



May 12, 2009

Kamron Saremi  
Santa Ana Regional Water Quality Control Board  
3737 Main St., Suite 500  
Riverside, CA 92501

Subject: Revised copy of the *On-Site Biotreatment and Disposal of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California*

Dear Mr. Saremi,

Please accept a revised copy of the *On-Site Biotreatment and Disposal of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California*. The table for the summary of analytical results was inadvertently omitted from the original submitted yesterday, May 11, 2009.

Please accept our apologies for this oversight. If you have any questions, please do not hesitate to contact us at (909) 381-1674.

Sincerely,

**Tetra Tech, Inc.**

A handwritten signature in blue ink, appearing to read 'Mark Feldman', followed by a horizontal line.

Mark Feldman, CHG CEG  
Senior Geochemist

A handwritten signature in blue ink, appearing to read 'Thomas J. Villeneuve', followed by a horizontal line.

Thomas Villeneuve, PE  
Project Manager

Enclosure: As stated

cc: Denise Kato, Lockheed-Martin (1 pdf only)  
Gene Matsushita, Lockheed-Martin (1 hard copy and 1 pdf)



May 11, 2009

Mr. Kamron Saremi  
Santa Ana Regional Water Quality Control Board  
3737 Main St., Suite 500  
Riverside, CA 92501

SUBJECT: On-Site Biotreatment And Disposal Of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California

Dear Mr. Saremi:

The following letter has been prepared by Tetra Tech, Inc. on behalf of Lockheed Martin Corporation (LMC) in support of a planned request to discharge treated water to land at LMC Beaumont Site 2, located southwest of the City of Beaumont in Riverside County, California (the Site; Figure 1). The water was produced during recent site investigation activities at the Site, which are being conducted with oversight from the California Department of Toxic Substances Control (DTSC). Site activities which resulted in generation of the water include drilling, well development, groundwater sampling, and equipment decontamination. The water is currently being stored on-Site in two 20,000-gallon portable aboveground tanks and one roll-off bin.

LMC is in the process of conducting on-site biotreatment of the water to reduce perchlorate concentrations in the water to levels below the California Maximum Contaminant Level (MCL) of 6 µg/L. At the conclusion of treatment, and with the concurrence of the Santa Ana Regional Water Quality Control Board (SARWQCB), LMC wishes to discharge the treated water to an ephemeral drainage in Laborde Canyon, approximately three miles north of the junction between Laborde Canyon and the San Jacinto Valley. The location of the proposed discharge point is shown in Figure 2.

This letter provides the results of a pilot test of the biotreatment process, information on amendments used in the process, and information on full-scale implementation of the bioremediation process, which has been initiated. This information is being provided in response to a telephone conversation between you and Tom Villeneuve and Mark Feldman of Tetra Tech held on May 6, 2009.

### **Water Treatment Pilot Test**

The primary chemical of concern in the water is perchlorate, which is readily biodegradable under anaerobic conditions. A small-scale pilot test was conducted to evaluate use of anaerobic biodegradation to treat the water for potential onsite discharge. The pilot test consisted of filling a 55-gallon polyethylene drum with water from one of the aboveground tanks. The drum was then amended with a small amount of sediment collected from a bin used to settle solids from the water prior to transfer to the tanks (microorganism source), three pounds of food-grade glycerine (electron donor) and approximately 20 grams of diammonium phosphate (nutrient). The drum was then sealed to allow anaerobic conditions to develop. The drum was briefly stirred once per day for the duration of the pilot test using a wooden stake inserted through a bung in the drum lid.

The water tank was initially sampled for disposal purposes in January 2008. Additional samples of the drum contents were collected prior to adding the amendments. Progress samples were collected at 7 and 15 days

after the start of the test, and final confirmation samples were collected approximately 19 days after the start of the test. The initial water tank samples and/or the initial drum samples were analyzed for the following:

- Perchlorate (EPA Method 332.0)
- VOCs (EPA Method 8260B; tank sample only)
- TPH as gasoline and diesel (EPA Method 8015m; tank sample only)
- California Title 22 Metals (EPA Methods 6020/ 200.8; filtered samples)
- Nitrate (EPA Method 300.0)
- Orthophosphate Phosphorous (SM 4500P)
- Total Organic Carbon (TOC; SM 5310B)

The progress samples were analyzed for perchlorate only. The final confirmation samples were analyzed for most of the same compounds as the initial samples. Analytical results for the pilot test are summarized in Table 1; copies of the laboratory reports are provided in Attachment 1.

Briefly, the results of the pilot test were as follows:

- Biotreatment reduced perchlorate concentrations in the water to essentially non-detectable levels within approximately two to three weeks.
- The treatment process did not result in significant changes in dissolved metals concentrations, indicating that the anaerobic conditions under which biodegradation occurred did not result in undesirable solubilization of metals.
- Due to the uncertainty of the quantity of glycerine needed to achieve the appropriate redox conditions, the drum was dosed generously. As a result, phosphate and TOC concentrations increased slightly in the post-treatment sample. The quantity of amendments added for full-scale treatment will therefore be reduced accordingly.

Based on the results of the pilot test, full-scale treatment of the water tanks has been initiated. Treatment consists of amending each tank with approximately 27.5 gallons of water from the pilot test drum, 50 pounds of glycerine, and 2 pounds of diammonium phosphate, and closing off hatches and vents on the tanks to allow anaerobic conditions to develop. The glycerine dosage rate is approximately 22 times less than used in the pilot test; if necessary, additional glycerin can be added to maintain the appropriate redox conditions. The tanks are stirred for approximately 1 hour every other day using a high-volume pump. Copies of vendor receipts and Material Safety Data Sheets for the amendments are provided in Attachment 2. Testing is being conducted on an on-going basis to monitor the progress of biodegradation.

### **Proposed Confirmation Testing Protocol**

Prior to discharging the contents of the water tanks to land, LMC proposes to collect one sample from each tank for analysis of the following:

- Perchlorate
- California Title 22 Metals (filtered samples)
- Nitrate
- Orthophosphate Phosphorous
- TOC

Saremi  
May 11, 2009  
Page 3 of 3

Based on the results of the pilot test, LMC requests that the SARWQCB provide concurrence that discharge of the treated water to land is an acceptable disposal option. The results of the confirmation sampling will be provided in a future submittal to the SARWQCB for review and final approval prior to discharging the water.

If you have any questions regarding this letter, please feel free to contact Tom Villeneuve or Mark Feldman of Tetra Tech at (909) 381-1674.

Sincerely,

**Tetra Tech, Inc.**



Mark Feldman, CHG CEG  
Senior Geochemist



Thomas Villeneuve, PE  
Project Manager

MF:dc

Attachments:     Table 1 – Pilot Test Results  
                         Figure 1 – Site Location Map  
                         Figure 2 – Proposed Discharge Point  
                         Attachment 1 – Laboratory Reports  
                         Attachment 2 – Amendment Receipts and Material Safety Data Sheets

cc:     Denise Kato (1 pdf only)  
         Gene Matsushita, LMC (1 hard copy & 1 pdf)

**TABLE 1**  
**Summary of Analytical Results**  
**Biotreatment Pilot Test**  
**LMC Beaumont Site 2**

| Analyte                                              | Disposal Water Container | IDW1-031109 | IDW-011809 | IDW-032609 | IDW1-033009 |
|------------------------------------------------------|--------------------------|-------------|------------|------------|-------------|
|                                                      | 01/09/09                 | 03/11/09    | 03/18/09   | 03/26/09   | 03/30/09    |
| <b>Perchlorate<sup>1</sup> (µg/L)</b>                | 3,100                    | 2,200       | 1,600      | <0.071     | 0.39        |
| <b>TPH gasoline<sup>2</sup> (mg/L)</b>               | <0.024                   | -           | -          | -          | -           |
| <b>TPH diesel<sup>2</sup> (mg/L)</b>                 | <0.46                    | -           | -          | -          | -           |
| <b>VOCs<sup>3</sup> (µg/L)</b>                       | All ND                   | -           | -          | -          | -           |
| <b>Dissolved Metals<sup>4</sup> (mg/L)</b>           |                          |             |            |            |             |
| Antimony                                             | -                        | <0.0030     | -          | -          | <0.0030     |
| Arsenic                                              | -                        | 0.0054      | -          | -          | 0.009       |
| Barium                                               | -                        | 0.18        | -          | -          | 0.15        |
| Beryllium                                            | -                        | 0.00058 J   | -          | -          | 0.00052 J   |
| Cadmium                                              | -                        | 0.000098 J  | -          | -          | 0.00014 J   |
| Total Chromium                                       | -                        | 0.029       | -          | -          | 0.034       |
| Cobalt                                               | -                        | 0.0059 J    | -          | -          | 0.0049 J    |
| Copper                                               | -                        | 0.019       | -          | -          | 0.014       |
| Lead                                                 | -                        | 0.0071      | -          | -          | 0.005       |
| Mercury                                              | -                        | <0.000032   | -          | -          | <0.000032   |
| Molybdenum                                           | -                        | 0.056       | -          | -          | 0.065       |
| Nickel                                               | -                        | 0.0098 J    | -          | -          | 0.0091 J    |
| Selenium                                             | -                        | 0.0027 J    | -          | -          | <0.0025     |
| Silver                                               | -                        | <0.0050     | -          | -          | <0.0050     |
| Thallium                                             | -                        | <0.00098    | -          | -          | <0.00098    |
| Vanadium                                             | -                        | 0.049       | -          | -          | 0.029       |
| Zinc                                                 | -                        | 0.026       | -          | -          | 0.025       |
| <b>Nitrate<sup>5</sup> (mg/L)</b>                    | -                        | 0.14        | -          | -          | <0.11       |
| <b>Orthophosphate Phosphorous<sup>6</sup> (mg/L)</b> | -                        | 4.1         | -          | -          | 13          |
| <b>Total Organic Carbon<sup>7</sup> (mg/L)</b>       | -                        | 740         | -          | -          | 2,900       |

Notes

- indicates not analyzed.

< indicates concentration below specified method detection limit (MDL).

J indicates estimated concentration.

ND indicates not detected above MDL; MDL varies by compound.

mg/L: milligrams per liter

µg/L: micrograms per liter

1) EPA Method 332.0

2) EPA Method 8015m

3) EPA Method 8260B

4) EPA Method 6020/200.8. Only results for filtered samples are shown.

5) EPA Method 300.0

6) Standard Method 4500P

7) Standard Method 5310B





Adapted from:

U.S. Census Bureau TIGER line data, 2000.

### LEGEND

County Boundary

Beaumont Site 2

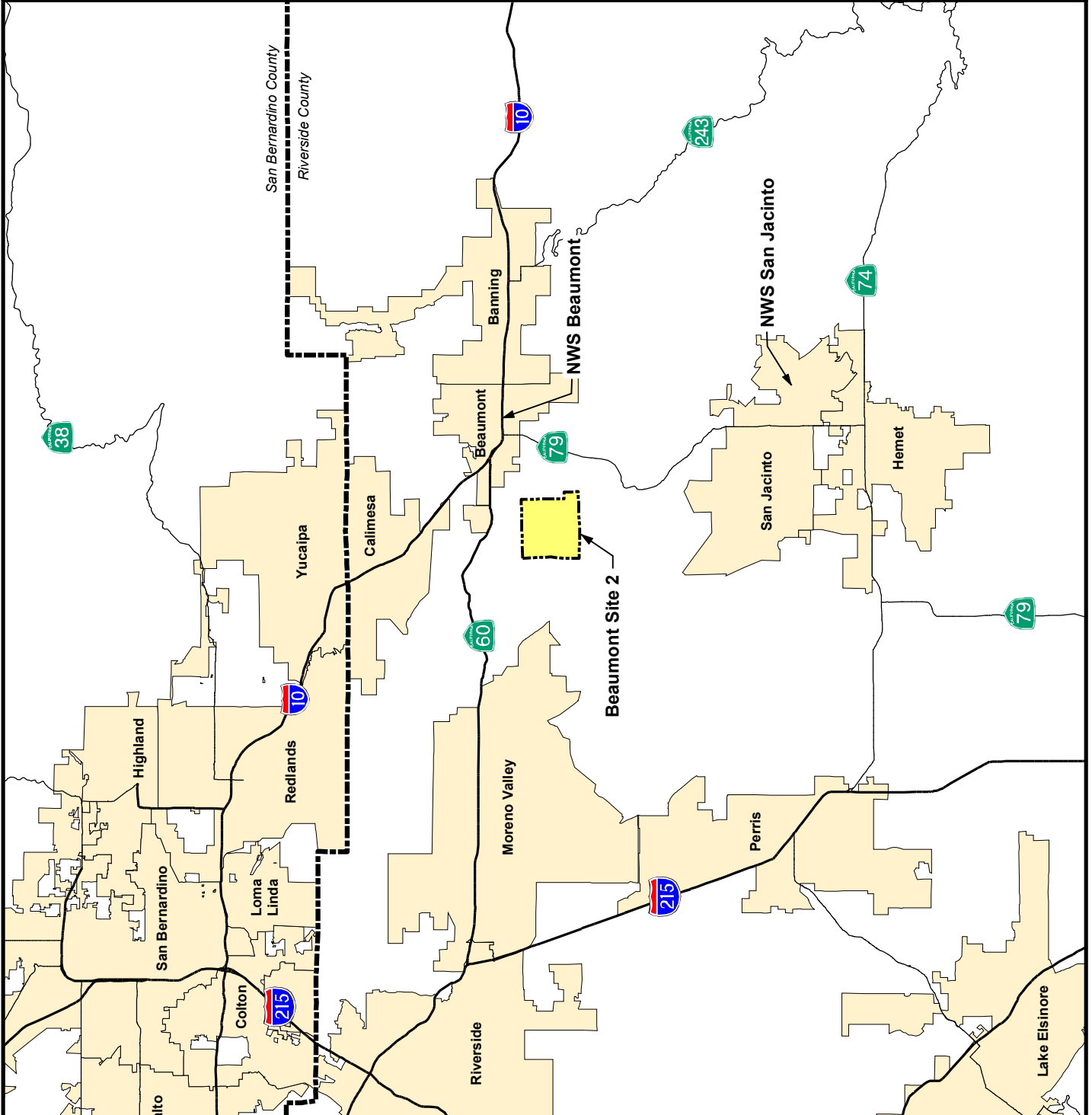
Property Boundary



Beaumont Site 2

### Figure 1

Regional Location of  
Beaumont Site 2







Discharge  
Point Location

Laborde

Canyon

Gilman Springs Rd.

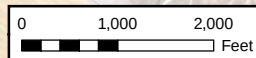
**LEGEND**



Discharge Point



Beaumont Site 2  
Property Boundary



Beaumont Site 2

**Figure 2**

**Discharge Point Location**



TETRA TECH





Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

**Work Order Number: A9A0762**

Received on Ice (Y/N): Yes Temp: 15 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>                  | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>        | <u>Date Submitted</u> | <u>By</u>        |
|---------------------|------------------------------------------|---------------|---------------------|------------------|-----------------------|------------------|
| A9A0762-01          | Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00      | Fernando Ramirez | 01/09/09 16:44        | Fernando Ramirez |
| A9A0762-02          | TB-010909 Beaumont Site 2                | Liquid        | 01/09/09 15:15      | Fernando Ramirez | 01/09/09 16:44        | Fernando Ramirez |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number  
**A9A0762-01**

|                                          |               |                          |                           |
|------------------------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u>                | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                                     | Result  | RDL      | MDL     | Units | Method    | Analysis Date  | Analyst | Flag  |
|------------------------------------------------|---------|----------|---------|-------|-----------|----------------|---------|-------|
| <b>Metals and Metalloids</b>                   |         |          |         |       |           |                |         |       |
| Mercury                                        | 0.00028 | 0.0050   | 0.00016 | mg/L  | EPA 200.8 | 01/13/09 12:28 | ap      | J     |
| <b>Metals and Metalloids; EPA SW846 Series</b> |         |          |         |       |           |                |         |       |
| Antimony                                       | ND      | 0.030    | 0.015   | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Arsenic                                        | 0.031   | 0.010    | 0.0081  | mg/L  | EPA 6020  | 01/13/09 14:23 | krv     |       |
| Barium                                         | 1.3     | 0.50     | 0.00028 | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Beryllium                                      | 0.0045  | 0.0050   | 0.00086 | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      | J     |
| Cadmium                                        | 0.00045 | 0.0050   | 0.00039 | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      | J     |
| Total Chromium                                 | 0.24    | 0.050    | 0.0025  | mg/L  | EPA 6020  | 01/13/09 17:04 | ap      |       |
| Cobalt                                         | 0.050   | 0.050    | 0.0014  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Copper                                         | 0.13    | 0.050    | 0.0095  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Lead                                           | 0.045   | 0.025    | 0.00042 | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Molybdenum                                     | 0.088   | 0.050    | 0.0045  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Nickel                                         | 0.088   | 0.050    | 0.0075  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Selenium                                       | ND      | 0.025    | 0.012   | mg/L  | EPA 6020  | 01/13/09 14:23 | krv     |       |
| Silver                                         | ND      | 0.050    | 0.025   | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Thallium                                       | ND      | 0.0050   | 0.0049  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| Vanadium                                       | 0.29    | 0.050    | 0.013   | mg/L  | EPA 6020  | 01/13/09 17:04 | ap      |       |
| Zinc                                           | 0.25    | 0.050    | 0.0070  | mg/L  | EPA 6020  | 01/13/09 12:28 | ap      |       |
| <b>Diesel Range Organics by EPA 8015</b>       |         |          |         |       |           |                |         |       |
| Diesel Range Hydrocarbons                      | ND      | 2.0      | 0.46    | mg/L  | EPA 8015B | 01/13/09 03:13 | cth     |       |
| Surrogate: Decachlorobiphenyl                  | 89.3    | % 56-117 |         |       | EPA 8015B | 01/13/09 03:13 | cth     |       |
| <b>Gasoline Range Organics by EPA 8015</b>     |         |          |         |       |           |                |         |       |
| Gasoline Range Organics                        | ND      | 0.050    | 0.024   | mg/L  | EPA 8015B | 01/12/09 23:19 | CTH     | NRPDo |
| Surrogate: a,a,a-Trifluorotoluene              | 90.1    | % 50-150 |         |       | EPA 8015B | 01/12/09 23:19 | CTH     |       |



**E.S.BABCOCK & Sons, Inc.**

Environmental Laboratories *est. 1906*

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number

**A9A0762-01**

| <u>Sample Description</u>                | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|------------------------------------------|---------------|--------------------------|---------------------------|
| Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                              | Result | RDL  | MDL   | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|--------|------|-------|-------|-----------|----------------|---------|------|
| Volatile Organic Compounds by EPA 8260B |        |      |       |       |           |                |         |      |
| 1,1,1-Trichloroethane                   | ND     | 0.50 | 0.12  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,1,2,2-Tetrachloroethane               | ND     | 0.50 | 0.29  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,1,2-Trichloroethane                   | ND     | 0.50 | 0.31  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,1-Dichloroethane                      | ND     | 0.50 | 0.098 | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,1-Dichloroethene                      | ND     | 0.50 | 0.12  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,2-Dichlorobenzene                     | ND     | 0.50 | 0.20  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,2-Dichloroethane                      | ND     | 0.50 | 0.21  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,2-Dichloropropane                     | ND     | 0.50 | 0.19  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,3-Dichlorobenzene                     | ND     | 0.50 | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 1,4-Dichlorobenzene                     | ND     | 0.50 | 0.072 | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 2-Butanone(MEK)                         | ND     | 3.0  | 1.2   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 2-Hexanone                              | ND     | 5.0  | 1.2   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| 4-Methyl-2-Pentanone(MIBK)              | ND     | 5.0  | 0.95  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Acetone                                 | ND     | 5.0  | 5.0   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Benzene                                 | ND     | 0.50 | 0.14  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Bromodichloromethane                    | ND     | 0.50 | 0.11  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Bromoform                               | ND     | 0.50 | 0.13  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Bromomethane                            | ND     | 0.50 | 0.48  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Carbon Disulfide                        | ND     | 0.50 | 0.36  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Carbon Tetrachloride                    | ND     | 0.50 | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Chlorobenzene                           | ND     | 0.50 | 0.23  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Chloroethane                            | ND     | 0.50 | 0.35  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Chloroform                              | ND     | 0.50 | 0.17  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Chloromethane                           | ND     | 0.50 | 0.36  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| cis-1,2-Dichloroethene                  | ND     | 0.50 | 0.18  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| cis-1,3-Dichloropropene                 | ND     | 0.50 | 0.30  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Dibromochloromethane                    | ND     | 0.50 | 0.37  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Ethylbenzene                            | ND     | 0.50 | 0.26  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Methyl tert Butyl Ether                 | ND     | 5.0  | 0.29  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Methylene Chloride                      | ND     | 3.0  | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Styrene                                 | ND     | 0.50 | 0.22  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Tetrachloroethene                       | ND     | 0.50 | 0.17  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Toluene                                 | ND     | 0.50 | 0.22  | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |

