dimethyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,6-Dinitrotoluene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Acenaphthylene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
3-Nitroaniline	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
Acenaphthene	j 2	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4-Dinitrophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
4-Nitrophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
Dibenzofuran	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
2,4-Dinitrotoluene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Diethyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Fluorene	j 1	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4-Chlorophenyl phenyl ether	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4-Nitroaniline	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4,6-Dinitro-2-methylphenol	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
N-Nitrosodiphenylamine	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
4-Bromophenyl phenyl ether	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Hexachlorobenzene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Atrazine	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Pentachlorophenol	ND	ug/L	EPA 8270	25	4/1/2004	4/2/2004
Phenanthrene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Carbazole	j 4	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Di-n-butyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 / 04033013-06						
Semi-Volatile Organic Compounds						
Fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Butyl benzyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
3,3-Dichlorobenzidine	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Benzo (a) anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Chrysene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Bis (2-ethylhexyl) phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Di-n-octyl phthalate	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Benzo (b) fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Benzo (k) fluoranthene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Benzo (a) pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Indeno (1,2,3-cd) pyrene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Dibenzo (a,h) anthracene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Benzo (g,h,i) perylene	ND	ug/L	EPA 8270	10	4/1/2004	4/2/2004
Volatile Organic Compounds						
Benzene	22	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	ND	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004

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CERTIFICATE OF ANALYSIS
No. 04033013 Page 15 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 / 04033013-06						
Volatile Organic Compounds						
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**3,800**	ug/L	EPA 8260	100		4/1/2004
trans-1,2-Dichloroethene	**790**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	**12**	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	10		3/30/2004
Naphthalene	**27**	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	10		3/30/2004
Toluene	**80**	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	**21**	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	**68**	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**76**	ug/L	EPA 8260	10		3/30/2004

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CERTIFICATE OF ANALYSIS
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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 / 04033013-06						
Volatile Organic Compounds						
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	**7,700**	ug/L	EPA 8260	100		4/1/2004
m&p-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
o-Xylene	ND	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
j - estimated value, less than quantitation limit.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-3S-032604 (DISS) / 04033013-07						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	**27**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**85**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	**13**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: Dan Pennell
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9I-032604 / 04033013-08						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**11**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**52**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**79**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	**100**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**31**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**360**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**110**	ug/L	EPA 8260	10		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		3/30/2004
Bromoform	ND	ug/L	EPA 8260	10		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	10		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		3/30/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		3/30/2004
Chlorobenzene	**84**	ug/L	EPA 8260	10		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Chloroform	**68**	ug/L	EPA 8260	10		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	10		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9I-032604 / 04033013-08						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloroethene	**57**	ug/L	EPA 8260	10		3/30/2004
cis-1,2-Dichloroethene	**19,000**	ug/L	EPA 8260	100		4/1/2004
trans-1,2-Dichloroethene	**61**	ug/L	EPA 8260	10		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Ethylbenzene	**200**	ug/L	EPA 8260	10		3/30/2004
Isopropylbenzene	**15**	ug/L	EPA 8260	10		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		3/30/2004
Methylene chloride	ND	ug/L	EPA 8260	10		3/30/2004
Naphthalene	**18**	ug/L	EPA 8260	10		3/30/2004
n-Propylbenzene	**10**	ug/L	EPA 8260	10		3/30/2004
Styrene	ND	ug/L	EPA 8260	10		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Tetrachloroethene	ND	ug/L	EPA 8260	10		3/30/2004
Toluene	**77**	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	10		3/30/2004
1,2,4-Trichlorobenzene	**11**	ug/L	EPA 8260	10		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		3/30/2004
Trichloroethene	**1,900**	ug/L	EPA 8260	10		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		3/30/2004

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April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9I-032604 / 04033013-08						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	**130**	ug/L	EPA 8260	10		3/30/2004
1,3,5-Trimethylbenzene	**59**	ug/L	EPA 8260	10		3/30/2004
Vinyl chloride	**6,400**	ug/L	EPA 8260	100		4/1/2004
m&p-Xylene	**590**	ug/L	EPA 8260	30		3/30/2004
o-Xylene	**45**	ug/L	EPA 8260	30		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		3/30/2004
Acetone	ND	ug/L	EPA 8260	100		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		3/30/2004

Reviewed By: Dan Pennel
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/26/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-9I-032604 (DISS) / 04033013-09						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**5.3**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**8.1**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	**5.3**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1A-033004 / 04033013-10						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**11**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	**840**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**430**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**18**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	**2.1**	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**110**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**310**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**31**	ug/L	EPA 8260	1		3/30/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/30/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/30/2004
Bromoform	ND	ug/L	EPA 8260	1		3/30/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/30/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Carbon tetrachloride	**1**	ug/L	EPA 8260	1		3/30/2004
Chlorobenzene	**7**	ug/L	EPA 8260	1		3/30/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Chloroform	**7**	ug/L	EPA 8260	1		3/30/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/30/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/30/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/30/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1A-033004 / 04033013-10						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichlorobenzene	**1**	ug/L	EPA 8260	1		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethene	**20**	ug/L	EPA 8260	1		3/30/2004
cis-1,2-Dichloroethene	**12,000**	ug/L	EPA 8260	100		4/1/2004
trans-1,2-Dichloroethene	**38**	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Ethylbenzene	**1**	ug/L	EPA 8260	1		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/30/2004
Methylene chloride	**b 160**	ug/L	EPA 8260	1		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Styrene	ND	ug/L	EPA 8260	1		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Tetrachloroethene	**5**	ug/L	EPA 8260	1		3/30/2004
Toluene	**150**	ug/L	EPA 8260	1		3/30/2004
1,2,3-Trichlorobenzene	**2**	ug/L	EPA 8260	1		3/30/2004
1,2,4-Trichlorobenzene	**13**	ug/L	EPA 8260	1		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Trichloroethene	**9,000**	ug/L	EPA 8260	100		4/1/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/30/2004

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1A-033004 / 04033013-10						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	**2**	ug/L	EPA 8260	1		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl chloride	**8,500**	ug/L	EPA 8260	100		4/1/2004
m&p-Xylene	**6**	ug/L	EPA 8260	3		3/30/2004
o-Xylene	**8**	ug/L	EPA 8260	3		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/30/2004
4-Methyl-2-Pentanone (MIBK)	**j 5**	ug/L	EPA 8260	10		3/30/2004
Acetone	ND	ug/L	EPA 8260	10		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact.
j - estimated value, less than quantitation limit.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1A-033004 (DISS) / 04033013-11						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	**8.3**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	**790**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**200**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**13**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**82**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**300**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 03/30/04
Date Received: 03/30/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID DMW-1B-033004 / 04033013-12						
Ferric Iron						
Iron (Fe3+)	**1.2**	mg/L	Mod._7199	1		03/31/04
Nitrate Nitrogen						
Nitrate	ND	mg/L	EPA 300.0	0.2		03/31/04
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Arsenic	**17**	ug/L	EPA 6020	5	04/07/04	04/07/04
Beryllium	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Cadmium	**110**	ug/L	EPA 6020	5	04/07/04	04/07/04
Chromium	**47**	ug/L	EPA 6020	5	04/07/04	04/07/04
Copper	**16**	ug/L	EPA 6020	5	04/07/04	04/07/04
Lead	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Mercury	ND	ug/L	EPA 6020	1	04/07/04	04/07/04
Nickel	**37**	ug/L	EPA 6020	20	04/07/04	04/07/04
Selenium	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Silver	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Thallium	ND	ug/L	EPA 6020	5	04/07/04	04/07/04
Zinc	**160**	ug/L	EPA 6020	50	04/07/04	04/07/04
Total Sulfate						
Sulfate	**489**	mg/L	EPA 300.0	1		04/01/04
Volatile Organic Compounds						
Benzene	**41**	ug/L	EPA 8260	1		03/30/04
Bromobenzene	ND	ug/L	EPA 8260	1		03/30/04
Bromochloromethane	ND	ug/L	EPA 8260	1		03/30/04
Bromodichloromethane	ND	ug/L	EPA 8260	1		03/30/04
Bromoform	ND	ug/L	EPA 8260	1		03/30/04
Bromomethane	ND	ug/L	EPA 8260	1		03/30/04
n-Butylbenzene	ND	ug/L	EPA 8260	1		03/30/04
sec-Butylbenzene	ND	ug/L	EPA 8260	1		03/30/04
tert-Butylbenzene	ND	ug/L	EPA 8260	1		03/30/04
Carbon tetrachloride	ND	ug/L	EPA 8260	1		03/30/04
Chlorobenzene	**7**	ug/L	EPA 8260	1		03/30/04
Chloroethane	ND	ug/L	EPA 8260	1		03/30/04
Chloroform	**3**	ug/L	EPA 8260	1		03/30/04

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1B-033004 / 04033013-12						
Volatile Organic Compounds						
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/30/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/30/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloroethene	9	ug/L	EPA 8260	1		3/30/2004
cis-1,2-Dichloroethene	6,700	ug/L	EPA 8260	100		4/1/2004
trans-1,2-Dichloroethene	8	ug/L	EPA 8260	1		3/30/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/30/2004
Methylene chloride	b 5	ug/L	EPA 8260	1		3/30/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/30/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Styrene	ND	ug/L	EPA 8260	1		3/30/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Tetrachloroethene	1	ug/L	EPA 8260	1		3/30/2004
Toluene	8	ug/L	EPA 8260	1		3/30/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,2,4-Trichlorobenzene	2	ug/L	EPA 8260	1		3/30/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004

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April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1B-033004 / 04033013-12						
Volatile Organic Compounds						
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/30/2004
Trichloroethene	**E 250**	ug/L	EPA 8260	1		3/30/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/30/2004
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl chloride	**8,500**	ug/L	EPA 8260	100		4/1/2004
m&p-Xylene	**j 3**	ug/L	EPA 8260	3		3/30/2004
o-Xylene	**7**	ug/L	EPA 8260	3		3/30/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/30/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/30/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/30/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/30/2004
Acetone	ND	ug/L	EPA 8260	10		3/30/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/30/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/30/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/30/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/30/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/30/2004

Reviewed By: Dan Pennal
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact.
E - estimated value, exceeds calibration range.
j - estimated value, less than quantitation limit.

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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1B-033004 (DISS) / 04033013-13						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	**15**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	**86**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**19**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**9.5**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**24**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**130**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
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Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-2-033004 / 04033013-14						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**300**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**150**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		3/31/2004
Bromobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		3/31/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		3/31/2004
Bromoform	ND	ug/L	EPA 8260	1		3/31/2004
Bromomethane	ND	ug/L	EPA 8260	1		3/31/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		3/31/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Chloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Chloroform	ND	ug/L	EPA 8260	1		3/31/2004
Chloromethane	ND	ug/L	EPA 8260	1		3/31/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		3/31/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		3/31/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		3/31/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-2-033004 / 04033013-14						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		3/31/2004
Dibromomethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		3/31/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		3/31/2004
Methylene chloride	ND	ug/L	EPA 8260	1		3/31/2004
Naphthalene	ND	ug/L	EPA 8260	1		3/31/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Styrene	ND	ug/L	EPA 8260	1		3/31/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		3/31/2004
Toluene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		3/31/2004
Trichloroethene	ND	ug/L	EPA 8260	1		3/31/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		3/31/2004

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033013 Page 32 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-2-033004 / 04033013-14						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		3/31/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		3/31/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		3/31/2004
o-Xylene	ND	ug/L	EPA 8260	3		3/31/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		3/31/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		3/31/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		3/31/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		3/31/2004
Acetone	ND	ug/L	EPA 8260	10		3/31/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		3/31/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		3/31/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		3/31/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		3/31/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		3/31/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033013 Page 33 of 33
Tetra Tech, Inc.
April 7, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: MW-2-033004 (DISS) / 04033013-15						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**150**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033013 Page 1 of 1
Tetra Tech, Inc.
April 12, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D

Date Sampled: 3/30/2004
Date Received: 3/30/2004

	Result	Unit	Method	PQL	Analyzed
Sample ID: DMW-1B-033004 / 04033013-12 / Ground Water					
Ferric Iron					
Iron (Fe3+)	1.2	mg/L	Mod._7199	1	3/31/2004

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

Reviewed By: Matt Colee
Quality Assurance Chemist

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

(1)

CLIENT: Tetra Tech PHONE NO.: (916) 276-7846

PROJECT MGR: Nisha Bansal FAX NO.: ( )

EMAIL: Nisha.bansal@Tetratech.com

PROJECT NAME: Martin State Airport - Quarterly Sampling

SITE LOCATION: Martin State Airport

PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #: 0403313

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	HCl		HNO3	ICE	ICE					REMARKS
							Analysis Required (3)	Volatile Organic Compounds (8260 B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	SVOCs (8270C)	Nitrates & Sulfates	Ferric Iron				
	TB0326Ø4	3/26/Ø4	ØØØØ	GW	2	G		X									
	DMW-3D-Ø326Ø4		1Ø33		4			X	X	X							
	DMW-3I-Ø326Ø4		1128		4			X	X	X							
	DMW-3S-Ø326Ø4		123Ø		5			X	X	X	X						
	DMW-9I-Ø326Ø4		163Ø		4			X	X	X							
	DMW-1A-Ø33Ø4	3/3Ø/Ø4	Ø859	GW	4	G		X	X	X							
	DMW-1B-Ø33Ø4		11ØØ		8			X	X	X		X	X				
	MW-2-Ø33Ø4		1159		4			X	X	X							

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date	Time	Received By:
	3/30/04	1350	

(4)

Requested Turnaround Time

☐ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:

Custody Seal: ON ICE

Shipping Carrier: HAND

Shipping Ticket No.:

Special Instructions:
STD TAT

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.

ENVIRO-CHEM LABORATORIES, INC.

100 Lakefront Drive, Hunt Valley, Maryland 21030 (410) 785-9739

FINAL REPORT OF ANALYSES

Phase Separation Science, Inc.
6630 Baltimore Nat. Pike
Baltimore, MD 21228-
Attn: Mr. John Richardson

PROJECT NAME: 04033013
REPORT DATE: 04/05/2004

SAMPLE NUMBER- 30999 SAMPLE ID- 04033013-12 SAMPLE MATRIX- WA
DATE SAMPLED- 03/30/04
DATE RECEIVED- 03/31/04 SAMPLER- NOT SPECIFIED RECEIVED BY- SES
TIME RECEIVED- 1500 DELIVERED BY- Courier

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	DET. LIMIT
NITRATE	EPA 300.0	03/31/04	SES	<0.2	mg/L as N	0.2
SULFATE	EPA 300.0	04/01/04	AAA	489	mg/L	1.0

LABORATORY DIRECTOR

Order #: P0403683
Report Date: 04/05/04
Client Proj Name: Martin State Airport
Client Proj #: 04033013 ✓

Client Name: Phase Separation Science
Contact: Bryan Ridgell
Address: 6630 Baltimore National P
Baltimore, MD 21228

Lab Sample #: P0403683-01

Sample Description	Matrix	Sampled Date/Time	Received
04033013-12	Water	30 Mar. 04	31 Mar. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
WetChem						
Ferric Iron	1.2	1.0	mg/L	Mod._7199	md	3/31/04 18:23
	✓	✓		✓		✓

N - NELAC certified analysis

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Volatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *BFB Tune Summary*

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/30/04 11:05	TCL-W, CCV 50ppb	102	103	105	
03/30/04 11:29	UNREG-W, CCV 50ppb	101	102	100	
03/30/04 12:17	Method Blank	103	102	103	
03/30/04 22:09	LCS / LCS 25ppb	101	101	103	
03/30/04 18:46	TB032604 / 04033013-01	102	101	103	
03/30/04 20:52	DMW-3I-032604 / 04033013-04	103	99	104	
03/30/04 21:18	DMW-3S-032604 / 04033013-06	103	104	104	
03/30/04 21:45	DMW-9I-032604 / 04033013-08	102	101	106	
03/30/04 19:10	DMW-1A-033004 / 04033013-10	102	99	103	
03/30/04 19:34	DMW-1B-033004 / 04033013-12	104	100	104	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
03/31/04 10:38	TCL-W, CCV 50ppb	102	104	102	
03/31/04 11:01	UNREG-W, CCV 50ppb	102	104	101	
03/31/04 11:49	Method Blank	105	103	104	
04/01/04 02:34	LCS / LCS 25ppb	103	102	99	
03/31/04 13:03	DMW-3D-032604 / 04033013-02	102	102	104	
03/31/04 13:27	MW-2-033004 / 04033013-14	104	103	103	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04033005.D**	**DATE/TIME ANALYZED:**	**03/30/04 12:17**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB032604	04033013-01	04033020.D	03/30/04 18:46
DMW-3I-032604	04033013-04	04033025.D	03/30/04 20:52
DMW-3S-032604	04033013-06	04033026.D	03/30/04 21:18
DMW-9I-032604	04033013-08	04033027.D	03/30/04 21:45
DMW-1A-033004	04033013-10	04033021.D	03/30/04 19:10
DMW-1B-033004	04033013-12	04033022.D	03/30/04 19:34

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	114279	50.00	ug/L	-0.02
23) 1,4-Difluorobenzene ISTD	4.70	114	214245	50.00	ug/L	-0.01
39) Chlorobenzene d-5 ISTD	8.03	117	177259	50.00	ug/L	-0.02
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	60418	50.00	ug/L	-0.02
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	70498	51.58	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.16%			
33) Toluene d-8 SS#2	6.29	98	281034	50.75	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.50%			
50) 4-Bromofluorobenzene SS#3	9.59	95	104209	51.39	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.78%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	1.76	94	59	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	0.00	43	0	Not Detected		d
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.57	84	567	Not Detected		
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	0.00	43	0	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	0.00	56	0	Not Detected		d
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.32	78	114	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

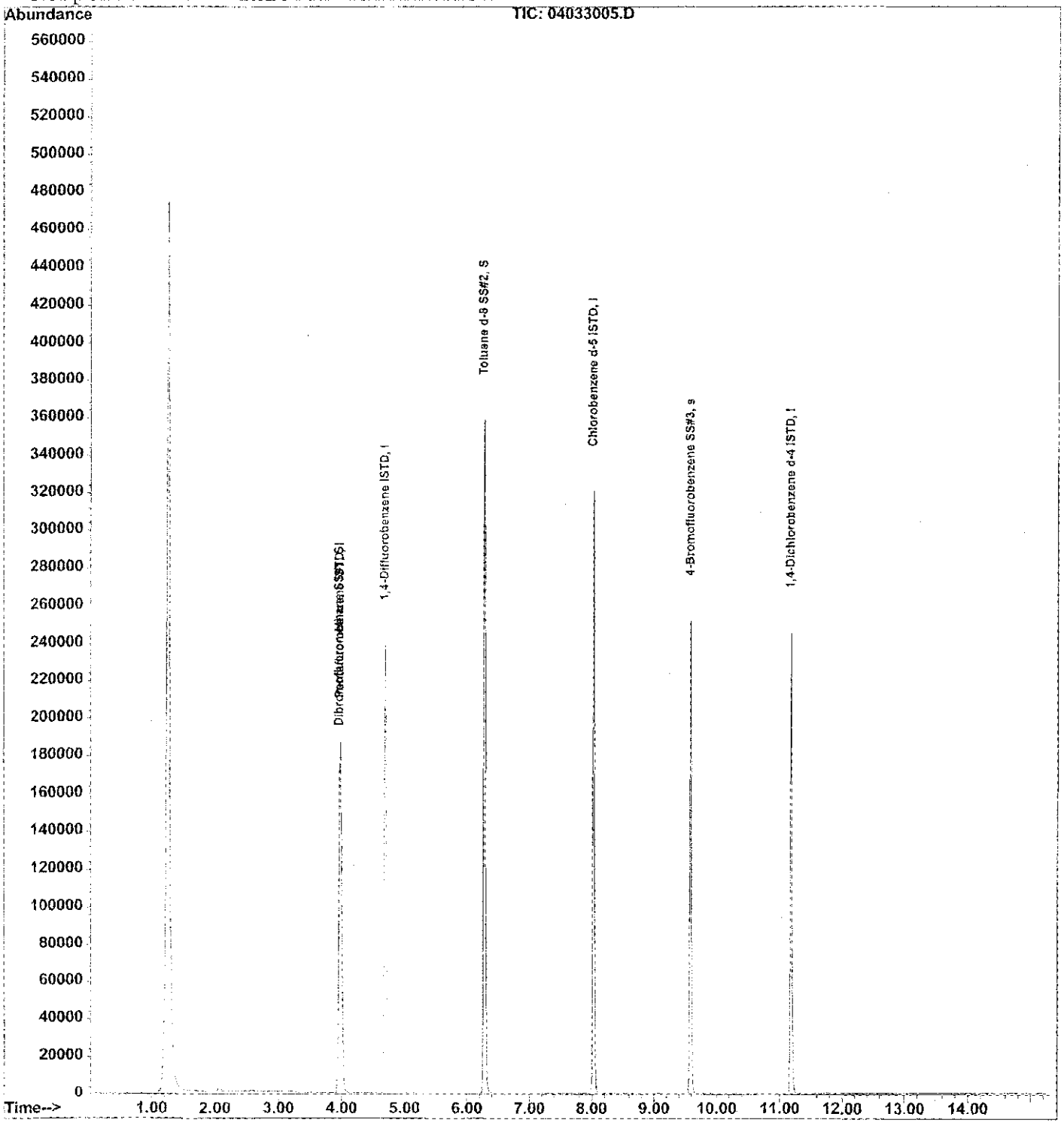
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32)	4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34)	TOLUENE	0.00	92	0	Not Detected	
35)	trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36)	1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37)	Tetrachloroethene	7.00	166	247	Not Detected	
38)	2-Hexanone (MBK)	0.00	43	0	Not Detected	
40)	Dibromochloromethane	0.00	129	0	Not Detected	
41)	1,2-Dibromoethane	0.00	107	0	Not Detected	
42)	Chlorobenzene	0.00	112	0	Not Detected	
43)	ETHYLBENZENE	8.22	91	49	Not Detected	
44)	m&p-Xylene	0.00	106	0	Not Detected	
45)	o-Xylene	0.00	106	0	Not Detected	
46)	Styrene	0.00	104	0	Not Detected	
47)	Bromoform	0.00	173	0	Not Detected	
49)	Isopropylbenzene	0.00	105	0	Not Detected	
51)	1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52)	1,3-Dichlorobenzene	11.22	146	1426	Not Detected	
53)	1,4-Dichlorobenzene	11.22	146	1426	Not Detected	
54)	1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55)	1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56)	1,2,4-Trichlorobenzene	0.00	180	0	Not Detected	
57)	Naphthalene	14.38	128	242	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : TS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	3.99	168	114279	50.00	ug/L	-0.02
12) 1,4-Difluorobenzene	4.70	114	214245	50.00	ug/L	-0.02
19) Chlorobenzene d-5	8.03	117	177259	50.00	ug/L	-0.02
27) 1,4-Dichlorobenzene d-4	11.19	152	60418	50.00	ug/L	-0.02
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.97	113	70498	51.28	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.56%			
18) Toluene d-8 SS#2	6.29	98	281034	50.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.12%			
23) 4-Bromofluorobenzene SS#3	9.59	95	104209	51.68	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.36%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		
6) vinyl acetate	3.12	43	294	Not Detected		
7) diisopropyl ether	0.00	45	0	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.95	91	308	Not Detected		
28) 2-Chlorotoluene	9.95	91	308	Not Detected		
29) 4-Chlorotoluene	10.21	91	123	Not Detected		
30) 1,3,5-Trimethylbenzene	10.22	105	169	Not Detected		
31) tert-Butylbenzene	0.00	119	0	Not Detected		
32) 1,2,4-Trimethylbenzene	10.73	105	241	Not Detected		
33) sec-Butylbenzene	10.96	105	296	Not Detected		
34) 4-Isopropyltoluene	11.19	119	246	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

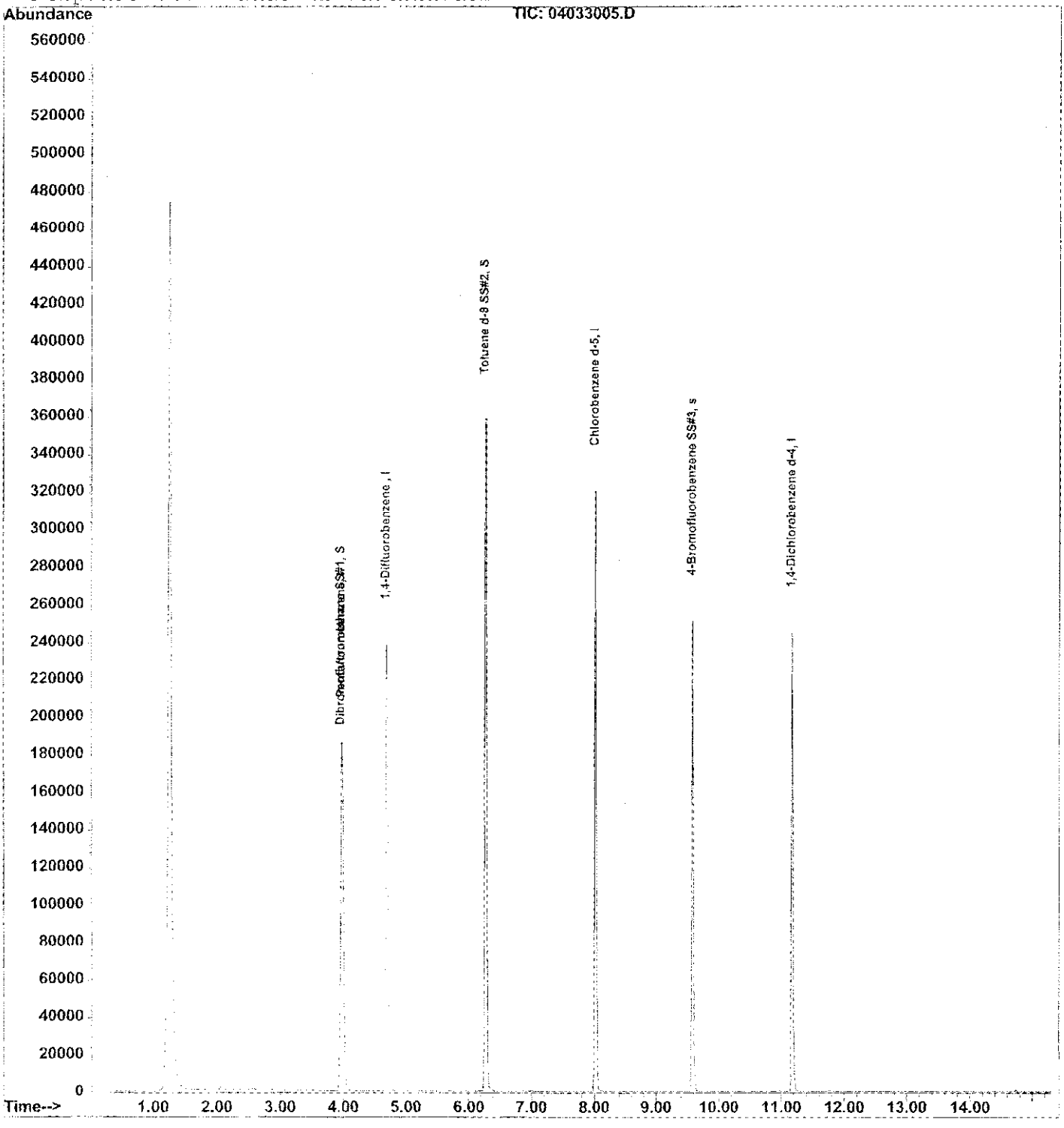
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	n-Butylbenzene	11.76	91	477	Not Detected	
36)	1,2,3-Trichlorobenzene	14.75	180	503	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033005.D Vial: 5
Acq On : 30 Mar 2004 12:17 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:55 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04033105.D**	**DATE/TIME ANALYZED:**	**03/31/04 11:49**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-3D-032604	04033013-02	04033108.D	03/31/04 13:03
MW-2-033004	04033013-14	04033109.D	03/31/04 13:27

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033105.D
Acq On : 31 Mar 2004 11:49 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 31 14:31 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	107079	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	202972	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	173117	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	56723	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	67088	52.38	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.76%			
33) Toluene d-8 SS#2	6.30	98	270710	51.61	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.22%			
50) 4-Bromofluorobenzene SS#3	9.60	95	99231	52.13	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	0.00	94	0	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	2.25	43	296	Not Detected		
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.58	84	642	Not Detected		
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	3.56	43	63	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	0.00	56	0	Not Detected		d
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.35	78	441	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033105.D Vial: 5
Acq On : 31 Mar 2004 11:49 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 14:31 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32)	4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34)	TOLUENE	0.00	92	0	Not Detected	
35)	trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36)	1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37)	Tetrachloroethene	0.00	166	0	Not Detected	
38)	2-Hexanone (MBK)	0.00	43	0	Not Detected	
40)	Dibromochloromethane	0.00	129	0	Not Detected	
41)	1,2-Dibromoethane	0.00	107	0	Not Detected	
42)	Chlorobenzene	0.00	112	0	Not Detected	
43)	ETHYLBENZENE	8.23	91	73	Not Detected	
44)	m&p-Xylene	0.00	106	0	Not Detected	
45)	o-Xylene	0.00	106	0	Not Detected	
46)	Styrene	0.00	104	0	Not Detected	
47)	Bromoform	0.00	173	0	Not Detected	
49)	Isopropylbenzene	0.00	105	0	Not Detected	
51)	1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52)	1,3-Dichlorobenzene	11.23	146	1350	Not Detected	
53)	1,4-Dichlorobenzene	11.23	146	1350	Not Detected	
54)	1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55)	1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56)	1,2,4-Trichlorobenzene	0.00	180	0	Not Detected	
57)	Naphthalene	14.40	128	375	Not Detected	

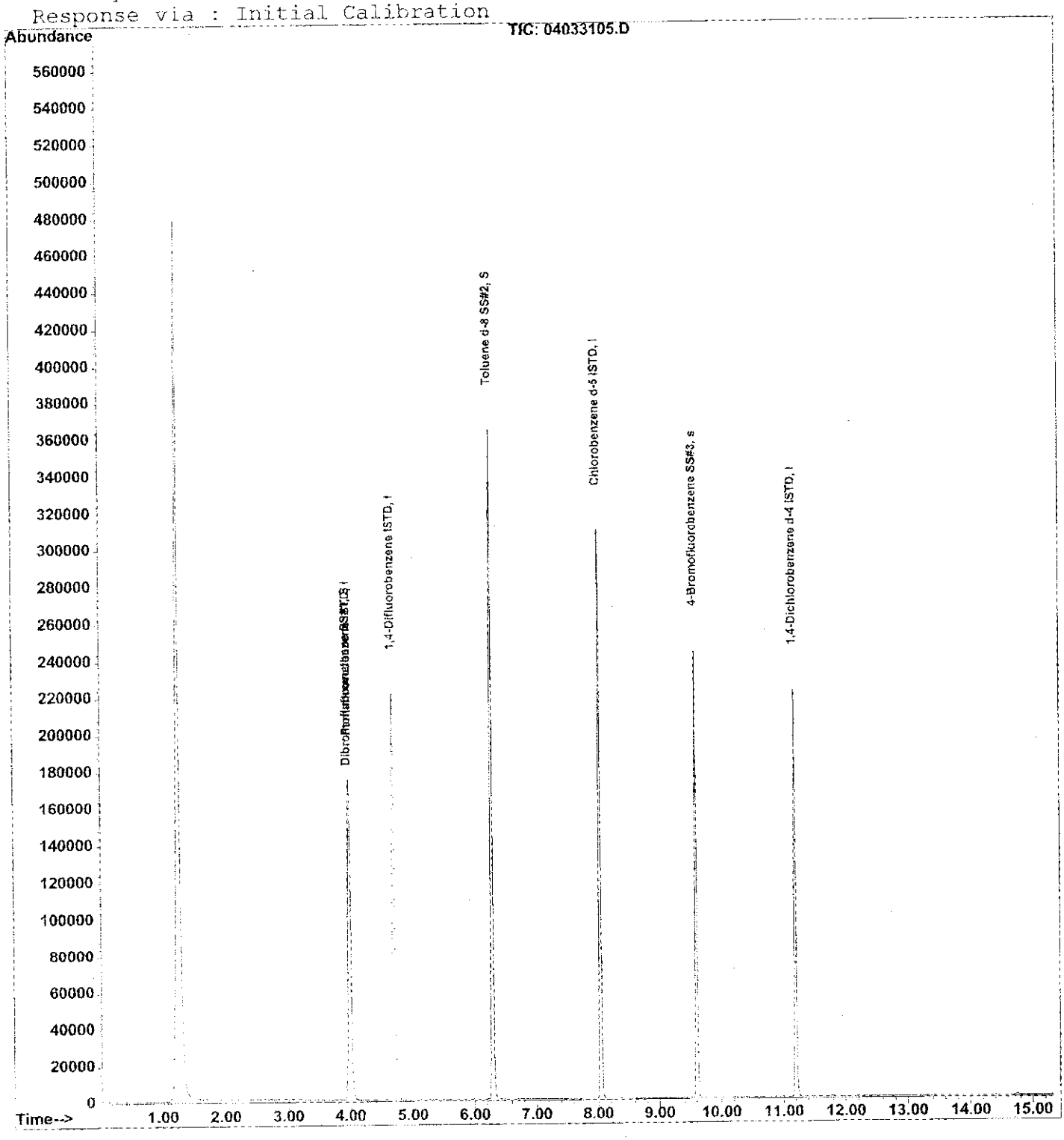
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040331\04033105.D
Acq On : 31 Mar 2004 11:49 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 31 14:31 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033105.D Vial: 5
Acq On : 31 Mar 2004 11:49 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : 1S/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 14:32 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.00	168	107079	50.00	ug/L	0.00
12) 1,4-Difluorobenzene	4.71	114	202972	50.00	ug/L	0.00
19) Chlorobenzene d-5	8.04	117	173117	50.00	ug/L	0.00
27) 1,4-Dichlorobenzene d-4	11.21	152	56723	50.00	ug/L	0.00
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.98	113	67088	52.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.16%			
18) Toluene d-8 SS#2	6.30	98	270710	51.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.82%			
23) 4-Bromofluorobenzene SS#3	9.60	95	99231	50.38	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		
6) vinyl acetate	3.13	43	236	Not Detected		
7) diisopropyl ether	0.00	45	0	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.96	91	279	Not Detected		
28) 2-Chlorotoluene	10.06	91	53	Not Detected		
29) 4-Chlorotoluene	10.22	91	113	Not Detected		
30) 1,3,5-Trimethylbenzene	10.23	105	173	Not Detected		
31) tert-Butylbenzene	10.67	119	65	Not Detected		
32) 1,2,4-Trimethylbenzene	10.75	105	194	Not Detected		
33) sec-Butylbenzene	10.98	105	340	Not Detected		
34) 4-Isopropyltoluene	11.20	119	275	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033105.D
Acq On : 31 Mar 2004 11:49 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 31 14:32 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.78	91	399	Not Detected	
36) 1,2,3-Trichlorobenzene	14.76	180	391	Not Detected	

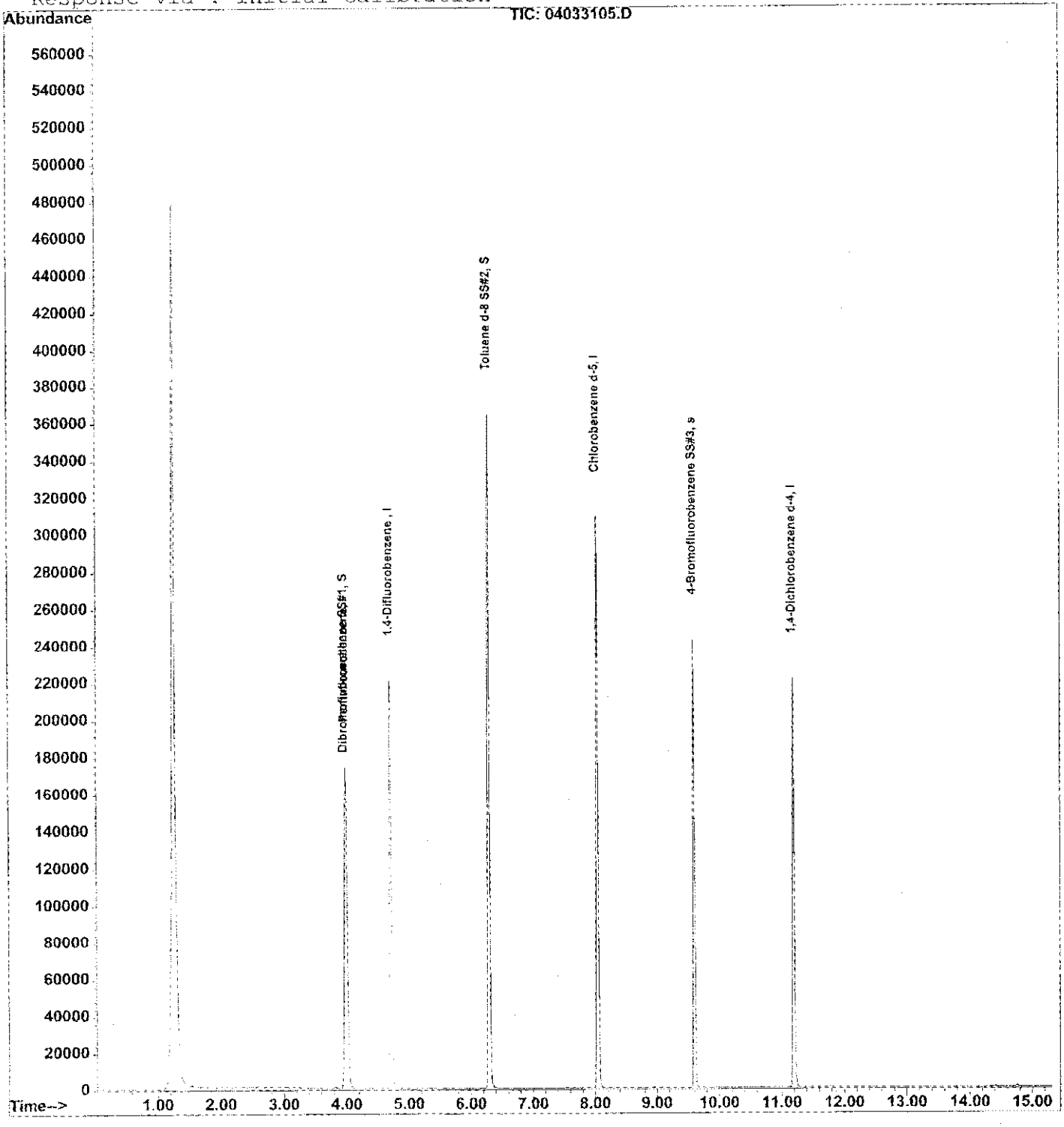
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040331\04033105.D
Acq On : 31 Mar 2004 11:49 am
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Mar 31 14:32 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 03/30/04 **BATCH NUMBER:** VOC040330

METHOD: EPA 8260 **LAB FILE IDs:** 04033028.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	93	61-145
Benzene	25	ND	25	100	76-127
Trichloroethene	25	ND	26	105	71-120
Toluene	25	ND	25	98	76-125
Chlorobenzene	25	ND	23	92	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033028.D Vial: 28
Acq On : 30 Mar 2004 10:09 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	113072	50.00	ug/L		-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	207094	50.00	ug/L		0.00
39) Chlorobenzene d-5 ISTD	8.04	117	173386	50.00	ug/L		-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	58741	50.00	ug/L		-0.01
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.98	113	68460	50.62	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.24%				
33) Toluene d-8 SS#2	6.29	98	270706	50.58	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.16%				
50) 4-Bromofluorobenzene SS#3	9.59	95	101623	51.55	ug/L		-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.39	85	43524	21.40	ug/L		100
3) Chloromethane	1.49	50	51230	23.54	ug/L		99
4) VINYL CHLORIDE	1.58	62	49349	22.85	ug/L		100
5) Bromomethane	1.76	94	39901	22.54	ug/L		99
6) Chloroethane	1.77	64	28887	26.02	ug/L		99
7) Trichlorofluoromethane	1.93	101	32865	26.19	ug/L	#	58
8) Acetone	2.28	43	13179	24.29	ug/L		95
9) 1,1-DICHLOROETHENE	2.26	96	38595	23.22	ug/L		93
10) 1,1,2-Trichlorotrifluoroet	2.28	101	33390	24.37	ug/L		97
11) Carbon Disulfide	2.44	76	144824	24.43	ug/L		99
12) Methyl Acetate	2.49	74	4929	23.63	ug/L		98
13) Methylene chloride	2.59	84	45169	22.57	ug/L		98
14) trans-1,2-Dichloroethene	2.79	96	42534	23.78	ug/L		94
15) Methyl-t-Butyl Ether	2.78	73	85220	25.11	ug/L		100
16) 1,1-Dichloroethane	3.10	63	73921	24.32	ug/L		99
17) cis-1,2-Dichloroethene	3.57	96	48015	26.87	ug/L		94
18) 2-Butanone (MEK)	3.56	43	24907	24.68	ug/L		99
19) CHLOROFORM	3.84	83	79899	24.48	ug/L		100
21) 1,1,1-Trichloroethane	4.02	97	56048	24.27	ug/L	#	15
22) Cyclohexane	4.08	56	67015	25.42	ug/L	#	88
24) Carbon tetrachloride	4.17	117	37921	23.71	ug/L		98
25) Benzene	4.35	78	192186	24.96	ug/L		99
26) 1,2-Dichloroethane	4.36	62	61649	25.62	ug/L		97
27) Trichloroethene	4.98	95	45859	26.23	ug/L		97
28) 1,2-DICHLOROPROPANE	5.20	63	51764	25.50	ug/L		99
29) Methylcyclohexane	5.19	83	40769	22.55	ug/L		97
30) Bromodichloromethane	5.49	83	59212	24.55	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033028.D Vial: 28
Acq On : 30 Mar 2004 10:09 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.98	75	77300	24.02 ug/L	97
32)	4-Methyl-2-Pentanone (MIBK	6.16	43	52459	26.18 ug/L	100
34)	TOLUENE	6.37	92	102588	24.60 ug/L	99
35)	trans-1,3-Dichloropropene	6.62	75	64369	23.77 ug/L	97
36)	1,1,2-Trichloroethane	6.84	83	30893	25.01 ug/L	98
37)	Tetrachloroethene	7.01	166	25389	22.93 ug/L	99
38)	2-Hexanone (MBK)	7.16	43	35491	25.83 ug/L	97
40)	Dibromochloromethane	7.31	129	27602	23.54 ug/L	99
41)	1,2-Dibromoethane	7.45	107	31389	25.32 ug/L	98
42)	Chlorobenzene	8.07	112	90722	23.05 ug/L	93
43)	ETHYLBENZENE	8.23	91	169431	23.99 ug/L	98
44)	m&p-Xylene	8.38	106	113124	47.12 ug/L	94
45)	o-Xylene	8.90	106	55921	24.09 ug/L	94
46)	Styrene	8.92	104	102384	23.90 ug/L	93
47)	Bromoform	9.15	173	17373	24.61 ug/L	100
49)	Isopropylbenzene	9.40	105	104524	22.70 ug/L	100
51)	1,1,2,2-Tetrachloroethane	9.82	83	41202	24.16 ug/L	98
52)	1,3-Dichlorobenzene	11.10	146	39246	21.47 ug/L	97
53)	1,4-Dichlorobenzene	11.23	146	44503	20.51 ug/L	98
54)	1,2-Dichlorobenzene	11.75	146	38712	22.39 ug/L	100
55)	1,2-Dibromo-3-chloropropan	12.86	75	5227	23.79 ug/L	97
56)	1,2,4-Trichlorobenzene	14.06	180	18900	20.19 ug/L	100
57)	Naphthalene	14.39	128	437	Not Detected	

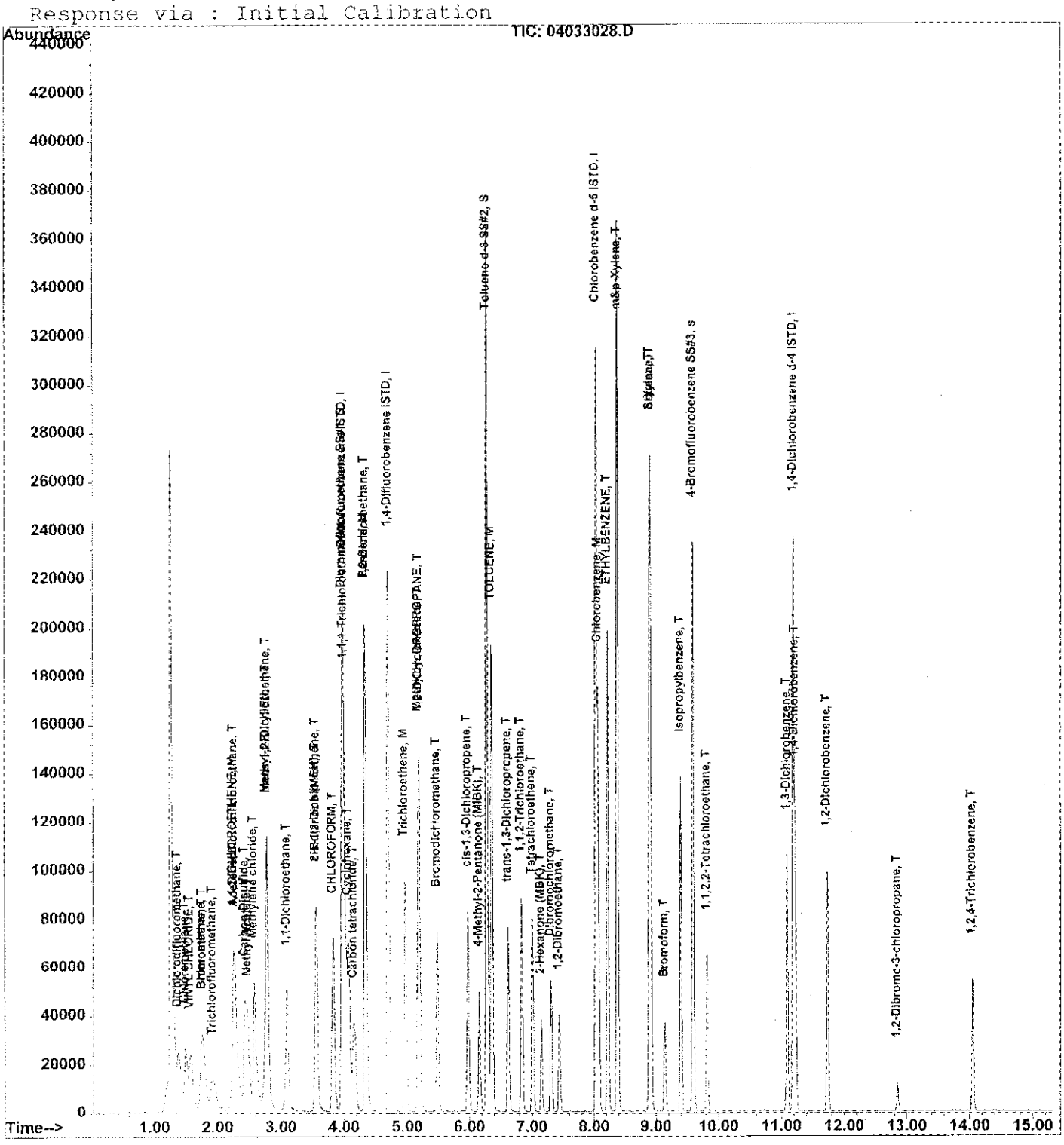
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033028.D
Acq On : 30 Mar 2004 10:09 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Vial: 28
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 04/01/04 **BATCH NUMBER:** VOC040331

METHOD: EPA 8260 **LAB FILE IDs:** 04033137.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	101	61-145
Benzene	25	ND	27	107	76-127
Trichloroethene	25	ND	26	103	71-120
Toluene	25	ND	26	105	76-125
Chlorobenzene	25	ND	24	97	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2)]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033137.D Vial: 37
Acq On : 1 Apr 2004 2:34 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	103753	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	194800	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.06	117	164118	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.22	152	57948	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	64019	51.59	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.18%			
33) Toluene d-8 SS#2	6.31	98	256517	50.95	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.90%			
50) 4-Bromofluorobenzene SS#3	9.61	95	96100	49.41	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.40	85	43402	23.26	ug/L	100
3) Chloromethane	1.50	50	50310	25.19	ug/L	100
4) VINYL CHLORIDE	1.58	62	48740	24.60	ug/L	100
5) Bromomethane	1.75	94	38038	23.42	ug/L	98
6) Chloroethane	1.80	64	28152	27.63	ug/L	99
7) Trichlorofluoromethane	1.93	101	28109	24.41	ug/L	99
8) Acetone	2.28	43	13200	26.51	ug/L	93
9) 1,1-DICHLOROETHENE	2.27	96	38396	25.17	ug/L	91
10) 1,1,2-Trichlorotrifluoroet	2.28	101	31861	25.35	ug/L	98
11) Carbon Disulfide	2.44	76	143541	26.39	ug/L	97
12) Methyl Acetate	2.50	74	5322	27.81	ug/L	100
13) Methylene chloride	2.60	84	43836	23.87	ug/L	97
14) trans-1,2-Dichloroethene	2.80	96	41315	25.18	ug/L	94
15) Methyl-t-Butyl Ether	2.79	73	86660	27.82	ug/L	100
16) 1,1-Dichloroethane	3.11	63	72652	26.04	ug/L	99
17) cis-1,2-Dichloroethene	3.59	96	43902	26.78	ug/L	95
18) 2-Butanone (MEK)	3.57	43	25011	27.01	ug/L	100
19) CHLOROFORM	3.86	83	78392	26.18	ug/L	100
21) 1,1,1-Trichloroethane	4.04	97	54667	25.80	ug/L #	18
22) Cyclohexane	4.10	56	66249	27.39	ug/L	96
24) Carbon tetrachloride	4.19	117	36712	24.41	ug/L	98
25) Benzene	4.37	78	189884	26.22	ug/L	99
26) 1,2-Dichloroethane	4.38	62	60738	26.83	ug/L	98
27) Trichloroethene	4.99	95	42358	25.76	ug/L	96
28) 1,2-DICHLOROPROPANE	5.22	63	51709	27.08	ug/L	98
29) Methylcyclohexane	5.20	83	41002	24.11	ug/L	96
30) Bromodichloromethane	5.51	83	60106	26.49	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033137.D Vial: 37
Acq On : 1 Apr 2004 2:34 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

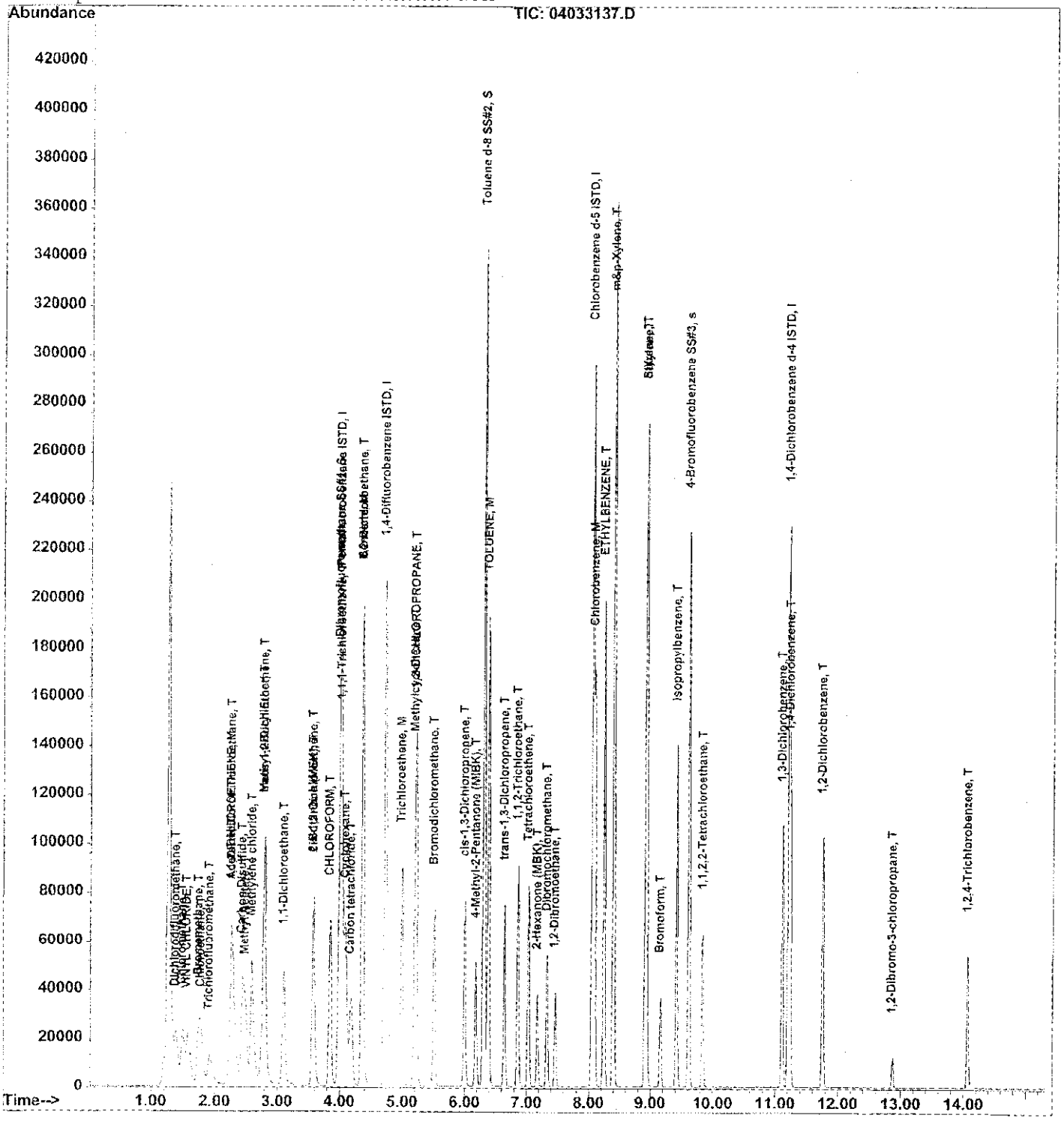
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	6.00	75	74875	24.74	ug/L	96
32)	4-Methyl-2-Pentanone (MIBK	6.18	43	54045	28.67	ug/L	99
34)	TOLUENE	6.38	92	102718	26.19	ug/L	98
35)	trans-1,3-Dichloropropene	6.64	75	63120	24.78	ug/L	99
36)	1,1,2-Trichloroethane	6.86	83	30091	25.90	ug/L	99
37)	Tetrachloroethene	7.03	166	26465	25.41	ug/L	98
38)	2-Hexanone (MBK)	7.18	43	37565	29.07	ug/L	99
40)	Dibromochloromethane	7.34	129	27774	25.03	ug/L	100
41)	1,2-Dibromoethane	7.47	107	30082	25.64	ug/L	99
42)	Chlorobenzene	8.09	112	90045	24.17	ug/L	94
43)	ETHYLBENZENE	8.25	91	170296	25.47	ug/L	98
44)	m&p-Xylene	8.40	106	115132	50.66	ug/L	95
45)	o-Xylene	8.92	106	55687	25.35	ug/L	96
46)	Styrene	8.94	104	102463	25.26	ug/L	92
47)	Bromoform	9.17	173	17825	26.68	ug/L	97
49)	Isopropylbenzene	9.42	105	103395	22.76	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.84	83	42824	25.46	ug/L	100
52)	1,3-Dichlorobenzene	11.12	146	40423	22.42	ug/L	99
53)	1,4-Dichlorobenzene	11.25	146	43269	20.22	ug/L	97
54)	1,2-Dichlorobenzene	11.76	146	39174	22.97	ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.88	75	5808	26.79	ug/L	95
56)	1,2,4-Trichlorobenzene	14.08	180	19386	20.99	ug/L	100
57)	Naphthalene	0.00	128	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040331\04033137.D Vial: 37
Acq On : 1 Apr 2004 2:34 am Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 03/30/04 **BATCH NUMBER:** VOC040330

METHOD: EPA 8260 **LAB FILE IDs:** 04033029.D
04033030.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	22	88	61-145
Benzene	25	ND	24	95	76-127
Trichloroethene	25	ND	24	94	71-120
Toluene	25	ND	23	93	76-125
Chlorobenzene	25	ND	22	87	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	92	3.8	14	61-145
Benzene	25	ND	24	97	1.4	11	76-127
Trichloroethene	25	ND	24	96	1.3	14	71-120
Toluene	25	ND	24	97	4.2	13	76-125
Chlorobenzene	25	ND	22	89	2.9	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033029.D Vial: 29
Acq On : 30 Mar 2004 10:33 pm Operator: MI
Sample : 04033017-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	111306	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	205264	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	173809	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	58711	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	68850	51.72	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.44%			
33) Toluene d-8 SS#2	6.29	98	271094	51.10	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.20%			
50) 4-Bromofluorobenzene SS#3	9.60	95	98066	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.54%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	38144	19.06	ug/L	100
3) Chloromethane	1.49	50	50305	23.48	ug/L	99
4) VINYL CHLORIDE	1.57	62	45703	21.50	ug/L	99
5) Bromomethane	1.75	94	39135	22.46	ug/L	98
6) Chloroethane	1.79	64	27801	25.43	ug/L	100
7) Trichlorofluoromethane	1.91	101	27995	22.66	ug/L	100
8) Acetone	2.27	43	13261	24.83	ug/L	93
9) 1,1-DICHLOROETHENE	2.26	96	36104	22.06	ug/L	94
10) 1,1,2-Trichlorotrifluoroet	2.26	101	27105	20.10	ug/L	99
11) Carbon Disulfide	2.44	76	137704	23.60	ug/L	97
12) Methyl Acetate	2.49	74	4424	21.55	ug/L	96
13) Methylene chloride	2.59	84	42772	21.71	ug/L	97
14) trans-1,2-Dichloroethene	2.78	96	40338	22.91	ug/L	96
15) Methyl-t-Butyl Ether	2.78	73	82345	24.64	ug/L	100
16) 1,1-Dichloroethane	3.10	63	70517	23.56	ug/L	100
17) cis-1,2-Dichloroethene	3.56	96	43192	24.56	ug/L	94
18) 2-Butanone (MEK)	3.56	43	24713	24.88	ug/L	97
19) CHLOROFORM	3.84	83	76178	23.71	ug/L	100
21) 1,1,1-Trichloroethane	4.02	97	52419	23.06	ug/L #	8
22) Cyclohexane	4.08	56	58415	22.51	ug/L	92
24) Carbon tetrachloride	4.16	117	34782	21.94	ug/L	99
25) Benzene	4.34	78	182043	23.86	ug/L	99
26) 1,2-Dichloroethane	4.35	62	59149	24.80	ug/L	98
27) Trichloroethene	4.98	95	40855	23.58	ug/L	97
28) 1,2-DICHLOROPROPANE	5.20	63	48711	24.21	ug/L	99
29) Methylcyclohexane	5.18	83	34710	19.37	ug/L	97
30) Bromodichloromethane	5.50	83	58133	24.31	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033029.D Vial: 29
Acq On : 30 Mar 2004 10:33 pm Operator: MI
Sample : 04033017-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

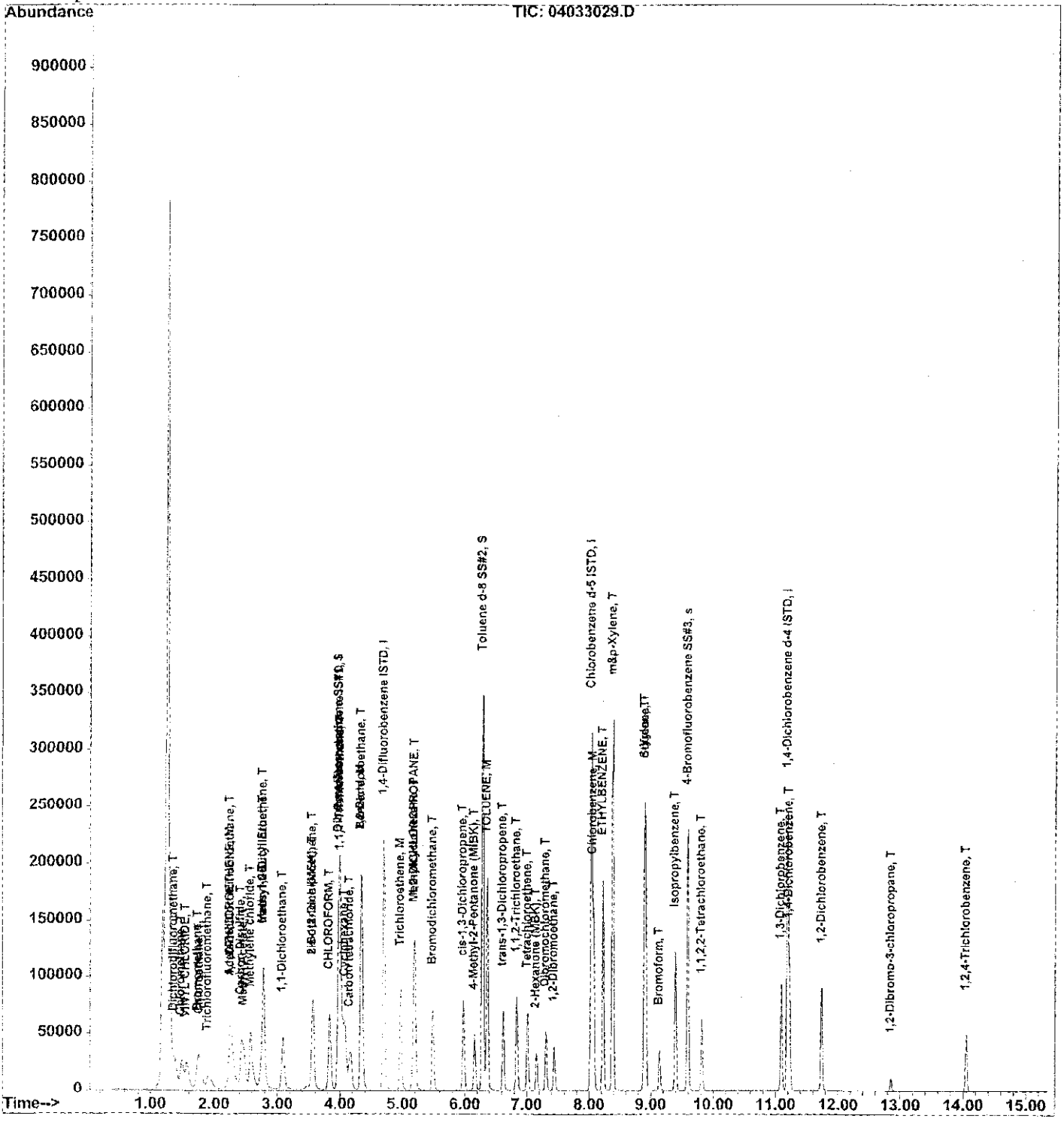
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.98	75	74650	23.41 ug/L	97
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	51666	26.01 ug/L	99
34) TOLUENE	6.37	92	95658	23.15 ug/L	98
35) trans-1,3-Dichloropropene	6.62	75	62587	23.32 ug/L	98
36) 1,1,2-Trichloroethane	6.84	83	29330	23.96 ug/L	96
37) Tetrachloroethene	7.02	166	22130	20.17 ug/L	99
38) 2-Hexanone (MBK)	7.16	43	34632	25.43 ug/L	99
40) Dibromochloromethane	7.31	129	27133	23.09 ug/L	99
41) 1,2-Dibromoethane	7.44	107	29781	23.97 ug/L	99
42) Chlorobenzene	8.08	112	85333	21.63 ug/L	93
43) ETHYLBENZENE	8.23	91	155620	21.98 ug/L	98
44) m&p-Xylene	8.38	106	100240	41.65 ug/L	92
45) o-Xylene	8.90	106	52257	22.46 ug/L	97
46) Styrene	8.92	104	95888	22.32 ug/L	91
47) Bromoform	9.15	173	16757	23.68 ug/L	100
49) Isopropylbenzene	9.40	105	93930	20.41 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.82	83	40660	23.86 ug/L	99
52) 1,3-Dichlorobenzene	11.09	146	36363	19.91 ug/L	100
53) 1,4-Dichlorobenzene	11.23	146	38266	17.65 ug/L	98
54) 1,2-Dichlorobenzene	11.74	146	35580	20.59 ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.85	75	5332	24.28 ug/L	96
56) 1,2,4-Trichlorobenzene	14.05	180	17180	18.36 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033029.D Vial: 29
Acq On : 30 Mar 2004 10:33 pm Operator: MI
Sample : 04033017-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033030.D Vial: 30
Acq On : 30 Mar 2004 10:57 pm Operator: MI
Sample : 04033017-01 MSD 25ppb Inst : Instrumen
Misc : TS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	110885	50.00	ug/L		0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	206093	50.00	ug/L		0.00
39) Chlorobenzene d-5 ISTD	8.04	117	172758	50.00	ug/L		0.00
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	59482	50.00	ug/L		0.00
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.98	113	67666	51.02	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.04%				
33) Toluene d-8 SS#2	6.29	98	270566	50.80	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.60%				
50) 4-Bromofluorobenzene SS#3	9.59	95	99976	50.08	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.16%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.39	85	38366	19.24	ug/L		100
3) Chloromethane	1.50	50	49381	23.14	ug/L		99
4) VINYL CHLORIDE	1.57	62	46348	21.89	ug/L		100
5) Bromomethane	1.75	94	39757	22.90	ug/L		96
6) Chloroethane	1.78	64	28669	26.33	ug/L		96
7) Trichlorofluoromethane	1.92	101	29945	24.33	ug/L		100
8) Acetone	2.27	43	13322	25.04	ug/L		97
9) 1,1-DICHLOROETHENE	2.26	96	37374	22.92	ug/L		95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	28260	21.04	ug/L		99
11) Carbon Disulfide	2.43	76	139507	24.00	ug/L		97
12) Methyl Acetate	2.48	74	4142	20.25	ug/L		99
13) Methylene chloride	2.58	84	43825	22.33	ug/L		99
14) trans-1,2-Dichloroethene	2.79	96	40874	23.31	ug/L		95
15) Methyl-t-Butyl Ether	2.78	73	84889	25.50	ug/L		100
16) 1,1-Dichloroethane	3.10	63	72493	24.32	ug/L		99
17) cis-1,2-Dichloroethene	3.57	96	44860	25.60	ug/L		98
18) 2-Butanone (MEK)	3.55	43	23834	24.08	ug/L		99
19) CHLOROFORM	3.84	83	79302	24.78	ug/L		100
21) 1,1,1-Trichloroethane	4.02	97	53264	23.52	ug/L	#	10
22) Cyclohexane	4.08	56	60012	23.21	ug/L		90
24) Carbon tetrachloride	4.17	117	36766	23.10	ug/L		98
25) Benzene	4.35	78	185407	24.20	ug/L		100
26) 1,2-Dichloroethane	4.36	62	59907	25.01	ug/L		97
27) Trichloroethene	4.97	95	41552	23.88	ug/L		97
28) 1,2-DICHLOROPROPANE	5.20	63	50736	25.11	ug/L		99
29) Methylcyclohexane	5.19	83	35055	19.49	ug/L		97
30) Bromodichloromethane	5.49	83	60226	25.09	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033030.D Vial: 30
Acq On : 30 Mar 2004 10:57 pm Operator: MI
Sample : 04033017-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

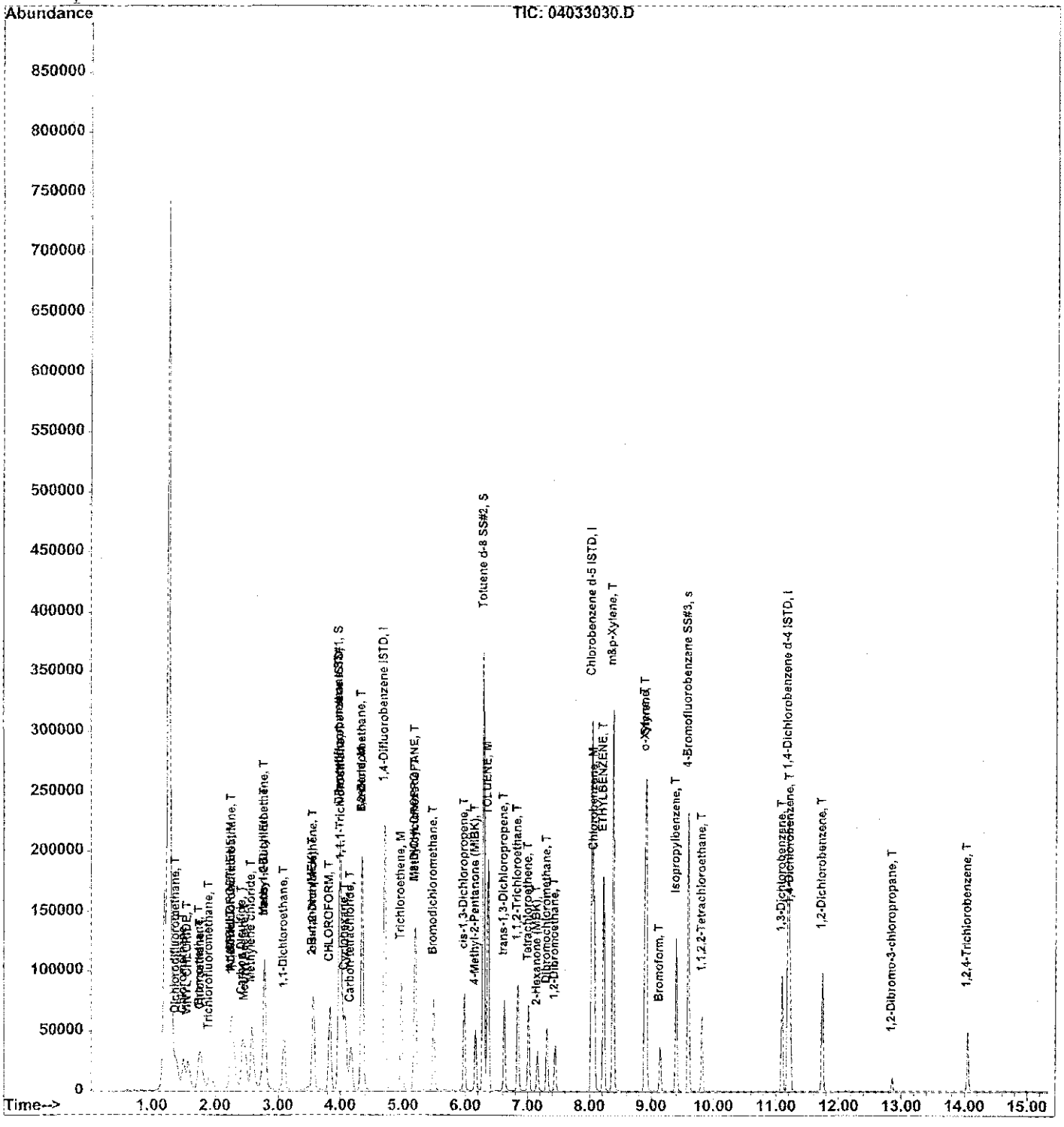
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	76717	23.96	ug/L	97
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	52466	26.31	ug/L	100
34)	TOLUENE	6.36	92	100183	24.14	ug/L	99
35)	trans-1,3-Dichloropropene	6.63	75	65009	24.12	ug/L	96
36)	1,1,2-Trichloroethane	6.84	83	30249	24.61	ug/L	97
37)	Tetrachloroethene	7.01	166	22571	20.49	ug/L	100
38)	2-Hexanone (MBK)	7.16	43	34103	24.94	ug/L	99
40)	Dibromochloromethane	7.32	129	27387	23.45	ug/L	100
41)	1,2-Dibromoethane	7.45	107	29513	23.90	ug/L	98
42)	Chlorobenzene	8.07	112	87310	22.26	ug/L	95
43)	ETHYLBENZENE	8.23	91	160793	22.85	ug/L	98
44)	m&p-Xylene	8.39	106	105407	44.06	ug/L	95
45)	o-Xylene	8.90	106	53451	23.11	ug/L	96
46)	Styrene	8.92	104	99147	23.22	ug/L	93
47)	Bromoform	9.15	173	17366	24.69	ug/L	100
49)	Isopropylbenzene	9.41	105	97196	20.85	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.82	83	41003	23.75	ug/L	99
52)	1,3-Dichlorobenzene	11.10	146	37673	20.36	ug/L	99
53)	1,4-Dichlorobenzene	11.23	146	39013	17.76	ug/L	97
54)	1,2-Dichlorobenzene	11.74	146	36805	21.03	ug/L	98
55)	1,2-Dibromo-3-chloropropan	12.86	75	5490	24.67	ug/L	94
56)	1,2,4-Trichlorobenzene	14.06	180	17156	18.09	ug/L	100
57)	Naphthalene	0.00	128	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033030.D Vial: 30
Acq On : 30 Mar 2004 10:57 pm Operator: MI
Sample : 04033017-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:39 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 04/01/04 **BATCH NUMBER:** VOC040331

METHOD: EPA 8260 **LAB FILE IDs:** 04033138.D
04033139.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	91	61-145
Benzene	25	ND	25	101	76-127
Trichloroethene	25	ND	25	100	71-120
Toluene	25	ND	25	101	76-125
Chlorobenzene	25	ND	23	93	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	24	95	4.0	14	61-145
Benzene	25	ND	24	98	2.9	11	76-127
Trichloroethene	25	ND	25	98	1.9	14	71-120
Toluene	25	ND	25	101	0.1	13	76-125
Chlorobenzene	25	ND	23	90	3.2	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033138.D Vial: 38
Acq On : 1 Apr 2004 2:58 am Operator: MI
Sample : 04033027-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	105732	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	195138	50.00	ug/L	0.02
39) Chlorobenzene d-5 ISTD	8.06	117	165360	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	56372	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.00	113	64206	50.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.54%			
33) Toluene d-8 SS#2	6.31	98	257471	51.05	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.10%			
50) 4-Bromofluorobenzene SS#3	9.62	95	95327	50.39	ug/L	0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.78%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	40604	21.35	ug/L	100
3) Chloromethane	1.50	50	47096	23.14	ug/L	99
4) VINYL CHLORIDE	1.58	62	46154	22.86	ug/L	99
5) Bromomethane	1.75	94	36827	22.25	ug/L	97
6) Chloroethane	1.80	64	27363	26.35	ug/L	99
7) Trichlorofluoromethane	1.92	101	27494	23.43	ug/L	100
8) Acetone	2.28	43	15317	30.19	ug/L	93
9) 1,1-DICHLOROETHENE	2.27	96	35376	22.76	ug/L	90
10) 1,1,2-Trichlorotrifluoroet	2.29	101	29662	23.15	ug/L	99
11) Carbon Disulfide	2.44	76	136436	24.62	ug/L	99
12) Methyl Acetate	2.50	74	4263	21.86	ug/L	93
13) Methylene chloride	2.60	84	41929	22.41	ug/L	97
14) trans-1,2-Dichloroethene	2.80	96	40354	24.13	ug/L	93
15) Methyl-t-Butyl Ether	2.80	73	85161	26.83	ug/L	100
16) 1,1-Dichloroethane	3.11	63	70413	24.77	ug/L	99
17) cis-1,2-Dichloroethene	3.58	96	41108	24.60	ug/L	95
18) 2-Butanone (MEK)	3.57	43	25849	27.39	ug/L	97
19) CHLOROFORM	3.86	83	75491	24.74	ug/L	99
21) 1,1,1-Trichloroethane	4.04	97	52274	24.21	ug/L #	11
22) Cyclohexane	4.09	56	63152	25.62	ug/L #	83
24) Carbon tetrachloride	4.18	117	36037	23.92	ug/L	98
25) Benzene	4.37	78	182757	25.19	ug/L	100
26) 1,2-Dichloroethane	4.37	62	60009	26.46	ug/L	97
27) Trichloroethene	5.00	95	41171	24.99	ug/L	95
28) 1,2-DICHLOROPROPANE	5.22	63	48878	25.55	ug/L	98
29) Methylcyclohexane	5.20	83	38032	22.33	ug/L	96
30) Bromodichloromethane	5.52	83	57660	25.37	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033138.D Vial: 38
Acq On : 1 Apr 2004 2:58 am Operator: MI
Sample : 04033027-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