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location  
6100 Quail Valley Court  
Riverside, CA 92507-0704

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NELAP no, 02101CA  
CA ELAP no. 1156  
EPA no. CA00102

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number  
**A9A0762-01**

|                                          |               |                          |                           |
|------------------------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u>                | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                              | Result | RDL  | MDL    | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|--------|------|--------|-------|-----------|----------------|---------|------|
| Volatile Organic Compounds by EPA 8260B |        |      |        |       |           |                |         |      |
| trans-1,2-Dichloroethene                | ND     | 0.50 | 0.10   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| trans-1,3-Dichloropropene               | ND     | 0.50 | 0.24   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Trichloroethene                         | ND     | 0.50 | 0.17   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Trichlorofluoromethane                  | ND     | 5.0  | 0.16   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Vinyl Acetate                           | ND     | 10   | 0.48   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Vinyl Chloride                          | ND     | 0.50 | 0.13   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Xylenes (m+p)                           | ND     | 0.50 | 0.36   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Xylenes (ortho)                         | ND     | 0.50 | 0.41   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: 1,2-Dichloroethane-d4        | 109    | %    | 80-124 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: Bromofluorobenzene           | 105    | %    | 71-149 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: Toluene-d8                   | 98.4   | %    | 80-120 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |





**E.S.BABCOCK & Sons, Inc.**

Environmental Laboratories *est. 1906*

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number

**A9A0762-02**

| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|---------------------------|---------------|--------------------------|---------------------------|
| TB-010909 Beaumont Site 2 | Liquid        | 01/09/09 15:15           | 01/09/09 16:44            |

| Analyte(s)                              | Result | RDL  | MDL   | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|--------|------|-------|-------|-----------|----------------|---------|------|
| Volatile Organic Compounds by EPA 8260B |        |      |       |       |           |                |         |      |
| 1,1,1-Trichloroethane                   | ND     | 0.50 | 0.12  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,1,2,2-Tetrachloroethane               | ND     | 0.50 | 0.29  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,1,2-Trichloroethane                   | ND     | 0.50 | 0.31  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,1-Dichloroethane                      | ND     | 0.50 | 0.098 | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,1-Dichloroethene                      | ND     | 0.50 | 0.12  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,2-Dichlorobenzene                     | ND     | 0.50 | 0.20  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,2-Dichloroethane                      | ND     | 0.50 | 0.21  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,2-Dichloropropane                     | ND     | 0.50 | 0.19  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,3-Dichlorobenzene                     | ND     | 0.50 | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 1,4-Dichlorobenzene                     | ND     | 0.50 | 0.072 | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 2-Butanone(MEK)                         | ND     | 3.0  | 1.2   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 2-Hexanone                              | ND     | 5.0  | 1.2   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| 4-Methyl-2-Pentanone(MIBK)              | ND     | 5.0  | 0.95  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Acetone                                 | ND     | 5.0  | 5.0   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Benzene                                 | ND     | 0.50 | 0.14  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Bromodichloromethane                    | ND     | 0.50 | 0.11  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Bromoform                               | ND     | 0.50 | 0.13  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Bromomethane                            | ND     | 0.50 | 0.48  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Carbon Disulfide                        | ND     | 0.50 | 0.36  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Carbon Tetrachloride                    | ND     | 0.50 | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Chlorobenzene                           | ND     | 0.50 | 0.23  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Chloroethane                            | ND     | 0.50 | 0.35  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Chloroform                              | ND     | 0.50 | 0.17  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Chloromethane                           | ND     | 0.50 | 0.36  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| cis-1,2-Dichloroethene                  | ND     | 0.50 | 0.18  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| cis-1,3-Dichloropropene                 | ND     | 0.50 | 0.30  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Dibromochloromethane                    | ND     | 0.50 | 0.37  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Ethylbenzene                            | ND     | 0.50 | 0.26  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Methyl tert Butyl Ether                 | ND     | 5.0  | 0.29  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Methylene Chloride                      | ND     | 3.0  | 0.15  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Styrene                                 | ND     | 0.50 | 0.22  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Tetrachloroethene                       | ND     | 0.50 | 0.17  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Toluene                                 | ND     | 0.50 | 0.22  | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |

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NELAP no, 02101CA  
CA ELAP no. 1156  
EPA no. CA00102

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 6 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number  
**A9A0762-02**

|                           |               |                          |                           |
|---------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| TB-010909 Beaumont Site 2 | Liquid        | 01/09/09 15:15           | 01/09/09 16:44            |

| Analyte(s)                              | Result | RDL  | MDL    | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|--------|------|--------|-------|-----------|----------------|---------|------|
| Volatile Organic Compounds by EPA 8260B |        |      |        |       |           |                |         |      |
| trans-1,2-Dichloroethene                | ND     | 0.50 | 0.10   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| trans-1,3-Dichloropropene               | ND     | 0.50 | 0.24   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Trichloroethene                         | ND     | 0.50 | 0.17   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Trichlorofluoromethane                  | ND     | 5.0  | 0.16   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Vinyl Acetate                           | ND     | 10   | 0.48   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Vinyl Chloride                          | ND     | 0.50 | 0.13   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Xylenes (m+p)                           | ND     | 0.50 | 0.36   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Xylenes (ortho)                         | ND     | 0.50 | 0.41   | ug/L  | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Surrogate: 1,2-Dichloroethane-d4        | 110    | %    | 80-124 |       | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Surrogate: Bromofluorobenzene           | 106    | %    | 71-149 |       | EPA 8260B | 01/12/09 23:22 | jes     |      |
| Surrogate: Toluene-d8                   | 98.2   | %    | 80-120 |       | EPA 8260B | 01/12/09 23:22 | jes     |      |

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Analytical Report: Page 7 of 18  
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Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Metals and Metalloids - Batch Quality Control

| Analyte(s)                                | Result  | RDL    | MDL      | Units | Spike Level                                              | Source Result | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|-------------------------------------------|---------|--------|----------|-------|----------------------------------------------------------|---------------|------|-------------|-------|-----------|------|
| <b>Batch 9A12042 - EPA 3015A SOP M02A</b> |         |        |          |       |                                                          |               |      |             |       |           |      |
| <b>Blank (9A12042-BLK1)</b>               |         |        |          |       | Prepared: 01/12/09 Analyzed: 01/13/09                    |               |      |             |       |           |      |
| Mercury                                   | ND      | 0.0010 | 0.000032 | mg/L  |                                                          |               |      |             |       |           |      |
| <b>LCS (9A12042-BS1)</b>                  |         |        |          |       | Prepared: 01/12/09 Analyzed: 01/13/09                    |               |      |             |       |           |      |
| Mercury                                   | 0.00315 | 0.0010 | 0.000032 | mg/L  | 0.00334                                                  |               | 94.4 | 85-115      |       |           |      |
| <b>Matrix Spike (9A12042-MS1)</b>         |         |        |          |       | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |       |           |      |
| Mercury                                   | 0.0155  | 0.0050 | 0.00016  | mg/L  | 0.0167                                                   | 0.000280      | 90.9 | 75-125      |       |           |      |
| <b>Matrix Spike Dup (9A12042-MSD1)</b>    |         |        |          |       | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |       |           |      |
| Mercury                                   | 0.0156  | 0.0050 | 0.00016  | mg/L  | 0.0167                                                   | 0.000280      | 91.5 | 75-125      | 0.668 | 20        |      |

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Analytical Report: Page 8 of 18  
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Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result    | RDL    | MDL      | Units | Spike Level                           | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag    |
|-------------------------------------------|-----------|--------|----------|-------|---------------------------------------|---------------|------|-------------|-----|-----------|---------|
| <b>Batch 9A12042 - EPA 3015A SOP M02A</b> |           |        |          |       |                                       |               |      |             |     |           |         |
| <b>Blank (9A12042-BLK1)</b>               |           |        |          |       | Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |     |           |         |
| Antimony                                  | ND        | 0.0060 | 0.0030   | mg/L  |                                       |               |      |             |     |           |         |
| Arsenic                                   | ND        | 0.0020 | 0.0016   | mg/L  |                                       |               |      |             |     |           |         |
| Barium                                    | 0.0000982 | 0.10   | 0.000056 | mg/L  |                                       |               |      |             |     |           | J       |
| Beryllium                                 | ND        | 0.0010 | 0.00017  | mg/L  |                                       |               |      |             |     |           |         |
| Cadmium                                   | ND        | 0.0010 | 0.000077 | mg/L  |                                       |               |      |             |     |           |         |
| Total Chromium                            | 0.00866   | 0.010  | 0.00050  | mg/L  |                                       |               |      |             |     |           | QBLK, J |
| Cobalt                                    | ND        | 0.010  | 0.00028  | mg/L  |                                       |               |      |             |     |           |         |
| Copper                                    | ND        | 0.010  | 0.0019   | mg/L  |                                       |               |      |             |     |           |         |
| Lead                                      | ND        | 0.0050 | 0.000084 | mg/L  |                                       |               |      |             |     |           |         |
| Molybdenum                                | ND        | 0.010  | 0.00090  | mg/L  |                                       |               |      |             |     |           |         |
| Nickel                                    | ND        | 0.010  | 0.0015   | mg/L  |                                       |               |      |             |     |           |         |
| Selenium                                  | ND        | 0.0050 | 0.0025   | mg/L  |                                       |               |      |             |     |           |         |
| Silver                                    | ND        | 0.010  | 0.0050   | mg/L  |                                       |               |      |             |     |           |         |
| Thallium                                  | ND        | 0.0010 | 0.00098  | mg/L  |                                       |               |      |             |     |           |         |
| Vanadium                                  | ND        | 0.010  | 0.0027   | mg/L  |                                       |               |      |             |     |           |         |
| Zinc                                      | 0.00624   | 0.010  | 0.0014   | mg/L  |                                       |               |      |             |     |           | QBLK, J |
| <b>LCS (9A12042-BS1)</b>                  |           |        |          |       | Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |     |           |         |
| Antimony                                  | 0.224     | 0.0060 | 0.0030   | mg/L  | 0.200                                 |               | 112  | 85-115      |     |           |         |
| Arsenic                                   | 0.195     | 0.0020 | 0.0016   | mg/L  | 0.200                                 |               | 97.6 | 85-115      |     |           |         |
| Barium                                    | 0.224     | 0.10   | 0.000056 | mg/L  | 0.200                                 |               | 112  | 85-115      |     |           |         |
| Beryllium                                 | 0.211     | 0.0010 | 0.00017  | mg/L  | 0.200                                 |               | 106  | 85-115      |     |           |         |
| Cadmium                                   | 0.212     | 0.0010 | 0.000077 | mg/L  | 0.200                                 |               | 106  | 85-115      |     |           |         |
| Total Chromium                            | 0.200     | 0.010  | 0.00050  | mg/L  | 0.200                                 |               | 100  | 85-115      |     |           |         |
| Cobalt                                    | 0.212     | 0.010  | 0.00028  | mg/L  | 0.200                                 |               | 106  | 85-115      |     |           |         |
| Copper                                    | 0.223     | 0.010  | 0.0019   | mg/L  | 0.200                                 |               | 111  | 85-115      |     |           |         |
| Lead                                      | 0.203     | 0.0050 | 0.000084 | mg/L  | 0.200                                 |               | 101  | 85-115      |     |           |         |
| Molybdenum                                | 0.215     | 0.010  | 0.00090  | mg/L  | 0.200                                 |               | 107  | 85-115      |     |           |         |
| Nickel                                    | 0.210     | 0.010  | 0.0015   | mg/L  | 0.200                                 |               | 105  | 85-115      |     |           |         |
| Selenium                                  | 0.190     | 0.0050 | 0.0025   | mg/L  | 0.200                                 |               | 94.8 | 85-115      |     |           |         |
| Silver                                    | 0.219     | 0.010  | 0.0050   | mg/L  | 0.200                                 |               | 110  | 85-115      |     |           |         |
| Thallium                                  | 0.205     | 0.0010 | 0.00098  | mg/L  | 0.200                                 |               | 102  | 85-115      |     |           |         |
| Vanadium                                  | 0.180     | 0.010  | 0.0027   | mg/L  | 0.200                                 |               | 89.9 | 85-115      |     |           |         |
| Zinc                                      | 0.232     | 0.010  | 0.0014   | mg/L  | 0.200                                 |               | 116  | 85-115      |     |           | QL-MS   |

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Analytical Report: Page 9 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result | RDL    | MDL                       | Units | Spike Level | Source Result      | %REC | %REC Limits        | RPD    | RPD Limit | Flag |
|-------------------------------------------|--------|--------|---------------------------|-------|-------------|--------------------|------|--------------------|--------|-----------|------|
| <b>Batch 9A12042 - EPA 3015A SOP M02A</b> |        |        |                           |       |             |                    |      |                    |        |           |      |
| <b>Matrix Spike (9A12042-MS1)</b>         |        |        | <b>Source: A9A0762-01</b> |       |             | Prepared: 01/12/09 |      | Analyzed: 01/13/09 |        |           |      |
| Antimony                                  | 0.997  | 0.030  | 0.015                     | mg/L  | 1.00        | ND                 | 99.7 | 75-125             |        |           |      |
| Arsenic                                   | 0.993  | 0.010  | 0.0081                    | mg/L  | 1.00        | 0.0310             | 96.2 | 75-125             |        |           |      |
| Barium                                    | 2.12   | 0.50   | 0.00028                   | mg/L  | 1.00        | 1.26               | 85.5 | 75-125             |        |           |      |
| Beryllium                                 | 1.04   | 0.0050 | 0.00086                   | mg/L  | 1.00        | 0.00453            | 103  | 75-125             |        |           |      |
| Cadmium                                   | 1.01   | 0.0050 | 0.00039                   | mg/L  | 1.00        | 0.000453           | 101  | 75-125             |        |           |      |
| Total Chromium                            | 1.23   | 0.050  | 0.0025                    | mg/L  | 1.00        | 0.238              | 99.5 | 75-125             |        |           |      |
| Cobalt                                    | 1.07   | 0.050  | 0.0014                    | mg/L  | 1.00        | 0.0496             | 102  | 75-125             |        |           |      |
| Copper                                    | 1.13   | 0.050  | 0.0095                    | mg/L  | 1.00        | 0.134              | 99.9 | 75-125             |        |           |      |
| Lead                                      | 1.04   | 0.025  | 0.00042                   | mg/L  | 1.00        | 0.0455             | 99.3 | 75-125             |        |           |      |
| Molybdenum                                | 1.13   | 0.050  | 0.0045                    | mg/L  | 1.00        | 0.0878             | 105  | 75-125             |        |           |      |
| Nickel                                    | 1.09   | 0.050  | 0.0075                    | mg/L  | 1.00        | 0.0879             | 101  | 75-125             |        |           |      |
| Selenium                                  | 0.946  | 0.025  | 0.013                     | mg/L  | 1.00        | ND                 | 94.6 | 75-125             |        |           |      |
| Silver                                    | 1.03   | 0.050  | 0.025                     | mg/L  | 1.00        | ND                 | 103  | 75-125             |        |           |      |
| Thallium                                  | 0.995  | 0.0050 | 0.0049                    | mg/L  | 1.00        | ND                 | 99.5 | 75-125             |        |           |      |
| Vanadium                                  | 1.25   | 0.050  | 0.013                     | mg/L  | 1.00        | 0.288              | 95.8 | 75-125             |        |           |      |
| Zinc                                      | 1.32   | 0.050  | 0.0070                    | mg/L  | 1.00        | 0.250              | 107  | 75-125             |        |           |      |
| <b>Matrix Spike Dup (9A12042-MSD1)</b>    |        |        | <b>Source: A9A0762-01</b> |       |             | Prepared: 01/12/09 |      | Analyzed: 01/13/09 |        |           |      |
| Antimony                                  | 0.975  | 0.030  | 0.015                     | mg/L  | 1.00        | ND                 | 97.5 | 75-125             | 2.27   | 20        |      |
| Arsenic                                   | 1.00   | 0.010  | 0.0081                    | mg/L  | 1.00        | 0.0310             | 97.4 | 75-125             | 1.19   | 20        |      |
| Barium                                    | 1.95   | 0.50   | 0.00028                   | mg/L  | 1.00        | 1.26               | 68.5 | 75-125             | 8.40   | 20        | QMSD |
| Beryllium                                 | 1.00   | 0.0050 | 0.00086                   | mg/L  | 1.00        | 0.00453            | 99.9 | 75-125             | 3.45   | 20        |      |
| Cadmium                                   | 0.979  | 0.0050 | 0.00039                   | mg/L  | 1.00        | 0.000453           | 97.8 | 75-125             | 3.22   | 20        |      |
| Total Chromium                            | 1.19   | 0.050  | 0.0025                    | mg/L  | 1.00        | 0.238              | 95.4 | 75-125             | 3.38   | 20        |      |
| Cobalt                                    | 1.07   | 0.050  | 0.0014                    | mg/L  | 1.00        | 0.0496             | 102  | 75-125             | 0.0909 | 20        |      |
| Copper                                    | 1.13   | 0.050  | 0.0095                    | mg/L  | 1.00        | 0.134              | 99.3 | 75-125             | 0.548  | 20        |      |
| Lead                                      | 1.02   | 0.025  | 0.00042                   | mg/L  | 1.00        | 0.0455             | 97.3 | 75-125             | 1.90   | 20        |      |
| Molybdenum                                | 1.12   | 0.050  | 0.0045                    | mg/L  | 1.00        | 0.0878             | 103  | 75-125             | 1.45   | 20        |      |
| Nickel                                    | 1.09   | 0.050  | 0.0075                    | mg/L  | 1.00        | 0.0879             | 101  | 75-125             | 0.0266 | 20        |      |
| Selenium                                  | 0.996  | 0.025  | 0.013                     | mg/L  | 1.00        | ND                 | 99.6 | 75-125             | 5.07   | 20        |      |
| Silver                                    | 1.00   | 0.050  | 0.025                     | mg/L  | 1.00        | ND                 | 100  | 75-125             | 2.60   | 20        |      |
| Thallium                                  | 0.987  | 0.0050 | 0.0049                    | mg/L  | 1.00        | ND                 | 98.7 | 75-125             | 0.849  | 20        |      |
| Vanadium                                  | 1.22   | 0.050  | 0.013                     | mg/L  | 1.00        | 0.288              | 93.0 | 75-125             | 2.28   | 20        |      |
| Zinc                                      | 1.28   | 0.050  | 0.0070                    | mg/L  | 1.00        | 0.250              | 103  | 75-125             | 3.30   | 20        |      |

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Analytical Report: Page 10 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Diesel Range Organics by EPA 8015 - Batch Quality Control

| Analyte(s)                             | Result | RDL | MDL  | Units | Spike Level | Source Result                                            | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|----------------------------------------|--------|-----|------|-------|-------------|----------------------------------------------------------|------|-------------|------|-----------|-------|
| <b>Batch 9A12009 - Microextraction</b> |        |     |      |       |             |                                                          |      |             |      |           |       |
| <b>Blank (9A12009-BLK1)</b>            |        |     |      |       |             | Prepared: 01/12/09 Analyzed: 01/13/09                    |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 6.22   | 2.0 | 0.46 | mg/L  |             |                                                          |      |             |      |           | QHCno |
| Surrogate: Decachlorobiphenyl          | 0.967  |     |      | mg/L  | 1.14        |                                                          | 84.7 | 56-117      |      |           |       |
| <b>LCS (9A12009-BS1)</b>               |        |     |      |       |             | Prepared: 01/12/09 Analyzed: 01/13/09                    |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 44.4   | 2.0 | 0.46 | mg/L  | 45.7        |                                                          | 97.1 | 60-110      |      |           |       |
| Surrogate: Decachlorobiphenyl          | 0.782  |     |      | mg/L  | 1.14        |                                                          | 68.5 | 56-117      |      |           |       |
| <b>LCS Dup (9A12009-BSD1)</b>          |        |     |      |       |             | Prepared: 01/12/09 Analyzed: 01/13/09                    |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 37.4   | 2.0 | 0.46 | mg/L  | 45.7        |                                                          | 81.8 | 60-110      | 17.1 | 40        |       |
| Surrogate: Decachlorobiphenyl          | 1.02   |     |      | mg/L  | 1.14        |                                                          | 89.1 | 56-117      |      |           |       |
| <b>Matrix Spike (9A12009-MS1)</b>      |        |     |      |       |             | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 41.1   | 2.0 | 0.46 | mg/L  | 45.7        | ND                                                       | 89.9 | 28-126      |      |           |       |
| Surrogate: Decachlorobiphenyl          | 1.04   |     |      | mg/L  | 1.14        |                                                          | 90.8 | 56-117      |      |           |       |
| <b>Matrix Spike Dup (9A12009-MSD1)</b> |        |     |      |       |             | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 38.0   | 2.0 | 0.46 | mg/L  | 45.7        | ND                                                       | 83.2 | 28-126      | 7.71 | 40        |       |
| Surrogate: Decachlorobiphenyl          | 0.988  |     |      | mg/L  | 1.14        |                                                          | 86.5 | 56-117      |      |           |       |



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
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San Bernardino, CA 92408-3216

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Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Gasoline Range Organics by EPA 8015 - Batch Quality Control

| Analyte(s)                             | Result | RDL   | MDL   | Units | Spike Level | Source Result                                            | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|----------------------------------------|--------|-------|-------|-------|-------------|----------------------------------------------------------|------|-------------|------|-----------|-------|
| <b>Batch 9A12006 - Purge and Trap</b>  |        |       |       |       |             |                                                          |      |             |      |           |       |
| <b>Blank (9A12006-BLK1)</b>            |        |       |       |       |             | Prepared: 01/12/09 Analyzed: 01/13/09                    |      |             |      |           |       |
| Gasoline Range Organics                | ND     | 0.050 | 0.024 | mg/L  |             |                                                          |      |             |      |           |       |
| Surrogate: a,a,a-Trifluorotoluene      | 0.0879 |       |       | mg/L  | 0.108       |                                                          | 81.8 | 50-150      |      |           |       |
| <b>LCS (9A12006-BS1)</b>               |        |       |       |       |             | Prepared & Analyzed: 01/12/09                            |      |             |      |           |       |
| Gasoline Range Organics                | 2.81   | 0.050 | 0.024 | mg/L  | 2.50        |                                                          | 112  | 67-140      |      |           |       |
| Surrogate: a,a,a-Trifluorotoluene      | 0.100  |       |       | mg/L  | 0.108       |                                                          | 93.1 | 50-150      |      |           |       |
| <b>LCS Dup (9A12006-BSD1)</b>          |        |       |       |       |             | Prepared & Analyzed: 01/12/09                            |      |             |      |           |       |
| Gasoline Range Organics                | 3.39   | 0.050 | 0.024 | mg/L  | 2.50        |                                                          | 135  | 67-140      | 18.6 | 35        |       |
| Surrogate: a,a,a-Trifluorotoluene      | 0.101  |       |       | mg/L  | 0.108       |                                                          | 93.9 | 50-150      |      |           |       |
| <b>Matrix Spike (9A12006-MS1)</b>      |        |       |       |       |             | Source: A9A0762-01 Prepared & Analyzed: 01/12/09         |      |             |      |           |       |
| Gasoline Range Organics                | 2.58   | 0.050 | 0.024 | mg/L  | 2.50        | ND                                                       | 103  | 73-147      |      |           |       |
| Surrogate: a,a,a-Trifluorotoluene      | 0.0858 |       |       | mg/L  | 0.108       |                                                          | 79.8 | 50-150      |      |           |       |
| <b>Matrix Spike Dup (9A12006-MSD1)</b> |        |       |       |       |             | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |      |             |      |           |       |
| Gasoline Range Organics                | 3.20   | 0.050 | 0.024 | mg/L  | 2.50        | ND                                                       | 128  | 73-147      | 21.6 | 20        | QRPD0 |
| Surrogate: a,a,a-Trifluorotoluene      | 0.0988 |       |       | mg/L  | 0.108       |                                                          | 91.9 | 50-150      |      |           |       |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                            | Result | RDL  | MDL   | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------|--------|------|-------|-------|-------------------------------|---------------|------|-------------|-----|-----------|------|
| <b>Batch 9A12002 - Purge and Trap</b> |        |      |       |       |                               |               |      |             |     |           |      |
| <b>Blank (9A12002-BLK1)</b>           |        |      |       |       | Prepared & Analyzed: 01/12/09 |               |      |             |     |           |      |
| 1,1,1-Trichloroethane                 | ND     | 0.50 | 0.12  | ug/L  |                               |               |      |             |     |           |      |
| 1,1,2,2-Tetrachloroethane             | ND     | 0.50 | 0.29  | ug/L  |                               |               |      |             |     |           |      |
| 1,1,2-Trichloroethane                 | ND     | 0.50 | 0.31  | ug/L  |                               |               |      |             |     |           |      |
| 1,1-Dichloroethane                    | ND     | 0.50 | 0.098 | ug/L  |                               |               |      |             |     |           |      |
| 1,1-Dichloroethene                    | ND     | 0.50 | 0.12  | ug/L  |                               |               |      |             |     |           |      |
| 1,2-Dichlorobenzene                   | ND     | 0.50 | 0.20  | ug/L  |                               |               |      |             |     |           |      |
| 1,2-Dichloroethane                    | ND     | 0.50 | 0.21  | ug/L  |                               |               |      |             |     |           |      |
| 1,2-Dichloropropane                   | ND     | 0.50 | 0.19  | ug/L  |                               |               |      |             |     |           |      |
| 1,3-Dichlorobenzene                   | ND     | 0.50 | 0.15  | ug/L  |                               |               |      |             |     |           |      |
| 1,4-Dichlorobenzene                   | ND     | 0.50 | 0.072 | ug/L  |                               |               |      |             |     |           |      |
| 2-Butanone(MEK)                       | ND     | 3.0  | 1.2   | ug/L  |                               |               |      |             |     |           |      |
| 2-Hexanone                            | ND     | 5.0  | 1.2   | ug/L  |                               |               |      |             |     |           |      |
| 4-Methyl-2-Pentanone(MIBK)            | ND     | 5.0  | 0.95  | ug/L  |                               |               |      |             |     |           |      |
| Acetone                               | ND     | 5.0  | 5.0   | ug/L  |                               |               |      |             |     |           |      |
| Benzene                               | ND     | 0.50 | 0.14  | ug/L  |                               |               |      |             |     |           |      |
| Bromodichloromethane                  | ND     | 0.50 | 0.11  | ug/L  |                               |               |      |             |     |           |      |
| Bromoform                             | ND     | 0.50 | 0.13  | ug/L  |                               |               |      |             |     |           |      |
| Bromomethane                          | ND     | 0.50 | 0.48  | ug/L  |                               |               |      |             |     |           |      |
| Carbon Disulfide                      | ND     | 0.50 | 0.36  | ug/L  |                               |               |      |             |     |           |      |
| Carbon Tetrachloride                  | ND     | 0.50 | 0.15  | ug/L  |                               |               |      |             |     |           |      |
| Chlorobenzene                         | ND     | 0.50 | 0.23  | ug/L  |                               |               |      |             |     |           |      |
| Chloroethane                          | ND     | 0.50 | 0.35  | ug/L  |                               |               |      |             |     |           |      |
| Chloroform                            | ND     | 0.50 | 0.17  | ug/L  |                               |               |      |             |     |           |      |
| Chloromethane                         | ND     | 0.50 | 0.36  | ug/L  |                               |               |      |             |     |           |      |
| cis-1,2-Dichloroethene                | ND     | 0.50 | 0.18  | ug/L  |                               |               |      |             |     |           |      |
| cis-1,3-Dichloropropene               | ND     | 0.50 | 0.30  | ug/L  |                               |               |      |             |     |           |      |
| Dibromochloromethane                  | ND     | 0.50 | 0.37  | ug/L  |                               |               |      |             |     |           |      |
| Ethylbenzene                          | ND     | 0.50 | 0.26  | ug/L  |                               |               |      |             |     |           |      |
| Methyl tert Butyl Ether               | ND     | 5.0  | 0.29  | ug/L  |                               |               |      |             |     |           |      |
| Methylene Chloride                    | ND     | 3.0  | 0.15  | ug/L  |                               |               |      |             |     |           |      |
| Styrene                               | ND     | 0.50 | 0.22  | ug/L  |                               |               |      |             |     |           |      |
| Tetrachloroethene                     | ND     | 0.50 | 0.17  | ug/L  |                               |               |      |             |     |           |      |
| Toluene                               | ND     | 0.50 | 0.22  | ug/L  |                               |               |      |             |     |           |      |
| trans-1,2-Dichloroethene              | ND     | 0.50 | 0.10  | ug/L  |                               |               |      |             |     |           |      |
| trans-1,3-Dichloropropene             | ND     | 0.50 | 0.24  | ug/L  |                               |               |      |             |     |           |      |
| Trichloroethene                       | ND     | 0.50 | 0.17  | ug/L  |                               |               |      |             |     |           |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                            | Result | RDL  | MDL   | Units                         | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------|--------|------|-------|-------------------------------|-------------|---------------|------|-------------|-----|-----------|------|
| <b>Batch 9A12002 - Purge and Trap</b> |        |      |       |                               |             |               |      |             |     |           |      |
| <b>Blank (9A12002-BLK1)</b>           |        |      |       | Prepared & Analyzed: 01/12/09 |             |               |      |             |     |           |      |
| Trichlorofluoromethane                | ND     | 5.0  | 0.16  | ug/L                          |             |               |      |             |     |           |      |
| Vinyl Acetate                         | ND     | 10   | 0.48  | ug/L                          |             |               |      |             |     |           |      |
| Vinyl Chloride                        | ND     | 0.50 | 0.13  | ug/L                          |             |               |      |             |     |           |      |
| Xylenes (m+p)                         | ND     | 0.50 | 0.36  | ug/L                          |             |               |      |             |     |           |      |
| Xylenes (ortho)                       | ND     | 0.50 | 0.41  | ug/L                          |             |               |      |             |     |           |      |
| Surrogate: 1,2-Dichloroethane-d4      | 107    |      |       | ug/L                          | 100         |               | 107  | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene         | 105    |      |       | ug/L                          | 100         |               | 105  | 71-149      |     |           |      |
| Surrogate: Toluene-d8                 | 98.2   |      |       | ug/L                          | 100         |               | 98.2 | 80-120      |     |           |      |
| <b>LCS (9A12002-BS1)</b>              |        |      |       | Prepared & Analyzed: 01/12/09 |             |               |      |             |     |           |      |
| 1,1-Dichloroethane                    | 25.6   | 0.50 | 0.098 | ug/L                          | 25.0        |               | 102  | 76-130      |     |           |      |
| 1,1-Dichloroethene                    | 26.2   | 0.50 | 0.12  | ug/L                          | 25.0        |               | 105  | 70-130      |     |           |      |
| 1,4-Dichlorobenzene                   | 24.2   | 0.50 | 0.072 | ug/L                          | 25.0        |               | 96.9 | 79-130      |     |           |      |
| Benzene                               | 26.9   | 0.50 | 0.14  | ug/L                          | 25.0        |               | 108  | 70-130      |     |           |      |
| Bromodichloromethane                  | 24.8   | 0.50 | 0.11  | ug/L                          | 25.0        |               | 99.3 | 70-132      |     |           |      |
| Bromoform                             | 24.5   | 0.50 | 0.13  | ug/L                          | 25.0        |               | 98.0 | 65-141      |     |           |      |
| Chloroform                            | 27.5   | 0.50 | 0.17  | ug/L                          | 25.0        |               | 110  | 70-130      |     |           |      |
| Dibromochloromethane                  | 25.7   | 0.50 | 0.37  | ug/L                          | 25.0        |               | 103  | 70-130      |     |           |      |
| Ethylbenzene                          | 24.6   | 0.50 | 0.26  | ug/L                          | 25.0        |               | 98.6 | 70-136      |     |           |      |
| Methyl tert Butyl Ether               | 27.5   | 5.0  | 0.29  | ug/L                          | 25.0        |               | 110  | 70-130      |     |           |      |
| Tetrachloroethene                     | 23.2   | 0.50 | 0.17  | ug/L                          | 25.0        |               | 92.8 | 70-130      |     |           |      |
| Toluene                               | 25.0   | 0.50 | 0.22  | ug/L                          | 25.0        |               | 99.8 | 70-130      |     |           |      |
| Trichloroethene                       | 25.2   | 0.50 | 0.17  | ug/L                          | 25.0        |               | 101  | 70-130      |     |           |      |
| Vinyl Chloride                        | 26.8   | 0.50 | 0.13  | ug/L                          | 25.0        |               | 107  | 60-130      |     |           |      |
| Xylenes (m+p)                         | 51.9   | 0.50 | 0.36  | ug/L                          | 50.0        |               | 104  | 70-137      |     |           |      |
| Xylenes (ortho)                       | 24.8   | 0.50 | 0.41  | ug/L                          | 25.0        |               | 99.0 | 70-136      |     |           |      |
| Surrogate: 1,2-Dichloroethane-d4      | 96.1   |      |       | ug/L                          | 100         |               | 96.1 | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene         | 99.5   |      |       | ug/L                          | 100         |               | 99.5 | 71-149      |     |           |      |
| Surrogate: Toluene-d8                 | 99.8   |      |       | ug/L                          | 100         |               | 99.8 | 80-120      |     |           |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                            | Result | RDL  | MDL   | Units | Spike Level                                      | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|---------------------------------------|--------|------|-------|-------|--------------------------------------------------|---------------|------|-------------|------|-----------|------|
| <b>Batch 9A12002 - Purge and Trap</b> |        |      |       |       |                                                  |               |      |             |      |           |      |
| <b>LCS Dup (9A12002-BSD1)</b>         |        |      |       |       | Prepared & Analyzed: 01/12/09                    |               |      |             |      |           |      |
| 1,1-Dichloroethane                    | 24.0   | 0.50 | 0.098 | ug/L  | 25.0                                             |               | 95.8 | 76-130      | 6.70 | 20        |      |
| 1,1-Dichloroethene                    | 24.2   | 0.50 | 0.12  | ug/L  | 25.0                                             |               | 96.9 | 70-130      | 7.66 | 20        |      |
| 1,4-Dichlorobenzene                   | 22.7   | 0.50 | 0.072 | ug/L  | 25.0                                             |               | 90.8 | 79-130      | 6.56 | 20        |      |
| Benzene                               | 24.9   | 0.50 | 0.14  | ug/L  | 25.0                                             |               | 99.4 | 70-130      | 7.99 | 20        |      |
| Bromodichloromethane                  | 23.2   | 0.50 | 0.11  | ug/L  | 25.0                                             |               | 92.9 | 70-132      | 6.66 | 20        |      |
| Bromoform                             | 23.2   | 0.50 | 0.13  | ug/L  | 25.0                                             |               | 93.0 | 65-141      | 5.28 | 20        |      |
| Chloroform                            | 25.6   | 0.50 | 0.17  | ug/L  | 25.0                                             |               | 102  | 70-130      | 7.13 | 20        |      |
| Dibromochloromethane                  | 24.0   | 0.50 | 0.37  | ug/L  | 25.0                                             |               | 96.2 | 70-130      | 6.60 | 20        |      |
| Ethylbenzene                          | 23.0   | 0.50 | 0.26  | ug/L  | 25.0                                             |               | 92.2 | 70-136      | 6.71 | 20        |      |
| Methyl tert Butyl Ether               | 25.7   | 5.0  | 0.29  | ug/L  | 25.0                                             |               | 103  | 70-130      | 6.47 | 20        |      |
| Tetrachloroethene                     | 21.5   | 0.50 | 0.17  | ug/L  | 25.0                                             |               | 86.1 | 70-130      | 7.56 | 20        |      |
| Toluene                               | 23.2   | 0.50 | 0.22  | ug/L  | 25.0                                             |               | 92.7 | 70-130      | 7.40 | 20        |      |
| Trichloroethene                       | 23.4   | 0.50 | 0.17  | ug/L  | 25.0                                             |               | 93.8 | 70-130      | 7.20 | 20        |      |
| Vinyl Chloride                        | 24.4   | 0.50 | 0.13  | ug/L  | 25.0                                             |               | 97.7 | 60-130      | 9.14 | 20        |      |
| Xylenes (m+p)                         | 48.4   | 0.50 | 0.36  | ug/L  | 50.0                                             |               | 96.7 | 70-137      | 7.02 | 20        |      |
| Xylenes (ortho)                       | 23.3   | 0.50 | 0.41  | ug/L  | 25.0                                             |               | 93.3 | 70-136      | 5.99 | 20        |      |
| Surrogate: 1,2-Dichloroethane-d4      | 95.3   |      |       | ug/L  | 100                                              |               | 95.3 | 80-124      |      |           |      |
| Surrogate: Bromofluorobenzene         | 100    |      |       | ug/L  | 100                                              |               | 100  | 71-149      |      |           |      |
| Surrogate: Toluene-d8                 | 100    |      |       | ug/L  | 100                                              |               | 100  | 80-120      |      |           |      |
| <b>Duplicate (9A12002-DUP1)</b>       |        |      |       |       | Source: A9A0313-01 Prepared & Analyzed: 01/12/09 |               |      |             |      |           |      |
| 1,1,1-Trichloroethane                 | ND     | 0.50 | 0.12  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,1,2,2-Tetrachloroethane             | ND     | 0.50 | 0.29  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,1,2-Trichloroethane                 | ND     | 0.50 | 0.31  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,1-Dichloroethane                    | ND     | 0.50 | 0.098 | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,1-Dichloroethene                    | ND     | 0.50 | 0.12  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,2-Dichlorobenzene                   | ND     | 0.50 | 0.20  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,2-Dichloroethane                    | ND     | 0.50 | 0.21  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,2-Dichloropropane                   | ND     | 0.50 | 0.19  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,3-Dichlorobenzene                   | ND     | 0.50 | 0.15  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 1,4-Dichlorobenzene                   | ND     | 0.50 | 0.072 | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 2-Butanone(MEK)                       | ND     | 3.0  | 1.2   | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 2-Hexanone                            | ND     | 5.0  | 1.2   | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| 4-Methyl-2-Pentanone(MIBK)            | ND     | 5.0  | 0.95  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| Acetone                               | ND     | 5.0  | 5.0   | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| Benzene                               | ND     | 0.50 | 0.14  | ug/L  |                                                  | ND            |      |             |      | 40        |      |
| Bromodichloromethane                  | ND     | 0.50 | 0.11  | ug/L  |                                                  | ND            |      |             |      | 40        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                            | Result | RDL                       | MDL  | Units | Spike Level | Source Result                            | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------|--------|---------------------------|------|-------|-------------|------------------------------------------|------|-------------|-----|-----------|------|
| <b>Batch 9A12002 - Purge and Trap</b> |        |                           |      |       |             |                                          |      |             |     |           |      |
| <b>Duplicate (9A12002-DUP1)</b>       |        | <b>Source: A9A0313-01</b> |      |       |             | <b>Prepared &amp; Analyzed: 01/12/09</b> |      |             |     |           |      |
| Bromoform                             | ND     | 0.50                      | 0.13 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Bromomethane                          | ND     | 0.50                      | 0.48 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Carbon Disulfide                      | ND     | 0.50                      | 0.36 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Carbon Tetrachloride                  | ND     | 0.50                      | 0.15 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Chlorobenzene                         | ND     | 0.50                      | 0.23 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Chloroethane                          | ND     | 0.50                      | 0.35 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Chloroform                            | ND     | 0.50                      | 0.17 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Chloromethane                         | ND     | 0.50                      | 0.36 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| cis-1,2-Dichloroethene                | ND     | 0.50                      | 0.18 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| cis-1,3-Dichloropropene               | ND     | 0.50                      | 0.30 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Dibromochloromethane                  | ND     | 0.50                      | 0.37 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Ethylbenzene                          | ND     | 0.50                      | 0.26 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Methyl tert Butyl Ether               | ND     | 5.0                       | 0.29 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Methylene Chloride                    | ND     | 3.0                       | 0.15 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Styrene                               | ND     | 0.50                      | 0.22 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Tetrachloroethene                     | ND     | 0.50                      | 0.17 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Toluene                               | ND     | 0.50                      | 0.22 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| trans-1,2-Dichloroethene              | ND     | 0.50                      | 0.10 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| trans-1,3-Dichloropropene             | ND     | 0.50                      | 0.24 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Trichloroethene                       | ND     | 0.50                      | 0.17 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Trichlorofluoromethane                | ND     | 5.0                       | 0.16 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Vinyl Acetate                         | ND     | 10                        | 0.48 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Vinyl Chloride                        | ND     | 0.50                      | 0.13 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Xylenes (m+p)                         | ND     | 0.50                      | 0.36 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Xylenes (ortho)                       | ND     | 0.50                      | 0.41 | ug/L  |             | ND                                       |      |             |     | 40        |      |
| Surrogate: 1,2-Dichloroethane-d4      | 108    |                           |      | ug/L  | 100         |                                          | 108  | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene         | 104    |                           |      | ug/L  | 100         |                                          | 104  | 71-149      |     |           |      |
| Surrogate: Toluene-d8                 | 97.1   |                           |      | ug/L  | 100         |                                          | 97.1 | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 16 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0762**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                            | Result | RDL                       | MDL   | Units                     | Spike Level | Source Result             | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|---------------------------------------|--------|---------------------------|-------|---------------------------|-------------|---------------------------|------|-------------|-----|-----------|-------|
| <b>Batch 9A12002 - Purge and Trap</b> |        |                           |       |                           |             |                           |      |             |     |           |       |
| <b>Matrix Spike (9A12002-MS1)</b>     |        | <b>Source: A9A0762-01</b> |       | <b>Prepared: 01/12/09</b> |             | <b>Analyzed: 01/13/09</b> |      |             |     |           |       |
| 1,1-Dichloroethane                    | 22.5   | 0.50                      | 0.098 | ug/L                      | 25.0        | ND                        | 90.0 | 57-136      |     |           |       |
| 1,1-Dichloroethene                    | 28.4   | 0.50                      | 0.12  | ug/L                      | 25.0        | ND                        | 114  | 55-134      |     |           |       |
| 1,4-Dichlorobenzene                   | 21.5   | 0.50                      | 0.072 | ug/L                      | 25.0        | ND                        | 86.0 | 67-130      |     |           |       |
| Benzene                               | 23.9   | 0.50                      | 0.14  | ug/L                      | 25.0        | ND                        | 95.6 | 70-130      |     |           |       |
| Bromodichloromethane                  | 14.2   | 0.50                      | 0.11  | ug/L                      | 25.0        | ND                        | 57.0 | 55-136      |     |           |       |
| Bromoform                             | 3.55   | 0.50                      | 0.13  | ug/L                      | 25.0        | ND                        | 14.2 | 39-151      |     |           | QMint |
| Chloroform                            | 24.0   | 0.50                      | 0.17  | ug/L                      | 25.0        | ND                        | 96.0 | 68-133      |     |           |       |
| Dibromochloromethane                  | 8.52   | 0.50                      | 0.37  | ug/L                      | 25.0        | ND                        | 34.1 | 53-133      |     |           | QMint |
| Ethylbenzene                          | 24.0   | 0.50                      | 0.26  | ug/L                      | 25.0        | ND                        | 96.2 | 70-143      |     |           |       |
| Methyl tert Butyl Ether               | 21.0   | 5.0                       | 0.29  | ug/L                      | 25.0        | ND                        | 83.9 | 70-130      |     |           |       |
| Tetrachloroethene                     | 21.5   | 0.50                      | 0.17  | ug/L                      | 25.0        | ND                        | 85.8 | 63-132      |     |           |       |
| Toluene                               | 23.0   | 0.50                      | 0.22  | ug/L                      | 25.0        | ND                        | 92.2 | 70-130      |     |           |       |
| Trichloroethene                       | 22.5   | 0.50                      | 0.17  | ug/L                      | 25.0        | ND                        | 89.9 | 70-130      |     |           |       |
| Vinyl Chloride                        | 23.4   | 0.50                      | 0.13  | ug/L                      | 25.0        | ND                        | 93.5 | 60-130      |     |           |       |
| Xylenes (m+p)                         | 48.4   | 0.50                      | 0.36  | ug/L                      | 50.0        | ND                        | 96.8 | 70-147      |     |           |       |
| Xylenes (ortho)                       | 23.0   | 0.50                      | 0.41  | ug/L                      | 25.0        | ND                        | 92.0 | 69-147      |     |           |       |
| Surrogate: 1,2-Dichloroethane-d4      | 82.1   |                           |       | ug/L                      | 100         |                           | 82.1 | 80-124      |     |           |       |
| Surrogate: Bromofluorobenzene         | 100    |                           |       | ug/L                      | 100         |                           | 100  | 71-149      |     |           |       |
| Surrogate: Toluene-d8                 | 100    |                           |       | ug/L                      | 100         |                           | 100  | 80-120      |     |           |       |