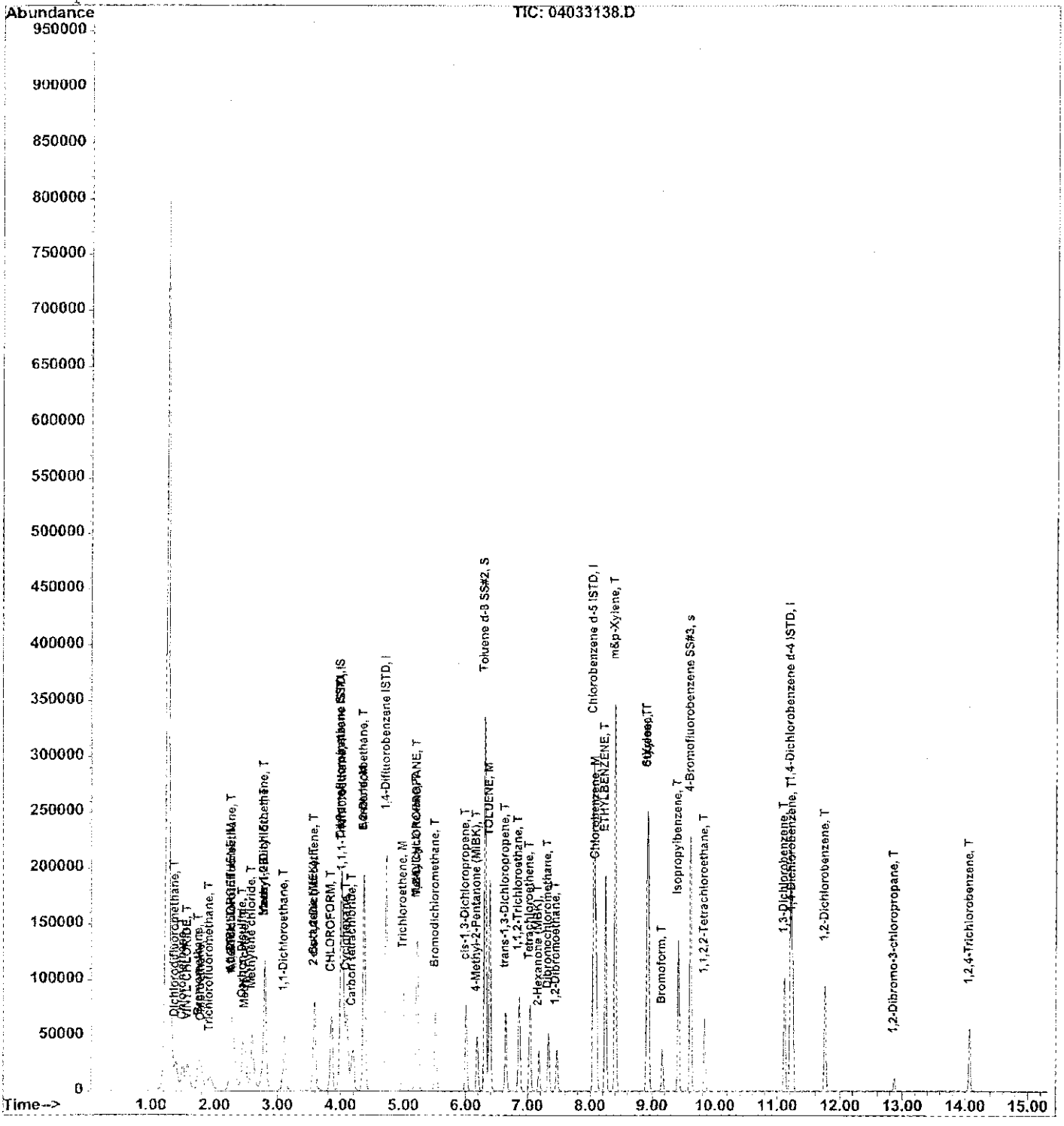
Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	Qlon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	6.00	75	72855	24.03 ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.18	43	51918	27.49 ug/L	99
34)	TOLUENE	6.39	92	99073	25.22 ug/L	99
35)	trans-1,3-Dichloropropene	6.64	75	60966	23.89 ug/L	97
36)	1,1,2-Trichloroethane	6.86	83	30221	25.96 ug/L	96
37)	Tetrachloroethene	7.04	166	25190	24.15 ug/L	99
38)	2-Hexanone (MBK)	7.18	43	34338	26.52 ug/L	99
40)	Dibromochloromethane	7.33	129	27212	24.34 ug/L	100
41)	1,2-Dibromoethane	7.46	107	29682	25.11 ug/L	100
42)	Chlorobenzene	8.10	112	87386	23.28 ug/L	94
43)	ETHYLBENZENE	8.25	91	163499	24.27 ug/L	98
44)	m&p-Xylene	8.40	106	107333	46.88 ug/L	94
45)	o-Xylene	8.92	106	52807	23.86 ug/L	96
46)	Styrene	8.94	104	97059	23.75 ug/L	92
47)	Bromoform	9.17	173	17109	25.41 ug/L	99
49)	Isopropylbenzene	9.42	105	101129	22.89 ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.84	83	40443	24.71 ug/L	98
52)	1,3-Dichlorobenzene	11.11	146	39036	22.26 ug/L	99
53)	1,4-Dichlorobenzene	11.25	146	41601	19.98 ug/L	98
54)	1,2-Dichlorobenzene	11.76	146	37816	22.79 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.87	75	5713	27.09 ug/L	97
56)	1,2,4-Trichlorobenzene	14.07	180	19101	21.26 ug/L	100
57)	Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040331\04033138.D Vial: 38
Acq On : 1 Apr 2004 2:58 am Operator: MI
Sample : 04033027-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033139.D Vial: 39
Acq On : 1 Apr 2004 3:22 am Operator: MI
Sample : 04033027-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	104569	50.00	ug/L		0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	193202	50.00	ug/L		0.02
39) Chlorobenzene d-5 ISTD	8.06	117	164428	50.00	ug/L		0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	56838	50.00	ug/L		0.00
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	4.00	113	62540	50.00	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.00%				
33) Toluene d-8 SS#2	6.31	98	262936	52.66	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.32%				
50) 4-Bromofluorobenzene SS#3	9.62	95	95689	50.16	ug/L		0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.39	85	41024	21.82	ug/L		100
3) Chloromethane	1.50	50	46164	22.94	ug/L		99
4) VINYL CHLORIDE	1.58	62	43884	21.97	ug/L		100
5) Bromomethane	1.75	94	36269	22.15	ug/L		100
6) Chloroethane	1.79	64	26192	25.51	ug/L		96
7) Trichlorofluoromethane	1.92	101	27929	24.06	ug/L		99
8) Acetone	2.28	43	15159	30.21	ug/L		95
9) 1,1-DICHLOROETHENE	2.27	96	36425	23.69	ug/L		95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	30490	24.07	ug/L		97
11) Carbon Disulfide	2.45	76	132286	24.13	ug/L	#	85
12) Methyl Acetate	2.50	74	4022	20.85	ug/L		100
13) Methylene chloride	2.60	84	41441	22.39	ug/L		99
14) trans-1,2-Dichloroethene	2.80	96	38763	23.44	ug/L		94
15) Methyl-t-Butyl Ether	2.79	73	81159	25.85	ug/L		100
16) 1,1-Dichloroethane	3.11	63	68568	24.39	ug/L		99
17) cis-1,2-Dichloroethene	3.59	96	40633	24.59	ug/L		94
18) 2-Butanone (MEK)	3.58	43	25832	27.68	ug/L		97
19) CHLOROFORM	3.86	83	73264	24.28	ug/L		100
21) 1,1,1-Trichloroethane	4.04	97	51275	24.01	ug/L	#	13
22) Cyclohexane	4.10	56	60873	24.97	ug/L		93
24) Carbon tetrachloride	4.19	117	34712	23.27	ug/L		98
25) Benzene	4.37	78	175806	24.48	ug/L		99
26) 1,2-Dichloroethane	4.37	62	57471	25.60	ug/L		97
27) Trichloroethene	5.00	95	40001	24.52	ug/L		95
28) 1,2-DICHLOROPROPANE	5.22	63	48927	25.83	ug/L		100
29) Methylcyclohexane	5.20	83	37719	22.37	ug/L		97
30) Bromodichloromethane	5.52	83	56376	25.05	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033139.D Vial: 39
Acq On : 1 Apr 2004 3:22 am Operator: MI
Sample : 04033027-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

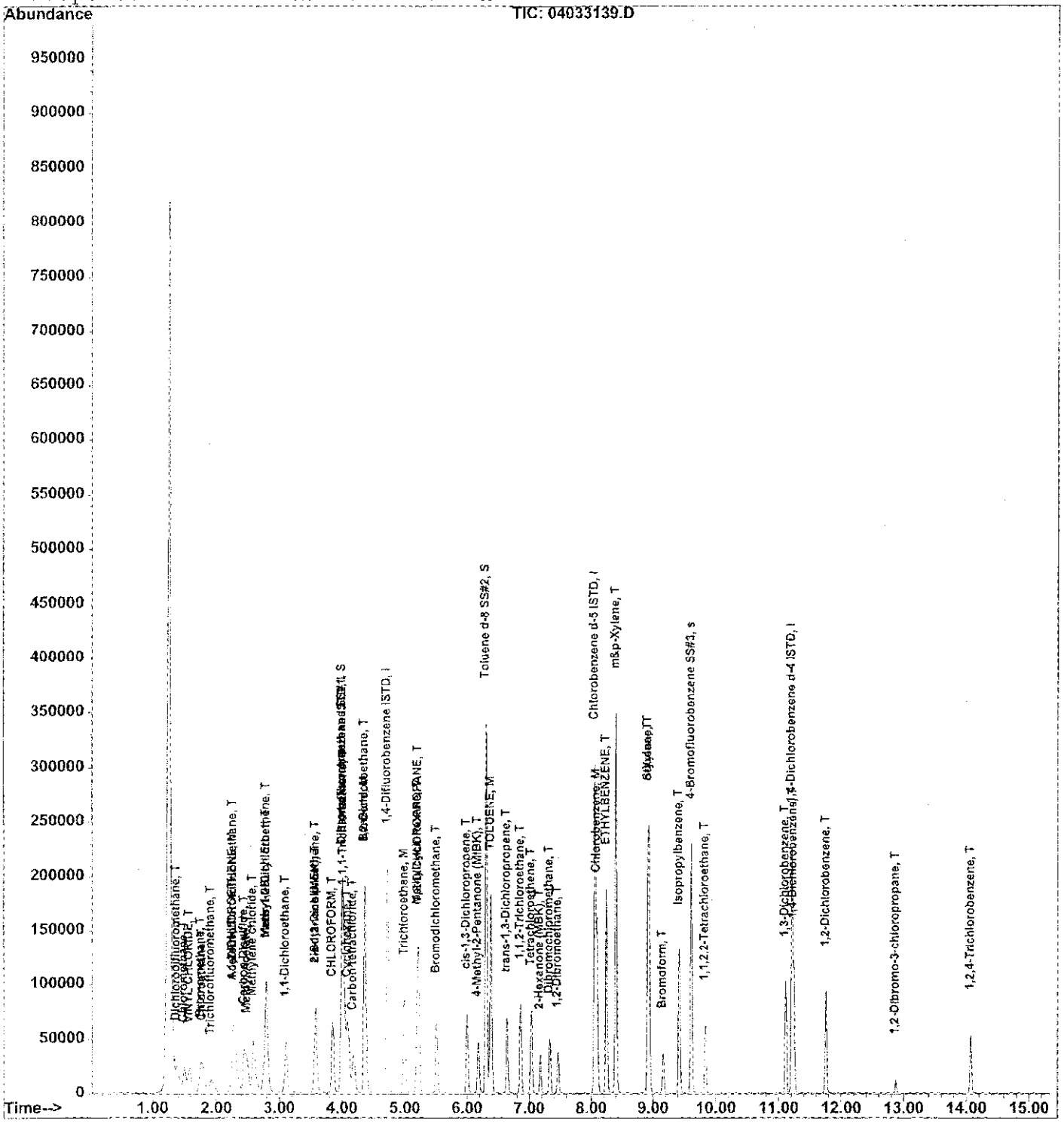
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	6.00	75	69357	23.11 ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.18	43	49830	26.65 ug/L	99
34)	TOLUENE	6.39	92	98169	25.24 ug/L	99
35)	trans-1,3-Dichloropropene	6.64	75	60525	23.96 ug/L	97
36)	1,1,2-Trichloroethane	6.87	83	29021	25.18 ug/L	98
37)	Tetrachloroethene	7.04	166	24926	24.13 ug/L	99
38)	2-Hexanone (MBK)	7.18	43	32870	25.64 ug/L	99
40)	Dibromochloromethane	7.33	129	26200	23.57 ug/L	99
41)	1,2-Dibromoethane	7.47	107	29197	24.84 ug/L	99
42)	Chlorobenzene	8.09	112	84142	22.54 ug/L	93
43)	ETHYLBENZENE	8.25	91	159062	23.75 ug/L	97
44)	m&p-Xylene	8.40	106	105066	46.15 ug/L	93
45)	o-Xylene	8.92	106	51854	23.56 ug/L	95
46)	Styrene	8.94	104	95538	23.51 ug/L	94
47)	Bromoform	9.17	173	16810	25.11 ug/L	98
49)	Isopropylbenzene	9.42	105	99646	22.37 ug/L	98
51)	1,1,2,2-Tetrachloroethane	9.84	83	39425	23.89 ug/L	99
52)	1,3-Dichlorobenzene	11.12	146	38334	21.68 ug/L	99
53)	1,4-Dichlorobenzene	11.25	146	40450	19.27 ug/L	97
54)	1,2-Dichlorobenzene	11.77	146	37243	22.27 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.87	75	5504	25.89 ug/L	94
56)	1,2,4-Trichlorobenzene	14.08	180	18938	20.90 ug/L	99
57)	Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040331\04033139.D Vial: 39
Acq On : 1 Apr 2004 3:22 am Operator: MI
Sample : 04033027-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 1 9:54 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	87	-0.02
2	T	Dichlorodifluoromethane	0.899	0.824	8.3	81	0.00
3	T	Chloromethane	0.962	0.842	12.5	78	0.00
4	T	VINYL CHLORIDE	0.955	0.877	8.2	80	0.00
5	T	Bromomethane	0.783	0.682	12.9	82	-0.01
6	T	Chloroethane	0.491	0.467	4.9	81	0.00
7	T	Trichlorofluoromethane	0.555	0.697	-25.6#	104	0.00
8	T	Acetone	0.240	0.264	-10.0	99	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.680	7.5	82	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.582	4.0	82	0.00
11	T	Carbon Disulfide	2.621	2.416	7.8	81	-0.04
12	T	Methyl Acetate	0.092	0.084	8.7	76	0.00
13	T	Methylene chloride	0.885	0.771	12.9	80	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.734	7.2	82	0.00
15	T	Methyl-t-Butyl Ether	1.501	1.409	6.1	81	0.00
16	T	1,1-Dichloroethane	1.344	1.259	6.3	84	-0.01
17	T	cis-1,2-Dichloroethene	0.790	0.760	3.8	85	-0.01
18	T	2-Butanone (MEK)	0.446	0.420	5.8	90	-0.01
19	T	CHLOROFORM	1.443	1.389	3.7	86	-0.02
20	S	Dibromofluoromethane SS#1	0.598	0.607	-1.5	89	-0.02
21	T	1,1,1-Trichloroethane	1.021	0.965	5.5	84	-0.01
22	T	Cyclohexane	1.166	1.117	4.2	85	-0.01
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	89	-0.01
24	T	Carbon tetrachloride	0.386	0.371	3.9	86	-0.02
25	M	Benzene	1.859	1.759	5.4	87	-0.02
26	T	1,2-Dichloroethane	0.581	0.564	2.9	86	-0.02
27	M	Trichloroethene	0.422	0.397	5.9	84	-0.01
28	T	1,2-DICHLOROPROPANE	0.490	0.481	1.8	87	-0.02
29	T	Methylcyclohexane	0.436	0.418	4.1	89	-0.01
30	T	Bromodichloromethane	0.582	0.577	0.9	89	-0.01
31	T	cis-1,3-Dichloropropene	0.777	0.765	1.5	88	-0.02
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.452	6.6	83	-0.02
33	S	Toluene d-8 SS#2	1.292	1.334	-3.3	94	-0.02
34	M	TOLUENE	1.007	0.956	5.1	86	-0.02
35	T	trans-1,3-Dichloropropene	0.654	0.643	1.7	86	-0.02
36	T	1,1,2-Trichloroethane	0.298	0.285	4.4	85	-0.01
37	T	Tetrachloroethene	0.267	0.255	4.5	87	-0.01
38	T	2-Hexanone (MBK)	0.332	0.318	4.2	86	-0.02
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	91	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.317	6.2	85	-0.02
41	T	1,2-Dibromoethane	0.357	0.334	6.4	85	-0.02
42	M	Chlorobenzene	1.135	1.030	9.3	86	-0.01
43	T	ETHYLBENZENE	2.037	1.870	8.2	86	-0.02
44	T	m&p-Xylene	0.692	0.615	11.1	82	-0.02
45	T	o-Xylene	0.669	0.612	8.5	84	-0.02
46	T	Styrene	1.236	1.133	8.3	83	-0.02
47	T	Bromoform	0.204	0.203	0.5	86	-0.02
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	88	-0.02
49	T	Isopropylbenzene	3.919	3.720	5.1	86	-0.02
50	s	4-Bromofluorobenzene SS#3	1.678	1.761	-4.9	92	-0.01
51	T	1,1,2,2-Tetrachloroethane	1.451	1.382	4.8	82	-0.02
52	T	1,3-Dichlorobenzene	1.556	1.448	6.9	83	-0.02
53	T	1,4-Dichlorobenzene	1.847	1.501	18.7	84	-0.02
54	T	1,2-Dichlorobenzene	1.471	1.339	9.0	82	-0.02
55	T	1,2-Dibromo-3-chloropropane	0.187	0.182	2.7	78	-0.02
56	T	1,2,4-Trichlorobenzene	0.797	0.697	12.5	81	-0.02
57	T	Naphthalene	1.591	1.237	22.3	69	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	ISTD							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	ISTD							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis 1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	ISTD							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	----------	ISTD	----------	----------	----------	
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	3.99	168	119866	50.00	ug/L	-0.02
23) 1,4-Difluorobenzene ISTD	4.70	114	221003	50.00	ug/L	-0.01
39) Chlorobenzene d-5 ISTD	8.03	117	187457	50.00	ug/L	-0.02
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	60546	50.00	ug/L	-0.02
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.97	113	72816	50.79	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.58%			
33) Toluene d-8 SS#2	6.28	98	294924	51.63	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.26%			
50) 4-Bromofluorobenzene SS#3	9.59	95	106624	52.47	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	98822	45.85	ug/L	100
3) Chloromethane	1.50	50	100974	43.77	ug/L	99
4) VINYL CHLORIDE	1.58	62	105151	45.93	ug/L	100
5) Bromomethane	1.75	94	81692	43.53	ug/L	98
6) Chloroethane	1.79	64	55971	47.55	ug/L	99
7) Trichlorofluoromethane	1.96	101	83589	62.83	ug/L	99
8) Acetone	2.27	43	31690	55.09	ug/L	95
9) 1,1-DICHLOROETHENE	2.26	96	81558	46.28	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	69706	48.00	ug/L	99
11) Carbon Disulfide	2.43	76	289545	46.08	ug/L	99
12) Methyl Acetate	2.49	74	10086	45.61	ug/L	99
13) Methylene chloride	2.58	84	92474	43.59	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	87983	46.41	ug/L	97
15) Methyl-t-Butyl Ether	2.78	73	168875	46.93	ug/L	100
16) 1,1-Dichloroethane	3.09	63	150903	46.82	ug/L	100
17) cis-1,2-Dichloroethene	3.57	96	91135	48.12	ug/L	97
18) 2-Butanone (MEK)	3.55	43	50403	47.12	ug/L	98
19) CHLOROFORM	3.83	83	166500	48.13	ug/L	99
21) 1,1,1-Trichloroethane	4.02	97	115627	47.23	ug/L #	62
22) Cyclohexane	4.08	56	133858	47.89	ug/L	98
24) Carbon tetrachloride	4.17	117	81954	48.02	ug/L	100
25) Benzene	4.34	78	388777	47.32	ug/L	100
26) 1,2-Dichloroethane	4.35	62	124664	48.54	ug/L	98
27) Trichloroethene	4.97	95	87761	47.04	ug/L	98
28) 1,2-DICHLOROPROPANE	5.19	63	106398	49.11	ug/L	100
29) Methylcyclohexane	5.19	83	92422	47.91	ug/L	98
30) Bromodichloromethane	5.49	83	127565	49.55	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

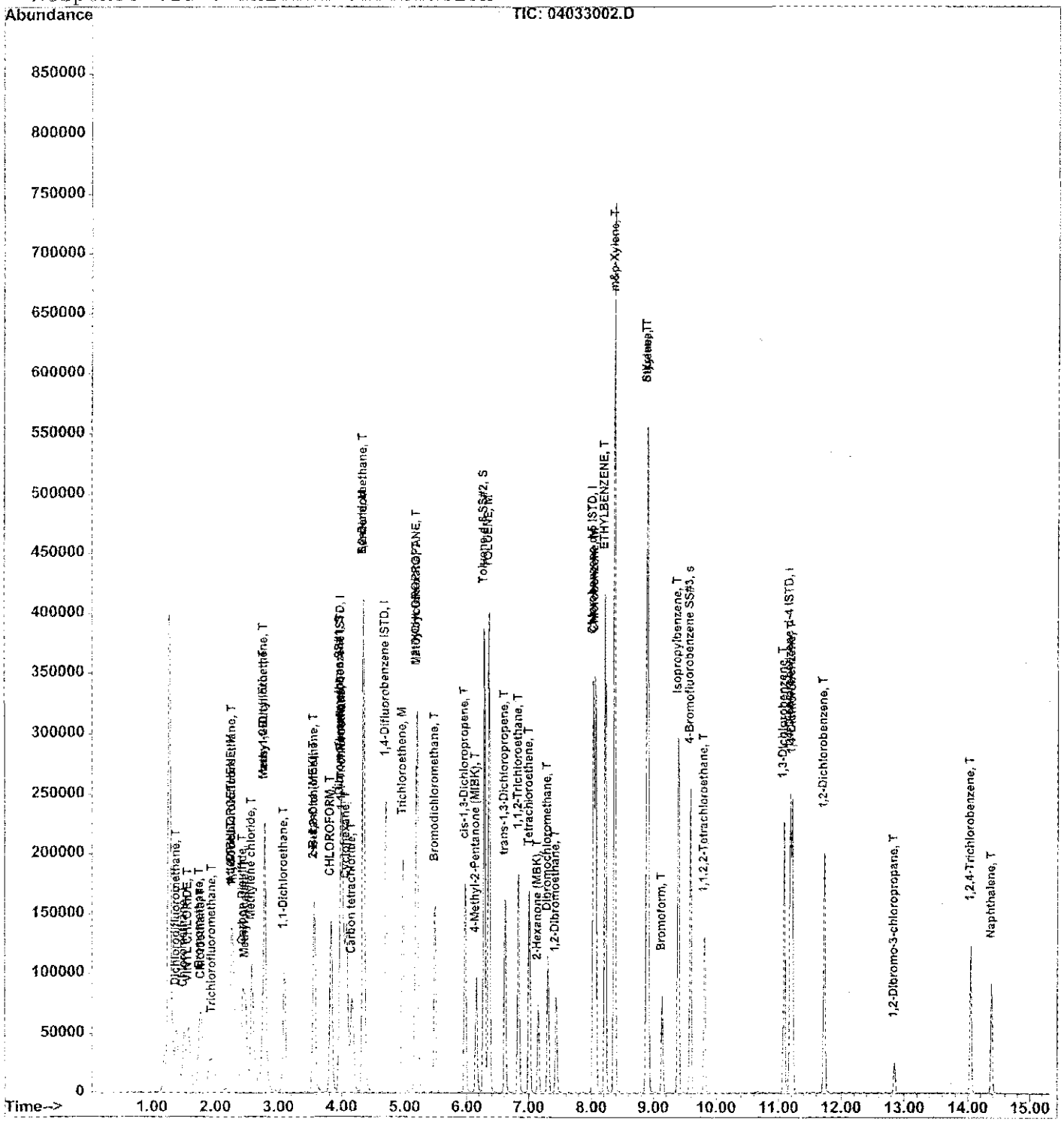
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) cis-1,3-Dichloropropene	5.98	75	169121	49.26	ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.16	43	99796	46.66	ug/L	99
34) TOLUENE	6.36	92	211186	47.46	ug/L	99
35) trans-1,3-Dichloropropene	6.62	75	142121	49.18	ug/L	99
36) 1,1,2-Trichloroethane	6.84	83	62925	47.74	ug/L	98
37) Tetrachloroethene	7.01	166	56416	47.75	ug/L	100
38) 2-Hexanone (MBK)	7.15	43	70279	47.93	ug/L	99
40) Dibromochloromethane	7.31	129	59457	46.91	ug/L	100
41) 1,2-Dibromoethane	7.44	107	62546	46.67	ug/L	99
42) Chlorobenzene	8.07	112	193086	45.37	ug/L	96
43) ETHYLBENZENE	8.22	91	350555	45.90	ug/L	99
44) m&p-Xylene	8.38	106	230755	88.90	ug/L	96
45) o-Xylene	8.89	106	114708	45.71	ug/L	95
46) Styrene	8.91	104	212444	45.86	ug/L	94
47) Bromoform	9.14	173	38038	49.84	ug/L	99
49) Isopropylbenzene	9.40	105	225203	47.45	ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.81	83	83646	47.59	ug/L	99
52) 1,3-Dichlorobenzene	11.09	146	87662	46.53	ug/L	100
53) 1,4-Dichlorobenzene	11.22	146	90900	40.65	ug/L	99
54) 1,2-Dichlorobenzene	11.74	146	81046	45.49	ug/L	98
55) 1,2-Dibromo-3-chloropropan	12.85	75	10998	48.56	ug/L	96
56) 1,2,4-Trichlorobenzene	14.05	180	42193	43.72	ug/L	98
57) Naphthalene	14.39	128	74892	38.86	ng/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033002.D Vial: 2
Acq On : 30 Mar 2004 11:05 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040330\04033003.D Vial: 3
Acq On : 30 Mar 2004 11:29 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	86	-0.01
2	t	acrolein	0.121	0.112	7.4	83	0.00
3	t	iodomethne	0.985	0.933	5.3	83	-0.01
4	t	acrylonitrile	0.212	0.196	7.5	82	0.00
5	t	tert-butanol	0.063	0.065	-3.2	84	0.00
6	t	vinyl acetate	3.201	3.084	3.7	84	-0.01
7	t	diisopropyl ether	3.077	2.935	4.6	82	-0.02
8	t	Ethyl tert-butyl ether	2.311	2.330	-0.8	87	-0.01
9	T	2,2-Dichloropropane	0.998	1.021	-2.3	89	-0.02
10	T	Bromochloromethane	0.292	0.280	4.1	85	-0.01
11	S	Dibromofluoromethane SS#1	0.602	0.610	-1.3	86	-0.01
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	-0.01
13	T	1,1-Dichloropropene	0.614	0.613	0.2	90	-0.02
14	t	tert-amyl methyl ether	1.158	1.096	5.4	82	-0.01
15	T	Dibromomethane	0.247	0.240	2.8	87	-0.01
16	t	1,4-dioxane	0.002	0.001	50.0#	72	0.02
17	T	2-Chloroethylvinyl Ether	0.260	0.243	6.5	82	-0.02
18	S	Toluene d-8 SS#2	1.297	1.319	-1.7	89	-0.01
19	I	Chlorobenzene d-5	1.000	1.000	0.0	91	-0.01
20	T	1,3-Dichloropropane	0.773	0.756	2.2	90	-0.01
21	T	1,1,1,2-Tetrachloroethane	0.310	0.286	7.7	87	-0.01
22	T	1,2,3-Trichloropropane	0.106	0.100	5.7	90	-0.01
23	s	4-Bromofluorobenzene SS#3	0.569	0.569	0.0	90	-0.02
24	T	Bromobenzene	0.338	0.312	7.7	86	-0.02
25	t	trans-1,4-dichloro-2-butene	0.396	0.400	-1.0	89	-0.01
26	T	n-Propylbenzene	1.777	1.678	5.6	87	-0.02
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	87	-0.01
28	T	2-Chlorotoluene	3.453	3.389	1.9	89	-0.02
29	T	4-Chlorotoluene	3.987	3.898	2.2	86	-0.02
30	T	1,3,5-Trimethylbenzene	3.127	3.008	3.8	85	-0.02
31	T	tert-Butylbenzene	2.100	2.032	3.2	87	-0.02
32	T	1,2,4-Trimethylbenzene	3.245	3.085	4.9	83	-0.02
33	T	sec-Butylbenzene	3.482	3.449	0.9	88	-0.02
34	T	4-Isopropyltoluene	2.465	2.402	2.6	87	-0.02
35	T	n-Butylbenzene	2.785	2.831	-1.7	89	-0.01
36	T	1,2,3-Trichlorobenzene	0.558	0.479	14.2	76	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------			ISTD	----------			
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------			ISTD	----------			
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------			ISTD	----------			
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------			ISTD	----------			
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033003.D Vial: 3
Acq On : 30 Mar 2004 11:29 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	4.00	168	116355	50.00	ug/L		-0.01
12) 1,4-Difluorobenzene	4.70	114	214623	50.00	ug/L		-0.01
19) Chlorobenzene d-5	8.03	117	181462	50.00	ug/L		-0.01
27) 1,4-Dichlorobenzene d-4	11.19	152	60220	50.00	ug/L		-0.01
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.97	113	70965	50.70	ug/L		-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.40%				
18) Toluene d-8 SS#2	6.28	98	283181	50.86	ug/L		-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.72%				
23) 4-Bromofluorobenzene SS#3	9.59	95	103185	49.98	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%				
Target Compounds							Qvalue
2) acrolein	2.17	56	13017	46.33	ug/L		87
3) iodomethne	2.38	142	108576	47.38	ug/L		98
4) acrylonitrile	2.75	53	22768	46.09	ug/L		98
5) tert-butanol	2.65	59	7528	51.65	ug/L		100
6) vinyl acetate	3.10	43	358885	48.18	ug/L		99
7) diisopropyl ether	3.13	45	341447	47.68	ug/L		98
8) Ethyl tert-butyl ether	3.44	59	271116	50.41	ug/L		98
9) 2,2-Dichloropropane	3.57	77	118760	51.14	ug/L		98
10) Bromochloromethane	3.77	128	32624	48.08	ug/L	#	88
13) 1,1-Dichloropropene	4.14	75	131520	49.88	ug/L		98
14) tert-amyl methyl ether	4.46	73	235156	47.32	ug/L		99
15) Dibromomethane	5.32	93	51451	48.45	ug/L		97
16) 1,4-dioxane	5.34	58	180	27.42	ug/L	#	3
17) 2-Chloroethylvinyl Ether	5.81	63	52136	46.76	ug/L		98
20) 1,3-Dichloropropane	7.04	76	137209	48.92	ug/L		98
21) 1,1,1,2-Tetrachloroethane	8.18	131	51819	46.05	ug/L		99
22) 1,2,3-Trichloropropane	9.86	110	18208	47.26	ug/L		100
24) Bromobenzene	9.78	156	56597	46.19	ug/L	#	86
25) trans-1,4-dichloro-2-buten	9.86	75	72645	50.58	ug/L	#	100
26) n-Propylbenzene	9.96	91	304575	47.23	ug/L		98
28) 2-Chlorotoluene	10.06	91	204060	49.07	ug/L		96
29) 4-Chlorotoluene	10.21	91	234767	48.89	ug/L		95
30) 1,3,5-Trimethylbenzene	10.21	105	181144	48.09	ug/L		97
31) tert-Butylbenzene	10.66	119	122395	48.39	ug/L		95
32) 1,2,4-Trimethylbenzene	10.73	105	185788	47.53	ug/L		98
33) sec-Butylbenzene	10.97	105	207689	49.53	ug/L		98
34) 4-Isopropyltoluene	11.18	119	144637	48.71	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040330\04033003.D Vial: 3
Acq On : 30 Mar 2004 11:29 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

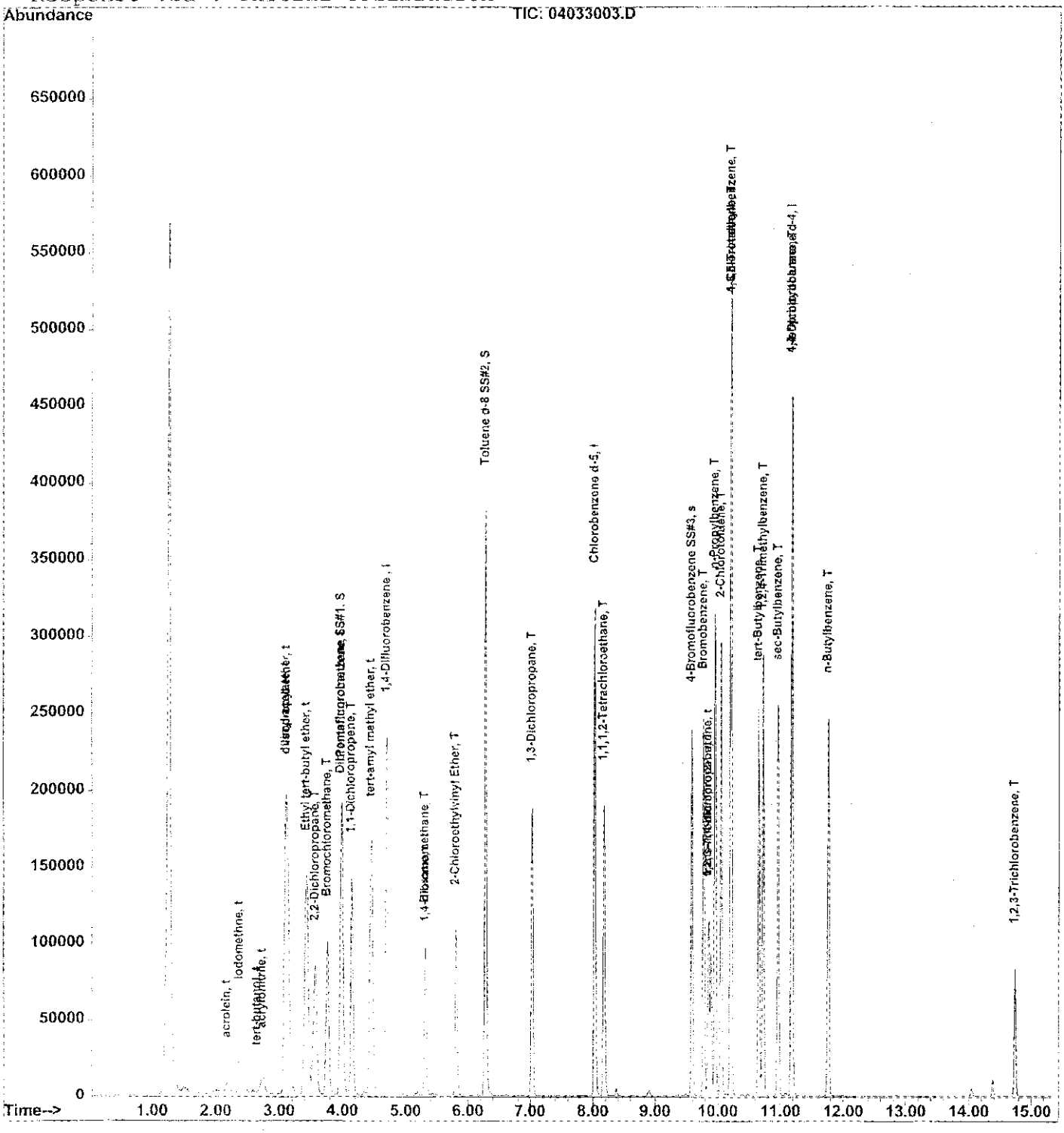
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	n-Butylbenzene	11.77	91	170462	50.83 ug/L	97
36)	1,2,3-Trichlorobenzene	14.74	180	28853	42.95 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040330\04033003.D Vial: 3
Acq On : 30 Mar 2004 11:29 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 30 13:53 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040331\04033102.D
Acq On : 31 Mar 2004 10:38 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	82	0.00
2	T	Dichlorodifluoromethane	0.899	0.887	1.3	81	0.00
3	T	Chloromethane	0.962	0.913	5.1	79	0.00
4	T	VINYL CHLORIDE	0.955	0.923	3.4	79	0.00
5	T	Bromomethane	0.783	0.713	8.9	80	0.00
6	T	Chloroethane	0.491	0.495	-0.8	81	0.00
7	T	Trichlorofluoromethane	0.555	0.689	-24.1	96	0.00
8	T	Acetone	0.240	0.313	-30.4#	110	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.710	3.4	80	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.609	-0.5	80	0.02
11	T	Carbon Disulfide	2.621	2.548	2.8	80	-0.03
12	T	Methyl Acetate	0.092	0.091	1.1	77	0.00
13	T	Methylene chloride	0.885	0.826	6.7	80	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.768	2.9	80	0.00
15	T	Methyl-t-Butyl Ether	1.501	1.532	-2.1	83	0.00
16	T	1,1-Dichloroethane	1.344	1.354	-0.7	84	0.00
17	T	cis-1,2-Dichloroethene	0.790	0.796	-0.8	83	0.00
18	T	2-Butanone (MEK)	0.446	0.499	-11.9	100	0.00
19	T	CHLOROFORM	1.443	1.469	-1.8	85	0.00
20	S	Dibromofluoromethane SS#1	0.598	0.611	-2.2	84	0.00
21	T	1,1,1-Trichloroethane	1.021	1.037	-1.6	85	0.00
22	T	Cyclohexane	1.166	1.170	-0.3	84	0.00
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	82	0.00
24	T	Carbon tetrachloride	0.386	0.396	-2.6	84	0.00
25	M	Benzene	1.859	1.891	-1.7	86	0.00
26	T	1,2-Dichloroethane	0.581	0.619	-6.5	86	0.00
27	M	Trichloroethene	0.422	0.438	-3.8	85	0.00
28	T	1,2-DICHLOROPROPANE	0.490	0.526	-7.3	87	0.00
29	T	Methylcyclohexane	0.436	0.446	-2.3	86	0.00
30	T	Bromodichloromethane	0.582	0.622	-6.9	88	0.00
31	T	cis-1,3-Dichloropropene	0.777	0.838	-7.9	88	0.00
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.505	-4.3	85	0.00
33	S	Toluene d-8 SS#2	1.292	1.341	-3.8	86	0.00
34	M	TOLUENE	1.007	1.037	-3.0	85	0.00
35	T	trans-1,3-Dichloropropene	0.654	0.712	-8.9	87	0.00
36	T	1,1,2-Trichloroethane	0.298	0.316	-6.0	87	0.00
37	T	Tetrachloroethene	0.267	0.271	-1.5	84	0.00
38	T	2-Hexanone (MBK)	0.332	0.381	-14.8	94	0.00
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	84	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040331\04033102.D Vial: 2
Acq On : 31 Mar 2004 10:38 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.342	-1.2	85	0.00
41	T	1,2-Dibromoethane	0.357	0.353	1.1	83	0.00
42	M	Chlorobenzene	1.135	1.091	3.9	84	0.00
43	T	ETHYLBENZENE	2.037	2.029	0.4	87	0.00
44	T	m&p-Xylene	0.692	0.660	4.6	81	0.00
45	T	o-Xylene	0.669	0.668	0.1	84	0.00
46	T	Styrene	1.236	1.224	1.0	83	0.00
47	T	Bromoform	0.204	0.216	-5.9	84	0.00
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	84	0.00
49	T	Isopropylbenzene	3.919	3.818	2.6	84	0.00
50	s	4-Bromofluorobenzene SS#3	1.678	1.719	-2.4	85	0.00
51	T	1,1,2,2-Tetrachloroethane	1.451	1.495	-3.0	85	0.00
52	T	1,3-Dichlorobenzene	1.556	1.469	5.6	81	0.00
53	T	1,4-Dichlorobenzene	1.847	1.548	16.2	83	0.00
54	T	1,2-Dichlorobenzene	1.471	1.382	6.1	81	0.00
55	T	1,2-Dibromo-3-chloropropane	0.187	0.197	-5.3	81	0.00
56	T	1,2,4-Trichlorobenzene	0.797	0.716	10.2	79	0.00
57	T	Naphthalene	1.591	1.377	13.5	73	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	ISTD							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	ISTD							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	ISTD							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	ISTD	----------	----------	----------		
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033102.D Vial: 2
Acq On : 31 Mar 2004 10:38 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:56 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	112100	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	202230	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.05	117	173026	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	57773	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	68529	51.11	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.22%			
33) Toluene d-8 SS#2	6.30	98	271240	51.90	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.80%			
50) 4-Bromofluorobenzene SS#3	9.60	95	99298	51.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	99454	49.33	ug/L	100
3) Chloromethane	1.50	50	102322	47.42	ug/L	99
4) VINYL CHLORIDE	1.58	62	103504	48.35	ug/L	100
5) Bromomethane	1.75	94	79945	45.55	ug/L	100
6) Chloroethane	1.79	64	55491	50.41	ug/L	99
7) Trichlorofluoromethane	1.96	101	77236	62.08	ug/L	99
8) Acetone	2.28	43	35049	65.15	ug/L	95
9) 1,1-DICHLOROETHENE	2.27	96	79641	48.32	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.29	101	68279	50.27	ug/L	99
11) Carbon Disulfide	2.44	76	285610	48.60	ug/L	99
12) Methyl Acetate	2.50	74	10146	49.06	ug/L	98
13) Methylene chloride	2.59	84	92596	46.67	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	86115	48.57	ug/L	95
15) Methyl-t-Butyl Ether	2.79	73	171707	51.02	ug/L	100
16) 1,1-Dichloroethane	3.10	63	151831	50.38	ug/L	100
17) cis-1,2-Dichloroethene	3.58	96	89199	50.36	ug/L	97
18) 2-Butanone (MEK)	3.56	43	55887	55.86	ug/L	99
19) CHLOROFORM	3.84	83	164709	50.91	ug/L	100
21) 1,1,1-Trichloroethane	4.03	97	116257	50.78	ug/L #	64
22) Cyclohexane	4.09	56	131109	50.16	ug/L	98
24) Carbon tetrachloride	4.18	117	80117	51.30	ug/L	100
25) Benzene	4.36	78	382395	50.86	ug/L	100
26) 1,2-Dichloroethane	4.37	62	125107	53.24	ug/L	98
27) Trichloroethene	4.98	95	88663	51.93	ug/L	97
28) 1,2-DICHLOROPROPANE	5.21	63	106296	53.62	ug/L	99
29) Methylcyclohexane	5.20	83	90250	51.13	ug/L	97
30) Bromodichloromethane	5.50	83	125845	53.42	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033102.D Vial: 2
Acq On : 31 Mar 2004 10:38 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:56 2004

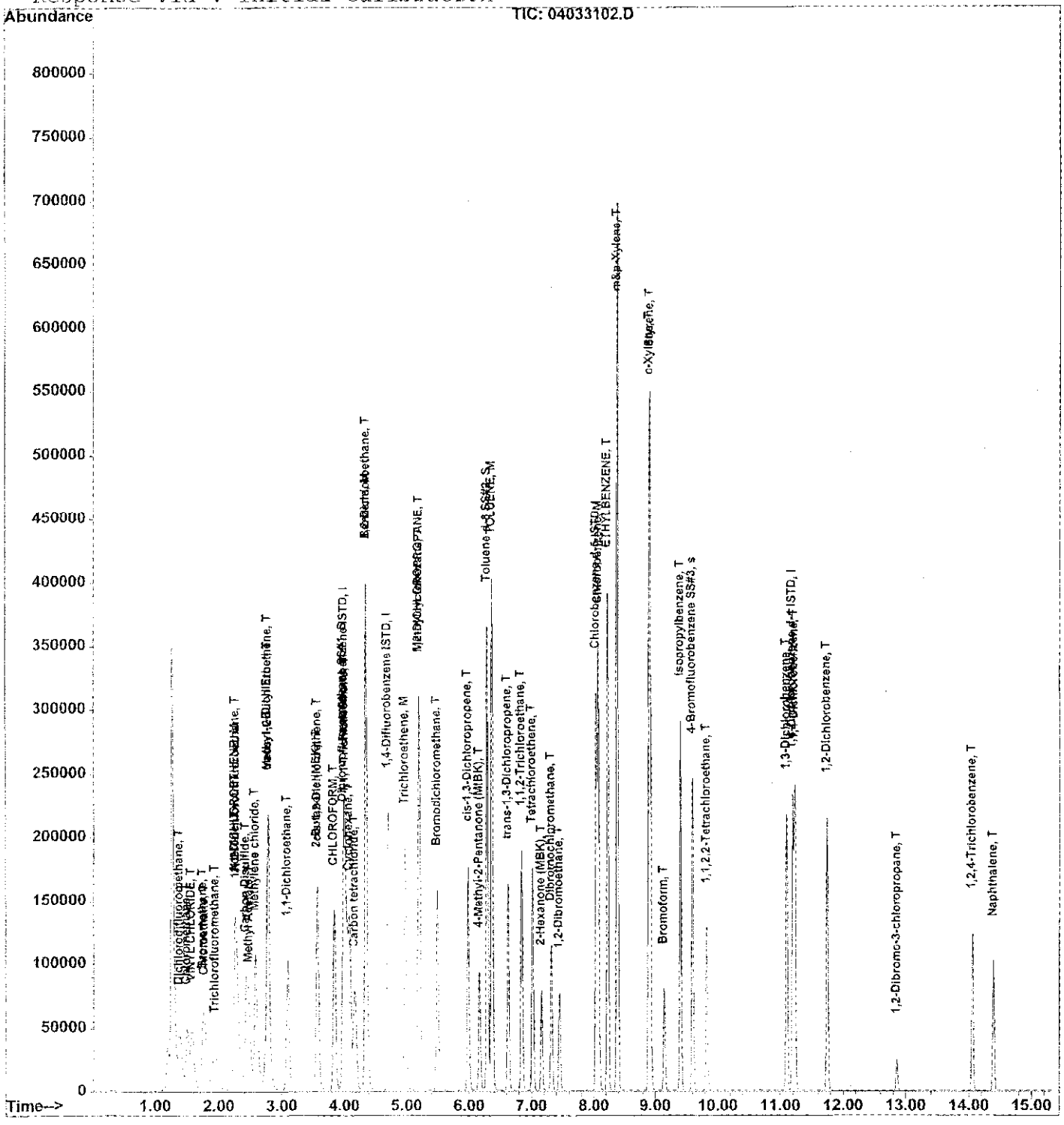
Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	169519	53.95	ug/L	97
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	102204	52.22	ug/L	99
34)	TOLUENE	6.37	92	209741	51.51	ug/L	98
35)	trans-1,3-Dichloropropene	6.63	75	143910	54.42	ug/L	97
36)	1,1,2-Trichloroethane	6.85	83	63992	53.05	ug/L	96
37)	Tetrachloroethene	7.02	166	54756	50.65	ug/L	99
38)	2-Hexanone (MBK)	7.17	43	77075	57.45	ug/L	99
40)	Dibromochloromethane	7.33	129	59122	50.54	ug/L	99
41)	1,2-Dibromoethane	7.46	107	61037	49.34	ug/L	100
42)	Chlorobenzene	8.08	112	188744	48.05	ug/L	95
43)	ETHYLBENZENE	8.24	91	351086	49.81	ug/L	98
44)	m&p-Xylene	8.39	106	228481	95.37	ug/L	94
45)	o-Xylene	8.90	106	115610	49.91	ug/L	96
46)	Styrene	8.93	104	211822	49.54	ug/L	93
47)	Bromoform	9.15	173	37322	52.98	ug/L	100
49)	Isopropylbenzene	9.41	105	220573	48.71	ug/L	98
51)	1,1,2,2 Tetrachloroethane	9.83	83	86376	51.50	ug/L	100
52)	1,3-Dichlorobenzene	11.11	146	84868	47.21	ug/L	99
53)	1,4-Dichlorobenzene	11.24	146	89436	41.91	ug/L	98
54)	1,2-Dichlorobenzene	11.75	146	79853	46.97	ug/L	97
55)	1,2-Dibromo-3-chloropropan	12.87	75	11403	52.76	ug/L	96
56)	1,2,4-Trichlorobenzene	14.06	180	41372	44.93	ug/L	99
57)	Naphthalene	14.40	128	79543	43.26	ng/L	100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040331\04033102.D Vial: 2
Acq On : 31 Mar 2004 10:38 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 10:56 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040331\04033103.D Vial: 3
Acq On : 31 Mar 2004 11:01 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	81	0.00
2	t	acrolein	0.121	0.115	5.0	81	0.00
3	t	iodomethne	0.985	0.949	3.7	80	0.00
4	t	acrylonitrile	0.212	0.203	4.2	81	0.00
5	t	tert-butanol	0.063	0.066	-4.8	81	0.02
6	t	vinyl acetate	3.201	3.197	0.1	83	0.00
7	t	diisopropyl ether	3.077	3.071	0.2	81	0.00
8	t	Ethyl tert-butyl ether	2.311	2.393	-3.5	85	0.00
9	T	2,2-Dichloropropane	0.998	1.049	-5.1	87	0.00
10	T	Bromochloromethane	0.292	0.283	3.1	82	0.00
11	S	Dibromofluoromethane SS#1	0.602	0.614	-2.0	83	0.00
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
13	T	1,1-Dichloropropene	0.614	0.625	-1.8	87	0.00
14	t	tert-amyl methyl ether	1.158	1.158	0.0	83	0.00
15	T	Dibromomethane	0.247	0.249	-0.8	86	0.00
16	t	1,4-dioxane	0.002	0.001	50.0#	52	0.00
17	T	2-Chloroethylvinyl Ether	0.260	0.251	3.5	81	0.00
18	S	Toluene d-8 SS#2	1.297	1.343	-3.5	85	0.00
19	I	Chlorobenzene d-5	1.000	1.000	0.0	87	0.00
20	T	1,3-Dichloropropane	0.773	0.755	2.3	85	0.00
21	T	1,1,1,2-Tetrachloroethane	0.310	0.287	7.4	84	0.00
22	T	1,2,3-Trichloropropane	0.106	0.101	4.7	86	0.00
23	s	4-Bromofluorobenzene SS#3	0.569	0.576	-1.2	87	0.00
24	T	Bromobenzene	0.338	0.312	7.7	82	0.00
25	t	trans-1,4-dichloro-2-butene	0.396	0.420	-6.1	90	0.00
26	T	n-Propylbenzene	1.777	1.714	3.5	84	0.00
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	84	0.00
28	T	2-Chlorotoluene	3.453	3.342	3.2	85	0.00
29	T	4-Chlorotoluene	3.987	3.905	2.1	84	0.00
30	T	1,3,5-Trimethylbenzene	3.127	3.052	2.4	83	0.00
31	T	tert-Butylbenzene	2.100	2.019	3.9	84	0.00
32	T	1,2,4-Trimethylbenzene	3.245	3.143	3.1	82	0.00
33	T	sec-Butylbenzene	3.482	3.441	1.2	85	0.00
34	T	4-Isopropyltoluene	2.465	2.436	1.2	86	0.00
35	T	n-Butylbenzene	2.785	2.852	-2.4	87	0.00
36	T	1,2,3-Trichlorobenzene	0.558	0.482	13.6	74	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------			ISTD	----------			
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------			ISTD	----------			
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------			ISTD	----------			
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------			ISTD	----------			
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033103.D Vial: 3
Acq On : 31 Mar 2004 11:01 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 14:30 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	4.01	168	110501	50.00	ug/L		0.00
12) 1,4-Difluorobenzene	4.72	114	203557	50.00	ug/L		0.00
19) Chlorobenzene d-5	8.05	117	173311	50.00	ug/L		0.00
27) 1,4-Dichlorobenzene d-4	11.20	152	58385	50.00	ug/L		0.00
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	3.99	113	67821	51.02	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.04%				
18) Toluene d-8 SS#2	6.30	98	273459	51.78	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.56%				
23) 4-Bromofluorobenzene SS#3	9.60	95	99747	50.59	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.18%				
Target Compounds							Qvalue
2) acrolein	2.18	56	12687	47.55	ug/L		86
3) iodomethne	2.38	142	104818	48.16	ug/L		98
4) acrylonitrile	2.75	53	22403	47.76	ug/L		99
5) tert-butanol	2.66	59	7289	52.66	ug/L		100
6) vinyl acetate	3.11	43	353309	49.95	ug/L		98
7) diisopropyl ether	3.14	45	339313	49.89	ug/L		97
8) Ethyl tert-butyl ether	3.44	59	264394	51.76	ug/L		98
9) 2,2-Dichloropropane	3.58	77	115883	52.55	ug/L		98
10) Bromochloromethane	3.78	128	31317	48.60	ug/L	#	86
13) 1,1-Dichloropropene	4.16	75	127133	50.84	ug/L		98
14) tert-amyl methyl ether	4.47	73	235684	50.00	ug/L		99
15) Dibromomethane	5.33	93	50735	50.37	ug/L		98
16) 1,4-dioxane	5.35	58	130	20.88	ug/L	#	1
17) 2-Chloroethylvinyl Ether	5.83	63	51164	48.39	ug/L		97
20) 1,3-Dichloropropane	7.04	76	130817	48.84	ug/L		99
21) 1,1,1,2-Tetrachloroethane	8.19	131	49783	46.32	ug/L		98
22) 1,2,3-Trichloropropane	9.87	110	17550	47.69	ug/L		100
24) Bromobenzene	9.79	156	54116	46.24	ug/L	#	86
25) trans-1,4-dichloro-2-buten	9.87	75	72865	53.12	ug/L	#	100
26) n-Propylbenzene	9.97	91	297107	48.24	ug/L		97
28) 2-Chlorotoluene	10.07	91	195108	48.39	ug/L		96
29) 4-Chlorotoluene	10.23	91	228019	48.97	ug/L		95
30) 1,3,5-Trimethylbenzene	10.23	105	178173	48.79	ug/L		97
31) tert-Butylbenzene	10.67	119	117901	48.08	ug/L		93
32) 1,2,4-Trimethylbenzene	10.74	105	183514	48.42	ug/L		98
33) sec-Butylbenzene	10.98	105	200882	49.41	ug/L		98
34) 4-Isopropyltoluene	11.20	119	142207	49.40	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040331\04033103.D Vial: 3
Acq On : 31 Mar 2004 11:01 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 31 14:30 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35) n-Butylbenzene	11.78	91	166497	51.21	ug/L	97
36) 1,2,3-Trichlorobenzene	14.75	180	28136	43.20	ug/L	99

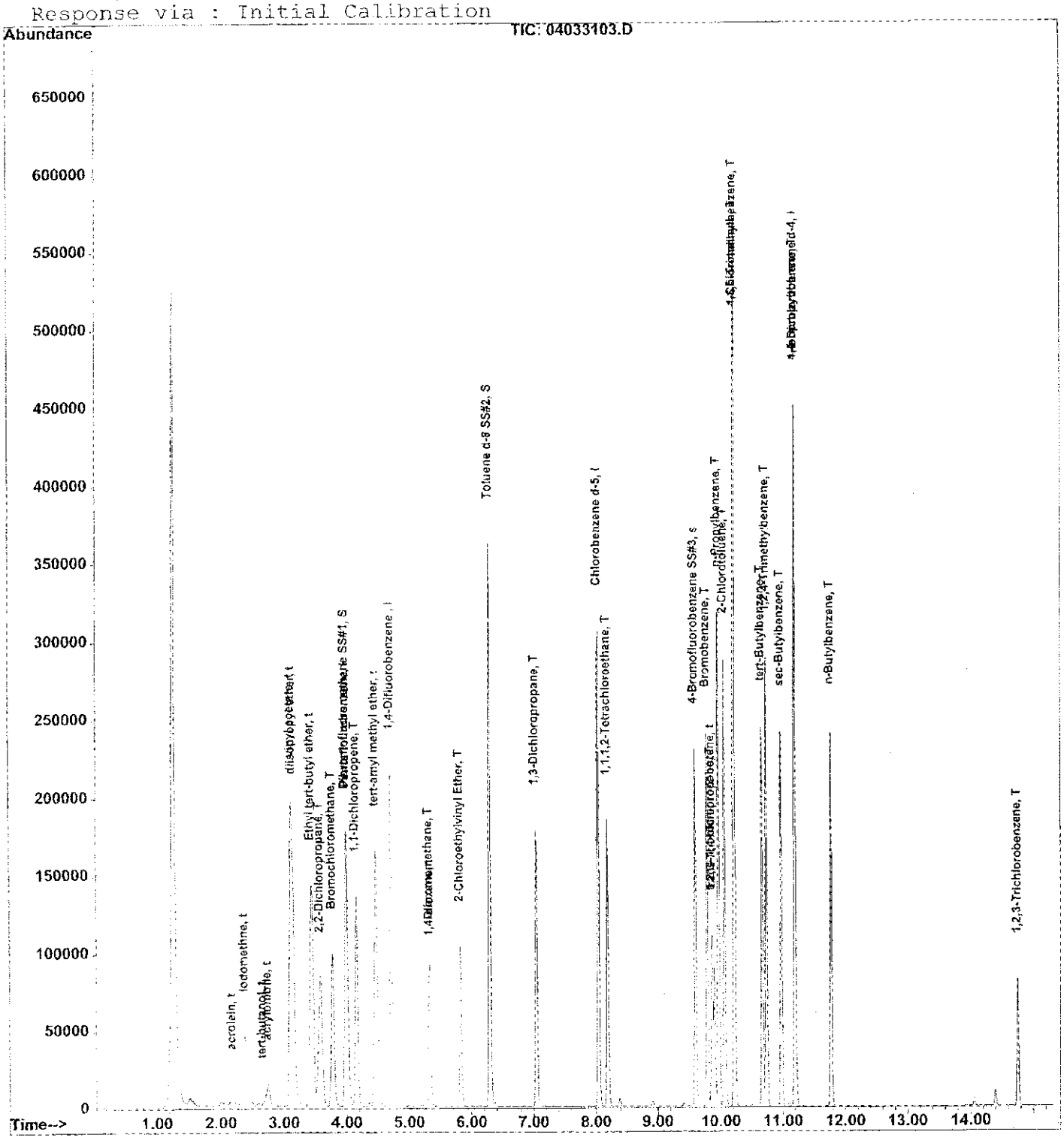
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040331\04033103.D
Acq On : 31 Mar 2004 11:01 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Mar 31 14:30 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04033001.D**	**DATE/TIME ANALYZED:**	**03/30/04 09:49**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.9
75	30.0 - 60.0% of mass 95	51.1
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	59.6
175	5.0 - 9.0% of mass 174	7.7
176	Greater than 95.0%, but less than 101.0% of mass 174	99.6
177	5.0 - 9.0% of mass 176	6.7

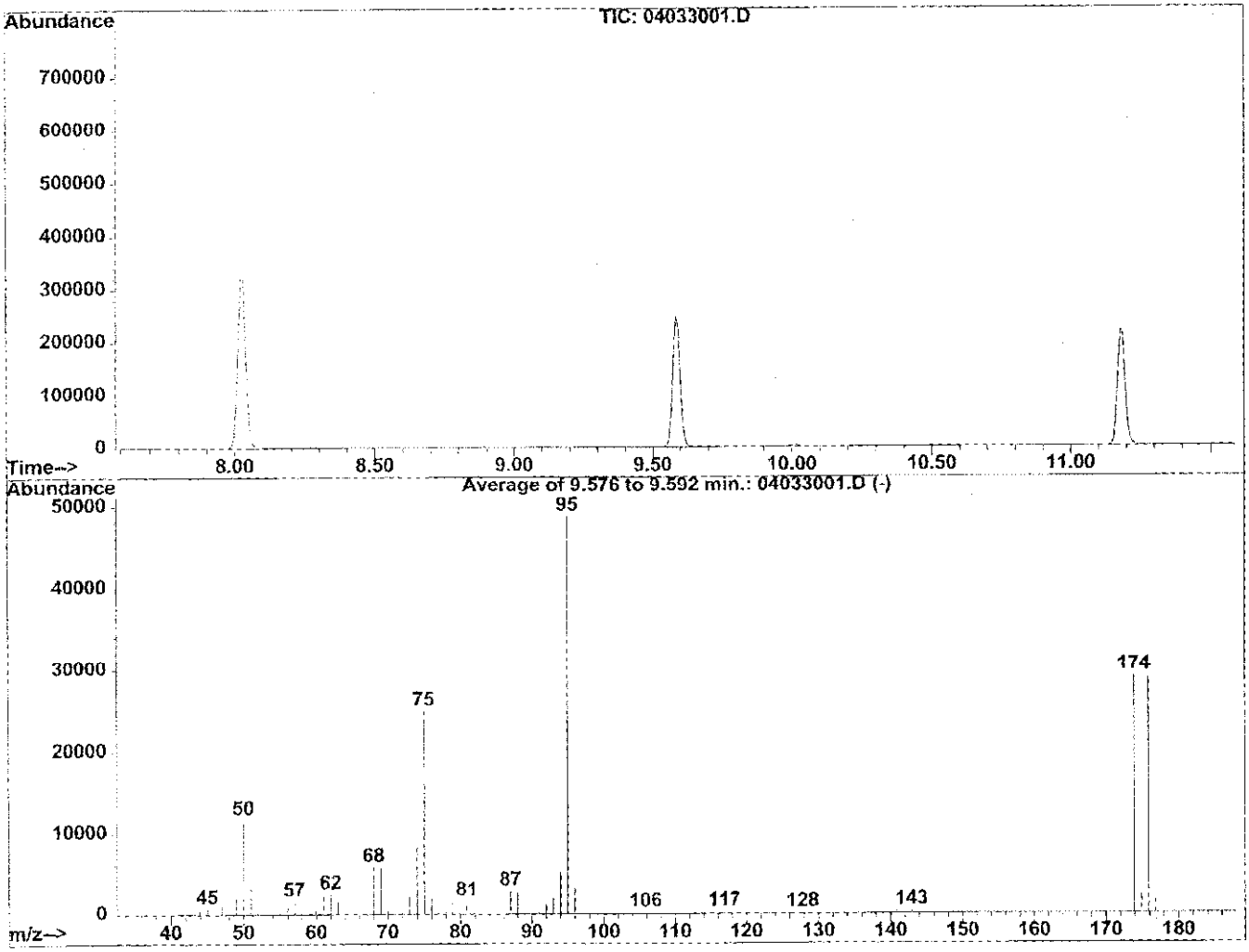
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB032604	04033013-01	04033020.D	03/30/04 18:46
DMW-3I-032604	04033013-04	04033025.D	03/30/04 20:52
DMW-3S-032604	04033013-06	04033026.D	03/30/04 21:18
DMW-9I-032604	04033013-08	04033027.D	03/30/04 21:45
DMW-1A-033004	04033013-10	04033021.D	03/30/04 19:10
DMW-1B-033004	04033013-12	04033022.D	03/30/04 19:34

BFB

Data File : C:\HPCHEM\1\DATA\040330\04033001.D
Acq On : 30 Mar 2004 9:49 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1160, 1161, 1162; Background Corrected with Scan 1154

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	11661	PASS
75	95	30	60	51.1	24901	PASS
95	95	100	100	100.0	48693	PASS
96	95	5	9	6.5	3177	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	59.6	29016	PASS
175	174	5	9	7.7	2222	PASS
176	174	95	101	99.6	28893	PASS
177	176	5	9	6.7	1930	PASS

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VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04033101.D**	**DATE/TIME ANALYZED:**	**03/31/04 09:58**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	24.7
75	30.0 - 60.0% of mass 95	52.4
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	59.6
175	5.0 - 9.0% of mass 174	7.9
176	Greater than 95.0%, but less than 101.0% of mass 174	99.0
177	5.0 - 9.0% of mass 176	6.6

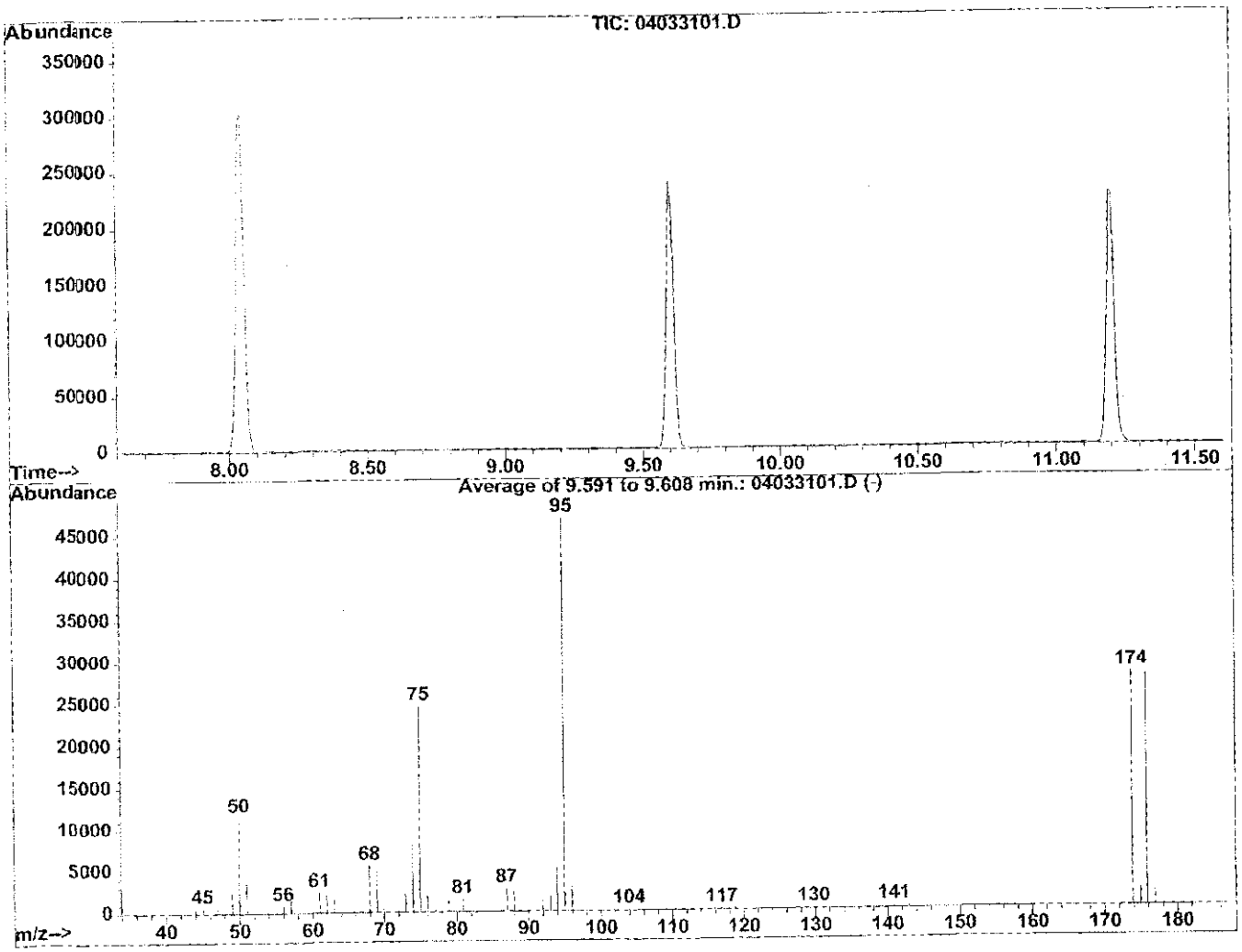
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-3D-032604	04033013-02	04033108.D	03/31/04 13:03
MW-2-033004	04033013-14	04033109.D	03/31/04 13:27

BFB

Data File : C:\HPCHEM\1\DATA\040331\04033101.D
Acq On : 31 Mar 2004 9:58 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1162, 1163, 1164; Background Corrected with Scan 1156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.7	11594	PASS
75	95	30	60	52.4	24595	PASS
95	95	100	100	100.0	46904	PASS
96	95	5	9	6.3	2951	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	59.6	27949	PASS
175	174	5	9	7.9	2205	PASS
176	174	95	101	99.0	27680	PASS
177	176	5	9	6.6	1830	PASS

Injection Log

Directory: c:\hpchem\1\data\040330

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04033001.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	30 Mar 04 09:49
2	2	04033002.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	30 Mar 04 11:05
3	3	04033003.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	30 Mar 04 11:29
4	4	04033004.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 11:53
5	5	04033005.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 12:17
6	6	04033006.d	1.	04032606-04 5mL	IS/S 1uL #423	30 Mar 04 12:41
7	7	04033007.d	1.	04032606-05 5mL	IS/S 1uL #423	30 Mar 04 13:05
8	8	04033008.d	1.	04032603-14 500D	IS/S 1uL #423	30 Mar 04 13:29
9	9	04033009.d	1.	04032606-09 10D	IS/S 1uL #423	30 Mar 04 13:55
10	10	04033010.d	1.	04032603-16 20D	IS/S 1uL #423	30 Mar 04 14:22
11	11	04033011.d	1.	04032603-18 20D	IS/S 1uL #423	30 Mar 04 14:49
12	12	04033012.d	1.	04032603-06 100D	IS/S 1uL #423	30 Mar 04 15:24
13	13	04033013.d	1.	04032603-08 100D	IS/S 1uL #423	30 Mar 04 15:50
14	14	04033014.d	1.	04032603-12 100D	IS/S 1uL #423	30 Mar 04 16:17
15	15	04033015.d	1.	04032606-03 100D	IS/S 1uL #423	30 Mar 04 16:44
16	16	04033016.d	1.	04032618-01 100D	IS/S 1uL #423	30 Mar 04 17:11
17	17	04033017.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 17:35
18	18	04033018.d	1.	04033017-01 5mL	IS/S 1uL #423	30 Mar 04 17:58
19	19	04033019.d	1.	04032419-08 5mL	IS/S 1uL #423	30 Mar 04 18:22
20	20	04033020.d	1.	04033013-01 5mL	IS/S 1uL #423	30 Mar 04 18:46
21	21	04033021.d	1.	04033013-10 5mL	IS/S 1uL #423	30 Mar 04 19:10
22	22	04033022.d	1.	04033013-12 5mL	IS/S 1uL #423	30 Mar 04 19:34
23	23	04033023.d	1.	04033013-14 5mL	IS/S 1uL #423	30 Mar 04 19:58
24	24	04033024.d	1.	04033013-02 10D	IS/S 1uL #423	30 Mar 04 20:25
25	25	04033025.d	1.	04033013-04 10D	IS/S 1uL #423	30 Mar 04 20:52
26	26	04033026.d	1.	04033013-06 10D	IS/S 1uL #423	30 Mar 04 21:18
27	27	04033027.d	1.	04033013-08 10D	IS/S 1uL #423	30 Mar 04 21:45
28	28	04033028.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	30 Mar 04 22:09
29	29	04033029.d	1.	04033017-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	30 Mar 04 22:33
30	30	04033030.d	1.	04033017-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	30 Mar 04 22:57
31	31	04033031.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	30 Mar 04 23:21
32	32	04033032.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 02:58

Injection Log

Directory: c:\hpchem\1\data\040331

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	04033132.d	1.	04032606-04 10D	IS/S 1uL #423	1 Apr 04 00:24
2	33	04033133.d	1.	04033013-06 100D	IS/S 1uL #423	1 Apr 04 00:50
3	34	04033134.d	1.	04033013-08 100D	IS/S 1uL #423	1 Apr 04 01:17
4	35	04033135.d	1.	04033013-10 100D	IS/S 1uL #423	1 Apr 04 01:44
5	36	04033136.d	1.	04033013-12 100D	IS/S 1uL #423	1 Apr 04 02:10
6	37	04033137.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	1 Apr 04 02:34
7	38	04033138.d	1.	04033027-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	1 Apr 04 02:58
8	39	04033139.d	1.	04033027-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	1 Apr 04 03:22
9	40	04033140.d	1.	04033024-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	1 Apr 04 03:46
10	41	04033141.d	1.	04033024-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	1 Apr 04 04:10
11	42	04033142.d	1.	LCS-1 25ppb	IS/S 1uL #423, LCS 5uL #350	1 Apr 04 04:34
12	43	04033143.d	1.	LCS-1, DUP 25ppb	IS/S 1uL #423, LCS 5uL #350	1 Apr 04 04:57
13	44	04033144.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	1 Apr 04 05:21
14	45	04033145.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	1 Apr 04 05:45
15	1	04033101.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	31 Mar 04 09:58
16	2	04033102.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	31 Mar 04 10:38
17	3	04033103.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	31 Mar 04 11:01
18	4	04033104.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 11:25
19	5	04033105.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 11:49
20	6	04033106.d	1.	04032603-06 200D	IS/S 1uL #423	31 Mar 04 12:16
21	7	04033107.d	1.	04033013-04 200D	IS/S 1uL #423	31 Mar 04 12:40
22	8	04033108.d	1.	04033013-02 5mL	IS/S 1uL #423	31 Mar 04 13:03
23	9	04033109.d	1.	04033013-14 5mL	IS/S 1uL #423	31 Mar 04 13:27
24	10	04033110.d	1.	04033027-01 5mL	IS/S 1uL #423	31 Mar 04 14:42
25	11	04033111.d	1.	04033024-01 5mL	IS/S 1uL #423	31 Mar 04 15:56
26	12	04033112.d	1.	04033024-02 5mL	IS/S 1uL #423	31 Mar 04 16:20
27	13	04033113.d	1.	04033015-01 5mL	IS/S 1uL #423	31 Mar 04 16:44
28	14	04033114.d	1.	04033015-02 5mL	IS/S 1uL #423	31 Mar 04 17:08
29	15	04033115.d	1.	04033015-03 5mL	IS/S 1uL #423	31 Mar 04 17:32
30	16	04033116.d	1.	04033015-04 5mL	IS/S 1uL #423	31 Mar 04 17:56
31	17	04033117.d	1.	04033015-05 5mL	IS/S 1uL #423	31 Mar 04 18:20
32	18	04033118.d	1.	04033015-06 5mL	IS/S 1uL #423	31 Mar 04 18:43
33	19	04033119.d	1.	04033020-01 5mL	IS/S 1uL #423	31 Mar 04 19:07
34	20	04033120.d	1.	04033019-06 5mL	IS/S 1uL #423	31 Mar 04 19:31
35	21	04033121.d	1.	04033019-07 5mL	IS/S 1uL #423	31 Mar 04 19:55
36	22	04033122.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	31 Mar 04 20:19
37	23	04033123.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	31 Mar 04 20:43
38	24	04033124.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 21:07
39	25	04033125.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	31 Mar 04 21:31
40	26	04033126.d	1.	04033109-25 5mL	IS/S 1uL #423	31 Mar 04 21:55
41	27	04033127.d	1.	04033106-01 5mL	IS/S 1uL #423	31 Mar 04 22:19
42	28	04033128.d	1.	04033105-04 5mL	IS/S 1uL #423	31 Mar 04 22:42
43	29	04033129.d	1.	04033103-01 5mL	IS/S 1uL #423	31 Mar 04 23:06
44	30	04033130.d	1.	04033104-01 5mL	IS/S 1uL #423	31 Mar 04 23:30
45	31	04033131.d	1.	04033105-01 10D	IS/S 1uL #423	31 Mar 04 23:57

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Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Semivolatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *DFTPP Tune Summary*