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 17 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

**Work Order Number: A9A0762**

Received on Ice (Y/N): Yes Temp: 15 °C

## Notes and Definitions

- J Estimated value
- NRPD The RPD/precision of replicate analyses performed on this sample did not meet laboratory acceptance criteria.
- QBLK The method blank did not meet laboratory acceptance criteria.
- QHCno The quality control sample chromatographic pattern does NOT resemble the fuel standard used for quantitation.
- QL-MS Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.
- QMint Due to matrix interference, the MS and/or MSD did not meet laboratory acceptance criteria.
- QMSD The MS recovery and MS/MSD RPD met laboratory acceptance criteria. MSD recovery was not within range. MSD performed to assess precision data only.
- QRPD The RPD value for the sample duplicate or MS/MSD did not meet laboratory acceptance criteria.
- ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)
- NR: Not Reported
- RDL: Reportable Detection Limit
- MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

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## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



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Lawrence J. Chrystal For Humaira Saleem

Project Manager

cc:

ESB\_md1\_PDF Report



E.S.BABCOCK & Sons, Inc.

Environmental Laboratories est. 1906

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 18 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Work Order Number: A9A0762

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

# SHIP TO: E.S. Babcock & Sons CHAIN OF CUSTODY RECORD



TETRA TECH, INC.  
348 W. Hospitality Lane, Suite 100  
San Bernardino, California 92408  
Telephone: (909) 381-1674  
FAX: (909) 889-1391

DATE 1/9/09 PAGE 1 OF 1

| CLIENT: Lockheed Martin Corp. |                      | PROJECT NAME: Bowman Site 2 |      | PROJECT MANAGER: Mark Feldman |             | TO # 22284-090104 |                 | SAMPLERS (Signature) Mark Feldman |                                                                    | TURN-AROUND TIME |  |
|-------------------------------|----------------------|-----------------------------|------|-------------------------------|-------------|-------------------|-----------------|-----------------------------------|--------------------------------------------------------------------|------------------|--|
| LINE                          | TEST                 | SAMPLE NO.                  | DATE | TIME                          | MATRIX TYPE | CONTAINER TYPE    | PREPRESERVATIVE | NUMBER OF CONTAINERS              | OBSERVATIONS/COMMENTS                                              |                  |  |
| 1.                            | Deep water container | 1-9-09                      | 1500 |                               | UNW         | 8                 | HCL/HR/HNDg     |                                   | 48 W<br>TX<br>clear                                                |                  |  |
| 2.                            |                      |                             |      |                               |             |                   | H2SO4           |                                   |                                                                    |                  |  |
| 3.                            | TB-D10909            | 1-9-09                      | 1515 |                               | UNW         | 6                 | 1 HCL           |                                   | This bottle was for<br>TPH if they wanted<br>that too. (AB) 1/9/09 |                  |  |
| 4.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 5.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 6.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 7.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 8.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 9.                            |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |
| 10.                           |                      |                             |      |                               |             |                   |                 |                                   |                                                                    |                  |  |

| FILTERING:                        |                                                | MATRIX TYPE: |              | CONTAINER TYPE:      |                   | PRESERVATIVES: (Water Only) |       |
|-----------------------------------|------------------------------------------------|--------------|--------------|----------------------|-------------------|-----------------------------|-------|
| <input type="checkbox"/> FILTERED | <input checked="" type="checkbox"/> UNFILTERED | S - Soil     | M - Sediment | G - Glass Bottle/Jar | SB - Brass Sleeve | HCL                         | NaOH  |
|                                   |                                                |              |              |                      |                   | HR                          | H2SO4 |

| RELINQUISHED BY |                 | SIGNATURE |        | DATE |  | TIME |  | TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: 9 |  |
|-----------------|-----------------|-----------|--------|------|--|------|--|--------------------------------------------------------|--|
| X               | REINQUISHED BY  | Signature | 1-9-09 | 1644 |  |      |  |                                                        |  |
|                 | RECEIVED BY     | Signature | 1-9-09 | 1644 |  |      |  |                                                        |  |
|                 | RELINQUISHED BY | Signature |        |      |  |      |  |                                                        |  |
|                 | RECEIVED BY     | Signature |        |      |  |      |  |                                                        |  |

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

A9A0762 AB

JAN -9 2009



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0768**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>                     | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>           | <u>Date Submitted</u> | <u>By</u>           |
|---------------------|---------------------------------------------|---------------|---------------------|---------------------|-----------------------|---------------------|
| A9A0768-01          | Disposal Water Container Beaumont Site<br>2 | Liquid        | 01/09/09 15:00      | Fernando<br>Ramirez | 01/09/09 16:44        | Fernando<br>Ramirez |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0768**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

Laboratory Reference Number  
**A9A0768-01**

| <u>Sample Description</u>                | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|------------------------------------------|---------------|--------------------------|---------------------------|
| Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                        | Result | RDL | MDL | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------|--------|-----|-----|-------|-----------|----------------|---------|------|
| General Inorganics<br>Perchlorate | 3100   | 100 | 71  | ug/L* | EPA 332.0 | 01/13/09 07:36 | aa      |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0768**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

### General Inorganics - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL   | Units | Spike Level | Source Result                                            | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|---------------------------------------------|--------|------|-------|-------|-------------|----------------------------------------------------------|------|-------------|-------|-----------|------|
| <b>Batch 9A10004 - Analyzed as received</b> |        |      |       |       |             |                                                          |      |             |       |           |      |
| <b>Blank (9A10004-BLK1)</b>                 |        |      |       |       |             | Prepared: 01/10/09 Analyzed: 01/13/09                    |      |             |       |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             |                                                          |      |             |       |           |      |
| <b>LCS (9A10004-BS1)</b>                    |        |      |       |       |             | Prepared: 01/10/09 Analyzed: 01/13/09                    |      |             |       |           |      |
| Perchlorate                                 | 4.82   | 0.10 | 0.071 | ug/L* | 5.00        |                                                          | 96.3 | 80-120      |       |           |      |
| <b>Duplicate (9A10004-DUP1)</b>             |        |      |       |       |             | Source: A9A0543-01 Prepared: 01/10/09 Analyzed: 01/13/09 |      |             |       |           |      |
| Perchlorate                                 | 29.1   | 0.50 | 0.35  | ug/L* |             | 29.9                                                     |      |             | 2.81  | 40        |      |
| <b>Matrix Spike (9A10004-MS1)</b>           |        |      |       |       |             | Source: A9A0543-01 Prepared: 01/10/09 Analyzed: 01/13/09 |      |             |       |           |      |
| Perchlorate                                 | 51.2   | 0.50 | 0.35  | ug/L* | 25.0        | 29.9                                                     | 85.2 | 75-120      |       |           |      |
| <b>Matrix Spike Dup (9A10004-MSD1)</b>      |        |      |       |       |             | Source: A9A0543-01 Prepared: 01/10/09 Analyzed: 01/13/09 |      |             |       |           |      |
| Perchlorate                                 | 51.6   | 0.50 | 0.35  | ug/L* | 25.0        | 29.9                                                     | 86.9 | 75-120      | 0.799 | 40        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9A0768**

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes      Temp: 15 °C

## Notes and Definitions

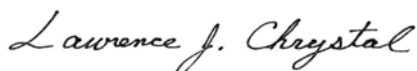
ND:      Analyte NOT DETECTED at or above the Method Detection Limit **(if MDL is reported)**, otherwise at or above the Reportable Detection Limit (RDL)  
NR:      Not Reported  
RDL:      Reportable Detection Limit  
MDL:      Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

---

## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



---

Lawrence J. Chrystal For Humaira Saleem

Project Manager

cc:

ESB\_md1\_PDF Report





E.S.BABCOCK & Sons, Inc.

Environmental Laboratories est. 1906

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Work Order Number: A9A0768

Report Date: 14-Jan-2009

Received on Ice (Y/N): Yes Temp: 15 °C

# CHAIN OF CUSTODY RECORD

TETRA TECH, INC.

348 W. Hospitality Lane, Suite 100  
San Bernardino, California 92408  
Telephone: (909) 381-1674  
FAX: (909) 889-1391



SHIP TO: E.S. Babcock & Sons

DATE 1/9/09 PAGE 1 OF 1

| CLIENT: <u>Lockheed Martin Corp</u>        |                          |            |      | PARAMETERS          |   |               |  | TURN-AROUND TIME      |  |
|--------------------------------------------|--------------------------|------------|------|---------------------|---|---------------|--|-----------------------|--|
| PROJECT NAME: <u>Bowmont Site 2</u>        |                          |            |      | PRESERVATIVE        |   |               |  | OBSERVATIONS/COMMENTS |  |
| PROJECT: <u>Dynamic Site Investigation</u> |                          |            |      | CONTAINER TYPE      |   |               |  |                       |  |
| PROJECT MANAGER: <u>Mark Feldman</u>       |                          |            |      | MATRIX TYPE         |   |               |  |                       |  |
| TO # <u>22281-090104</u>                   |                          |            |      | FILTERED/UNFILTERED |   |               |  |                       |  |
| SAMPLERS SIGNATURE: <u>[Signature]</u>     |                          |            |      |                     |   |               |  |                       |  |
| LINE                                       | ITEM                     | SAMPLE NO. | DATE | TIME                |   |               |  |                       |  |
| 1.                                         | Drinking water container | 1-9-09     | 1500 |                     | X | TPHgd         |  |                       |  |
| 2.                                         |                          |            |      |                     | X | CAH 17 METALS |  |                       |  |
| 3.                                         | TR-010909                | 1-9-09     | 1515 |                     | X | Perchlorate   |  |                       |  |
| 4.                                         |                          |            |      |                     |   |               |  |                       |  |
| 5.                                         |                          |            |      |                     |   |               |  |                       |  |
| 6.                                         |                          |            |      |                     |   |               |  |                       |  |
| 7.                                         |                          |            |      |                     |   |               |  |                       |  |
| 8.                                         |                          |            |      |                     |   |               |  |                       |  |
| 9.                                         |                          |            |      |                     |   |               |  |                       |  |
| 10.                                        |                          |            |      |                     |   |               |  |                       |  |

| FILTERING:                        |                                                | MATRIX TYPE:       |                    | CONTAINER TYPE:             |                        | PRESERVATIVES: (Water Only) |                                                               |
|-----------------------------------|------------------------------------------------|--------------------|--------------------|-----------------------------|------------------------|-----------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> FILTERED | <input checked="" type="checkbox"/> UNFILTERED | S - Soil           | M - Sediment       | G - Glass Bottle/Jar        | SB - Brass Sleeve      | HCL                         | NaOH                                                          |
|                                   |                                                | W - Water          |                    | SS - Stainless Steel Sleeve | P - Plastic Bottle/Jar | MR (None required)          | H <sub>2</sub> SO <sub>4</sub>                                |
| RELINQUISHED BY                   | <u>[Signature]</u>                             | <u>[Signature]</u> | <u>[Signature]</u> | TETRA TECH, INC.            | DATE                   | TIME                        | TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: <u>9</u> |
| RECEIVED BY                       | <u>[Signature]</u>                             | <u>[Signature]</u> | <u>[Signature]</u> | COMPANY                     | DATE                   | TIME                        | METHOD OF SHIPMENT/SHIPMENT NO.                               |
| RELINQUISHED BY                   | <u>[Signature]</u>                             | <u>[Signature]</u> | <u>[Signature]</u> | COMPANY                     | DATE                   | TIME                        | Special Shipping/Handling/Storage Requirements:               |
| RECEIVED BY                       | <u>[Signature]</u>                             | <u>[Signature]</u> | <u>[Signature]</u> | COMPANY                     | DATE                   | TIME                        |                                                               |

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

A9A0768#6 JAN -9 2009

mailing  
P.O Box 432  
Riverside, CA 92502-0432

location  
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Riverside, CA 92507-0704

P 951 653 3351  
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www.babcocklabs.com

NELAP no, 02101CA  
CA ELAP no. 1156  
EPA no. CA00102

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>                 | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>        | <u>Date Submitted</u> | <u>By</u>        |
|---------------------|-----------------------------------------|---------------|---------------------|------------------|-----------------------|------------------|
| A9C1065-01          | IDW1-031109 Beaumont Site 2             | Liquid        | 03/11/09 15:36      | David Bertolacci | 03/11/09 16:06        | David Bertolacci |
| A9C1065-02          | IDW1-031109 (Dissolved) Beaumont Site 2 | Liquid        | 03/11/09 15:36      | David Bertolacci | 03/11/09 16:06        | David Bertolacci |

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Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number

**A9C1065-01**

| <u>Sample Description</u>   | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|-----------------------------|---------------|--------------------------|---------------------------|
| IDW1-031109 Beaumont Site 2 | Liquid        | 03/11/09 15:36           | 03/11/09 16:06            |

| Analyte(s)                  | Result | RDL  | MDL   | Units | Method     | Analysis Date  | Analyst | Flag |
|-----------------------------|--------|------|-------|-------|------------|----------------|---------|------|
| Anions                      |        |      |       |       |            |                |         |      |
| Nitrate as N                | 0.14   | 0.20 | 0.11  | mg/L  | EPA 300.0  | 03/11/09 22:39 | AA      | J    |
| Aggregate Organic Compounds |        |      |       |       |            |                |         |      |
| Total Organic Carbon        | 740    | 28   | 6.6   | mg/L  | SM 5310B   | 03/20/09 10:41 | krv     |      |
| General Inorganics          |        |      |       |       |            |                |         |      |
| Perchlorate                 | 2200   | 100  | 71    | ug/L* | EPA 332.0  | 03/14/09 00:11 | aa      |      |
| Nutrients                   |        |      |       |       |            |                |         |      |
| Ortho Phosphate Phosphorus  | 4.1    | 0.50 | 0.028 | mg/L  | SM 4500P E | 03/12/09 19:34 | jma     |      |