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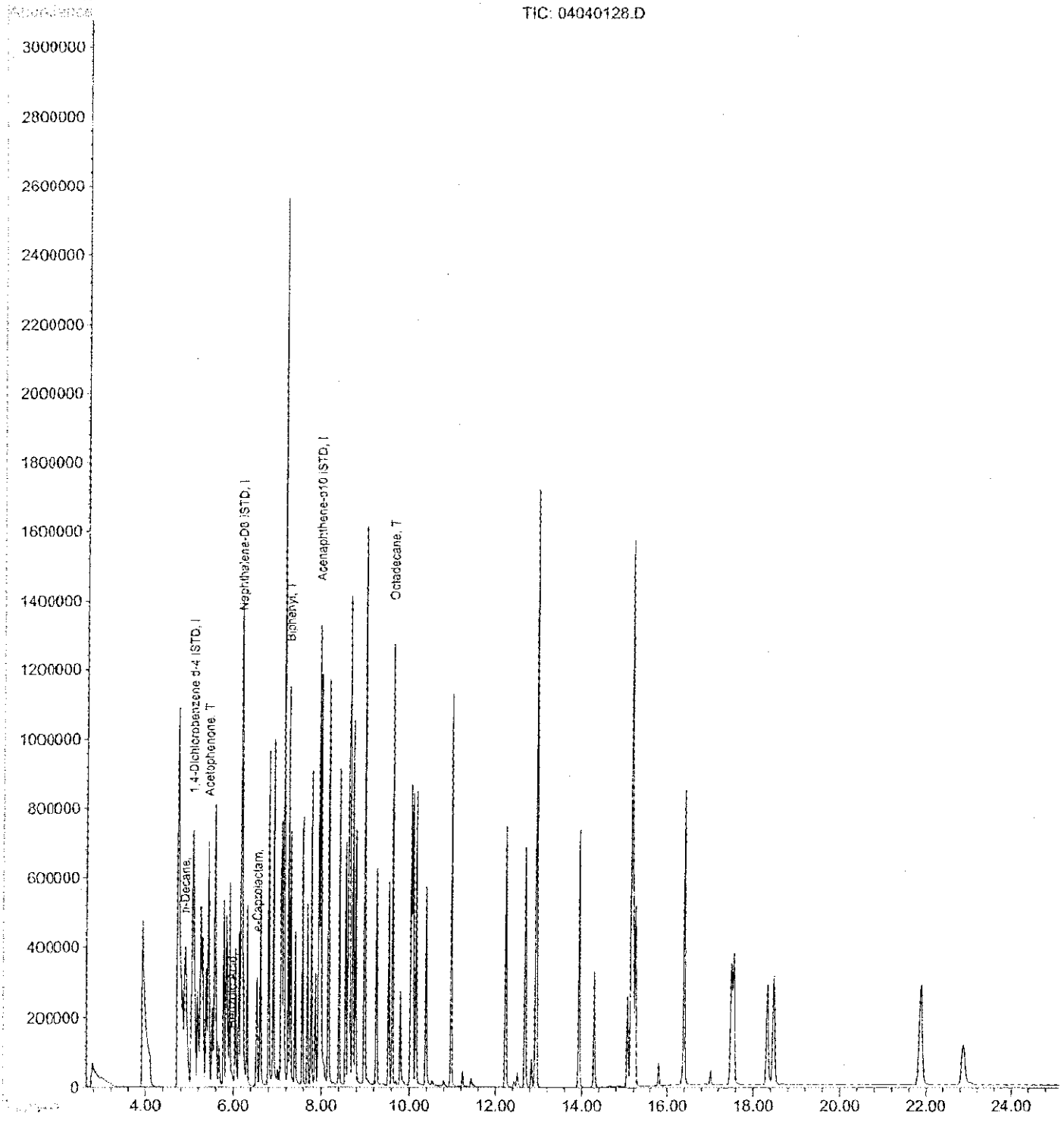
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.06	152	258187	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.17	136	1018674	40.00	mg/L	-0.02
33) Acenaphthene-d10 ISTD	7.95	164	522267	40.00	mg/L	-0.02
59) Phenanthrene-d10 ISTD	10.04	188	702035	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.18	240	479740	40.00	mg/L	-0.03
81) Perylene-d12 ISTD	18.47	264	383542	40.00	mg/L	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	900597	114.60	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 57.30%			
5) Phenol-d6 Acid SS 2	4.73	99	1230719	124.22	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 62.11%			
19) Nitrobenzene-d5 BN SS 1	5.57	82	517499	62.26	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 62.26%			
37) 2-Fluorobiphenyl BN SS 2	7.15	172	1034300	67.82	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 67.82%			
58) 2,4,6-Tribromophenol Acid	8.99	330	344437	170.79	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 85.40%			
74) Terphenyl-d14 BN SS 3	12.94	244	1266966	89.35	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 89.35%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	213587m	21.28	mg/L	
3) N-Nitrosodimethylamine	2.78	74	148773	24.42	mg/L	99
6) PHENOL	4.74	94	298198	25.29	mg/L	85
7) Bis(2-chloroethyl)ether	4.84	63	125717	26.39	mg/L #	72
8) 2-Chlorophenol	4.91	128	223889	24.56	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.07	146	380489m	27.33	mg/L	
10) 1,3'-Dichlorobenzene	5.03	146	146956m	22.87	mg/L	
11) 1,2'-Dichlorobenzene	5.25	146	238133	25.60	mg/L	100
12) Benzyl Alcohol	5.18	108	139137	27.01	mg/L	99
13) 2-Methylphenol	5.26	107	167862	27.55	mg/L #	81
14) bis(2-chloroisopropyl)ethe	5.30	45	258060	26.52	mg/L	98
15) 3,4-Methylphenol	5.38	107	241464	30.01	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.43	70	169479	28.03	mg/L	99
17) Hexachloroethane	5.51	117	82954	25.22	mg/L	100
20) Nitrobenzene	5.59	77	247473	30.13	mg/L	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21)	Isophorone	5.77	82	471175	27.60 mg/L	99
22)	2-NITROPHENOL	5.85	139	149690	27.80 mg/L	96
23)	2,4-dimethylphenol	5.83	122	154101	20.37 mg/L	99
24)	Bis(2-chloroethoxy)methane	5.91	93	271331	28.24 mg/L	98
25)	2,4-DICHLOROPHENOL	6.05	162	180342	27.45 mg/L	99
26)	1,2,4'-Trichlorobenzene	6.13	180	166634	26.25 mg/L	100
27)	Naphthalene`	6.19	128	710118	28.67 mg/L #	99
28)	4-Chloroaniline	6.22	127	318475	24.27 mg/L	97
29)	HEXACHLOROBUTADIENE`	6.31	225	94340	25.31 mg/L	100
30)	4-CHLORO-3-METHYLPHENOL	6.62	107	205222	32.37 mg/L	100
31)	2-Methylnaphthalene	6.80	142	520389	30.04 mg/L	100
32)	1-Methylnaphthalene	6.91	142	488227	28.86 mg/L	100
34)	Hexachlorocyclopentadiene	7.01	237	10123	17.38 mg/L #	86
35)	2,4,6-TRICHLOROPHENOL	7.09	97	72684	34.40 mg/L	94
36)	2,4,5-trichlorophenol	7.14	97	68431	34.52 mg/L	97
38)	2-Chloronaphthalene	7.30	162	404986	28.59 mg/L	98
39)	2-Nitroaniline	7.40	65	128873	34.31 mg/L	98
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected	
41)	1,3-dinitrobenzene	0.00	168	0	Not Detected	
42)	1,2-dinitrobenzene	7.86	168	447	Not Detected	
43)	3-Nitroaniline	7.86	138	143224	32.31 mg/L	100
44)	4-Nitroaniline	8.65	138	111478	31.51 mg/L	98
45)	Dimethylphthalate	7.58	163	627062	37.18 mg/L	100
46)	2,6-Dinitrotoluene	7.69	165	151381	36.03 mg/L	90
47)	Acenaphthylene	7.77	152	756091	29.88 mg/L	100
48)	ACENAPHTHENE	7.99	154	516298	34.19 mg/L	99
49)	2,4-Dinitrophenol	8.00	184	49505	56.31 mg/L #	54
50)	4-nitrophenol	8.00	139	98860	38.92 mg/L	92
51)	2,4-Dinitrotoluene	8.16	165	197918	39.09 mg/L	97
52)	Dibenzofuran	8.17	168	631308	33.90 mg/L	99
53)	2,3,5,6-tetrachlorophenol	8.36	232	1537	Not Detected	
54)	2,3,4,6-tetrachlorophenol	8.36	232	1537	Not Detected	
55)	Diethylphthalate	8.42	149	738415	39.52 mg/L	100
56)	4-chlorophenyl phenyl ethe	8.56	204	246985	34.63 mg/L	99
57)	Fluorene	8.62	166	550361	36.73 mg/L	99
60)	4,6-Dinitro-2-methylphenol	8.71	198	83570	54.99 mg/L #	74
61)	N-NITROSODI-N-PHENYLAMINE	8.72	169	445898	37.66 mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

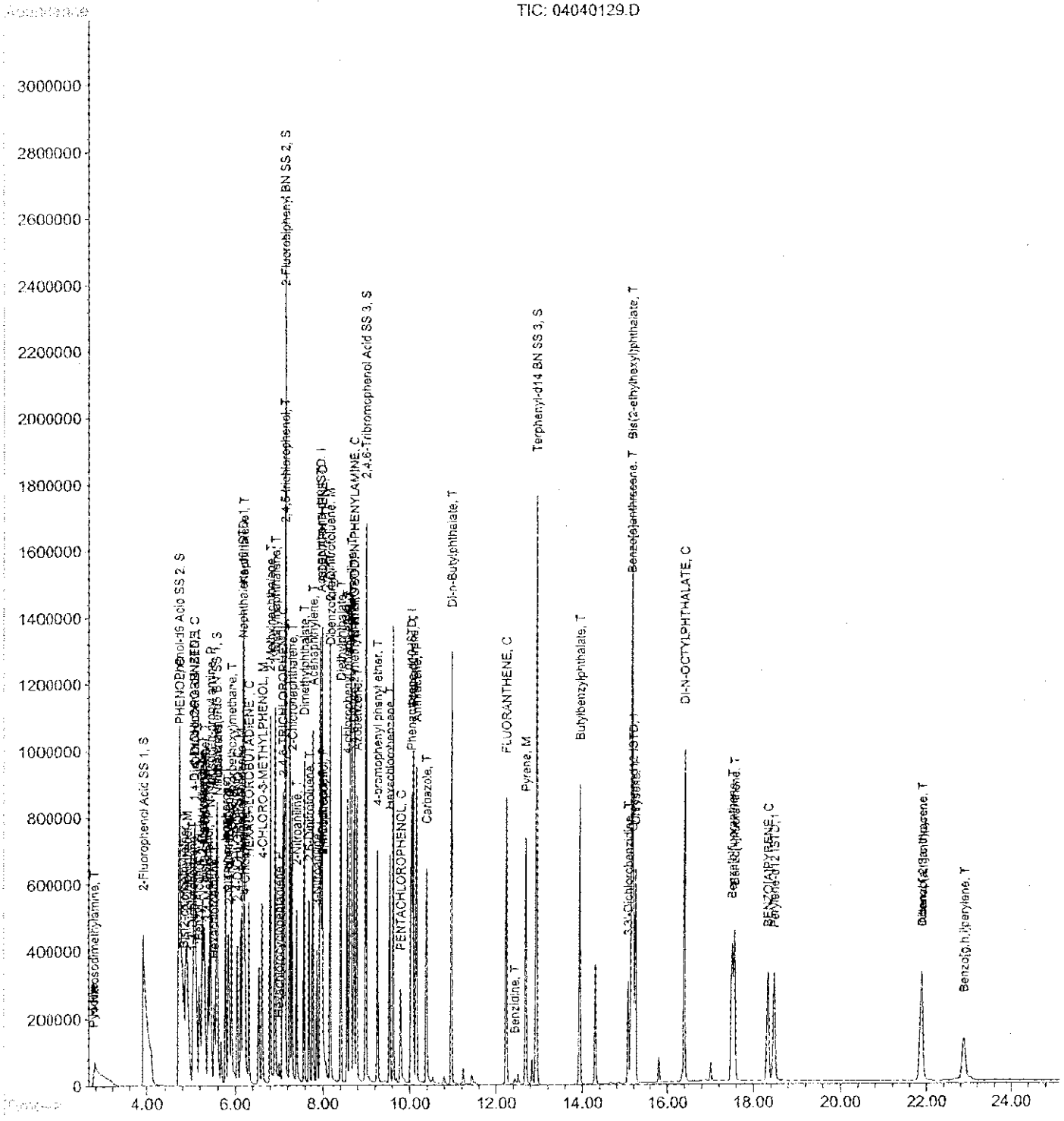
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62)	Azobenzene	8.78	77	599096	37.96 mg/L	100
63)	4-bromophenyl phenyl ether	9.25	248	157927	37.18 mg/L	99
64)	Hexachlorobenzene	9.54	142	72718	37.93 mg/L	91
65)	PENTACHLOROPHENOL	9.81	266	74797	44.57 mg/L	98
66)	Phenanthrene	10.08	178	690902	39.43 mg/L	100
67)	Anthracene	10.15	178	677629	38.81 mg/L	99
68)	Carbazole	10.39	167	570159	44.27 mg/L	99
69)	Di-n-Butylphthalate	10.97	149	1315761	41.50 mg/L	100
70)	FLUORANTHENE	12.24	202	712638	42.62 mg/L	100
72)	Benzidine	12.43	184	19831	3.76 mg/L	98
73)	Pyrene	12.69	202	689686	39.29 mg/L	99
75)	Butylbenzylphthalate	13.94	149	484223	39.25 mg/L	100
76)	Bis 2-ethylhexyl adipate	13.95	129	109	Not Detected	
77)	3,3'-Dichlorobenzidine	15.06	252	154535	37.43 mg/L	99
78)	Bis(2-ethylhexyl)phthalate	15.15	149	701628	39.63 mg/L	100
79)	Benzo[a]anthracene	15.14	228	580025	40.21 mg/L	99
80)	Chrysene	15.24	228	493742	40.82 mg/L	99
82)	DI-N-OCTYLPHTHALATE	16.40	149	1058407	42.48 mg/L	100
83)	Benzo[b]fluoranthene	17.50	252	525827	41.12 mg/L	97
84)	Benzo[k]fluoranthene	17.56	252	424419	37.79 mg/L	98
85)	BENZO[A]PYRENE	18.33	252	410812	39.77 mg/L	100
86)	Indeno(1,2,3-c,d)pyrene	21.88	276	342808	41.16 mg/L #	98
87)	Dibenzo[a,h]anthracene	21.88	278	289756	41.25 mg/L	99
88)	Benzo[g,h,i]perylene	22.88	276	263693	40.78 mg/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:31 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

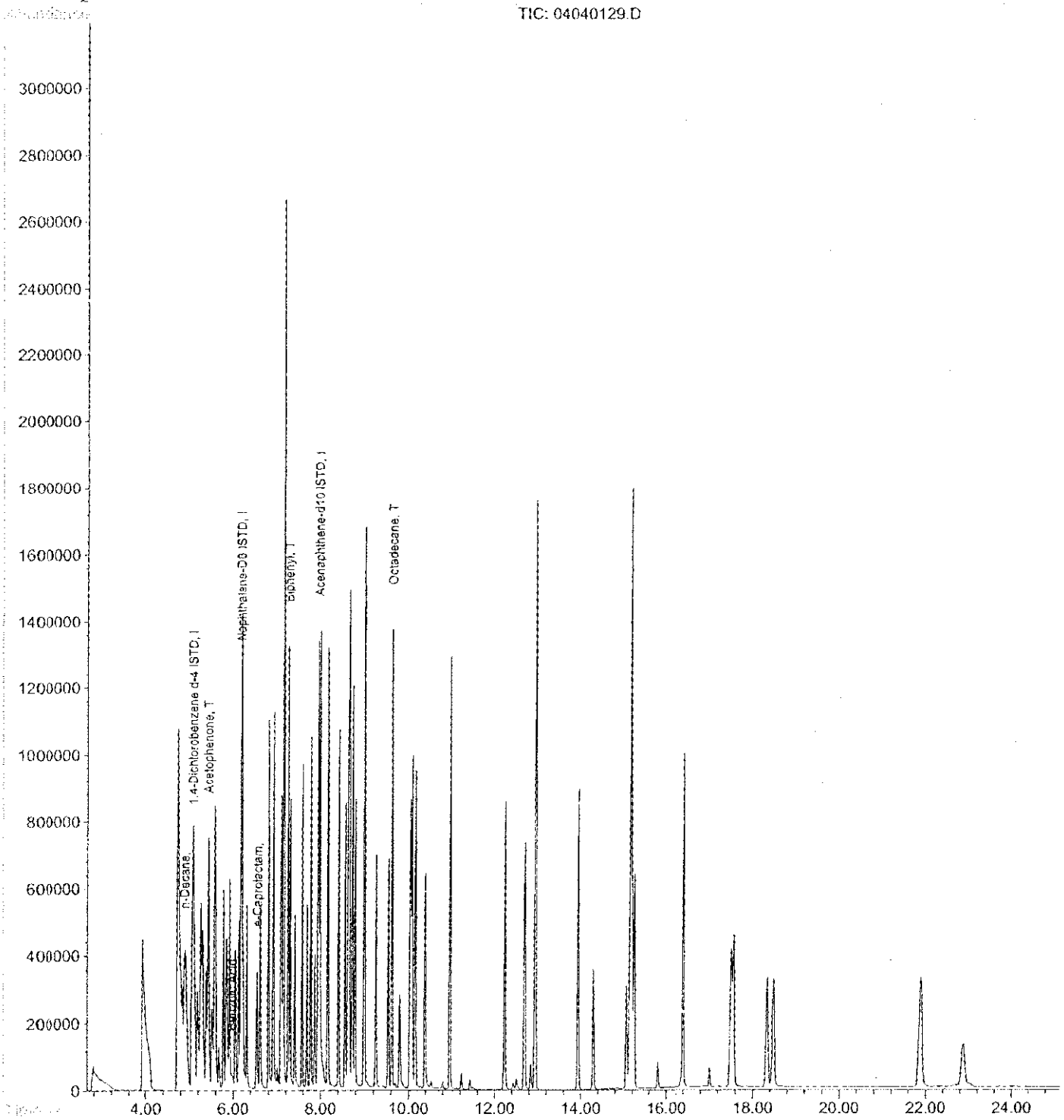
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.06	152	257425	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.17	136	1018674	40.00	mg/L	-0.01
8) Acenaphthene-d10 ISTD	7.95	164	521666	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	188862	23.81	mg/L	98
3) Acetophenone	5.42	105	263005	22.24	mg/L	99
5) Benzoic Acid	5.97	105	24924	10.65	mg/L	89
6) e-Caprolactam	6.55	55	116360	35.26	mg/L	89
7) Biphenyl	7.25	154	588667	28.46	mg/L	94
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.62	57	367937	40.14	mg/L	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040129.D Vial: 29
Acq On : 2 Apr 2004 8:47 am Operator: DJP
Sample : 04033026-16 MSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 ISTD	1.000	1.000	0.0	96	0.00
2		Pyridine	1.555	1.543	0.8	94	0.00
3	T	N-Nitrosodimethylamine	0.944	0.838	11.2	85	0.00
4	S	2-Fluorophenol Acid SS 1	1.218	1.257	-3.2	98	0.00
5	S	Phenol-d6 Acid SS 2	1.535	1.628	-6.1	99	0.00
6	C	PHENOL	1.827	1.856	-1.6	94	0.00
7	T	Bis(2-chloroethyl)ether	0.738	0.763	-3.4	93	0.00
8	M	2-Chlorophenol	1.412	1.391	1.5	93	0.00
9	C	1,4'-DICHLOROBENZENE	2.157	2.081	3.5	88	0.00
10	T	1,3'-Dichlorobenzene	0.996	1.072	-7.6	111	0.00
11	T	1,2'-Dichlorobenzene	1.441	1.439	0.1	94	0.00
12	T	Benzyl Alcohol	0.798	0.805	-0.9	92	0.00
13	T	2-Methylphenol	0.944	0.948	-0.4	94	0.00
14	T	bis(2-chloroisopropyl)ether	1.508	1.597	-5.9	96	0.00
15	T	3,4-Methylphenol	1.247	1.228	1.5	92	0.00
16	P	N-Nitrosodi-n-propyl amine	0.937	0.954	-1.8	94	0.00
17	T	Hexachloroethane	0.510	0.517	-1.4	94	0.00
18	I	Naphthalene-d8 ISTD	1.000	1.000	0.0	96	0.00
19	S	Nitrobenzene-d5 BN SS 1	0.326	0.341	-4.6	97	0.00
20	T	Nitrobenzene	0.323	0.330	-2.2	96	0.00
21	T	Isophorone	0.670	0.677	-1.0	95	0.00
22	C	2-NITROPHENOL	0.211	0.212	-0.5	94	0.00
23	T	2,4-dimethylphenol	0.297	0.305	-2.7	95	0.00
24	T	Bis(2-chloroethoxy)methane	0.377	0.384	-1.9	94	0.00
25	C	2,4-DICHLOROPHENOL	0.258	0.247	4.3	91	0.00
26	M	1,2,4'-Trichlorobenzene	0.249	0.248	0.4	95	0.00
27	T	Naphthalene`	0.973	0.988	-1.5	96	0.00
28	T	4-Chloroaniline	0.515	0.520	-1.0	95	0.00
29	C	HEXACHLOROBUTADIENE`	0.146	0.145	0.7	96	0.00
30	M	4-CHLORO-3-METHYLPHENOL	0.249	0.248	0.4	93	0.00
31	T	2-Methylnaphthalene	0.680	0.696	-2.4	96	0.00
32	T	1-Methylnaphthalene	0.664	0.670	-0.9	95	0.00
33	I	Acenaphthene-d10 ISTD	1.000	1.000	0.0	97	0.00
34	P	Hexachlorocyclopentadiene	0.091	0.057	37.4#	88	0.00
35	C	2,4,6-TRICHLOROPHENOL	0.162	0.159	1.9	91	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	T	2,4,5-trichlorophenol	0.152	0.147	3.3	94	0.00
37	S	2-Fluorobiphenyl BN SS 2	1.168	1.200	-2.7	99	0.00
38	T	2-Chloronaphthalene	1.085	1.086	-0.1	96	0.00
39	T	2-Nitroaniline	0.288	0.289	-0.3	96	0.00
40	T	1,4-dinitrobenzene	0.213	0.211	0.9	94	0.00
41	T	1,3-dinitrobenzene	0.236	0.240	-1.7	97	0.00
42	T	1,2-dinitrobenzene	0.167	0.166	0.6	95	0.00
43	T	3-Nitroaniline	0.340	0.338	0.6	95	0.00
44	T	4-Nitroaniline	0.271	0.284	-4.8	102	0.00
45	T	Dimethylphthalate	1.292	1.301	-0.7	96	0.00
46	T	2,6-Dinitrotoluene	0.322	0.328	-1.9	98	0.00
47	T	Acenaphthylene	1.938	1.940	-0.1	95	0.00
48	C	ACENAPHTHENE	1.157	1.159	-0.2	97	0.00
49	P	2,4-Dinitrophenol	0.075	0.059	21.3	93	0.00
50	P	4-nitrophenol	0.194	0.192	1.0	93	0.00
51	M	2,4-Dinitrotoluene	0.388	0.399	-2.8	96	0.00
52	T	Dibenzofuran	1.426	1.438	-0.8	96	0.00
53	T	2,3,5,6-tetrachlorophenol	0.255	0.248	2.7	93	0.00
54	T	2,3,4,6-tetrachlorophenol	0.256	0.254	0.8	95	0.00
55	T	Diethylphthalate	1.431	1.442	-0.8	96	0.00
56	T	4-chlorophenyl phenyl ether	0.546	0.538	1.5	95	0.00
57	T	Fluorene	1.148	1.141	0.6	95	0.00
58	S	2,4,6-Tribromophenol Acid S	0.122	0.129	-5.7	98	0.00
59	I	Phenanthrene-d10 ISTD	1.000	1.000	0.0	98	0.00
60	T	4,6-Dinitro-2-methylphenol	0.084	0.082	2.4	101	0.00
61	C	N-NITROSODI-N-PHENYLAMINE	0.675	0.669	0.9	96	0.00
62	T	Azobenzene	0.899	0.875	2.7	97	0.00
63	T	4-bromophenyl phenyl ether	0.242	0.235	2.9	96	0.00
64	T	Hexachlorobenzene	0.109	0.109	0.0	93	0.00
65	C	PENTACHLOROPHENOL	0.106	0.085	19.8	88	0.00
66	T	Phenanthrene	0.998	0.996	0.2	98	0.00
67	T	Anthracene	0.995	0.992	0.3	97	0.00
68	T	Carbazole	0.734	0.761	-3.7	102	0.00
69	T	Di-n-Butylphthalate	1.806	1.819	-0.7	97	0.00
70	C	FLUORANTHENE	0.953	0.968	-1.6	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
72	T	Benzidine	0.440	0.434	1.4	113	0.00
73	M	Pyrene	1.463	1.398	4.4	98	0.00
74	S	Terphenyl-d14 BN SS 3	1.182	1.172	0.8	101	0.00
75	T	Butylbenzylphthalate	1.029	0.993	3.5	98	0.00
76	T	Bis 2-ethylhexyl adipate	1.045	0.997	4.6	96	0.00
77	T	3,3'-Dichlorobenzidine	0.344	0.342	0.6	110	0.00
78	T	Bis(2-ethylhexyl)phthalate	1.476	1.427	3.3	99	0.00
79	T	Benzo[a]anthracene	1.203	1.177	2.2	101	0.00
80	T	Chrysene	1.009	0.986	2.3	101	0.00
81	I	Perylene-d12 ISTD	1.000	1.000	0.0	105	0.00
82	C	DI-N-OCTYLPHTHALATE	2.598	2.486	4.3	100	0.00
83	T	Benzo[b]fluoranthene	1.334	1.199	10.1	99	0.00
84	T	Benzo[k]fluoranthene	1.171	1.227	-4.8	106	0.00
85	C	BENZO[A]PYRENE	1.077	1.044	3.1	102	0.00
86	T	Indeno(1,2,3-c,d)pyrene	0.869	0.843	3.0	102	0.00
87	T	Dibenzo[a,h]anthracene	0.733	0.714	2.6	103	0.00
88	T	Benzo[g,h,i]perylene	0.674	0.652	3.3	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.07	152	241333	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.18	136	953829	40.00	mg/L	0.00
33) Acenaphthene-d10 ISTD	7.96	164	490771	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	10.05	188	694051	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.20	240	461269	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.49	264	369784	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.94	112	379253	51.63	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 25.82%			
5) Phenol-d6 Acid SS 2	4.73	99	491248	53.05	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 26.53%			
19) Nitrobenzene-d5 BN SS 1	5.58	82	406270	52.20	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 52.20%			
37) 2-Fluorobiphenyl BN SS 2	7.16	172	735937	51.36	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 51.36%			
58) 2,4,6-Tribromophenol Acid	8.99	330	79225	50.23	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 25.12%			
74) Terphenyl-d14 BN SS 3	12.94	244	675852	49.57	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 49.57%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	465456	49.60	mg/L	100
3) N-Nitrosodimethylamine	2.78	74	252773	44.40	mg/L	98
6) PHENOL	4.74	94	559990	50.80	mg/L	98
7) Bis(2-chloroethyl)ether	4.84	63	230084	51.68	mg/L	97
8) 2-Chlorophenol	4.91	128	419503	49.24	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.08	146	627737	48.24	mg/L	75
10) 1,3'-Dichlorobenzene	5.05	146	323331	53.83	mg/L	11
11) 1,2'-Dichlorobenzene	5.25	146	433976	49.92	mg/L	100
12) Benzyl Alcohol	5.19	108	242960	50.45	mg/L	99
13) 2-Methylphenol	5.26	107	285930	50.20	mg/L #	89
14) bis(2-chloroisopropyl)ethe	5.31	45	481875	52.97	mg/L	97
15) 3,4-Methylphenol	5.38	107	370492	49.25	mg/L	99
16) N-Nitrosodi-n-propyl amine	5.43	70	287920	50.94	mg/L	99
17) Hexachloroethane	5.52	117	155851	50.69	mg/L	100
20) Nitrobenzene	5.59	77	393788	51.19	mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
21)	Isophorone	5.78	82	807773	50.53 mg/L		100
22)	2-NITROPHENOL	5.86	139	252620	50.11 mg/L		99
23)	2,4-dimethylphenol	5.84	122	363780	51.35 mg/L		100
24)	Bis(2-chloroethoxy)methane	5.92	93	457322	50.84 mg/L		99
25)	2,4-DICHLOROPHENOL	6.05	162	294967	47.95 mg/L		99
26)	1,2,4'-Trichlorobenzene	6.13	180	295603	49.72 mg/L		99
27)	Naphthalene`	6.20	128	1178190	50.79 mg/L	#	98
28)	4-Chloroaniline	6.23	127	620254	50.48 mg/L		99
29)	HEXACHLOROBUTADIENE`	6.32	225	172295	49.37 mg/L		100
30)	4-CHLORO-3-METHYLPHENOL	6.61	107	296235	49.90 mg/L		100
31)	2-Methylnaphthalene	6.81	142	829905	51.16 mg/L		100
32)	1-Methylnaphthalene	6.93	142	798787	50.43 mg/L		100
34)	Hexachlorocyclopentadiene	7.01	237	34819	43.94 mg/L		95
35)	2,4,6-TRICHLOROPHENOL	7.09	97	97376	49.04 mg/L		100
36)	2,4,5-trichlorophenol	7.13	97	90418	48.53 mg/L		98
38)	2-Chloronaphthalene	7.30	162	666196	50.05 mg/L		100
39)	2-Nitroaniline	7.42	65	177579	50.31 mg/L		99
40)	1,4-dinitrobenzene	7.53	168	129285	49.56 mg/L		99
41)	1,3-dinitrobenzene	7.66	168	147052	50.86 mg/L		99
42)	1,2-dinitrobenzene	7.80	168	101558	49.44 mg/L		99
43)	3-Nitroaniline	7.88	138	207591	49.83 mg/L		100
44)	4-Nitroaniline	8.66	138	174467	52.47 mg/L		98
45)	Dimethylphthalate	7.59	163	797882	50.35 mg/L		99
46)	2,6-Dinitrotoluene	7.70	165	201303	50.99 mg/L		99
47)	Acenaphthylene	7.78	152	1190146	50.06 mg/L		100
48)	ACENAPHTHENE	8.00	154	710972	50.10 mg/L		100
49)	2,4-Dinitrophenol	8.01	184	35954	46.22 mg/L		94
50)	4-nitrophenol	8.00	139	117887	48.57 mg/L		98
51)	2,4-Dinitrotoluene	8.17	165	244640	51.41 mg/L		99
52)	Dibenzofuran	8.18	168	882453	50.43 mg/L		99
53)	2,3,5,6-tetrachlorophenol	8.31	232	152020	48.87 mg/L		98
54)	2,3,4,6-tetrachlorophenol	8.37	232	155588	48.05 mg/L		97
55)	Diethylphthalate	8.43	149	884378	50.36 mg/L		100
56)	4-chlorophenyl phenyl ethe	8.57	204	329864	49.22 mg/L		99
57)	Fluorene	8.63	166	699895	49.71 mg/L		99
60)	4,6-Dinitro-2-methylphenol	8.72	198	70950	48.44 mg/L		96
61)	N-NITROSODI-N-PHENYLAMINE	8.73	169	580536	49.59 mg/L		100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

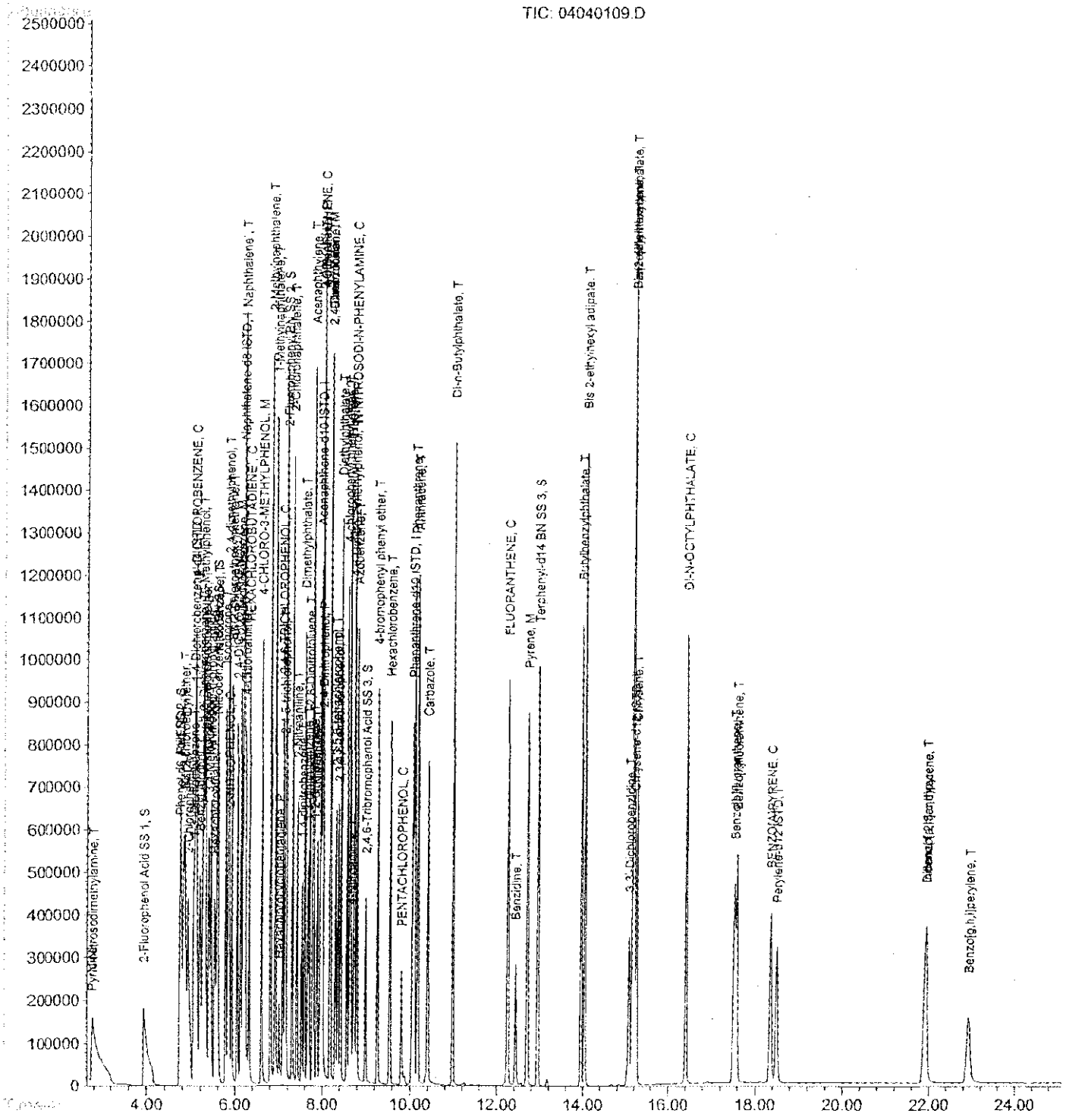
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) Azobenzene	8.80	77	759058	48.65 mg/L	100
63) 4-bromophenyl phenyl ether	9.27	248	204301	48.65 mg/L	99
64) Hexachlorobenzene	9.55	142	94734	49.99 mg/L	96
65) PENTACHLOROPHENOL	9.81	266	73471	44.32 mg/L	97
66) Phenanthrene	10.09	178	863750	49.87 mg/L	100
67) Anthracene	10.17	178	860259	49.84 mg/L	99
68) Carbazole	10.39	167	660204	51.86 mg/L	100
69) Di-n-Butylphthalate	10.98	149	1578472	50.36 mg/L	100
70) FLUORANTHENE	12.25	202	839513	50.78 mg/L	99
72) Benzidine	12.43	184	250120	49.31 mg/L	99
73) Pyrene	12.71	202	806338	47.78 mg/L	100
75) Butylbenzylphthalate	13.96	149	572517	48.27 mg/L	100
76) Bis 2-ethylhexyl adipate	14.04	129	574964	47.71 mg/L	100
77) 3,3'-Dichlorobenzidine	15.08	252	197428	49.73 mg/L	99
78) Bis(2-ethylhexyl)phthalate	15.16	149	822521	48.32 mg/L	100
79) Benzo[a]anthracene	15.16	228	678537	48.92 mg/L	100
80) Chrysene	15.25	228	568664	48.89 mg/L	100
82) DI-N-OCTYLPHTHALATE	16.41	149	1149315	47.85 mg/L	100
83) Benzo[b]fluoranthene	17.52	252	554405	44.96 mg/L	96
84) Benzo[k]fluoranthene	17.57	252	567111	52.37 mg/L	96
85) BENZO[A]PYRENE	18.35	252	482381	48.43 mg/L	100
86) Indeno(1,2,3-c,d)pyrene	21.93	276	389744	48.54 mg/L	100
87) Dibenzo[a,h]anthracene	21.93	278	330150	48.75 mg/L	100
88) Benzo[g,h,i]perylene	22.92	276	301427	48.35 mg/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040109.D Vial: 9
Acq On : 1 Apr 2004 10:57 pm Operator: DJP
Sample : HPBNA CCV @ 50ppm Inst : SVOC GC/M
Misc : 04-01-04 A215 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:44 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040401\04040110.D Vial: 10
Acq On : 1 Apr 2004 11:27 pm Operator: DJP
Sample : MDE-CH CCV @ 50ppm Inst : SVOC GC/M
Misc : 02-06-04 A201 DJP Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	125	0.00
2		n-Decane	1.232	1.223	0.7	123	0.00
3	T	Acetophenone	1.838	1.590	13.5	105	0.00
4	I	Naphthalene-D8 ISTD	1.000	1.000	0.0	135	0.00
5		Benzoic Acid	0.114	0.081	28.9	91	0.00
6		e-Caprolactam	0.130	0.121	6.9	125	0.00
7	T	Biphenyl	0.812	0.753	7.3	124	0.00
8	I	Acenaphthene-d10 ISTD	1.000	1.000	0.0	104	0.00
9	T	Atrazine	0.364	0.296	18.7	83	0.00
10	T	Octadecane	0.703	0.735	-4.6	109	-0.01

Response Factor Report SVOC GC/M

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration

Calibration Files
C1 =04033008.D C2 =04033009.D C3 =04033010.D
C4 =04033011.D C5 =04033012.D C6 =04033013.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	1,4-Dichlorobenzene d	ISTD							
2)		n-Decane	1.330	1.274	1.247	1.220	1.171	1.151	1.232	5.39
3)	T	Acetophenone	1.854	1.851	1.890	1.855	1.798	1.777	1.838	2.28
4)	I	Naphthalene-D8 ISTD	ISTD							
5)		Benzoic Acid	0.026	0.047	0.120	0.141	0.164	0.187	0.114	56.60
6)		e-Caprolactam	0.123	0.127	0.130	0.132	0.133	0.131	0.130	2.77
7)	T	Biphenyl	0.861	0.855	0.821	0.800	0.780	0.757	0.812	5.08
8)	I	Acenaphthene-d10 ISTD	ISTD							
9)	T	Atrazine	0.351	0.363	0.374	0.365	0.366	0.365	0.364	2.01
10)	T	Octadecane	0.763	0.733	0.706	0.677	0.669	0.669	0.703	5.53

(#) = Out of Range All CCC RSD must be <= 30%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040110.D
Acq On : 1 Apr 2004 11:27 pm
Sample : MDE-CH CCV @ 50ppm
Misc : 02-06-04 A201 DJP
MS Integration Params: rteint.p
Quant Time: Apr 2 9:11 2004

Vial: 10
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00
Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

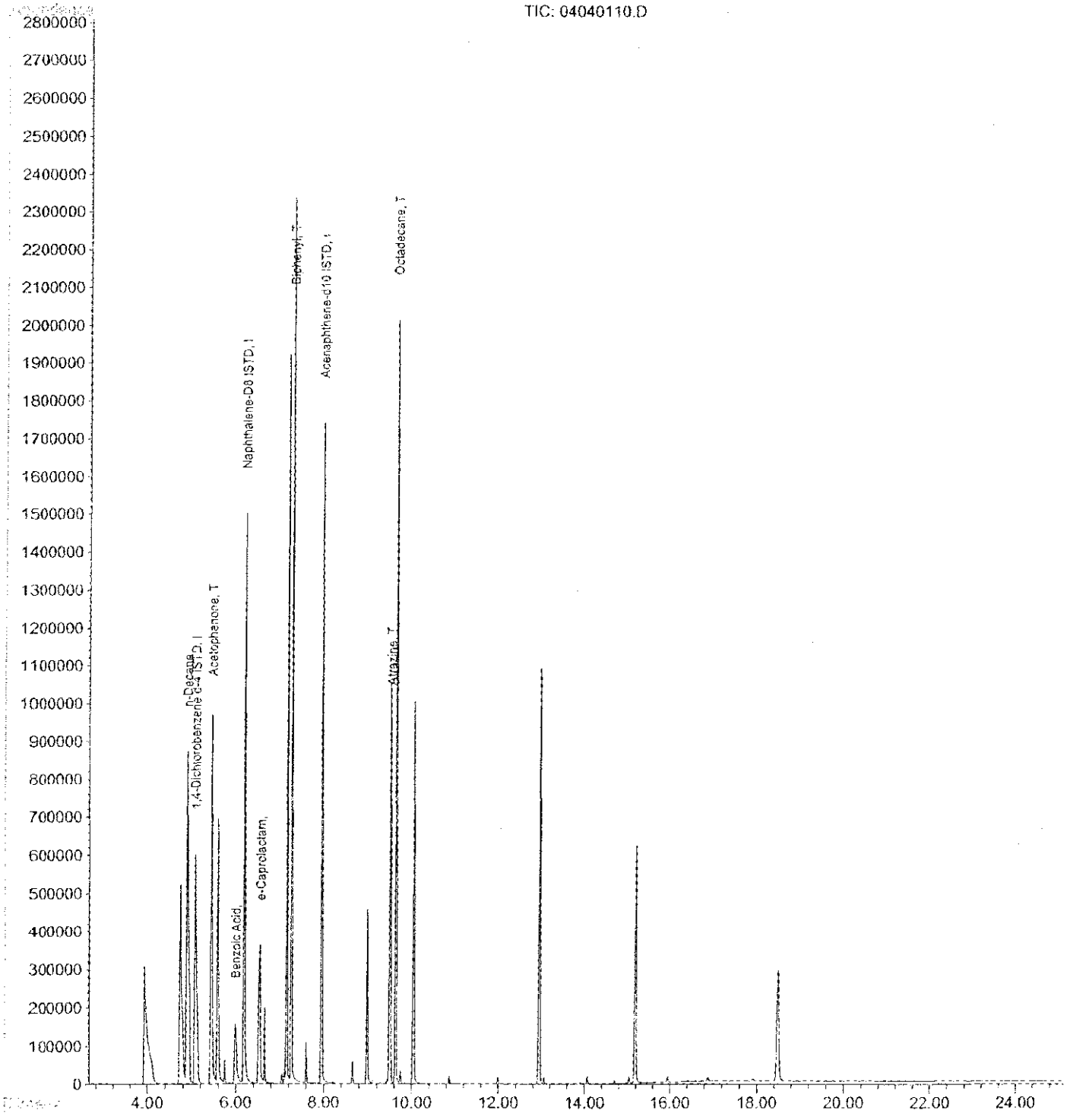
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.06	152	333609	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.18	136	1295982	40.00	mg/L	0.00
8) Acenaphthene-d10 ISTD	7.95	164	643681	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	510115	49.63	mg/L	99
3) Acetophenone	5.43	105	663181	43.27	mg/L	99
5) Benzoic Acid	5.98	105	130617	37.03	mg/L	92
6) e-Caprolactam	6.55	55	195710	46.62	mg/L	89
7) Biphenyl	7.26	154	1220575	46.39	mg/L	95
9) Atrazine	9.51	200	238507	40.73	mg/L	79
10) Octadecane	9.63	57	591394	52.29	mg/L	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040110.D Vial: 10
Acq On : 1 Apr 2004 11:27 pm Operator: DJP
Sample : MDE-CH CCV @ 50ppm Inst : SVOC GC/M
Misc : 02-06-04 A201 DJP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 9:11 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

ANALYSIS:	**GC/MS Semi-Volatiles**	**LAB CODE:**	**DFTPPW**
METHOD NO.:	**EPA 8270**	**LAB SAMPLE ID:**	**DFTPP Tune**
LAB FILE ID:	**04040108.d**	**DATE/TIME ANALYZED:**	**4/1/04 22:26**

Target Mass	Ion Abundance Criteria	% Relative Abundance
51	30.0 - 60.0% of mass 198	35.2
68	0 - 2.0% of mass 69	0.0
69	0 - 100.0% of mass 198	53.3
70	0 - 2.0% of mass 69	0.3
127	40.0 - 60.0% of mass 198	53.3
197	0 - 1.0% of mass 198	0.0
198	100% of mass 198	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	22.5
365	1.0 - 100.0% of mass 198	2.3
441	Present but less than mass 443	76.9
442	40.0 - 100.0% of mass 198	67.2
443	17.0 - 23.0% of mass 442	19.5

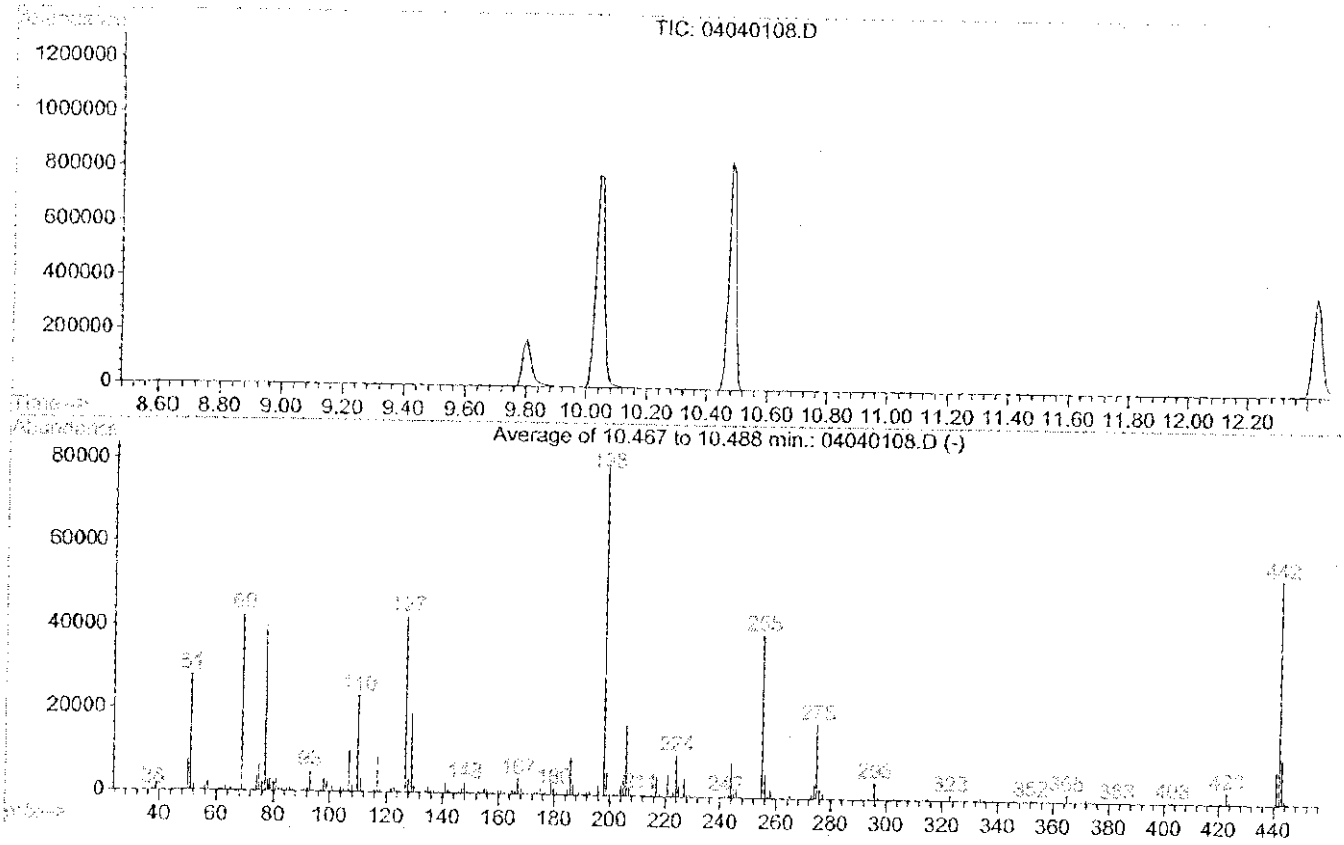
This Tune applies to the following samples:

Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-3S-032604	04033013-06	04040117.D	04/02/04 02:57

DFTPP

Data File : C:\HPCHEM\1\DATA\040401\04040108.D
Acq On : 1 Apr 2004 10:26 pm
Sample : ULTRA Tune Solution @ 50ppm
Misc : 04-01-04 A214 DJP
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TUNE.M (RTE Integrator)
Title : ALS8270.M

Vial: 8
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00



AutoFind: Scans 766, 767, 768; Background Corrected with Scan 761

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.2	28061	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	53.3	42491	PASS
70	69	0.00	2	0.3	148	PASS
127	198	40	60	53.3	42480	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	79723	PASS
199	198	5	9	6.9	5520	PASS
275	198	10	30	22.5	17927	PASS
365	198	1	100	2.3	1796	PASS
441	443	0.01	100	76.9	8047	PASS
442	198	40	100	67.2	53612	PASS
443	442	17	23	19.5	10464	PASS

Injection Log

Directory: p:\svochp~1\1\data\040401

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04040101.d	1.	ULTRA Tune Solution @ 50ppm	04-01-04 A214 DJP	1 Apr 04 18:52
2	2	04040102.d	1.	HPBNA ICAL L1 @ 10ppm	04-01-04 A216 DJP	1 Apr 04 19:23
3	3	04040103.d	1.	HPBNA ICAL L2 @ 20ppm	04-01-04 A217 DJP	1 Apr 04 19:54
4	4	04040104.d	1.	HPBNA ICAL L3 @ 50ppm	04-01-04 A218 DJP	1 Apr 04 20:24
5	5	04040105.d	1.	HPBNA ICAL L4 @ 80ppm	04-01-04 A219 DJP	1 Apr 04 20:55
6	6	04040106.d	1.	HPBNA ICAL L5 @ 120ppm	04-01-04 A220 DJP	1 Apr 04 21:25
7	7	04040107.d	1.	HPBNA ICAL L6 @ 160ppm	04-01-04 A221 DJP	1 Apr 04 21:56
8	8	04040108.d	1.	ULTRA Tune Solution @ 50ppm	04-01-04 A214 DJP	1 Apr 04 22:26
9	10	04040110.d	1.	MDE-CH CCV @ 50ppm	02-06-04 A201 DJP	1 Apr 04 23:27
10	11	04040111.d	1.	04032603-14 1000mL	Batch #504	1 Apr 04 23:57
11	12	04040112.d	1.	04032702-01 1000mL	Batch #504	2 Apr 04 00:28
12	13	04040113.d	1.	04032702-02 1000mL	Batch #504	2 Apr 04 00:58
13	14	04040114.d	1.	04032702-03 1000mL	Batch #504	2 Apr 04 01:28
14	15	04040115.d	1.	04032702-04 1000mL	Batch #504	2 Apr 04 01:57
15	16	04040116.d	1.	04032913-21 1000mL	Batch #504	2 Apr 04 02:27
16	17	04040117.d	1.	04033013-06 1000mL	Batch #504	2 Apr 04 02:57
17	18	04040118.d	1.	04033026-02 1000mL	Batch #504	2 Apr 04 03:26
18	19	04040119.d	1.	04033026-04 1000mL	Batch #504	2 Apr 04 03:55
19	20	04040120.d	1.	04033026-06 1000mL	Batch #504	2 Apr 04 04:24
20	21	04040121.d	1.	04033026-08 800mL	Batch #504	2 Apr 04 04:53
21	22	04040122.d	1.	04033026-09 1000mL	Batch #504	2 Apr 04 05:22
22	23	04040123.d	1.	04033026-10 1000mL	Batch #504	2 Apr 04 05:50
23	24	04040124.d	1.	04033026-11 1000mL	Batch #504	2 Apr 04 06:19
24	25	04040125.d	1.	04033026-12 1000mL	Batch #504	2 Apr 04 06:47
25	26	04040126.d	1.	04033026-13 1000mL	Batch #504	2 Apr 04 07:17
26	27	04040127.d	1.	04033026-14 1000mL	Batch #504	2 Apr 04 07:47
27	28	04040128.d	1.	04033026-15 MS 1000mL	Batch #504	2 Apr 04 08:17
28	29	04040129.d	1.	04033026-16 MSD 1000mL	Batch #504	2 Apr 04 08:47
29	30	04040130.d	1.	04033026-17 1000mL	Batch #504	2 Apr 04 09:16
30	31	04040131.d	1.	04033026-18 1000mL	Batch #504	2 Apr 04 09:45
31	32	04040132.d	1.	04032623-01 1050mL	Batch #504	2 Apr 04 10:15

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

SEMI-VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Semi-Volatiles **LAB CODE:** SURR

METHOD NO.: EPA 8270

Date/Time Analyzed	Sample ID	S1 A (2FP) #	S2 A (PHL) #	S1 BN (NBZ) #	S2 BN (FBP) #	S3 A (TBP) #	S3 BN (TPH) #	Total Out
	Upper Limit	110	110	114	116	123	141	
	Lower Limit	21	10	35	43	10	33	
04/01/04 22:57	Calibration Verification	103	106	104	103	100	99	
04/02/04 16:44	Method Blank	92	91	102	107	83	93	
04/02/04 02:57	DMW-3S-032604	67	73	77	86	84	89	

	Control Limits: Water	Soil
S1 A (2FP) = 2-Fluorophenol	21-110	25-121
S2 A (PHL) = Phenol-d6	10-110	24-113
S1 BN (NBZ) = Nitrobenzene-d5	35-114	23-120
S2 BN (FBP) = 2-Fluorobiphenyl	43-116	30-115
S3 A (TBP) = 2,4,6-Tribromophenol	10-123	19-122
S3 BN (TPH) = Terphenyl-d14	33-141	18-137

Column used to flag recovery values
* = Values outside QC limits. Affected by 100 fold dilution.
D: Surrogate diluted out

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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Semi-Volatiles**	**LAB CODE:**	**MBW**
METHOD NO.:	**EPA 8270**	**LAB SAMPLE ID:**	**METHOD BLANK 504**
LAB FILE ID:	**04040206.D**	**DATE/TIME ANALYZED:**	**4/2/04 16:44**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-3S-032604	04033013-06	04040117.D	04/02/04 02:57

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.05	152	230453	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	954125	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.88	164	469707	40.00	mg/L	-0.01
59) Phenanthrene-d10 ISTD	9.96	188	663085	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.08	240	565430	40.00	mg/L	-0.02
81) Perylene-d12 ISTD	18.33	264	386181	40.00	mg/L	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.94	112	1292074	184.19	mg/L	0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 92.10%			
5) Phenol-d6 Acid SS 2	4.71	99	1609142	181.96	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 90.98%			
19) Nitrobenzene-d5 BN SS 1	5.54	82	797426	102.43	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 102.43%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1471106	107.26	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 107.26%			
58) 2,4,6-Tribromophenol Acid	8.91	330	298225	165.61	mg/L	-0.01
Spiked Amount 200.000	Range 10 - 123		Recovery = 82.81%			
74) Terphenyl-d14 BN SS 3	12.86	244	1552925	92.92	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 92.92%			

Target Compounds				Qvalue
2) Pyridine	0.00	79	0	Not Detected
3) N-Nitrosodimethylamine	0.00	74	0	Not Detected
6) PHENOL	4.72	94	302	Not Detected
7) Bis(2-chloroethyl)ether	4.71	63	3135	Not Detected
8) 2-Chlorophenol	0.00	128	0	Not Detected
9) 1,4'-DICHLOROBENZENE	0.00	146	0	Not Detected
10) 1,3'-Dichlorobenzene	0.00	146	0	Not Detected
11) 1,2'-Dichlorobenzene	0.00	146	0	Not Detected
12) Benzyl Alcohol	5.05	108	315	Not Detected
13) 2-Methylphenol	0.00	107	0	Not Detected
14) bis(2-chloroisopropyl)ethe	0.00	45	0	Not Detected
15) 3,4-Methylphenol	0.00	107	0	Not Detected
16) N-Nitrosodi-n-propyl amine	0.00	70	0	Not Detected
17) Hexachloroethane	0.00	117	0	Not Detected
20) Nitrobenzene	5.54	77	2342	Not Detected

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21)	Isophorone	0.00	82	0	Not Detected	
22)	2-NITROPHENOL	0.00	139	0	Not Detected	
23)	2,4-dimethylphenol	0.00	122	0	Not Detected	
24)	Bis(2-chloroethoxy)methane	0.00	93	0	Not Detected	
25)	2,4-DICHLOROPHENOL	0.00	162	0	Not Detected	
26)	1,2,4'-Trichlorobenzene	0.00	180	0	Not Detected	
27)	Naphthalene`	6.14	128	95	Not Detected	
28)	4-Chloroaniline	0.00	127	0	Not Detected	
29)	HEXACHLOROBUTADIENE`	0.00	225	0	Not Detected	
30)	4-CHLORO-3-METHYLPHENOL	0.00	107	0	Not Detected	
31)	2-Methylnaphthalene	0.00	142	0	Not Detected	
32)	1-Methylnaphthalene	0.00	142	0	Not Detected	
34)	Hexachlorocyclopentadiene	0.00	237	0	Not Detected	
35)	2,4,6-TRICHLOROPHENOL	6.99	97	94	Not Detected	
36)	2,4,5-trichlorophenol	0.00	97	0	Not Detected	d
38)	2-Chloronaphthalene	0.00	162	0	Not Detected	
39)	2-Nitroaniline	0.00	65	0	Not Detected	
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected	
41)	1,3-dinitrobenzene	0.00	168	0	Not Detected	
42)	1,2-dinitrobenzene	0.00	168	0	Not Detected	
43)	3-Nitroaniline	0.00	138	0	Not Detected	
44)	4-Nitroaniline	0.00	138	0	Not Detected	
45)	Dimethylphthalate	0.00	163	0	Not Detected	
46)	2,6-Dinitrotoluene	0.00	165	0	Not Detected	
47)	Acenaphthylene	0.00	152	0	Not Detected	
48)	ACENAPHTHENE	7.88	154	1460	Not Detected	
49)	2,4-Dinitrophenol	0.00	184	0	Not Detected	
50)	4-nitrophenol	0.00	139	0	Not Detected	
51)	2,4-Dinitrotoluene	8.14	165	126	Not Detected	
52)	Dibenzofuran	0.00	168	0	Not Detected	
53)	2,3,5,6-tetrachlorophenol	0.00	232	0	Not Detected	
54)	2,3,4,6-tetrachlorophenol	0.00	232	0	Not Detected	
55)	Diethylphthalate	0.00	149	0	Not Detected	
56)	4-chlorophenyl phenyl ethe	0.00	204	0	Not Detected	
57)	Fluorene	0.00	166	0	Not Detected	
60)	4,6-Dinitro-2-methylphenol	0.00	198	0	Not Detected	
61)	N-NITROSODI-N-PHENYLAMINE	0.00	169	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62) Azobenzene	0.00	77	0	Not Detected	
63) 4-bromophenyl phenyl ether	0.00	248	0	Not Detected	
64) Hexachlorobenzene	0.00	142	0	Not Detected	
65) PENTACHLOROPHENOL	0.00	266	0	Not Detected	
66) Phenanthrene	9.95	178	118	Not Detected	
67) Anthracene	0.00	178	0	Not Detected	
68) Carbazole	0.00	167	0	Not Detected	
69) Di-n-Butylphthalate	0.00	149	0	Not Detected	
70) FLUORANTHENE	0.00	202	0	Not Detected	
72) Benzidine	0.00	184	0	Not Detected	
73) Pyrene	0.00	202	0	Not Detected	
75) Butylbenzylphthalate	0.00	149	0	Not Detected	
76) Bis 2-ethylhexyl adipate	0.00	129	0	Not Detected	
77) 3,3'-Dichlorobenzidine	0.00	252	0	Not Detected	
78) Bis(2-ethylhexyl)phthalate	15.08	149	423	Not Detected	
79) Benzo[a]anthracene	15.08	228	1137	Not Detected	
80) Chrysene	15.08	228	1137	Not Detected	
82) DI-N-OCTYLPHTHALATE	16.31	149	210	Not Detected	
83) Benzo[b]fluoranthene	0.00	252	0	Not Detected	
84) Benzo[k]fluoranthene	0.00	252	0	Not Detected	
85) BENZO[A]PYRENE	18.32	252	754	Not Detected	
86) Indeno(1,2,3-c,d)pyrene	0.00	276	0	Not Detected	
87) Dibenzo[a,h]anthracene	0.00	278	0	Not Detected	
88) Benzo[g,h,i]perylene	0.00	276	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.05	152	230079	40.00	mg/L	-0.02
4) Naphthalene-D8 ISTD	6.13	136	954125	40.00	mg/L	-0.05
8) Acenaphthene-d10 ISTD	7.88	164	469707	40.00	mg/L	-0.07

System Monitoring Compounds

Target Compounds				Qvalue
2) n-Decane	0.00	43	0	Not Detected
3) Acetophenone	0.00	105	0	Not Detected
5) Benzoic Acid	0.00	105	0	Not Detected
6) e-Caprolactam	6.55	55	132	Not Detected
7) Biphenyl	7.20	154	4165	Not Detected
9) Atrazine	0.00	200	0	Not Detected
10) Octadecane	9.54	57	755	Not Detected

(#) = qualifier out of range (m) = manual integration

Quantitation Report

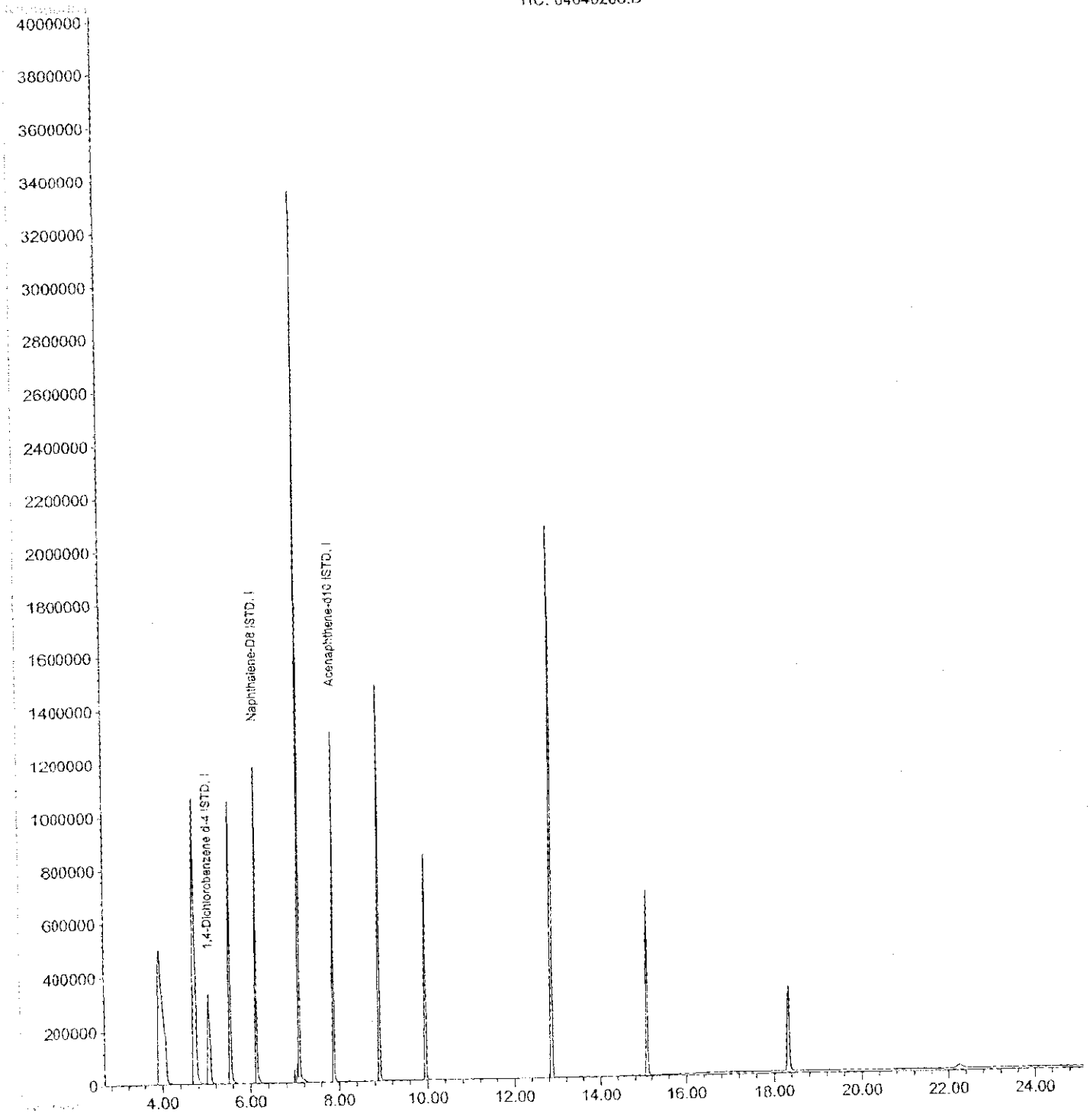
Data File : C:\HPCHEM\1\DATA\040402\04040206.D
Acq On : 2 Apr 2004 4:44 pm
Sample : Method Blank 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 6
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration

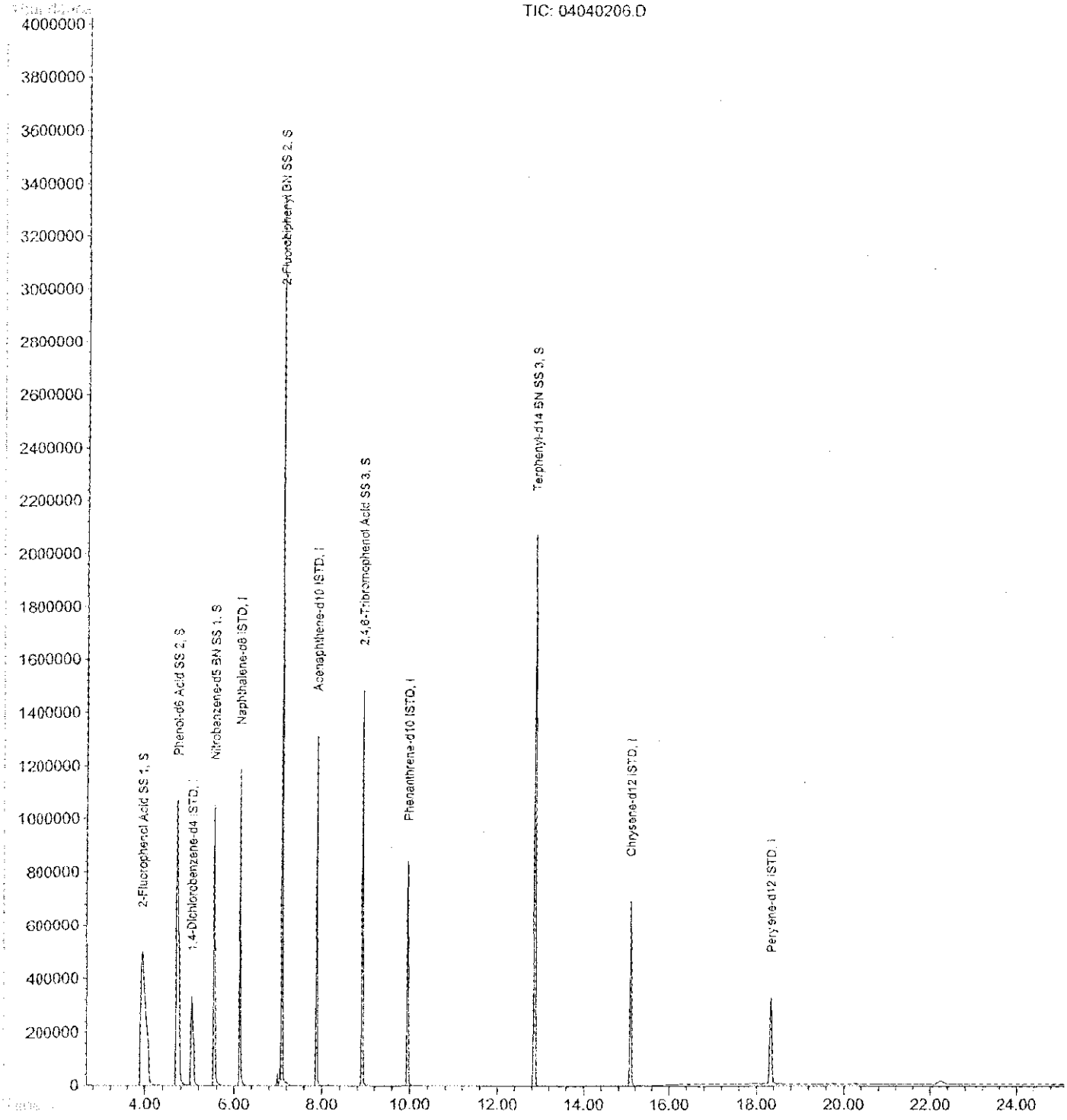
TIC: 04040206.D



Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040206.D Vial: 6
Acq On : 2 Apr 2004 4:44 pm Operator: DJP
Sample : Method Blank 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:15 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANICS COMPOUNDS
LCS & LCS DUPLICATE SUMMARY

DATE ANALYZED: 04/02/04 **Analytical Lot Number:** 504

METHOD: EPA 8270 **Lab File IDs:** 04040204.D
04040205.D

Matrix: Water

Sample ID: LCS 1000C MS

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)		LCL (%)	UCL (%)
Phenol	40	ND	30	75		12	110
2-Chlorophenol	40	ND	30	75		27	123
1,4-Dichlorobenzene	40	ND	32	79		36	97
N-Nitroso-di-n-propylamine	40	ND	34	85		41	116
1,2,4-Trichlorobenzene	40	ND	32	79		39	98
4-Chloro-3-methylphenol	40	ND	35	88		23	97
Acenaphthene	40	ND	38	94		46	118
4-Nitrophenol	40	ND	39	98	*	10	80
2,4-Dinitrotoluene	40	ND	39	97	*	24	96
Pentachlorophenol	40	ND	41	102		9	103
Pyrene	40	ND	37	93		26	127

Sample ID: LCSD 1000C MSD

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)		RPD (%)	QC RPD (%)	LCL (%)	UCL (%)
Phenol	40	ND	31	76		1.8	42	12	110
2-Chlorophenol	40	ND	30	76		1.2	40	27	123
1,4-Dichlorobenzene	40	ND	32	79		0.0	28	36	97
N-Nitroso-di-n-propylamine	40	ND	32	79		6.6	38	41	116
1,2,4-Trichlorobenzene	40	ND	31	77		2.4	28	39	98
4-Chloro-3-methylphenol	40	ND	35	86		1.5	42	23	97
Acenaphthene	40	ND	35	89		6.0	31	46	118
4-Nitrophenol	40	ND	42	105	*	0.0	50	10	80
2,4-Dinitrotoluene	40	ND	39	98	*	1.2	38	24	96
Pentachlorophenol	40	ND	44	111	*	0.0	50	9	103
Pyrene	40	ND	35	89		4.9	31	26	127

D = Spike compound diluted out
# - Column used to flag out of control recoveries
* = Values outside QC limits.
Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.03	152	225034	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	911161	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.89	164	481599	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	9.96	188	679742	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.10	240	504023	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.35	264	402978	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.91	112	891864	130.20	mg/L	-0.01
Spiked Amount 200.000	Range 21 - 100		Recovery = 65.10%			
5) Phenol-d6 Acid SS 2	4.70	99	1219148	141.18	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 70.59%			
19) Nitrobenzene-d5 BN SS 1	5.54	82	588338	79.14	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 79.14%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1117615	79.48	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 79.48%			
58) 2,4,6-Tribromophenol Acid	8.92	330	301996	163.95	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 81.97%			
74) Terphenyl-d14 BN SS 3	12.86	244	1299671	87.24	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 87.24%			
Target Compounds						Qvalue
2) Pyridine	2.75	79	219358m	25.07	mg/L	
3) N-Nitrosodimethylamine	2.79	74	150600	28.37	mg/L	98
6) PHENOL	4.71	94	308831	30.05	mg/L	80
7) Bis(2-chloroethyl)ether	4.81	63	172175	41.47	mg/L #	73
8) 2-Chlorophenol	4.88	128	238839	30.06	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.04	146	384776m	31.71	mg/L	
10) 1,3'-Dichlorobenzene	5.00	146	158763m	28.35	mg/L	
11) 1,2'-Dichlorobenzene	5.22	146	247136	30.49	mg/L	99
12) Benzyl Alcohol	5.15	108	138403	30.82	mg/L	99
13) 2-Methylphenol	5.23	107	175278	33.00	mg/L	97
14) bis(2-chloroisopropyl)ethe	5.27	45	276132	32.55	mg/L	98
15) 3,4-Methylphenol	5.35	107	252837	36.05	mg/L	90
16) N-Nitrosodi-n-propyl amine	5.39	70	178631	33.89	mg/L	98
17) Hexachloroethane	5.48	117	87629	30.56	mg/L	100
20) Nitrobenzene	5.55	77	259440	35.31	mg/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21)	Isophorone	5.73	82	500916	32.80 mg/L	100
22)	2-NITROPHENOL	5.81	139	158780	32.97 mg/L	97
23)	2,4-dimethylphenol	5.79	122	164854	24.36 mg/L	98
24)	Bis(2-chloroethoxy)methane	5.88	93	291319	33.90 mg/L	98
25)	2,4-DICHLOROPHENOL	6.01	162	185411	31.55 mg/L	100
26)	1,2,4'-Trichlorobenzene	6.09	180	179457	31.60 mg/L	100
27)	Naphthalene`	6.15	128	742034	33.49 mg/L #	98
28)	4-Chloroaniline	6.18	127	332250	28.31 mg/L	98
29)	HEXACHLOROBUTADIENE`	6.27	225	103102	30.93 mg/L	100
30)	4-CHLORO-3-METHYLPHENOL	6.57	107	198866	35.06 mg/L	99
31)	2-Methylnaphthalene	6.75	142	553869	35.74 mg/L	99
32)	1-Methylnaphthalene	6.86	142	519650	34.34 mg/L	100
34)	Hexachlorocyclopentadiene	6.96	237	15213	25.07 mg/L	95
35)	2,4,6-TRICHLOROPHENOL	7.03	97	74726	38.35 mg/L	91
36)	2,4,5-trichlorophenol	7.08	97	64780	35.43 mg/L	99
38)	2-Chloronaphthalene	7.25	162	423001	32.39 mg/L	99
39)	2-Nitroaniline	7.34	65	122722	35.43 mg/L	98
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected	
41)	1,3-dinitrobenzene	7.62	168	101	Not Detected	
42)	1,2-dinitrobenzene	7.80	168	400	Not Detected	
43)	3-Nitroaniline	7.80	138	135996	33.27 mg/L	99
44)	4-Nitroaniline	8.58	138	96166	29.47 mg/L	99
45)	Dimethylphthalate	7.52	163	589986	37.94 mg/L	100
46)	2,6-Dinitrotoluene	7.63	165	141453	36.51 mg/L	89
47)	Acenaphthylene	7.71	152	784141	33.61 mg/L	100
48)	ACENAPHTHENE	7.93	154	524191	37.64 mg/L	99
49)	2,4-Dinitrophenol	7.93	184	39220	50.16 mg/L #	71
50)	4-nitrophenol	7.93	139	92033	39.26 mg/L	96
51)	2,4-Dinitrotoluene	8.10	165	180723	38.70 mg/L	100
52)	Dibenzofuran	8.11	168	617744	35.97 mg/L	99
53)	2,3,5,6-tetrachlorophenol	8.29	232	1481	Not Detected	
54)	2,3,4,6-tetrachlorophenol	8.29	232	1481	Not Detected	
55)	Diethylphthalate	8.36	149	689757	40.03 mg/L	100
56)	4-chlorophenyl phenyl ethe	8.50	204	242363	36.85 mg/L	100
57)	Fluorene	8.56	166	533203	38.59 mg/L	99
60)	4,6-Dinitro-2-methylphenol	8.65	198	70759	49.18 mg/L	88
61)	N-NITROSODI-N-PHENYLAMINE	8.66	169	424010	36.98 mg/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62)	Azobenzene	8.71	77	574935	37.62 mg/L	100
63)	4-bromophenyl phenyl ether	9.19	248	153823	37.40 mg/L	99
64)	Hexachlorobenzene	9.47	142	71222	38.37 mg/L	99
65)	PENTACHLOROPHENOL	9.73	266	65398	40.81 mg/L #	99
66)	Phenanthrene	10.00	178	661149	38.97 mg/L	100
67)	Anthracene	10.07	178	640852	37.91 mg/L	100
68)	Carbazole	10.31	167	540354	43.34 mg/L	100
69)	Di-n-Butylphthalate	10.89	149	1258293	40.99 mg/L	100
70)	FLUORANTHENE	12.16	202	709395	43.81 mg/L	99
72)	Benzidine	12.35	184	15670	2.83 mg/L	98
73)	Pyrene	12.61	202	686012	37.20 mg/L	100
75)	Butylbenzylphthalate	13.86	149	480387	37.07 mg/L	100
76)	Bis 2-ethylhexyl adipate	13.85	129	105	Not Detected	
77)	3,3'-Dichlorobenzidine	14.98	252	161455	37.22 mg/L	92
78)	Bis(2-ethylhexyl)phthalate	15.08	149	695349	37.38 mg/L	99
79)	Benzo[a]anthracene	15.06	228	588808	38.85 mg/L	95
80)	Chrysene	15.15	228	498712	39.24 mg/L	97
82)	DI-N-OCTYLPHTHALATE	16.32	149	1071028	40.92 mg/L	100
83)	Benzo[b]fluoranthene	17.39	252	489540	36.43 mg/L	98
84)	Benzo[k]fluoranthene	17.44	252	496489	42.07 mg/L #	100
85)	BENZO[A]PYRENE	18.21	252	429867	39.61 mg/L #	100
86)	Indeno(1,2,3-c,d)pyrene	21.68	276	345736	39.51 mg/L #	87
87)	Dibenzo[a,h]anthracene	21.68	278	294503	39.91 mg/L	96
88)	Benzo[g,h,i]perylene	22.65	276	264378	38.91 mg/L	84

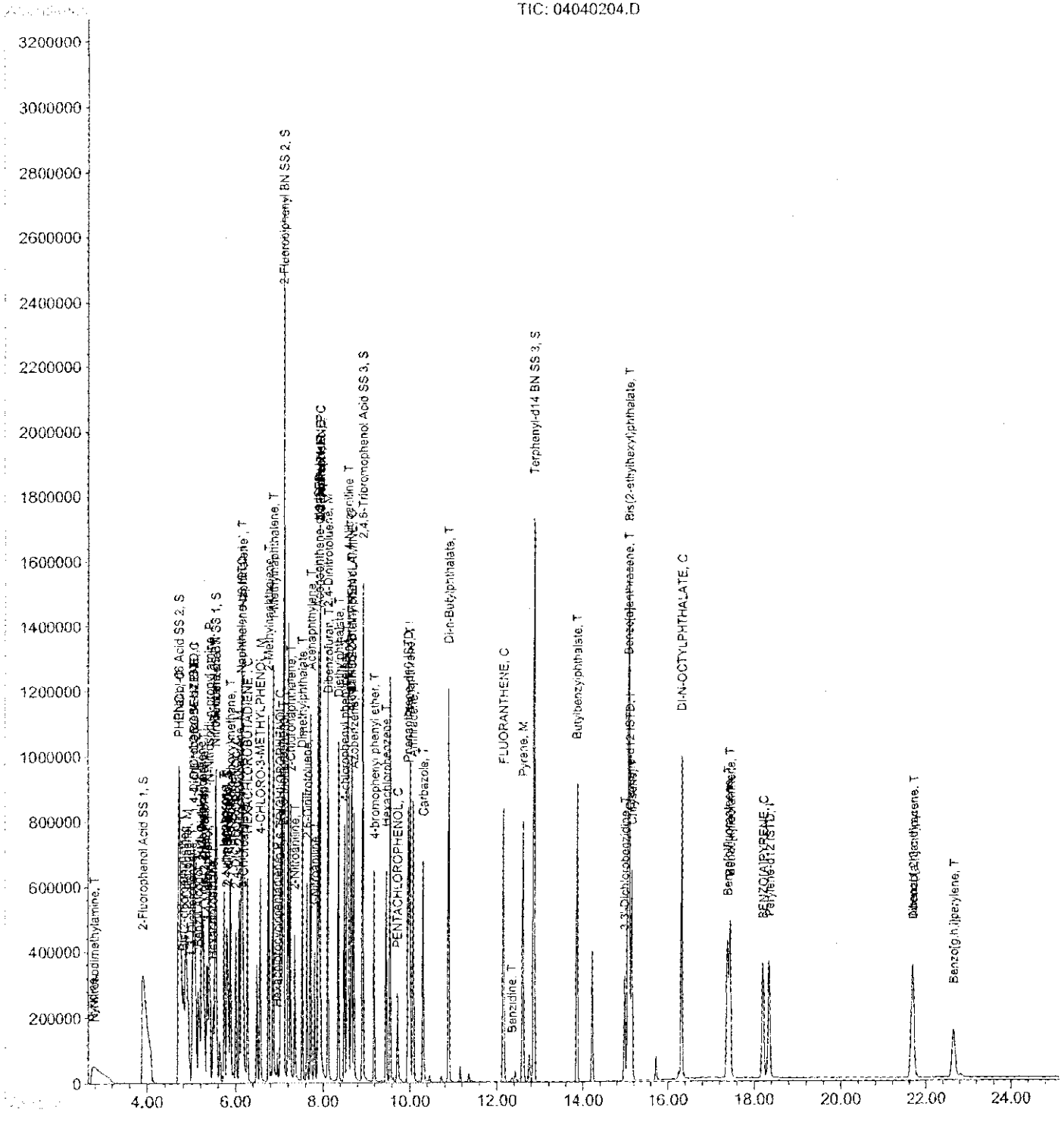
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 3:42 pm Operator: DJP
Sample : LCS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration