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Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C1065-02**

|                                         |               |                          |                           |
|-----------------------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u>               | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| IDW1-031109 (Dissolved) Beaumont Site 2 | Liquid        | 03/11/09 15:36           | 03/11/09 16:06            |

| Analyte(s)                              | Result   | RDL    | MDL      | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|----------|--------|----------|-------|-----------|----------------|---------|------|
| Metals and Metalloids                   |          |        |          |       |           |                |         |      |
| Mercury                                 | ND       | 0.0010 | 0.000032 | mg/L  | EPA 200.8 | 03/16/09 17:50 | krv     |      |
| Metals and Metalloids; EPA SW846 Series |          |        |          |       |           |                |         |      |
| Antimony                                | ND       | 0.0060 | 0.0030   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Arsenic                                 | 0.0054   | 0.0020 | 0.0016   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Barium                                  | 0.18     | 0.10   | 0.000056 | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Beryllium                               | 0.00058  | 0.0010 | 0.00017  | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     | J    |
| Cadmium                                 | 0.000098 | 0.0010 | 0.000077 | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     | J    |
| Total Chromium                          | 0.029    | 0.010  | 0.00050  | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Cobalt                                  | 0.0059   | 0.010  | 0.00028  | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     | J    |
| Copper                                  | 0.019    | 0.010  | 0.0019   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Lead                                    | 0.0071   | 0.0050 | 0.000084 | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Molybdenum                              | 0.056    | 0.010  | 0.00090  | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Nickel                                  | 0.0098   | 0.010  | 0.0015   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     | J    |
| Selenium                                | 0.0027   | 0.0050 | 0.0025   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     | J    |
| Silver                                  | ND       | 0.010  | 0.0050   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Thallium                                | ND       | 0.0010 | 0.00098  | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Vanadium                                | 0.049    | 0.010  | 0.0027   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |
| Zinc                                    | 0.026    | 0.010  | 0.0014   | mg/L  | EPA 6020  | 03/16/09 17:50 | krv     |      |

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Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### Anions - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL  | Units | Spike Level | Source Result                                    | %REC | %REC Limits | RPD   | RPD Limit | Flag  |
|---------------------------------------------|--------|------|------|-------|-------------|--------------------------------------------------|------|-------------|-------|-----------|-------|
| <b>Batch 9C11056 - Analyzed as received</b> |        |      |      |       |             |                                                  |      |             |       |           |       |
| <b>Blank (9C11056-BLK1)</b>                 |        |      |      |       |             | Prepared & Analyzed: 03/11/09                    |      |             |       |           |       |
| Nitrate as N                                | ND     | 0.20 | 0.11 | mg/L  |             |                                                  |      |             |       |           |       |
| <b>LCS (9C11056-BS1)</b>                    |        |      |      |       |             | Prepared & Analyzed: 03/11/09                    |      |             |       |           |       |
| Nitrate as N                                | 11.4   | 0.20 | 0.11 | mg/L  | 11.3        |                                                  | 101  | 90-110      |       |           |       |
| <b>Matrix Spike (9C11056-MS1)</b>           |        |      |      |       |             | Source: A9C1004-02 Prepared & Analyzed: 03/11/09 |      |             |       |           |       |
| Nitrate as N                                | 16.6   | 0.20 | 0.11 | mg/L  | 4.52        | 11.6                                             | 110  | 78-120      |       |           |       |
| <b>Matrix Spike (9C11056-MS2)</b>           |        |      |      |       |             | Source: A9C1046-01 Prepared & Analyzed: 03/11/09 |      |             |       |           |       |
| Nitrate as N                                | 28.6   | 0.20 | 0.11 | mg/L  | 4.52        | 24.1                                             | 98.9 | 78-120      |       |           | QOcal |
| <b>Matrix Spike Dup (9C11056-MSD1)</b>      |        |      |      |       |             | Source: A9C1004-02 Prepared & Analyzed: 03/11/09 |      |             |       |           |       |
| Nitrate as N                                | 16.7   | 0.20 | 0.11 | mg/L  | 4.52        | 11.6                                             | 112  | 78-120      | 0.562 | 20        |       |

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Received on Ice (Y/N): Yes Temp: 10 °C

### Aggregate Organic Compounds - Batch Quality Control

| Analyte(s)                             | Result | RDL  | MDL  | Units | Spike Level | Source Result                                    | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|----------------------------------------|--------|------|------|-------|-------------|--------------------------------------------------|------|-------------|------|-----------|------|
| <b>Batch 9C19023 - As recieved</b>     |        |      |      |       |             |                                                  |      |             |      |           |      |
| <b>Blank (9C19023-BLK1)</b>            |        |      |      |       |             | Prepared & Analyzed: 03/20/09                    |      |             |      |           |      |
| Total Organic Carbon                   | ND     | 0.70 | 0.16 | mg/L  |             |                                                  |      |             |      |           |      |
| <b>LCS (9C19023-BS1)</b>               |        |      |      |       |             | Prepared & Analyzed: 03/20/09                    |      |             |      |           |      |
| Total Organic Carbon                   | 4.12   | 0.70 | 0.16 | mg/L  | 4.00        |                                                  | 103  | 90-110      |      |           |      |
| <b>Matrix Spike (9C19023-MS1)</b>      |        |      |      |       |             | Source: A9C1619-02 Prepared & Analyzed: 03/20/09 |      |             |      |           |      |
| Total Organic Carbon                   | 9.85   | 0.70 | 0.16 | mg/L  | 4.00        | 5.35                                             | 113  | 80-120      |      |           |      |
| <b>Matrix Spike Dup (9C19023-MSD1)</b> |        |      |      |       |             | Source: A9C1619-02 Prepared & Analyzed: 03/20/09 |      |             |      |           |      |
| Total Organic Carbon                   | 9.56   | 0.70 | 0.16 | mg/L  | 4.00        | 5.35                                             | 105  | 80-120      | 2.94 | 10        |      |



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Received on Ice (Y/N): Yes Temp: 10 °C

### General Inorganics - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL   | Units | Spike Level | Source Result                                              | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|---------------------------------------------|--------|------|-------|-------|-------------|------------------------------------------------------------|------|-------------|-------|-----------|------|
| <b>Batch 9C12054 - Analyzed as received</b> |        |      |       |       |             |                                                            |      |             |       |           |      |
| <b>Blank (9C12054-BLK1)</b>                 |        |      |       |       |             | Prepared: 03/12/09 Analyzed: 03/14/09                      |      |             |       |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             |                                                            |      |             |       |           |      |
| <b>LCS (9C12054-BS1)</b>                    |        |      |       |       |             | Prepared: 03/12/09 Analyzed: 03/14/09                      |      |             |       |           |      |
| Perchlorate                                 | 4.84   | 0.10 | 0.071 | ug/L* | 5.00        |                                                            | 96.7 | 80-120      |       |           |      |
| <b>Duplicate (9C12054-DUP1)</b>             |        |      |       |       |             | Source: A9C1060-02 Prepared: 03/11/09 Analyzed: 03/14/09   |      |             |       |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             | ND                                                         |      |             |       | 40        |      |
| <b>Duplicate (9C12054-DUP2)</b>             |        |      |       |       |             | Source: A9C1263-03RE Prepared: 03/11/09 Analyzed: 03/14/09 |      |             |       |           |      |
| Perchlorate                                 | 13.9   | 0.20 | 0.14  | ug/L* |             | 14.8                                                       |      |             | 6.42  | 40        |      |
| <b>Matrix Spike (9C12054-MS1)</b>           |        |      |       |       |             | Source: A9C1060-02 Prepared: 03/11/09 Analyzed: 03/14/09   |      |             |       |           |      |
| Perchlorate                                 | 4.78   | 0.10 | 0.071 | ug/L* | 5.00        | ND                                                         | 95.6 | 75-120      |       |           |      |
| <b>Matrix Spike (9C12054-MS2)</b>           |        |      |       |       |             | Source: A9C1263-03RE Prepared: 03/11/09 Analyzed: 03/14/09 |      |             |       |           |      |
| Perchlorate                                 | 24.4   | 0.20 | 0.14  | ug/L* | 10.0        | 14.8                                                       | 96.6 | 75-120      |       |           |      |
| <b>Matrix Spike Dup (9C12054-MSD1)</b>      |        |      |       |       |             | Source: A9C1060-02 Prepared: 03/11/09 Analyzed: 03/14/09   |      |             |       |           |      |
| Perchlorate                                 | 4.66   | 0.10 | 0.071 | ug/L* | 5.00        | ND                                                         | 93.1 | 75-120      | 2.58  | 40        |      |
| <b>Matrix Spike Dup (9C12054-MSD2)</b>      |        |      |       |       |             | Source: A9C1263-03RE Prepared: 03/11/09 Analyzed: 03/14/09 |      |             |       |           |      |
| Perchlorate                                 | 24.2   | 0.20 | 0.14  | ug/L* | 10.0        | 14.8                                                       | 94.4 | 75-120      | 0.889 | 40        |      |

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**Work Order Number: A9C1065**

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Received on Ice (Y/N): Yes Temp: 10 °C

### Nutrients - Batch Quality Control

| Analyte(s)                               | Result | RDL   | MDL    | Units | Spike Level                                             | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|------------------------------------------|--------|-------|--------|-------|---------------------------------------------------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch 9C12073 - Filter if turbid.</b> |        |       |        |       |                                                         |               |      |             |      |           |       |
| <b>LCS (9C12073-BS1)</b>                 |        |       |        |       | Prepared & Analyzed: 03/12/09                           |               |      |             |      |           |       |
| Ortho Phosphate Phosphorus               | 0.549  | 0.050 | 0.0028 | mg/L  | 0.500                                                   |               | 110  | 90-110      |      |           |       |
| <b>Matrix Spike (9C12073-MS1)</b>        |        |       |        |       | <b>Source: A9C1084-01</b> Prepared & Analyzed: 03/12/09 |               |      |             |      |           |       |
| Ortho Phosphate Phosphorus               | 5.50   | 0.25  | 0.014  | mg/L  | 2.50                                                    | 2.85          | 106  | 80-120      |      |           | QOcal |
| <b>Matrix Spike Dup (9C12073-MSD1)</b>   |        |       |        |       | <b>Source: A9C1084-01</b> Prepared & Analyzed: 03/12/09 |               |      |             |      |           |       |
| Ortho Phosphate Phosphorus               | 5.60   | 0.25  | 0.014  | mg/L  | 2.50                                                    | 2.85          | 110  | 80-120      | 1.80 | 20        | QOcal |

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Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### Metals and Metalloids - Batch Quality Control

| Analyte(s)                                  | Result  | RDL    | MDL      | Units | Spike Level | Source Result                                           | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|---------------------------------------------|---------|--------|----------|-------|-------------|---------------------------------------------------------|------|-------------|------|-----------|------|
| <b>Batch 9C16020 - 200.8/ No Digest M12</b> |         |        |          |       |             |                                                         |      |             |      |           |      |
| <b>Blank (9C16020-BLK1)</b>                 |         |        |          |       |             | Prepared & Analyzed: 03/16/09                           |      |             |      |           |      |
| Mercury                                     | ND      | 0.0010 | 0.000032 | mg/L  |             |                                                         |      |             |      |           |      |
| <b>LCS (9C16020-BS1)</b>                    |         |        |          |       |             | Prepared & Analyzed: 03/16/09                           |      |             |      |           |      |
| Mercury                                     | 0.00589 | 0.0010 | 0.000032 | mg/L  | 0.00625     |                                                         | 94.2 | 85-115      |      |           |      |
| <b>Matrix Spike (9C16020-MS1)</b>           |         |        |          |       |             | <b>Source: A9C1065-02</b> Prepared & Analyzed: 03/16/09 |      |             |      |           |      |
| Mercury                                     | 0.00638 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND                                                      | 102  | 75-125      |      |           |      |
| <b>Matrix Spike Dup (9C16020-MSD1)</b>      |         |        |          |       |             | <b>Source: A9C1065-02</b> Prepared & Analyzed: 03/16/09 |      |             |      |           |      |
| Mercury                                     | 0.00628 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND                                                      | 100  | 75-125      | 1.56 | 20        |      |

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Project Number: [none]

**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                  | Result  | RDL    | MDL      | Units                         | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------------|---------|--------|----------|-------------------------------|-------------|---------------|------|-------------|-----|-----------|------|
| <b>Batch 9C16020 - 200.8/ No Digest M12</b> |         |        |          |                               |             |               |      |             |     |           |      |
| <b>Blank (9C16020-BLK1)</b>                 |         |        |          | Prepared & Analyzed: 03/16/09 |             |               |      |             |     |           |      |
| Antimony                                    | ND      | 0.0060 | 0.0030   | mg/L                          |             |               |      |             |     |           |      |
| Arsenic                                     | ND      | 0.0020 | 0.0016   | mg/L                          |             |               |      |             |     |           |      |
| Barium                                      | ND      | 0.10   | 0.000056 | mg/L                          |             |               |      |             |     |           |      |
| Beryllium                                   | ND      | 0.0010 | 0.00017  | mg/L                          |             |               |      |             |     |           |      |
| Cadmium                                     | ND      | 0.0010 | 0.000077 | mg/L                          |             |               |      |             |     |           |      |
| Total Chromium                              | 0.00262 | 0.010  | 0.00050  | mg/L                          |             |               |      |             |     |           | J    |
| Cobalt                                      | ND      | 0.010  | 0.00028  | mg/L                          |             |               |      |             |     |           |      |
| Copper                                      | ND      | 0.010  | 0.0019   | mg/L                          |             |               |      |             |     |           |      |
| Lead                                        | ND      | 0.0050 | 0.000084 | mg/L                          |             |               |      |             |     |           |      |
| Molybdenum                                  | ND      | 0.010  | 0.00090  | mg/L                          |             |               |      |             |     |           |      |
| Nickel                                      | ND      | 0.010  | 0.0015   | mg/L                          |             |               |      |             |     |           |      |
| Selenium                                    | ND      | 0.0050 | 0.0025   | mg/L                          |             |               |      |             |     |           |      |
| Silver                                      | ND      | 0.010  | 0.0050   | mg/L                          |             |               |      |             |     |           |      |
| Thallium                                    | ND      | 0.0010 | 0.00098  | mg/L                          |             |               |      |             |     |           |      |
| Vanadium                                    | ND      | 0.010  | 0.0027   | mg/L                          |             |               |      |             |     |           |      |
| Zinc                                        | ND      | 0.010  | 0.0014   | mg/L                          |             |               |      |             |     |           |      |
| <b>LCS (9C16020-BS1)</b>                    |         |        |          | Prepared & Analyzed: 03/16/09 |             |               |      |             |     |           |      |
| Antimony                                    | 0.119   | 0.0060 | 0.0030   | mg/L                          | 0.125       |               | 95.3 | 85-115      |     |           |      |
| Arsenic                                     | 0.124   | 0.0020 | 0.0016   | mg/L                          | 0.125       |               | 98.9 | 85-115      |     |           |      |
| Barium                                      | 0.125   | 0.10   | 0.000056 | mg/L                          | 0.125       |               | 99.9 | 85-115      |     |           |      |
| Beryllium                                   | 0.111   | 0.0010 | 0.00017  | mg/L                          | 0.125       |               | 88.9 | 85-115      |     |           |      |
| Cadmium                                     | 0.119   | 0.0010 | 0.000077 | mg/L                          | 0.125       |               | 95.1 | 85-115      |     |           |      |
| Total Chromium                              | 0.122   | 0.010  | 0.00050  | mg/L                          | 0.125       |               | 97.6 | 85-115      |     |           |      |
| Cobalt                                      | 0.122   | 0.010  | 0.00028  | mg/L                          | 0.125       |               | 97.3 | 85-115      |     |           |      |
| Copper                                      | 0.120   | 0.010  | 0.0019   | mg/L                          | 0.125       |               | 95.8 | 85-115      |     |           |      |
| Lead                                        | 0.119   | 0.0050 | 0.000084 | mg/L                          | 0.125       |               | 95.2 | 85-115      |     |           |      |
| Molybdenum                                  | 0.125   | 0.010  | 0.00090  | mg/L                          | 0.125       |               | 100  | 85-115      |     |           |      |
| Nickel                                      | 0.122   | 0.010  | 0.0015   | mg/L                          | 0.125       |               | 97.4 | 85-115      |     |           |      |
| Selenium                                    | 0.120   | 0.0050 | 0.0025   | mg/L                          | 0.125       |               | 95.7 | 85-115      |     |           |      |
| Silver                                      | 0.136   | 0.010  | 0.0050   | mg/L                          | 0.125       |               | 109  | 85-115      |     |           |      |
| Thallium                                    | 0.120   | 0.0010 | 0.00098  | mg/L                          | 0.125       |               | 95.8 | 85-115      |     |           |      |
| Vanadium                                    | 0.133   | 0.010  | 0.0027   | mg/L                          | 0.125       |               | 106  | 85-115      |     |           |      |
| Zinc                                        | 0.123   | 0.010  | 0.0014   | mg/L                          | 0.125       |               | 98.0 | 85-115      |     |           |      |

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**Work Order Number: A9C1065**

Report Date: 23-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                  | Result | RDL    | MDL                       | Units | Spike Level | Source Result                 | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|---------------------------------------------|--------|--------|---------------------------|-------|-------------|-------------------------------|------|-------------|-------|-----------|------|
| <b>Batch 9C16020 - 200.8/ No Digest M12</b> |        |        |                           |       |             |                               |      |             |       |           |      |
| <b>Matrix Spike (9C16020-MS1)</b>           |        |        | <b>Source: A9C1065-02</b> |       |             | Prepared & Analyzed: 03/16/09 |      |             |       |           |      |
| Antimony                                    | 0.0987 | 0.0060 | 0.0030                    | mg/L  | 0.125       | ND                            | 78.9 | 75-125      |       |           |      |
| Arsenic                                     | 0.135  | 0.0020 | 0.0016                    | mg/L  | 0.125       | 0.00535                       | 104  | 75-125      |       |           |      |
| Barium                                      | 0.310  | 0.10   | 0.000056                  | mg/L  | 0.125       | 0.182                         | 102  | 75-125      |       |           |      |
| Beryllium                                   | 0.111  | 0.0010 | 0.00017                   | mg/L  | 0.125       | 0.000575                      | 88.4 | 75-125      |       |           |      |
| Cadmium                                     | 0.118  | 0.0010 | 0.000077                  | mg/L  | 0.125       | 0.0000980                     | 94.2 | 75-125      |       |           |      |
| Total Chromium                              | 0.152  | 0.010  | 0.00050                   | mg/L  | 0.125       | 0.0287                        | 99.0 | 75-125      |       |           |      |
| Cobalt                                      | 0.131  | 0.010  | 0.00028                   | mg/L  | 0.125       | 0.00594                       | 100  | 75-125      |       |           |      |
| Copper                                      | 0.141  | 0.010  | 0.0019                    | mg/L  | 0.125       | 0.0187                        | 97.5 | 75-125      |       |           |      |
| Lead                                        | 0.127  | 0.0050 | 0.000084                  | mg/L  | 0.125       | 0.00711                       | 96.2 | 75-125      |       |           |      |
| Molybdenum                                  | 0.181  | 0.010  | 0.00090                   | mg/L  | 0.125       | 0.0557                        | 100  | 75-125      |       |           |      |
| Nickel                                      | 0.135  | 0.010  | 0.0015                    | mg/L  | 0.125       | 0.00976                       | 100  | 75-125      |       |           |      |
| Selenium                                    | 0.124  | 0.0050 | 0.0025                    | mg/L  | 0.125       | 0.00271                       | 97.2 | 75-125      |       |           |      |
| Silver                                      | 0.132  | 0.010  | 0.0050                    | mg/L  | 0.125       | ND                            | 106  | 75-125      |       |           |      |
| Thallium                                    | 0.121  | 0.0010 | 0.00098                   | mg/L  | 0.125       | ND                            | 96.5 | 75-125      |       |           |      |
| Vanadium                                    | 0.197  | 0.010  | 0.0027                    | mg/L  | 0.125       | 0.0491                        | 119  | 75-125      |       |           |      |
| Zinc                                        | 0.152  | 0.010  | 0.0014                    | mg/L  | 0.125       | 0.0258                        | 101  | 75-125      |       |           |      |
| <b>Matrix Spike Dup (9C16020-MSD1)</b>      |        |        | <b>Source: A9C1065-02</b> |       |             | Prepared & Analyzed: 03/16/09 |      |             |       |           |      |
| Antimony                                    | 0.0886 | 0.0060 | 0.0030                    | mg/L  | 0.125       | ND                            | 70.9 | 75-125      | 10.8  | 20        | QMSD |
| Arsenic                                     | 0.133  | 0.0020 | 0.0016                    | mg/L  | 0.125       | 0.00535                       | 102  | 75-125      | 1.16  | 20        |      |
| Barium                                      | 0.284  | 0.10   | 0.000056                  | mg/L  | 0.125       | 0.182                         | 81.3 | 75-125      | 8.82  | 20        |      |
| Beryllium                                   | 0.109  | 0.0010 | 0.00017                   | mg/L  | 0.125       | 0.000575                      | 87.1 | 75-125      | 1.44  | 20        |      |
| Cadmium                                     | 0.116  | 0.0010 | 0.000077                  | mg/L  | 0.125       | 0.0000980                     | 93.0 | 75-125      | 1.26  | 20        |      |
| Total Chromium                              | 0.146  | 0.010  | 0.00050                   | mg/L  | 0.125       | 0.0287                        | 93.7 | 75-125      | 4.43  | 20        |      |
| Cobalt                                      | 0.128  | 0.010  | 0.00028                   | mg/L  | 0.125       | 0.00594                       | 97.9 | 75-125      | 2.21  | 20        |      |
| Copper                                      | 0.136  | 0.010  | 0.0019                    | mg/L  | 0.125       | 0.0187                        | 93.9 | 75-125      | 3.28  | 20        |      |
| Lead                                        | 0.124  | 0.0050 | 0.000084                  | mg/L  | 0.125       | 0.00711                       | 93.1 | 75-125      | 3.03  | 20        |      |
| Molybdenum                                  | 0.174  | 0.010  | 0.00090                   | mg/L  | 0.125       | 0.0557                        | 94.3 | 75-125      | 4.16  | 20        |      |
| Nickel                                      | 0.132  | 0.010  | 0.0015                    | mg/L  | 0.125       | 0.00976                       | 97.8 | 75-125      | 2.36  | 20        |      |
| Selenium                                    | 0.123  | 0.0050 | 0.0025                    | mg/L  | 0.125       | 0.00271                       | 95.9 | 75-125      | 1.25  | 20        |      |
| Silver                                      | 0.131  | 0.010  | 0.0050                    | mg/L  | 0.125       | ND                            | 105  | 75-125      | 0.376 | 20        |      |
| Thallium                                    | 0.118  | 0.0010 | 0.00098                   | mg/L  | 0.125       | ND                            | 94.7 | 75-125      | 1.81  | 20        |      |
| Vanadium                                    | 0.163  | 0.010  | 0.0027                    | mg/L  | 0.125       | 0.0491                        | 91.0 | 75-125      | 19.1  | 20        |      |
| Zinc                                        | 0.140  | 0.010  | 0.0014                    | mg/L  | 0.125       | 0.0258                        | 91.7 | 75-125      | 7.66  | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 11 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 23-Mar-2009

**Work Order Number: A9C1065**

Received on Ice (Y/N): Yes Temp: 10 °C

## Notes and Definitions

J Estimated value

QMSD The MS recovery and MS/MSD RPD met laboratory acceptance criteria. MSD recovery was not within range. MSD performed to assess precision data only.