TIC: 04040204.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00
Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.03	152	225034	40.00	mg/L		-0.03
4) Naphthalene-D8 ISTD	6.13	136	911161	40.00	mg/L		-0.05
8) Acenaphthene-d10 ISTD	7.89	164	481599	40.00	mg/L		-0.06
System Monitoring Compounds							
Target Compounds							Qvalue
2) n-Decane	4.85	43	199068	28.71	mg/L		99
3) Acetophenone	5.39	105	272538	26.36	mg/L	#	75
5) Benzoic Acid	5.94	105	14496	7.10	mg/L		91
6) e-Caprolactam	6.50	55	105894	35.88	mg/L		88
7) Biphenyl	7.20	154	612546	33.11	mg/L		92
9) Atrazine	0.00	200	0	Not Detected			
10) Octadecane	9.55	57	361903	42.77	mg/L		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

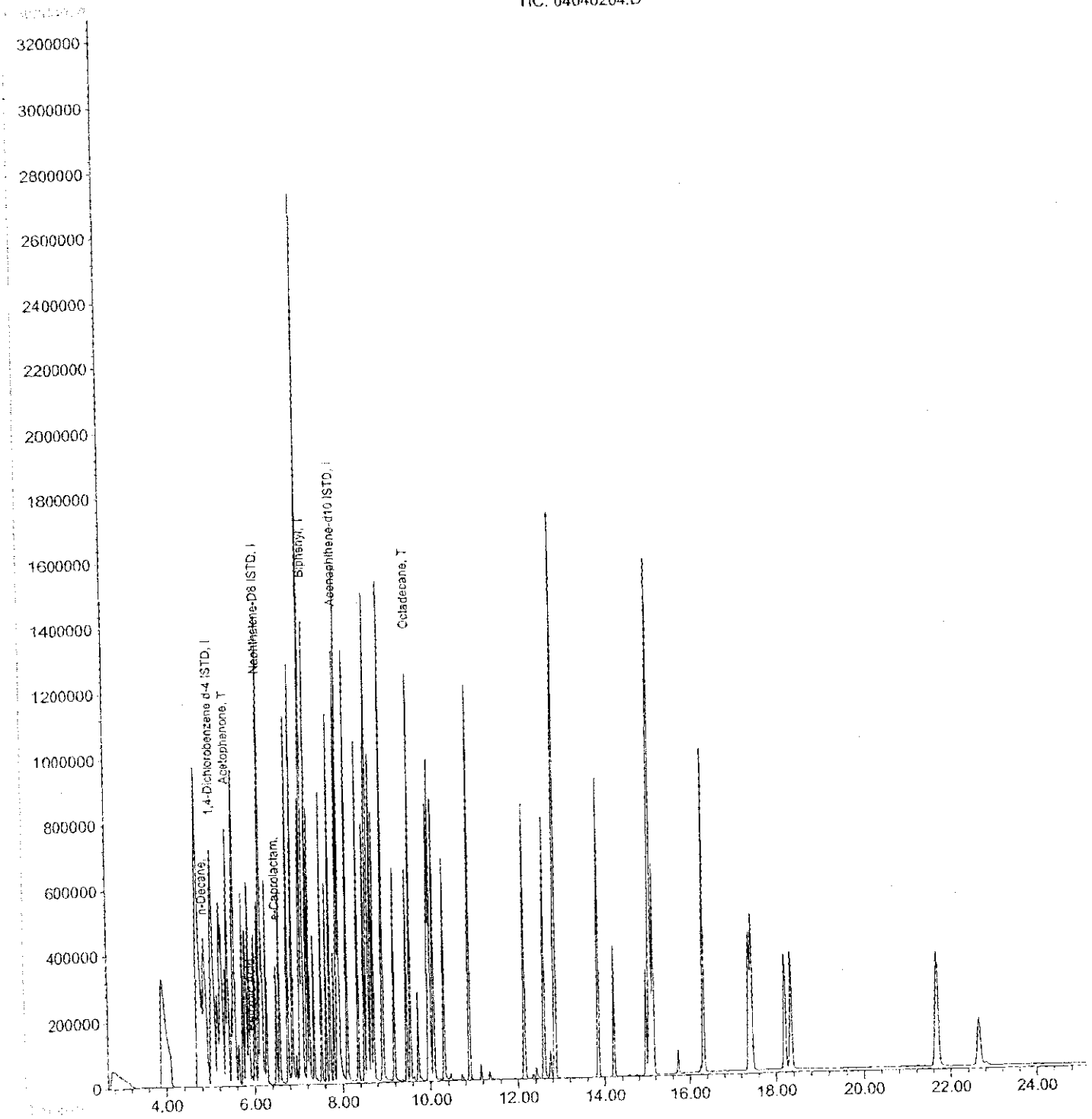
Data File : C:\HPCHEM\1\DATA\040402\04040204.D
Acq On : 2 Apr 2004 3:42 pm
Sample : LCS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 4
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration

TIC: 04040204.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.04	152	236467	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.13	136	947274	40.00	mg/L	-0.01
33) Acenaphthene-d10 ISTD	7.89	164	492200	40.00	mg/L	0.00
59) Phenanthrene-d10 ISTD	9.96	188	697330	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.10	240	552656	40.00	mg/L	0.00
81) Perylene-d12 ISTD	18.35	264	448714	40.00	mg/L	0.00
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	954481	132.61	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 66.31%			
5) Phenol-d6 Acid SS 2	4.70	99	1276517	140.68	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 70.34%			
19) Nitrobenzene-d5 BN SS 1	5.53	82	570652	73.83	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 73.83%			
37) 2-Fluorobiphenyl BN SS 2	7.10	172	1036992	72.16	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 72.16%			
58) 2,4,6-Tribromophenol Acid	8.92	330	314558	166.49	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 83.25%			
74) Terphenyl-d14 BN SS 3	12.86	244	1319458	80.77	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 80.77%			
Target Compounds						Qvalue
2) Pyridine	2.78	79	231218	25.15	mg/L	99
3) N-Nitrosodimethylamine	2.81	74	159900	28.66	mg/L	98
6) PHENOL	4.72	94	330393	30.59	mg/L	82
7) Bis(2-chloroethyl)ether	4.81	63	179778	41.21	mg/L #	72
8) 2-Chlorophenol	4.88	128	253961	30.42	mg/L	100
9) 1,4'-DICHLOROBENZENE	5.04	146	404454m	31.72	mg/L	
10) 1,3'-Dichlorobenzene	5.01	146	153901m	26.15	mg/L	
11) 1,2'-Dichlorobenzene	5.22	146	256850	30.15	mg/L	100
12) Benzyl Alcohol	5.15	108	142853	30.27	mg/L	98
13) 2-Methylphenol	5.23	107	181394	32.50	mg/L #	92
14) bis(2-chloroisopropyl)ethe	5.27	45	286366	32.13	mg/L #	84
15) 3,4-Methylphenol	5.35	107	266173	36.11	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.40	70	175596	31.71	mg/L	98
17) Hexachloroethane	5.48	117	92563	30.72	mg/L	98
20) Nitrobenzene	5.56	77	265891	34.81	mg/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
21)	Isophorone	5.73	82	507380	31.96	mg/L		99
22)	2-NITROPHENOL	5.82	139	166459	33.25	mg/L		95
23)	2,4-dimethylphenol	5.79	122	150765	21.43	mg/L		98
24)	Bis(2-chloroethoxy)methane	5.88	93	293176	32.82	mg/L		98
25)	2,4-DICHLOROPHENOL	6.00	162	195728	32.04	mg/L		99
26)	1,2,4'-Trichlorobenzene	6.09	180	182212	30.86	mg/L		99
27)	Naphthalene`	6.15	128	754892	32.77	mg/L	#	98
28)	4-Chloroaniline	6.18	127	337174	27.63	mg/L		99
29)	HEXACHLOROBUTADIENE`	6.27	225	104594	30.18	mg/L		99
30)	4-CHLORO-3-METHYLPHENOL	6.57	107	203730	34.55	mg/L		98
31)	2-Methylnaphthalene	6.75	142	549447	34.10	mg/L		99
32)	1-Methylnaphthalene	6.86	142	514444	32.70	mg/L		99
34)	Hexachlorocyclopentadiene	6.96	237	15461	24.97	mg/L		99
35)	2,4,6-TRICHLOROPHENOL	7.03	97	73522	36.92	mg/L		94
36)	2,4,5-trichlorophenol	7.08	97	64349	34.44	mg/L		97
38)	2-Chloronaphthalene	7.24	162	420398	31.49	mg/L		99
39)	2-Nitroaniline	7.34	65	122336	34.56	mg/L		99
40)	1,4-dinitrobenzene	0.00	168	0	Not Detected			
41)	1,3-dinitrobenzene	7.63	168	93	Not Detected			
42)	1,2-dinitrobenzene	7.80	168	455	Not Detected			
43)	3-Nitroaniline	7.80	138	139422	33.37	mg/L		99
44)	4-Nitroaniline	8.58	138	106051	31.80	mg/L		95
45)	Dimethylphthalate	7.52	163	586804	36.92	mg/L		100
46)	2,6-Dinitrotoluene	7.63	165	142083	35.88	mg/L		89
47)	Acenaphthylene	7.71	152	760028	31.87	mg/L		100
48)	ACENAPHTHENE	7.93	154	504511	35.45	mg/L		99
49)	2,4-Dinitrophenol	7.93	184	42686	52.64	mg/L	#	66
50)	4-nitrophenol	7.93	139	100804	41.89	mg/L		98
51)	2,4-Dinitrotoluene	8.10	165	186905	39.17	mg/L		99
52)	Dibenzofuran	8.11	168	600624	34.22	mg/L		99
53)	2,3,5,6-tetrachlorophenol	8.29	232	1680	Not Detected			
54)	2,3,4,6-tetrachlorophenol	8.29	232	1680	Not Detected			
55)	Diethylphthalate	8.36	149	697395	39.60	mg/L		100
56)	4-chlorophenyl phenyl ethe	8.50	204	238068	35.42	mg/L		100
57)	Fluorene	8.55	166	526818	37.31	mg/L		99
60)	4,6-Dinitro-2-methylphenol	8.65	198	77090	51.72	mg/L	#	85
61)	N-NITROSODI-N-PHENYLAMINE	8.66	169	417971	35.54	mg/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

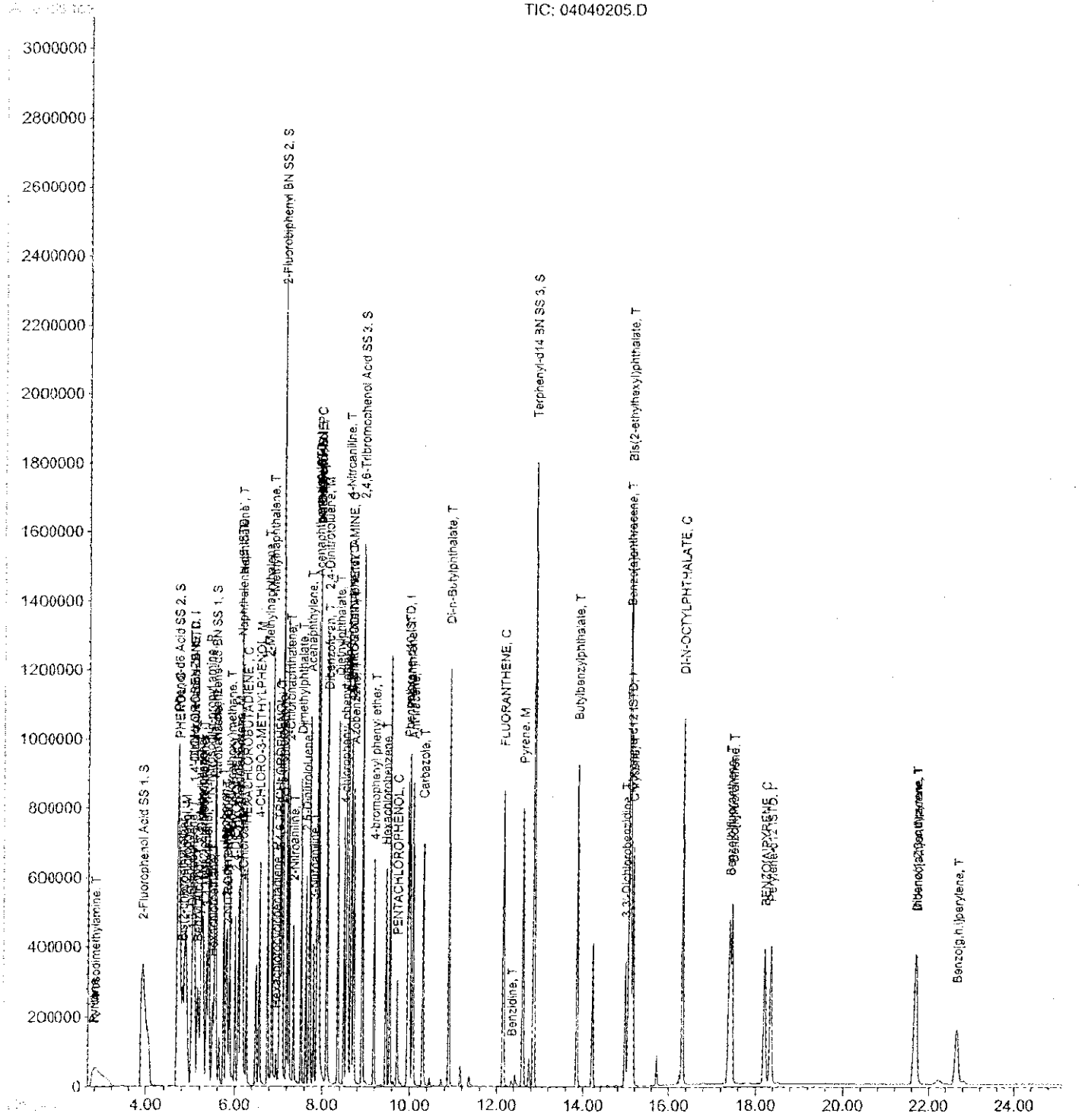
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
62)	Azobenzene	8.71	77	579383	36.96	mg/L		99
63)	4-bromophenyl phenyl ether	9.19	248	151908	36.00	mg/L		99
64)	Hexachlorobenzene	9.46	142	72504	38.08	mg/L		98
65)	PENTACHLOROPHENOL	9.72	266	73881	44.36	mg/L	#	99
66)	Phenanthrene	10.00	178	668223	38.40	mg/L		100
67)	Anthracene	10.07	178	654133	37.72	mg/L		100
68)	Carbazole	10.31	167	568969	44.48	mg/L		100
69)	Di-n-Butylphthalate	10.89	149	1288286	40.91	mg/L		100
70)	FLUORANTHENE	12.16	202	732633	44.11	mg/L		100
72)	Benzidine	12.35	184	18003	2.96	mg/L		98
73)	Pyrene	12.61	202	716448	35.43	mg/L		99
75)	Butylbenzylphthalate	13.86	149	508430	35.78	mg/L		99
76)	Bis 2-ethylhexyl adipate	13.86	129	102	Not Detected			
77)	3,3'-Dichlorobenzidine	14.98	252	177281	37.27	mg/L		92
78)	Bis(2-ethylhexyl)phthalate	15.08	149	732945	35.94	mg/L		99
79)	Benzo[a]anthracene	15.06	228	638011	38.39	mg/L		94
80)	Chrysene	15.15	228	536773	38.52	mg/L		96
82)	DI-N-OCTYLPHTHALATE	16.32	149	1161726	39.86	mg/L		100
83)	Benzo[b]fluoranthene	17.39	252	539660	36.07	mg/L		98
84)	Benzo[k]fluoranthene	17.45	252	549498	41.82	mg/L	#	100
85)	BENZO[A]PYRENE	18.21	252	470961	38.97	mg/L	#	100
86)	Indeno(1,2,3-c,d)pyrene	21.68	276	380984	39.10	mg/L		89
87)	Dibenzo[a,h]anthracene	21.69	278	325640	39.63	mg/L		97
88)	Benzo[g,h,i]perylene	22.65	276	289043	38.21	mg/L		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:14 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040205.D
Acq On : 2 Apr 2004 4:13 pm
Sample : LCSD 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004

Vial: 5
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

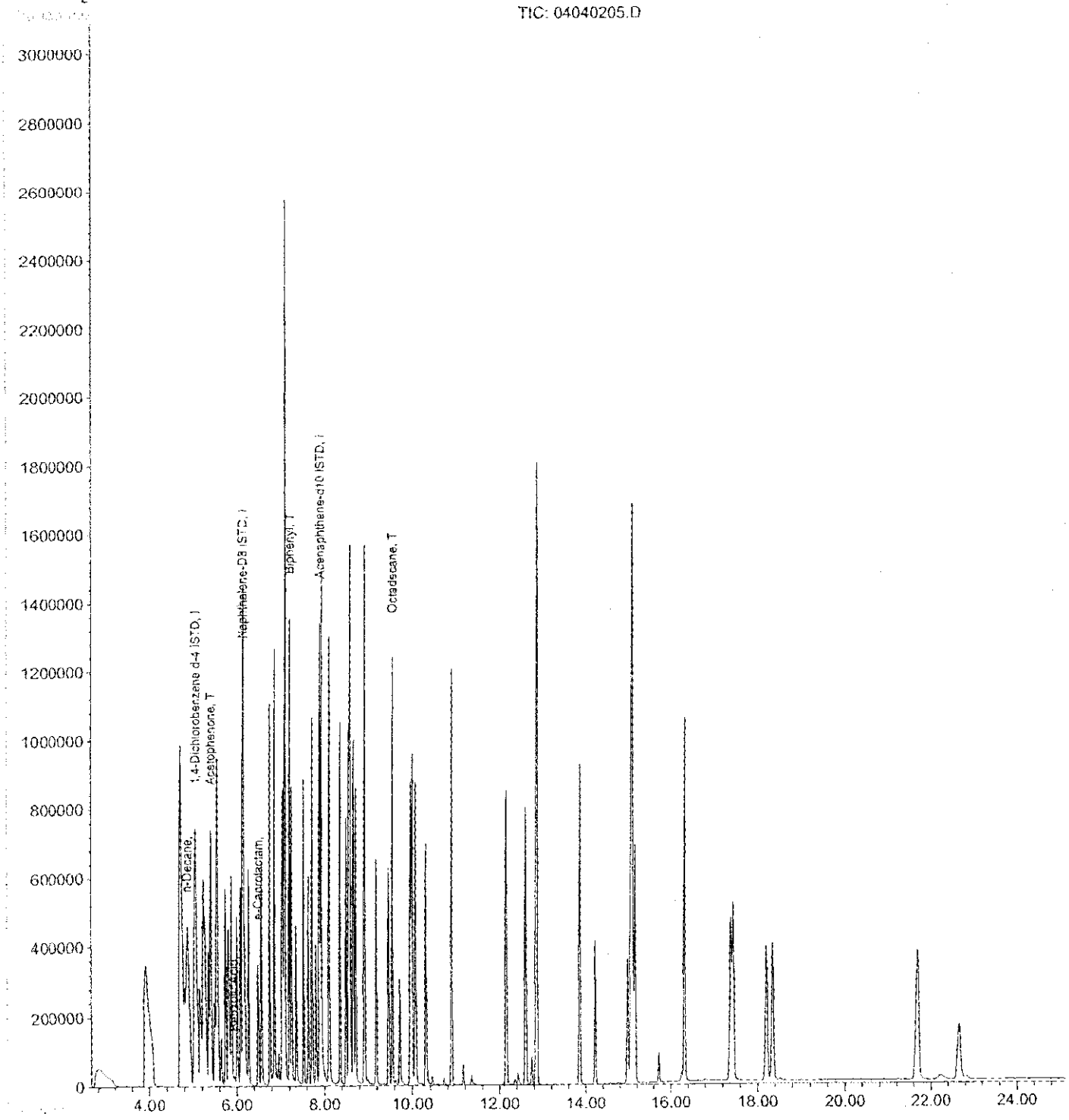
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.04	152	236366	40.00	mg/L	-0.02
4) Naphthalene-D8 ISTD	6.13	136	947274	40.00	mg/L	-0.05
8) Acenaphthene-d10 ISTD	7.89	164	492762	40.00	mg/L	0.06
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.86	43	206211	28.32	mg/L	99
3) Acetophenone	5.39	105	276251	25.44	mg/L	97
5) Benzoic Acid	5.93	105	13434	6.36	mg/L	91
6) e-Caprolactam	6.50	55	107001	34.87	mg/L	91
7) Biphenyl	7.20	154	598204	31.10	mg/L	92
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.55	57	360057	41.59	mg/L	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040205.D Vial: 5
Acq On : 2 Apr 2004 4:13 pm Operator: DJP
Sample : LCSD 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 10:27 2004 Quant Results File: MDE_CHN.RES

Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

SEMI-VOLATILE ORGANICS COMPOUNDS
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 04/02/04 **Analytical Lot Number:** 504

METHOD: EPA 8270 **Lab File IDs:** 04040128.D
04040129.D

Matrix: Water

Sample ID: BATCH MS 1000mL MS

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)		LCL (%)	UCL (%)
Phenol	40	ND	25	61		12	110
2-Chlorophenol	40	ND	24	61		27	123
1,4-Dichlorobenzene	40	ND	24	61		36	97
N-Nitroso-di-n-propylamine	40	ND	25	64		41	116
1,2,4-Trichlorobenzene	40	ND	24	60		39	98
4-Chloro-3-methylphenol	40	ND	31	78		23	97
Acenaphthene	40	ND	31	77		46	118
4-Nitrophenol	40	ND	36	90	*	10	80
2,4-Dinitrotoluene	40	ND	33	83		24	96
Pentachlorophenol	40	ND	42	105	*	9	103
Pyrene	40	ND	35	89		26	127

Sample ID: BATCH MSD 1000mL MSD

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)		RPD (%)	QC RPD (%)	LCL (%)	UCL (%)
Phenol	40	ND	25	63		3.1	42	12	110
2-Chlorophenol	40	ND	25	61		1.0	40	27	123
1,4-Dichlorobenzene	40	ND	27	68		11.1	28	36	97
N-Nitroso-di-n-propylamine	40	ND	28	70		9.5	38	41	116
1,2,4-Trichlorobenzene	40	ND	26	66		9.7	28	39	98
4-Chloro-3-methylphenol	40	ND	32	81		4.0	42	23	97
Acenaphthene	40	ND	34	85		11.0	31	46	118
4-Nitrophenol	40	ND	39	97	*	0.0	50	10	80
2,4-Dinitrotoluene	40	ND	39	98	*	16.4	38	24	96
Pentachlorophenol	40	ND	45	111	*	0.0	50	9	103
Pyrene	40	ND	39	98		10.2	31	26	127

D = Spike compound diluted out
# - Column used to flag out of control recoveries
* = Values outside QC limits.
Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4 IST	5.07	152	249995	40.00	mg/L	0.00
18) Naphthalene-d8 ISTD	6.17	136	1001375	40.00	mg/L	-0.02
33) Acenaphthene-d10 ISTD	7.95	164	518789	40.00	mg/L	-0.02
59) Phenanthrene-d10 ISTD	10.04	188	689041	40.00	mg/L	0.00
71) Chrysene-d12 ISTD	15.18	240	459266	40.00	mg/L	-0.03
81) Perylene-d12 ISTD	18.47	264	372016	40.00	mg/L	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol Acid SS 1	3.93	112	858408	112.81	mg/L	0.00
Spiked Amount 200.000	Range 21 - 100		Recovery = 56.41%			
5) Phenol-d6 Acid SS 2	4.73	99	1180598	123.07	mg/L	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 61.54%			
19) Nitrobenzene-d5 BN SS 1	5.57	82	489403	59.90	mg/L	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 59.90%			
37) 2-Fluorobiphenyl BN SS 2	7.15	172	1007790	66.53	mg/L	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 66.53%			
58) 2,4,6-Tribromophenol Acid	8.99	330	336322	168.43	mg/L	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 84.22%			
74) Terphenyl-d14 BN SS 3	12.94	244	1205239	88.78	mg/L	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 88.78%			
Target Compounds						Qvalue
2) Pyridine	2.76	79	179055m	18.42	mg/L	
3) N-Nitrosodimethylamine	2.79	74	128535m	21.79	mg/L	
6) PHENOL	4.74	94	279836	24.51	mg/L	82
7) Bis(2-chloroethyl)ether	4.83	63	109560	23.75	mg/L #	71
8) 2-Chlorophenol	4.91	128	214544	24.31	mg/L	99
9) 1,4'-DICHLOROBENZENE	5.08	146	329808m	24.46	mg/L	
10) 1,3'-Dichlorobenzene	5.04	146	135224m	21.73	mg/L	
11) 1,2'-Dichlorobenzene	5.25	146	208582	23.16	mg/L	99
12) Benzyl Alcohol	5.18	108	111866	22.42	mg/L	90
13) 2-Methylphenol	5.26	107	157019	26.61	mg/L	99
14) bis(2-chloroisopropyl)ethe	5.30	45	226397	24.02	mg/L	98
15) 3,4-Methylphenol	5.38	107	232230	29.80	mg/L	89
16) N-Nitrosodi-n-propyl amine	5.42	70	149213	25.49	mg/L	99
17) Hexachloroethane	5.52	117	72381	22.72	mg/L	99
20) Nitrobenzene	5.59	77	220844	27.35	mg/L	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D
Acq On : 2 Apr 2004 8:17 am
Sample : 04033026-15 MS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004

Vial: 28
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00

Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) Isophorone	5.77	82	416714	24.83 mg/L	99
22) 2-NITROPHENOL	5.85	139	140827	26.61 mg/L	99
23) 2,4-dimethylphenol	5.83	122	160665	21.60 mg/L	97
24) Bis(2-chloroethoxy)methane	5.91	93	238929	25.30 mg/L	99
25) 2,4-DICHLOROPHENOL	6.05	162	169709	26.28 mg/L	99
26) 1,2,4'-Trichlorobenzene	6.13	180	148600	23.81 mg/L	99
27) Naphthalene`	6.19	128	626761	25.74 mg/L #	99
28) 4-Chloroaniline	6.22	127	278098	21.56 mg/L	97
29) HEXACHLOROBUTADIENE`	6.31	225	84945	23.19 mg/L	98
30) 4-CHLORO-3-METHYLPHENOL	6.61	107	193755	31.09 mg/L	99
31) 2-Methylnaphthalene	6.80	142	449662	26.40 mg/L	99
32) 1-Methylnaphthalene	6.92	142	437269	26.29 mg/L	98
34) Hexachlorocyclopentadiene	7.01	237	7471	13.76 mg/L	91
35) 2,4,6-TRICHLOROPHENOL	7.08	97	68998	32.87 mg/L	94
36) 2,4,5-trichlorophenol	7.14	97	65091	33.05 mg/L	99
38) 2-Chloronaphthalene	7.30	162	361832	25.72 mg/L	99
39) 2-Nitroaniline	7.41	65	110368	29.58 mg/L	97
40) 1,4-dinitrobenzene	0.00	168	0	Not Detected	
41) 1,3-dinitrobenzene	0.00	168	0	Not Detected	
42) 1,2-dinitrobenzene	7.86	168	386	Not Detected	
43) 3-Nitroaniline	7.87	138	114897	26.09 mg/L	99
44) 4-Nitroaniline	8.65	138	88490	25.18 mg/L	99
45) Dimethylphthalate	7.58	163	545520	32.57 mg/L	99
46) 2,6-Dinitrotoluene	7.68	165	129668	31.07 mg/L	89
47) Acenaphthylene	7.77	152	671260	26.71 mg/L	100
48) ACENAPHTHENE	7.98	154	459532	30.63 mg/L	99
49) 2,4-Dinitrophenol	7.99	184	45999	53.54 mg/L #	52
50) 4-nitrophenol	8.00	139	90342	35.98 mg/L	94
51) 2,4-Dinitrotoluene	8.16	165	166757	33.15 mg/L	100
52) Dibenzofuran	8.17	168	546219	29.53 mg/L	99
53) 2,3,5,6-tetrachlorophenol	8.36	232	1278	Not Detected	
54) 2,3,4,6-tetrachlorophenol	8.36	232	1278	Not Detected	
55) Diethylphthalate	8.41	149	652312	35.14 mg/L	100
56) 4-chlorophenyl phenyl ethe	8.56	204	211781	29.89 mg/L	99
57) Fluorene	8.62	166	484237	32.53 mg/L	98
60) 4,6-Dinitro-2-methylphenol	8.71	198	77564	52.50 mg/L #	72
61) N-NITROSODI-N-PHENYLAMINE	8.72	169	395311	34.02 mg/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Quant Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

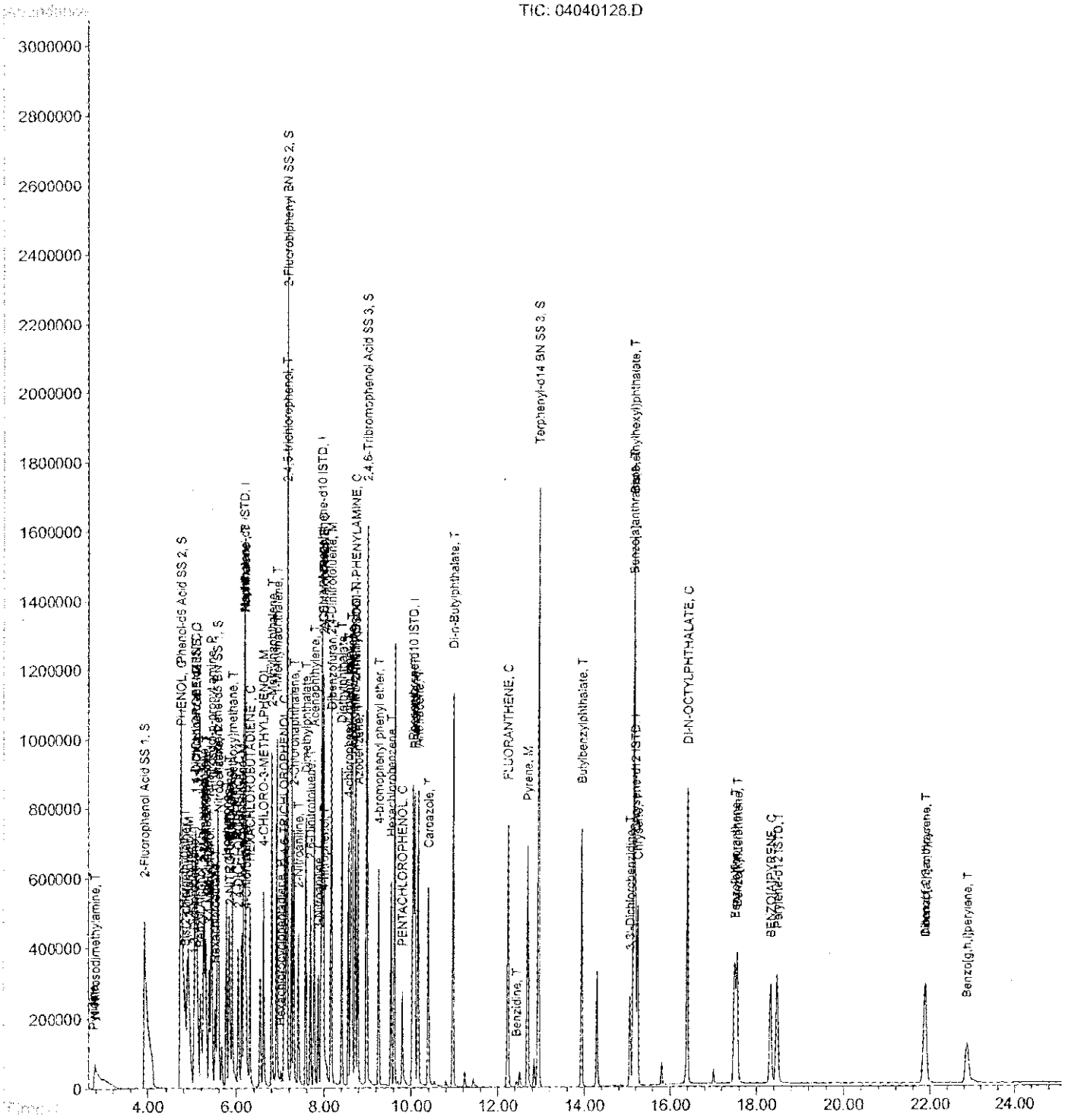
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
62)	Azobenzene	8.79	77	527350	34.04 mg/L	100
63)	4-bromophenyl phenyl ether	9.26	248	137449	32.97 mg/L	99
64)	Hexachlorobenzene	9.54	142	64996	34.55 mg/L	94
65)	PENTACHLOROPHENOL	9.80	266	68588	42.03 mg/L #	97
66)	Phenanthrene	10.08	178	605277	35.20 mg/L	100
67)	Anthracene	10.15	178	590504	34.46 mg/L	100
68)	Carbazole	10.39	167	504159	39.89 mg/L	100
69)	Di-n-Butylphthalate	10.97	149	1178725	37.88 mg/L	100
70)	FLUORANTHENE	12.24	202	618377	37.68 mg/L	100
72)	Benzidine	12.43	184	17170	3.40 mg/L	95
73)	Pyrene	12.69	202	596017	35.47 mg/L	99
75)	Butylbenzylphthalate	13.95	149	420668	35.62 mg/L	100
76)	Bis 2-ethylhexyl adipate	13.95	129	94	Not Detected	
77)	3,3' Dichlorobenzidine	15.06	252	130303	32.96 mg/L	99
78)	Bis(2-ethylhexyl)phthalate	15.15	149	614435	36.25 mg/L	100
79)	Benzo[a]anthracene	15.14	228	497460	36.02 mg/L	99
80)	Chrysene	15.24	228	420214	36.29 mg/L	100
82)	DI-N-OCTYLPHTHALATE	16.40	149	914221	37.83 mg/L	99
83)	Benzo[b]fluoranthene	17.50	252	421858m	34.01 mg/L	
84)	Benzo[k]fluoranthene	17.55	252	397420	36.48 mg/L	100
85)	BENZO[A]PYRENE	18.33	252	355581	35.49 mg/L	99
86)	Indeno(1,2,3-c,d)pyrene	21.88	276	301754	37.36 mg/L	97
87)	Dibenzo[a,h]anthracene	21.88	278	253123	37.16 mg/L	99
88)	Benzo[g,h,i]perylene	22.87	276	234464	37.38 mg/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040401\04040128.D Vial: 28
Acq On : 2 Apr 2004 8:17 am Operator: DJP
Sample : 04033026-15 MS 1000mL Inst : SVOC GC/M
Misc : Batch #504 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:30 2004 Quant Results File: HPBNAN.RES

Method : C:\HPCHEM\1\METHODS\HPBNAN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Fri Apr 02 09:02:01 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040401\04040128.D
Acq On : 2 Apr 2004 8:17 am
Sample : 04033026-15 MS 1000mL
Misc : Batch #504
MS Integration Params: rteint.p
Quant Time: Apr 2 10:11 2004

Vial: 28
Operator: DJP
Inst : SVOC GC/M
Multiplr: 1.00
Quant Results File: MDE_CHN.RES

Quant Method : C:\HPCHEM\1\METHODS\MDE_CHN.M (RTE Integrator)
Title : ALS8270.M
Last Update : Wed Mar 31 11:00:43 2004
Response via : Initial Calibration
DataAcq Meth : ALSHPBNA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene d-4 IS	5.07	152	249189	40.00	mg/L	0.00
4) Naphthalene-D8 ISTD	6.17	136	1001375	40.00	mg/L	-0.01
8) Acenaphthene-d10 ISTD	7.95	164	518265	40.00	mg/L	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) n-Decane	4.88	43	165550	21.57	mg/L	98
3) Acetophenone	5.42	105	224805	19.64	mg/L	99
5) Benzoic Acid	5.96	105	19557	8.62	mg/L	88
6) e-Caprolactam	6.54	55	97091	29.93	mg/L	86
7) Biphenyl	7.25	154	520319	25.59	mg/L	93
9) Atrazine	0.00	200	0	Not Detected		
10) Octadecane	9.62	57	324174	35.60	mg/L	91

(#) = qualifier out of range (m) = manual integration

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Metals

- *Initial Calibration Verification Summary*
- *Continuing Calibration Verification Summary*
- *Duplicate Summary*
- *Matrix Spike Summary*
- *Method Blank Summary (LRB)*
- *LCS Summary (LFB)*

6630 Baltimore National Pike Baltimore, MD 21228 (800) 932-9047 (410) 747-8770 FAX (410) 788-8723

Batch QC Summary Report

Batch ID:	547	Date:	04/07/04	QC Sample:	04033128-02

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec
Antimony	0.03	114	65 - 141	102.2	70 - 130	11.8	20	109.4
Arsenic	0.16	104	67 - 118	101.1	70 - 130	2.9	20	98.5
Barium	0	106	-45 - 274	113.2	70 - 130	3.0	20	107.2
Beryllium	0	103	75 - 128	90.7	70 - 130	0.0	20	88.2
Cadmium	0.06	106	64 - 119	102.3	70 - 130	5.5	20	96.1
Chromium	0.32	102	66 - 118	109.6	70 - 130	1.6	20	109.0
Copper	1.45	107	56 - 140	102.7	70 - 130	1.2	20	97.8
Lead	0.05	107	65 - 123	115.9	70 - 130	5.9	20	112.2
Mercury	0.01	107	45 - 140	112.0	70 - 130	0.0	20	109.5
Nickel	0	114	54 - 144	98.0	70 - 130	0.0	20	92.1
Selenium	0	106	63 - 124	102.6	70 - 130	10.7	20	104.9
Silver	0	106	50 - 133	107.7	70 - 130	0.0	20	101.2
Thallium	0	101	74 - 114	86.4	70 - 130	0.0	20	85.9
Zinc	0.26	103	31 - 166	72.2	70 - 130	8.5	20	86.2

QC Comments:

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit	PDS %Rec

Associated Samples:

Lab ID	Client ID	Test Group
04033013-02	DMW-3D-032604	PP Metals in Water
04033013-04	DMW-3I-032604	PP Metals in Water
04033013-06	DMW-3S-032604	PP Metals in Water
04033013-08	DMW-9I-032604	PP Metals in Water
04033013-10	DMW-1A-033004	PP Metals in Water
04033013-12	DMW-1B-033004	PP Metals in Water
04033013-14	MW-2-033004	PP Metals in Water
04033118-01	HRP Out	Total Metals in Water
04033118-02	HRP Lagoon	Total Metals in Water
04033128-02	DMW-10S-033004	PP Metals in Water
04033128-04	DMW-10I-033004	PP Metals in Water
04033128-06	DMW-1S-033004	PP Metals in Water
04033128-08	DMW-6S-033104	PP Metals in Water
04033128-10	DMW-6I-033104	PP Metals in Water
04033128-12	DMW-6D-033104	PP Metals in Water
04033128-14	MW-6-033104	PP Metals in Water
04033128-16	DMW-2A-033104	PP Metals in Water
04040103-01	3321-EI	TCLP - 8 Metals - EPA 1311/200.8
04040108-05	AM#1	Total Metals in Water
04040108-06	AM#2	Total Metals in Water

QC Comments:

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\006ICV1.D\006ICV1.D#
Date Acquired: Apr 7 2004 12:05 pm
Acq. Method: 47.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 15 2004 08:26 am
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.61	ppb	0.51	50.00	90 - 110	
52 Cr	49.59	ppb	0.67	50.00	90 - 110	
60 Ni	52.60	ppb	1.79	50.00	90 - 110	
63 Cu	52.31	ppb	1.73	50.00	90 - 110	
66 Zn	48.30	ppb	0.49	50.00	90 - 110	
75 As	51.02	ppb	0.73	50.00	90 - 110	
82 Se	51.55	ppb	1.69	50.00	90 - 110	
107 Ag	50.39	ppb	1.74	50.00	90 - 110	
111 Cd	53.28	ppb	2.28	50.00	90 - 110	
121 Sb	57.86	ppb	2.06	50.00	90 - 110	Fail
202 Hg	1.96	ppb	2.54	2.00	90 - 110	
205 Tl	51.32	ppb	1.57	50.00	90 - 110	
208 Pb	51.15	ppb	1.27	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3732531	0.87	3765813	99.1	30 - 140	
45 Sc	3467704	0.86	3527369	98.3	30 - 140	
72 Ge	546384	0.75	548095	99.7	30 - 140	
115 In	3546791	1.65	3570529	99.3	30 - 140	
159 Tb	3913884	1.82	3821942	102.4	30 - 140	
209 Bi	2152558	1.87	2084621	103.3	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

Calibration Report

Calibration : Z:\040407B.B\47.C
Last Calib: Apr 12, 2004 11:43
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...chem\1\data\040407b.b\002calb.d\	002calb.d#	Apr 7 2004 11:45 am
2	...chem\1\data\040407b.b\003cals.d\	003cals.d#	Apr 7 2004 11:50 am
3	...chem\1\data\040407b.b\004cals.d\	004cals.d#	Apr 7 2004 11:55 am
4	...chem\1\data\040407b.b\005cals.d\	005cals.d#	Apr 7 2004 12:00 pm
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
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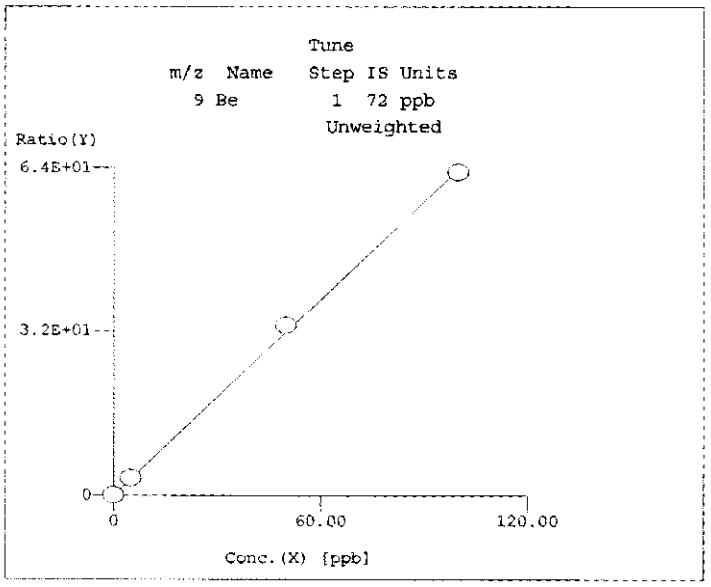
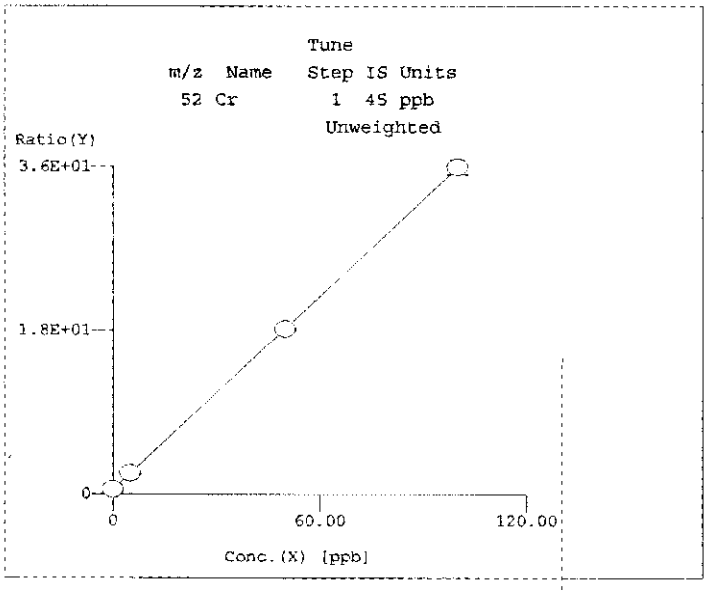
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		



Lv.	Conc.	Ratio		RSD %
1	0.00	1.52E-2	P	8.86
2	5.00	3.34E+0	P	4.76
3	50.00	3.31E+1	P	8.46E-1
4	100.00	6.31E+1	P	9.19E-1
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 0.9997
Y = 6.372E-1*X +1.521E-2
X = 1.569E+0*Y -2.387E-2

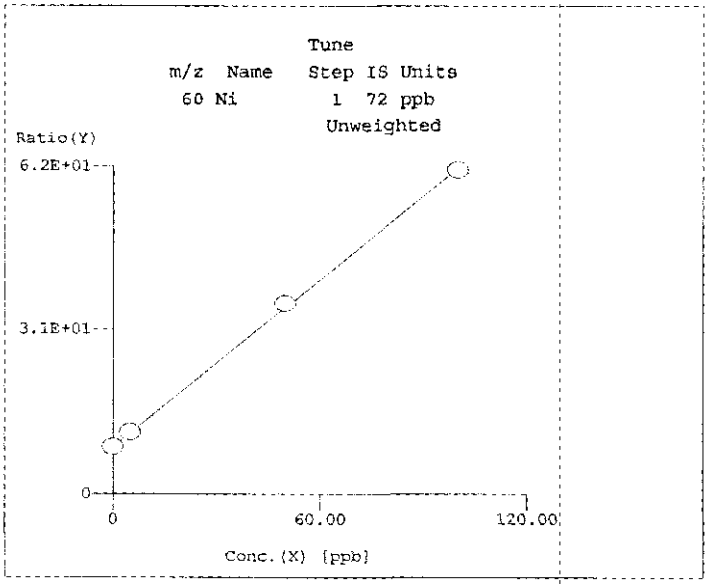
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	5.12E-1	P	3.65
2	5.00	2.29E+0	P	5.22
3	50.00	1.82E+1	P	1.04
4	100.00	3.60E+1	A	2.22
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 3.543E-1*X +5.120E-1
X = 2.823E+0*Y -1.445E+0

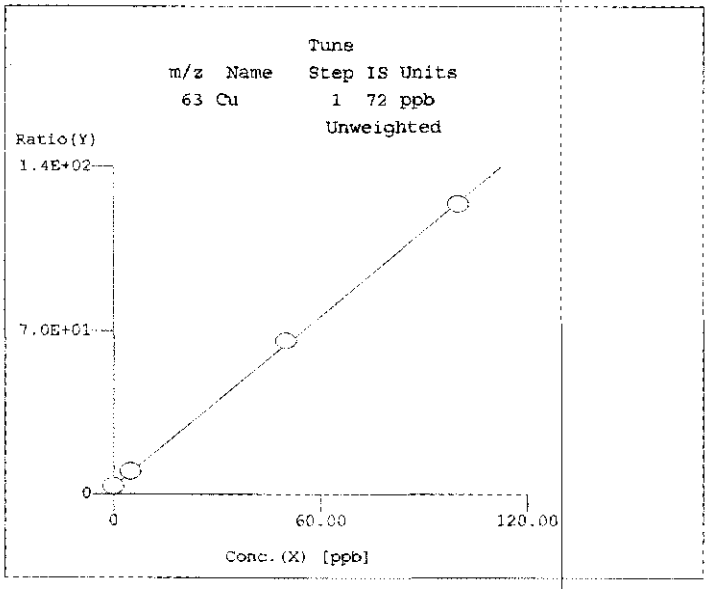
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	8.88E+0 P	2.47
2	5.00	1.17E+1 P	3.28
3	50.00	3.60E+1 P	4.91E-1
4	100.00	6.13E+1 P	9.43E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9998
Y = 5.281E-1*X +8.882E+0
X = 1.894E+0*Y -1.682E+1

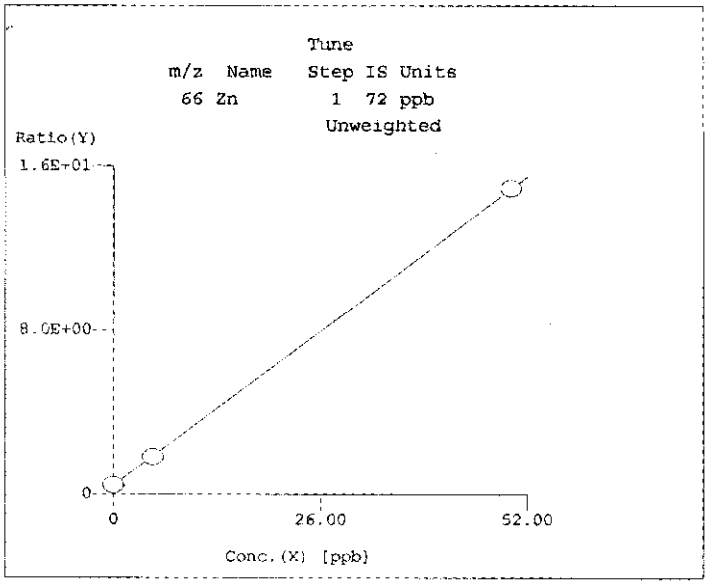
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.27E+0 P	1.55
2	5.00	9.64E+0 P	3.11
3	50.00	6.56E+1 P	1.28
4	100.00	1.24E+2 P	8.88E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.215E+0*X +3.273E+0
X = 8.230E-1*Y -2.694E+0

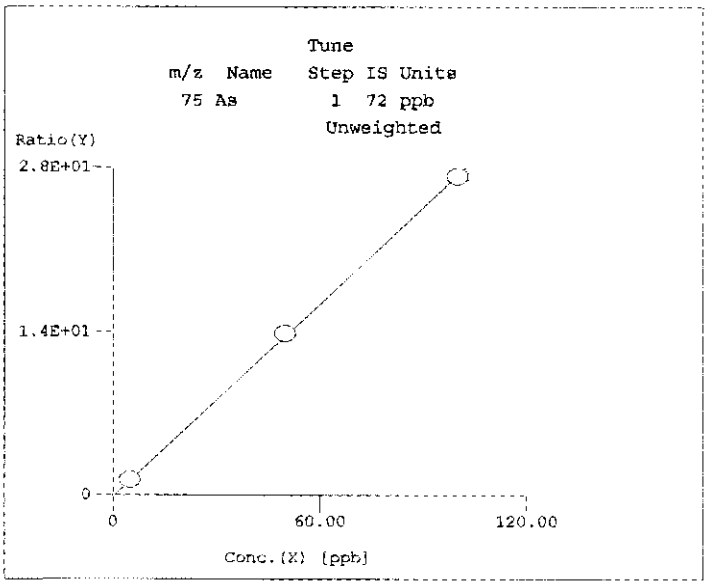
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.34E-1 P	2.35
2	5.00	1.81E+0 P	5.49
3	50.00	1.49E+1 P	3.90E-1
*4	100.00	2.65E+1 P	1.37
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 2.893E-1*X +4.340E-1
X = 3.456E+0*Y -1.500E+0

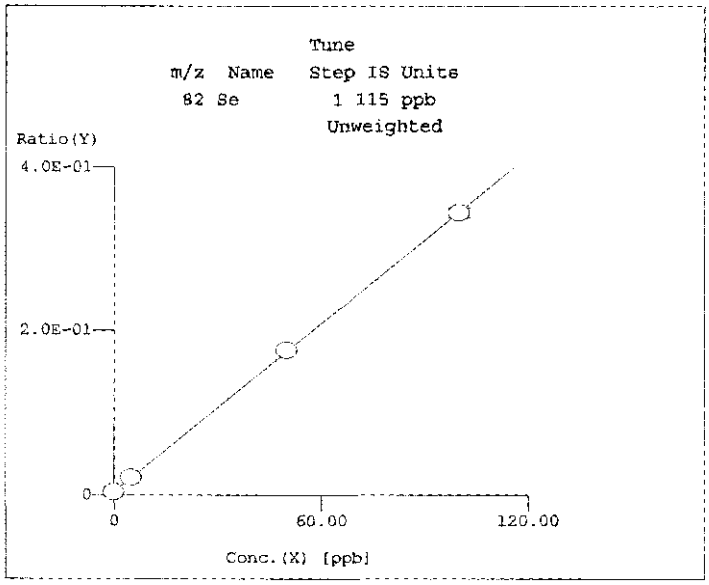
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	-1.39E-1 P	---
2	5.00	1.29E+0 P	6.63
3	50.00	1.39E+1 P	2.38E-1
4	100.00	2.72E+1 P	9.81E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 2.749E-1*X -1.391E-1
X = 3.638E+0*Y +5.062E-1

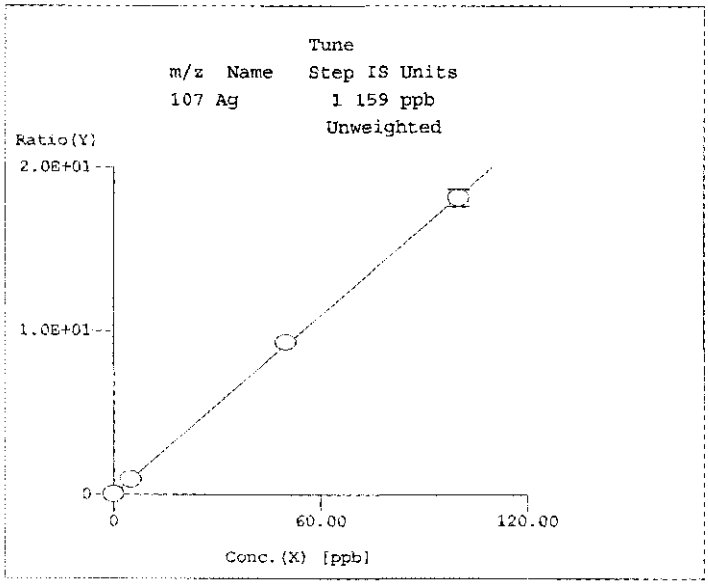
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	3.40E-3 P	3.41
2	5.00	2.11E-2 P	6.42
3	50.00	1.76E-1 P	3.65E-1
4	100.00	3.45E-1 P	1.76
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 3.420E-3*X +3.402E-3
X = 2.924E+2*Y -9.948E-1

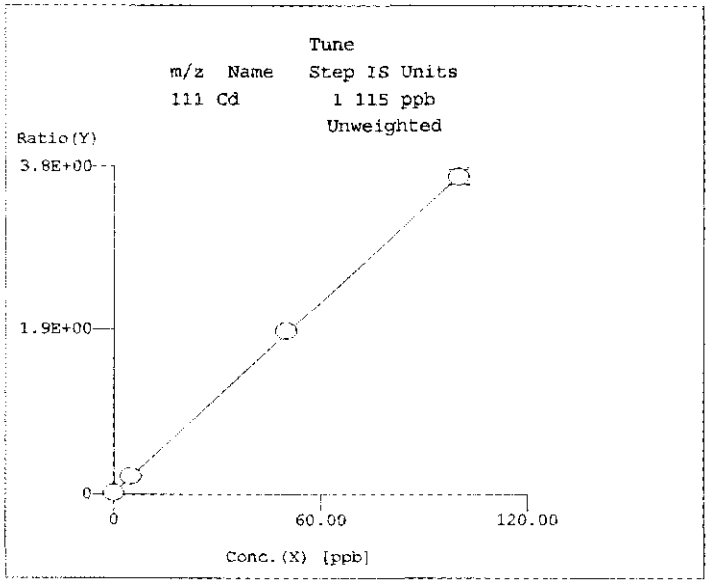
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	2.66E-2 P	1.93
2	5.00	9.27E-1 P	2.58
3	50.00	9.30E+0 P	1.29
4	100.00	1.81E+1 P	2.93
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 1.820E-1*X +2.664E-2
X = 5.494E+0*Y -1.463E-1

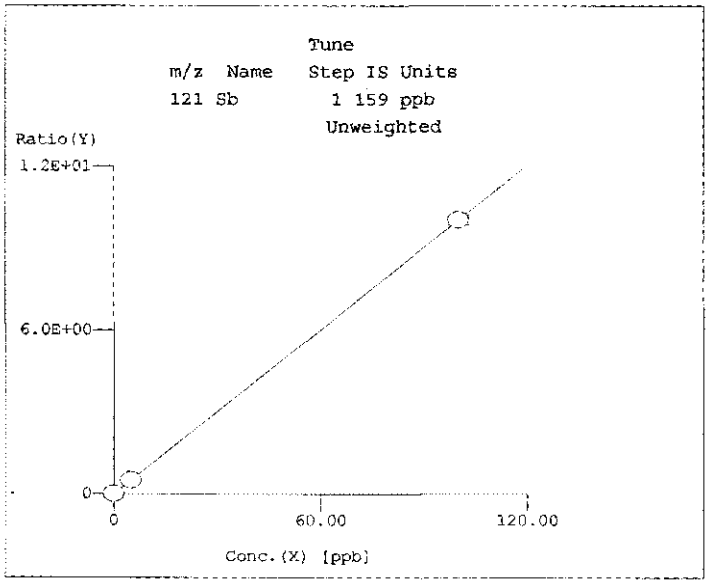
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.78E-2	P	6.78
2	5.00	2.09E-1	P	5.87
3	50.00	1.88E+0	P	1.18
4	100.00	3.68E+0	P	2.31
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 3.677E-2*X +1.784E-2
X = 2.720E+1*Y -4.853E-1

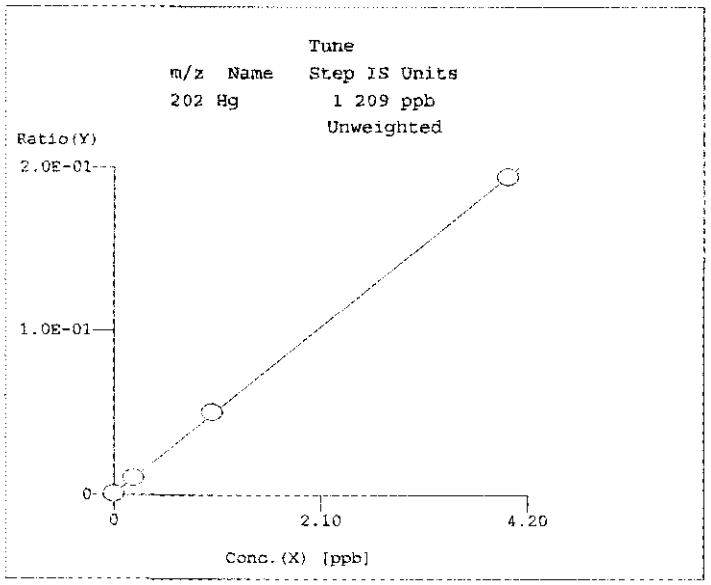
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	7.29E-3	P	17.50
2	5.00	5.02E-1	P	5.64
*3	50.00	5.08E+0	P	4.36E-1
4	100.00	1.00E+1	P	1.83
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 1.003E-1*X +7.292E-3
X = 9.970E+0*Y -7.270E-2

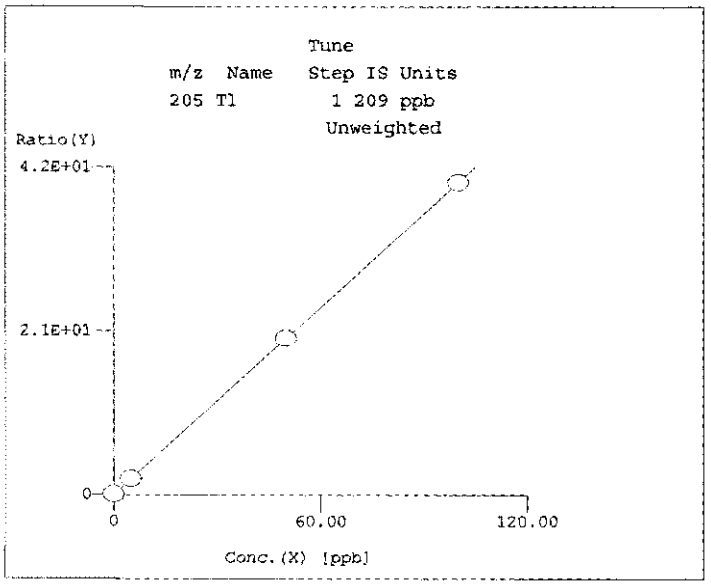
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.88E-4 P	19.90
2	2.00E-1	1.04E-2 P	5.55
3	1.00	5.04E-2 P	1.57
4	4.00	1.94E-1 P	1.29
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 4.847E-2*X +6.876E-4
X = 2.063E+1*Y -1.419E-2

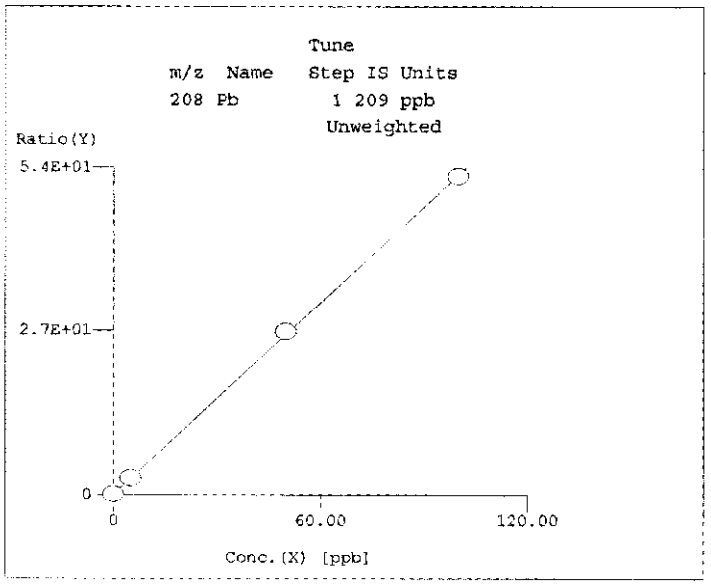
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.59E-2 P	10.10
2	5.00	2.08E+0 P	2.12
3	50.00	2.01E+1 P	7.96E-1
4	100.00	4.01E+1 P	4.82E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 1.0000
Y = 4.005E-1*X +4.593E-2
X = 2.497E+0*Y -1.147E-1

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.84E-2 P	6.26
2	5.00	2.75E+0 P	3.02
3	50.00	2.69E+1 P	1.10
4	100.00	5.25E+1 P	4.97E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+[blank]
r = 0.9999
Y = 5.271E-1*X +5.842E-2
X = 1.897E+0*Y -1.108E-1

MinConc: 0.00

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\023CCV1.D\023CCV1.D#
Date Acquired: Apr 7 2004 01:29 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal Update: Apr 07 2004 01:02 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.52	ppb	0.58	50.00	90 - 110	
52 Cr	48.42	ppb	2.27	50.00	90 - 110	
60 Ni	50.61	ppb	3.39	50.00	90 - 110	
63 Cu	50.90	ppb	1.50	50.00	90 - 110	
66 Zn	54.11	ppb	1.51	50.00	90 - 110	
75 As	50.57	ppb	0.30	50.00	90 - 110	
82 Se	51.54	ppb	0.99	50.00	90 - 110	
107 Ag	52.22	ppb	2.09	50.00	90 - 110	
111 Cd	51.35	ppb	1.82	50.00	90 - 110	
121 Sb	52.15	ppb	1.77	50.00	90 - 110	
202 Hg	1.04	ppb	2.61	1.00	90 - 110	
205 Tl	49.95	ppb	2.31	50.00	90 - 110	
208 Pb	50.71	ppb	2.08	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3648745	1.92	3765813	96.9	30 - 140	
45 Sc	3540564	1.32	3527369	100.4	30 - 140	
72 Ge	549761	1.10	548095	100.3	30 - 140	
115 In	3529874	1.28	3570529	98.9	30 - 140	
159 Tb	3720426	2.34	3821942	97.3	30 - 140	
209 Bi	2061467	3.48	2084621	98.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\037CCV1.D\037CCV1.D#
Date Acquired: Apr 7 2004 02:40 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal Update: Apr 07 2004 01:02 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	48.75	ppb	0.84	50.00	90 - 110	
52 Cr	48.85	ppb	2.31	50.00	90 - 110	
60 Ni	54.97	ppb	1.34	50.00	90 - 110	
63 Cu	53.86	ppb	0.69	50.00	90 - 110	
66 Zn	55.28	ppb	0.72	50.00	90 - 110	Fail
75 As	50.81	ppb	0.19	50.00	90 - 110	
82 Se	53.08	ppb	1.15	50.00	90 - 110	
107 Ag	55.52	ppb	0.79	50.00	90 - 110	Fail
111 Cd	51.83	ppb	1.51	50.00	90 - 110	
121 Sb	53.59	ppb	0.31	50.00	90 - 110	
202 Hg	1.04	ppb	1.76	1.00	90 - 110	
205 Tl	48.78	ppb	0.47	50.00	90 - 110	
208 Pb	51.27	ppb	0.36	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3922653	2.56	3765813	104.2	30 - 140	
45 Sc	4044733	1.99	3527369	114.7	30 - 140	
72 Ge	601542	0.90	548095	109.8	30 - 140	
115 In	3712757	0.77	3570529	104.0	30 - 140	
159 Tb	3757598	1.16	3821942	98.3	30 - 140	
209 Bi	2051810	1.45	2084621	98.4	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

All Reference Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040407B.B\031AREF.D\031AREF.D#
Date Acquired:	Apr 7 2004 02:10 pm
Acq. Method:	47.M
Operator:	Lisa Miller
Sample Name:	04033128-02
Misc Info:	BATCH 547
Vial Number:	3204
Current Method:	C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File:	C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update:	Apr 07 2004 01:02 pm
Sample Type:	AllRef
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.26	0.26	ppb	2.14	8000.00	
52 Cr	101.80	101.80	ppb	5.72	40000.00	
60 Ni	-4.31	-4.31	ppb	8.84	8000.00	
63 Cu	14.74	14.74	ppb	2.69	8000.00	
66 Zn	108.30	108.30	ppb	3.69	8000.00	
75 As	22.48	22.48	ppb	2.91	8000.00	
82 Se	2.40	2.40	ppb	1.81	8000.00	
107 Ag	0.16	0.16	ppb	11.30	8000.00	
111 Cd	0.75	0.75	ppb	8.76	8000.00	
121 Sb	1.26	1.26	ppb	0.50	8000.00	
202 Hg	0.03	0.03	ppb	4.75	8.00	
205 Tl	-0.04	-0.04	ppb	11.67	8000.00	
208 Pb	5.59	5.59	ppb	6.26	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3672138	3.58	3765813	97.5	30 - 140	
45 Sc	3897861	4.86	3527369	110.5	30 - 140	
72 Ge	606842	3.32	548095	110.7	30 - 140	
115 In	3462542	3.56	3570529	97.0	30 - 140	
159 Tb	3609342	3.10	3821942	94.4	30 - 140	
209 Bi	1808303	4.51	2084621	86.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

Duplicate QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\032DUP1.D\032DUP1.D#
Date Acquired: Apr 7 2004 02:15 pm
Acq. Method: 47.M
Operator:
Sample Name: DUP
Misc Info: BATCH 547
Vial Number: 3205
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Dupl
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\040407B.B\031AREF.D\031AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	0.25	ppb	5.12	0.26	5.67	20	<PQL
52 Cr	103.40	ppb	3.36	101.80	1.56	20	
60 Ni	-4.32	ppb	6.99	-4.31	-0.39	20	<PQL
63 Cu	14.57	ppb	1.31	14.74	1.16	20	
66 Zn	99.50	ppb	0.87	108.30	8.47	20	
75 As	23.14	ppb	0.89	22.48	2.89	20	
82 Se	2.67	ppb	3.54	2.40	10.64	20	<PQL
107 Ag	0.15	ppb	8.69	0.16	10.80	20	<PQL
111 Cd	0.71	ppb	11.40	0.75	5.13	20	<PQL
121 Sb	1.12	ppb	3.57	1.26	11.64	20	<PQL
202 Hg	0.04	ppb	19.46	0.03	10.91	20	<PQL
205 Tl	-0.04	ppb	33.71	-0.04	-2.09	20	<PQL
208 Pb	5.27	ppb	1.07	5.59	5.97	20	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3701455	2.06	3765813	98.3	30 - 140	
45 Sc	4014514	1.42	3527369	113.8	30 - 140	
72 Ge	612495	1.39	548095	111.7	30 - 140	
115 In	3433153	1.99	3570529	96.2	30 - 140	
159 Tb	3608960	1.76	3821942	94.4	30 - 140	
209 Bi	1798485	1.58	2084621	86.3	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:
H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

PDS Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\033PDS1.D\033PDS1.D#
Date Acquired: Apr 7 2004 02:20 pm
Acq. Method: 47.M
Operator:
Sample Name: PDS
Misc Info: BATCH 547
Vial Number: 3207
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: PDS1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040407B.B\031AREF.D\031AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	44.36	ppb	0.26	1.67	50.00	88.2	75 - 125	
52 Cr	156.30	ppb	101.80	2.80	50.00	109.0	75 - 125	
60 Ni	46.04	ppb	-4.31	2.36	50.00	100.7	75 - 125	
63 Cu	63.66	ppb	14.74	0.34	50.00	97.8	75 - 125	
66 Zn	151.40	ppb	108.30	0.24	50.00	86.2	75 - 125	
75 As	71.73	ppb	22.48	1.72	50.00	98.5	75 - 125	
82 Se	54.86	ppb	2.40	1.47	50.00	104.9	75 - 125	
107 Ag	50.78	ppb	0.16	1.34	50.00	101.2	75 - 125	
111 Cd	48.80	ppb	0.75	0.10	50.00	96.1	75 - 125	
121 Sb	55.97	ppb	1.26	1.26	50.00	109.4	75 - 125	
202 Hg	2.22	ppb	0.03	0.95	2.00	109.5	75 - 125	
205 Tl	42.93	ppb	-0.04	0.91	50.00	85.9	75 - 125	
208 Pb	61.71	ppb	5.59	0.44	50.00	112.2	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3516036	2.73	3765813	93.4	30 - 140	
45 Sc	3691476	2.40	3527369	104.7	30 - 140	
72 Ge	580337	0.80	548095	105.9	30 - 140	
115 In	3374548	1.64	3570529	94.5	30 - 140	
159 Tb	3523120	2.04	3821942	92.2	30 - 140	
209 Bi	1720533	1.17	2084621	82.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

LFM Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\034LFM1.D\034LFM1.D#
Date Acquired: Apr 7 2004 02:25 pm
Acq. Method: 47.M
Operator:
Sample Name: LFM
Misc Info: BATCH 547
Vial Number: 3206
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: C:\ICPCHEM\1\DATA\040407B.B\031AREF.D\031AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	45.59	ppb	0.26	1.19	50.00	90.7	75 - 125	
52 Cr	156.60	ppb	101.80	2.30	50.00	109.6	75 - 125	
60 Ni	49.00	ppb	-4.31	2.04	50.00	106.6	75 - 125	
63 Cu	66.11	ppb	14.74	2.09	50.00	102.7	75 - 125	
66 Zn	144.40	ppb	108.30	1.47	50.00	72.2	75 - 125	Fail
75 As	73.02	ppb	22.48	1.47	50.00	101.1	75 - 125	
82 Se	53.69	ppb	2.40	2.93	50.00	102.6	75 - 125	
107 Ag	54.02	ppb	0.16	3.13	50.00	107.7	75 - 125	
111 Cd	51.92	ppb	0.75	1.35	50.00	102.3	75 - 125	
121 Sb	52.38	ppb	1.26	2.69	50.00	102.3	75 - 125	
202 Hg	2.27	ppb	0.03	2.70	2.00	112.0	75 - 125	
205 Tl	43.20	ppb	-0.04	0.72	50.00	86.5	75 - 125	
208 Pb	63.53	ppb	5.59	1.01	50.00	115.9	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	3534140	2.23	3765813	93.8	30 - 140	
45 Sc	3962010	0.97	3527369	112.3	30 - 140	
72 Ge	592438	1.16	548095	108.1	30 - 140	
115 In	3423379	0.34	3570529	95.9	30 - 140	
159 Tb	3564356	1.07	3821942	93.3	30 - 140	
209 Bi	1782519	1.38	2084621	85.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PB QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\018__PB.D\018__PB.D#
Date Acquired: Apr 7 2004 01:04 pm
Operator:
Sample Name: PB
Misc Info: BATCH 547
Vial Number: 3105
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal Update: Apr 07 2004 01:02 pm
Sample Type: PB
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.01	ppb	60.90	2.50	
52 Cr	0.32	ppb	40.90	2.50	
60 Ni	-0.72	ppb	10.55	2.50	
63 Cu	1.45	ppb	5.48	2.50	
66 Zn	0.26	ppb	31.73	2.50	
75 As	0.16	ppb	24.33	2.50	
82 Se	-0.01	ppb	572.55	2.50	
107 Ag	-0.07	ppb	12.04	2.50	
111 Cd	0.06	ppb	46.76	2.50	
121 Sb	0.03	ppb	48.25	2.50	
202 Hg	0.01	ppb	66.42	2.50	
205 Tl	-0.07	ppb	3.61	2.50	
208 Pb	0.05	ppb	14.21	2.50	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3836355	1.71	3765813	101.9	30 - 140	
45 Sc	3596092	2.99	3527369	101.9	30 - 140	
72 Ge	570063	2.60	548095	104.0	30 - 140	
115 In	3681223	4.00	3570529	103.1	30 - 140	
159 Tb	3981349	5.09	3821942	104.2	30 - 140	
209 Bi	2220468	2.92	2084621	106.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Traceability:
HNO3 #82; HCL #X13037; Au #174; IS #168

LCS QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\019_LCS.D\019_LCS.D#
Date Acquired: Apr 7 2004 01:09 pm
Acq. Method: 47.M
Operator:
Sample Name: LCS
Misc Info: BATCH 547
Vial Number: 3106
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Analyte Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	51.73	ppb	0.75	50.00	75 - 125	
52 Cr	50.77	ppb	3.61	50.00	75 - 125	
60 Ni	57.13	ppb	2.42	50.00	75 - 125	
63 Cu	53.50	ppb	1.66	50.00	75 - 125	
66 Zn	51.56	ppb	0.85	50.00	75 - 125	
75 As	52.06	ppb	0.38	50.00	75 - 125	
82 Se	52.79	ppb	1.09	50.00	75 - 125	
107 Ag	53.06	ppb	0.86	50.00	75 - 125	
111 Cd	52.89	ppb	1.89	50.00	75 - 125	
121 Sb	57.17	ppb	0.42	50.00	75 - 125	
202 Hg	2.13	ppb	1.27	2.00	75 - 125	
205 Tl	50.72	ppb	1.33	50.00	75 - 125	
208 Pb	53.31	ppb	1.64	50.00	75 - 125	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3725792	2.77	3765813	0.0	30 - 140	
45 Sc	3542970	2.92	3527369	0.0	30 - 140	
72 Ge	559278	1.45	548095	0.0	30 - 140	
115 In	3596073	2.12	3570529	0.0	30 - 140	
159 Tb	3881845	1.18	3821942	0.0	30 - 140	
209 Bi	2126284	2.57	2084621	0.0	30 - 140	

ISTD Ref File :

Traceability:

W: 0.1 ML #A098; 0.1 ML # A100; 0.05 ML #115
S: 1.0 ML # A098; 1.0 ML #A100; 0.5 ML #115
HCL #X13037; AU #174; IS #168;HNO3 # 82; H2O2 #X44A01

Batch QC Summary Report

Batch ID:	506	Date:	04/01/04	QC Sample:	04033013-15

Analysis	MS %Rec	MS Control Limits	DUP RPD	DUP RPD Limit
Antimony	89.8	70 - 130	0.0	20
Arsenic	95.5	70 - 130	0.0	20
Beryllium	96.9	70 - 130	0.0	20
Cadmium	92.8	70 - 130	5.3	20
Chromium	87.1	70 - 130	24.4	20
Copper	86.6	70 - 130	13.5	20
Lead	83.6	70 - 130	7.3	20
Mercury	113.0	70 - 130	0.0	20
Nickel	69.1	70 - 130	0.0	20
Selenium	105.5	70 - 130	0.0	20
Silver	63.1	70 - 130	0.0	20
Thallium	93.8	70 - 130	0.0	20
Zinc	77.8	70 - 130	3.6	20

QC Comments:

Associated Samples:

Lab ID	Client ID	Test Group
04032702-01	B-1, Groundwater	PP Metals in Water Dissolved
04032702-02	B-2, Groundwater	PP Metals in Water Dissolved
04032702-03	B-3, Groundwater	PP Metals in Water Dissolved
04032702-04	B-4, Groundwater	PP Metals in Water Dissolved
04033013-03	DMW-3D-032604 (DISS)	PP Metals in Water Dissolved
04033013-05	DMW-3I-032604 (DISS)	PP Metals in Water Dissolved
04033013-07	DMW-3S-032604 (DISS)	PP Metals in Water Dissolved
04033013-09	DMW-9I-032604 (DISS)	PP Metals in Water Dissolved
04033013-11	DMW-1A-033004 (DISS)	PP Metals in Water Dissolved
04033013-13	DMW-1B-033004 (DISS)	PP Metals in Water Dissolved
04033013-15	MW-2-033004 (DISS)	PP Metals in Water Dissolved
04033123-04	IW-2	Dissolved Metals in Water
04033123-05	IW-3	Dissolved Metals in Water
04033123-06	IW-4	Dissolved Metals in Water
04033123-10	DW	Dissolved Metals in Water
04033128-03	DMW-10S-033004 (DISS)	PP Metals in Water Dissolved
04033128-05	DMW-10I-033004 (DISS)	PP Metals in Water Dissolved
04033128-07	DMW-1S-033004 (DISS)	PP Metals in Water Dissolved
04033128-09	DMW-6S-033104 (DISS)	PP Metals in Water Dissolved
04033128-11	DMW-6I-033104 (DISS)	PP Metals in Water Dissolved

QC Comments:

ICV QC Report

Data File: z:\040401B.B\006ICV1.D\006ICV1.D#
Date Acquired: Apr 1 2004 06:37 pm
Acq. Method: 2004ppba.M
Operator:
Sample Name: ICV
Misc Info: 0.125 ML #115; 1.25 ML #A100-50 ML
Vial Number: 1105
Current Method: z:\040401B.B\2004ppba.M
Calibration File: z:\040401B.B\401MC.C
Last Cal. Update: Apr 30 2004 02:10 pm
Sample Type: ICV1
Dilution Factor: 1.00

QC Elements

Element	Raw Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	49.79	ppb	1.89	50.00	90 - 110	
52 Cr	47.97	ppb	1.70	50.00	90 - 110	
60 Ni	46.73	ppb	1.50	50.00	90 - 110	
63 Cu	47.07	ppb	1.20	50.00	90 - 110	
66 Zn	47.57	ppb	1.91	50.00	90 - 110	
75 As	47.03	ppb	2.71	50.00	90 - 110	
82 Se	47.08	ppb	2.82	50.00	90 - 110	
107 Ag	48.38	ppb	1.24	50.00	90 - 110	
111 Cd	48.34	ppb	0.78	50.00	90 - 110	
121 Sb	47.90	ppb	0.63	50.00	90 - 110	
202 Hg	1.87	ppb	1.05	2.00	90 - 110	
205 Tl	49.68	ppb	3.60	50.00	90 - 110	
208 Pb	46.82	ppb	1.28	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5996615	3.19	5946071	100.9	30 - 140	
45 Sc	4773107	1.15	4621961	103.3	30 - 140	
72 Ge	863980	3.28	846062	102.1	30 - 140	
115 In	6899690	0.35	6905646	99.9	30 - 140	
159 Tb	8191496	1.02	8253466	99.2	30 - 140	
209 Bi	5157570	1.12	5359006	96.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:

0.05 ML # 115; 1.25 ML # A100; HG 0.1 ML # A097
HNO3 #82; HCL #X13037; Au #174; IS # 168

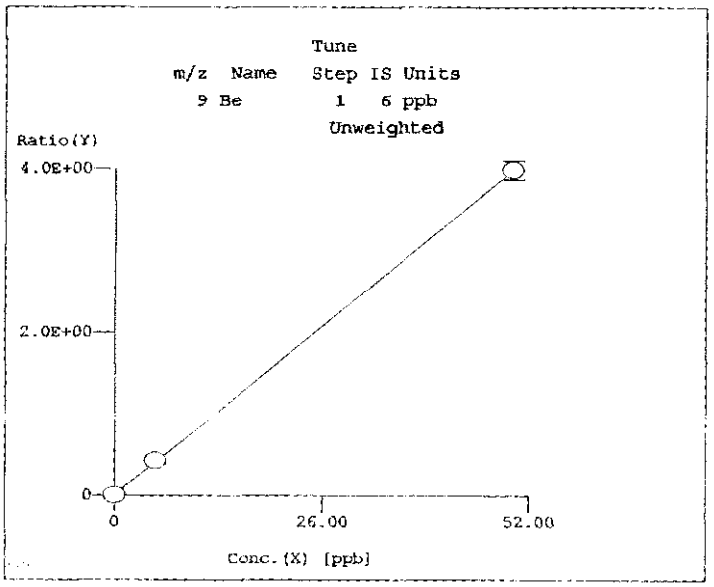
Calibration Report

Calibration : Z:\040401B.B\401MC.C
Last Calib: Apr 30, 2004 14:10
Cal Type : External Calibration Method
Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	z:\040401b.b\002calb.d\	002calb.d#	Apr 1 2004 06:18 pm
2	z:\040401b.b\003cals.d\	003cals.d#	Apr 1 2004 06:23 pm
3	z:\040401b.b\004cals.d\	004cals.d#	Apr 1 2004 06:28 pm
4	z:\040401b.b\005cals.d\	005cals.d#	Apr 1 2004 06:32 pm
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

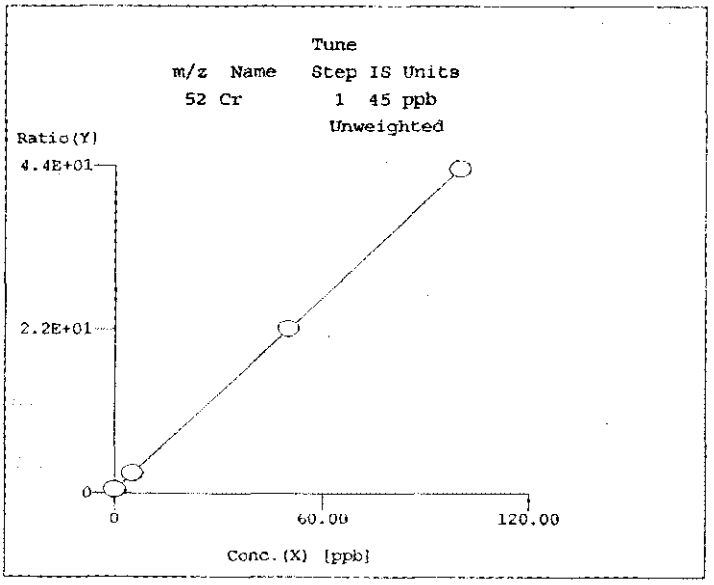
Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---		
6	---		
7	---		
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		



Lv.	Conc.	Ratio	RSD %
1	0.00	5.40E-3 P	4.44
2	5.00	4.37E-1 P	4.47
3	50.00	3.98E+0 P	2.85
*4	100.00	9.93E+0 A	2.09
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 1.0000
Y = 7.928E-2*X +2.199E-2
X = 1.261E+1*Y -2.774E-1

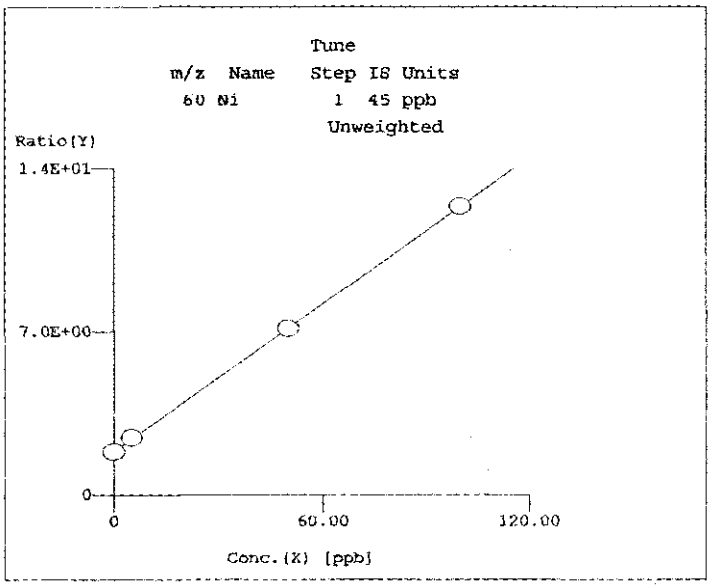
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.89E-1 P	1.44
2	5.00	2.68E+0 P	1.25
3	50.00	2.22E+1 A	1.05
4	100.00	4.36E+1 A	2.20E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 1.0000
Y = 4.315E-1*X +5.248E-1
X = 2.317E+0*Y -1.216E+0

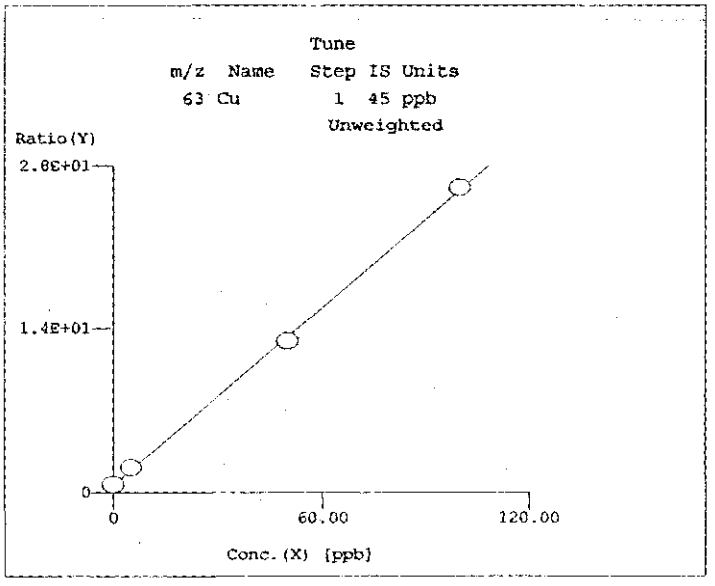
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.89E+0 P	3.60
2	5.00	2.49E+0 P	7.56E-1
3	50.00	7.13E+0 P	1.40
4	100.00	1.24E+1 P	6.70E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 1.0000
Y = 1.045E-1*X +1.927E+0
X = 9.569E+0*Y -1.844E+1

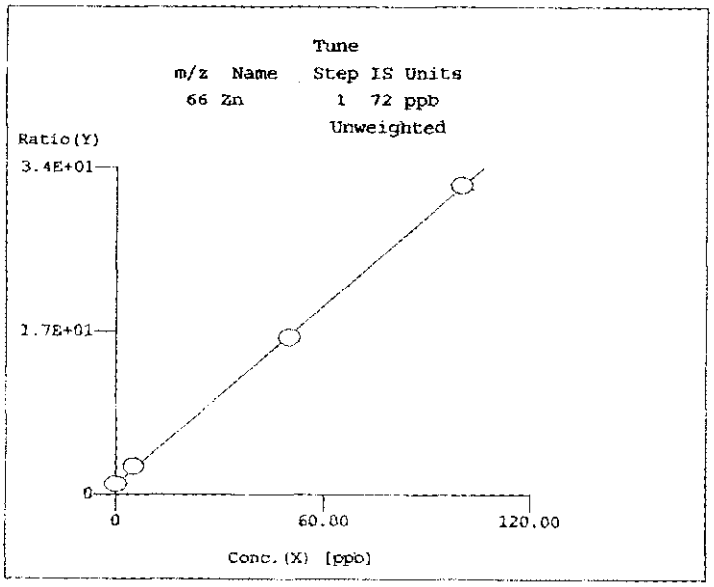
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	6.74E-1 P	2.65
2	5.00	2.14E+0 P	1.70
3	50.00	1.29E+1 P	2.20
4	100.00	2.61E+1 A	7.61E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 0.9997
Y = 2.525E-1*X +6.708E-1
X = 3.961E+0*Y -2.657E+0

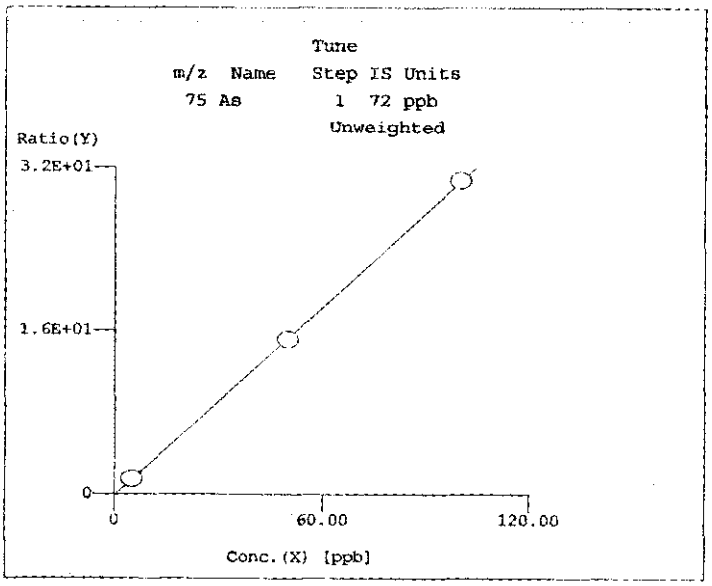
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.09E+0	P	2.58
2	5.00	2.99E+0	P	1.10
3	50.00	1.64E+1	P	3.56E-1
4	100.00	3.22E+1	P	1.16
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 0.9999
Y = 3.087E-1*X +1.202E+0
X = 3.239E+0*Y -3.893E+0

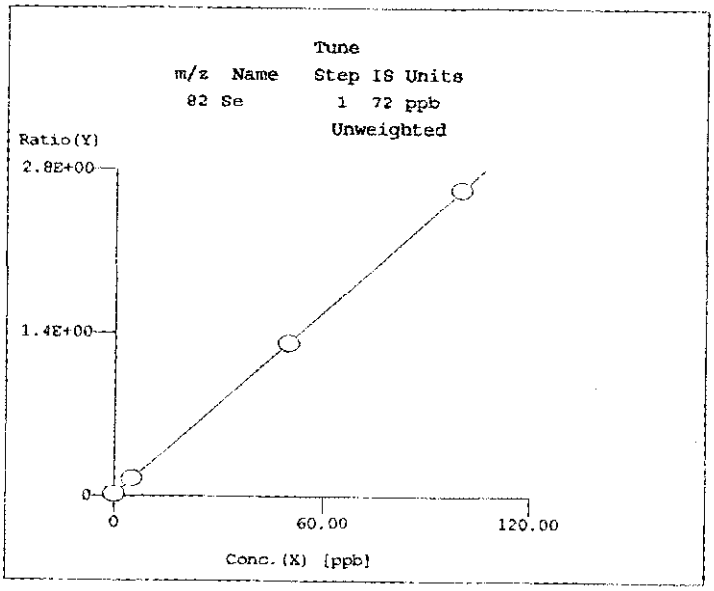
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	-5.60E-2	P	---
2	5.00	1.48E+0	P	6.34E-1
3	50.00	1.51E+1	P	5.52E-1
4	100.00	3.07E+1	P	7.32E-1
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 1.0000
Y = 3.074E-1*X -9.303E-2
X = 3.253E+0*Y +3.027E-1

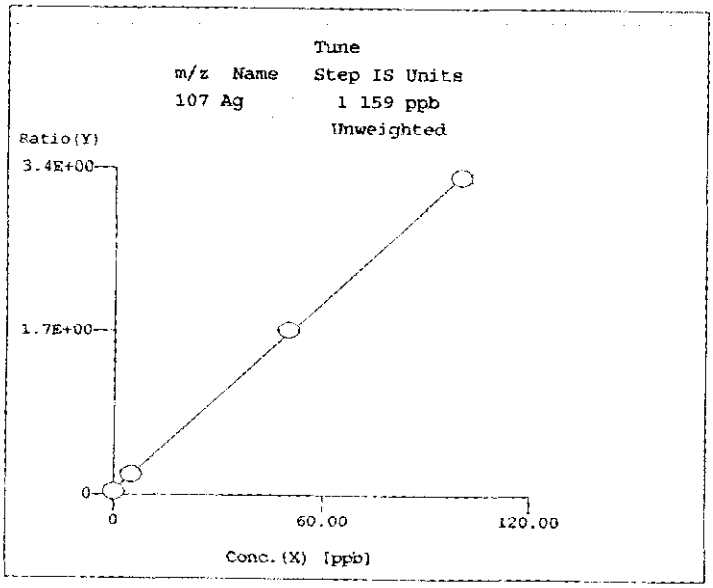
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.71E-2	P	3.86
2	5.00	1.55E-1	P	3.01
3	50.00	1.31E+0	P	9.18E-1
4	100.00	2.63E+0	P	6.86E-1
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 1.0000
Y = 2.605E-2*X +1.892E-2
X = 3.838E+1*Y -7.260E-1

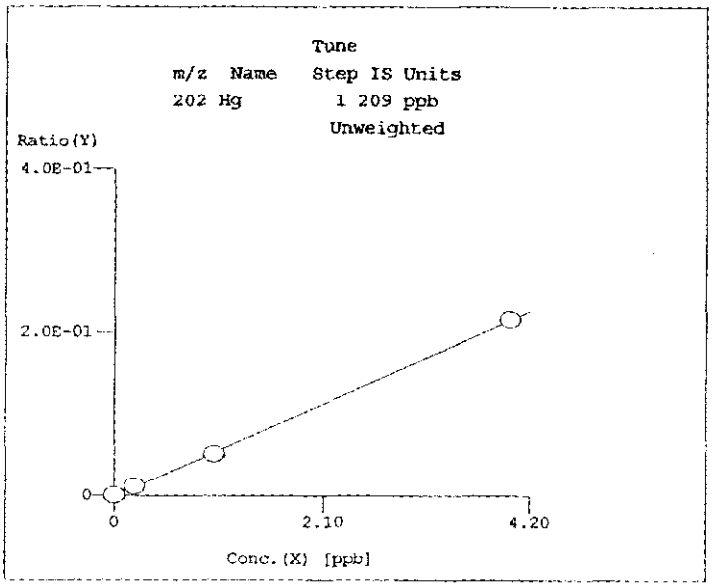
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	3.13E-2	P	2.58
2	5.00	2.11E-1	P	1.15
3	50.00	1.72E+0	P	1.29
4	100.00	3.31E+0	P	1.38
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 0.9999
Y = 3.278E-2*X +4.685E-2
X = 3.051E+1*Y -1.429E+0

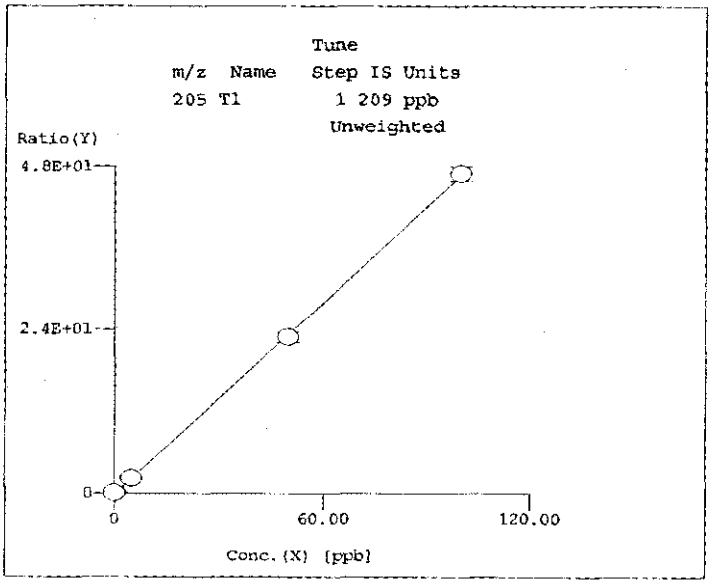
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	4.47E-4 P	14.70
2	2.00E-1	1.15E-2 P	1.33
3	1.00	5.18E-2 P	1.99
4	4.00	2.15E-1 P	5.57E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 0.9999
Y = 5.380E-2*X -1.273E-4
X = 1.859E+1*Y +2.366E-3

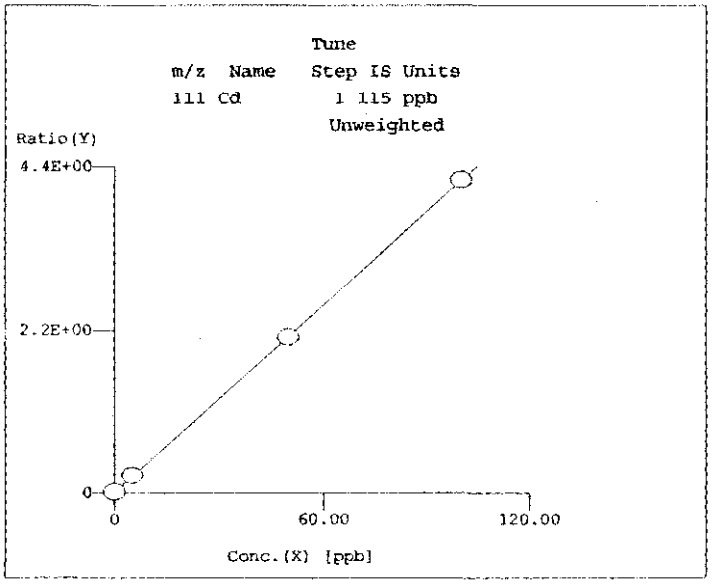
MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	5.75E-2 P	6.79
2	5.00	2.20E+0 P	2.06
3	50.00	2.29E+1 A	3.34
4	100.00	4.70E+1 A	2.23
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 0.9999
Y = 4.690E-1*X -1.423E-1
X = 2.132E+0*Y +3.035E-1

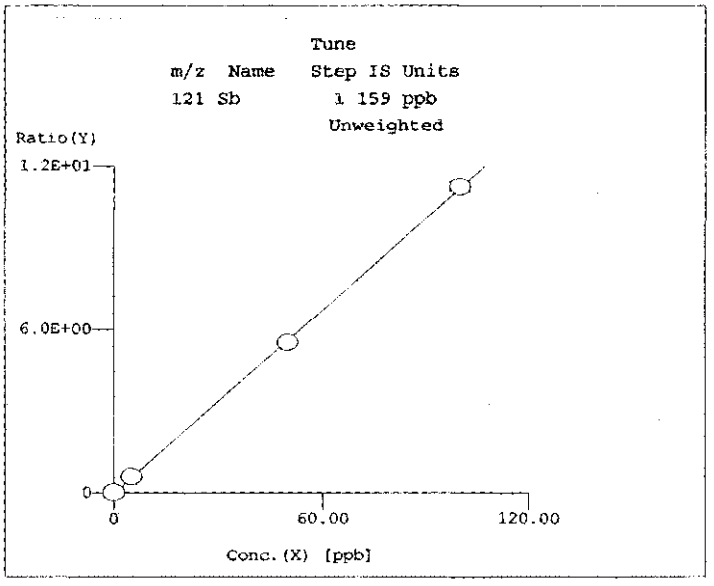
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.60E-2	P	8.57
2	5.00	2.40E-1	P	1.63
3	50.00	2.11E+0	P	1.72
4	100.00	4.22E+0	P	1.03
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 1.0000
Y = 4.196E-2*X +2.120E-2
X = 2.383E+1*Y -5.052E-1

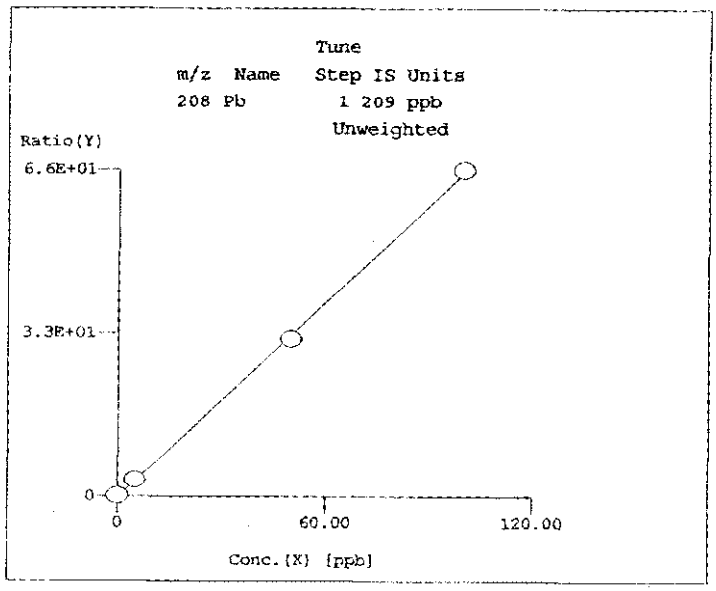
MinConc: 0.00



Lv.	Conc.	Ratio		RSD %
1	0.00	1.55E-2	P	1.15
2	5.00	5.87E-1	P	1.18
3	50.00	5.51E+0	P	9.92E-1
4	100.00	1.12E+1	P	1.54
*5	---	---		---
*6	---	---		---
*7	---	---		---
*8	---	---		---
*9	---	---		---
*10	---	---		---
*11	---	---		---
*12	---	---		---
*13	---	---		---
*14	---	---		---
*15	---	---		---
*16	---	---		---
*17	---	---		---
*18	---	---		---
*19	---	---		---
*20	---	---		---

CurveFit : Y=aX+b
r = 0.9999
Y = 1.119E-1*X -9.946E-4
X = 8.934E+0*Y +8.886E-3

MinConc: 0.00



Lv.	Conc.	Ratio	RSD %
1	0.00	1.19E-1 P	5.16
2	5.00	3.41E+0 P	1.26
3	50.00	3.19E+1 P	8.43E-1
4	100.00	6.59E+1 A	5.84E-1
*5	---	---	---
*6	---	---	---
*7	---	---	---
*8	---	---	---
*9	---	---	---
*10	---	---	---
*11	---	---	---
*12	---	---	---
*13	---	---	---
*14	---	---	---
*15	---	---	---
*16	---	---	---
*17	---	---	---
*18	---	---	---
*19	---	---	---
*20	---	---	---

CurveFit : Y=aX+b
r = 0.9998
Y = 6.562E-1*X -8.978E-2
X = 1.524E+0*Y +1.368E-1

MinConc: 0.00

CCV QC Report

Data File: z:\040401B.B\023CCV1.D\023CCV1.D#
Date Acquired: Apr 1 2004 08:01 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: z:\040401B.B\2004ppba.M
Calibration File: z:\040401B.B\401MC.C
Last Cal Update: Apr 30 2004 02:10 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	56.95	ppb	1.42	50.00	90 - 110	Fail
52 Cr	51.03	ppb	0.69	50.00	90 - 110	
60 Ni	50.73	ppb	3.26	50.00	90 - 110	
63 Cu	49.78	ppb	2.51	50.00	90 - 110	
66 Zn	51.44	ppb	1.49	50.00	90 - 110	
75 As	50.99	ppb	0.87	50.00	90 - 110	
82 Se	51.21	ppb	0.66	50.00	90 - 110	
107 Ag	60.25	ppb	2.05	50.00	90 - 110	Fail
111 Cd	51.84	ppb	1.53	50.00	90 - 110	
121 Sb	52.63	ppb	0.91	50.00	90 - 110	
202 Hg	0.99	ppb	1.89	1.00	90 - 110	
205 Tl	48.90	ppb	4.33	50.00	90 - 110	
208 Pb	49.69	ppb	0.23	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6126682	0.42	5946071	103.0	30 - 140	
45 Sc	4986230	1.28	4621961	107.9	30 - 140	
72 Ge	864985	0.36	846062	102.2	30 - 140	
115 In	6878757	1.74	6905646	99.6	30 - 140	
159 Tb	7965319	1.27	8253466	96.5	30 - 140	
209 Bi	4883496	1.16	5359006	91.1	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

CCV QC Report

Data File: z:\040401B.B\038CCV1.D\038CCV1.D#
Date Acquired: Apr 1 2004 09:15 pm
Operator:
Sample Name: CCV
Misc Info:
Vial Number: 1103
Current Method: z:\040401B.B\2004ppba.M
Calibration File: z:\040401B.B\401MC.C
Last Cal Update: Apr 30 2004 02:10 pm
Sample Type: CCV1
Total Dil Factor: 1.00

QC Elements

Element	Conc	Units	RSD(%)	Expected	QC Range(%)	Flag
9 Be	53.98	ppb	1.39	50.00	90 - 110	
52 Cr	51.76	ppb	0.63	50.00	90 - 110	
60 Ni	50.23	ppb	4.24	50.00	90 - 110	
63 Cu	48.86	ppb	0.84	50.00	90 - 110	
66 Zn	51.21	ppb	1.22	50.00	90 - 110	
75 As	50.81	ppb	0.60	50.00	90 - 110	
82 Se	50.50	ppb	0.67	50.00	90 - 110	
107 Ag	44.46	ppb	11.52	50.00	90 - 110	Fail
111 Cd	51.34	ppb	2.01	50.00	90 - 110	
121 Sb	53.44	ppb	1.43	50.00	90 - 110	
202 Hg	0.97	ppb	1.13	1.00	90 - 110	
205 Tl	47.99	ppb	5.87	50.00	90 - 110	
208 Pb	49.24	ppb	0.36	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6904041	0.61	5946071	116.1	30 - 140	
45 Sc	5291684	1.81	4621961	114.5	30 - 140	
72 Ge	883442	0.70	846062	104.4	30 - 140	
115 In	6855116	1.28	6905646	99.3	30 - 140	
159 Tb	7713520	1.70	8253466	93.5	30 - 140	
209 Bi	4635495	0.98	5359006	86.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:

HNO3 #82; HCL #X13037; Au # 174; IS # 168
0.05 ML # 115; 1.25 ML # A100; HG 0.1ML#A098

Duplicate QC Report

Data File: z:\040401B.B\031DUP1.D\031DUP1.D#
Date Acquired: Apr 1 2004 08:40 pm
Acq. Method: 2004ppba.M
Operator:
Sample Name: DUP
Misc Info: BATCH 506
Vial Number: 4201
Current Method: z:\040401B.B\2004ppba.M
Calibration File: z:\040401B.B\401MC.C
Last Cal. Update: Apr 30 2004 02:10 pm
Sample Type: Dup1
Dilution Factor: 1.00

Duplicate Ref File: z:\040401B.B\030AREF.D\030AREF.D#

QC Elements

Element	Raw Conc	Units	RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	-0.20	ppb	5.28	-0.19	-3.56	20	<PQL
52 Cr	1.73	ppb	1.00	2.21	24.52	20	<PQL
60 Ni	-10.55	ppb	1.64	-10.47	-0.76	20	<PQL
63 Cu	1.73	ppb	2.87	1.98	13.39	20	<PQL
66 Zn	141.10	ppb	1.72	146.20	3.55	20	
75 As	0.27	ppb	3.31	0.27	1.33	20	<PQL
82 Se	0.09	ppb	68.51	0.10	7.74	20	<PQL
107 Ag	-1.11	ppb	0.87	-1.11	-0.18	20	<PQL
111 Cd	1.64	ppb	4.98	1.73	5.16	20	<PQL
121 Sb	0.03	ppb	4.54	0.04	19.62	20	<PQL
202 Hg	0.02	ppb	4.64	0.02	17.08	20	<PQL
205 Tl	0.36	ppb	0.48	0.37	3.13	20	<PQL
208 Pb	0.53	ppb	0.54	0.57	7.19	20	<PQL

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5320002	2.14	5946071	89.5	30 - 140	
45 Sc	4349969	1.96	4621961	94.1	30 - 140	
72 Ge	847436	1.45	846062	100.2	30 - 140	
115 In	6873752	1.03	6905646	99.5	30 - 140	
159 Tb	8330669	1.61	8253466	100.9	30 - 140	
209 Bi	5321524	2.39	5359006	99.3	30 - 140	

ISTD Ref. File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:
H202 # X44A01; HNO3 # 82; IS # 168; AU # 174; HCL # X13037

All Reference Sample QC Report

Data File:	**z:\040401B.B\030AREF.D\030AREF.D#**
Date Acquired:	**Apr 1 2004 08:35 pm**
Acq. Method:	**2004ppba.M**
Operator:	**Lisa Miller**
Sample Name:	**04033013-15**
Misc Info:	**BATCH 506**
Vial Number:	**4112**
Current Method:	**z:\040401B.B\2004ppba.M**
Calibration File:	**z:\040401B.B\401MC.C**
Last Cal. Update:	**Apr 30 2004 02:10 pm**
Sample Type:	**AllRef**
Dilution Factor:	**1.00**
Autodil Factor:	**Undiluted**
Final Dil Factor:	**1.00**

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.19	-0.19	ppb	6.11	8000.00	
52 Cr	2.21	2.21	ppb	19.01	8000.00	
60 Ni	-10.47	-10.47	ppb	0.91	8000.00	
63 Cu	1.98	1.98	ppb	2.35	8000.00	
66 Zn	146.20	146.20	ppb	1.40	8000.00	
75 As	0.27	0.27	ppb	7.59	8000.00	
82 Se	0.10	0.10	ppb	55.16	8000.00	
107 Ag	-1.11	-1.11	ppb	1.82	8000.00	
111 Cd	1.73	1.73	ppb	3.26	8000.00	
121 Sb	0.04	0.04	ppb	1.79	8000.00	
202 Hg	0.02	0.02	ppb	3.37	8.00	
205 Tl	0.37	0.37	ppb	1.65	8000.00	
208 Pb	0.57	0.57	ppb	2.02	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5167573	2.30	5946071	86.9	30 - 140	
45 Sc	4445006	0.84	4621961	96.2	30 - 140	
72 Ge	853741	0.58	846062	100.9	30 - 140	
115 In	6937237	1.01	6905646	100.5	30 - 140	
159 Tb	8380264	1.14	8253466	101.5	30 - 140	
209 Bi	5371969	3.60	5359006	100.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:

H202 # X44A01; HNO3 # 82; HCL# X13037; Au #174; IS #168

LFM Sample QC Report

Data File: z:\040401B.B\032LFM1.D\032LFM1.D#
Date Acquired: Apr 1 2004 08:45 pm
Acq. Method: 2004ppba.M
Operator:
Sample Name: LFM
Misc Info: BATCH 506
Vial Number: 4202
Current Method: z:\040401B.B\2004ppba.M
Calibration File: z:\040401B.B\401MC.C
Last Cal. Update: Apr 30 2004 02:10 pm
Sample Type: LFM1
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: z:\040401B.B\030AREF.D\030AREF.D#

QC Elements

Element	Raw Conc	Units	Ref Conc	RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	48.44	ppb	-0.19	3.16	50.00	97.3	75 - 125	
52 Cr	45.77	ppb	2.21	1.15	50.00	87.1	75 - 125	
60 Ni	34.56	ppb	-10.47	2.58	50.00	90.1	75 - 125	
63 Cu	45.30	ppb	1.98	2.14	50.00	86.6	75 - 125	
66 Zn	185.10	ppb	146.20	1.03	50.00	77.8	75 - 125	
75 As	48.00	ppb	0.27	0.36	50.00	95.5	75 - 125	
82 Se	52.86	ppb	0.10	0.41	50.00	105.5	75 - 125	
107 Ag	31.54	ppb	-1.11	2.91	50.00	65.3	75 - 125	Fail
111 Cd	48.14	ppb	1.73	0.59	50.00	92.8	75 - 125	
121 Sb	44.92	ppb	0.04	1.25	50.00	89.8	75 - 125	
202 Hg	1.15	ppb	0.02	0.52	1.00	113.0	75 - 125	
205 Tl	47.25	ppb	0.37	1.36	50.00	93.8	75 - 125	
208 Pb	42.35	ppb	0.57	1.15	50.00	83.6	75 - 125	

ISTD Elements

Element	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	5146674	2.19	5946071	86.6	30 - 140	
45 Sc	4415139	1.61	4621961	95.5	30 - 140	
72 Ge	851487	1.22	846062	100.6	30 - 140	
115 In	6862744	1.86	6905646	99.4	30 - 140	
159 Tb	8313088	2.36	8253466	100.7	30 - 140	
209 Bi	5315394	2.52	5359006	99.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Traceability:
W 0.1 ML #A098; 0.1 ML #A100; 0.05 ML #115; HNO3 # 82
S 1.0 ML #A098; 1.0ML #A100; 0.5 ML # 115; H2O2 # X44A01
HCL # X13037; Au IN RINSE #174

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 31, 2004

PROJECT: Martin State Airport - Quarterly Sampling

Project #: N7339-0677D

CERTIFICATE OF ANALYSIS #: *04033128*

PREPARED FOR:

Tetra Tech, Inc.
10670 White Rock Rd., Ste. 100
Rancho Cordova, CA 95670

April 8, 2004

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PHASE SEPARATION SCIENCE, INC.

Case Narrative

Client: Tetra Tech, Inc.
Project: Martin State Airport – Quarterly Sampling
Site: Martin State Airport
Project #: N7339-0677D

Re: Trip Blank Results

On March 31, 2004, Phase Separation Science (PSS) received 9 samples for the above referenced project. Sample TB033004 was analyzed for volatile organic compounds on April 2, 2004. The initial analysis of the sample indicated detectable concentrations of target compounds including Carbon Tetrachloride and Trichloroethene.

Upon the routine review of the entire sequence to ensure that the samples had been processed correctly, the analyst noticed this anomaly. The sample was reanalyzed the same day at a tenfold dilution with the second vile provided. In the diluted run, Trichloroethene was detected at a concentration of 80ppb. No other target compounds were detected.

In the process of transferring the data from the instrument to the LIMS the analyst inadvertently chose the data file from the initial run in the sequence rather than the correct data file from the diluted run.

Further, it appears that the Trichloroethene detect of 81ppb is most likely the result of carryover from sample DMW-2A-033104. This sample had an estimated TCE concentration of 51,000ppb and was analyzed immediately before the tenfold dilution of TB033004. The sample could not be analyzed a third time to confirm the possible carryover because both vials provided had been compromised. It is standard practice to supply two 40mL vials for each trip blank.

After thoroughly reviewing the situation, we believe that the most appropriate course of action is to modify the original certificate analysis to reflect the results obtained from the diluted run of TB033004. In addition, the Trichloroethene result will be qualified to indicate that some or all of the 81ppb detected is likely the result of carryover from DMW-2A-033104.

The above mentioned changes will be made to the certificate of analysis and included in the final Level II data package.

Reviewed by: Matt Miller Date: 10 MAY 04
Quality Assurance Officer

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033128 Page 1 of 35
Tetra Tech, Inc.
May 10, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/30/04
Date Received: 03/31/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB033004 / 04033128-01						
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260B	10		04/02/04
Bromobenzene	ND	ug/L	EPA 8260B	10		04/02/04
Bromochloromethane	ND	ug/L	EPA 8260B	10		04/02/04
Bromodichloromethane	ND	ug/L	EPA 8260B	10		04/02/04
Bromoform	ND	ug/L	EPA 8260B	10		04/02/04
Bromomethane	ND	ug/L	EPA 8260B	10		04/02/04
n-Butylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
sec-Butylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
tert-Butylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
Carbon tetrachloride	ND	ug/L	EPA 8260B	10		04/02/04
Chlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
Chloroethane	ND	ug/L	EPA 8260B	10		04/02/04
Chloroform	ND	ug/L	EPA 8260B	10		04/02/04
Chloromethane	ND	ug/L	EPA 8260B	10		04/02/04
2-Chlorotoluene	ND	ug/L	EPA 8260B	10		04/02/04
4-Chlorotoluene	ND	ug/L	EPA 8260B	10		04/02/04
Dibromochloromethane	ND	ug/L	EPA 8260B	10		04/02/04
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260B	10		04/02/04
1,2-Dibromoethane	ND	ug/L	EPA 8260B	10		04/02/04
Dibromomethane	ND	ug/L	EPA 8260B	10		04/02/04
1,2-Dichlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
1,3-Dichlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
1,4-Dichlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
Dichlorodifluoromethane	ND	ug/L	EPA 8260B	10		04/02/04
1,1-Dichloroethane	ND	ug/L	EPA 8260B	10		04/02/04
1,2-Dichloroethane	ND	ug/L	EPA 8260B	10		04/02/04
1,1-Dichloroethene	ND	ug/L	EPA 8260B	10		04/02/04
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260B	10		04/02/04
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260B	10		04/02/04
1,2-Dichloropropane	ND	ug/L	EPA 8260B	10		04/02/04
1,3-Dichloropropane	ND	ug/L	EPA 8260B	10		04/02/04
2,2-Dichloropropane	ND	ug/L	EPA 8260B	10		04/02/04
1,1-Dichloropropene	ND	ug/L	EPA 8260B	10		04/02/04

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 2 of 35
Tetra Tech, Inc.
May 10, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Water
Date Sampled: 03/30/04
Date Received: 03/31/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB033004 / 04033128-01						
Volatile Organic Compounds						
Ethylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
Isopropylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
p-Isopropyltoluene	ND	ug/L	EPA 8260B	10		04/02/04
Methylene chloride	ND	ug/L	EPA 8260B	10		04/02/04
Naphthalene	ND	ug/L	EPA 8260B	10		04/02/04
n-Propylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
Styrene	ND	ug/L	EPA 8260B	10		04/02/04
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260B	10		04/02/04
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260B	10		04/02/04
Tetrachloroethene	ND	ug/L	EPA 8260B	10		04/02/04
Toluene	ND	ug/L	EPA 8260B	10		04/02/04
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260B	10		04/02/04
1,1,1-Trichloroethane	ND	ug/L	EPA 8260B	10		04/02/04
1,1,2-Trichloroethane	ND	ug/L	EPA 8260B	10		04/02/04
Trichloroethene	**c 81**	ug/L	EPA 8260B	10		04/02/04
1,2,3-Trichloropropane	ND	ug/L	EPA 8260B	10		04/02/04
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260B	10		04/02/04
Vinyl chloride	ND	ug/L	EPA 8260B	10		04/02/04
m&p-Xylene	ND	ug/L	EPA 8260B	30		04/02/04
o-Xylene	ND	ug/L	EPA 8260B	30		04/02/04
Methyl-t-butyl ether	ND	ug/L	EPA 8260B	10		04/02/04
2-Butanone (MEK)	ND	ug/L	EPA 8260B	100		04/02/04
2-Hexanone (MBK)	ND	ug/L	EPA 8260B	100		04/02/04
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260B	100		04/02/04
Acetone	ND	ug/L	EPA 8260B	100		04/02/04
Trichlorofluoromethane	ND	ug/L	EPA 8260B	50		04/02/04
Carbon disulfide	ND	ug/L	EPA 8260B	10		04/02/04
Vinyl acetate	ND	ug/L	EPA 8260B	10		04/02/04
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260B	10		04/02/04
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260B	10		04/02/04
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260B	10		04/02/04

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 3 of 35
Tetra Tech, Inc.
May 10, 2004

Project:	Martin State Airport - Quarterly Sampling		
Site Location:	Martin State Airport		
Project Number:	N7339-0677D	Date Sampled:	03/30/04
Matrix:	Water	Date Received:	03/31/04

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: TB033004 / 04033128-01						

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
c - Suspected instrument carry-over from sample DMW-2A-033104.

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 4 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10S-033004 / 04033128-02						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**22**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**100**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**15**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	**5.6**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**110**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**3**	ug/L	EPA 8260	1		4/7/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/7/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/7/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/7/2004
Bromoform	ND	ug/L	EPA 8260	1		4/7/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/7/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/7/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/7/2004
Chloroform	ND	ug/L	EPA 8260	1		4/7/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/7/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/7/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/7/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/7/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/7/2004

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 5 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10S-033004 / 04033128-02						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/7/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/7/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/7/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/7/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/7/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/7/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/7/2004
trans-1,2-Dichloroethene	2	ug/L	EPA 8260	1		4/7/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/7/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/7/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/7/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/7/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/7/2004
Methylene chloride	ND	ug/L	EPA 8260	1		4/7/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/7/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
Styrene	ND	ug/L	EPA 8260	1		4/7/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/7/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/7/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/7/2004
Toluene	ND	ug/L	EPA 8260	1		4/7/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/7/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/7/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/7/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/7/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/7/2004

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10S-033004 / 04033128-02						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/7/2004
Vinyl chloride	**93**	ug/L	EPA 8260	1		4/7/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/7/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/7/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/7/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/7/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/7/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/7/2004
Acetone	ND	ug/L	EPA 8260	10		4/7/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/7/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/7/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/7/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/7/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/7/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/7/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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No. 04033128 Page 7 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10S-033004 (DISS) / 04033128-03						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	17	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 8 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10I-033004 / 04033128-04						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	ND	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		4/6/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/6/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/6/2004
Bromoform	ND	ug/L	EPA 8260	1		4/6/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/6/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Carbon tetrachloride	**150**	ug/L	EPA 8260	1		4/6/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/6/2004
Chloroform	**19**	ug/L	EPA 8260	1		4/6/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/6/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/6/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/6/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/6/2004

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 9 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10I-033004 / 04033128-04						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/6/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
cis-1,2-Dichloroethene	**23**	ug/L	EPA 8260	1		4/6/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/6/2004
Methylene chloride	**b 3**	ug/L	EPA 8260	1		4/6/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/6/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Styrene	ND	ug/L	EPA 8260	1		4/6/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/6/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/6/2004
Toluene	ND	ug/L	EPA 8260	1		4/6/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1,2-Trichloroethane	**3**	ug/L	EPA 8260	1		4/6/2004
Trichloroethene	**480**	ug/L	EPA 8260	10		4/7/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/6/2004

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CERTIFICATE OF ANALYSIS
No. 04033128 Page 10 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10I-033004 / 04033128-04						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		4/6/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/6/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/6/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/6/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/6/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/6/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/6/2004
Acetone	ND	ug/L	EPA 8260	10		4/6/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/6/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/6/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/6/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/6/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-10I-033004 (DISS) / 04033128-05						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1S-033004 / 04033128-06						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**5.5**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**13**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**13**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	**18**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	ND	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**36**	ug/L	EPA 8260	1		4/2/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromoform	ND	ug/L	EPA 8260	1		4/2/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/2/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/2/2004
Chlorobenzene	**980**	ug/L	EPA 8260	20		4/6/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Chloroform	ND	ug/L	EPA 8260	1		4/2/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/2/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1S-033004 / 04033128-06						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/2/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
cis-1,2-Dichloroethene	3	ug/L	EPA 8260	1		4/2/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Ethylbenzene	1	ug/L	EPA 8260	1		4/2/2004
Isopropylbenzene	3	ug/L	EPA 8260	1		4/2/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/2/2004
Methylene chloride	ND	ug/L	EPA 8260	1		4/2/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/2/2004
n-Propylbenzene	j 1	ug/L	EPA 8260	1		4/2/2004
Styrene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/2/2004
Toluene	1	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1S-033004 / 04033128-06						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl chloride	**31**	ug/L	EPA 8260	1		4/2/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/2/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/2/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/2/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/2/2004
Acetone	ND	ug/L	EPA 8260	10		4/2/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/2/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/2/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/2/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
j - estimated value, less than quantitation limit.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/30/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-1S-033004 (DISS) / 04033128-07						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	**5.4**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**8.3**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**7.5**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6S-033104 / 04033128-08						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	6.1	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	ND	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromoform	ND	ug/L	EPA 8260	1		4/2/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/2/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/2/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Chloroform	ND	ug/L	EPA 8260	1		4/2/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/2/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6S-033104 / 04033128-08						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/2/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/2/2004
Methylene chloride	ND	ug/L	EPA 8260	1		4/2/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/2/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Styrene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/2/2004
Toluene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6S-033104 / 04033128-08						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		4/2/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/2/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/2/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/2/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/2/2004
Acetone	ND	ug/L	EPA 8260	10		4/2/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/2/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/2/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/2/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6S-033104 (DISS) / 04033128-09						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	7.1	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	18	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	ND	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
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ND - Not Detected at a concentration greater than or equal to the PQL.

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April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6I-033104 / 04033128-10						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	**9.2**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	**16**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	**130**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**37**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**480**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	**53**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**180**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	**8.2**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**1,500**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromoform	ND	ug/L	EPA 8260	1		4/2/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/2/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/2/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Chloroform	ND	ug/L	EPA 8260	1		4/2/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/2/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Site Location: Martin State Airport
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Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6I-033104 / 04033128-10						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/2/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/2/2004
Methylene chloride	ND	ug/L	EPA 8260	1		4/2/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/2/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Styrene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/2/2004
Toluene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
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Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6I-033104 / 04033128-10						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		4/2/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/2/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/2/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/2/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/2/2004
Acetone	ND	ug/L	EPA 8260	10		4/2/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/2/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/2/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/2/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6I-033104 (DISS) / 04033128-11						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	**16**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**9.8**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**79**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**100**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	**7.4**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**530**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

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Quality Assurance Chemist

Notes/Comments:
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April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6D-033104 / 04033128-12						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**81**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**12**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**36**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**120**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/2/2004
Bromoform	ND	ug/L	EPA 8260	1		4/2/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/2/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/2/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Chloroform	ND	ug/L	EPA 8260	1		4/2/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/2/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/2/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6D-033104 / 04033128-12						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/2/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/2/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/2/2004
Methylene chloride	ND	ug/L	EPA 8260	1		4/2/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/2/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Styrene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/2/2004
Toluene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/2/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/2/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/2/2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water

Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6D-033104 / 04033128-12						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		4/2/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/2/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/2/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/2/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/2/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/2/2004
Acetone	ND	ug/L	EPA 8260	10		4/2/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/2/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/2/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/2/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/2/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/2/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6D-033104 (DISS) / 04033128-13						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**25**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**100**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6-033104 / 04033128-14						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**6.0**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	ND	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**100**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	ND	ug/L	EPA 8260	1		4/6/2004
Bromobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Bromochloromethane	ND	ug/L	EPA 8260	1		4/6/2004
Bromodichloromethane	ND	ug/L	EPA 8260	1		4/6/2004
Bromoform	ND	ug/L	EPA 8260	1		4/6/2004
Bromomethane	ND	ug/L	EPA 8260	1		4/6/2004
n-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	1		4/6/2004
Chlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Chloroethane	ND	ug/L	EPA 8260	1		4/6/2004
Chloroform	ND	ug/L	EPA 8260	1		4/6/2004
Chloromethane	ND	ug/L	EPA 8260	1		4/6/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	1		4/6/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	1		4/6/2004
Dibromochloromethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	1		4/6/2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6-033104 / 04033128-14						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	1		4/6/2004
Dibromomethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
cis-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
trans-1,2-Dichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	1		4/6/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004
Ethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Isopropylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	1		4/6/2004
Methylene chloride	**j, b 0.9**	ug/L	EPA 8260	1		4/6/2004
Naphthalene	ND	ug/L	EPA 8260	1		4/6/2004
n-Propylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Styrene	ND	ug/L	EPA 8260	1		4/6/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	1		4/6/2004
Tetrachloroethene	ND	ug/L	EPA 8260	1		4/6/2004
Toluene	ND	ug/L	EPA 8260	1		4/6/2004
1,2,3-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,2,4-Trichlorobenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	1		4/6/2004
Trichloroethene	ND	ug/L	EPA 8260	1		4/6/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	1		4/6/2004

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Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6-033104 / 04033128-14						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
1,3,5-Trimethylbenzene	ND	ug/L	EPA 8260	1		4/6/2004
Vinyl chloride	ND	ug/L	EPA 8260	1		4/6/2004
m&p-Xylene	ND	ug/L	EPA 8260	3		4/6/2004
o-Xylene	ND	ug/L	EPA 8260	3		4/6/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	1		4/6/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	10		4/6/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	10		4/6/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	10		4/6/2004
Acetone	ND	ug/L	EPA 8260	10		4/6/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	5		4/6/2004
Carbon disulfide	ND	ug/L	EPA 8260	1		4/6/2004
Vinyl acetate	ND	ug/L	EPA 8260	1		4/6/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	1		4/6/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	1		4/6/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.
b - found in blank / suspected lab artifact.
j - estimated value, less than quantitation limit.

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-6-033104 (DISS) / 04033128-15						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	ND	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**92**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2A-033104 / 04033128-16						
Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Arsenic	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Beryllium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Cadmium	**870**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Chromium	**18**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Copper	**210**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Lead	**8.6**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Mercury	ND	ug/L	EPA 6020	1	4/7/2004	4/7/2004
Nickel	**150**	ug/L	EPA 6020	20	4/7/2004	4/7/2004
Selenium	**14**	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Silver	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Thallium	ND	ug/L	EPA 6020	5	4/7/2004	4/7/2004
Zinc	**550**	ug/L	EPA 6020	50	4/7/2004	4/7/2004
Volatile Organic Compounds						
Benzene	**57**	ug/L	EPA 8260	10		4/2/2004
Bromobenzene	ND	ug/L	EPA 8260	10		4/2/2004
Bromochloromethane	ND	ug/L	EPA 8260	10		4/2/2004
Bromodichloromethane	ND	ug/L	EPA 8260	10		4/2/2004
Bromoform	ND	ug/L	EPA 8260	10		4/2/2004
Bromomethane	ND	ug/L	EPA 8260	10		4/2/2004
n-Butylbenzene	ND	ug/L	EPA 8260	10		4/2/2004
sec-Butylbenzene	ND	ug/L	EPA 8260	10		4/2/2004
tert-Butylbenzene	ND	ug/L	EPA 8260	10		4/2/2004
Carbon tetrachloride	ND	ug/L	EPA 8260	10		4/2/2004
Chlorobenzene	**17**	ug/L	EPA 8260	10		4/2/2004
Chloroethane	ND	ug/L	EPA 8260	10		4/2/2004
Chloroform	**170**	ug/L	EPA 8260	10		4/2/2004
Chloromethane	ND	ug/L	EPA 8260	10		4/2/2004
2-Chlorotoluene	ND	ug/L	EPA 8260	10		4/2/2004
4-Chlorotoluene	ND	ug/L	EPA 8260	10		4/2/2004
Dibromochloromethane	ND	ug/L	EPA 8260	10		4/2/2004
1,2-Dibromo-3-chloropropane	ND	ug/L	EPA 8260	10		4/2/2004

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Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2A-033104 / 04033128-16						
Volatile Organic Compounds						
1,2-Dibromoethane	ND	ug/L	EPA 8260	10		4/2/2004
Dibromomethane	ND	ug/L	EPA 8260	10		4/2/2004
1,2-Dichlorobenzene	**13**	ug/L	EPA 8260	10		4/2/2004
1,3-Dichlorobenzene	ND	ug/L	EPA 8260	10		4/2/2004
1,4-Dichlorobenzene	ND	ug/L	EPA 8260	10		4/2/2004
Dichlorodifluoromethane	ND	ug/L	EPA 8260	10		4/2/2004
1,1-Dichloroethane	ND	ug/L	EPA 8260	10		4/2/2004
1,2-Dichloroethane	**310**	ug/L	EPA 8260	10		4/2/2004
1,1-Dichloroethene	**78**	ug/L	EPA 8260	10		4/2/2004
cis-1,2-Dichloroethene	**7,600**	ug/L	EPA 8260	100		4/7/2004
trans-1,2-Dichloroethene	**45**	ug/L	EPA 8260	10		4/2/2004
1,2-Dichloropropane	ND	ug/L	EPA 8260	10		4/2/2004
1,3-Dichloropropane	ND	ug/L	EPA 8260	10		4/2/2004
2,2-Dichloropropane	ND	ug/L	EPA 8260	10		4/2/2004
1,1-Dichloropropene	ND	ug/L	EPA 8260	10		4/2/2004
Ethylbenzene	**36**	ug/L	EPA 8260	10		4/2/2004
Isopropylbenzene	ND	ug/L	EPA 8260	10		4/2/2004
p-Isopropyltoluene	ND	ug/L	EPA 8260	10		4/2/2004
Methylene chloride	**b 230**	ug/L	EPA 8260	10		4/2/2004
Naphthalene	**15**	ug/L	EPA 8260	10		4/2/2004
n-Propylbenzene	**j 9**	ug/L	EPA 8260	10		4/2/2004
Styrene	ND	ug/L	EPA 8260	10		4/2/2004
1,1,1,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		4/2/2004
1,1,2,2-Tetrachloroethane	ND	ug/L	EPA 8260	10		4/2/2004
Tetrachloroethene	**100**	ug/L	EPA 8260	10		4/2/2004
Toluene	**960**	ug/L	EPA 8260	10		4/2/2004
1,2,3-Trichlorobenzene	**260**	ug/L	EPA 8260	10		4/2/2004
1,2,4-Trichlorobenzene	**1,600**	ug/L	EPA 8260	10		4/2/2004
1,1,1-Trichloroethane	ND	ug/L	EPA 8260	10		4/2/2004
1,1,2-Trichloroethane	ND	ug/L	EPA 8260	10		4/2/2004
Trichloroethene	**E 51,000**	ug/L	EPA 8260	100		4/7/2004
1,2,3-Trichloropropane	ND	ug/L	EPA 8260	10		4/2/2004

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Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2A-033104 / 04033128-16						
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	**75**	ug/L	EPA 8260	10		4/2/2004
1,3,5-Trimethylbenzene	**27**	ug/L	EPA 8260	10		4/2/2004
Vinyl chloride	**910**	ug/L	EPA 8260	10		4/2/2004
m&p-Xylene	**160**	ug/L	EPA 8260	30		4/2/2004
o-Xylene	**68**	ug/L	EPA 8260	30		4/2/2004
Methyl-t-butyl ether	ND	ug/L	EPA 8260	10		4/2/2004
2-Butanone (MEK)	ND	ug/L	EPA 8260	100		4/2/2004
2-Hexanone (MBK)	ND	ug/L	EPA 8260	100		4/2/2004
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	EPA 8260	100		4/2/2004
Acetone	ND	ug/L	EPA 8260	100		4/2/2004
Trichlorofluoromethane	ND	ug/L	EPA 8260	50		4/2/2004
Carbon disulfide	ND	ug/L	EPA 8260	10		4/2/2004
Vinyl acetate	ND	ug/L	EPA 8260	10		4/2/2004
2-Chloroethylvinyl ether	ND	ug/L	EPA 8260	10		4/2/2004
Cis-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		4/2/2004
Trans-1,3-Dichloropropene	ND	ug/L	EPA 8260	10		4/2/2004

Reviewed By:

Quality Assurance Chemist

Notes/Comments:

PQL - Practical Quantitation Limit

ND - Not Detected at a concentration greater than or equal to the PQL.

b - found in blank / suspected lab artifact.

E - estimated value, exceeds calibration range.

j - estimated value, less than quantitation limit.

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 04033128 Page 35 of 35
Tetra Tech, Inc.
April 8, 2004

Project: Martin State Airport - Quarterly Sampling
Site Location: Martin State Airport
Project Number: N7339-0677D
Matrix: Ground Water
Date Sampled: 3/31/2004
Date Received: 3/31/2004

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: DMW-2A-033104 (DISS) / 04033128-17						
Dissolved Priority Pollutant Metals						
Antimony	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Arsenic	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Beryllium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Cadmium	**760**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Chromium	**8.1**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Copper	**40**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Lead	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Mercury	ND	ug/L	EPA 6020	1	4/1/2004	4/1/2004
Nickel	**120**	ug/L	EPA 6020	20	4/1/2004	4/1/2004
Selenium	**12**	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Silver	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Thallium	ND	ug/L	EPA 6020	5	4/1/2004	4/1/2004
Zinc	**540**	ug/L	EPA 6020	50	4/1/2004	4/1/2004

Reviewed By: _____
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
ND - Not Detected at a concentration greater than or equal to the PQL.

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

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email: info@phaseonline.com

(1)
CLIENT: Tetra Tech PHONE NO.: (916) 276-7846
PROJECT MGR: Nisha Bansal FAX NO.: ( )
EMAIL: Nisha.bansal@Tetratech.com
PROJECT NAME: Martin State Airport- Quarterly Sampling
SITE LOCATION: Martin State Airport
PROJECT NO.: N7339-0677D P.O. NO.:

PSS Project #: 0403128

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE (C = COMP, G = GRAB)	Preservatives Used	Analysis Required (3) Volatile Organic Compounds (8260 B)	Total Priority Pollutant Metals (6020)	Dissolved Priority Pollutant Metals (6020)	REMARKS
	TB 033004	3/30/04	0000	GW	2	G	HCL	X			
	DMW-1OS-033004		1541		4			X	X	X	
	DMW-1OI-033004		1630		4			X	X	X	
	DMW-1S-033004		1724		4			X	X	X	
	DMW-6S-033104	3-31-04	1020		4			X	X	X	
	DMW-6I-033104		1205		4			X	X	X	
	DMW-6D-033104		1405		4			X	X	X	
	DMW-6-033104		1520		4			X	X	X	
	DMW-2A-033104		1640		4			X	X	X	

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Walter Elmore	3-31-04	1845	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Collected / Relinquished By: (4)	Date	Time	Received By:

(4)

Requested Turnaround Time
☒ 5-Day (Std.) ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:

Sample Condition Upon Receipt:
Custody Seal:
Shipping Carrier:
Shipping Ticket No.:

Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if colleciton becomes necessary.

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Volatile Organic Compounds

- *Surrogate Summary*
- *Method Blank Summary*
- *Continuing Calibration Verification Summary*
- *LCS Summary*
- *MS/MSD Summary*
- *BFB Tune Summary*

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
04/02/04 10:16	TCL-W, CCV 50ppb	101	101	100	
04/02/04 10:40	UNREG-W, CCV 50ppb	102	101	103	
04/02/04 11:04	Method Blank	101	101	104	
04/02/04 21:37	LCS / LCS 25ppb	102	101	100	
04/02/04 13:56	TB033004 / 04033128-01	101	100	103	
04/02/04 16:57	DMW-1S-033004 / 04033128-06	101	100	103	
04/02/04 15:08	DMW-6S-033104 / 04033128-08	102	102	104	
04/02/04 15:32	DMW-6I-033104 / 04033128-10	101	103	103	
04/02/04 15:56	DMW-6D-033104 / 04033128-12	103	103	102	
04/02/04 19:26	DMW-2A-033104 / 04033128-16	100	101	102	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
04/06/04 11:14	TCL-W, CCV 50ppb	101	100	100	
04/06/04 11:39	UNREG-W, CCV 50ppb	99	101	100	
04/06/04 12:03	Method Blank	100	102	102	
04/06/04 16:56	04033128-04 / DMW-10I-033004	100	99	101	
04/06/04 17:20	04033128-14 / DMW-6-033104	100	102	98	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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VOLATILE ORGANIC COMPOUNDS
SYSTEM MONITORING COMPOUND RECOVERY
(SURROGATES)

ANALYSIS: GC/MS Volatiles **LAB CODE:** SURR

METHOD: EPA 8260 **MATRIX:** Water

Date/Time Analyzed	Sample ID	SMC-1 (DBF) #	SMC-2 (TOL) #	SMC-3 (BFB) #	Total Out
	Upper Limit	113	110	113	
	Lower Limit	84	83	67	
04/07/04 10:50	TCL-W, CCV 50ppb	102	101	102	
04/07/04 11:14	UNREG-W, CCV 50ppb	100	101	101	
04/04/04 12:02	Method Blank	101	98	102	
04/07/04 16:34	LCS / LCS 25ppb	101	100	104	
04/07/04 14:52	DMW-10S-033004 / 04033128-02	102	100	103	

	Water Control Limits	Soil Control Limits
SMC-1 (DBF): Dibromofluoromethane	84-113	74-131
SMC-2 (TOL): Toluene d-8	83-110	82-115
SMC-3 (BFB): Bromofluorobenzene	67-113	59-157

Column used to flag recovery values
* = Values outside QC limits
D: Surrogate diluted out

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VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04040204.D**	**DATE/TIME ANALYZED:**	**04/02/04 11:04**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB033004	04033128-01	04040211.D	04/02/04 13:56
DMW-1S-033004	04033128-06	04040218.D	04/02/04 16:57
DMW-6S-033104	04033128-08	04040214.D	04/02/04 15:08
DMW-6I-033104	04033128-10	04040215.D	04/02/04 15:32
DMW-6D-033104	04033128-12	04040216.D	04/02/04 15:56
DMW-2A-033104	04033128-16	04040224.D	04/02/04 19:26

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	104799	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	194154	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.06	117	157290	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	51729	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	63118	50.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.70%			
33) Toluene d-8 SS#2	6.31	98	253780	50.58	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.16%			
50) 4-Bromofluorobenzene SS#3	9.61	95	90247	51.98	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.96%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	1.76	94	51	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	0.00	43	0	Not Detected d		
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.59	84	683	Not Detected		
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	0.00	43	0	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	4.09	56	107	Not Detected		
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.37	78	256	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

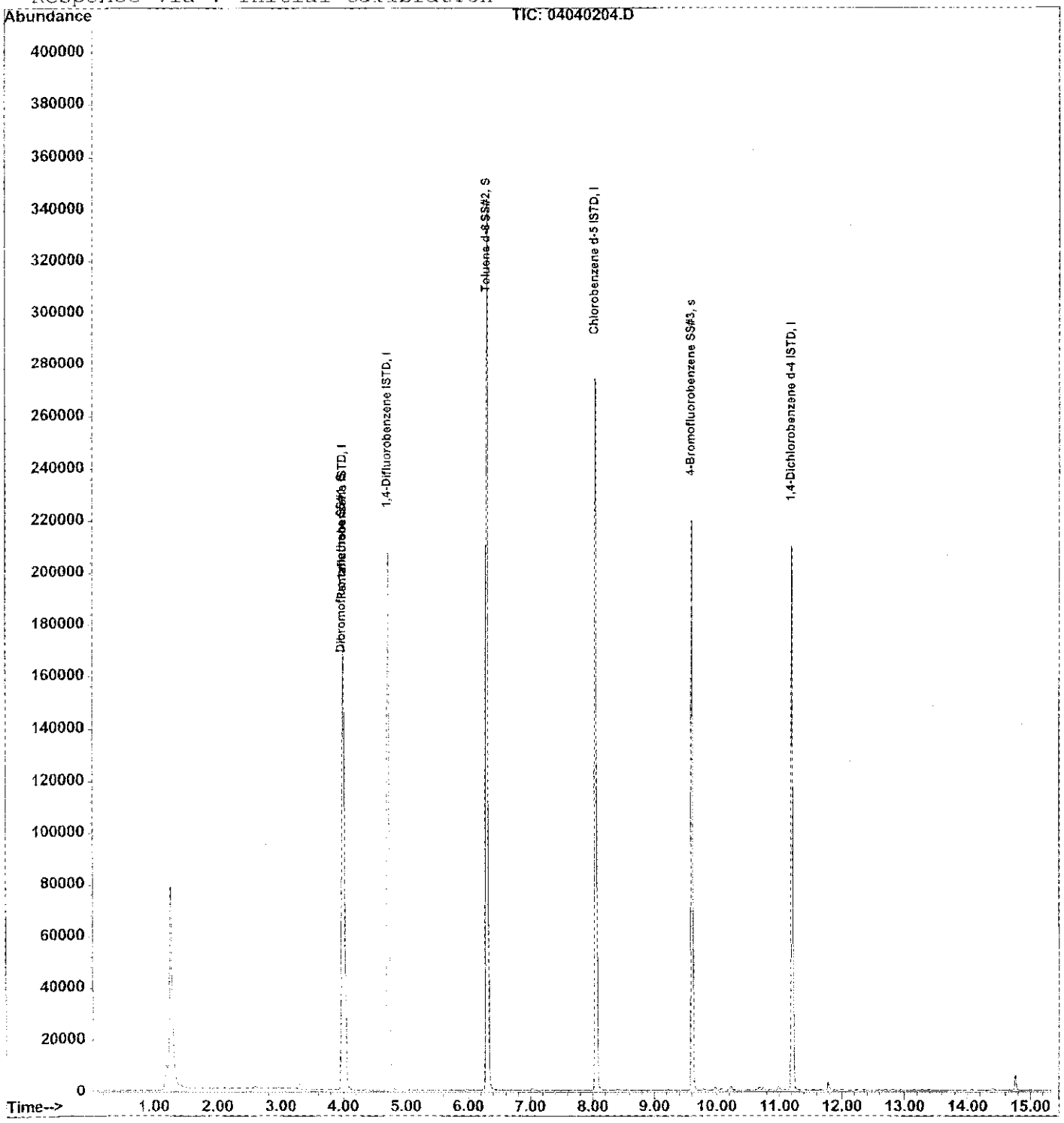
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	0.00	43	0	Not Detected	d
34) TOLUENE	0.00	92	0	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	7.03	166	337	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.25	91	186	Not Detected	
44) m&p-Xylene	8.39	106	125	Not Detected	
45) o-Xylene	0.00	106	0	Not Detected	
46) Styrene	0.00	104	0	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	9.42	105	129	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	11.11	146	50	Not Detected	
53) 1,4-Dichlorobenzene	11.25	146	915	Not Detected	
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	14.08	180	229	Not Detected	
57) Naphthalene	14.40	128	1121	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.01	168	104799	50.00	ug/L	0.00
12) 1,4-Difluorobenzene	4.72	114	194154	50.00	ug/L	0.00
19) Chlorobenzene d-5	8.06	117	157290	50.00	ug/L	0.01
27) 1,4-Dichlorobenzene d-4	11.21	152	51729	50.00	ug/L	0.01
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.99	113	63118	50.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.12%			
18) Toluene d-8 SS#2	6.31	98	253780	50.38	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%			
23) 4-Bromofluorobenzene SS#3	9.61	95	90247	50.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.86%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		
6) vinyl acetate	3.13	43	237	Not Detected		
7) diisopropyl ether	3.15	45	54	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	0.00	156	0	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.98	91	1776	Not Detected		
28) 2-Chlorotoluene	10.08	91	739	Not Detected		
29) 4-Chlorotoluene	10.23	91	896	Not Detected		
30) 1,3,5-Trimethylbenzene	10.24	105	911	Not Detected		
31) tert-Butylbenzene	10.68	119	698	Not Detected		
32) 1,2,4-Trimethylbenzene	10.75	105	1125	Not Detected		
33) sec-Butylbenzene	10.99	105	1967	Not Detected		
34) 4-Isopropyltoluene	11.21	119	1358	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MT
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

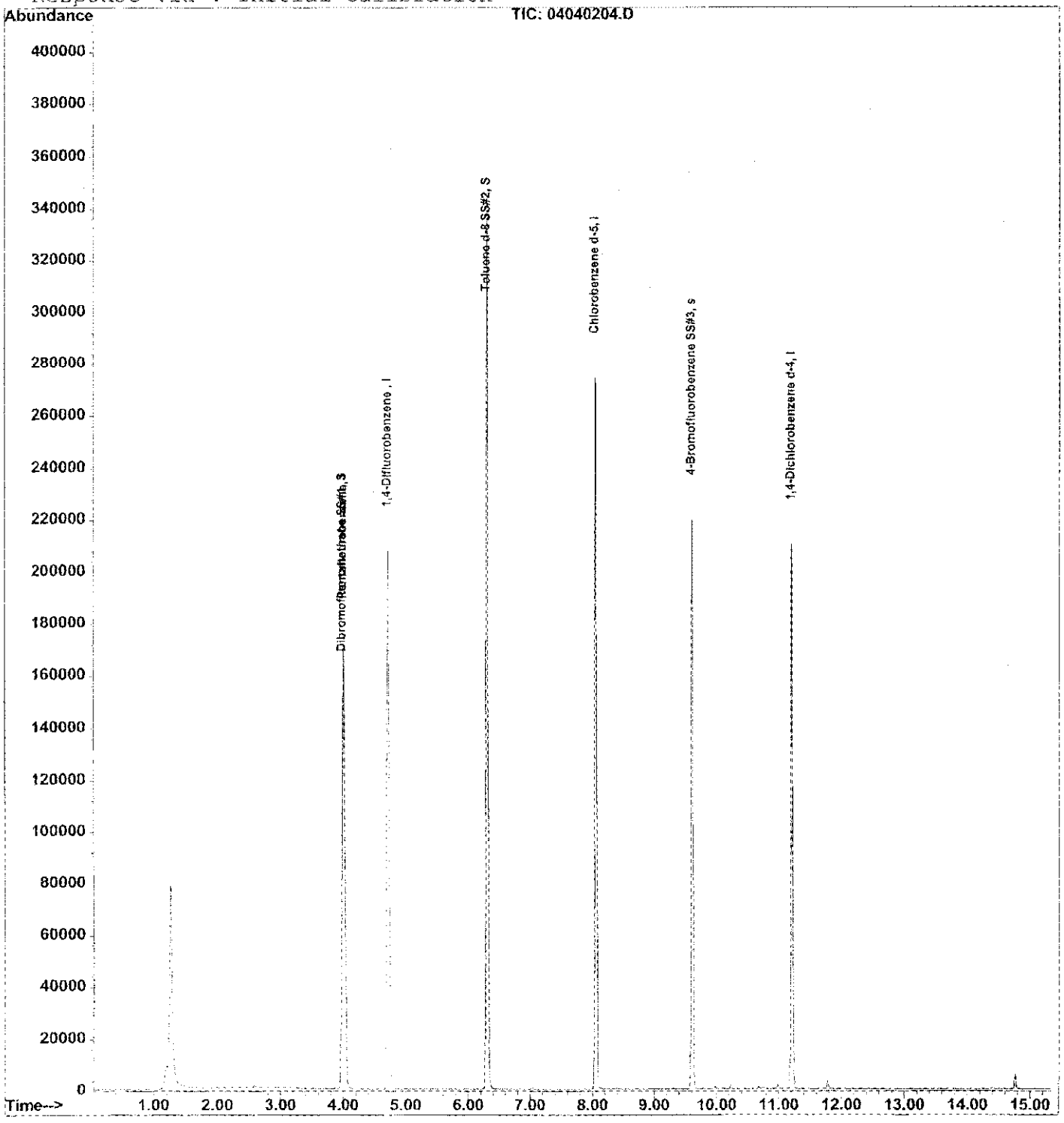
Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	0.00	91	0	Not Detected	d
36) 1,2,3-Trichlorobenzene	0.00	180	0	Not Detected	d

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040402\04040204.D Vial: 4
Acq On : 2 Apr 2004 11:04 am Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:19 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04040605.D**	**DATE/TIME ANALYZED:**	**04/06/04 12:03**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
04033128-04	DMW-10I-033004	04040617.D	04/06/04 16:56
04033128-14	DMW-6-033104	04040618.D	04/06/04 17:20

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:18 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.00	168	157091	50.00	ug/L	-0.01
23) 1,4-Difluorobenzene ISTD	4.71	114	287195	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	237860	50.00	ug/L	-0.01
48) 1,4-Dichlorobenzene d-4 IS	11.19	152	79004	50.00	ug/L	-0.01
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	94367	50.22	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.44%			
33) Toluene d-8 SS#2	6.29	98	378913	51.05	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.10%			
50) 4-Bromofluorobenzene SS#3	9.60	95	135255	51.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.02%			

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected
3) Chloromethane	0.00	50	0	Not Detected
4) VINYL CHLORIDE	0.00	62	0	Not Detected
5) Bromomethane	1.79	94	69	Not Detected
6) Chloroethane	0.00	64	0	Not Detected
7) Trichlorofluoromethane	0.00	101	0	Not Detected
8) Acetone	2.24	43	623	Not Detected
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected
11) Carbon Disulfide	2.46	76	50	Not Detected
12) Methyl Acetate	0.00	74	0	Not Detected
13) Methylene chloride	2.59	84	1870	Not Detected
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected
16) 1,1-Dichloroethane	0.00	63	0	Not Detected
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected
18) 2-Butanone (MEK)	3.56	43	123	Not Detected
19) CHLOROFORM	0.00	83	0	Not Detected
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected
22) Cyclohexane	0.00	56	0	Not Detected d
24) Carbon tetrachloride	0.00	117	0	Not Detected
25) Benzene	4.34	78	298	Not Detected
26) 1,2-Dichloroethane	0.00	62	0	Not Detected
27) Trichloroethene	0.00	95	0	Not Detected
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected
29) Methylcyclohexane	5.20	83	62	Not Detected
30) Bromodichloromethane	0.00	83	0	Not Detected

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:18 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