QOcal The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

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## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_md1\_PDF Report

Environmental Laboratories *est. 1906*

Report Date: 23-Mar-2009

**Work Order Number: A9C1065**

Received on Ice (Y/N): Yes Temp: 10 °C

**E.S. BABCOCK & SONS, INC.**  
Environmental Laboratories *est. 1906*  
6100 Quail Valley Court Riverside, CA 92507  
(951) 653-3351 • FAX (951) 653-1662  
[www.babcocklabs.com](http://www.babcocklabs.com)

[illegible]

Lab No: APC065AB

Page 11 of 20





Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C1623**

Report Date: 19-Mar-2009

Received on Ice (Y/N): Yes Temp: 4 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>    | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>       | <u>Date Submitted</u> | <u>By</u>       |
|---------------------|----------------------------|---------------|---------------------|-----------------|-----------------------|-----------------|
| A9C1623-01          | IDW-031809 Beaumont Site 2 | Liquid        | 03/18/09 14:50      | Jose R. Santoya | 03/18/09 15:20        | Jose R. Santoya |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C1623**

Report Date: 19-Mar-2009

Received on Ice (Y/N): Yes Temp: 4 °C

Laboratory Reference Number  
**A9C1623-01**

| <u>Sample Description</u>  | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|----------------------------|---------------|--------------------------|---------------------------|
| IDW-031809 Beaumont Site 2 | Liquid        | 03/18/09 14:50           | 03/18/09 15:20            |

| Analyte(s)                        | Result | RDL | MDL | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------|--------|-----|-----|-------|-----------|----------------|---------|------|
| General Inorganics<br>Perchlorate | 1600   | 100 | 71  | ug/L* | EPA 332.0 | 03/19/09 08:52 | aa      |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C1623**

Report Date: 19-Mar-2009

Received on Ice (Y/N): Yes Temp: 4 °C

### General Inorganics - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL   | Units | Spike Level | Source Result                         | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------------|--------|------|-------|-------|-------------|---------------------------------------|------|-------------|-----|-----------|------|
| <b>Batch 9C18040 - Analyzed as received</b> |        |      |       |       |             |                                       |      |             |     |           |      |
| <b>Blank (9C18040-BLK1)</b>                 |        |      |       |       |             | Prepared: 03/18/09 Analyzed: 03/19/09 |      |             |     |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             |                                       |      |             |     |           |      |
| <b>LCS (9C18040-BS1)</b>                    |        |      |       |       |             | Prepared: 03/18/09 Analyzed: 03/19/09 |      |             |     |           |      |
| Perchlorate                                 | 5.03   | 0.10 | 0.071 | ug/L* | 5.00        |                                       | 101  | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C1623**

Report Date: 19-Mar-2009

Received on Ice (Y/N): Yes Temp: 4 °C

## Notes and Definitions

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)  
NR: Not Reported  
RDL: Reportable Detection Limit  
MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

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## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



\_\_\_\_\_  
Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_md1\_PDF Report



E.S.BABCOCK & Sons, Inc.

Environmental Laboratories est. 1906

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Work Order Number: A9C1623

Report Date: 19-Mar-2009

Received on Ice (Y/N): Yes Temp: 4 °C

# CHAIN OF CUSTODY RECORD

SHIP TO: Babcock

**TETRA TECH, INC.**  
348 W. Hospitality Lane, Suite 100  
San Bernardino, California 92408  
Telephone: (909) 381-1674  
FAX: (909) 889-1381



DATE \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

| CLIENT: LMC   |  |  |  | PROJECT NAME: LMC Beaumont Site 2 |  |  |  | PROJECT MANAGER: Bill Plac |  |  |  | TC # 23522-0141 |  |  |  | SAMPLERS (Signatures) |  |  |  | DATE |  |  |  | TIME |  |  |  |
|---------------|--|--|--|-----------------------------------|--|--|--|----------------------------|--|--|--|-----------------|--|--|--|-----------------------|--|--|--|------|--|--|--|------|--|--|--|
| CLIENT        |  |  |  | PROJECT NAME                      |  |  |  | PROJECT MANAGER            |  |  |  | TC #            |  |  |  | SAMPLERS              |  |  |  | DATE |  |  |  | TIME |  |  |  |
| 1. IDW-031809 |  |  |  | 3/18/09                           |  |  |  | 1450                       |  |  |  | X               |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 2.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 3.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 4.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 5.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 6.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 7.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 8.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 9.            |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |
| 10.           |  |  |  |                                   |  |  |  |                            |  |  |  |                 |  |  |  |                       |  |  |  |      |  |  |  |      |  |  |  |

| PARAMETERS          |  |  |  | PRESERVATIVE   |  |  |  | OBSERVATIONS/COMMENTS             |  |  |  |
|---------------------|--|--|--|----------------|--|--|--|-----------------------------------|--|--|--|
| MATRIX TYPE         |  |  |  | CONTAINER TYPE |  |  |  | NUMBER OF CONTAINERS              |  |  |  |
| FILTERED/UNFILTERED |  |  |  | HCL            |  |  |  | NaOH                              |  |  |  |
| UWP                 |  |  |  | NR             |  |  |  | H <sub>2</sub> SO <sub>4</sub>    |  |  |  |
| UWP                 |  |  |  | NR             |  |  |  | Please report all data to the MDL |  |  |  |
| UWP                 |  |  |  | NR             |  |  |  | Rush                              |  |  |  |

| CONTAINER TYPE              |  |  |  | PRESERVATIVES: (Water Only)                            |  |  |  |
|-----------------------------|--|--|--|--------------------------------------------------------|--|--|--|
| G - Glass Bottle/Jar        |  |  |  | HCL                                                    |  |  |  |
| SS - Stainless Steel Sleeve |  |  |  | NaOH                                                   |  |  |  |
| SB - Brass Sleeve           |  |  |  | H <sub>2</sub> SO <sub>4</sub>                         |  |  |  |
| P - Plastic Bottle/Jar      |  |  |  | NR (None required)                                     |  |  |  |
| TETRA TECH, INC.            |  |  |  | TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: 1 |  |  |  |
| DATE: 3/18/09               |  |  |  | METHOD OF SHIPMENT/SHIPMENT NO. Dep off                |  |  |  |
| DATE: 3/18/09               |  |  |  | Special Shipping/Handling/Storage Requirements: 4C     |  |  |  |
| DATE: 3/18/09               |  |  |  |                                                        |  |  |  |

| MATRIX TYPE                       |  |  |  | CONTAINER TYPE              |  |  |  |
|-----------------------------------|--|--|--|-----------------------------|--|--|--|
| S - Soil                          |  |  |  | G - Glass Bottle/Jar        |  |  |  |
| M - Sediment                      |  |  |  | SS - Stainless Steel Sleeve |  |  |  |
| W - Water                         |  |  |  | SB - Brass Sleeve           |  |  |  |
|                                   |  |  |  | P - Plastic Bottle/Jar      |  |  |  |
| RELINQUISHED BY: Jose R. Santiago |  |  |  | SIGNATURE: Jose R. Santiago |  |  |  |
| RECEIVED BY: UNICORP              |  |  |  | SIGNATURE: UNICORP          |  |  |  |
| RELINQUISHED BY: UNICORP          |  |  |  | SIGNATURE: UNICORP          |  |  |  |
| RECEIVED BY: UNICORP              |  |  |  | SIGNATURE: UNICORP          |  |  |  |

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

A9C1623AB MAR 19 2009



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C2262**

Report Date: 27-Mar-2009

Received on Ice (Y/N): Yes Temp: 7 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>    | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>       | <u>Date Submitted</u> | <u>By</u>       |
|---------------------|----------------------------|---------------|---------------------|-----------------|-----------------------|-----------------|
| A9C2262-01          | IDW-032609 Beaumont Site 2 | Liquid        | 03/26/09 08:00      | Jose R. Santoya | 03/26/09 15:00        | Jose R. Santoya |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C2262**

Report Date: 27-Mar-2009

Received on Ice (Y/N): Yes Temp: 7 °C

Laboratory Reference Number  
**A9C2262-01**

| <u>Sample Description</u>  | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|----------------------------|---------------|--------------------------|---------------------------|
| IDW-032609 Beaumont Site 2 | Liquid        | 03/26/09 08:00           | 03/26/09 15:00            |

| <u>Analyte(s)</u>                 | <u>Result</u> | <u>RDL</u> | <u>MDL</u> | <u>Units</u> | <u>Method</u> | <u>Analysis Date</u> | <u>Analyst</u> | <u>Flag</u> |
|-----------------------------------|---------------|------------|------------|--------------|---------------|----------------------|----------------|-------------|
| General Inorganics<br>Perchlorate | ND            | 0.10       | 0.071      | ug/L*        | EPA 332.0     | 03/27/09 09:43       | aa             |             |



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C2262**

Report Date: 27-Mar-2009

Received on Ice (Y/N): Yes Temp: 7 °C

### General Inorganics - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL   | Units | Spike Level | Source Result                         | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---------------------------------------------|--------|------|-------|-------|-------------|---------------------------------------|------|-------------|-----|-----------|------|
| <b>Batch 9C26042 - Analyzed as received</b> |        |      |       |       |             |                                       |      |             |     |           |      |
| <b>Blank (9C26042-BLK1)</b>                 |        |      |       |       |             | Prepared: 03/26/09 Analyzed: 03/27/09 |      |             |     |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             |                                       |      |             |     |           |      |
| <b>LCS (9C26042-BS1)</b>                    |        |      |       |       |             | Prepared: 03/26/09 Analyzed: 03/27/09 |      |             |     |           |      |
| Perchlorate                                 | 5.03   | 0.10 | 0.071 | ug/L* | 5.00        |                                       | 101  | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

**Work Order Number: A9C2262**

Report Date: 27-Mar-2009

Received on Ice (Y/N): Yes Temp: 7 °C

## Notes and Definitions

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)  
NR: Not Reported  
RDL: Reportable Detection Limit  
MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

---

## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_md1\_PDF Report



Analytical Report: Page 5 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 27-Mar-2009

Received on Ice (Y/N): Yes Temp: 7 °C

## CHAIN OF CUSTODY RECORD

**TETRA TECH, INC.**  
348 W. Hospitality Lane, Suite 100  
San Bernardino, California 92408  
Telephone: (909) 381-1674  
FAX: (909) 888-1391

SHIP TO: Sabock

DATE 3/26/09 PAGE 1 OF 1

[illegible]

49C.2262 AB MAR 26 2009

Canary = Laboratory

**DISTRIBUTION:** White and Pink = Tetra Tech, Inc.



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u> | <u>Date Submitted</u> | <u>By</u>        |
|---------------------|-------------------------|---------------|---------------------|-----------|-----------------------|------------------|
| A9C2429-01          | IDW1-033009             | Liquid        | 03/30/09 13:30      | Mandy S.  | 03/30/09 14:35        | David Bertolacci |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 31-Mar-2009

**Work Order Number: A9C2429**

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C2429-01**

| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|---------------------------|---------------|--------------------------|---------------------------|
| IDW1-033009               | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| Analyte(s)                  | Result | RDL  | MDL   | Units | Method      | Analysis Date  | Analyst | Flag |
|-----------------------------|--------|------|-------|-------|-------------|----------------|---------|------|
| Anions                      |        |      |       |       |             |                |         |      |
| Sulfate                     | 50     | 0.50 |       | mg/L  | EPA 300.0   | 03/30/09 19:11 | AA      |      |
| Nitrate as N                | ND     | 0.20 | 0.11  | mg/L  | EPA 300.0   | 03/30/09 19:11 | AA      |      |
| Aggregate Organic Compounds |        |      |       |       |             |                |         |      |
| Total Organic Carbon        | 2900   | 70   |       | mg/L  | SM 5310B    | 03/31/09 13:51 | krv     |      |
| General Inorganics          |        |      |       |       |             |                |         |      |
| Perchlorate                 | 0.39   | 0.10 | 0.071 | ug/L* | EPA 332.0   | 03/30/09 23:05 | aa      |      |
| Sulfide                     | ND     | 0.10 |       | mg/L  | SM 4500S2 D | 03/30/09 18:10 | kam     |      |
| Nutrients                   |        |      |       |       |             |                |         |      |
| Ortho Phosphate Phosphorus  | 13     | 2.0  |       | mg/L  | SM 4500P E  | 03/31/09 11:40 | je      |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 3 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### Anions - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL  | Units | Spike Level | Source Result                                           | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|---------------------------------------------|--------|------|------|-------|-------------|---------------------------------------------------------|------|-------------|-------|-----------|------|
| <b>Batch 9C30028 - Analyzed as received</b> |        |      |      |       |             |                                                         |      |             |       |           |      |
| <b>Blank (9C30028-BLK1)</b>                 |        |      |      |       |             | Prepared & Analyzed: 03/30/09                           |      |             |       |           |      |
| Sulfate                                     | ND     | 0.50 |      | mg/L  |             |                                                         |      |             |       |           |      |
| Nitrate as N                                | ND     | 0.20 | 0.11 | mg/L  |             |                                                         |      |             |       |           |      |
| <b>LCS (9C30028-BS1)</b>                    |        |      |      |       |             | Prepared & Analyzed: 03/30/09                           |      |             |       |           |      |
| Sulfate                                     | 46.8   | 0.50 |      | mg/L  | 50.0        |                                                         | 93.6 | 90-110      |       |           |      |
| Nitrate as N                                | 10.8   | 0.20 | 0.11 | mg/L  | 11.3        |                                                         | 95.7 | 90-110      |       |           |      |
| <b>Matrix Spike (9C30028-MS1)</b>           |        |      |      |       |             | <b>Source: A9C2359-02</b> Prepared & Analyzed: 03/30/09 |      |             |       |           |      |
| Sulfate                                     | 191    | 0.50 |      | mg/L  | 100         | 85.6                                                    | 105  | 87-114      |       |           |      |
| Nitrate as N                                | 7.94   | 0.20 | 0.11 | mg/L  | 4.52        | 3.25                                                    | 104  | 78-120      |       |           |      |
| <b>Matrix Spike Dup (9C30028-MSD1)</b>      |        |      |      |       |             | <b>Source: A9C2359-02</b> Prepared & Analyzed: 03/30/09 |      |             |       |           |      |
| Sulfate                                     | 192    | 0.50 |      | mg/L  | 100         | 85.6                                                    | 106  | 87-114      | 0.487 | 20        |      |
| Nitrate as N                                | 7.87   | 0.20 | 0.11 | mg/L  | 4.52        | 3.25                                                    | 102  | 78-120      | 0.886 | 20        |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### Aggregate Organic Compounds - Batch Quality Control

| Analyte(s)                             | Result | RDL  | MDL | Units | Spike Level | Source Result                                           | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|----------------------------------------|--------|------|-----|-------|-------------|---------------------------------------------------------|------|-------------|------|-----------|-------|
| <b>Batch 9C31004 - As recieved</b>     |        |      |     |       |             |                                                         |      |             |      |           |       |
| <b>Blank (9C31004-BLK1)</b>            |        |      |     |       |             | Prepared & Analyzed: 03/31/09                           |      |             |      |           |       |
| Total Organic Carbon                   | ND     | 0.70 |     | mg/L  |             |                                                         |      |             |      |           |       |
| <b>Blank (9C31004-BLK2)</b>            |        |      |     |       |             | Prepared & Analyzed: 03/31/09                           |      |             |      |           |       |
| Total Organic Carbon                   | ND     | 0.70 |     | mg/L  |             |                                                         |      |             |      |           |       |
| <b>LCS (9C31004-BS1)</b>               |        |      |     |       |             | Prepared & Analyzed: 03/31/09                           |      |             |      |           |       |
| Total Organic Carbon                   | 4.52   | 0.70 |     | mg/L  | 4.00        |                                                         | 113  | 90-110      |      |           | QL-MS |
| <b>LCS (9C31004-BS2)</b>               |        |      |     |       |             | Prepared & Analyzed: 03/31/09                           |      |             |      |           |       |
| Total Organic Carbon                   | 4.55   | 0.70 |     | mg/L  | 4.00        |                                                         | 114  | 90-110      |      |           | QL-MS |
| <b>Matrix Spike (9C31004-MS1)</b>      |        |      |     |       |             | <b>Source: A9C2280-01</b> Prepared & Analyzed: 03/31/09 |      |             |      |           |       |
| Total Organic Carbon                   | 11.4   | 0.70 |     | mg/L  | 4.00        | 7.14                                                    | 106  | 80-120      |      |           |       |
| <b>Matrix Spike Dup (9C31004-MSD1)</b> |        |      |     |       |             | <b>Source: A9C2280-01</b> Prepared & Analyzed: 03/31/09 |      |             |      |           |       |
| Total Organic Carbon                   | 11.6   | 0.70 |     | mg/L  | 4.00        | 7.14                                                    | 111  | 80-120      | 1.57 | 10        |       |