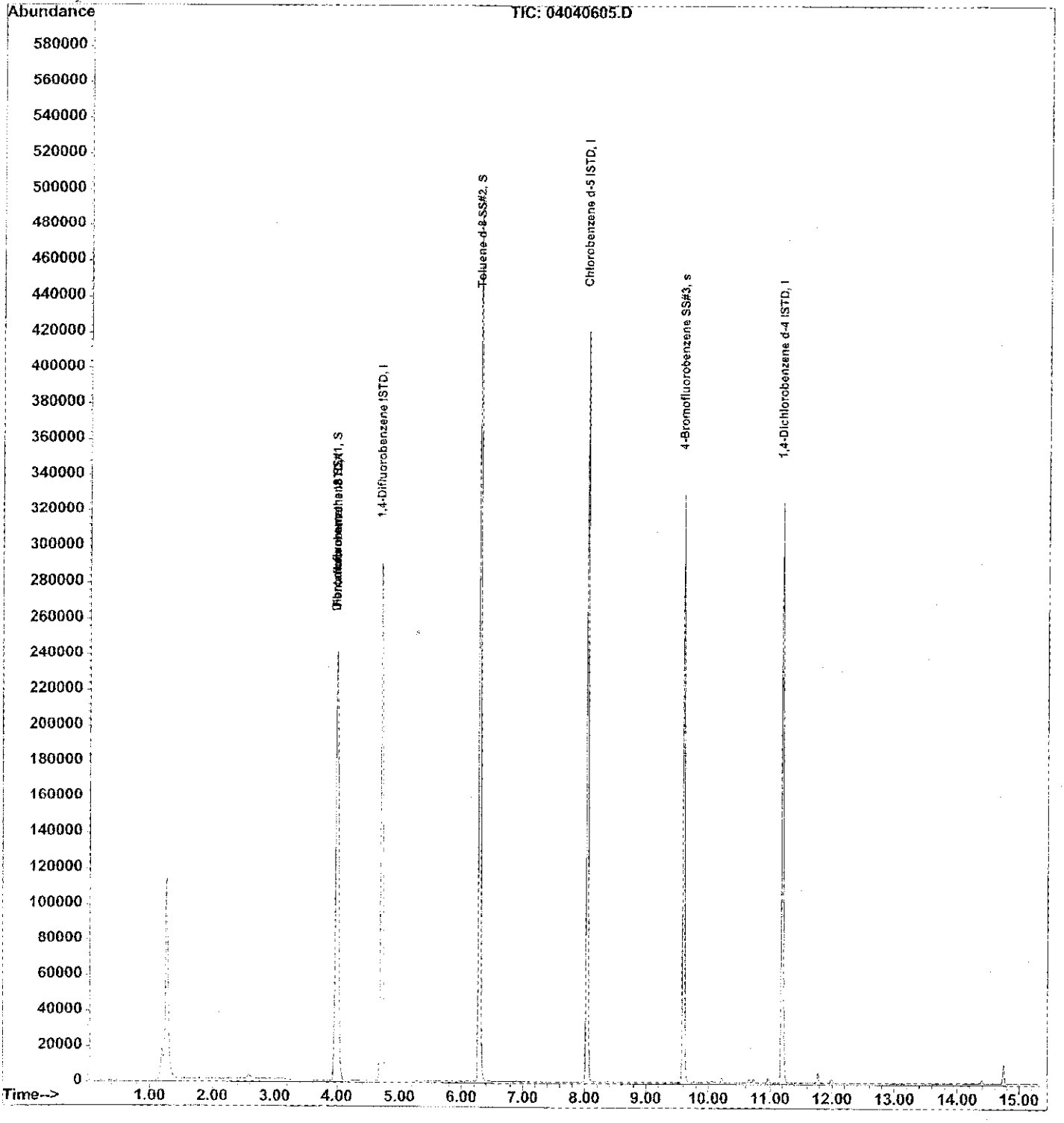
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32)	4-Methyl-2-Pentanone (MIBK	6.29	43	2476	Not Detected	
34)	TOLUENE	6.36	92	56	Not Detected	
35)	trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36)	1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37)	Tetrachloroethene	7.02	166	59	Not Detected	
38)	2-Hexanone (MBK)	0.00	43	0	Not Detected	
40)	Dibromochloromethane	0.00	129	0	Not Detected	
41)	1,2-Dibromoethane	0.00	107	0	Not Detected	
42)	Chlorobenzene	0.00	112	0	Not Detected	
43)	ETHYLBENZENE	8.22	91	309	Not Detected	
44)	m&p-Xylene	8.38	106	201	Not Detected	
45)	o-Xylene	0.00	106	0	Not Detected	
46)	Styrene	8.92	104	53	Not Detected	
47)	Bromoform	0.00	173	0	Not Detected	
49)	Isopropylbenzene	9.41	105	294	Not Detected	
51)	1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52)	1,3-Dichlorobenzene	0.00	146	0	Not Detected	d
53)	1,4-Dichlorobenzene	0.00	146	0	Not Detected	d
54)	1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55)	1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56)	1,2,4-Trichlorobenzene	14.05	180	456	Not Detected	
57)	Naphthalene	14.39	128	1847	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:18 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:19 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.00	168	157091	50.00	ug/L	-0.01
12) 1,4-Difluorobenzene	4.71	114	287195	50.00	ug/L	-0.01
19) Chlorobenzene d-5	8.04	117	237860	50.00	ug/L	-0.01
27) 1,4-Dichlorobenzene d-4	11.19	152	79004	50.00	ug/L	-0.01
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.98	113	94367	49.93	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.86%			
18) Toluene d-8 SS#2	6.29	98	378913	50.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.70%			
23) 4-Bromofluorobenzene SS#3	9.60	95	135255	49.98	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
Target Compounds						Qvalue
2) acrolein	0.00	56	0	Not Detected		
3) iodomethne	0.00	142	0	Not Detected		
4) acrylonitrile	0.00	53	0	Not Detected		
5) tert-butanol	0.00	59	0	Not Detected		d
6) vinyl acetate	3.12	43	388	Not Detected		
7) diisopropyl ether	3.11	45	124	Not Detected		
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected		
9) 2,2-Dichloropropane	0.00	77	0	Not Detected		
10) Bromochloromethane	0.00	128	0	Not Detected		
13) 1,1-Dichloropropene	0.00	75	0	Not Detected		
14) tert-amyl methyl ether	0.00	73	0	Not Detected		
15) Dibromomethane	0.00	93	0	Not Detected		
16) 1,4-dioxane	0.00	58	0	Not Detected		
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected		
20) 1,3-Dichloropropane	0.00	76	0	Not Detected		
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected		
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected		
24) Bromobenzene	9.79	156	53	Not Detected		
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected		
26) n-Propylbenzene	9.97	91	2589	Not Detected		
28) 2-Chlorotoluene	10.07	91	1008	Not Detected		
29) 4-Chlorotoluene	10.21	91	1432	Not Detected		
30) 1,3,5-Trimethylbenzene	10.22	105	1405	Not Detected		
31) tert-Butylbenzene	10.66	119	1155	Not Detected		
32) 1,2,4-Trimethylbenzene	10.73	105	1949	Not Detected		
33) sec-Butylbenzene	10.97	105	3221	Not Detected		
34) 4-Isopropyltoluene	11.19	119	2272	Not Detected		

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : ES/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:19 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

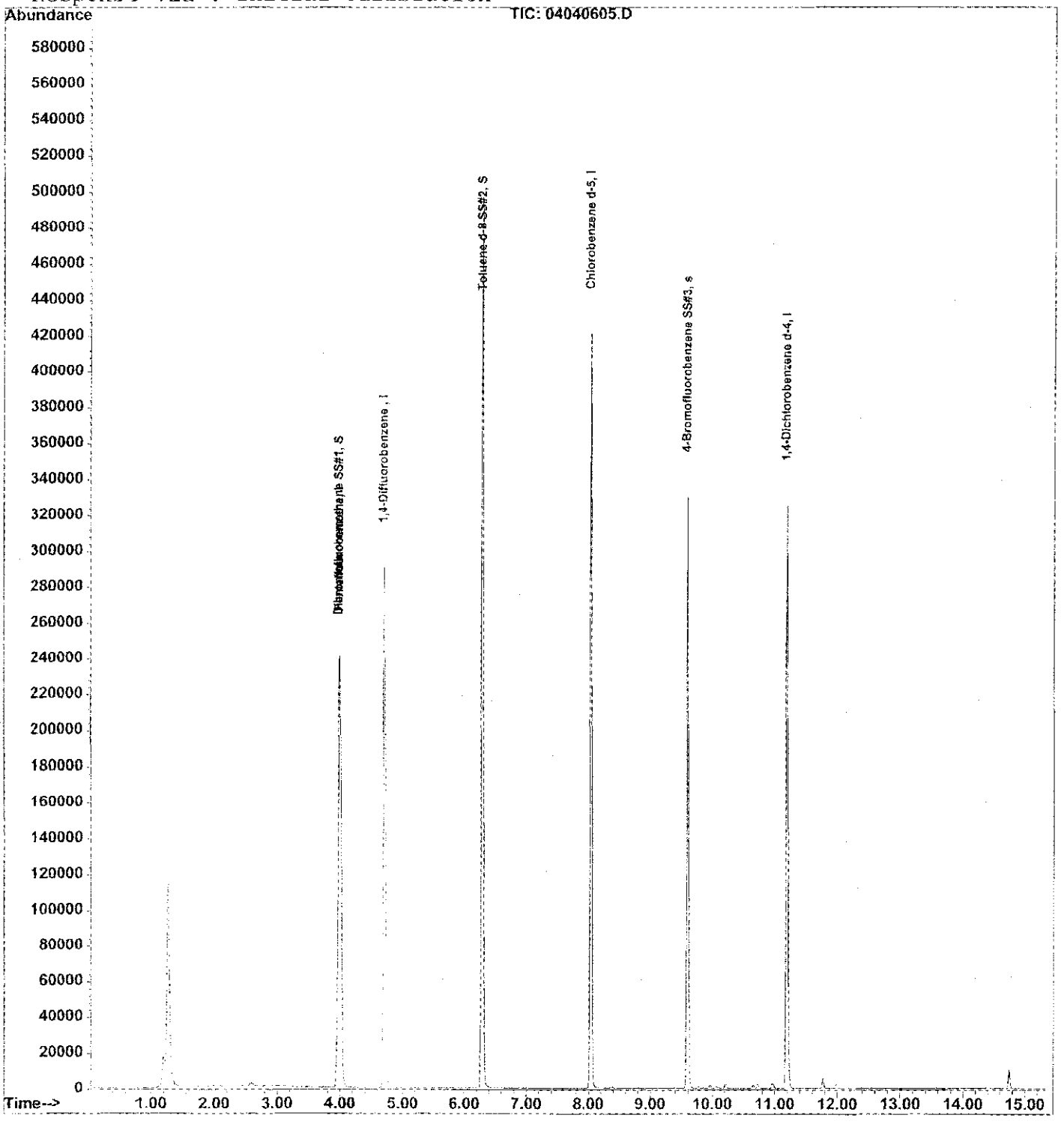
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	0.00	91	0	Not Detected	d
36) 1,2,3-Trichlorobenzene	0.00	180	0	Not Detected	d

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040406\04040605.D Vial: 5
Acq On : 6 Apr 2004 12:03 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:19 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
METHOD BLANK SUMMARY

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**Method Blank**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**METHOD BLANK 5mL**
LAB FILE ID:	**04040705.D**	**DATE/TIME ANALYZED:**	**04/04/04 12:02**
MATRIX:	**Water**		

This Method Blank applies to the following samples:

Field Sample ID	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-10S-033004	04033128-02	04040706.D	4/7/04 14:52

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040705.D Vial: 5
Acq On : 7 Apr 2004 12:02 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	152927	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	285382	50.00	ug/L	0.01
39) Chlorobenzene d-5 ISTD	8.05	117	236459	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	77997	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	92530	50.59	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.18%			
33) Toluene d-8 SS#2	6.30	98	360588	48.89	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.78%			
50) 4-Bromofluorobenzene SS#3	9.61	95	133143	50.86	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.72%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	Not Detected		
3) Chloromethane	0.00	50	0	Not Detected		
4) VINYL CHLORIDE	0.00	62	0	Not Detected		
5) Bromomethane	1.80	94	53	Not Detected		
6) Chloroethane	0.00	64	0	Not Detected		
7) Trichlorofluoromethane	0.00	101	0	Not Detected		
8) Acetone	0.00	43	0	Not Detected		d
9) 1,1-DICHLOROETHENE	0.00	96	0	Not Detected		
10) 1,1,2-Trichlorotrifluoroet	0.00	101	0	Not Detected		
11) Carbon Disulfide	0.00	76	0	Not Detected		
12) Methyl Acetate	0.00	74	0	Not Detected		
13) Methylene chloride	2.60	84	6369	2.35	ug/L	97
14) trans-1,2-Dichloroethene	0.00	96	0	Not Detected		
15) Methyl-t-Butyl Ether	0.00	73	0	Not Detected		
16) 1,1-Dichloroethane	0.00	63	0	Not Detected		
17) cis-1,2-Dichloroethene	0.00	96	0	Not Detected		
18) 2-Butanone (MEK)	0.00	43	0	Not Detected		
19) CHLOROFORM	0.00	83	0	Not Detected		
21) 1,1,1-Trichloroethane	0.00	97	0	Not Detected		
22) Cyclohexane	0.00	56	0	Not Detected		d
24) Carbon tetrachloride	0.00	117	0	Not Detected		
25) Benzene	4.36	78	372	Not Detected		
26) 1,2-Dichloroethane	0.00	62	0	Not Detected		
27) Trichloroethene	0.00	95	0	Not Detected		
28) 1,2-DICHLOROPROPANE	0.00	63	0	Not Detected		
29) Methylcyclohexane	0.00	83	0	Not Detected		
30) Bromodichloromethane	0.00	83	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040705.D Vial: 5
Acq On : 7 Apr 2004 12:02 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

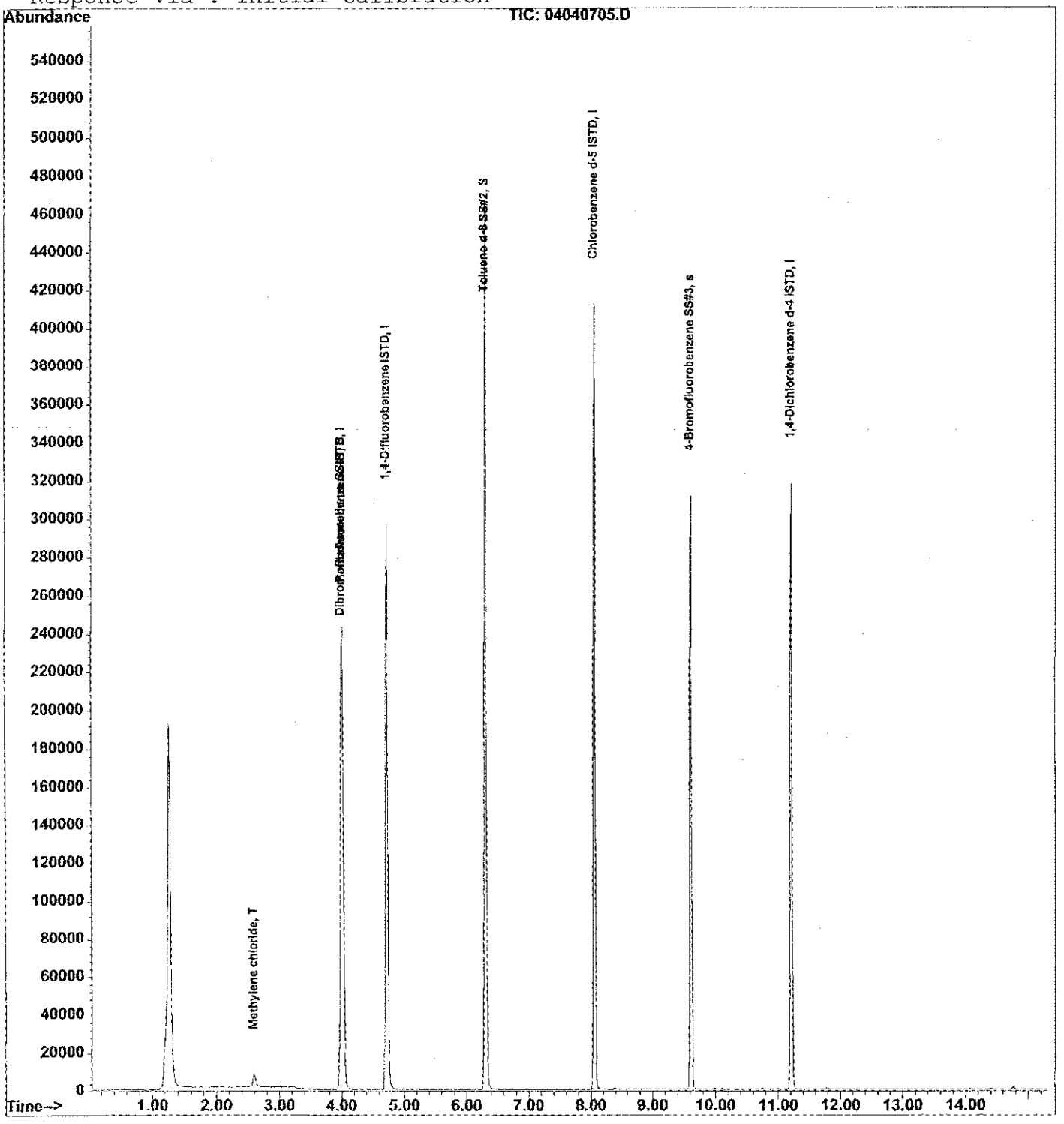
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	0.00	75	0	Not Detected	
32) 4-Methyl-2-Pentanone (MIBK	6.31	43	2266	Not Detected	
34) TOLUENE	6.38	92	136	Not Detected	
35) trans-1,3-Dichloropropene	0.00	75	0	Not Detected	
36) 1,1,2-Trichloroethane	0.00	83	0	Not Detected	
37) Tetrachloroethene	0.00	166	0	Not Detected	
38) 2-Hexanone (MBK)	0.00	43	0	Not Detected	
40) Dibromochloromethane	0.00	129	0	Not Detected	
41) 1,2-Dibromoethane	0.00	107	0	Not Detected	
42) Chlorobenzene	0.00	112	0	Not Detected	
43) ETHYLBENZENE	8.24	91	282	Not Detected	
44) m&p-Xylene	8.40	106	220	Not Detected	
45) o-Xylene	0.00	106	0	Not Detected	
46) Styrene	0.00	104	0	Not Detected	
47) Bromoform	0.00	173	0	Not Detected	
49) Isopropylbenzene	9.42	105	59	Not Detected	
51) 1,1,2,2-Tetrachloroethane	0.00	83	0	Not Detected	
52) 1,3-Dichlorobenzene	11.24	146	2099	Not Detected	
53) 1,4-Dichlorobenzene	11.24	146	2099	Not Detected	
54) 1,2-Dichlorobenzene	0.00	146	0	Not Detected	
55) 1,2-Dibromo-3-chloropropan	0.00	75	0	Not Detected	
56) 1,2,4-Trichlorobenzene	14.07	180	117	Not Detected	
57) Naphthalene	14.41	128	600	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040705.D Vial: 5
Acq On : 7 Apr 2004 12:02 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040705.D
Acq On : 7 Apr 2004 12:02 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentaflourobenzene	4.02	168	152927	50.00 ug/L	0.00
12) 1,4-Difluorobenzene	4.72	114	285382	50.00 ug/L	0.00
19) Chlorobenzene d-5	8.05	117	236459	50.00 ug/L	0.00
27) 1,4-Dichlorobenzene d-4	11.21	152	77997	50.00 ug/L	0.00
System Monitoring Compounds					
11) Dibromofluoromethane SS#1	3.99	113	92530	50.30 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.60%		
18) Toluene d-8 SS#2	6.30	98	360588	48.70 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.40%		
23) 4-Bromofluorobenzene SS#3	9.61	95	133143	49.49 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.98%		
Target Compounds					Qvalue
2) acrolein	0.00	56	0	Not Detected	
3) iodomethne	0.00	142	0	Not Detected	
4) acrylonitrile	0.00	53	0	Not Detected	
5) tert-butanol	0.00	59	0	Not Detected	
6) vinyl acetate	3.10	43	289	Not Detected	
7) diisopropyl ether	3.16	45	60	Not Detected	
8) Ethyl tert-butyl ether	0.00	59	0	Not Detected	
9) 2,2-Dichloropropane	0.00	77	0	Not Detected	
10) Bromochloromethane	0.00	128	0	Not Detected	
13) 1,1-Dichloropropene	0.00	75	0	Not Detected	
14) tert-amyl methyl ether	0.00	73	0	Not Detected	
15) Dibromomethane	0.00	93	0	Not Detected	
16) 1,4-dioxane	0.00	58	0	Not Detected	
17) 2-Chloroethylvinyl Ether	0.00	63	0	Not Detected	
20) 1,3-Dichloropropane	0.00	76	0	Not Detected	
21) 1,1,1,2-Tetrachloroethane	0.00	131	0	Not Detected	
22) 1,2,3-Trichloropropane	0.00	110	0	Not Detected	
24) Bromobenzene	0.00	156	0	Not Detected	
25) trans-1,4-dichloro-2-buten	0.00	75	0	Not Detected	
26) n-Propylbenzene	9.98	91	543	Not Detected	
28) 2-Chlorotoluene	10.07	91	131	Not Detected	
29) 4-Chlorotoluene	10.24	91	230	Not Detected	
30) 1,3,5-Trimethylbenzene	10.23	105	296	Not Detected	
31) tert-Butylbenzene	10.68	119	162	Not Detected	
32) 1,2,4-Trimethylbenzene	10.75	105	600	Not Detected	
33) sec-Butylbenzene	10.99	105	374	Not Detected	
34) 4-Isopropyltoluene	11.21	119	346	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040705.D Vial: 5
Acq On : 7 Apr 2004 12:02 pm Operator: MI
Sample : METHOD BLANK 5mL Inst : Instrumen
Misc : IS/S 1uL #423 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.78	91	731	Not Detected	
36) 1,2,3-Trichlorobenzene	14.76	180	703	Not Detected	

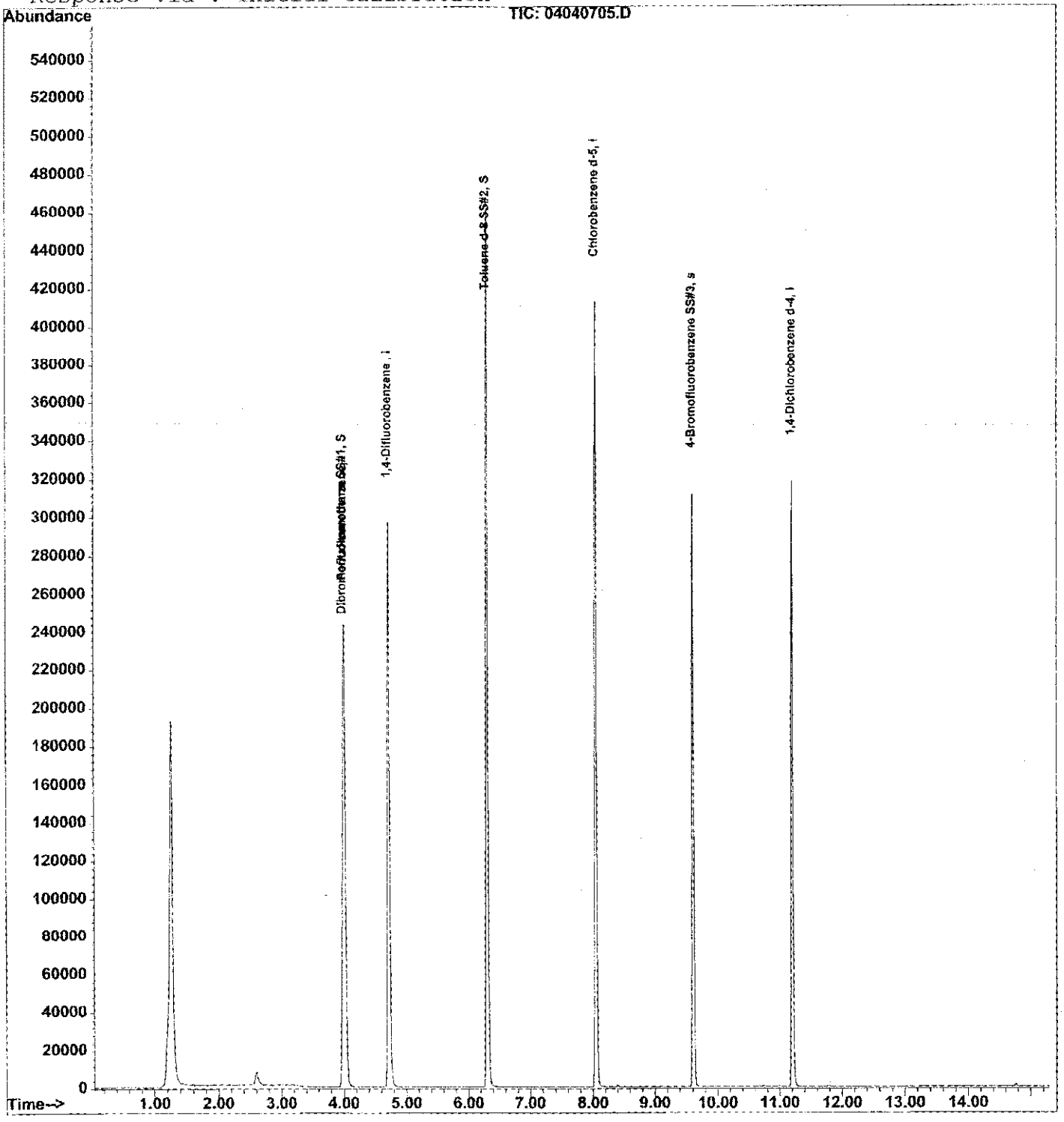
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040705.D
Acq On : 7 Apr 2004 12:02 pm
Sample : METHOD BLANK 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Quant Time: Apr 7 16:06 2004

Vial: 5
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 04/02/04 **BATCH NUMBER:** VOC040402

METHOD: EPA 8260 **LAB FILE IDs:** 04040229.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	21	86	61-145
Benzene	25	ND	23	91	76-127
Trichloroethene	25	ND	23	93	71-120
Toluene	25	ND	23	93	76-125
Chlorobenzene	25	ND	22	87	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040229.D Vial: 29
Acq On : 2 Apr 2004 9:37 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	106083	50.00 ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	194711	50.00 ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.05	117	157433	50.00 ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	55330	50.00 ug/L	0.00
System Monitoring Compounds					
20) Dibromofluoromethane SS#1	3.99	113	64844	51.11 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.22%		
33) Toluene d-8 SS#2	6.31	98	254892	50.65 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.30%		
50) 4-Bromofluorobenzene SS#3	9.61	95	93018	50.09 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.18%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	38254	20.05 ug/L	100
3) Chloromethane	1.50	50	43290	21.20 ug/L	97
4) VINYL CHLORIDE	1.58	62	41686	20.58 ug/L	99
5) Bromomethane	1.75	94	34862	20.99 ug/L	96
6) Chloroethane	1.79	64	24533	23.55 ug/L	99
7) Trichlorofluoromethane	1.92	101	24868	21.12 ug/L	97
8) Acetone	2.28	43	13389	26.30 ug/L	93
9) 1,1-DICHLOROETHENE	2.27	96	33494	21.47 ug/L	94
10) 1,1,2-Trichlorotrifluoroet	2.28	101	28298	22.02 ug/L	97
11) Carbon Disulfide	2.44	76	125143	22.50 ug/L	97
12) Methyl Acetate	2.49	74	4921	25.15 ug/L	97
13) Methylene chloride	2.59	84	39616	21.10 ug/L	97
14) trans-1,2-Dichloroethene	2.80	96	37340	22.25 ug/L	96
15) Methyl-t-Butyl Ether	2.79	73	81025	25.44 ug/L	100
16) 1,1-Dichloroethane	3.11	63	63995	22.44 ug/L	99
17) cis-1,2-Dichloroethene	3.58	96	37668	22.47 ug/L	94
18) 2-Butanone (MEK)	3.57	43	24290	25.66 ug/L	97
19) CHLOROFORM	3.85	83	68509	22.38 ug/L	99
21) 1,1,1-Trichloroethane	4.03	97	48139	22.22 ug/L #	4
22) Cyclohexane	4.09	56	57458	23.23 ug/L	90
24) Carbon tetrachloride	4.18	117	32361	21.52 ug/L	100
25) Benzene	4.36	78	163799	22.63 ug/L	99
26) 1,2-Dichloroethane	4.37	62	54807	24.22 ug/L	98
27) Trichloroethene	4.99	95	38185	23.23 ug/L	95
28) 1,2-DICHLOROPROPANE	5.21	63	44730	23.44 ug/L	99
29) Methylcyclohexane	5.20	83	34951	20.56 ug/L	96
30) Bromodichloromethane	5.51	83	51738	22.81 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040229.D Vial: 29
Acq On : 2 Apr 2004 9:37 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

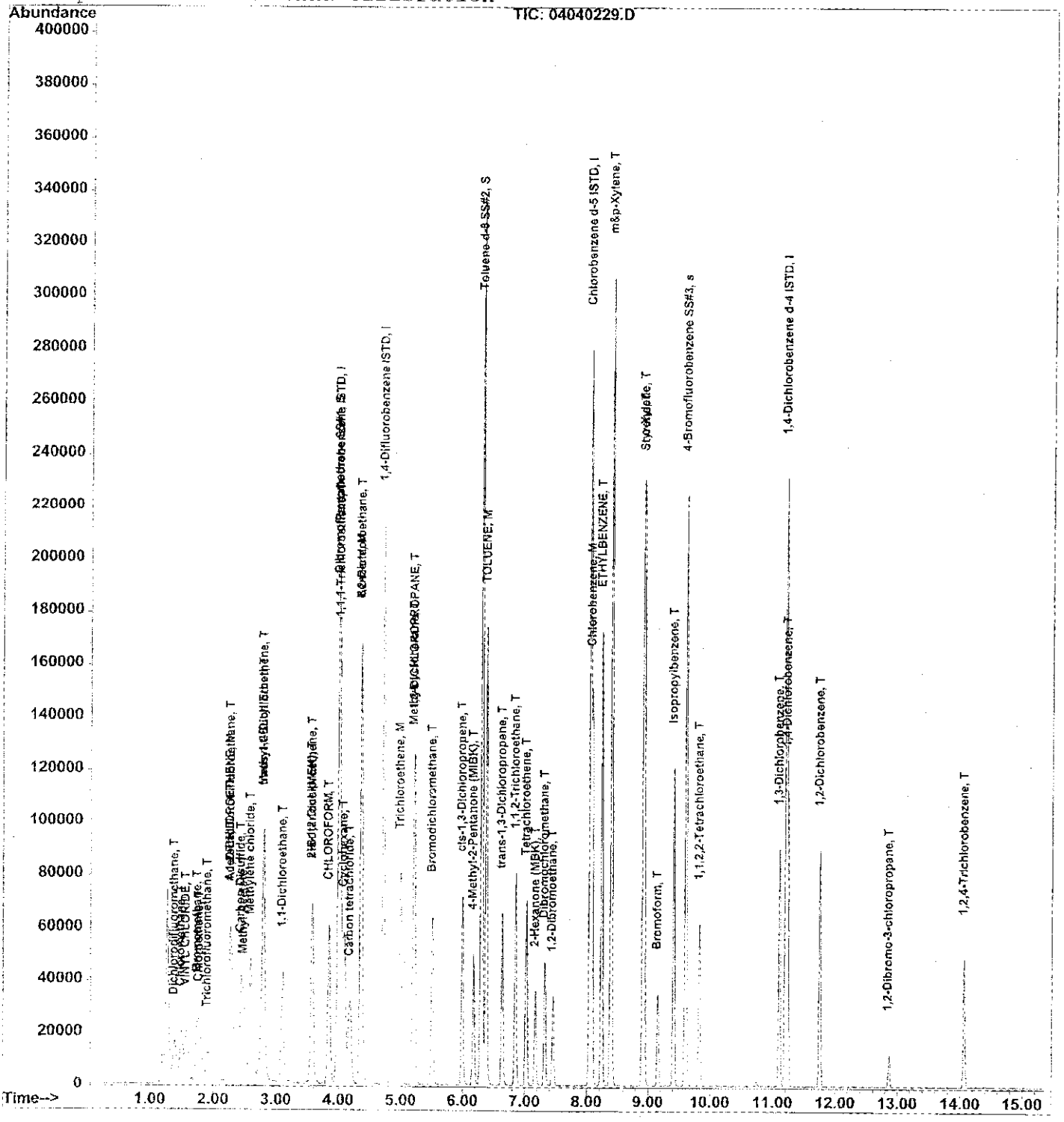
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.99	75	69379	22.93 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.17	43	52341	27.78 ug/L	99
34) TOLUENE	6.38	92	91333	23.30 ug/L	100
35) trans-1,3-Dichloropropene	6.63	75	58735	23.07 ug/L	96
36) 1,1,2-Trichloroethane	6.86	83	28009	24.12 ug/L	97
37) Tetrachloroethene	7.03	166	22674	21.78 ug/L	99
38) 2-Hexanone (MBK)	7.17	43	35779	27.70 ug/L	100
40) Dibromochloromethane	7.33	129	25279	23.75 ug/L	98
41) 1,2-Dibromoethane	7.46	107	27674	24.59 ug/L	99
42) Chlorobenzene	8.09	112	78051	21.84 ug/L	94
43) ETHYLBENZENE	8.24	91	146779	22.89 ug/L	98
44) m&p-Xylene	8.39	106	97651	44.80 ug/L	92
45) o-Xylene	8.91	106	48075	22.81 ug/L	94
46) Styrene	8.94	104	88749	22.81 ug/L	94
47) Bromoform	9.16	173	16304	25.44 ug/L	98
49) Isopropylbenzene	9.41	105	91796	21.17 ug/L	98
51) 1,1,2,2-Tetrachloroethane	9.83	83	40056	24.94 ug/L	98
52) 1,3-Dichlorobenzene	11.11	146	35412	20.57 ug/L	100
53) 1,4-Dichlorobenzene	11.24	146	38163	18.68 ug/L	99
54) 1,2-Dichlorobenzene	11.76	146	35170	21.60 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.87	75	5296	25.59 ug/L	98
56) 1,2,4-Trichlorobenzene	14.07	180	17185	19.49 ug/L	99
57) Naphthalene	14.40	128	500	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040229.D Vial: 29
Acq On : 2 Apr 2004 9:37 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
LABORATORY CONTROL SAMPLE SUMMARY

DATE ANALYZED: 04/07/04 **BATCH NUMBER:** VOC040702

METHOD: EPA 8260 **LAB FILE IDs:** 04040709.D

MATRIX: Water

Client Sample ID: LCS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	22	88	61-145
Benzene	25	ND	22	90	76-127
Trichloroethene	25	ND	28	111	71-120
Toluene	25	ND	23	92	76-125
Chlorobenzene	25	ND	22	87	75-130

* - Values outside of QC Limits

Calculation: LCS or LCS dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040709.D
Acq On : 7 Apr 2004 4:34 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Vial: 9
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	154624	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	284205	50.00	ug/L	0.02
39) Chlorobenzene d-5 ISTD	8.06	117	239971	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	76126	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.00	113	93162	50.37	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.74%			
33) Toluene d-8 SS#2	6.31	98	366124	49.85	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.70%			
50) 4-Bromofluorobenzene SS#3	9.62	95	133216	52.14	ug/L	0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.28%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.40	85	55901	20.10	ug/L	100
3) Chloromethane	1.51	50	64772	21.76	ug/L	100
4) VINYL CHLORIDE	1.59	62	59550	20.17	ug/L	100
5) Bromomethane	1.76	94	52306	21.61	ug/L	97
6) Chloroethane	1.80	64	36800	24.24	ug/L	99
7) Trichlorofluoromethane	1.92	101	38364	22.35	ug/L	100
8) Acetone	2.29	43	14608	19.69	ug/L	95
9) 1,1-DICHLOROETHENE	2.28	96	50268	22.11	ug/L	95
10) 1,1,2-Trichlorotrifluoroet	2.28	101	43210	23.07	ug/L	99
11) Carbon Disulfide	2.45	76	187233	23.10	ug/L	99
12) Methyl Acetate	2.50	74	6163	21.61	ug/L	95
13) Methylene chloride	2.60	84	59660	21.80	ug/L	99
14) trans-1,2-Dichloroethene	2.80	96	55686	22.77	ug/L	99
15) Methyl-t-Butyl Ether	2.80	73	105407	22.71	ug/L	100
16) 1,1-Dichloroethane	3.12	63	94238	22.67	ug/L	100
17) cis-1,2-Dichloroethene	3.59	96	56973	23.32	ug/L	97
18) 2-Butanone (MEK)	3.58	43	27761	20.12	ug/L	99
19) CHLOROFORM	3.86	83	101537	22.75	ug/L	99
21) 1,1,1-Trichloroethane	4.04	97	70381	22.29	ug/L #	7
22) Cyclohexane	4.10	56	83178	23.07	ug/L	90
24) Carbon tetrachloride	4.19	117	48935	22.30	ug/L	99
25) Benzene	4.37	78	237237	22.45	ug/L	98
26) 1,2-Dichloroethane	4.37	62	75010	22.71	ug/L	97
27) Trichloroethene	5.00	95	66378	27.66	ug/L	97
28) 1,2-DICHLOROPROPANE	5.22	63	64949	23.31	ug/L	99
29) Methylcyclohexane	5.20	83	57035	22.99	ug/L	98
30) Bromodichloromethane	5.52	83	76011	22.96	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040709.D Vial: 9
Acq On : 7 Apr 2004 4:34 pm Operator: MI
Sample : LCS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	6.00	75	100712	22.81 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.18	43	61846	22.49 ug/L	100
34) TOLUENE	6.39	92	131967	23.06 ug/L	100
35) trans-1,3-Dichloropropene	6.64	75	84487	22.73 ug/L	99
36) 1,1,2-Trichloroethane	6.87	83	38440	22.68 ug/L	97
37) Tetrachloroethene	7.04	166	33178	21.84 ug/L	99
38) 2-Hexanone (MBK)	7.18	43	39628	21.02 ug/L	99
40) Dibromochloromethane	7.33	129	35067	21.61 ug/L	99
41) 1,2-Dibromoethane	7.47	107	38298	22.32 ug/L	99
42) Chlorobenzene	8.09	112	117849	21.63 ug/L	95
43) ETHYLBENZENE	8.25	91	219475	22.45 ug/L	98
44) m&p-Xylene	8.40	106	142739	42.96 ug/L	94
45) o-Xylene	8.92	106	70357	21.90 ug/L	94
46) Styrene	8.94	104	131763	22.22 ug/L	94
47) Bromoform	9.17	173	21896	22.41 ug/L	99
49) Isopropylbenzene	9.42	105	135582	22.72 ug/L	100
51) 1,1,2,2-Tetrachloroethane	9.84	83	49690	22.49 ug/L	98
52) 1,3-Dichlorobenzene	11.12	146	53990	22.79 ug/L	99
53) 1,4-Dichlorobenzene	11.25	146	57835	20.57 ug/L	97
54) 1,2-Dichlorobenzene	11.77	146	48949	21.85 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.87	75	6165	21.65 ug/L	97
56) 1,2,4-Trichlorobenzene	14.08	180	27280	22.48 ug/L	100
57) Naphthalene	14.41	128	122	Not Detected	

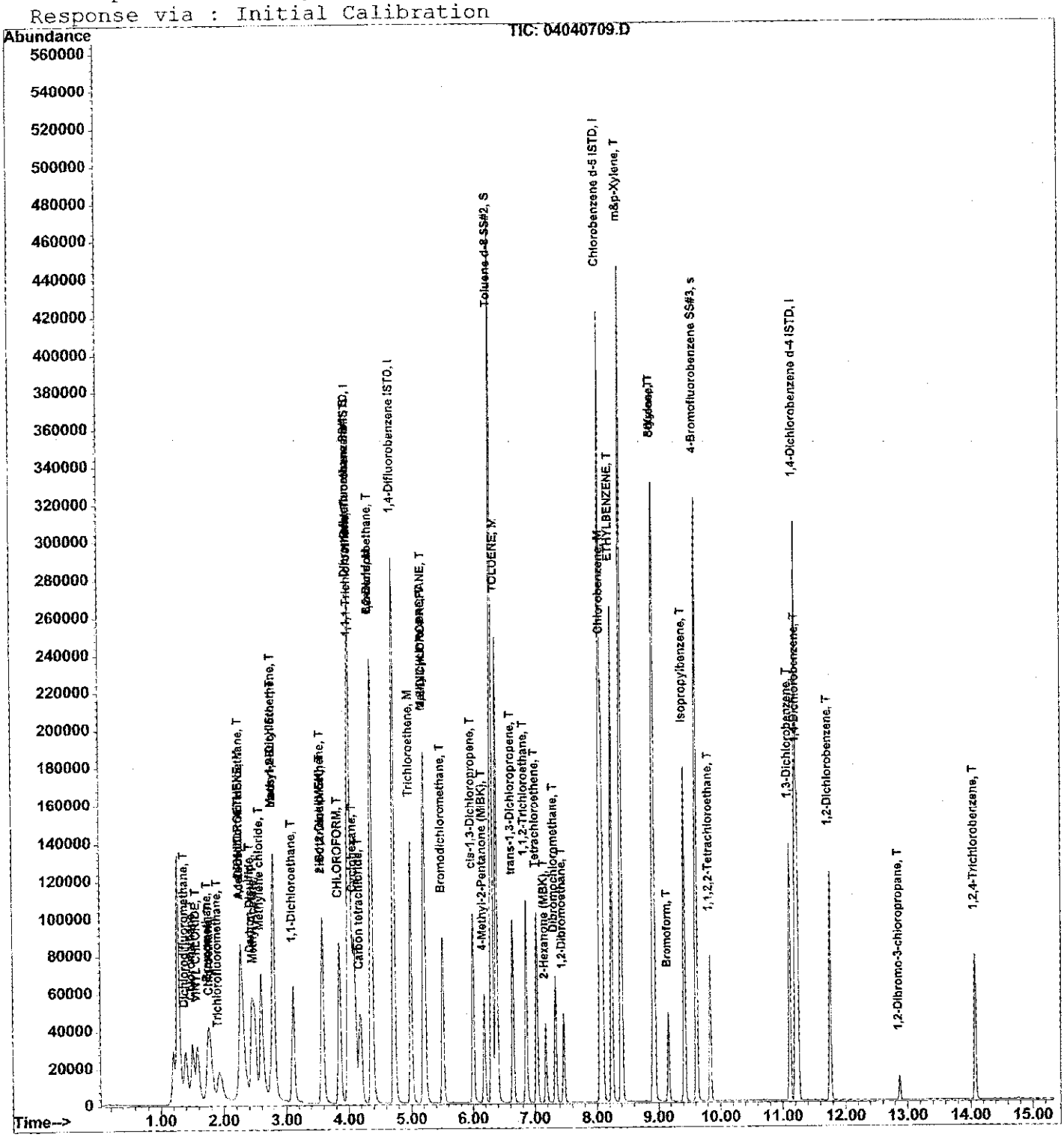
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040709.D
Acq On : 7 Apr 2004 4:34 pm
Sample : LCS 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Vial: 9
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



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VOLATILE ORGANICS COMPOUNDS
SAMPLE SPIKE AND SAMPLE SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 04/02/04 **BATCH NUMBER:** VOC040402

METHOD: EPA 8260 **LAB FILE IDs:** 04040230.D
04040231.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	92	61-145
Benzene	25	ND	25	100	76-127
Trichloroethene	25	ND	26	103	71-120
Toluene	25	ND	26	102	76-125
Chlorobenzene	25	ND	23	94	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	91	0.9	14	61-145
Benzene	25	ND	25	99	1.1	11	76-127
Trichloroethene	25	ND	25	99	3.1	14	71-120
Toluene	25	ND	25	100	2.4	13	76-125
Chlorobenzene	25	ND	24	94	0.3	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040230.D Vial: 30
Acq On : 2 Apr 2004 10:01 pm Operator: MI
Sample : 04033128-10 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	105769	50.00	ug/L		0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	192109	50.00	ug/L		0.00
39) Chlorobenzene d-5 ISTD	8.05	117	160055	50.00	ug/L		0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	54011	50.00	ug/L		0.00
System Monitoring Compounds							
20) Dibromofluoromethane SS#1	3.99	113	63951	50.55	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.10%				
33) Toluene d-8 SS#2	6.31	98	256606	51.68	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.36%				
50) 4-Bromofluorobenzene SS#3	9.61	95	91720	50.60	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.39	85	42319	22.25	ug/L		100
3) Chloromethane	1.51	50	47326	23.25	ug/L		99
4) VINYL CHLORIDE	1.59	62	42141	20.86	ug/L		99
5) Bromomethane	1.75	94	38088	23.00	ug/L		97
6) Chloroethane	1.79	64	26851	25.85	ug/L		100
7) Trichlorofluoromethane	1.92	101	32034	27.29	ug/L		99
8) Acetone	2.28	43	13419	26.44	ug/L		91
9) 1,1-DICHLOROETHENE	2.27	96	35863	23.06	ug/L		95
10) 1,1,2-Trichlorotrifluoroet	2.29	101	31067	24.24	ug/L		98
11) Carbon Disulfide	2.44	76	132924	23.97	ug/L		97
12) Methyl Acetate	2.49	74	4110	21.07	ug/L		96
13) Methylene chloride	2.59	84	42747	22.83	ug/L		100
14) trans-1,2-Dichloroethene	2.80	96	40064	23.95	ug/L		97
15) Methyl-t-Butyl Ether	2.80	73	85027	26.78	ug/L		100
16) 1,1-Dichloroethane	3.10	63	68332	24.03	ug/L		99
17) cis-1,2-Dichloroethene	3.58	96	41590	24.88	ug/L		96
18) 2-Butanone (MEK)	3.57	43	25107	26.60	ug/L		98
19) CHLOROFORM	3.85	83	74550	24.42	ug/L		100
21) 1,1,1-Trichloroethane	4.03	97	52878	24.48	ug/L	#	15
22) Cyclohexane	4.09	56	61736	25.03	ug/L		92
24) Carbon tetrachloride	4.19	117	35730	24.09	ug/L		99
25) Benzene	4.36	78	179158	25.09	ug/L		99
26) 1,2-Dichloroethane	4.37	62	59601	26.70	ug/L		98
27) Trichloroethene	4.99	95	41561	25.63	ug/L		96
28) 1,2-DICHLOROPROPANE	5.21	63	47635	25.30	ug/L		98
29) Methylcyclohexane	5.20	83	37852	22.57	ug/L		96
30) Bromodichloromethane	5.51	83	57410	25.66	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040230.D Vial: 30
Acq On : 2 Apr 2004 10:01 pm Operator: MI
Sample : 04033128-10 MS 25ppb Inst : Instrumen
Misc : TS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

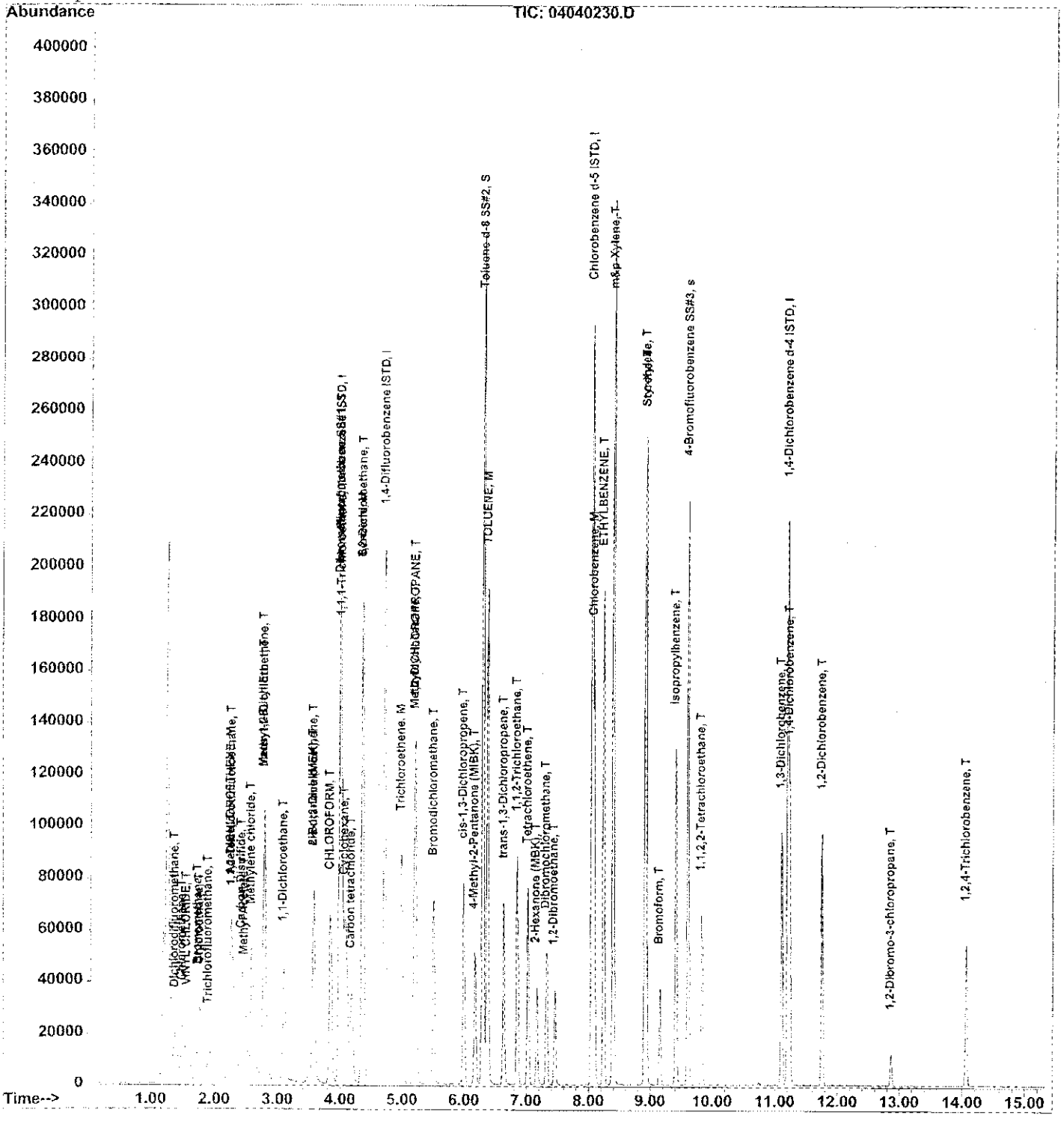
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	5.99	75	74555	24.98 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.17	43	53289	28.66 ug/L	98
34) TOLUENE	6.38	92	98755	25.53 ug/L	99
35) trans-1,3-Dichloropropene	6.64	75	63657	25.34 ug/L	97
36) 1,1,2-Trichloroethane	6.86	83	29355	25.62 ug/L	100
37) Tetrachloroethene	7.03	166	24153	23.52 ug/L	100
38) 2-Hexanone (MBK)	7.17	43	36442	28.59 ug/L	99
40) Dibromochloromethane	7.33	129	26862	24.82 ug/L	100
41) 1,2-Dibromoethane	7.47	107	30155	26.35 ug/L	97
42) Chlorobenzene	8.09	112	85108	23.42 ug/L	94
43) ETHYLBENZENE	8.24	91	162013	24.85 ug/L	98
44) m&p-Xylene	8.39	106	106351	47.99 ug/L	93
45) o-Xylene	8.91	106	52466	24.49 ug/L	95
46) Styrene	8.94	104	92464	23.38 ug/L	93
47) Bromoform	9.16	173	16622	25.51 ug/L	98
49) Isopropylbenzene	9.41	105	99927	23.60 ug/L	98
51) 1,1,2,2-Tetrachloroethane	9.83	83	42542	27.13 ug/L	98
52) 1,3-Dichlorobenzene	11.12	146	38706	23.03 ug/L	99
53) 1,4-Dichlorobenzene	11.24	146	41172	20.64 ug/L	99
54) 1,2-Dichlorobenzene	11.76	146	37419	23.54 ug/L	100
55) 1,2-Dibromo-3-chloropropan	12.87	75	5789	28.65 ug/L	95
56) 1,2,4-Trichlorobenzene	14.07	180	18023	20.93 ug/L	97
57) Naphthalene	14.40	128	87	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040230.D Vial: 30
Acq On : 2 Apr 2004 10:01 pm Operator: MI
Sample : 04033128-10 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040231.D Vial: 31
Acq On : 2 Apr 2004 10:25 pm Operator: MI
Sample : 04033128-10 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	Qlon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	105958	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	193788	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.05	117	160863	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	53458	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	64380	50.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.60%			
33) Toluene d-8 SS#2	6.31	98	260117	51.94	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.88%			
50) 4-Bromofluorobenzene SS#3	9.61	95	92710	51.67	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	41838	21.96	ug/L	100
3) Chloromethane	1.50	50	46831	22.96	ug/L	100
4) VINYL CHLORIDE	1.58	62	42174	20.84	ug/L	100
5) Bromomethane	1.75	94	37267	22.46	ug/L	98
6) Chloroethane	1.79	64	27420	26.35	ug/L	96
7) Trichlorofluoromethane	1.92	101	31907	27.13	ug/L	100
8) Acetone	2.28	43	14217	27.96	ug/L	94
9) 1,1-DICHLOROETHENE	2.27	96	35606	22.86	ug/L	92
10) 1,1,2-Trichlorotrifluoroet	2.27	101	30265	23.58	ug/L	98
11) Carbon Disulfide	2.44	76	134030	24.13	ug/L	98
12) Methyl Acetate	2.50	74	4463	22.83	ug/L	94
13) Methylene chloride	2.59	84	42492	22.66	ug/L	97
14) trans-1,2-Dichloroethene	2.79	96	39613	23.64	ug/L	95
15) Methyl-t-Butyl Ether	2.79	73	85514	26.88	ug/L	100
16) 1,1-Dichloroethane	3.11	63	69767	24.49	ug/L	99
17) cis-1,2-Dichloroethene	3.58	96	40808	24.37	ug/L	94
18) 2-Butanone (MEK)	3.56	43	25789	27.27	ug/L	97
19) CHLOROFORM	3.85	83	74557	24.38	ug/L	100
21) 1,1,1-Trichloroethane	4.03	97	51771	23.92	ug/L #	10
22) Cyclohexane	4.09	56	60516	24.49	ug/L	93
24) Carbon tetrachloride	4.18	117	35304	23.59	ug/L	100
25) Benzene	4.36	78	178703	24.81	ug/L	99
26) 1,2-Dichloroethane	4.37	62	59369	26.36	ug/L	97
27) Trichloroethene	4.99	95	40639	24.84	ug/L	96
28) 1,2-DICHLOROPROPANE	5.21	63	47825	25.18	ug/L	98
29) Methylcyclohexane	5.20	83	37253	22.02	ug/L	95
30) Bromodichloromethane	5.51	83	57199	25.34	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040231.D Vial: 31
Acq On : 2 Apr 2004 10:25 pm Operator: MI
Sample : 04033128-10 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

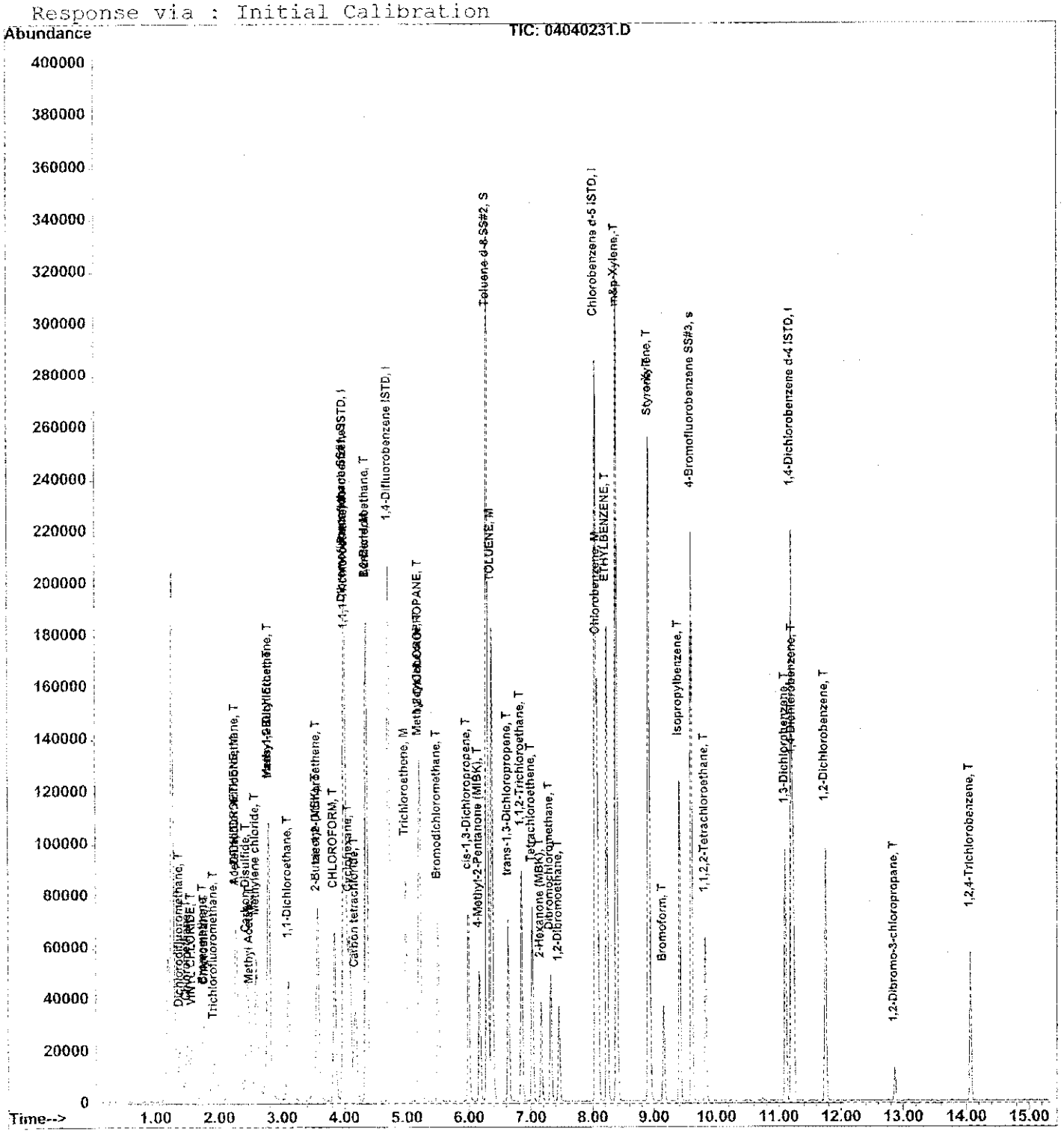
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	72260	24.00	ug/L	97
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	53298	28.42	ug/L	99
34)	TOLUENE	6.38	92	97244	24.92	ug/L	99
35)	trans-1,3-Dichloropropene	6.64	75	62203	24.55	ug/L	98
36)	1,1,2-Trichloroethane	6.86	83	29685	25.68	ug/L	98
37)	Tetrachloroethene	7.03	166	24159	23.32	ug/L	98
38)	2-Hexanone (MBK)	7.17	43	36106	28.08	ug/L	98
40)	Dibromochloromethane	7.33	129	26189	24.08	ug/L	99
41)	1,2-Dibromoethane	7.46	107	29262	25.44	ug/L	98
42)	Chlorobenzene	8.09	112	85807	23.50	ug/L	94
43)	ETHYLBENZENE	8.24	91	157794	24.08	ug/L	98
44)	m&p-Xylene	8.39	106	104601	46.96	ug/L	93
45)	o-Xylene	8.91	106	52325	24.30	ug/L	93
46)	Styrene	8.94	104	93460	23.51	ug/L	94
47)	Bromoform	9.16	173	16715	25.52	ug/L	100
49)	Isopropylbenzene	9.41	105	97371	23.24	ug/L	98
51)	1,1,2,2-Tetrachloroethane	9.83	83	40886	26.35	ug/L	99
52)	1,3-Dichlorobenzene	11.11	146	38457	23.12	ug/L	98
53)	1,4-Dichlorobenzene	11.24	146	40130	20.33	ug/L	98
54)	1,2-Dichlorobenzene	11.76	146	37258	23.68	ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.87	75	5822	29.11	ug/L	96
56)	1,2,4-Trichlorobenzene	14.07	180	18927	22.21	ug/L	98
57)	Naphthalene	0.00	128	0	Not Detected		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040231.D Vial: 31
Acq On : 2 Apr 2004 10:25 pm Operator: MI
Sample : 04033128-10 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 11:42 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANICS COMPOUNDS
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE SUMMARY

DATE ANALYZED: 04/06/04 **BATCH NUMBER:** VOC040602

METHOD: EPA 8260 **LAB FILE IDs:** 04040623.D
04040624.D

MATRIX: Water

Client Sample ID: BATCH MS 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	22	89	61-145
Benzene	25	ND	22	88	76-127
Trichloroethene	25	ND	23	92	71-120
Toluene	25	ND	25	99	76-125
Chlorobenzene	25	ND	22	88	75-130

Client Sample ID: BATCH MSD 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	91	2.2	14	61-145
Benzene	25	ND	24	95	7.5	11	76-127
Trichloroethene	25	ND	23	93	0.9	14	71-120
Toluene	25	ND	24	98	0.6	13	76-125
Chlorobenzene	25	ND	23	93	5.6	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040623.D Vial: 23
Acq On : 6 Apr 2004 11:17 pm Operator: MI
Sample : 04040502-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:09 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	396114	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	760794	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.05	117	626523	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	197109	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	229092	48.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.70%			
33) Toluene d-8 SS#2	6.30	98	978522	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.54%			
50) 4-Bromofluorobenzene SS#3	9.60	95	348776	52.72	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	136359	19.14	ug/L	100
3) Chloromethane	1.51	50	159964	20.98	ug/L	99
4) VINYL CHLORIDE	1.59	62	151425	20.02	ug/L	99
5) Bromomethane	1.76	94	130866	21.10	ug/L	99
6) Chloroethane	1.79	64	98579	25.34	ug/L	98
7) Trichlorofluoromethane	1.97	101	114302	26.00	ug/L	100
8) Acetone	2.29	43	20302	10.68	ug/L	100
9) 1,1-DICHLOROETHENE	2.28	96	129733	22.28	ug/L	96
10) 1,1,2-Trichlorotrifluoroct	2.29	101	116453	24.27	ug/L	99
11) Carbon Disulfide	2.48	76	455801	21.95	ug/L	100
12) Methyl Acetate	2.50	74	8475	11.60	ug/L	100
13) Methylene chloride	2.59	84	135473	19.32	ug/L	99
14) trans-1,2-Dichloroethene	2.80	96	143136	22.85	ug/L	98
15) Methyl-t-Butyl Ether	2.79	73	186829	15.71	ug/L	100
16) 1,1-Dichloroethane	3.11	63	244805	22.99	ug/L	100
17) cis-1,2-Dichloroethene	3.59	96	144484	23.08	ug/L	99
18) 2-Butanone (MEK)	3.57	43	39095	11.06	ug/L	98
19) CHLOROFORM	3.85	83	258222	22.59	ug/L	99
21) 1,1,1-Trichloroethane	4.03	97	183232	22.65	ug/L #	9
22) Cyclohexane	4.10	56	250455	27.12	ug/L	94
24) Carbon tetrachloride	4.19	117	134583	22.91	ug/L	99
25) Benzene	4.36	78	624796	22.09	ug/L	99
26) 1,2-Dichloroethane	4.37	62	148875	16.84	ug/L	99
27) Trichloroethene	4.99	95	147682	22.99	ug/L	98
28) 1,2-DICHLOROPROPANE	5.21	63	152861	20.50	ug/L	100
29) Methylcyclohexane	5.20	83	195314	29.41	ug/L	99
30) Bromodichloromethane	5.50	83	175134	19.76	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040623.D Vial: 23
Acq On : 6 Apr 2004 11:17 pm Operator: MI
Sample : 04040502-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:09 2004

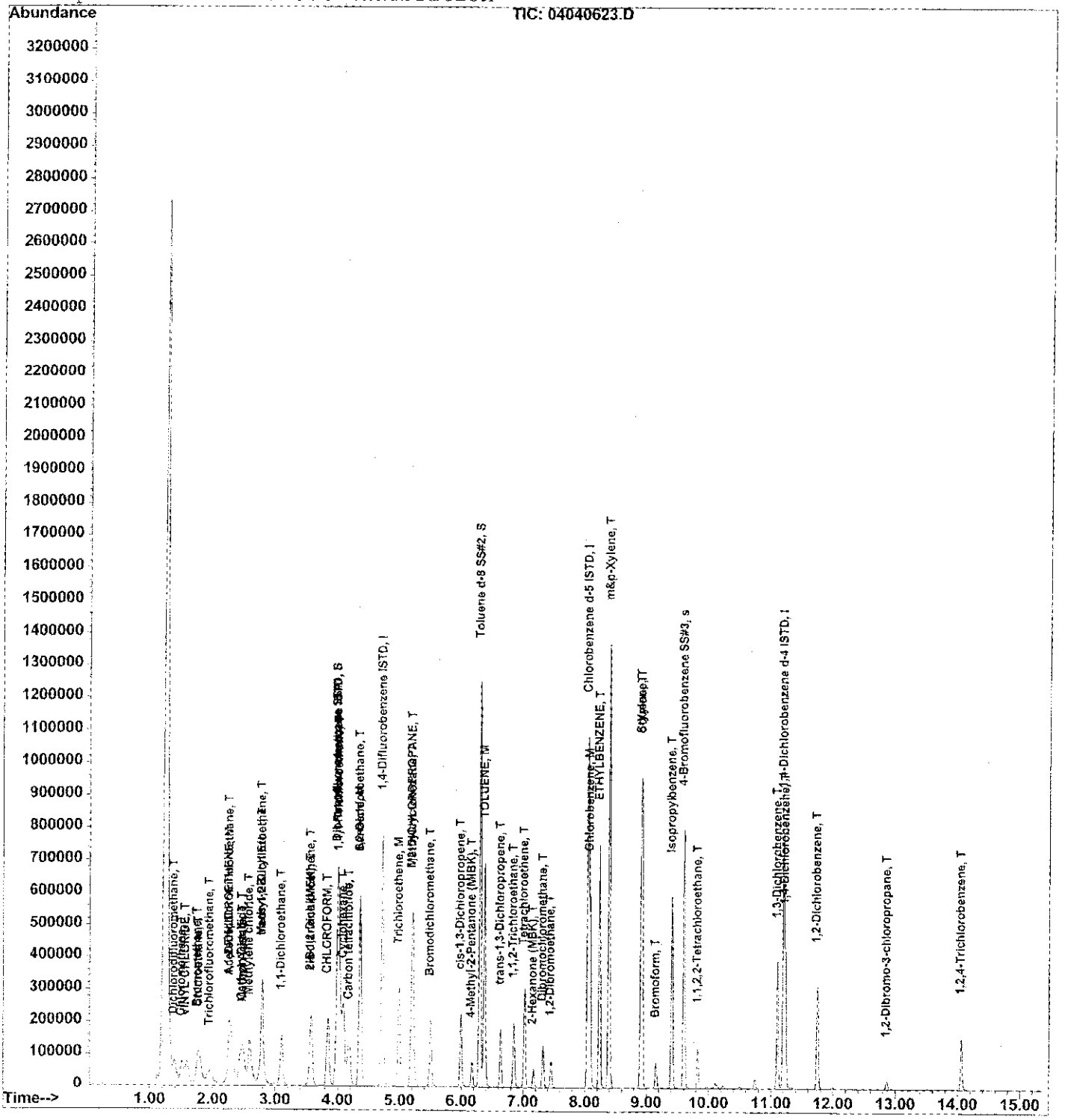
Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	217013	18.36 ug/L	99
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	90096	12.24 ug/L	99
34)	TOLUENE	6.38	92	377226	24.63 ug/L	100
35)	trans-1,3-Dichloropropene	6.64	75	159838	16.07 ug/L	100
36)	1,1,2-Trichloroethane	6.85	83	69406	15.29 ug/L	99
37)	Tetrachloroethene	7.03	166	102334	25.16 ug/L	99
38)	2-Hexanone (MBK)	7.17	43	56341	11.16 ug/L	99
40)	Dibromochloromethane	7.33	129	70796	16.71 ug/L	99
41)	1,2-Dibromoethane	7.46	107	67076	14.98 ug/L	99
42)	Chlorobenzene	8.08	112	313026	22.01 ug/L	97
43)	ETHYLBENZENE	8.24	91	637759	24.99 ug/L	99
44)	m&p-Xylene	8.39	106	444206	51.20 ug/L	98
45)	o-Xylene	8.91	106	211372	25.20 ug/L	97
46)	Styrene	8.93	104	344147	22.23 ug/L	94
47)	Bromoform	9.16	173	38973	15.28 ug/L	99
49)	Isopropylbenzene	9.41	105	439313	28.43 ug/L	100
51)	1,1,2,2-Tetrachloroethane	9.83	83	82213	14.37 ug/L	99
52)	1,3-Dichlorobenzene	11.11	146	147955	24.13 ug/L	99
53)	1,4-Dichlorobenzene	11.24	146	151191	20.77 ug/L	98
54)	1,2-Dichlorobenzene	11.75	146	124107	21.40 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.87	75	11316	15.35 ug/L	97
56)	1,2,4-Trichlorobenzene	14.07	180	56509	17.99 ug/L	98
57)	Naphthalene	14.40	128	2419	Not Detected	

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040406\04040623.D Vial: 23
Acq On : 6 Apr 2004 11:17 pm Operator: MI
Sample : 04040502-01 MS 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:09 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040624.D Vial: 24
Acq On : 6 Apr 2004 11:41 pm Operator: MI
Sample : 04040502-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:21 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	160790	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.72	114	294677	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.05	117	244143	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	83109	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	96087	49.96	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.92%			
33) Toluene d-8 SS#2	6.30	98	380161	49.92	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.84%			
50) 4-Bromofluorobenzene SS#3	9.60	95	139383	49.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	58178	20.12	ug/L	100
3) Chloromethane	1.51	50	68164	22.02	ug/L	100
4) VINYL CHLORIDE	1.59	62	62684	20.41	ug/L	100
5) Bromomethane	1.76	94	55102	21.89	ug/L	97
6) Chloroethane	1.79	64	39784	25.20	ug/L	100
7) Trichlorofluoromethane	1.93	101	43743	24.51	ug/L	99
8) Acetone	2.27	43	17878	23.17	ug/L	95
9) 1,1-DICHLOROETHENE	2.27	96	53833	22.77	ug/L	96
10) 1,1,2-Trichlorotrifluoroet	2.27	101	44491	22.84	ug/L	98
11) Carbon Disulfide	2.44	76	178780	21.21	ug/L	100
12) Methyl Acetate	2.49	74	7245	24.43	ug/L	96
13) Methylene chloride	2.59	84	61238	21.52	ug/L	98
14) trans-1,2-Dichloroethene	2.80	96	58941	23.18	ug/L	96
15) Methyl-t-Butyl Ether	2.79	73	121830	25.24	ug/L	100
16) 1,1-Dichloroethane	3.11	63	98847	22.87	ug/L	99
17) cis-1,2-Dichloroethene	3.58	96	60275	23.72	ug/L	97
18) 2-Butanone (MEK)	3.57	43	32655	22.76	ug/L	99
19) CHLOROFORM	3.85	83	108659	23.42	ug/L	99
21) 1,1,1-Trichloroethane	4.03	97	76606	23.33	ug/L #	11
22) Cyclohexane	4.09	56	88161	23.52	ug/L	93
24) Carbon tetrachloride	4.18	117	54160	23.80	ug/L	98
25) Benzene	4.36	78	260881	23.81	ug/L	100
26) 1,2-Dichloroethane	4.37	62	83060	24.26	ug/L	98
27) Trichloroethene	4.98	95	57710	23.20	ug/L	99
28) 1,2-DICHLOROPROPANE	5.21	63	67966	23.53	ug/L	100
29) Methylcyclohexane	5.20	83	56292	21.88	ug/L	98
30) Bromodichloromethane	5.50	83	84130	24.51	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040624.D Vial: 24
Acq On : 6 Apr 2004 11:41 pm Operator: MI
Sample : 04040502-01 MSD 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, MS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 10:21 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	107055	23.38 ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.18	43	71684	25.14 ug/L	100
34)	TOLUENE	6.37	92	145320	24.49 ug/L	99
35)	trans-1,3-Dichloropropene	6.64	75	88165	22.88 ug/L	98
36)	1,1,2-Trichloroethane	6.85	83	42532	24.20 ug/L	98
37)	Tetrachloroethene	7.02	166	35763	22.70 ug/L	99
38)	2-Hexanone (MBK)	7.17	43	48673	24.90 ug/L	100
40)	Dibromochloromethane	7.33	129	40417	24.48 ug/L	97
41)	1,2-Dibromoethane	7.46	107	42967	24.62 ug/L	99
42)	Chlorobenzene	8.08	112	128949	23.27 ug/L	96
43)	ETHYLBENZENE	8.24	91	232418	23.37 ug/L	98
44)	m&p-Xylene	8.40	106	162133	47.96 ug/L	97
45)	o-Xylene	8.91	106	79843	24.43 ug/L	97
46)	Styrene	8.93	104	144013	23.87 ug/L	95
47)	Bromoform	9.16	173	24936	25.09 ug/L	99
49)	Isopropylbenzene	9.41	105	146301	22.46 ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.83	83	58104	24.08 ug/L	99
52)	1,3-Dichlorobenzene	11.11	146	58623	22.67 ug/L	99
53)	1,4-Dichlorobenzene	11.24	146	60526	19.72 ug/L	97
54)	1,2-Dichlorobenzene	11.75	146	56359	23.04 ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.87	75	7939	25.54 ug/L	97
56)	1,2,4-Trichlorobenzene	14.07	180	30330	22.89 ug/L	99
57)	Naphthalene	14.40	128	485	Not Detected	

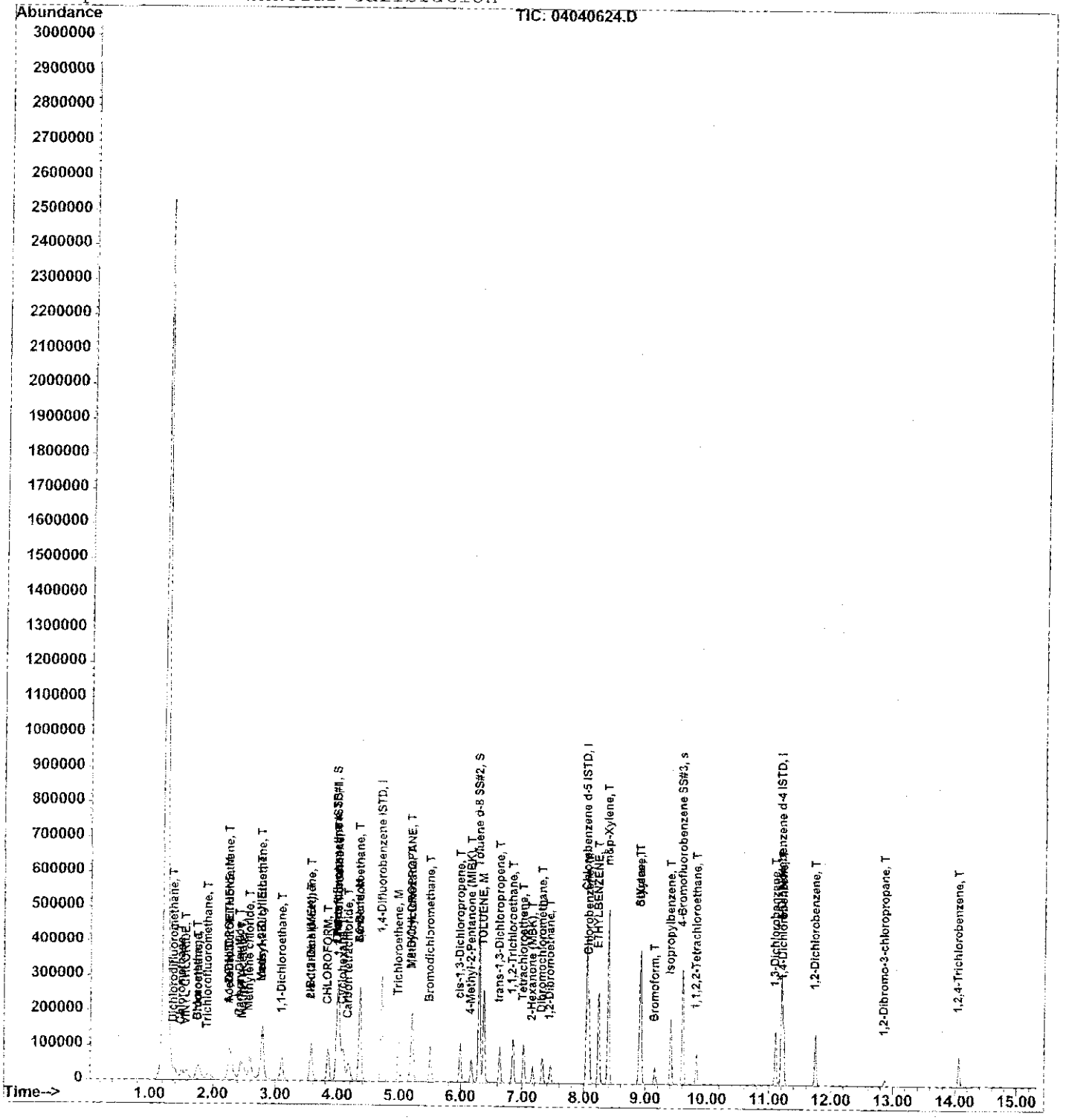
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040406\04040624.D
Acq On : 6 Apr 2004 11:41 pm
Sample : 04040502-01 MSD 25ppb
Misc : IS/S 1uL #423, MS 5uL #350
MS Integration Params: rteint.p
Quant Time: Apr 7 10:21 2004

Vial: 24
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

VOLATILE ORGANICS COMPOUNDS
LCS AND LCS DUPLICATE SUMMARY

DATE ANALYZED: 04/07/04 **BATCH NUMBER:** VOC040702

METHOD: EPA 8260 **LAB FILE IDs:** 04040710.D
04040711.D

MATRIX: Water

Client Sample ID: LCS-1 25ppb

SAMPLE SPIKE COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPIKE CONC (ug/L)	SPIKE REC (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	25	99	61-145
Benzene	25	ND	25	100	76-127
Trichloroethene	25	ND	25	102	71-120
Toluene	25	ND	25	100	76-125
Chlorobenzene	25	ND	24	96	75-130

Client Sample ID: LCS-1 DUP 25ppb

SAMPLE SPIKE DUP COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	SPK DUP CONC (ug/L)	SPIKE DUP REC (%)	RPD (%)	QC RPD (%)	QC LIMITS (%)
1,1-Dichloroethene	25	ND	23	93	7.0	14	61-145
Benzene	25	ND	24	95	4.5	11	76-127
Trichloroethene	25	ND	25	100	1.7	14	71-120
Toluene	25	ND	25	98	2.1	13	76-125
Chlorobenzene	25	ND	23	92	4.0	13	75-130