Client Name: Tetra Tech, Inc. - San Bernardino  
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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### General Inorganics - Batch Quality Control

| Analyte(s)                                  | Result | RDL  | MDL   | Units | Spike Level | Source Result                                           | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|---------------------------------------------|--------|------|-------|-------|-------------|---------------------------------------------------------|------|-------------|------|-----------|------|
| <b>Batch 9C30027 - Analyzed as received</b> |        |      |       |       |             |                                                         |      |             |      |           |      |
| <b>Blank (9C30027-BLK1)</b>                 |        |      |       |       |             | Prepared & Analyzed: 03/30/09                           |      |             |      |           |      |
| Perchlorate                                 | ND     | 0.10 | 0.071 | ug/L* |             |                                                         |      |             |      |           |      |
| <b>LCS (9C30027-BS1)</b>                    |        |      |       |       |             | Prepared & Analyzed: 03/30/09                           |      |             |      |           |      |
| Perchlorate                                 | 4.98   | 0.10 | 0.071 | ug/L* | 5.00        |                                                         | 99.6 | 80-120      |      |           |      |
| <b>Duplicate (9C30027-DUP1)</b>             |        |      |       |       |             | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/30/09 |      |             |      |           |      |
| Perchlorate                                 | 0.365  | 0.10 | 0.071 | ug/L* |             | 0.394                                                   |      |             | 7.80 | 40        |      |
| <b>Matrix Spike (9C30027-MS1)</b>           |        |      |       |       |             | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/30/09 |      |             |      |           |      |
| Perchlorate                                 | 5.30   | 0.10 | 0.071 | ug/L* | 5.00        | 0.394                                                   | 98.1 | 75-120      |      |           |      |
| <b>Matrix Spike Dup (9C30027-MSD1)</b>      |        |      |       |       |             | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/30/09 |      |             |      |           |      |
| Perchlorate                                 | 5.52   | 0.10 | 0.071 | ug/L* | 5.00        | 0.394                                                   | 103  | 75-120      | 4.09 | 40        |      |
| <b>Batch 9C30036 - Analyzed as received</b> |        |      |       |       |             |                                                         |      |             |      |           |      |
| <b>Blank (9C30036-BLK1)</b>                 |        |      |       |       |             | Prepared & Analyzed: 03/30/09                           |      |             |      |           |      |
| Sulfide                                     | ND     | 0.10 |       | mg/L  |             |                                                         |      |             |      |           |      |
| <b>Duplicate (9C30036-DUP1)</b>             |        |      |       |       |             | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/30/09 |      |             |      |           |      |
| Sulfide                                     | ND     | 0.10 |       | mg/L  |             | ND                                                      |      |             |      | 20        |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

### Nutrients - Batch Quality Control

| Analyte(s)                               | Result | RDL   | MDL | Units | Spike Level                                             | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|------------------------------------------|--------|-------|-----|-------|---------------------------------------------------------|---------------|------|-------------|------|-----------|------|
| <b>Batch 9C31027 - Filter if turbid.</b> |        |       |     |       |                                                         |               |      |             |      |           |      |
| <b>LCS (9C31027-BS1)</b>                 |        |       |     |       | Prepared & Analyzed: 03/31/09                           |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 0.551  | 0.050 |     | mg/L  | 0.500                                                   |               | 110  | 90-110      |      |           |      |
| <b>Matrix Spike (9C31027-MS1)</b>        |        |       |     |       | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/31/09 |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 35.9   | 2.0   |     | mg/L  | 20.0                                                    | 13.2          | 114  | 80-120      |      |           |      |
| <b>Matrix Spike Dup (9C31027-MSD1)</b>   |        |       |     |       | <b>Source: A9C2429-01</b> Prepared & Analyzed: 03/31/09 |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 34.9   | 2.0   |     | mg/L  | 20.0                                                    | 13.2          | 109  | 80-120      | 2.71 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 7 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 31-Mar-2009

**Work Order Number: A9C2429**

Received on Ice (Y/N): Yes Temp: 10 °C

## Notes and Definitions

QL-MS Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

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## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



\_\_\_\_\_  
Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_md1\_PDF Report



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Environmental Laboratories est. 1906

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Work Order Number: A9C2429

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

# CHAIN OF CUSTODY RECORD

TETRA TECH, INC.

348 W. Hospitality Lane, Suite 100  
San Bernardino, California 92408  
Telephone: (909) 381-1674  
FAX: (909) 889-1391



SHIP TO: Babcock

DATE 3/30/09 PAGE 1 OF 1

| CLIENT: TMC |      | PROJECT NAME: 512 |         | PROJECT MANAGER: E.P. ANJ |              | TC #: 22289-0241 D90108     |                                | SAMPLERS (Signature): [Signature] |                | DATE: 3/30/09 |                     | TIME: 1330       |                       |
|-------------|------|-------------------|---------|---------------------------|--------------|-----------------------------|--------------------------------|-----------------------------------|----------------|---------------|---------------------|------------------|-----------------------|
| LPE         | TECH | SAMPLE NO.        | DATE    | TIME                      | MATRIX TYPE  | CONTAINER TYPE              | PRESERVATIVES (Water Only)     | NUMBER OF CONTAINERS              | CONTAINER TYPE | MATRIX TYPE   | FILTERED/UNFILTERED | TURN-AROUND TIME | OBSERVATIONS/COMMENTS |
| 1.          | EDW1 | 023009            | 3/30/09 | 1330                      | S - Soil     | G - Glass Bottle/Jar        | HCL                            | 7                                 | W 61P          | W 61P         | NO                  | 7                |                       |
| 2.          |      |                   |         |                           | M - Sediment | SS - Stainless Steel Sleeve | NaOH                           |                                   |                |               |                     |                  |                       |
| 3.          |      |                   |         |                           | W - Water    |                             | H <sub>2</sub> SO <sub>4</sub> |                                   |                |               |                     |                  |                       |
| 4.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 5.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 6.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 7.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 8.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 9.          |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |
| 10.         |      |                   |         |                           |              |                             |                                |                                   |                |               |                     |                  |                       |

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

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CA ELAP no. 1156  
EPA no. CA00102

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 06-Apr-2009

**Work Order Number: A9C2432**

Received on Ice (Y/N): Yes Temp: 10 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u> | <u>Date Submitted</u> | <u>By</u>        |
|---------------------|-------------------------|---------------|---------------------|-----------|-----------------------|------------------|
| A9C2432-01          | IDW1-033009 (Total)     | Liquid        | 03/30/09 13:30      | Mandy S.  | 03/30/09 14:35        | David Bertolacci |
| A9C2432-02          | IDW1-033009 (Dissolved) | Liquid        | 03/30/09 13:30      | Mandy S.  | 03/30/09 14:35        | David Bertolacci |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 2 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 06-Apr-2009

**Work Order Number: A9C2432**

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C2432-01**

|                           |               |                          |                           |
|---------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| IDW1-033009 (Total)       | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| Analyte(s)                              | Result  | RDL    | MDL      | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|---------|--------|----------|-------|-----------|----------------|---------|------|
| Metals and Metalloids                   |         |        |          |       |           |                |         |      |
| Mercury                                 | ND      | 0.0010 | 0.000032 | mg/L  | EPA 200.8 | 04/02/09 11:16 | krv     |      |
| Metals and Metalloids; EPA SW846 Series |         |        |          |       |           |                |         |      |
| Antimony                                | ND      | 0.0060 | 0.0030   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | NLOh |
| Arsenic                                 | 0.010   | 0.0020 | 0.0016   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Barium                                  | 0.23    | 0.10   | 0.000056 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Beryllium                               | 0.00071 | 0.0010 | 0.00017  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Cadmium                                 | 0.00019 | 0.0010 | 0.000077 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Total Chromium                          | 0.032   | 0.010  | 0.00050  | mg/L  | EPA 6020  | 04/02/09 14:30 | krv     |      |
| Cobalt                                  | 0.0080  | 0.010  | 0.00028  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Copper                                  | 0.024   | 0.010  | 0.0019   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Lead                                    | 0.0085  | 0.0050 | 0.000084 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Molybdenum                              | 0.069   | 0.010  | 0.00090  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Nickel                                  | 0.015   | 0.010  | 0.0015   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Selenium                                | ND      | 0.0050 | 0.0025   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Silver                                  | ND      | 0.010  | 0.0050   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Thallium                                | ND      | 0.0010 | 0.00098  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Vanadium                                | 0.056   | 0.010  | 0.0027   | mg/L  | EPA 6020  | 04/03/09 17:24 | ap      |      |
| Zinc                                    | 0.047   | 0.010  | 0.0014   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 06-Apr-2009

**Work Order Number: A9C2432**

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C2432-02**

|                           |               |                          |                           |
|---------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| IDW1-033009 (Dissolved)   | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| Analyte(s)                              | Result  | RDL    | MDL      | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------------|---------|--------|----------|-------|-----------|----------------|---------|------|
| Metals and Metalloids                   |         |        |          |       |           |                |         |      |
| Mercury                                 | ND      | 0.0010 | 0.000032 | mg/L  | EPA 200.8 | 04/02/09 10:46 | krv     |      |
| Metals and Metalloids; EPA SW846 Series |         |        |          |       |           |                |         |      |
| Antimony                                | ND      | 0.0060 | 0.0030   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Arsenic                                 | 0.0090  | 0.0020 | 0.0016   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Barium                                  | 0.15    | 0.10   | 0.000056 | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Beryllium                               | 0.00052 | 0.0010 | 0.00017  | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     | J    |
| Cadmium                                 | 0.00014 | 0.0010 | 0.000077 | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     | J    |
| Total Chromium                          | 0.034   | 0.010  | 0.00050  | mg/L  | EPA 6020  | 04/02/09 14:49 | krv     |      |
| Cobalt                                  | 0.0049  | 0.010  | 0.00028  | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     | J    |
| Copper                                  | 0.014   | 0.010  | 0.0019   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Lead                                    | 0.0050  | 0.0050 | 0.000084 | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Molybdenum                              | 0.065   | 0.010  | 0.00090  | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Nickel                                  | 0.0091  | 0.010  | 0.0015   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     | J    |
| Selenium                                | ND      | 0.0050 | 0.0025   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Silver                                  | ND      | 0.010  | 0.0050   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Thallium                                | ND      | 0.0010 | 0.00098  | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |
| Vanadium                                | 0.029   | 0.010  | 0.0027   | mg/L  | EPA 6020  | 04/02/09 14:49 | krv     |      |
| Zinc                                    | 0.025   | 0.010  | 0.0014   | mg/L  | EPA 6020  | 04/02/09 10:46 | krv     |      |



Client Name: Tetra Tech, Inc. - San Bernardino  
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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 06-Apr-2009

**Work Order Number: A9C2432**

Received on Ice (Y/N): Yes Temp: 10 °C

### Metals and Metalloids - Batch Quality Control

| Analyte(s)                                 | Result  | RDL    | MDL      | Units | Spike Level | Source Result                                                   | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|--------------------------------------------|---------|--------|----------|-------|-------------|-----------------------------------------------------------------|------|-------------|------|-----------|------|
| <b>Batch 9D01003 - EPA 3015A SOP M02A</b>  |         |        |          |       |             |                                                                 |      |             |      |           |      |
| <b>Blank (9D01003-BLK1)</b>                |         |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09                           |      |             |      |           |      |
| Mercury                                    | ND      | 0.0010 | 0.000032 | mg/L  |             |                                                                 |      |             |      |           |      |
| <b>LCS (9D01003-BS1)</b>                   |         |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09                           |      |             |      |           |      |
| Mercury                                    | 0.00402 | 0.0010 | 0.000032 | mg/L  | 0.00400     |                                                                 | 100  | 85-115      |      |           |      |
| <b>Matrix Spike (9D01003-MS1)</b>          |         |        |          |       |             | <b>Source: A9C2369-01</b> Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |      |           |      |
| Mercury                                    | 0.00377 | 0.0010 | 0.000032 | mg/L  | 0.00400     | ND                                                              | 94.0 | 75-125      |      |           |      |
| <b>Matrix Spike Dup (9D01003-MSD1)</b>     |         |        |          |       |             | <b>Source: A9C2369-01</b> Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |      |           |      |
| Mercury                                    | 0.00367 | 0.0010 | 0.000032 | mg/L  | 0.00400     | ND                                                              | 91.6 | 75-125      | 2.61 | 20        |      |
| <b>Batch 9D01004 - 6020/ No Digest M13</b> |         |        |          |       |             |                                                                 |      |             |      |           |      |
| <b>Blank (9D01004-BLK1)</b>                |         |        |          |       |             | Prepared & Analyzed: 04/02/09                                   |      |             |      |           |      |
| Mercury                                    | ND      | 0.0010 | 0.000032 | mg/L  |             |                                                                 |      |             |      |           |      |
| <b>LCS (9D01004-BS1)</b>                   |         |        |          |       |             | Prepared & Analyzed: 04/02/09                                   |      |             |      |           |      |
| Mercury                                    | 0.00625 | 0.0010 | 0.000032 | mg/L  | 0.00625     |                                                                 | 100  | 85-115      |      |           |      |
| <b>Matrix Spike (9D01004-MS1)</b>          |         |        |          |       |             | <b>Source: A9C2432-02</b> Prepared & Analyzed: 04/02/09         |      |             |      |           |      |
| Mercury                                    | 0.00683 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND                                                              | 109  | 75-125      |      |           |      |
| <b>Matrix Spike Dup (9D01004-MSD1)</b>     |         |        |          |       |             | <b>Source: A9C2432-02</b> Prepared & Analyzed: 04/02/09         |      |             |      |           |      |
| Mercury                                    | 0.00707 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND                                                              | 113  | 75-125      | 3.57 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 5 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result    | RDL    | MDL      | Units | Spike Level | Source Result                         | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|-------------------------------------------|-----------|--------|----------|-------|-------------|---------------------------------------|------|-------------|-----|-----------|-------|
| <b>Batch 9D01003 - EPA 3015A SOP M02A</b> |           |        |          |       |             |                                       |      |             |     |           |       |
| <b>Blank (9D01003-BLK1)</b>               |           |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |     |           |       |
| Antimony                                  | ND        | 0.0060 | 0.0030   | mg/L  |             |                                       |      |             |     |           |       |
| Arsenic                                   | ND        | 0.0020 | 0.0016   | mg/L  |             |                                       |      |             |     |           |       |
| Barium                                    | 0.0000880 | 0.10   | 0.000056 | mg/L  |             |                                       |      |             |     |           | J     |
| Beryllium                                 | ND        | 0.0010 | 0.00017  | mg/L  |             |                                       |      |             |     |           |       |
| Cadmium                                   | ND        | 0.0010 | 0.000077 | mg/L  |             |                                       |      |             |     |           |       |
| Total Chromium                            | ND        | 0.010  | 0.00050  | mg/L  |             |                                       |      |             |     |           |       |
| Cobalt                                    | ND        | 0.010  | 0.00028  | mg/L  |             |                                       |      |             |     |           |       |
| Copper                                    | ND        | 0.010  | 0.0019   | mg/L  |             |                                       |      |             |     |           |       |
| Lead                                      | 0.000115  | 0.0050 | 0.000084 | mg/L  |             |                                       |      |             |     |           | J     |
| Molybdenum                                | ND        | 0.010  | 0.00090  | mg/L  |             |                                       |      |             |     |           |       |
| Nickel                                    | ND        | 0.010  | 0.0015   | mg/L  |             |                                       |      |             |     |           |       |
| Selenium                                  | ND        | 0.0050 | 0.0025   | mg/L  |             |                                       |      |             |     |           |       |
| Silver                                    | ND        | 0.010  | 0.0050   | mg/L  |             |                                       |      |             |     |           |       |
| Thallium                                  | ND        | 0.0010 | 0.00098  | mg/L  |             |                                       |      |             |     |           |       |
| Zinc                                      | 0.00412   | 0.010  | 0.0014   | mg/L  |             |                                       |      |             |     |           | J     |
| <b>LCS (9D01003-BS1)</b>                  |           |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |     |           |       |
| Antimony                                  | 0.246     | 0.0060 | 0.0030   | mg/L  | 0.200       |                                       | 123  | 85-115      |     |           | QLout |
| Arsenic                                   | 0.219     | 0.0020 | 0.0016   | mg/L  | 0.200       |                                       | 110  | 85-115      |     |           |       |
| Barium                                    | 0.226     | 0.10   | 0.000056 | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Beryllium                                 | 0.229     | 0.0010 | 0.00017  | mg/L  | 0.200       |                                       | 115  | 85-115      |     |           |       |
| Cadmium                                   | 0.224     | 0.0010 | 0.000077 | mg/L  | 0.200       |                                       | 112  | 85-115      |     |           |       |
| Total Chromium                            | 0.209     | 0.010  | 0.00050  | mg/L  | 0.200       |                                       | 104  | 85-115      |     |           |       |
| Cobalt                                    | 0.227     | 0.010  | 0.00028  | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Copper                                    | 0.224     | 0.010  | 0.0019   | mg/L  | 0.200       |                                       | 112  | 85-115      |     |           |       |
| Lead                                      | 0.234     | 0.0050 | 0.000084 | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Molybdenum                                | 0.234     | 0.010  | 0.00090  | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Nickel                                    | 0.233     | 0.010  | 0.0015   | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Selenium                                  | 0.220     | 0.0050 | 0.0025   | mg/L  | 0.200       |                                       | 110  | 85-115      |     |           |       |
| Silver                                    | 0.227     | 0.010  | 0.0050   | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Thallium                                  | 0.229     | 0.0010 | 0.00098  | mg/L  | 0.200       |                                       | 114  | 85-115      |     |           |       |
| Zinc                                      | 0.230     | 0.010  | 0.0014   | mg/L  | 0.200       |                                       | 115  | 85-115      |     |           |       |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result | RDL    | MDL                       | Units | Spike Level        | Source Result | %REC               | %REC Limits | RPD    | RPD Limit | Flag |
|-------------------------------------------|--------|--------|---------------------------|-------|--------------------|---------------|--------------------|-------------|--------|-----------|------|
| <b>Batch 9D01003 - EPA 3015A SOP M02A</b> |        |        |                           |       |                    |               |                    |             |        |           |      |
| <b>Matrix Spike (9D01003-MS1)</b>         |        |        | <b>Source: A9C2369-01</b> |       | Prepared: 04/01/09 |               | Analyzed: 04/02/09 |             |        |           |      |
| Antimony                                  | 0.280  | 0.0060 | 0.0030                    | mg/L  | 0.200              | 0.0352        | 122                | 75-125      |        |           |      |
| Arsenic                                   | 0.230  | 0.0020 | 0.0016                    | mg/L  | 0.200              | 0.0190        | 105                | 75-125      |        |           |      |
| Barium                                    | 0.955  | 0.10   | 0.000056                  | mg/L  | 0.200              | 0.746         | 104                | 75-125      |        |           |      |
| Beryllium                                 | 0.221  | 0.0010 | 0.00017                   | mg/L  | 0.200              | 0.00320       | 109                | 75-125      |        |           |      |
| Cadmium                                   | 0.255  | 0.0010 | 0.000077                  | mg/L  | 0.200              | 0.0348        | 110                | 75-125      |        |           |      |
| Total Chromium                            | 0.279  | 0.010  | 0.00050                   | mg/L  | 0.200              | 0.0681        | 105                | 75-125      |        |           |      |
| Cobalt                                    | 0.218  | 0.010  | 0.00028                   | mg/L  | 0.200              | 0.000309      | 109                | 75-125      |        |           |      |
| Copper                                    | 0.270  | 0.010  | 0.0019                    | mg/L  | 0.200              | 0.0582        | 106                | 75-125      |        |           |      |
| Lead                                      | 0.271  | 0.0050 | 0.000084                  | mg/L  | 0.200              | 0.0440        | 113                | 75-125      |        |           |      |
| Molybdenum                                | 0.348  | 0.010  | 0.00090                   | mg/L  | 0.200              | 0.117         | 115                | 75-125      |        |           |      |
| Nickel                                    | 0.516  | 0.010  | 0.0015                    | mg/L  | 0.200              | 0.303         | 106                | 75-125      |        |           |      |
| Selenium                                  | 0.274  | 0.0050 | 0.0025                    | mg/L  | 0.200              | 0.0622        | 106                | 75-125      |        |           |      |
| Silver                                    | 0.280  | 0.010  | 0.0050                    | mg/L  | 0.200              | 0.0566        | 112                | 75-125      |        |           |      |
| Thallium                                  | 0.224  | 0.0010 | 0.00098                   | mg/L  | 0.200              | 0.00382       | 110                | 75-125      |        |           |      |
| Zinc                                      | 1.21   | 0.010  | 0.0014                    | mg/L  | 0.200              | 0.974         | 116                | 75-125      |        |           |      |
| <b>Matrix Spike Dup (9D01003-MSD1)</b>    |        |        | <b>Source: A9C2369-01</b> |       | Prepared: 04/01/09 |               | Analyzed: 04/02/09 |             |        |           |      |
| Antimony                                  | 0.272  | 0.0060 | 0.0030                    | mg/L  | 0.200              | 0.0352        | 118                | 75-125      | 2.84   | 20        |      |
| Arsenic                                   | 0.230  | 0.0020 | 0.0016                    | mg/L  | 0.200              | 0.0190        | 105                | 75-125      | 0.0213 | 20        |      |
| Barium                                    | 0.923  | 0.10   | 0.000056                  | mg/L  | 0.200              | 0.746         | 88.2               | 75-125      | 3.40   | 20        |      |
| Beryllium                                 | 0.219  | 0.0010 | 0.00017                   | mg/L  | 0.200              | 0.00320       | 108                | 75-125      | 0.738  | 20        |      |
| Cadmium                                   | 0.249  | 0.0010 | 0.000077                  | mg/L  | 0.200              | 0.0348        | 107                | 75-125      | 2.64   | 20        |      |
| Total Chromium                            | 0.267  | 0.010  | 0.00050                   | mg/L  | 0.200              | 0.0681        | 99.4               | 75-125      | 4.28   | 20        |      |
| Cobalt                                    | 0.212  | 0.010  | 0.00028                   | mg/L  | 0.200              | 0.000309      | 106                | 75-125      | 2.96   | 20        |      |
| Copper                                    | 0.264  | 0.010  | 0.0019                    | mg/L  | 0.200              | 0.0582        | 103                | 75-125      | 2.44   | 20        |      |
| Lead                                      | 0.260  | 0.0050 | 0.000084                  | mg/L  | 0.200              | 0.0440        | 108                | 75-125      | 4.02   | 20        |      |
| Molybdenum                                | 0.339  | 0.010  | 0.00090                   | mg/L  | 0.200              | 0.117         | 111                | 75-125      | 2.61   | 20        |      |
| Nickel                                    | 0.508  | 0.010  | 0.0015                    | mg/L  | 0.200              | 0.303         | 102                | 75-125      | 1.59   | 20        |      |
| Selenium                                  | 0.271  | 0.0050 | 0.0025                    | mg/L  | 0.200              | 0.0622        | 104                | 75-125      | 1.21   | 20        |      |
| Silver                                    | 0.270  | 0.010  | 0.0050                    | mg/L  | 0.200              | 0.0566        | 107                | 75-125      | 3.69   | 20        |      |
| Thallium                                  | 0.217  | 0.0010 | 0.00098                   | mg/L  | 0.200              | 0.00382       | 106                | 75-125      | 3.15   | 20        |      |
| Zinc                                      | 1.18   | 0.010  | 0.0014                    | mg/L  | 0.200              | 0.974         | 101                | 75-125      | 2.48   | 20        |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                 | Result   | RDL    | MDL      | Units                         | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|--------------------------------------------|----------|--------|----------|-------------------------------|-------------|---------------|------|-------------|-----|-----------|------|
| <b>Batch 9D01004 - 6020/ No Digest M13</b> |          |        |          |                               |             |               |      |             |     |           |      |
| <b>Blank (9D01004-BLK1)</b>                |          |        |          | Prepared & Analyzed: 04/02/09 |             |               |      |             |     |           |      |
| Antimony                                   | ND       | 0.0060 | 0.0030   | mg/L                          |             |               |      |             |     |           |      |
| Arsenic                                    | ND       | 0.0020 | 0.0016   | mg/L                          |             |               |      |             |     |           |      |
| Barium                                     | ND       | 0.10   | 0.000056 | mg/L                          |             |               |      |             |     |           |      |
| Beryllium                                  | ND       | 0.0010 | 0.00017  | mg/L                          |             |               |      |             |     |           |      |
| Cadmium                                    | ND       | 0.0010 | 0.000077 | mg/L                          |             |               |      |             |     |           |      |
| Total Chromium                             | ND       | 0.010  | 0.00050  | mg/L                          |             |               |      |             |     |           |      |
| Cobalt                                     | ND       | 0.010  | 0.00028  | mg/L                          |             |               |      |             |     |           |      |
| Copper                                     | ND       | 0.010  | 0.0019   | mg/L                          |             |               |      |             |     |           |      |
| Lead                                       | 0.000605 | 0.0050 | 0.000084 | mg/L                          |             |               |      |             |     |           | J    |
| Molybdenum                                 | ND       | 0.010  | 0.00090  | mg/L                          |             |               |      |             |     |           |      |
| Nickel                                     | ND       | 0.010  | 0.0015   | mg/L                          |             |               |      |             |     |           |      |
| Selenium                                   | ND       | 0.0050 | 0.0025   | mg/L                          |             |               |      |             |     |           |      |
| Silver                                     | ND       | 0.010  | 0.0050   | mg/L                          |             |               |      |             |     |           |      |
| Thallium                                   | ND       | 0.0010 | 0.00098  | mg/L                          |             |               |      |             |     |           |      |
| Vanadium                                   | ND       | 0.010  | 0.0027   | mg/L                          |             |               |      |             |     |           |      |
| Zinc                                       | ND       | 0.010  | 0.0014   | mg/L                          |             |               |      |             |     |           |      |
| <b>LCS (9D01004-BS1)</b>                   |          |        |          | Prepared & Analyzed: 04/02/09 |             |               |      |             |     |           |      |
| Antimony                                   | 0.126    | 0.0060 | 0.0030   | mg/L                          | 0.125       |               | 101  | 85-115      |     |           |      |
| Arsenic                                    | 0.120    | 0.0020 | 0.0016   | mg/L                          | 0.125       |               | 95.6 | 85-115      |     |           |      |
| Barium                                     | 0.130    | 0.10   | 0.000056 | mg/L                          | 0.125       |               | 104  | 85-115      |     |           |      |
| Beryllium                                  | 0.118    | 0.0010 | 0.00017  | mg/L                          | 0.125       |               | 94.3 | 85-115      |     |           |      |
| Cadmium                                    | 0.126    | 0.0010 | 0.000077 | mg/L                          | 0.125       |               | 101  | 85-115      |     |           |      |
| Total Chromium                             | 0.118    | 0.010  | 0.00050  | mg/L                          | 0.125       |               | 94.3 | 85-115      |     |           |      |
| Cobalt                                     | 0.125    | 0.010  | 0.00028  | mg/L                          | 0.125       |               | 99.9 | 85-115      |     |           |      |
| Copper                                     | 0.121    | 0.010  | 0.0019   | mg/L                          | 0.125       |               | 97.1 | 85-115      |     |           |      |
| Lead                                       | 0.128    | 0.0050 | 0.000084 | mg/L                          | 0.125       |               | 102  | 85-115      |     |           |      |
| Molybdenum                                 | 0.130    | 0.010  | 0.00090  | mg/L                          | 0.125       |               | 104  | 85-115      |     |           |      |
| Nickel                                     | 0.125    | 0.010  | 0.0015   | mg/L                          | 0.125       |               | 99.7 | 85-115      |     |           |      |
| Selenium                                   | 0.118    | 0.0050 | 0.0025   | mg/L                          | 0.125       |               | 94.6 | 85-115      |     |           |      |
| Silver                                     | 0.127    | 0.010  | 0.0050   | mg/L                          | 0.125       |               | 101  | 85-115      |     |           |      |
| Thallium                                   | 0.124    | 0.0010 | 0.00098  | mg/L                          | 0.125       |               | 99.5 | 85-115      |     |           |      |
| Vanadium                                   | 0.122    | 0.010  | 0.0027   | mg/L                          | 0.125       |               | 97.9 | 85-115      |     |           |      |
| Zinc                                       | 0.124    | 0.010  | 0.0014   | mg/L                          | 0.125       |               | 99.5 | 85-115      |     |           |      |