* - Values outside of QC Limits

Calculation: spike or spike dup %Recovery
*=[(spike conc - original sample conc)/(spike added)]*100*
Calculation: spike/spike dup Relative Percent Difference
*=absolute value [(spike dup conc - spike conc)/((spike dup conc + spike conc)/2))]*100*
Note: QC limits are based on CLP OLM04.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040710.D Vial: 10
Acq On : 7 Apr 2004 4:58 pm Operator: MI
Sample : LCS-1 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	151829	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	280352	50.00	ug/L	0.01
39) Chlorobenzene d-5 ISTD	8.05	117	234342	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	76686	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	91985	50.65	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.30%			
33) Toluene d-8 SS#2	6.31	98	365150	50.40	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.80%			
50) 4-Bromofluorobenzene SS#3	9.62	95	133643	51.93	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.86%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.40	85	60335	22.10	ug/L	100
3) Chloromethane	1.51	50	69763	23.87	ug/L	100
4) VINYL CHLORIDE	1.59	62	65109	22.45	ug/L	98
5) Bromomethane	1.77	94	55488	23.34	ug/L	99
6) Chloroethane	1.80	64	41034	27.52	ug/L	100
7) Trichlorofluoromethane	1.93	101	43060	25.55	ug/L	98
8) Acetone	2.29	43	18142	24.90	ug/L	92
9) 1,1-DICHLOROETHENE	2.28	96	55462	24.85	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.29	101	47442	25.79	ug/L	98
11) Carbon Disulfide	2.46	76	203298	25.54	ug/L	100
12) Methyl Acetate	2.51	74	6950	24.81	ug/L	97
13) Methylene chloride	2.60	84	64227	23.90	ug/L	98
14) trans-1,2-Dichloroethene	2.80	96	59479	24.77	ug/L	97
15) Methyl-t-Butyl Ether	2.80	73	117217	25.72	ug/L	100
16) 1,1-Dichloroethane	3.11	63	100217	24.55	ug/L	99
17) cis-1,2-Dichloroethene	3.59	96	60302	25.13	ug/L	96
18) 2-Butanone (MEK)	3.57	43	30915	22.81	ug/L	100
19) CHLOROFORM	3.85	83	110106	25.13	ug/L	99
21) 1,1,1-Trichloroethane	4.04	97	76453	24.66	ug/L #	17
22) Cyclohexane	4.10	56	89574	25.30	ug/L	94
24) Carbon tetrachloride	4.19	117	53921	24.91	ug/L	99
25) Benzene	4.37	78	259861	24.93	ug/L	100
26) 1,2-Dichloroethane	4.38	62	83506	25.63	ug/L	99
27) Trichloroethene	5.00	95	60184	25.43	ug/L	98
28) 1,2-DICHLOROPROPANE	5.23	63	68759	25.02	ug/L	99
29) Methylcyclohexane	5.21	83	59367	24.26	ug/L	98
30) Bromodichloromethane	5.51	83	83043	25.43	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040710.D
Acq On : 7 Apr 2004 4:58 pm
Sample : LCS-1 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Vial: 10
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

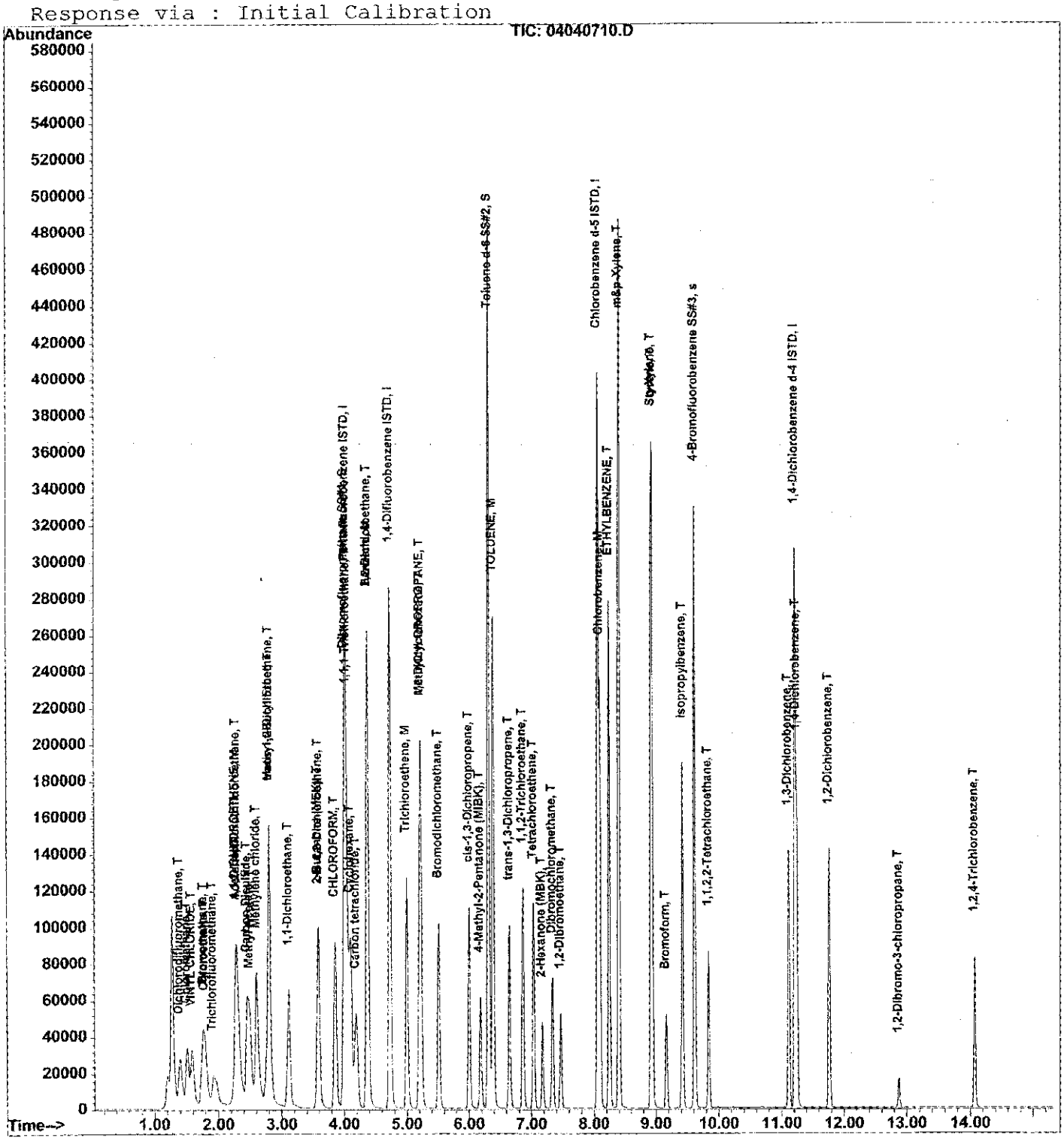
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	6.01	75	107853	24.76 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.18	43	67033	24.71 ug/L	99
34) TOLUENE	6.39	92	141523	25.07 ug/L	98
35) trans-1,3-Dichloropropene	6.65	75	91164	24.87 ug/L	97
36) 1,1,2-Trichloroethane	6.86	83	42070	25.16 ug/L	95
37) Tetrachloroethene	7.04	166	35810	23.89 ug/L	98
38) 2-Hexanone (MBK)	7.18	43	46037	24.75 ug/L	99
40) Dibromochloromethane	7.34	129	39162	24.72 ug/L	100
41) 1,2-Dibromoethane	7.47	107	42336	25.27 ug/L	98
42) Chlorobenzene	8.10	112	127775	24.02 ug/L	95
43) ETHYLBENZENE	8.24	91	236862	24.81 ug/L	98
44) m&p-Xylene	8.40	106	155499	47.92 ug/L	94
45) o-Xylene	8.92	106	76613	24.42 ug/L	94
46) Styrene	8.94	104	140995	24.35 ug/L	94
47) Bromoform	9.16	173	24046	25.20 ug/L	99
49) Isopropylbenzene	9.43	105	147487	24.54 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.84	83	56305	25.29 ug/L	99
52) 1,3-Dichlorobenzene	11.12	146	56773	23.79 ug/L	98
53) 1,4-Dichlorobenzene	11.24	146	62925	22.22 ug/L	98
54) 1,2-Dichlorobenzene	11.76	146	54747	24.26 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.88	75	7390	25.76 ug/L	97
56) 1,2,4-Trichlorobenzene	14.07	180	28353	23.20 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040710.D Vial: 10
Acq On : 7 Apr 2004 4:58 pm Operator: MI
Sample : LCS-1 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040711.D Vial: 11
Acq On : 7 Apr 2004 5:22 pm Operator: MI
Sample : LCS-1, DUP 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	150040	50.00	ug/L	0.01
23) 1,4-Difluorobenzene ISTD	4.73	114	278445	50.00	ug/L	0.02
39) Chlorobenzene d-5 ISTD	8.06	117	234021	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.22	152	76858	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.00	113	91971	51.25	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.50%			
33) Toluene d-8 SS#2	6.31	98	363058	50.45	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.90%			
50) 4-Bromofluorobenzene SS#3	9.62	95	133522	51.76	ug/L	0.02
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.40	85	56436	20.92	ug/L	100
3) Chloromethane	1.51	50	66520	23.03	ug/L	99
4) VINYL CHLORIDE	1.59	62	62105	21.67	ug/L	100
5) Bromomethane	1.76	94	53875	22.93	ug/L	97
6) Chloroethane	1.79	64	38584	26.19	ug/L	100
7) Trichlorofluoromethane	1.93	101	40547	24.35	ug/L	99
8) Acetone	2.28	43	16969	23.57	ug/L	96
9) 1,1-DICHLOROETHENE	2.29	96	51105	23.17	ug/L	96
10) 1,1,2-Trichlorotrifluoroet	2.29	101	44527	24.49	ug/L	99
11) Carbon Disulfide	2.46	76	190154	24.18	ug/L	97
12) Methyl Acetate	2.51	74	6531	23.60	ug/L	99
13) Methylene chloride	2.60	84	61942	23.33	ug/L	98
14) trans-1,2-Dichloroethene	2.81	96	57284	24.14	ug/L	97
15) Methyl-t-Butyl Ether	2.80	73	116508	25.87	ug/L	100
16) 1,1-Dichloroethane	3.12	63	99017	24.55	ug/L	99
17) cis-1,2-Dichloroethene	3.59	96	59363	25.04	ug/L	98
18) 2-Butanone (MEK)	3.58	43	31463	23.50	ug/L	98
19) CHLOROFORM	3.86	83	104484	24.13	ug/L	99
21) 1,1,1-Trichloroethane	4.04	97	71619	23.37	ug/L #	11
22) Cyclohexane	4.10	56	85026	24.30	ug/L	91
24) Carbon tetrachloride	4.19	117	51153	23.79	ug/L	100
25) Benzene	4.37	78	246658	23.83	ug/L	99
26) 1,2-Dichloroethane	4.38	62	80723	24.95	ug/L	97
27) Trichloroethene	5.00	95	58801	25.01	ug/L	97
28) 1,2-DICHLOROPROPANE	5.22	63	67354	24.68	ug/L	99
29) Methylcyclohexane	5.21	83	56369	23.19	ug/L	99
30) Bromodichloromethane	5.51	83	79038	24.37	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040711.D
Acq On : 7 Apr 2004 5:22 pm
Sample : LCS-1, DUP 25ppb
Misc : IS/S 1uL #423, LCS 5uL #350
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Vial: 11
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

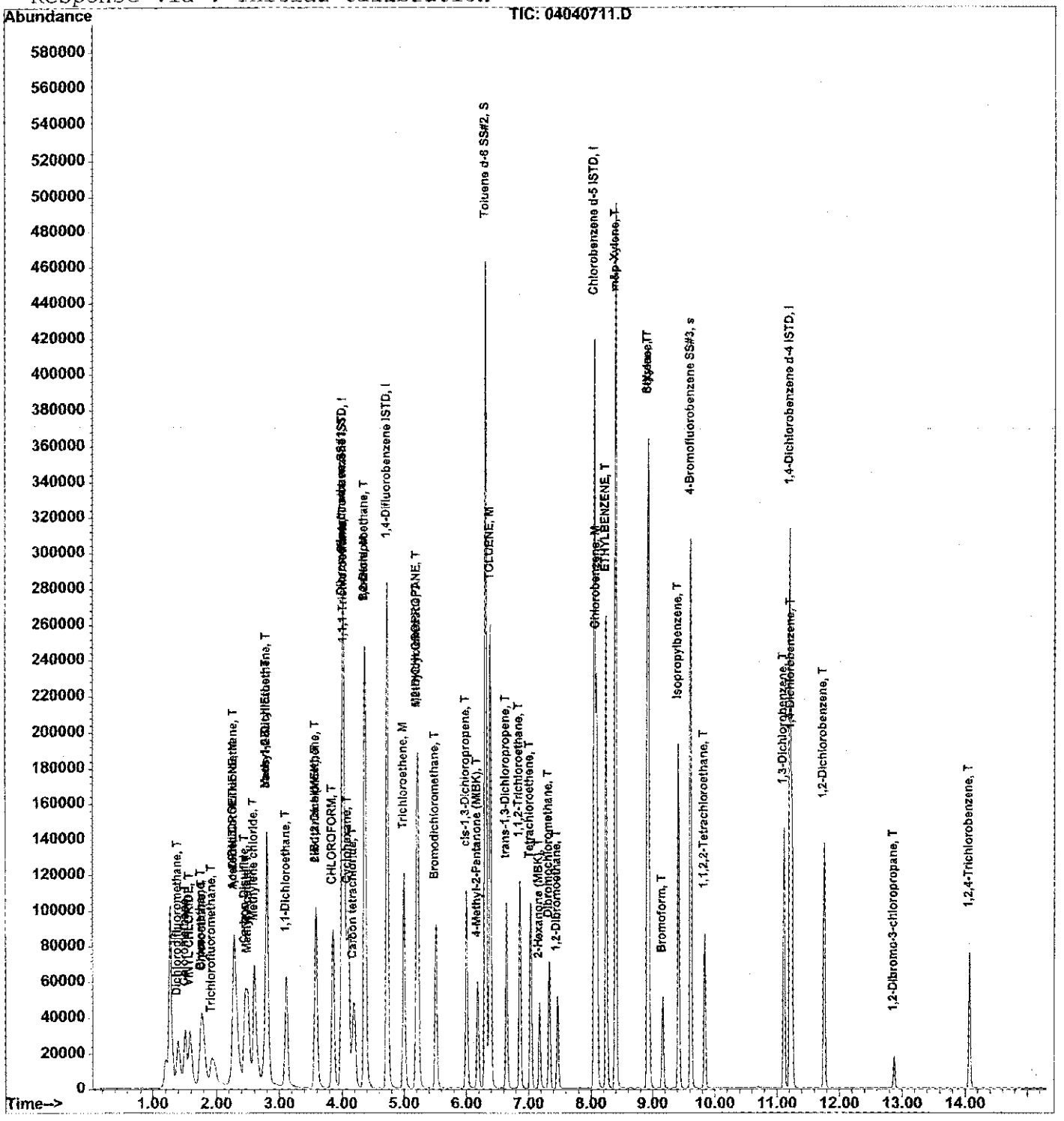
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	6.00	75	107330	24.81 ug/L	98
32) 4-Methyl-2-Pentanone (MIBK	6.18	43	69396	25.75 ug/L	99
34) TOLUENE	6.39	92	137615	24.55 ug/L	98
35) trans-1,3-Dichloropropene	6.64	75	90592	24.88 ug/L	97
36) 1,1,2-Trichloroethane	6.86	83	41052	24.72 ug/L	96
37) Tetrachloroethene	7.04	166	34840	23.41 ug/L	100
38) 2-Hexanone (MBK)	7.18	43	45525	24.64 ug/L	99
40) Dibromochloromethane	7.34	129	37587	23.75 ug/L	98
41) 1,2-Dibromoethane	7.47	107	41118	24.58 ug/L	99
42) Chlorobenzene	8.09	112	122631	23.08 ug/L	95
43) ETHYLBENZENE	8.25	91	228567	23.97 ug/L	98
44) m&p-Xylene	8.40	106	153981	47.52 ug/L	96
45) o-Xylene	8.92	106	73953	23.61 ug/L	96
46) Styrene	8.94	104	134125	23.19 ug/L	94
47) Bromoform	9.17	173	23755	24.93 ug/L	100
49) Isopropylbenzene	9.42	105	143247	23.78 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.84	83	55964	25.08 ug/L	99
52) 1,3-Dichlorobenzene	11.12	146	55729	23.30 ug/L	99
53) 1,4-Dichlorobenzene	11.25	146	60466	21.30 ug/L	96
54) 1,2-Dichlorobenzene	11.76	146	53742	23.76 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.88	75	7249	25.21 ug/L	98
56) 1,2,4-Trichlorobenzene	14.08	180	27217	22.22 ug/L	99
57) Naphthalene	0.00	128	0	Not Detected	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040711.D Vial: 11
Acq On : 7 Apr 2004 5:22 pm Operator: MI
Sample : LCS-1, DUP 25ppb Inst : Instrumen
Misc : IS/S 1uL #423, LCS 5uL #350 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 10:36 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040402\04040202.D
Acq On : 2 Apr 2004 10:16 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
I	Pentafluorobenzene ISTD	1.000	1.000	0.0	77	0.00
T	Dichlorodifluoromethane	0.899	0.847	5.8	73	0.00
T	Chloromethane	0.962	0.871	9.5	71	0.00
T	VINYL CHLORIDE	0.955	0.897	6.1	72	0.00
T	Bromomethane	0.783	0.692	11.6	73	0.00
T	Chloroethane	0.491	0.488	0.6	75	0.00
T	Trichlorofluoromethane	0.555	0.639	-15.1	84	-0.03
T	Acetone	0.240	0.236	1.7	78	0.02
M	1,1-DICHLOROETHENE	0.735	0.694	5.6	73	0.00
T	1,1,2-Trichlorotrifluoroeth	0.606	0.598	1.3	74	0.00
T	Carbon Disulfide	2.621	2.475	5.6	73	-0.03
T	Methyl Acetate	0.092	0.095	-3.3	76	0.00
T	Methylene chloride	0.885	0.794	10.3	73	0.02
T	trans-1,2-Dichloroethene	0.791	0.744	5.9	73	0.00
T	Methyl-t-Butyl Ether	1.501	1.561	-4.0	79	0.02
T	1,1-Dichloroethane	1.344	1.338	0.4	78	0.00
T	cis-1,2-Dichloroethene	0.790	0.779	1.4	77	0.00
T	2-Butanone (MEK)	0.446	0.432	3.1	81	0.00
T	CHLOROFORM	1.443	1.446	-0.2	79	0.00
S	Dibromofluoromethane SS#1	0.598	0.607	-1.5	78	0.00
T	1,1,1-Trichloroethane	1.021	1.002	1.9	77	0.00
T	Cyclohexane	1.166	1.155	0.9	78	0.00
	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	78	0.02
	Carbon tetrachloride	0.386	0.378	2.1	76	0.00
	Benzene	1.859	1.817	2.3	78	0.00
	1,2-Dichloroethane	0.581	0.608	-4.6	81	0.00
	Trichloroethene	0.422	0.418	0.9	77	0.00
	1,2-DICHLOROPROPANE	0.490	0.505	-3.1	80	0.00
	Methylcyclohexane	0.436	0.414	5.0	76	0.00
	Bromodichloromethane	0.582	0.597	-2.6	80	0.00
	cis-1,3-Dichloropropene	0.777	0.804	-3.5	80	0.00
	4-Methyl-2-Pentanone (MIBK)	0.484	0.511	-5.6	82	0.00
	Toluene d-8 SS#2	1.292	1.301	-0.7	79	0.00
	TOLUENE	1.007	1.007	0.0	79	0.00
	trans-1,3-Dichloropropene	0.654	0.684	-4.6	80	0.00
	1,1,2-Trichloroethane	0.298	0.312	-4.7	81	0.00
	Tetrachloroethene	0.267	0.255	4.5	76	0.00
	2-Hexanone (MBK)	0.332	0.348	-4.8	82	0.00
	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	77	0.00

= Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040402\04040202.D Vial: 2
Acq On : 2 Apr 2004 10:16 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.345	-2.1	78	0.00
41	T	1,2-Dibromoethane	0.357	0.365	-2.2	78	0.00
42	M	Chlorobenzene	1.135	1.081	4.8	76	0.00
43	T	ETHYLBENZENE	2.037	1.994	2.1	78	0.00
44	T	m&p-Xylene	0.692	0.676	2.3	76	0.00
45	T	o-Xylene	0.669	0.664	0.7	77	0.00
46	T	Styrene	1.236	1.227	0.7	76	0.00
47	T	Bromoform	0.204	0.220	-7.8	79	0.00
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	78	0.00
49	T	Isopropylbenzene	3.919	3.657	6.7	75	0.00
50	S	4-Bromofluorobenzene SS#3	1.678	1.685	-0.4	78	0.00
51	T	1,1,2,2-Tetrachloroethane	1.451	1.513	-4.3	80	0.00
52	T	1,3-Dichlorobenzene	1.556	1.450	6.8	74	0.00
53	T	1,4-Dichlorobenzene	1.847	1.519	17.8	76	0.00
54	T	1,2-Dichlorobenzene	1.471	1.386	5.8	75	0.00
55	T	1,2-Dibromo-3-chloropropane	0.187	0.204	-9.1	78	0.00
56	T	1,2,4-Trichlorobenzene	0.797	0.706	11.4	73	0.00
57	T	Naphthalene	1.591	1.407	11.6	69	0.00

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	----------ISTD----------							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	----------ISTD----------							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	----------ISTD----------							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	ISTD	----------					
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040202.D Vial: 2
Acq On : 2 Apr 2004 10:16 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:35 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	105241	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	192457	50.00	ug/L	0.02
39) Chlorobenzene d-5 ISTD	8.06	117	158785	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	53927	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.99	113	63845	50.72	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.44%			
33) Toluene d-8 SS#2	6.31	98	250362	50.33	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.66%			
50) 4-Bromofluorobenzene SS#3	9.61	95	90847	50.20	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	89101	47.08	ug/L	100
3) Chloromethane	1.51	50	91631	45.23	ug/L	100
4) VINYL CHLORIDE	1.58	62	94354	46.94	ug/L	99
5) Bromomethane	1.76	94	72823	44.20	ug/L	98
6) Chloroethane	1.79	64	51393	49.73	ug/L	98
7) Trichlorofluoromethane	1.92	101	67287	57.60	ug/L	100
8) Acetone	2.29	43	24866	49.24	ug/L	95
9) 1,1-DICHLOROETHENE	2.27	96	72992	47.17	ug/L	92
10) 1,1,2-Trichlorotrifluoroet	2.27	101	62882	49.32	ug/L	99
11) Carbon Disulfide	2.45	76	260456	47.21	ug/L	100
12) Methyl Acetate	2.50	74	9966	51.34	ug/L	99
13) Methylene chloride	2.60	84	83516	44.84	ug/L	98
14) trans-1,2-Dichloroethene	2.80	96	78270	47.02	ug/L	95
15) Methyl-t-Butyl Ether	2.80	73	164239	51.98	ug/L	100
16) 1,1-Dichloroethane	3.11	63	140833	49.77	ug/L	99
17) cis-1,2-Dichloroethene	3.58	96	82030	49.33	ug/L	94
18) 2-Butanone (MEK)	3.57	43	45486	48.43	ug/L	99
19) CHLOROFORM	3.85	83	152210	50.11	ug/L	99
21) 1,1,1-Trichloroethane	4.04	97	105425	49.05	ug/L #	63
22) Cyclohexane	4.09	56	121580	49.55	ug/L	98
24) Carbon tetrachloride	4.19	117	72730	48.94	ug/L	100
25) Benzene	4.37	78	349773	48.89	ug/L	99
26) 1,2-Dichloroethane	4.37	62	117086	52.35	ug/L	98
27) Trichloroethene	4.99	95	80417	49.49	ug/L	96
28) 1,2-DICHLOROPROPANE	5.22	63	97202	51.52	ug/L	99
29) Methylcyclohexane	5.20	83	79701	47.44	ug/L	97
30) Bromodichloromethane	5.51	83	114855	51.23	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040202.D Vial: 2
Acq On : 2 Apr 2004 10:16 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:35 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

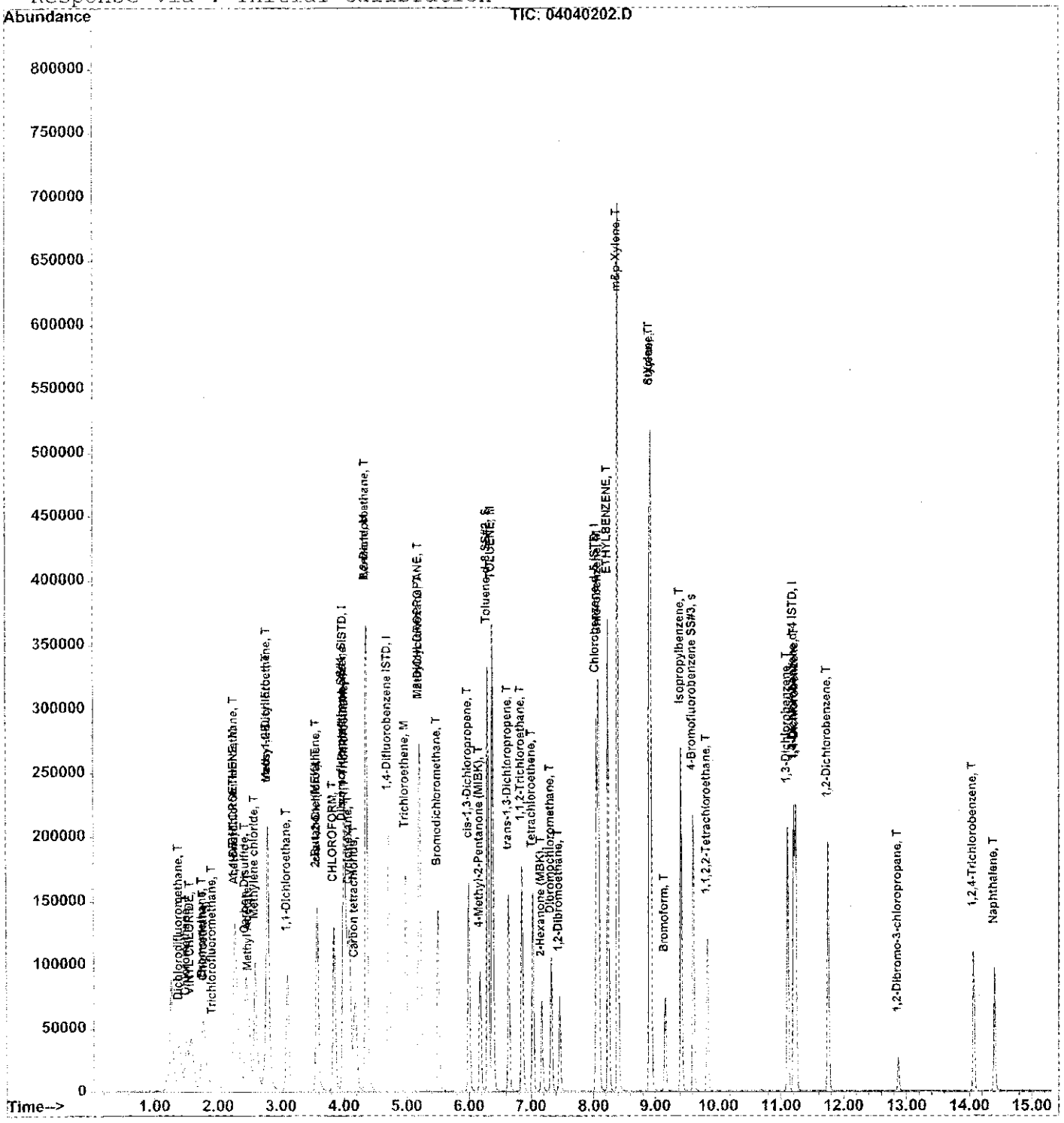
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31) cis-1,3-Dichloropropene	6.00	75	154748	51.75 ug/L	97
32) 4-Methyl-2-Pentanone (MIBK	6.18	43	98281	52.77 ug/L	100
34) TOLUENE	6.38	92	193803	50.01 ug/L	98
35) trans-1,3-Dichloropropene	6.64	75	131719	52.34 ug/L	98
36) 1,1,2-Trichloroethane	6.86	83	59958	52.23 ug/L	97
37) Tetrachloroethene	7.03	166	49064	47.69 ug/L	99
38) 2-Hexanone (MBK)	7.18	43	67071	52.53 ug/L	100
40) Dibromochloromethane	7.33	129	54793	51.04 ug/L	100
41) 1,2-Dibromoethane	7.47	107	57883	50.99 ug/L	99
42) Chlorobenzene	8.09	112	171688	47.63 ug/L	94
43) ETHYLBENZENE	8.25	91	316568	48.94 ug/L	98
44) m&p-Xylene	8.40	106	214592	97.60 ug/L	94
45) o-Xylene	8.92	106	105377	49.58 ug/L	94
46) Styrene	8.94	104	194898	49.67 ug/L	94
47) Bromoform	9.17	173	34876	53.95 ug/L	99
49) Isopropylbenzene	9.42	105	197224	46.66 ug/L	99
51) 1,1,2,2-Tetrachloroethane	9.84	83	81578	52.11 ug/L	100
52) 1,3-Dichlorobenzene	11.12	146	78195	46.60 ug/L	99
53) 1,4-Dichlorobenzene	11.25	146	81891	41.12 ug/L	99
54) 1,2-Dichlorobenzene	11.76	146	74744	47.10 ug/L	99
55) 1,2-Dibromo-3-chloropropan	12.87	75	10991	54.48 ug/L	96
56) 1,2,4-Trichlorobenzene	14.07	180	38051	44.27 ug/L	99
57) Naphthalene	14.40	128	75890	44.22 ng/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040202.D Vial: 2
Acq On : 2 Apr 2004 10:16 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 10:35 2004

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:12:50 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040402\04040203.D Vial: 3
Acq On : 2 Apr 2004 10:40 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	76	0.00
2	t	acrolein	0.121	0.121	0.0	80	0.00
3	t	iodomethne	0.985	0.932	5.4	74	0.00
4	t	acrylonitrile	0.212	0.211	0.5	79	0.00
5	t	tert-butanol	0.063	0.074	-17.5	85	0.00
6	t	vinyl acetate	3.201	3.340	-4.3	81	0.00
7	t	diisopropyl ether	3.077	3.109	-1.0	78	0.00
8	t	Ethyl tert-butyl ether	2.311	2.474	-7.1	82	0.00
9	T	2,2-Dichloropropane	0.998	1.020	-2.2	80	0.00
10	T	Bromochloromethane	0.292	0.280	4.1	76	0.00
11	S	Dibromofluoromethane SS#1	0.602	0.611	-1.5	77	0.00
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	80	0.00
13	T	1,1-Dichloropropene	0.614	0.616	-0.3	82	0.00
14	t	tert-amyl methyl ether	1.158	1.168	-0.9	80	0.00
15	T	Dibromomethane	0.247	0.251	-1.6	82	0.00
16	t	1,4-dioxane	0.002	0.001	50.0#	54	0.02
17	T	2-Chloroethylvinyl Ether	0.260	0.235	9.6	72	0.00
18	S	Toluene d-8 SS#2	1.297	1.308	-0.8	80	0.00
19	I	Chlorobenzene d-5	1.000	1.000	0.0	77	0.00
20	T	1,3-Dichloropropane	0.773	0.827	-7.0	84	0.00
21	T	1,1,1,2 Tetrachloroethane	0.310	0.301	2.9	78	0.00
22	T	1,2,3-Trichloropropane	0.106	0.110	-3.8	84	0.00
23	s	4-Bromofluorobenzene SS#3	0.569	0.585	-2.8	79	0.00
24	T	Bromobenzene	0.338	0.333	1.5	78	0.00
25	t	trans-1,4-dichloro-2-butene	0.396	0.439	-10.9	84	0.00
26	T	n-Propylbenzene	1.777	1.782	-0.3	79	0.00
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	77	0.00
28	T	2-Chlorotoluene	3.453	3.460	-0.2	80	0.00
29	T	4-Chlorotoluene	3.987	4.098	-2.8	80	0.00
30	T	1,3,5-Trimethylbenzene	3.127	3.150	-0.7	78	0.00
31	T	tert-Butylbenzene	2.100	2.024	3.6	76	0.00
32	T	1,2,4-Trimethylbenzene	3.245	3.192	1.6	76	0.00
33	T	sec-Butylbenzene	3.482	3.469	0.4	78	0.00
34	T	4-Isopropyltoluene	2.465	2.407	2.4	77	0.00
35	T	n-Butylbenzene	2.785	2.816	-1.1	78	0.00
36	T	1,2,3-Trichlorobenzene	0.558	0.522	6.5	73	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------	ISTD	----------					
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------	ISTD	----------					
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------	ISTD	----------					
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------	ISTD	----------					
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040203.D Vial: 3
Acq On : 2 Apr 2004 10:40 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:17 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2V0A

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	4.02	168	103976	50.00	ug/L		0.00
12) 1,4-Difluorobenzene	4.73	114	194507	50.00	ug/L		0.00
19) Chlorobenzene d-5	8.06	117	155221	50.00	ug/L		0.00
27) 1,4-Dichlorobenzene d-4	11.21	152	52983	50.00	ug/L		0.00
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	4.00	113	63564	50.82	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.64%				
18) Toluene d-8 SS#2	6.31	98	254366	50.41	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.82%				
23) 4-Bromofluorobenzene SS#3	9.61	95	90760	51.40	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.80%				
Target Compounds							Qvalue
2) acrolein	2.19	56	12604	50.20	ug/L	#	81
3) iodomethne	2.39	142	96908	47.32	ug/L		98
4) acrylonitrile	2.76	53	21916	49.65	ug/L		98
5) tert-butanol	2.66	59	7671	58.89	ug/L		100
6) vinyl acetate	3.12	43	347319	52.18	ug/L		99
7) diisopropyl ether	3.14	45	323302	50.52	ug/L		98
8) Ethyl tert-butyl ether	3.45	59	257218	53.52	ug/L		97
9) 2,2-Dichloropropane	3.59	77	106064	51.11	ug/L		98
10) Bromochloromethane	3.79	128	29131	48.05	ug/L	#	84
13) 1,1-Dichloropropene	4.17	75	119788	50.13	ug/L		97
14) tert-amyl methyl ether	4.48	73	227167	50.44	ug/L		97
15) Dibromomethane	5.34	93	48782	50.69	ug/L		96
16) 1,4-dioxane	5.38	58	134	22.53	ug/L	#	1
17) 2-Chloroethylvinyl Ether	5.84	63	45712	45.24	ug/L		97
20) 1,3-Dichloropropane	7.06	76	128434	53.54	ug/L		99
21) 1,1,1,2-Tetrachloroethane	8.20	131	46686	48.50	ug/L		98
22) 1,2,3-Trichloropropane	9.88	110	17056	51.75	ug/L		100
24) Bromobenzene	9.80	156	51733	49.36	ug/L	#	88
25) trans-1,4-dichloro-2-buten	9.88	75	68068	55.41	ug/L	#	100
26) n-Propylbenzene	9.98	91	276617	50.14	ug/L		97
28) 2-Chlorotoluene	10.08	91	183332	50.11	ug/L		97
29) 4-Chlorotoluene	10.24	91	217137	51.39	ug/L		94
30) 1,3,5-Trimethylbenzene	10.24	105	166918	50.37	ug/L		95
31) tert-Butylbenzene	10.68	119	107214	48.18	ug/L		93
32) 1,2,4-Trimethylbenzene	10.75	105	169100	49.17	ug/L		97
33) sec-Butylbenzene	10.99	105	183775	49.81	ug/L		99
34) 4-Isopropyltoluene	11.21	119	127525	48.81	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040402\04040203.D Vial: 3
Acq On : 2 Apr 2004 10:40 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 16:17 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	n-Butylbenzene	11.79	91	149200	50.56 ug/L	98
36)	1,2,3-Trichlorobenzene	14.76	180	27654	46.78 ug/L	99

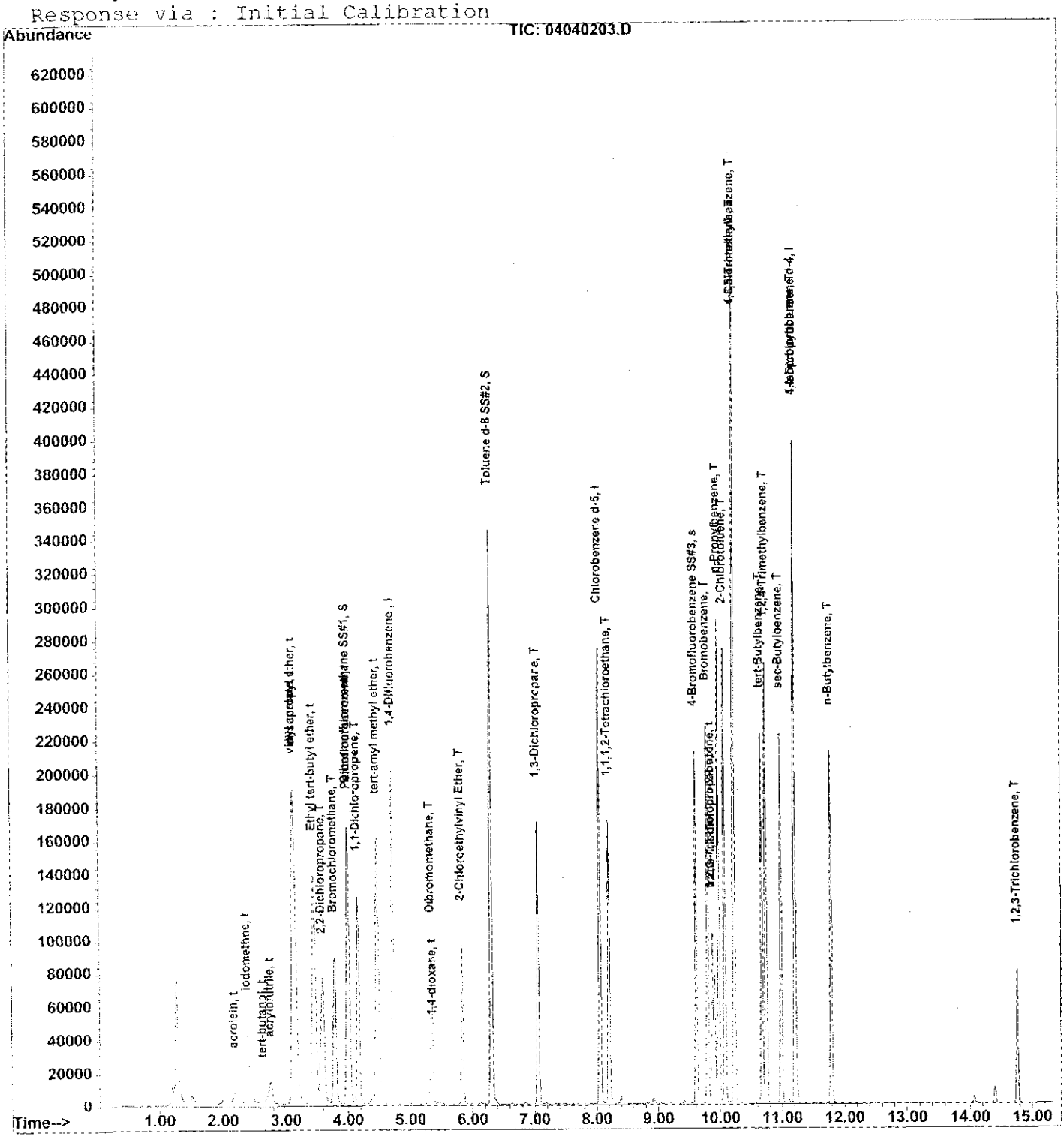
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040402\04040203.D
Acq On : 2 Apr 2004 10:40 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Apr 2 16:17 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040406\04040603.D Vial: 3
Acq On : 6 Apr 2004 11:14 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	118	0.00
2	T	Dichlorodifluoromethane	0.899	0.800	11.0	106	0.00
3	T	Chloromethane	0.962	0.839	12.8	105	0.00
4	T	VINYL CHLORIDE	0.955	0.859	10.1	106	0.00
5	T	Bromomethane	0.783	0.682	12.9	110	0.00
6	T	Chloroethane	0.491	0.452	7.9	106	0.00
7	T	Trichlorofluoromethane	0.555	0.591	-6.5	119	-0.04
8	T	Acetone	0.240	0.213	11.3	108	0.00
9	M	1,1-DICHLOROETHENE	0.735	0.683	7.1	111	0.00
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.580	4.3	110	0.00
11	T	Carbon Disulfide	2.621	2.401	8.4	109	-0.04
12	T	Methyl Acetate	0.092	0.093	-1.1	115	0.00
13	T	Methylene chloride	0.885	0.779	12.0	110	0.00
14	T	trans-1,2-Dichloroethene	0.791	0.752	4.9	114	0.00
15	T	Methyl-t-Butyl Ether	1.501	1.519	-1.2	119	0.00
16	T	1,1-Dichloroethane	1.344	1.287	4.2	116	0.00
17	T	cis-1,2-Dichloroethene	0.790	0.757	4.2	115	0.00
18	T	2-Butanone (MEK)	0.446	0.411	7.8	119	0.00
19	T	CHLOROFORM	1.443	1.359	5.8	114	0.00
20	S	Dibromofluoromethane SS#1	0.598	0.603	-0.8	119	0.00
21	T	1,1,1-Trichloroethane	1.021	0.967	5.3	114	0.00
22	T	Cyclohexane	1.166	1.078	7.5	111	0.00
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	118	0.00
24	T	Carbon tetrachloride	0.386	0.374	3.1	115	-0.02
25	M	Benzene	1.859	1.740	6.4	114	0.00
26	T	1,2-Dichloroethane	0.581	0.576	0.9	116	0.00
27	M	Trichloroethene	0.422	0.403	4.5	114	0.00
28	T	1,2-DICHLOROPROPANE	0.490	0.480	2.0	116	0.00
29	T	Methylcyclohexane	0.436	0.404	7.3	113	0.00
30	T	Bromodichloromethane	0.582	0.578	0.7	118	0.00
31	T	cis-1,3-Dichloropropene	0.777	0.779	-0.3	119	0.00
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.495	-2.3	121	0.00
33	S	Toluene d-8 SS#2	1.292	1.294	-0.2	120	0.00
34	M	TOLUENE	1.007	0.967	4.0	115	-0.02
35	T	trans-1,3-Dichloropropene	0.654	0.659	-0.8	117	0.00
36	T	1,1,2-Trichloroethane	0.298	0.298	0.0	118	0.00
37	T	Tetrachloroethene	0.267	0.257	3.7	116	0.00
38	T	2-Hexanone (MBK)	0.332	0.338	-1.8	121	0.00
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	121	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040406\04040603.D Vial: 3
Acq On : 6 Apr 2004 11:14 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : TS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.339	-0.3	120	0.00
41	T	1,2-Dibromoethane	0.357	0.353	1.1	118	0.00
42	M	Chlorobenzene	1.135	1.062	6.4	117	0.00
43	T	ETHYLBENZENE	2.037	1.915	6.0	117	0.00
44	T	m&p-Xylene	0.692	0.650	6.1	114	0.00
45	T	o-Xylene	0.669	0.629	6.0	114	-0.02
46	T	Styrene	1.236	1.175	4.9	114	0.00
47	T	Bromoform	0.204	0.211	-3.4	118	0.00
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	120	0.00
49	T	Isopropylbenzene	3.919	3.603	8.1	114	0.00
50	s	4-Bromofluorobenzene SS#3	1.678	1.674	0.2	119	0.00
51	T	1,1,2,2-Tetrachloroethane	1.451	1.451	0.0	118	0.00
52	T	1,3-Dichlorobenzene	1.556	1.447	7.0	114	0.00
53	T	1,4-Dichlorobenzene	1.847	1.515	18.0	116	0.00
54	T	1,2-Dichlorobenzene	1.471	1.368	7.0	114	-0.02
55	T	1,2-Dibromo-3-chloropropane	0.187	0.191	-2.1	112	0.00
56	T	1,2,4-Trichlorobenzene	0.797	0.688	13.7	109	-0.02
57	T	Naphthalene	1.591	1.384	13.0	105	-0.02

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	----------ISTD----------							
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	----------ISTD----------							
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	----------ISTD----------							
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	----------	----------	----------	ISTD	----------	----------	----------	
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040603.D Vial: 3
Acq On : 6 Apr 2004 11:14 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : TS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 11:32 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.01	168	161953	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.71	114	293310	50.00	ug/L	0.00
39) Chlorobenzene d-5 ISTD	8.04	117	247388	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.20	152	82617	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	3.98	113	97636	50.40	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.80%			
33) Toluene d-8 SS#2	6.29	98	379495	50.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.12%			
50) 4-Bromofluorobenzene SS#3	9.60	95	138299	49.88	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.38	85	129552	44.48	ug/L	100
3) Chloromethane	1.50	50	135955	43.61	ug/L	100
4) VINYL CHLORIDE	1.58	62	139181	45.00	ug/L	100
5) Bromomethane	1.75	94	110446	43.56	ug/L	98
6) Chloroethane	1.79	64	73140	45.99	ug/L	100
7) Trichlorofluoromethane	1.92	101	95750	53.27	ug/L	100
8) Acetone	2.27	43	34498	44.39	ug/L	98
9) 1,1-DICHLOROETHENE	2.26	96	110618	46.46	ug/L	99
10) 1,1,2-Trichlorotrifluoroet	2.27	101	93878	47.84	ug/L	100
11) Carbon Disulfide	2.44	76	388893	45.81	ug/L	99
12) Methyl Acetate	2.49	74	15102	50.55	ug/L	100
13) Methylene chloride	2.58	84	126084	43.99	ug/L	99
14) trans-1,2-Dichloroethene	2.79	96	121721	47.52	ug/L	99
15) Methyl-t-Butyl Ether	2.78	73	245931	50.58	ug/L	100
16) 1,1-Dichloroethane	3.10	63	208481	47.88	ug/L	99
17) cis-1,2-Dichloroethene	3.57	96	122665	47.93	ug/L	99
18) 2-Butanone (MEK)	3.55	43	66520	46.02	ug/L	98
19) CHLOROFORM	3.84	83	220044	47.08	ug/L	100
21) 1,1,1-Trichloroethane	4.02	97	156643	47.36	ug/L #	62
22) Cyclohexane	4.09	56	174576	46.23	ug/L	98
24) Carbon tetrachloride	4.17	117	109795	48.48	ug/L	100
25) Benzene	4.35	78	510261	46.80	ug/L	99
26) 1,2-Dichloroethane	4.36	62	168909	49.56	ug/L	99
27) Trichloroethene	4.98	95	118067	47.68	ug/L	98
28) 1,2-DICHLOROPROPANE	5.21	63	140882	49.00	ug/L	99
29) Methylcyclohexane	5.19	83	118405	46.25	ug/L	99
30) Bromodichloromethane	5.49	83	169412	49.59	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040603.D Vial: 3
Acq On : 6 Apr 2004 11:14 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 11:32 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

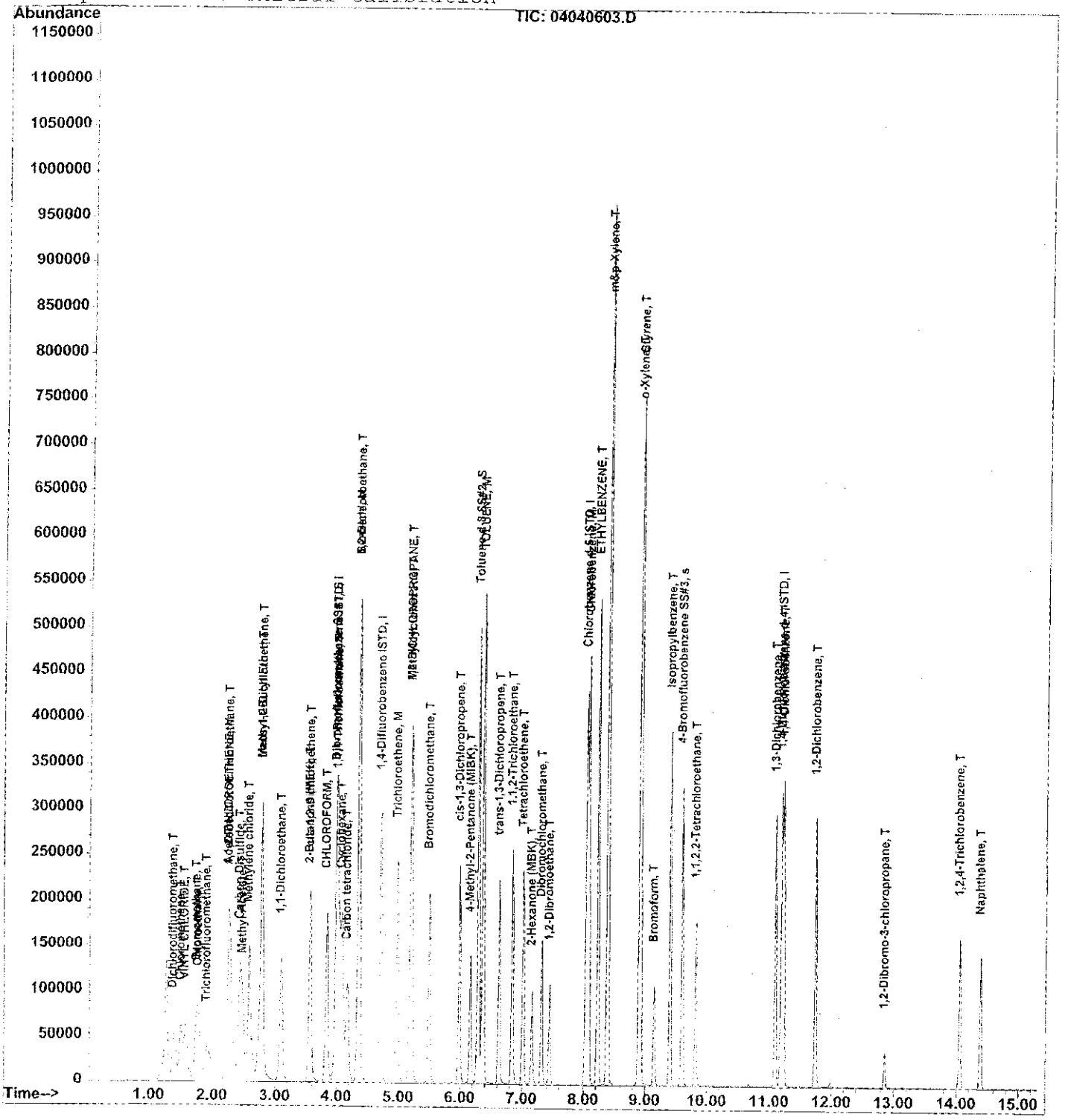
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	5.99	75	228361	50.11	ug/L	99
32)	4-Methyl-2-Pentanone (MIBK	6.17	43	145096	51.12	ug/L	100
34)	TOLUENE	6.36	92	283757	48.05	ug/L	98
35)	trans-1,3-Dichloropropene	6.63	75	193335	50.40	ug/L	99
36)	1,1,2-Trichloroethane	6.84	83	87414	49.97	ug/L	98
37)	Tetrachloroethene	7.01	166	75382	48.07	ug/L	99
38)	2-Hexanone (MBK)	7.16	43	99189	50.97	ug/L	100
40)	Dibromochloromethane	7.32	129	83873	50.14	ug/L	99
41)	1,2-Dibromoethane	7.45	107	87341	49.38	ug/L	100
42)	Chlorobenzene	8.07	112	262619	46.76	ug/L	98
43)	ETHYLBENZENE	8.23	91	473657	47.00	ug/L	99
44)	m&p-Xylene	8.39	106	321544	93.87	ug/L	97
45)	o-Xylene	8.90	106	155558	46.97	ug/L	97
46)	Styrene	8.92	104	290584	47.53	ug/L	96
47)	Bromoform	9.15	173	52118	51.75	ug/L	99
49)	Isopropylbenzene	9.41	105	297709	45.97	ug/L	99
51)	1,1,2,2-Tetrachloroethane	9.83	83	119898	49.99	ug/L	100
52)	1,3-Dichlorobenzene	11.10	146	119539	46.50	ug/L	99
53)	1,4-Dichlorobenzene	11.23	146	125141	41.01	ug/L	98
54)	1,2-Dichlorobenzene	11.74	146	113004	46.48	ug/L	99
55)	1,2-Dibromo-3-chloropropan	12.86	75	15760	50.99	ug/L	100
56)	1,2,4-Trichlorobenzene	14.05	180	56851	43.17	ug/L	98
57)	Naphthalene	14.39	128	114321	43.48	ng/L	100

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\040406\04040603.D
Acq On : 6 Apr 2004 11:14 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Apr 6 11:32 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040406\04040604.D Vial: 4
Acq On : 6 Apr 2004 11:39 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	118	0.00
2	t	acrolein	0.121	0.117	3.3	119	0.00
3	t	iodomethne	0.985	0.906	8.0	111	-0.01
4	t	acrylonitrile	0.212	0.208	1.9	120	0.00
5	t	tert-butanol	0.063	0.066	-4.8	118	0.00
6	t	vinyl acetate	3.201	3.099	3.2	116	-0.01
7	t	diisopropyl ether	3.077	2.927	4.9	113	-0.01
8	t	Ethyl tert-butyl ether	2.311	2.258	2.3	116	0.00
9	T	2,2-Dichloropropane	0.998	0.959	3.9	116	0.00
10	T	Bromochloromethane	0.292	0.274	6.2	115	0.00
11	S	Dibromofluoromethane SS#1	0.602	0.598	0.7	117	0.00
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	120	0.00
13	T	1,1-Dichloropropene	0.614	0.577	6.0	115	-0.01
14	t	tert-amyl methyl ether	1.158	1.117	3.5	115	-0.01
15	T	Dibromomethane	0.247	0.239	3.2	118	0.00
16	t	1,4-dioxane	0.002	0.001	50.0#	87	0.00
17	T	2-Chloroethylvinyl Ether	0.260	0.228	12.3	106	-0.01
18	S	Toluene d-8 SS#2	1.297	1.316	-1.5	121	0.00
19	I	Chlorobenzene d-5	1.000	1.000	0.0	122	-0.01
20	T	1,3-Dichloropropane	0.773	0.757	2.1	121	-0.01
21	T	1,1,1,2-Tetrachloroethane	0.310	0.292	5.8	120	0.00
22	T	1,2,3-Trichloropropane	0.106	0.104	1.9	125	0.00
23	s	4-Bromofluorobenzene SS#3	0.569	0.572	-0.5	121	-0.01
24	T	Bromobenzene	0.338	0.313	7.4	116	-0.01
25	t	trans-1,4-dichloro-2-butene	0.396	0.381	3.8	114	-0.01
26	T	n-Propylbenzene	1.777	1.645	7.4	114	-0.01
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	119	-0.01
28	T	2-Chlorotoluene	3.453	3.198	7.4	114	-0.01
29	T	4-Chlorotoluene	3.987	3.738	6.2	113	-0.02
30	T	1,3,5-Trimethylbenzene	3.127	2.872	8.2	111	-0.01
31	T	tert-Butylbenzene	2.100	1.896	9.7	111	-0.01
32	T	1,2,4-Trimethylbenzene	3.245	2.981	8.1	110	-0.02
33	T	sec-Butylbenzene	3.482	3.260	6.4	114	-0.01
34	T	4-Isopropyltoluene	2.465	2.274	7.7	113	-0.01
35	T	n-Butylbenzene	2.785	2.583	7.3	111	0.00
36	T	1,2,3-Trichlorobenzene	0.558	0.501	10.2	108	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	----------ISTD----------							
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	----------ISTD----------							
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	----------ISTD----------							
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	----------ISTD----------							
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040604.D Vial: 4
Acq On : 6 Apr 2004 11:39 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 11:54 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentaflourobenzene	4.01	168	160131	50.00	ug/L	0.00
12) 1,4-Difluorobenzene	4.71	114	293188	50.00	ug/L	0.00
19) Chlorobenzene d-5	8.03	117	244311	50.00	ug/L	-0.01
27) 1,4-Dichlorobenzene d-4	11.19	152	82379	50.00	ug/L	-0.01
System Monitoring Compounds						
11) Dibromofluoromethane SS#1	3.98	113	95770	49.71	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.42%			
18) Toluene d-8 SS#2	6.29	98	385867	50.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.46%			
23) 4-Bromofluorobenzene SS#3	9.60	95	139626	50.24	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.48%			
Target Compounds						Qvalue
2) acrolein	2.17	56	18736	48.46	ug/L	91
3) iodomethne	2.38	142	145156	46.02	ug/L	100
4) acrylonitrile	2.75	53	33331	49.03	ug/L	98
5) tert-butanol	2.64	59	10583	52.76	ug/L	100
6) vinyl acetate	3.10	43	496220	48.41	ug/L	99
7) diisopropyl ether	3.13	45	468777	47.57	ug/L	99
8) Ethyl tert-butyl ether	3.45	59	361553	48.85	ug/L	99
9) 2,2-Dichloropropane	3.59	77	153560	48.05	ug/L	99
10) Bromochloromethane	3.78	128	43877	46.99	ug/L	93
13) 1,1-Dichloropropene	4.15	75	169072	46.94	ug/L	98
14) tert-amyl methyl ether	4.46	73	327550	48.25	ug/L	100
15) Dibromomethane	5.33	93	70114	48.33	ug/L	98
16) 1,4-dioxane	5.35	58	216	24.09	ug/L #	1
17) 2-Chloroethylvinyl Ether	5.82	63	66783	43.85	ug/L	99
20) 1,3-Dichloropropane	7.04	76	184917	48.97	ug/L	100
21) 1,1,1,2-Tetrachloroethane	8.19	131	71262	47.03	ug/L	99
22) 1,2,3-Trichloropropane	9.87	110	25441	49.04	ug/L	100
24) Bromobenzene	9.79	156	76426	46.33	ug/L #	91
25) trans-1,4-dichloro-2-buten	9.86	75	93005	48.10	ug/L #	100
26) n-Propylbenzene	9.97	91	401795	46.28	ug/L	97
28) 2-Chlorotoluene	10.07	91	263419	46.30	ug/L	98
29) 4-Chlorotoluene	10.21	91	307950	46.88	ug/L	95
30) 1,3,5-Trimethylbenzene	10.22	105	236591	45.92	ug/L	97
31) tert-Butylbenzene	10.67	119	156212	45.15	ug/L	95
32) 1,2,4-Trimethylbenzene	10.73	105	245539	45.92	ug/L	98
33) sec-Butylbenzene	10.98	105	268586	46.82	ug/L	99
34) 4-Isopropyltoluene	11.19	119	187341	46.12	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040406\04040604.D Vial: 4
Acq On : 6 Apr 2004 11:39 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 11:54 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

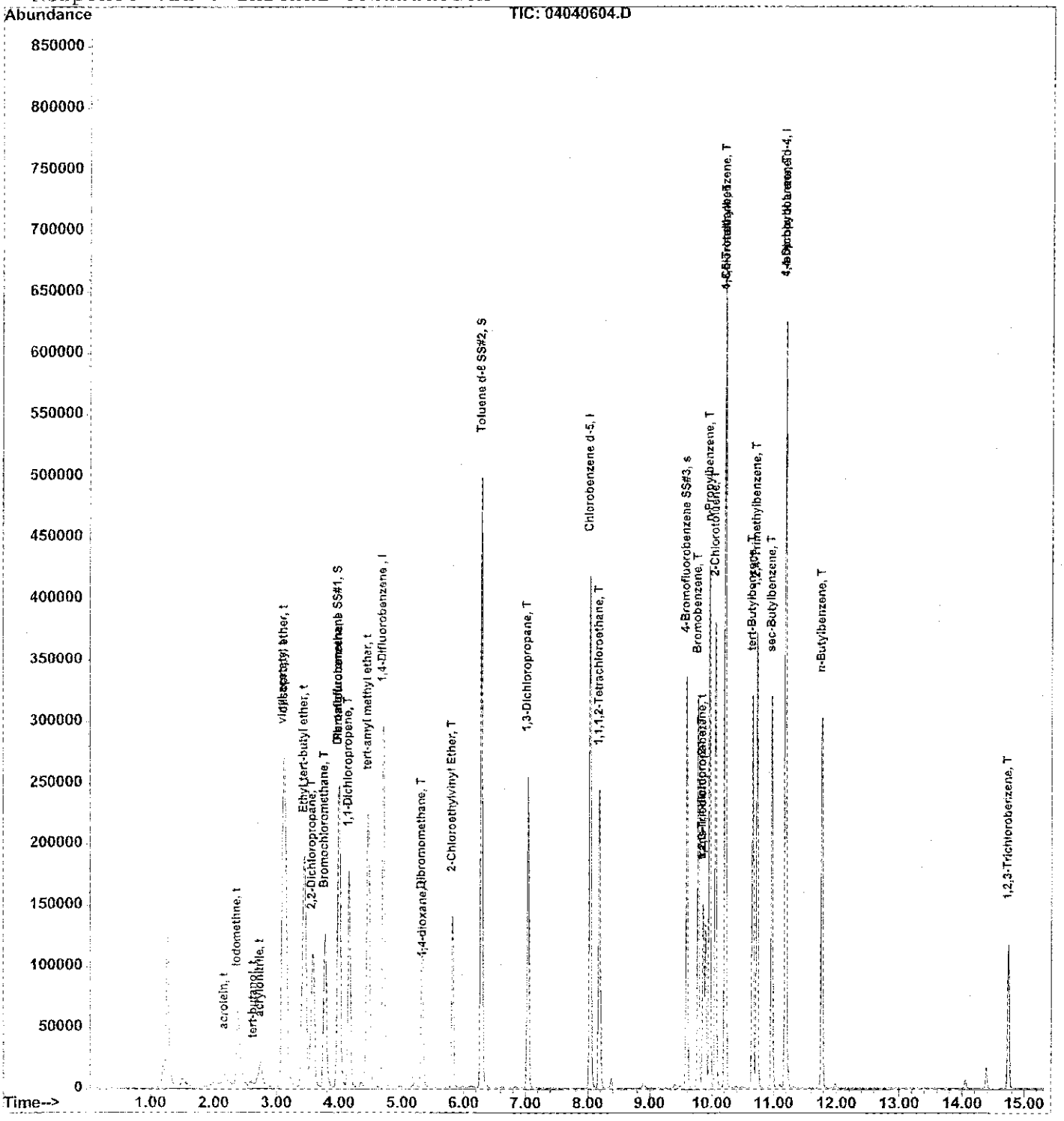
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.77	91	212803	46.39 ug/L	99
36) 1,2,3-Trichlorobenzene	14.75	180	41286	44.92 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040406\04040604.D Vial: 4
Acq On : 6 Apr 2004 11:39 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 11:54 2004

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040407\04040702.D Vial: 2
Acq On : 7 Apr 2004 10:50 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene ISTD	1.000	1.000	0.0	116	0.00
2	T	Dichlorodifluoromethane	0.899	0.816	9.2	106	0.00
3	T	Chloromethane	0.962	0.852	11.4	105	0.00
4	T	VINYL CHLORIDE	0.955	0.889	6.9	108	0.00
5	T	Bromomethane	0.783	0.692	11.6	110	0.00
6	T	Chloroethane	0.491	0.482	1.8	112	0.00
7	T	Trichlorofluoromethane	0.555	0.604	-8.8	120	-0.02
8	T	Acetone	0.240	0.246	-2.5	123	0.02
9	M	1,1-DICHLOROETHENE	0.735	0.714	2.9	114	0.02
10	T	1,1,2-Trichlorotrifluoroeth	0.606	0.601	0.8	113	0.02
11	T	Carbon Disulfide	2.621	2.462	6.1	110	-0.02
12	T	Methyl Acetate	0.092	0.083	9.8	101	0.00
13	T	Methylene chloride	0.885	0.856	3.3	119	0.02
14	T	trans-1,2-Dichloroethene	0.791	0.759	4.0	113	0.02
15	T	Methyl-t-Butyl Ether	1.501	1.454	3.1	112	0.02
16	T	1,1-Dichloroethane	1.344	1.323	1.6	117	0.02
17	T	cis-1,2-Dichloroethene	0.790	0.785	0.6	117	0.00
18	T	2-Butanone (MEK)	0.446	0.408	8.5	116	0.00
19	T	CHLOROFORM	1.443	1.425	1.2	117	0.00
20	S	Dibromofluoromethane SS#1	0.598	0.610	-2.0	119	0.00
21	T	1,1,1-Trichloroethane	1.021	1.006	1.5	117	0.00
22	T	Cyclohexane	1.166	1.112	4.6	113	0.00
23	I	1,4-Difluorobenzene ISTD	1.000	1.000	0.0	117	0.02
24	T	Carbon tetrachloride	0.386	0.381	1.3	116	0.00
25	M	Benzene	1.859	1.822	2.0	119	0.00
26	T	1,2-Dichloroethane	0.581	0.583	-0.3	117	0.00
27	M	Trichloroethene	0.422	0.411	2.6	115	0.00
28	T	1,2-DICHLOROPROPANE	0.490	0.491	-0.2	117	0.00
29	T	Methylcyclohexane	0.436	0.416	4.6	116	0.00
30	T	Bromodichloromethane	0.582	0.587	-0.9	119	0.00
31	T	cis-1,3-Dichloropropene	0.777	0.768	1.2	116	0.00
32	T	4-Methyl-2-Pentanone (MIBK)	0.484	0.433	10.5	105	0.00
33	S	Toluene d-8 SS#2	1.292	1.302	-0.8	120	0.00
34	M	TOLUENE	1.007	0.986	2.1	117	0.00
35	T	trans-1,3-Dichloropropene	0.654	0.648	0.9	115	0.00
36	T	1,1,2-Trichloroethane	0.298	0.293	1.7	115	0.00
37	T	Tetrachloroethene	0.267	0.258	3.4	116	0.00
38	T	2-Hexanone (MBK)	0.332	0.305	8.1	108	0.00
39	I	Chlorobenzene d-5 ISTD	1.000	1.000	0.0	119	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040407\04040702.D Vial: 2
Acq On : 7 Apr 2004 10:50 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Dibromochloromethane	0.338	0.329	2.7	115	0.00
41	T	1,2-Dibromoethane	0.357	0.339	5.0	112	0.00
42	M	Chlorobenzene	1.135	1.075	5.3	117	0.00
43	T	ETHYLBENZENE	2.037	1.958	3.9	118	0.00
44	T	m&p-Xylene	0.692	0.654	5.5	113	0.00
45	T	o-Xylene	0.669	0.641	4.2	114	0.00
46	T	Styrene	1.236	1.185	4.1	113	0.00
47	T	Bromoform	0.204	0.207	-1.5	114	0.00
48	I	1,4-Dichlorobenzene d-4 IST	1.000	1.000	0.0	115	0.00
49	T	Isopropylbenzene	3.919	3.709	5.4	112	0.00
50	s	4-Bromofluorobenzene SS#3	1.678	1.719	-2.4	117	0.00
51	T	1,1,2,2-Tetrachloroethane	1.451	1.415	2.5	110	0.00
52	T	1,3-Dichlorobenzene	1.556	1.478	5.0	111	0.00
53	T	1,4-Dichlorobenzene	1.847	1.536	16.8	113	0.00
54	T	1,2-Dichlorobenzene	1.471	1.371	6.8	109	0.00
55	T	1,2-Dibromo-3-chloropropane	0.187	0.177	5.3	100	0.00
56	T	1,2,4-Trichlorobenzene	0.797	0.680	14.7	103	0.00
57	T	Naphthalene	1.591	1.202	24.5	87	0.00

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentafluorobenzene IS	----------	ISTD	----------					
2)	T	Dichlorodifluoromet	0.848	0.970	0.930	0.905	0.895	0.847	0.899	5.33
3)	T	Chloromethane	1.051	1.038	0.969	0.903	0.942	0.871	0.962	7.46
4)	T	VINYL CHLORIDE	0.935	1.031	1.003	0.954	0.956	0.851	0.955	6.49
5)	T	Bromomethane	0.924	0.820	0.782	0.744	0.730	0.697	0.783	10.36
6)	T	Chloroethane	0.447	0.511	0.507	0.513	0.502	0.465	0.491	5.62
7)	T	Trichlorofluorometh		0.469	0.506	0.562	0.585	0.653	0.555	12.83
8)	T	Acetone		0.325	0.233	0.218	0.233	0.190	0.240	21.22
9)	M	1,1-DICHLOROETHENE	0.739	0.791	0.738	0.725	0.726	0.691	0.735	4.45
10)	T	1,1,2-Trichlorotrif	0.533	0.628	0.640	0.629	0.621	0.583	0.606	6.67
11)	T	Carbon Disulfide	2.713	2.775	2.639	2.598	2.595	2.408	2.621	4.80
12)	T	Methyl Acetate		0.095	0.089	0.095	0.096	0.086	0.092	4.95
13)	T	Methylene chloride		1.034	0.927	0.858	0.840	0.766	0.885	11.40
14)	T	trans-1,2-Dichloroe	0.783	0.850	0.799	0.784	0.782	0.747	0.791	4.24
15)	T	Methyl-t-Butyl Ethe	1.447	1.602	1.546	1.510	1.513	1.388	1.501	5.00
16)	T	1,1-Dichloroethane	1.359	1.448	1.376	1.326	1.311	1.246	1.344	5.05
17)	T	cis-1,2-Dichloroeth	0.778	0.835	0.808	0.779	0.781	0.758	0.790	3.44
18)	T	2-Butanone (MEK)	0.577	0.499	0.436	0.389	0.409	0.368	0.446	17.51
19)	T	CHLOROFORM	1.488	1.532	1.465	1.426	1.413	1.335	1.443	4.73
20)	S	Dibromofluoromethan	0.598	0.599	0.602	0.589	0.598	0.602	0.598	0.79
21)	T	1,1,1-Trichloroetha	1.047	1.082	1.040	1.005	1.001	0.952	1.021	4.42
22)	T	Cyclohexane	1.260	1.195	1.171	1.183	1.145	1.042	1.166	6.15
23)	I	1,4-Difluorobenzene I	----------	ISTD	----------					
24)	T	Carbon tetrachlorid	0.380	0.406	0.388	0.383	0.386	0.374	0.386	2.79
25)	M	Benzene	1.966	1.963	1.872	1.798	1.800	1.753	1.859	4.87
26)	T	1,2-Dichloroethane	0.539	0.611	0.615	0.581	0.585	0.556	0.581	5.13
27)	M	Trichloroethene	0.420	0.443	0.430	0.416	0.419	0.406	0.422	2.98
28)	T	1,2-DICHLOROPROPANE	0.486	0.515	0.501	0.485	0.491	0.463	0.490	3.53
29)	T	Methylcyclohexane	0.489	0.457	0.432	0.410	0.421	0.410	0.436	7.13
30)	T	Bromodichloromethan	0.577	0.600	0.608	0.574	0.579	0.555	0.582	3.27
31)	T	cis-1,3-Dichloropro	0.760	0.816	0.791	0.764	0.777	0.753	0.777	3.04
32)	T	4-Methyl-2-Pentanon	0.488	0.494	0.508	0.480	0.483	0.450	0.484	3.97
33)	S	Toluene d-8 SS#2	1.293	1.292	1.294	1.294	1.272	1.309	1.292	0.91
34)	M	TOLUENE	1.008	1.049	1.023	0.997	0.991	0.973	1.007	2.63
35)	T	trans-1,3-Dichlorop	0.645	0.684	0.664	0.646	0.664	0.620	0.654	3.33
36)	T	1,1,2-Trichloroetha	0.290	0.318	0.307	0.294	0.298	0.282	0.298	4.31
37)	T	Tetrachloroethene	0.283	0.272	0.265	0.265	0.262	0.257	0.267	3.40
38)	T	2-Hexanone (MBK)	0.343	0.368	0.333	0.309	0.330	0.306	0.332	6.94
39)	I	Chlorobenzene d-5 IST	----------	ISTD	----------					
40)	T	Dibromochloromethan	0.325	0.356	0.341	0.332	0.341	0.334	0.338	3.06
41)	T	1,2-Dibromoethane	0.330	0.386	0.371	0.356	0.360	0.341	0.357	5.61

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration

Calibration Files
C1 =04031606.D C2 =04031607.D C3 =04031608.D
C4 =04031609.D C5 =04031610.D C6 =04031611.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
42)	M	Chlorobenzene	1.196	1.213	1.129	1.103	1.096	1.073	1.135	5.01
43)	T	ETHYLBENZENE	2.109	2.175	2.080	1.965	1.978	1.915	2.037	4.88
44)	T	m&p-Xylene	0.710	0.731	0.684	0.679	0.686	0.664	0.692	3.49
45)	T	o-Xylene	0.646	0.701	0.685	0.651	0.668	0.664	0.669	3.10
46)	T	Styrene	1.189	1.273	1.263	1.223	1.244	1.222	1.236	2.47
47)	T	Bromoform	0.176	0.206	0.213	0.204	0.216	0.207	0.204	6.92
48)	I	1,4-Dichlorobenzene d	ISTD							
49)	T	Isopropylbenzene	4.261	4.037	3.951	3.871	3.814	3.583	3.919	5.80
50)	s	4-Bromofluorobenzen	1.730	1.663	1.685	1.678	1.689	1.624	1.678	2.08
51)	T	1,1,2,2-Tetrachloro	1.452	1.511	1.507	1.433	1.483	1.322	1.451	4.83
52)	T	1,3-Dichlorobenzene	1.757	1.542	1.547	1.527	1.530	1.430	1.556	6.92
53)	T	1,4-Dichlorobenzene	2.643	1.970	1.763	1.654	1.565	1.486	1.847	23.01
54)	T	1,2-Dichlorobenzene	1.537	1.498	1.500	1.463	1.442	1.388	1.471	3.56
55)	T	1,2-Dibromo-3-chlor	0.135	0.202	0.203	0.193	0.204	0.185	0.187	14.19
56)	T	1,2,4-Trichlorobenz	1.019	0.771	0.775	0.748	0.761	0.708	0.797	13.98
57)	T	Naphthalene	1.852	1.503	1.569	1.551	1.588	1.484	1.591	8.41

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040702.D Vial: 2
Acq On : 7 Apr 2004 10:50 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene ISTD	4.02	168	159357	50.00	ug/L	0.00
23) 1,4-Difluorobenzene ISTD	4.73	114	291126	50.00	ug/L	0.02
39) Chlorobenzene d-5 ISTD	8.06	117	243726	50.00	ug/L	0.00
48) 1,4-Dichlorobenzene d-4 IS	11.21	152	78926	50.00	ug/L	0.00
System Monitoring Compounds						
20) Dibromofluoromethane SS#1	4.00	113	97201	51.00	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.00%			
33) Toluene d-8 SS#2	6.31	98	379103	50.39	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.78%			
50) 4-Bromofluorobenzene SS#3	9.61	95	135705	51.23	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.40	85	130076	45.39	ug/L	100
3) Chloromethane	1.51	50	135784	44.27	ug/L	99
4) VINYL CHLORIDE	1.59	62	141740	46.57	ug/L	99
5) Bromomethane	1.77	94	110259	44.19	ug/L	99
6) Chloroethane	1.79	64	76793	49.07	ug/L	99
7) Trichlorofluoromethane	1.93	101	96259	54.42	ug/L	99
8) Acetone	2.29	43	39175	51.23	ug/L	97
9) 1,1-DICHLOROETHENE	2.28	96	113737	48.54	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	2.29	101	95789	49.61	ug/L	99
11) Carbon Disulfide	2.45	76	392368	46.97	ug/L	100
12) Methyl Acetate	2.50	74	13271	45.15	ug/L	99
13) Methylene chloride	2.60	84	136460	48.38	ug/L	100
14) trans-1,2-Dichloroethene	2.80	96	120882	47.96	ug/L	97
15) Methyl-t-Butyl Ether	2.80	73	231780	48.45	ug/L	100
16) 1,1-Dichloroethane	3.12	63	210856	49.21	ug/L	99
17) cis-1,2-Dichloroethene	3.59	96	125019	49.65	ug/L	99
18) 2-Butanone (MEK)	3.57	43	65036	45.73	ug/L	100
19) CHLOROFORM	3.86	83	227049	49.37	ug/L	100
21) 1,1,1-Trichloroethane	4.04	97	160299	49.25	ug/L #	65
22) Cyclohexane	4.10	56	177201	47.69	ug/L	95
24) Carbon Tetrachloride	4.19	117	110810	49.29	ug/L	99
25) Benzene	4.37	78	530571	49.02	ug/L	100
26) 1,2-Dichloroethane	4.37	62	169604	50.13	ug/L	99
27) Trichloroethene	4.99	95	119787	48.74	ug/L	99
28) 1,2-DICHLOROPROPANE	5.22	63	142866	50.06	ug/L	99
29) Methylcyclohexane	5.21	83	121073	47.64	ug/L	99
30) Bromodichloromethane	5.51	83	170802	50.37	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040702.D Vial: 2
Acq On : 7 Apr 2004 10:50 am Operator: MI
Sample : TCL-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #415 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:54 2004

Quant Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	6.00	75	223698	49.46	ug/L	98
32)	4-Methyl-2-Pentanone (MIBK	6.18	43	126004	44.72	ug/L	100
34)	TOLUENE	6.38	92	287148	48.99	ug/L	100
35)	trans-1,3-Dichloropropene	6.64	75	188654	49.55	ug/L	99
36)	1,1,2-Trichloroethane	6.86	83	85309	49.13	ug/L	97
37)	Tetrachloroethene	7.03	166	75119	48.27	ug/L	100
38)	2-Hexanone (MBK)	7.18	43	88655	45.90	ug/L	99
40)	Dibromochloromethane	7.33	129	80286	48.72	ug/L	100
41)	1,2-Dibromoethane	7.47	107	82580	47.39	ug/L	100
42)	Chlorobenzene	8.09	112	261903	47.34	ug/L	96
43)	ETHYLBENZENE	8.25	91	477110	48.05	ug/L	98
44)	m&p-Xylene	8.40	106	318665	94.42	ug/L	95
45)	o-Xylene	8.91	106	156198	47.88	ug/L	95
46)	Styrene	8.94	104	288746	47.94	ug/L	94
47)	Bromoform	9.17	173	50342	50.74	ug/L	100
49)	Isopropylbenzene	9.42	105	292773	47.32	ug/L	100
51)	1,1,2,2-Tetrachloroethane	9.83	83	111676	48.74	ug/L	100
52)	1,3-Dichlorobenzene	11.12	146	116676	47.51	ug/L	99
53)	1,4-Dichlorobenzene	11.24	146	121211	41.58	ug/L	98
54)	1,2-Dichlorobenzene	11.76	146	108198	46.58	ug/L	98
55)	1,2-Dibromo-3-chloropropan	12.87	75	14002	47.42	ug/L	99
56)	1,2,4-Trichlorobenzene	14.07	180	53645	42.64	ug/L	99
57)	Naphthalene	14.40	128	94863	37.76	ng/L	100

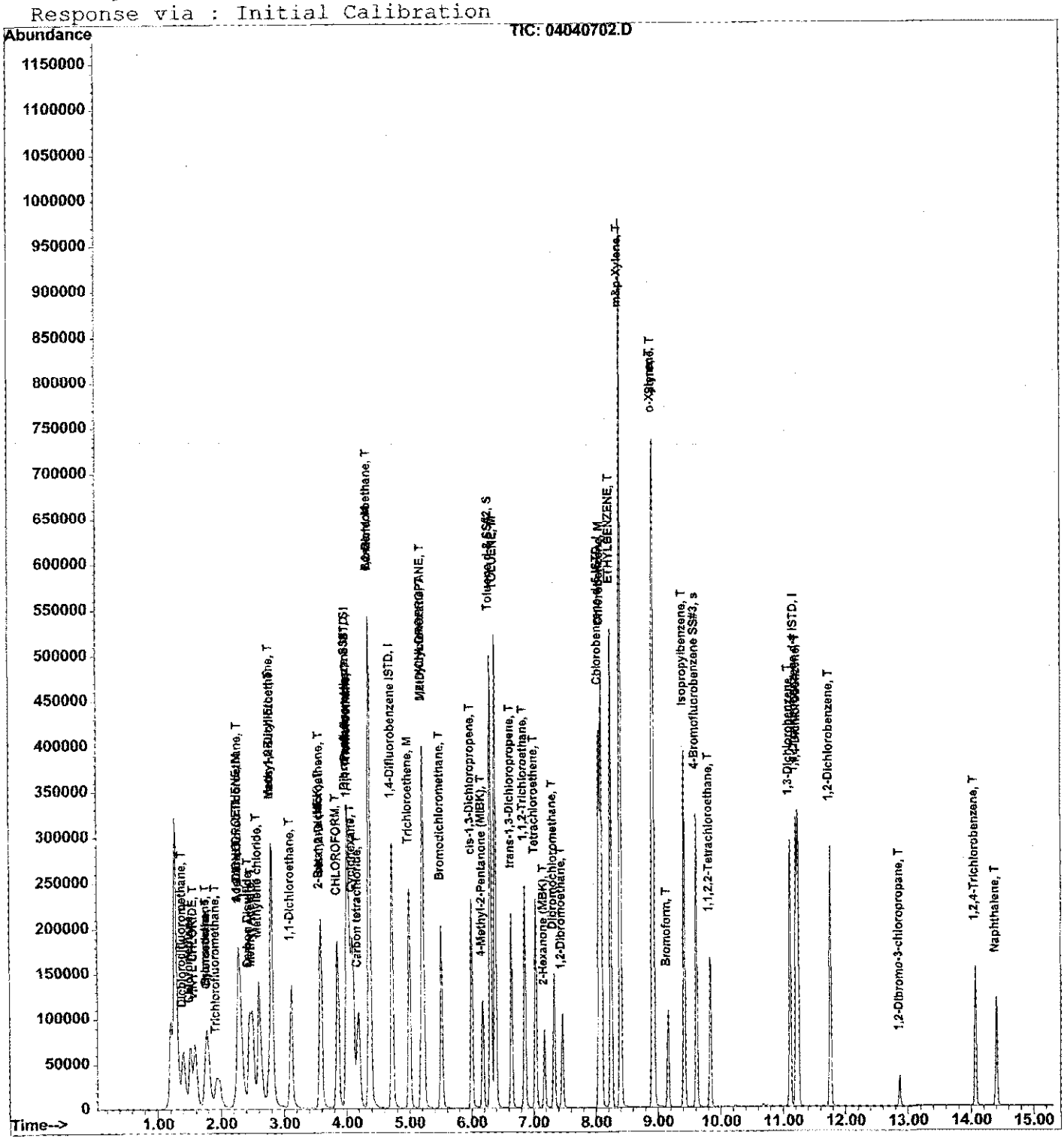
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040702.D
Acq On : 7 Apr 2004 10:50 am
Sample : TCL-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #415
MS Integration Params: rteint.p
Quant Time: Apr 7 11:54 2004

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Tue Apr 06 10:46:29 2004
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040407\04040703.D Vial: 3
Acq On : 7 Apr 2004 11:14 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentaflourobenzene	1.000	1.000	0.0	113	0.00
2	t	acrolein	0.121	0.116	4.1	113	0.00
3	t	iodomethne	0.985	0.889	9.7	104	0.00
4	t	acrylonitrile	0.212	0.201	5.2	111	0.00
5	t	tert-butanol	0.063	0.066	-4.8	113	0.02
6	t	vinyl acetate	3.201	3.135	2.1	113	0.00
7	t	diisopropyl ether	3.077	3.010	2.2	111	0.00
8	t	Ethyl tert-butyl ether	2.311	2.183	5.5	108	0.00
9	T	2,2-Dichloropropane	0.998	0.951	4.7	110	0.00
10	T	Bromochloromethane	0.292	0.269	7.9	108	0.01
11	S	Dibromofluoromethane SS#1	0.602	0.603	-0.2	113	0.01
12	I	1,4-Difluorobenzene	1.000	1.000	0.0	117	0.00
13	T	1,1-Dichloropropene	0.614	0.570	7.2	111	0.00
14	t	tert-amyl methyl ether	1.158	1.031	11.0	103	0.00
15	T	Dibromomethane	0.247	0.233	5.7	112	0.01
16	t	1,4-dioxane	0.002	0.001	50.0#	101	0.01
17	T	2-Chloroethylvinyl Ether	0.260	0.224	13.8	101	0.00
18	S	Toluene d-8 SS#2	1.297	1.305	-0.6	116	0.01
19	I	Chlorobenzene d-5	1.000	1.000	0.0	117	0.00
20	T	1,3-Dichloropropane	0.773	0.720	6.9	110	0.00
21	T	1,1,1,2-Tetrachloroethane	0.310	0.281	9.4	111	0.00
22	T	1,2,3-Trichloropropane	0.106	0.094	11.3	109	0.00
23	s	4-Bromofluorobenzene SS#3	0.569	0.574	-0.9	117	0.00
24	T	Bromobenzene	0.338	0.297	12.1	105	0.00
25	t	trans-1,4-dichloro-2-butene	0.396	0.354	10.6	102	0.00
26	T	n-Propylbenzene	1.777	1.633	8.1	109	0.00
27	I	1,4-Dichlorobenzene d-4	1.000	1.000	0.0	114	0.00
28	T	2-Chlorotoluene	3.453	3.216	6.9	110	0.00
29	T	4-Chlorotoluene	3.987	3.721	6.7	108	0.00
30	T	1,3,5-Trimethylbenzene	3.127	2.891	7.5	107	0.00
31	T	tert-Butylbenzene	2.100	1.954	7.0	109	0.00
32	T	1,2,4-Trimethylbenzene	3.245	3.000	7.6	106	0.00
33	T	sec-Butylbenzene	3.482	3.231	7.2	108	0.00
34	T	4-Isopropyltoluene	2.465	2.311	6.2	110	0.00
35	T	n-Butylbenzene	2.785	2.729	2.0	113	0.00
36	T	1,2,3-Trichlorobenzene	0.558	0.450	19.4	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report Instrumen

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration

Calibration Files
C1 =04031614.D C2 =04031615.D C3 =04031616.D
C4 =04031617.D C5 =04031618.D C6 =04031619.D

		Compound	C1	C2	C3	C4	C5	C6	Avg	%RSD
1)	I	Pentaflourobenzene	ISTD							
2)	t	acrolein	0.130	0.124	0.125	0.116	0.111	0.118	0.121	5.78
3)	t	iodomethne	1.026	0.972	1.010	0.964	0.937	1.000	0.985	3.35
4)	t	acrylonitrile	0.222	0.214	0.218	0.205	0.199	0.217	0.212	4.13
5)	t	tert-butanol	0.051	0.042	0.067	0.066	0.070	0.081	0.063	22.25
6)	t	vinyl acetate	3.448	3.303	3.314	3.140	2.934	3.065	3.201	5.89
7)	t	diisopropyl ether	3.295	3.198	3.166	3.062	2.818	2.923	3.077	5.83
8)	t	Ethyl tert-butyl et	2.417	2.380	2.404	2.300	2.135	2.231	2.311	4.81
9)	T	2,2-Dichloropropane	1.080	1.015	1.043	0.977	0.903	0.969	0.998	6.24
10)	T	Bromochloromethane	0.291	0.299	0.296	0.282	0.278	0.304	0.292	3.48
11)	S	Dibromofluoromethan	0.602	0.598	0.607	0.603	0.598	0.600	0.602	0.59
12)	I	1,4-Difluorobenzene	ISTD							
13)	T	1,1-Dichloropropene	0.641	0.618	0.630	0.602	0.578	0.616	0.614	3.57
14)	t	tert-amyl methyl et	1.203	1.178	1.204	1.172	1.074	1.116	1.158	4.50
15)	T	Dibromomethane	0.256	0.249	0.252	0.243	0.233	0.251	0.247	3.30
16)	t	1,4-dioxane				0.001	0.002	0.002	0.002	32.73
17)	T	2-Chloroethylvinyl	0.256	0.266	0.267	0.259	0.249	0.261	0.260	2.63
18)	S	Toluene d-8 SS#2	1.281	1.301	1.313	1.312	1.298	1.278	1.297	1.16
19)	I	Chlorobenzene d-5	ISTD							
20)	T	1,3-Dichloropropane	0.813	0.788	0.777	0.764	0.723	0.772	0.773	3.84
21)	T	1,1,1,2-Tetrachloro	0.317	0.305	0.309	0.297	0.296	0.337	0.310	4.92
22)	T	1,2,3-Trichloroprop	0.114	0.102	0.110	0.101	0.100	0.110	0.106	5.60
23)	s	4-Bromofluorobenzen	0.553	0.570	0.564	0.574	0.576	0.575	0.569	1.59
24)	T	Bromobenzene	0.338	0.328	0.339	0.329	0.327	0.364	0.338	4.13
25)	t	trans-1,4-dichloro-	0.440	0.393	0.398	0.406	0.355	0.383	0.396	7.01
26)	T	n-Propylbenzene	1.835	1.777	1.805	1.758	1.669	1.819	1.777	3.37
27)	I	1,4-Dichlorobenzene d	ISTD							
28)	T	2-Chlorotoluene	3.945	3.548	3.466	3.332	3.166	3.260	3.453	8.04
29)	T	4-Chlorotoluene	4.338	4.081	4.026	3.943	3.707	3.829	3.987	5.48
30)	T	1,3,5-Trimethylbenz	3.321	3.148	3.130	3.091	2.966	3.108	3.127	3.67
31)	T	tert-Butylbenzene	2.262	2.120	2.160	2.040	1.935	2.082	2.100	5.28
32)	T	1,2,4-Trimethylbenz	3.546	3.374	3.297	3.224	2.995	3.036	3.245	6.41
33)	T	sec-Butylbenzene	3.728	3.596	3.562	3.409	3.202	3.394	3.482	5.31
34)	T	4-Isopropyltoluene	2.627	2.556	2.525	2.402	2.252	2.431	2.465	5.41
35)	T	n-Butylbenzene	3.025	2.851	2.795	2.770	2.589	2.678	2.785	5.38
36)	T	1,2,3-Trichlorobenz	0.577	0.588	0.574	0.551	0.511	0.546	0.558	4.98

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040703.D Vial: 3
Acq On : 7 Apr 2004 11:14 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : TS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentaflourobenzene	4.01	168	154122	50.00	ug/L		0.00
12) 1,4-Difluorobenzene	4.72	114	285184	50.00	ug/L		0.00
19) Chlorobenzene d-5	8.05	117	234488	50.00	ug/L		0.00
27) 1,4-Dichlorobenzene d-4	11.21	152	79019	50.00	ug/L		0.00
System Monitoring Compounds							
11) Dibromofluoromethane SS#1	4.00	113	92901	50.11	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.22%				
18) Toluene d-8 SS#2	6.31	98	372042	50.28	ug/L		0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.56%				
23) 4-Bromofluorobenzene SS#3	9.61	95	134598	50.46	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.92%				
Target Compounds							Qvalue
2) acrolein	2.18	56	17837	47.93	ug/L		88
3) iodomethne	2.39	142	136942	45.11	ug/L		99
4) acrylonitrile	2.76	53	30949	47.30	ug/L		99
5) tert-butanol	2.67	59	10111	52.37	ug/L		100
6) vinyl acetate	3.12	43	483170	48.97	ug/L		99
7) diisopropyl ether	3.14	45	463832	48.90	ug/L		98
8) Ethyl tert-butyl ether	3.46	59	336417	47.22	ug/L		98
9) 2,2-Dichloropropane	3.60	77	146577	47.65	ug/L		98
10) Bromochloromethane	3.79	128	41456	46.13	ug/L	#	91
13) 1,1-Dichloropropene	4.17	75	162645	46.42	ug/L		98
14) tert-amyl methyl ether	4.47	73	293984	44.52	ug/L		99
15) Dibromomethane	5.35	93	66515	47.14	ug/L		98
16) 1,4-dioxane	5.37	58	251	28.78	ug/L	#	1
17) 2-Chloroethylvinyl Ether	5.84	63	63802	43.07	ug/L		99
20) 1,3-Dichloropropane	7.06	76	168742	46.56	ug/L		99
21) 1,1,1,2-Tetrachloroethane	8.20	131	65910	45.32	ug/L		100
22) 1,2,3-Trichloropropane	9.88	110	22103	44.39	ug/L		100
24) Bromobenzene	9.80	156	69624	43.97	ug/L	#	89
25) trans-1,4-dichloro-2-buten	9.88	75	83089	44.77	ug/L	#	100
26) n-Propylbenzene	9.98	91	382869	45.94	ug/L		97
28) 2-Chlorotoluene	10.08	91	254086	46.56	ug/L		97
29) 4-Chlorotoluene	10.23	91	294069	46.67	ug/L		95
30) 1,3,5-Trimethylbenzene	10.24	105	228421	46.22	ug/L		97
31) tert-Butylbenzene	10.68	119	154367	46.51	ug/L		95
32) 1,2,4-Trimethylbenzene	10.75	105	237030	46.21	ug/L		98
33) sec-Butylbenzene	10.99	105	255334	46.40	ug/L		99
34) 4-Isopropyltoluene	11.21	119	182591	46.86	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040407\04040703.D Vial: 3
Acq On : 7 Apr 2004 11:14 am Operator: MI
Sample : UNREG-W, CCV 50ppb Inst : Instrumen
Misc : IS/S 1uL #423, CCV 10uL #416 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 7 11:55 2004

Quant Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration
DataAcq Meth : RTX2VOA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) n-Butylbenzene	11.78	91	215608	48.99 ug/L	99
36) 1,2,3-Trichlorobenzene	14.77	180	35522	40.29 ug/L	99

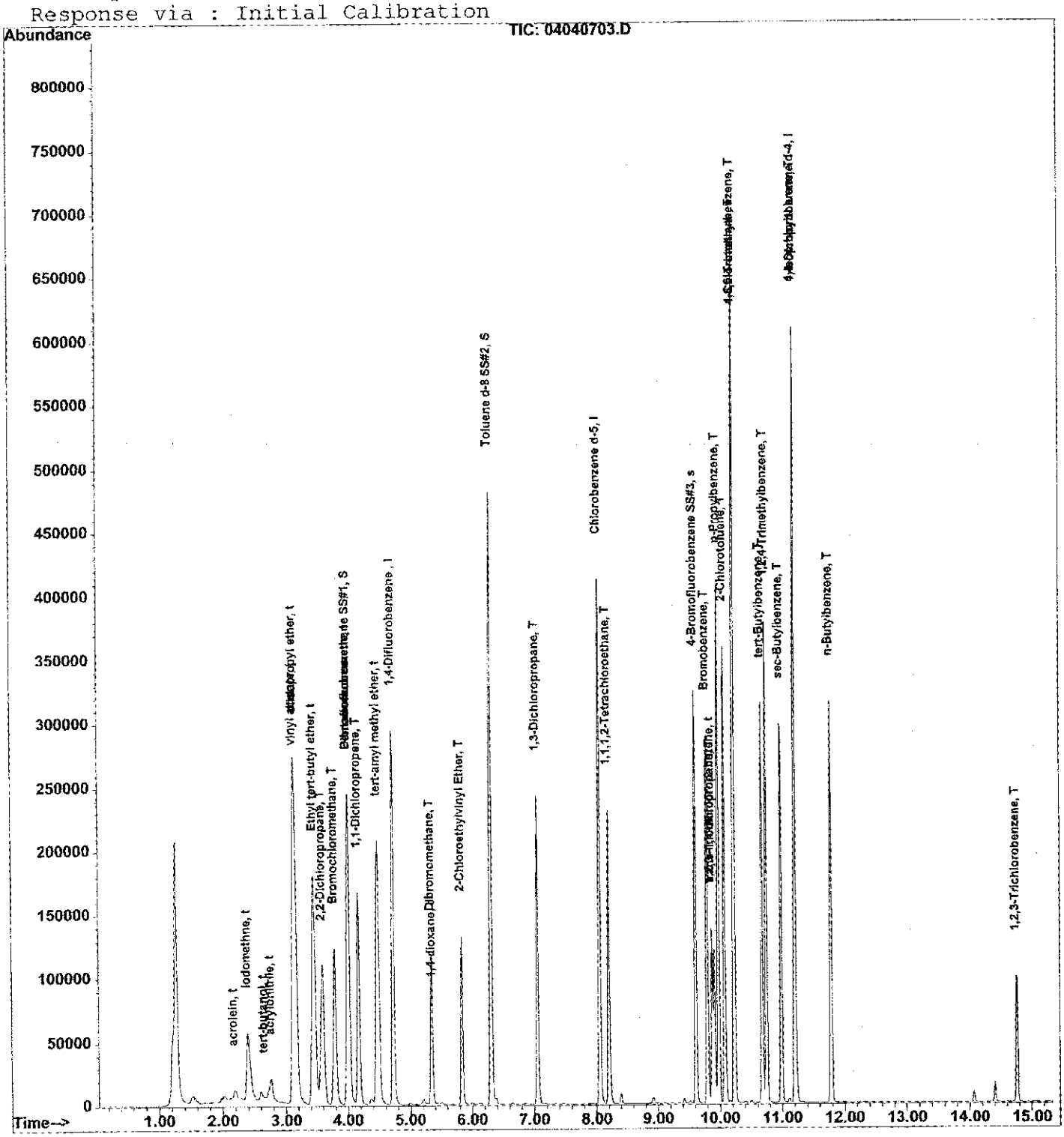
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040407\04040703.D
Acq On : 7 Apr 2004 11:14 am
Sample : UNREG-W, CCV 50ppb
Misc : IS/S 1uL #423, CCV 10uL #416
MS Integration Params: rteint.p
Quant Time: Apr 7 11:55 2004

Vial: 3
Operator: MI
Inst : Instrumen
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\UNREG-W.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Mar 17 15:18:05 2004
Response via : Initial Calibration



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VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04040201.D**	**DATE/TIME ANALYZED:**	**04/02/04 09:52**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	25.5
75	30.0 - 60.0% of mass 95	53.2
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	58.6
175	5.0 - 9.0% of mass 174	7.5
176	Greater than 95.0%, but less than 101.0% of mass 174	99.9
177	5.0 - 9.0% of mass 176	6.8

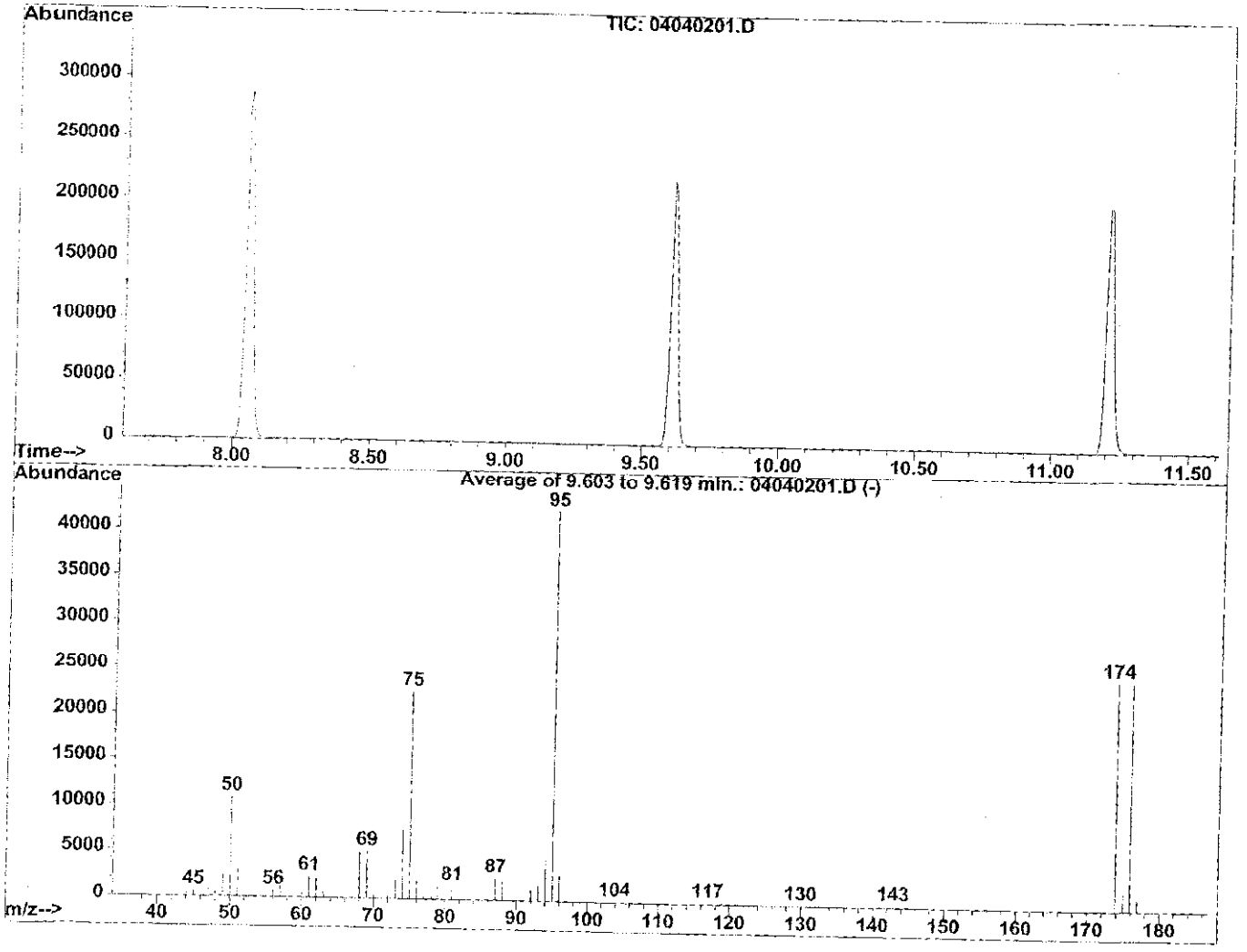
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
TB033004	04033128-01	04040211.D	04/02/04 13:56
DMW-1S-033004	04033128-06	04040218.D	04/02/04 16:57
DMW-6S-033104	04033128-08	04040214.D	04/02/04 15:08
DMW-6I-033104	04033128-10	04040215.D	04/02/04 15:32
DMW-6D-033104	04033128-12	04040216.D	04/02/04 15:56
DMW-2A-033104	04033128-16	04040224.D	04/02/04 19:26

BFB

Data File : C:\HPCHEM\1\DATA\040402\04040201.D
Acq On : 2 Apr 2004 9:52 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1164, 1165, 1166; Background Corrected with Scan 1158

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.5	10810	PASS
75	95	30	60	53.2	22557	PASS
95	95	100	100	100.0	42400	PASS
96	95	5	9	6.5	2738	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	58.6	24853	PASS
175	174	5	9	7.5	1861	PASS
176	174	95	101	99.9	24824	PASS
177	176	5	9	6.8	1697	PASS

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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04040602.D**	**DATE/TIME ANALYZED:**	**04/06/04 10:50**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.4
75	30.0 - 60.0% of mass 95	49.8
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	62.5
175	5.0 - 9.0% of mass 174	7.7
176	Greater than 95.0%, but less than 101.0% of mass 174	101.0
177	5.0 - 9.0% of mass 176	6.5

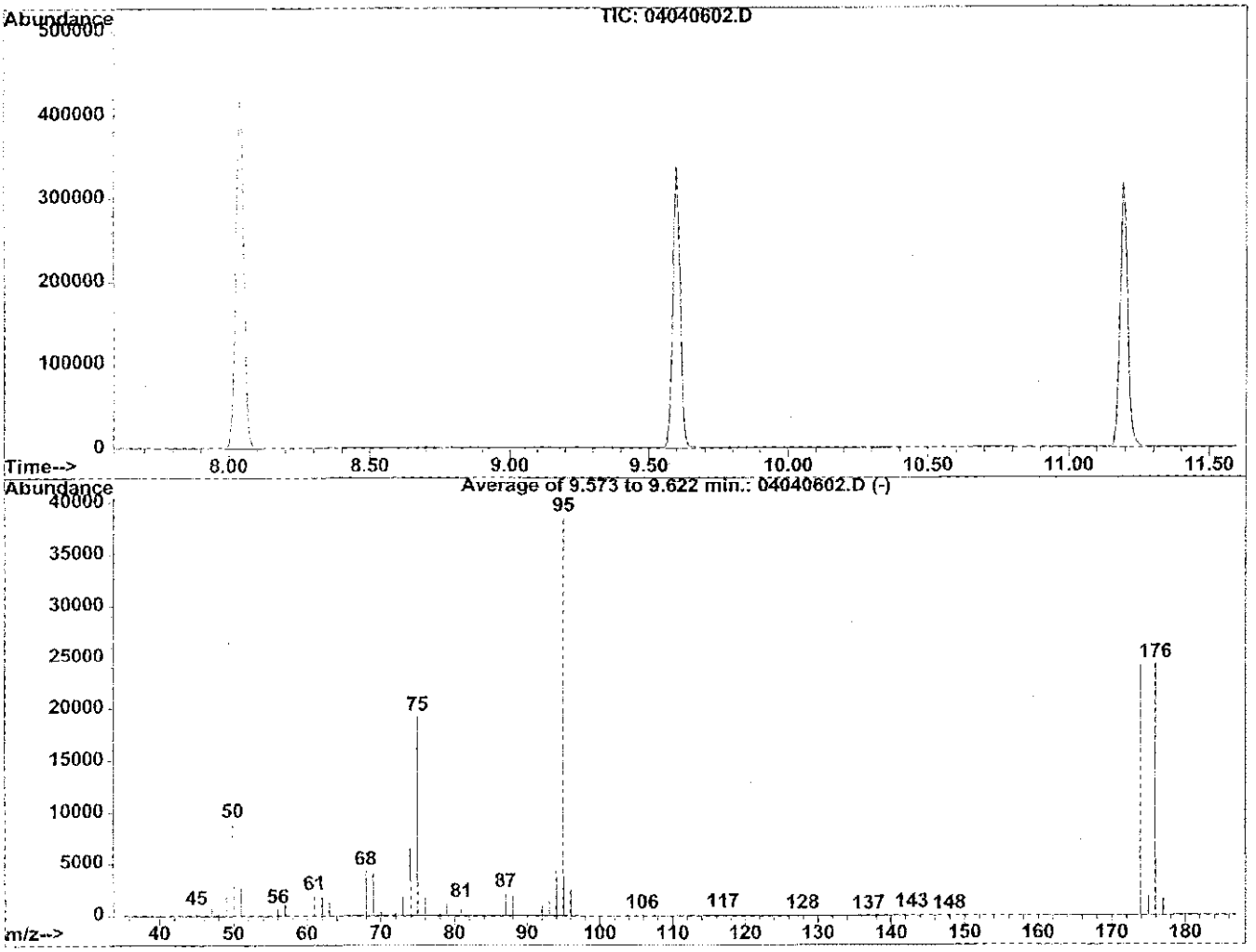
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
04033128-04	DMW-10I-033004	04040617.D	04/06/04 16:56
04033128-14	DMW-6-033104	04040618.D	04/06/04 17:20

BFB

Data File : C:\HPCHEM\1\DATA\040406\04040602.D
Acq On : 6 Apr 2004 10:50 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 2
Operator: MI
Inst : Instrumen
Multiplr: 1.00



Spectrum Information: Average of 9.573 to 9.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	9007	PASS
75	95	30	60	49.8	19182	PASS
95	95	100	100	100.0	38538	PASS
96	95	5	9	6.5	2489	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	62.5	24075	PASS
175	174	5	9	7.7	1846	PASS
176	174	95	101	101.0	24311	PASS
177	176	5	9	6.5	1587	PASS

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6630 BALTIMORE NATIONAL PIKE
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PHASE SEPARATION SCIENCE, INC.

VOLATILE ORGANIC COMPOUNDS
INSTRUMENT AND PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

ANALYSIS:	**GC/MS Volatiles**	**LAB CODE:**	**BFBW**
METHOD:	**EPA 8260**	**LAB SAMPLE ID:**	**BFB Tune**
LAB FILE ID:	**04040701.D**	**DATE/TIME ANALYZED:**	**04/07/04 10:19**

Target Mass	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	23.8
75	30.0 - 60.0% of mass 95	50.6
95	Base peak, 100% relative mass abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	59.2
175	5.0 - 9.0% of mass 174	7.8
176	Greater than 95.0%, but less than 101.0% of mass 174	98.5
177	5.0 - 9.0% of mass 176	6.8

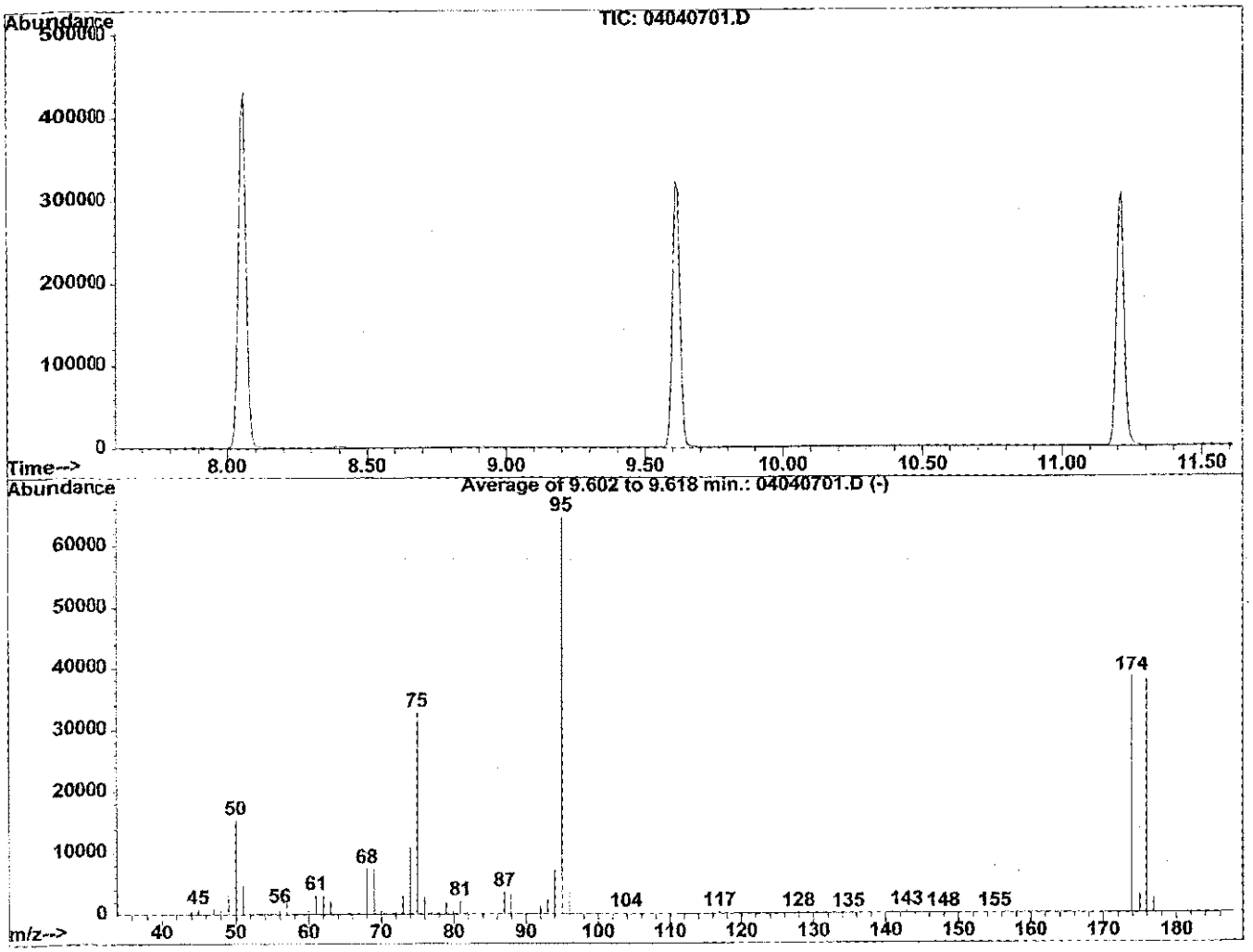
This Tune applies to the following samples:

Sample No.	Lab Sample ID	Lab File ID	Date/Time Analyzed
DMW-10S-033004	04033128-02	04040706.D	4/7/04 14:52

BFB

Data File : C:\HPCHEM\1\DATA\040407\04040701.D
Acq On : 7 Apr 2004 10:19 am
Sample : BFB TUNE Water 5mL
Misc : IS/S 1uL #423
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\TCL-W.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator: MI
Inst : Instrumen
Multiplr: 1.00



AutoFind: Scans 1163, 1164, 1165; Background Corrected with Scan 1157

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	15393	PASS
75	95	30	60	50.6	32667	PASS
95	95	100	100	100.0	64579	PASS
96	95	5	9	6.4	4147	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	59.2	38221	PASS
175	174	5	9	7.8	2986	PASS
176	174	95	101	98.5	37656	PASS
177	176	5	9	6.8	2579	PASS

Injection Log

Directory: c:\hpchem\1\data\040402

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1		04040217.d	1.			
2	1	04040201.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	2 Apr 04 09:52
3	2	04040202.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	2 Apr 04 10:16
4	3	04040203.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	2 Apr 04 10:40
5	4	04040204.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	2 Apr 04 11:04
6	5	04040205.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	2 Apr 04 11:33
7	6	04040206.d	1.	04040113-01 5mL	IS/S 1uL #423	2 Apr 04 11:57
8	7	04040207.d	1.	04040112-04 5mL	IS/S 1uL #423	2 Apr 04 12:21
9	8	04040208.d	1.	04040112-06 5mL	IS/S 1uL #423	2 Apr 04 12:45
10	9	04040209.d	1.	04040109-03 5mL	IS/S 1uL #423	2 Apr 04 13:09
11	10	04040210.d	1.	04040109-04 5mL	IS/S 1uL #423	2 Apr 04 13:32
12	11	04040211.d	1.	04033128-01 5mL (Re-run 10D in seq)	IS/S 1uL #423	2 Apr 04 13:56
13	12	04040212.d	1.	04033128-06 5mL (Re-run 5mL in seq)	IS/S 1uL #423	2 Apr 04 14:20
14	13	04040213.d	1.	04033128-04 5mL	IS/S 1uL #423	2 Apr 04 14:44
15	14	04040214.d	1.	04033128-08 5mL ✓	IS/S 1uL #423	2 Apr 04 15:08
16	15	04040215.d	1.	04033128-10 5mL ✓	IS/S 1uL #423	2 Apr 04 15:32
17	16	04040216.d	1.	04033128-12 5mL ✓	IS/S 1uL #423	2 Apr 04 15:56
18	18	04040218.d	1.	04033128-06 5mL	IS/S 1uL #423	2 Apr 04 16:57
19	19	04040219.d	1.	04040201-01 5mL	IS/S 1uL #423	2 Apr 04 17:21
20	20	04040220.d	1.	04040209-01 5mL	IS/S 1uL #423	2 Apr 04 17:45
21	21	04040221.d	1.	04040209-02 5mL	IS/S 1uL #423	2 Apr 04 18:09
22	22	04040222.d	1.	04040209-03 5mL	IS/S 1uL #423	2 Apr 04 18:33
23	23	04040223.d	1.	04033128-02 10D	IS/S 1uL #423	2 Apr 04 18:59
24	24	04040224.d	1.	04033128-16 10D	IS/S 1uL #423	2 Apr 04 19:26
25	25	04040225.d	1.	04033128-01 10D	IS/S 1uL #423	2 Apr 04 19:53
26	26	04040226.d	1.	04040109-01 20D	IS/S 1uL #423	2 Apr 04 20:19
27	27	04040227.d	1.	04040109-02 20D	IS/S 1uL #423	2 Apr 04 20:46
28	28	04040228.d	1.	04033128-04 100D	IS/S 1uL #423	2 Apr 04 21:13
29	29	04040229.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	2 Apr 04 21:37
30	30	04040230.d	1.	04033128-10 MS 25ppb	IS/S 1uL #423, MS 5uL #350	2 Apr 04 22:01
31	31	04040231.d	1.	04033128-10 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	2 Apr 04 22:25
32	32	04040232.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	2 Apr 04 22:48
33	33	04040233.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	2 Apr 04 23:12

Injection Log

Directory: c:\hpchem\1\data\040406

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1		04040637.d	1.			
2	1	04040601.d	1.	BFB TUNE Soil 5mL	IS/S 1uL #423	6 Apr 04 09:52
3	2	04040602.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	6 Apr 04 10:50
4	3	04040603.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	6 Apr 04 11:14
5	4	04040604.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	6 Apr 04 11:39
6	5	04040605.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	6 Apr 04 12:03
7	6	04040606.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	6 Apr 04 12:27
8	7	04040607.d	1.	04040505-01 5mL	IS/S 1uL #423	6 Apr 04 12:51
9	8	04040608.d	1.	04040505-02 5mL	IS/S 1uL #423	6 Apr 04 13:15
10	9	04040609.d	1.	04033128-16 1000D	IS/S 1uL #423	6 Apr 04 13:38
11	10	04040610.d	1.	04040502-01 5mL	IS/S 1uL #423	6 Apr 04 14:02
12	11	04040611.d	1.	04040507-01 5mL	IS/S 1uL #423	6 Apr 04 14:26
13	12	04040612.d	1.	04040507-02 5mL	IS/S 1uL #423	6 Apr 04 14:51
14	13	04040613.d	1.	04040507-03 5mL	IS/S 1uL #423	6 Apr 04 15:15
15	14	04040614.d	1.	04040507-04 5mL	IS/S 1uL #423	6 Apr 04 15:39
16	15	04040615.d	1.	04040507-05 5mL	IS/S 1uL #423	6 Apr 04 16:03
17	16	04040616.d	1.	04040201-01 5mL	IS/S 1uL #423	6 Apr 04 16:27
18	17	04040617.d	1.	04033128-04 5mL	IS/S 1uL #423	6 Apr 04 16:56
19	18	04040618.d	1.	04033128-14 5mL	IS/S 1uL #423	6 Apr 04 17:20
20	19	04040619.d	1.	04040107-01 10D	IS/S 1uL #423	6 Apr 04 17:47
21	20	04040620.d	1.	04040109-03 10D	IS/S 1uL #423	6 Apr 04 18:14
22	21	04040621.d	1.	04033128-06 20D	IS/S 1uL #423	6 Apr 04 18:40
23	22	04040622.d	1.	04040109-01 100D	IS/S 1uL #423	6 Apr 04 19:07
24	23	04040623.d	1.	04040502-01 MS 25ppb	IS/S 1uL #423, MS 5uL #350	6 Apr 04 23:17
25	24	04040624.d	1.	04040502-01 MSD 25ppb	IS/S 1uL #423, MS 5uL #350	6 Apr 04 23:41
26	25	04040625.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 00:05
27	26	04040626.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 00:29
28	27	04040627.d	1.	BFB TUNE Soil 5mL	IS/S 1uL #423	7 Apr 04 00:55
29	28	04040628.d	1.	METHOD BLANK Soil 5mL	IS/S 1uL #423	7 Apr 04 01:20
30	29	04040629.d	1.	ICal STD TCL-Soil 20ppb	IS/S 1uL #423, ICal 0.5uL #415	7 Apr 04 01:46
31	30	04040630.d	1.	TCL-S, CCV 80ppb	IS/S 1uL #423, CCV 2uL #415	7 Apr 04 02:12
32	31	04040631.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 02:37
33	32	04040632.d	1.	LCS 40ppb	IS/S 1uL #423, LCS 1uL #350	7 Apr 04 03:02
34	33	04040633.d	1.	04040112-03 MS 40ppb	IS/S 1uL #423, MS 1uL #350	7 Apr 04 03:28
35	34	04040634.d	1.	04040112-03 MSD 40ppb	IS/S 1uL #423, MS 1uL #350	7 Apr 04 03:53
36	35	04040635.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 04:19
37	36	04040636.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 09:52

Injection Log

Directory: c:\hpchem\1\data\040407

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	04040701.d	1.	BFB TUNE Water 5mL	IS/S 1uL #423	7 Apr 04 10:19
2	2	04040702.d	1.	TCL-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #415	7 Apr 04 10:50
3	3	04040703.d	1.	UNREG-W, CCV 50ppb	IS/S 1uL #423, CCV 10uL #416	7 Apr 04 11:14
4	4	04040704.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 11:38
5	5	04040705.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 12:02
6	6	04040706.d	1.	04033128-02 5mL	IS/S 1uL #423	7 Apr 04 14:52
7	7	04040707.d	1.	04033128-04 10D	IS/S 1uL #423	7 Apr 04 15:18
8	8	04040708.d	1.	04033128-16 100D	IS/S 1uL #423	7 Apr 04 15:45
9	9	04040709.d	1.	LCS 25ppb	IS/S 1uL #423, LCS 5uL #350	7 Apr 04 16:34
10	10	04040710.d	1.	LCS-1 25ppb	IS/S 1uL #423, LCS 5uL #350	7 Apr 04 16:58
11	11	04040711.d	1.	LCS-1, DUP 25ppb	IS/S 1uL #423, LCS 5uL #350	7 Apr 04 17:22
12	12	04040712.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 17:46
13	13	04040713.d	1.	METHOD BLANK 5mL	IS/S 1uL #423	7 Apr 04 18:10

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

QA/QC SUMMARY DATA

Metals

- *Initial Calibration Verification Summary*
- *Continuing Calibration Verification Summary*
- *Duplicate Summary*
- *Matrix Spike Summary*
- *Method Blank Summary (LRB)*
- *LCS Summary (LFB)*

6630 Baltimore National Pike Baltimore, MD 21228 (800) 932-9047 (410) 747-8770 FAX (410) 788-8723

Batch QC Summary Report

Batch ID:	547	Date:	04/07/04	QC Sample:	04033128-02

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC
Antimony	0.03	114	76 - 116			70 - 130		20		20			
Arsenic	0.16	104	64 - 118			70 - 130		20		20			
Barium	0	106	-64 - 304			70 - 130		20		20			
Beryllium	0	103	66 - 140			70 - 130		20		20			
Cadmium	0.06	106	63 - 116			70 - 130		20		20			
Chromium	0.32	102	63 - 115			70 - 130		20		20			
Copper	1.45	107	58 - 129			70 - 130		20		20			
Iron	24.75	106	89 - 110			70 - 130		20		20			
Lead	0.05	107	63 - 121			70 - 130		20		20			
Mercury	0.01	107	52 - 135			70 - 130		20		20			
Nickel	0	114	63 - 123			70 - 130		20		20			
Selenium	0	106	64 - 120			70 - 130		20		20			
Silver	0	106	53 - 122			70 - 130		20		20			
Thallium	0	101	82 - 107			70 - 130		20		20			
Zinc	0.26	103	17 - 180			70 - 130		20		20			

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC

Associated Samples:

Lab ID	Client ID	Test Group
04033013-02	DMW-3D-032604	PP Metals in Water
04033013-04	DMW-3I-032604	PP Metals in Water
04033013-06	DMW-3S-032604	PP Metals in Water
04033013-08	DMW-9I-032604	PP Metals in Water
04033013-10	DMW-1A-033004	PP Metals in Water
04033013-12	DMW-1B-033004	PP Metals in Water
04033013-14	MW-2-033004	PP Metals in Water
04033118-01	HRP Out	Total Metals in Water
04033118-02	HRP Lagoon	Total Metals in Water
04033128-02	DMW-10S-033004	PP Metals in Water
04033128-04	DMW-10I-033004	PP Metals in Water
04033128-06	DMW-1S-033004	PP Metals in Water
04033128-08	DMW-6S-033104	PP Metals in Water
04033128-10	DMW-6I-033104	PP Metals in Water
04033128-12	DMW-6D-033104	PP Metals in Water
04033128-14	DMW-6-033104	PP Metals in Water
04033128-16	DMW-2A-033104	PP Metals in Water
04040103-01	3321-EI	TCLP - 8 Metals - EPA 1311/200.8
04040108-05	AM#1	Total Metals in Water
04040108-06	AM#2	Total Metals in Water

All Reference Sample QC Report

Data File:	**C:\ICPCHEM\1\DATA\040407B.B\031AREF.D\031AREF.D#**
Date Acquired:	**Apr 7 2004 02:10 pm**
Acq. Method:	**47.M**
Operator:	**Lisa Miller**
Sample Name:	**04033128-02**
Misc Info:	**BATCH 547**
Vial Number:	**3204**
Current Method:	**C:\ICPCHEM\1\DATA\040407B.B\47.M**
Calibration File:	**C:\ICPCHEM\1\DATA\040407B.B\47.C**
Last Cal. Update:	**Apr 07 2004 01:02 pm**
Sample Type:	**AllRef**
Dilution Factor:	**1.00**
Autodil Factor:	**Undiluted**
Final Dil Factor:	**1.00**

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.26	0.26	ppb	2.14	8000.00	
24 Mg	40,370.00	40370.00	ppb	4.88	80000.00	
39 K	23,410.00	23410.00	ppb	4.24	80000.00	
52 Cr	101.80	101.80	ppb	5.72	40000.00	
57 Fe	94,270.00	94270.00	ppb	4.00	80000.00	>LRS
60 Ni	-4.31	-4.31	ppb	8.84	8000.00	
63 Cu	14.74	14.74	ppb	2.69	8000.00	
66 Zn	108.30	108.30	ppb	3.69	8000.00	
75 As	22.48	22.48	ppb	2.91	8000.00	
82 Se	2.40	2.40	ppb	1.81	8000.00	
107 Ag	0.16	0.16	ppb	11.30	8000.00	
111 Cd	0.75	0.75	ppb	8.76	8000.00	
121 Sb	1.26✓	1.26	ppb	0.50	8000.00	
138 Ba	21.94	21.94	ppb	4.18	8000.00	
202 Hg	0.03	0.03	ppb	4.75	8.00	
205 Tl	-0.04	-0.04	ppb	11.67	8000.00	
208 Pb	5.59	5.59	ppb	6.26	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3672138	3.58	3765813	97.5	30 - 140	
45 Sc	3897861	4.86	3527369	110.5	30 - 140	
72 Ge	606842	3.32	548095	110.7	30 - 140	
115 In	3462542	3.56	3570529	97.0	30 - 140	
159 Tb	3609342	3.10	3821942	94.4	30 - 140	
209 Bi	1808303	4.51	2084621	86.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\049SMPL.D\049SMPL.D#
Date Acquired: Apr 7 2004 03:40 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-04
Misc Info: BATCH 547
Vial Number: 3302
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.05	0.05	ppb	18.09	8000.00	
24 Mg	1,170.00	1170.00	ppb	3.57	80000.00	
39 K	713.30	713.30	ppb	1.82	80000.00	
52 Cr	3.86	3.86	ppb	1.37	40000.00	
57 Fe	662.00	662.00	ppb	1.20	80000.00	
60 Ni	-6.02	-6.02	ppb	3.91	8000.00	
63 Cu	4.17	4.17	ppb	2.40	8000.00	
66 Zn	16.75	16.75	ppb	1.64	8000.00	
75 As	0.41	0.41	ppb	16.73	8000.00	
82 Se	0.17	0.17	ppb	9.10	8000.00	
107 Ag	0.13	0.13	ppb	14.73	8000.00	
111 Cd	0.24	0.24	ppb	23.56	8000.00	
121 Sb	2.20	2.20	ppb	9.28	8000.00	
138 Ba	5.61	5.61	ppb	1.31	8000.00	
202 Hg	0.03	0.03	ppb	4.94	8.00	
205 Tl	0.00	0.00	ppb	281.47	8000.00	
208 Pb	1.12	1.12	ppb	3.86	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4036919.50	2.34	3765812.80	107.2	30 - 140	
45 Sc	4199429.00	0.72	3527368.80	119.1	30 - 140	
72 Ge	622252.06	1.12	548094.56	113.5	30 - 140	
115 In	3791502.50	0.81	3570529.00	106.2	30 - 140	
159 Tb	3823756.50	1.80	3821941.50	100.0	30 - 140	
209 Bi	2068498.30	2.03	2084620.60	99.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\053SMPL.D\053SMPL.D#
Date Acquired: Apr 7 2004 04:00 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-06
Misc Info: BATCH 547
Vial Number: 3303
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.02	0.02	ppb	44.33	8000.00	
24 Mg	19,050.00	19050.00	ppb	1.70	80000.00	
39 K	11,070.00	11070.00	ppb	1.29	80000.00	
52 Cr	12.84	12.84	ppb	1.00	40000.00	
57 Fe	30,280.00	30280.00	ppb	0.73	80000.00	
60 Ni	-3.43	-3.43	ppb	1.55	8000.00	
63 Cu	13.02	13.02	ppb	0.91	8000.00	
66 Zn	32.92	32.92	ppb	1.58	8000.00	
75 As	5.54	5.54	ppb	1.98	8000.00	
82 Se	1.48	1.48	ppb	2.43	8000.00	
107 Ag	0.10	0.10	ppb	12.91	8000.00	
111 Cd	1.33	1.33	ppb	7.46	8000.00	
121 Sb	3.06	3.06	ppb	0.96	8000.00	
138 Ba	211.10	211.10	ppb	1.72	8000.00	
202 Hg	0.03	0.03	ppb	25.99	8.00	
205 Tl	0.11	0.11	ppb	7.22	8000.00	
208 Pb	18.35	18.35	ppb	0.82	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3730742.00	2.49	3765812.80	99.1	30 - 140	
45 Sc	4107153.30	1.03	3527368.80	116.4	30 - 140	
72 Ge	592548.69	1.20	548094.56	108.1	30 - 140	
115 In	3495179.00	2.54	3570529.00	97.9	30 - 140	
159 Tb	3608388.80	2.36	3821941.50	94.4	30 - 140	
209 Bi	1791543.30	2.55	2084620.60	85.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\054SMPL.D\054SMPL.D#
Date Acquired: Apr 7 2004 04:05 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-08
Misc Info: BATCH 547
Vial Number: 3304
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.01	0.01	ppb	47.56	8000.00	
24 Mg	30,690.00	30690.00	ppb	3.66	80000.00	
39 K	25,660.00	25660.00	ppb	2.69	80000.00	
52 Cr	1.89	1.89	ppb	5.39	40000.00	
57 Fe	203,300.00	203300.00	ppb	3.34	80000.00	>LRS
60 Ni	-9.55	-9.55	ppb	1.25	8000.00	
63 Cu	0.84	0.84	ppb	5.16	8000.00	
66 Zn	13.41	13.41	ppb	2.10	8000.00	
75 As	6.11	6.11	ppb	1.93	8000.00	
82 Se	1.59	1.59	ppb	1.56	8000.00	
107 Ag	0.06	0.06	ppb	4.18	8000.00	
111 Cd	0.24	0.24	ppb	5.12	8000.00	
121 Sb	0.94	0.94	ppb	4.24	8000.00	
138 Ba	26.47	26.47	ppb	1.11	8000.00	
202 Hg	0.01	0.01	ppb	33.62	8.00	
205 Tl	0.01	0.01	ppb	46.62	8000.00	
208 Pb	0.46	0.46	ppb	3.12	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3719460.80	0.16	3765812.80	98.8	30 - 140	
45 Sc	3982345.30	1.76	3527368.80	112.9	30 - 140	
72 Ge	636555.13	0.47	548094.56	116.1	30 - 140	
115 In	3482584.50	1.15	3570529.00	97.5	30 - 140	
159 Tb	3612551.50	1.32	3821941.50	94.5	30 - 140	
209 Bi	1847800.00	1.97	2084620.60	88.6	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\055SMPL.D\055SMPL.D#
Date Acquired: Apr 7 2004 04:10 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-10
Misc Info: BATCH 547
Vial Number: 3305
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	16.12	16.12	ppb	0.99	8000.00	
24 Mg	33,150.00	33150.00	ppb	1.35	80000.00	
39 K	8,417.00	8417.00	ppb	1.33	80000.00	
52 Cr	37.38	37.38	ppb	0.73	40000.00	
57 Fe	11,050.00	11050.00	ppb	2.18	80000.00	
60 Ni	179.80	179.80	ppb	1.38	8000.00	
63 Cu	480.90	480.90	ppb	1.36	8000.00	
66 Zn	1,469.00	1469.00	ppb	0.39	8000.00	
75 As	9.24 ✓	9.24	ppb	0.27	8000.00	
82 Se	8.19	8.19	ppb	0.51	8000.00	
107 Ag	0.03	0.03	ppb	16.47	8000.00	
111 Cd	127.00	127.00	ppb	1.73	8000.00	
121 Sb	1.52 ✓	1.52	ppb	1.57	8000.00	
138 Ba	17.27	17.27	ppb	2.59	8000.00	
202 Hg	0.05	0.05	ppb	7.51	8.00	
205 Tl	0.41	0.41	ppb	2.77	8000.00	
208 Pb	52.57	52.57	ppb	0.90	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3651798.80	0.38	3765812.80	97.0	30 - 140	
45 Sc	4018057.80	1.55	3527368.80	113.9	30 - 140	
72 Ge	595300.50	1.69	548094.56	108.6	30 - 140	
115 In	3498877.00	2.60	3570529.00	98.0	30 - 140	
159 Tb	3810965.30	0.85	3821941.50	99.7	30 - 140	
209 Bi	1884773.90	2.33	2084620.60	90.4	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\056SMPL.D\056SMPL.D#
Date Acquired: Apr 7 2004 04:15 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-12
Misc Info: BATCH 547
Vial Number: 3306
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.59	0.59	ppb	7.73	8000.00	
24 Mg	11,840.00	11840.00	ppb	1.01	80000.00	
39 K	3,271.00	3271.00	ppb	1.99	80000.00	
52 Cr	81.38	81.38	ppb	0.94	40000.00	
57 Fe	4,157.00	4157.00	ppb	0.63	80000.00	
60 Ni	36.11	36.11	ppb	1.33	8000.00	
63 Cu	12.07	12.07	ppb	1.74	8000.00	
66 Zn	116.10	116.10	ppb	0.89	8000.00	
75 As	2.58	2.58	ppb	4.78	8000.00	
82 Se	3.29	3.29	ppb	4.62	8000.00	
107 Ag	-0.02	-0.02	ppb	33.71	8000.00	
111 Cd	0.96	0.96	ppb	5.06	8000.00	
121 Sb	0.98	0.98	ppb	1.30	8000.00	
138 Ba	52.55	52.55	ppb	3.03	8000.00	
202 Hg	0.51	0.51	ppb	1.84	8.00	
205 Tl	0.00	0.00	ppb	58.24	8000.00	
208 Pb	2.35	2.35	ppb	1.20	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3759671.50	1.90	3765812.80	99.8	30 - 140	
45 Sc	3876095.00	0.41	3527368.80	109.9	30 - 140	
72 Ge	582938.81	1.10	548094.56	106.4	30 - 140	
115 In	3525971.50	1.26	3570529.00	98.8	30 - 140	
159 Tb	3674087.00	0.52	3821941.50	96.1	30 - 140	
209 Bi	1922689.10	2.31	2084620.60	92.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040407B.B\057SMPL.D\057SMPL.D#
Date Acquired: Apr 7 2004 04:20 pm
Acq. Method: 47.M
Operator: Lisa Miller
Sample Name: 04033128-14
Misc Info: BATCH 547
Vial Number: 3307
Current Method: C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File: C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update: Apr 07 2004 01:02 pm
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	1.67	1.67	ppb	3.66	8000.00	
24 Mg	99,430.00	99430.00	ppb	2.04	80000.00	>LRS
39 K	10,630.00	10630.00	ppb	1.09	80000.00	
52 Cr	2.20	2.20	ppb	5.96	40000.00	
57 Fe	94,830.00	94830.00	ppb	2.61	80000.00	>LRS
60 Ni	19.79	19.79	ppb	0.88	8000.00	
63 Cu	5.96	5.96	ppb	0.68	8000.00	
66 Zn	100.70	100.70	ppb	1.04	8000.00	
75 As	1.91	1.91	ppb	3.16	8000.00	
82 Se	4.14	4.14	ppb	3.58	8000.00	
107 Ag	0.01	0.01	ppb	38.72	8000.00	
111 Cd	1.72	1.72	ppb	5.25	8000.00	
121 Sb	0.53	0.53	ppb	2.73	8000.00	
138 Ba	3.95	3.95	ppb	2.16	8000.00	
202 Hg	0.03	0.03	ppb	5.42	8.00	
205 Tl	0.05	0.05	ppb	5.51	8000.00	
208 Pb	0.74	0.74	ppb	3.34	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3490782.50	1.11	3765812.80	92.7	30 - 140	
45 Sc	4047780.80	2.71	3527368.80	114.8	30 - 140	
72 Ge	607269.88	0.97	548094.56	110.8	30 - 140	
115 In	3534290.00	1.22	3570529.00	99.0	30 - 140	
159 Tb	3701238.80	2.39	3821941.50	96.8	30 - 140	
209 Bi	1839105.60	0.32	2084620.60	88.2	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040407B.B\058SMPL.D\058SMPL.D#
Date Acquired:	Apr 7 2004 04:25 pm
Acq. Method:	47.M
Operator:	Lisa Miller
Sample Name:	04033128-16
Misc Info:	BATCH 547
Vial Number:	3308
Current Method:	C:\ICPCHEM\1\DATA\040407B.B\47.M
Calibration File:	C:\ICPCHEM\1\DATA\040407B.B\47.C
Last Cal. Update:	Apr 07 2004 01:02 pm
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	1.83	1.83	ppb	1.70	8000.00	
24 Mg	35,950.00	35950.00	ppb	3.85	80000.00	
39 K	4,482.00	4482.00	ppb	0.87	80000.00	
52 Cr	18.28	18.28	ppb	0.45	40000.00	
57 Fe	56,260.00	56260.00	ppb	0.81	80000.00	
60 Ni	154.10	154.10	ppb	0.59	8000.00	
63 Cu	211.60	211.60	ppb	1.65	8000.00	
66 Zn	549.50	549.50	ppb	1.09	8000.00	
75 As	1.74	1.74	ppb	11.33	8000.00	
82 Se	14.03	14.03	ppb	1.95	8000.00	
107 Ag	0.17	0.17	ppb	10.45	8000.00	
111 Cd	871.50	871.50	ppb	0.45	8000.00	
121 Sb	0.78	0.78	ppb	0.94	8000.00	
138 Ba	17.88	17.88	ppb	2.68	8000.00	
202 Hg	0.60	0.60	ppb	1.35	8.00	
205 Tl	0.13	0.13	ppb	17.17	8000.00	
208 Pb	8.62	8.62	ppb	1.58	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3520487.80	2.47	3765812.80	93.5	30 - 140	
45 Sc	4034121.30	0.88	3527368.80	114.4	30 - 140	
72 Ge	596539.88	0.69	548094.56	108.8	30 - 140	
115 In	3465658.50	2.49	3570529.00	97.1	30 - 140	
159 Tb	3775877.80	2.68	3821941.50	98.8	30 - 140	
209 Bi	1761981.00	1.66	2084620.60	84.5	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040407B.B\002CALB.D\002CALB.D#

Batch QC Summary Report

Batch ID:	506	Date:	04/01/04	QC Sample:	04033013-15

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC
Antimony	0		76 - 116	89.7		70 - 130		20	0.0	20			
Arsenic	0.1		64 - 118	95.6		70 - 130		20	0.0	20			
Beryllium	0		66 - 140	96.8		70 - 130		20	66.7	20			
Cadmium	0		63 - 116	92.7		70 - 130		20	4.4	20			
Chromium	0		63 - 115	87.0		70 - 130		20	23.4	20			
Copper	1.53		58 - 129	79.8		70 - 130		20	18.6	20			
Lead	0.03		63 - 121	83.9		70 - 130		20	17.4	20			
Mercury	0.03		52 - 135	57.0		70 - 130		20	0.0	20			
Nickel	0		63 - 123	69.5		70 - 130		20	0.0	20			
Selenium	0		64 - 120	107.2		70 - 130		20	0.0	20			
Silver	1.21		53 - 122	62.2		70 - 130		20	0.0	20			
Thallium	0		82 - 107	94.1		70 - 130		20	0.0	20			
Zinc	4.78		17 - 180	77.6		70 - 130		20	4.3	20			

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC

Associated Samples:

Lab ID	Client ID	Test Group
04032702-01	B-1, Groundwater	PP Metals in Water Dissolved
04032702-02	B-2, Groundwater	PP Metals in Water Dissolved
04032702-03	B-3, Groundwater	PP Metals in Water Dissolved
04032702-04	B-4, Groundwater	PP Metals in Water Dissolved
04033013-03	DMW-3D-032604 (DISS)	PP Metals in Water Dissolved
04033013-05	DMW-3I-032604 (DISS)	PP Metals in Water Dissolved
04033013-07	DMW-3S-032604 (DISS)	PP Metals in Water Dissolved
04033013-09	DMW-9I-032604 (DISS)	PP Metals in Water Dissolved
04033013-11	DMW-1A-033004 (DISS)	PP Metals in Water Dissolved
04033013-13	DMW-1B-033004 (DISS)	PP Metals in Water Dissolved
04033013-15	MW-2-033004 (DISS)	PP Metals in Water Dissolved
04033123-04	IW-2	Dissolved Metals in Water
04033123-05	IW-3	Dissolved Metals in Water
04033123-06	IW-4	Dissolved Metals in Water
04033123-10	DW	Dissolved Metals in Water
04033128-03	DMW-10S-033004 (DISS)	PP Metals in Water Dissolved
04033128-05	DMW-10I-033004 (DISS)	PP Metals in Water Dissolved
04033128-07	DMW-1S-033004 (DISS)	PP Metals in Water Dissolved
04033128-09	DMW-6S-033104 (DISS)	PP Metals in Water Dissolved
04033128-11	DMW-6I-033104 (DISS)	PP Metals in Water Dissolved

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\040401B.B\033SMPL.D\033SMPL.D#
Date Acquired: Apr 1 2004 08:50 pm
Acq. Method: 2004ppba.M
Operator: Lisa Miller
Sample Name: 04033128-3
Misc Info: BATCH 506
Vial Number: 4203
Current Method: C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File: C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update: Apr 02 2004 07:43 am
Sample Type: Sample
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.04	-0.04	ppb	10.40	8000.00	
52 Cr	4.88	4.88	ppb	3.07	8000.00	
60 Ni	-13.59	-13.59	ppb	1.03	8000.00	
63 Cu	0.27	0.27	ppb	5.80	8000.00	
66 Zn	28.80	28.80	ppb	3.33	8000.00	
75 As	16.51	16.51	ppb	0.14	8000.00	
82 Se	2.07	2.07	ppb	3.69	8000.00	
107 Ag	-0.86	-0.86	ppb	0.95	8000.00	
111 Cd	0.01	0.01	ppb	528.58	8000.00	
121 Sb	-0.04	-0.04	ppb	12.69	8000.00	
202 Hg	0.02	0.02	ppb	23.23	8.00	
205 Tl	-0.01	-0.01	ppb	27.73	8000.00	
208 Pb	0.07	0.07	ppb	3.37	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5786928.00	3.16	5946071.00	97.3	30 - 140	
45 Sc	5180173.50	4.22	4621961.00	112.1	30 - 140	
72 Ge	898722.19	2.45	846061.94	106.2	30 - 140	
115 In	6936875.50	1.08	6905645.50	100.5	30 - 140	
159 Tb	8050286.50	1.74	8253465.50	97.5	30 - 140	
209 Bi	4540063.50	3.01	5359005.50	84.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\034SMPL.D\034SMPL.D#
Date Acquired:	Apr 1 2004 08:55 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-5
Misc Info:	BATCH 506
Vial Number:	4204
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.00	0.00	ppb	1214.50	8000.00	
52 Cr	1.03	1.03	ppb	1.64	8000.00	
60 Ni	-10.47	-10.47	ppb	1.04	8000.00	
63 Cu	1.63	1.63	ppb	4.09	8000.00	
66 Zn	34.90	34.90	ppb	0.47	8000.00	
75 As	0.23	0.23	ppb	6.64	8000.00	
82 Se	0.10	0.10	ppb	23.00	8000.00	
107 Ag	-0.62	-0.62	ppb	10.42	8000.00	
111 Cd	0.02	0.02	ppb	85.16	8000.00	
121 Sb	-0.09	-0.09	ppb	2.94	8000.00	
202 Hg	0.01	0.01	ppb	8.75	8.00	
205 Tl	-0.03	-0.03	ppb	33.02	8000.00	
208 Pb	1.10	1.10	ppb	0.96	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6038838.50	2.81	5946071.00	101.6	30 - 140	
45 Sc	5422012.00	2.04	4621961.00	117.3	30 - 140	
72 Ge	1003940.00	2.28	846061.94	118.7	30 - 140	
115 In	7464278.00	0.83	6905645.50	108.1	30 - 140	
159 Tb	8448357.00	1.42	8253465.50	102.4	30 - 140	
209 Bi	5140724.00	1.89	5359005.50	95.9	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\035SMPL.D\035SMPL.D#
Date Acquired:	Apr 1 2004 09:00 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-7
Misc Info:	BATCH 506
Vial Number:	4205
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.05	-0.05	ppb	6.26	8000.00	
52 Cr	8.31	8.31	ppb	0.37	8000.00	
60 Ni	-14.97	-14.97	ppb	0.37	8000.00	
63 Cu	7.53	7.53	ppb	2.53	8000.00	
66 Zn	11.38	11.38	ppb	1.50	8000.00	
75 As	5.41	5.41	ppb	0.42	8000.00	
82 Se	0.93	0.93	ppb	5.10	8000.00	
107 Ag	-0.89	-0.89	ppb	0.66	8000.00	
111 Cd	-0.02	-0.02	ppb	146.23	8000.00	
121 Sb	0.04	0.04	ppb	41.48	8000.00	
202 Hg	0.01	0.01	ppb	6.66	8.00	
205 Tl	-0.07	-0.07	ppb	4.34	8000.00	
208 Pb	0.04	0.04	ppb	10.86	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5911012.50	2.04	5946071.00	99.4	30 - 140	
45 Sc	5196351.00	3.04	4621961.00	112.4	30 - 140	
72 Ge	893125.69	1.15	846061.94	105.6	30 - 140	
115 In	6877569.00	2.05	6905645.50	99.6	30 - 140	
159 Tb	7928277.50	1.81	8253465.50	96.1	30 - 140	
209 Bi	4434271.00	2.32	5359005.50	82.7	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\036SMPL.D\036SMPL.D#
Date Acquired:	Apr 1 2004 09:05 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-9
Misc Info:	BATCH 506
Vial Number:	4206
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	-0.04	-0.04	ppb	10.93	8000.00	
52 Cr	17.98	17.98	ppb	2.65	8000.00	
60 Ni	-13.42	-13.42	ppb	1.44	8000.00	
63 Cu	0.26	0.26	ppb	38.72	8000.00	
66 Zn	16.41	16.41	ppb	1.79	8000.00	
75 As	7.10	7.10	ppb	0.38	8000.00	
82 Se	1.56	1.56	ppb	3.16	8000.00	
107 Ag	-0.86	-0.86	ppb	1.23	8000.00	
111 Cd	0.07	0.07	ppb	7.88	8000.00	
121 Sb	0.04	0.04	ppb	20.11	8000.00	
202 Hg	0.00	0.00	ppb	28.60	8.00	
205 Tl	-0.06	-0.06	ppb	9.62	8000.00	
208 Pb	0.36	0.36	ppb	0.78	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6429558.00	3.69	5946071.00	108.1	30 - 140	
45 Sc	5591946.00	1.05	4621961.00	121.0	30 - 140	
72 Ge	1030361.40	2.39	846061.94	121.8	30 - 140	
115 In	7207250.50	1.27	6905645.50	104.4	30 - 140	
159 Tb	8037604.00	1.34	8253465.50	97.4	30 - 140	
209 Bi	4652452.00	1.95	5359005.50	86.8	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\040SMPL.D\040SMPL.D#
Date Acquired:	Apr 1 2004 09:24 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-11
Misc Info:	BATCH 506
Vial Number:	4207
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	16.20	16.20	ppb	1.39	8000.00	
52 Cr	9.79	9.79	ppb	0.37	8000.00	
60 Ni	103.80	103.80	ppb	1.48	8000.00	
63 Cu	78.73	78.73	ppb	0.92	8000.00	
66 Zn	530.70	530.70	ppb	2.04	8000.00	
75 As	0.73	0.73	ppb	5.93	8000.00	
82 Se	7.40	7.40	ppb	1.06	8000.00	
107 Ag	-0.81	-0.81	ppb	2.74	8000.00	
111 Cd	2.30	2.30	ppb	2.05	8000.00	
121 Sb	-0.07	-0.07	ppb	9.26	8000.00	
202 Hg	0.01	0.01	ppb	22.13	8.00	
205 Tl	0.22	0.22	ppb	4.38	8000.00	
208 Pb	2.86	2.86	ppb	1.88	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5748018.50	0.75	5946071.00	96.7	30 - 140	
45 Sc	5101670.50	0.48	4621961.00	110.4	30 - 140	
72 Ge	896900.56	1.67	846061.94	106.0	30 - 140	
115 In	7002877.50	1.43	6905645.50	101.4	30 - 140	
159 Tb	8456932.00	1.97	8253465.50	102.5	30 - 140	
209 Bi	4918497.00	3.23	5359005.50	91.8	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Batch QC Summary Report

Batch ID:	507	Date:	04/01/04	QC Sample:	04033026-18

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC
Antimony			76 - 116			70 - 130		20	0.0	20			
Arsenic			64 - 118			70 - 130		20	2.4	20			
Beryllium			66 - 140			70 - 130		20	0.0	20			
Cadmium			63 - 116			70 - 130		20	33.3	20			
Chromium			63 - 115			70 - 130		20	56.4	20			
Copper			58 - 129			70 - 130		20	0.0	20			
Lead			63 - 121			70 - 130		20	0.0	20			
Mercury			52 - 135			70 - 130		20		20			
Nickel			63 - 123			70 - 130		20	0.0	20			
Selenium			64 - 120			70 - 130		20	2.4	20			
Silver			53 - 122			70 - 130		20		20			
Thallium			82 - 107			70 - 130		20	0.0	20			
Zinc			17 - 180			70 - 130		20	9.7	20			

Analysis	Prep Blank	LCS %Rec	LCS Control Limits	MS %Rec	MSD %Rec	MS Control Limits	MS RPD	MS RPD Limit	DUP RPD	DUP RPD Limit	PDS %Rec	Dil Agree	LRC

Associated Samples:

Lab ID	Client ID	Test Group
04033026-02	6937-3/04-W1	PP Metals in Water Dissolved
04033026-03	6937-3/04-W2	PP Metals in Water Dissolved
04033026-04	6937-3/04-W4	PP Metals in Water Dissolved
04033026-05	6937-3/04-W6	PP Metals in Water Dissolved
04033026-06	6937-3/04-W3	PP Metals in Water Dissolved
04033026-08	6937-3/04-W9	PP Metals in Water Dissolved
04033026-09	6937-3/04-W8	PP Metals in Water Dissolved
04033026-10	6937-3/04-SW5	PP Metals in Water Dissolved
04033026-11	6937-3/04-SW4	PP Metals in Water Dissolved
04033026-12	6937-3/04-SW3	PP Metals in Water Dissolved
04033026-13	6937-3/04-SW2	PP Metals in Water Dissolved
04033026-14	6937-3/04-SW1	PP Metals in Water Dissolved
04033026-15	6937-3/04-SW1 MS	PP Metals in Water Dissolved
04033026-16	6937-3/04-SW1 MSD	PP Metals in Water Dissolved
04033026-17	6937-3/04-W10	PP Metals in Water Dissolved
04033026-18	6937-3/04-BKFD	PP Metals in Water Dissolved
04033128-13	DMW-6D-033104 (DISS)	PP Metals in Water Dissolved
04033128-15	DMW-6-033104 (DISS)	PP Metals in Water Dissolved
04033128-17	DMW-2A-033104 (DISS)	PP Metals in Water Dissolved

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\041SMPL.D\041SMPL.D#
Date Acquired:	Apr 1 2004 09:29 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-13
Misc Info:	BATCH 507
Vial Number:	4208
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	0.50	0.50	ppb	5.50	8000.00	
52 Cr	1.68	1.68	ppb	2.78	8000.00	
60 Ni	24.54	24.54	ppb	3.19	8000.00	
63 Cu	4.30	4.30	ppb	2.72	8000.00	
66 Zn	101.80	101.80	ppb	0.52	8000.00	
75 As	0.36	0.36	ppb	3.34	8000.00	
82 Se	2.34	2.34	ppb	4.36	8000.00	
107 Ag	-0.83	-0.83	ppb	1.80	8000.00	
111 Cd	0.62	0.62	ppb	2.28	8000.00	
121 Sb	-0.11	-0.11	ppb	4.30	8000.00	
202 Hg	0.01	0.01	ppb	17.09	8.00	
205 Tl	0.06	0.06	ppb	23.07	8000.00	
208 Pb	0.63	0.63	ppb	3.13	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5861328.00	1.58	5946071.00	98.6	30 - 140	
45 Sc	4987110.50	1.14	4621961.00	107.9	30 - 140	
72 Ge	917213.06	2.59	846061.94	108.4	30 - 140	
115 In	7016175.00	1.35	6905645.50	101.6	30 - 140	
159 Tb	8234995.00	1.22	8253465.50	99.8	30 - 140	
209 Bi	4917206.00	2.67	5359005.50	91.8	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\042SMPL.D\042SMPL.D#
Date Acquired:	Apr 1 2004 09:34 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-15
Misc Info:	BATCH 507
Vial Number:	4209
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	1.40	1.40	ppb	4.92	8000.00	
52 Cr	3.69	3.69	ppb	1.87	8000.00	
60 Ni	10.62	10.62	ppb	6.03	8000.00	
63 Cu	4.62	4.62	ppb	0.15	8000.00	
66 Zn	92.18	92.18	ppb	1.01	8000.00	
75 As	0.98	0.98	ppb	3.36	8000.00	
82 Se	3.55	3.55	ppb	4.74	8000.00	
107 Ag	-0.91	-0.91	ppb	0.84	8000.00	
111 Cd	1.29	1.29	ppb	6.99	8000.00	
121 Sb	-0.07	-0.07	ppb	8.15	8000.00	
202 Hg	0.01	0.01	ppb	7.55	8.00	
205 Tl	0.09	0.09	ppb	3.43	8000.00	
208 Pb	0.49	0.49	ppb	1.69	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5409309.50	1.29	5946071.00	91.0	30 - 140	
45 Sc	4811953.50	2.95	4621961.00	104.1	30 - 140	
72 Ge	848734.94	1.07	846061.94	100.3	30 - 140	
115 In	6561780.00	1.00	6905645.50	95.0	30 - 140	
159 Tb	7885254.00	1.86	8253465.50	95.5	30 - 140	
209 Bi	4447157.00	3.06	5359005.50	83.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\040401B.B\043SMPL.D\043SMPL.D#
Date Acquired:	Apr 1 2004 09:39 pm
Acq. Method:	2004ppba.M
Operator:	Lisa Miller
Sample Name:	04033128-17
Misc Info:	BATCH 507
Vial Number:	4210
Current Method:	C:\ICPCHEM\1\DATA\040401B.B\2004ppba.M
Calibration File:	C:\ICPCHEM\1\DATA\040401B.B\2004PPBA.C
Last Cal. Update:	Apr 02 2004 07:43 am
Sample Type:	Sample
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Elements

Element	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	2.01	2.01	ppb	2.71	8000.00	
52 Cr	8.05	8.05	ppb	1.04	8000.00	
60 Ni	119.20	119.20	ppb	2.20	8000.00	
63 Cu	40.26	40.26	ppb	0.55	8000.00	
66 Zn	536.50	536.50	ppb	1.59	8000.00	
75 As	-0.11	-0.11	ppb	68.45	8000.00	
82 Se	12.18	12.18	ppb	3.29	8000.00	
107 Ag	-0.89	-0.89	ppb	0.74	8000.00	
111 Cd	761.50	761.50	ppb	0.49	8000.00	
121 Sb	-0.07	-0.07	ppb	6.75	8000.00	
202 Hg	0.00	0.00	ppb	30.49	8.00	
205 Tl	0.17	0.17	ppb	10.05	8000.00	
208 Pb	3.73	3.73	ppb	0.45	40000.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5398333.00	0.75	5946071.00	90.8	30 - 140	
45 Sc	4987009.50	1.07	4621961.00	107.9	30 - 140	
72 Ge	851844.94	1.51	846061.94	100.7	30 - 140	
115 In	6488202.00	0.85	6905645.50	94.0	30 - 140	
159 Tb	8071598.00	0.94	8253465.50	97.8	30 - 140	
209 Bi	4339123.50	2.02	5359005.50	81.0	30 - 140	

ISTD Ref File : C:\ICPCHEM\1\DATA\040401B.B\002CALB.D\002CALB.D#