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Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                 | Result | RDL                       | MDL      | Units | Spike Level | Source Result                 | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|--------------------------------------------|--------|---------------------------|----------|-------|-------------|-------------------------------|------|-------------|-------|-----------|------|
| <b>Batch 9D01004 - 6020/ No Digest M13</b> |        |                           |          |       |             |                               |      |             |       |           |      |
| <b>Matrix Spike (9D01004-MS1)</b>          |        | <b>Source: A9C2432-02</b> |          |       |             | Prepared & Analyzed: 04/02/09 |      |             |       |           |      |
| Antimony                                   | 0.133  | 0.0060                    | 0.0030   | mg/L  | 0.125       | ND                            | 106  | 75-125      |       |           |      |
| Arsenic                                    | 0.135  | 0.0020                    | 0.0016   | mg/L  | 0.125       | 0.00896                       | 101  | 75-125      |       |           |      |
| Barium                                     | 0.282  | 0.10                      | 0.000056 | mg/L  | 0.125       | 0.154                         | 103  | 75-125      |       |           |      |
| Beryllium                                  | 0.148  | 0.0010                    | 0.00017  | mg/L  | 0.125       | 0.000522                      | 118  | 75-125      |       |           |      |
| Cadmium                                    | 0.122  | 0.0010                    | 0.000077 | mg/L  | 0.125       | 0.000143                      | 97.5 | 75-125      |       |           |      |
| Total Chromium                             | 0.152  | 0.010                     | 0.00050  | mg/L  | 0.125       | 0.0345                        | 93.9 | 75-125      |       |           |      |
| Cobalt                                     | 0.128  | 0.010                     | 0.00028  | mg/L  | 0.125       | 0.00490                       | 98.7 | 75-125      |       |           |      |
| Copper                                     | 0.134  | 0.010                     | 0.0019   | mg/L  | 0.125       | 0.0143                        | 95.5 | 75-125      |       |           |      |
| Lead                                       | 0.137  | 0.0050                    | 0.000084 | mg/L  | 0.125       | 0.00500                       | 106  | 75-125      |       |           |      |
| Molybdenum                                 | 0.197  | 0.010                     | 0.00090  | mg/L  | 0.125       | 0.0646                        | 106  | 75-125      |       |           |      |
| Nickel                                     | 0.132  | 0.010                     | 0.0015   | mg/L  | 0.125       | 0.00910                       | 98.4 | 75-125      |       |           |      |
| Selenium                                   | 0.129  | 0.0050                    | 0.0025   | mg/L  | 0.125       | ND                            | 103  | 75-125      |       |           |      |
| Silver                                     | 0.123  | 0.010                     | 0.0050   | mg/L  | 0.125       | ND                            | 98.1 | 75-125      |       |           |      |
| Thallium                                   | 0.128  | 0.0010                    | 0.00098  | mg/L  | 0.125       | ND                            | 102  | 75-125      |       |           |      |
| Vanadium                                   | 0.148  | 0.010                     | 0.0027   | mg/L  | 0.125       | 0.0289                        | 95.7 | 75-125      |       |           |      |
| Zinc                                       | 0.149  | 0.010                     | 0.0014   | mg/L  | 0.125       | 0.0247                        | 99.5 | 75-125      |       |           |      |
| <b>Matrix Spike Dup (9D01004-MSD1)</b>     |        | <b>Source: A9C2432-02</b> |          |       |             | Prepared & Analyzed: 04/02/09 |      |             |       |           |      |
| Antimony                                   | 0.133  | 0.0060                    | 0.0030   | mg/L  | 0.125       | ND                            | 107  | 75-125      | 0.396 | 20        |      |
| Arsenic                                    | 0.138  | 0.0020                    | 0.0016   | mg/L  | 0.125       | 0.00896                       | 103  | 75-125      | 2.11  | 20        |      |
| Barium                                     | 0.279  | 0.10                      | 0.000056 | mg/L  | 0.125       | 0.154                         | 101  | 75-125      | 1.10  | 20        |      |
| Beryllium                                  | 0.149  | 0.0010                    | 0.00017  | mg/L  | 0.125       | 0.000522                      | 119  | 75-125      | 0.311 | 20        |      |
| Cadmium                                    | 0.121  | 0.0010                    | 0.000077 | mg/L  | 0.125       | 0.000143                      | 96.9 | 75-125      | 0.653 | 20        |      |
| Total Chromium                             | 0.155  | 0.010                     | 0.00050  | mg/L  | 0.125       | 0.0345                        | 96.2 | 75-125      | 1.82  | 20        |      |
| Cobalt                                     | 0.134  | 0.010                     | 0.00028  | mg/L  | 0.125       | 0.00490                       | 103  | 75-125      | 4.47  | 20        |      |
| Copper                                     | 0.137  | 0.010                     | 0.0019   | mg/L  | 0.125       | 0.0143                        | 98.0 | 75-125      | 2.32  | 20        |      |
| Lead                                       | 0.140  | 0.0050                    | 0.000084 | mg/L  | 0.125       | 0.00500                       | 108  | 75-125      | 2.18  | 20        |      |
| Molybdenum                                 | 0.196  | 0.010                     | 0.00090  | mg/L  | 0.125       | 0.0646                        | 105  | 75-125      | 0.295 | 20        |      |
| Nickel                                     | 0.137  | 0.010                     | 0.0015   | mg/L  | 0.125       | 0.00910                       | 102  | 75-125      | 3.34  | 20        |      |
| Selenium                                   | 0.130  | 0.0050                    | 0.0025   | mg/L  | 0.125       | ND                            | 104  | 75-125      | 0.923 | 20        |      |
| Silver                                     | 0.124  | 0.010                     | 0.0050   | mg/L  | 0.125       | ND                            | 99.0 | 75-125      | 0.937 | 20        |      |
| Thallium                                   | 0.132  | 0.0010                    | 0.00098  | mg/L  | 0.125       | ND                            | 106  | 75-125      | 3.20  | 20        |      |
| Vanadium                                   | 0.155  | 0.010                     | 0.0027   | mg/L  | 0.125       | 0.0289                        | 101  | 75-125      | 4.31  | 20        |      |
| Zinc                                       | 0.151  | 0.010                     | 0.0014   | mg/L  | 0.125       | 0.0247                        | 101  | 75-125      | 1.39  | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 9 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result  | RDL   | MDL    | Units | Spike Level | Source Result                                             | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|-------------------------------------------|---------|-------|--------|-------|-------------|-----------------------------------------------------------|------|-------------|------|-----------|------|
| <b>Batch 9D03005 - EPA 3015A SOP M02A</b> |         |       |        |       |             |                                                           |      |             |      |           |      |
| <b>Blank (9D03005-BLK1)</b>               |         |       |        |       |             | Prepared & Analyzed: 04/03/09                             |      |             |      |           |      |
| Vanadium                                  | 0.00303 | 0.010 | 0.0027 | mg/L  |             |                                                           |      |             |      |           | J    |
| <b>LCS (9D03005-BS1)</b>                  |         |       |        |       |             | Prepared & Analyzed: 04/03/09                             |      |             |      |           |      |
| Vanadium                                  | 0.208   | 0.010 | 0.0027 | mg/L  | 0.200       |                                                           | 104  | 85-115      |      |           |      |
| <b>Matrix Spike (9D03005-MS1)</b>         |         |       |        |       |             | <b>Source: A9C2369-01RE</b> Prepared & Analyzed: 04/03/09 |      |             |      |           |      |
| Vanadium                                  | 0.595   | 0.010 | 0.0027 | mg/L  | 0.200       | 0.417                                                     | 88.8 | 75-125      |      |           |      |
| <b>Matrix Spike Dup (9D03005-MSD1)</b>    |         |       |        |       |             | <b>Source: A9C2369-01RE</b> Prepared & Analyzed: 04/03/09 |      |             |      |           |      |
| Vanadium                                  | 0.640   | 0.010 | 0.0027 | mg/L  | 0.200       | 0.417                                                     | 112  | 75-125      | 7.40 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 10 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

Report Date: 06-Apr-2009

**Work Order Number: A9C2432**

Received on Ice (Y/N): Yes Temp: 10 °C

## Notes and Definitions

J Estimated value

NLOh The LCS was biased high. The recovery did not meet laboratory acceptance criteria. Data is suspect.

QL-MS Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.

QLout The LCS and/or LCSD recovery did not meet laboratory acceptance criteria.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

---

## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



\_\_\_\_\_  
Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_md1\_PDF Report





Received on Ice (Y/N): Yes Temp: 10 °C

DATE 3/30/09 PAGE 1 OF 1

**DISTRIBUTION:** White and Pink = Tetra Tech, Inc.      Canary = Laboratory



Email to: CHRISTOPHER PATRICK

christopher.patrick@tetrattech.com



4/08/09  
14:39:21

TETRA TECH  
348 WEST HOSPITALITY LANE  
SUITE 100  
SAN BERNARDINO, CA 92408

THANK YOU FOR PLACING YOUR ORDER WITH BRENNTAG PACIFIC. PLEASE TAKE A MOMENT TO REVIEW YOUR ORDER CONFIRMATION TO ENSURE THAT WE HAVE MET YOUR REQUIREMENTS AND NOTIFY ME IF YOU FIND ANY DISCREPANCIES.

PLEASE NOTE THAT YOUR ORDER WILL BE INVOICED AT YOUR CURRENT PRICE IN EFFECT AT THE TIME OF SHIPMENT.

WE APPRECIATE YOUR CHOOSING BRENNTAG TO SERVICE YOUR CHEMICAL NEEDS. IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE DO NOT HESITATE TO CONTACT ME.

JANET WRAY, INSIDE SALES  
PHONE: 562-777-9306  
EMAIL: JWRAY@BRENNTAG.COM

NOTE: OUR TERMS ARE AVAILABLE FOR REVIEW AT [WWW.BRENNTAG.CC](http://WWW.BRENNTAG.CC). TERMS IN EFFECT AT THE TIME OF DELIVERY SHALL GOVERN THIS ORDER.

# BRENNTAG

|            |              |             |                     |
|------------|--------------|-------------|---------------------|
| B/L#....:  | 680343-00    | Ship Date.: | 4/08/09             |
| Cust#....: | 403557       | PO#.....:   | 22289-090108        |
| Ship Via:  | UPS          | Ordered by: | CHRISTOPHER PATRICK |
| Terms....: | COD-CO CHECK |             |                     |

Ship to: TETRA TECH  
 348 WEST HOSPITALITY LANE  
 SUITE 100  
 SAN BERNARDINO, CA 92408

| Product Name       | Prod#           | Quantity     | Unit Price | Ext Price |
|--------------------|-----------------|--------------|------------|-----------|
| Product Desc       | -- Packaging -- | Cust         | Prod Desc  |           |
| GLYCERINE 96-99.5% | 309308          | 2.0000       | 4.5400     | 454.00    |
|                    | >A RPK          | 50.0000#PAIL |            |           |

|                        |        |
|------------------------|--------|
| Total Merchandise....: | 454.00 |
| Freight Charge.....:   | 50.00  |
| Insurance Surcharge..: | 25.00  |
| Fuel Surcharge.....:   | 27.50  |
| Tax.....:              | 45.61  |
|                        | -----  |
| Total Order Value....: | 602.11 |

# Material Safety Data Sheet

## Glycerol

ACC# 96127

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Glycerol**Catalog Numbers:** AC158920000, AC158920200, 15892-0010, 15892-0025, 15892-0250, G33-1, G33-1LC, G33-20, G33-200, G33-4, G33-4LC, G33-500, G33P-200, NC9581172**Synonyms:** Glycerol; 1,2,3-Propanetriol; Glyceritol; Glycic Alcohol; 1,2,3-Trihydroxypropane; 1,2,3-Propanetriol**Company Identification:**Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

| CAS#    | Chemical Name | Percent | EINECS/ELINCS |
|---------|---------------|---------|---------------|
| 56-81-5 | Glycerol      | 99.0    | 200-289-5     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: Clear liquid.

**Caution!** May cause eye, skin, and respiratory tract irritation. This is expected to be a low hazard for usual industrial handling.**Target Organs:** None known.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation. Low hazard for usual industrial handling.**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. Low hazard for usual industrial handling. May cause headache.**Inhalation:** Low hazard for usual industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation.**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 193 deg C ( 379.40 deg F)

**Autoignition Temperature:** 400 deg C ( 752.00 deg F)

**Explosion Limits, Lower:**1.1

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 0; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. No special precautions indicated.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

| Chemical Name | ACGIH        | NIOSH       | OSHA - Final PELs                                       |
|---------------|--------------|-------------|---------------------------------------------------------|
| Glycerol      | 10 mg/m3 TWA | none listed | 15 mg/m3 TWA (total); 5 mg/m3 TWA (respirable fraction) |

**OSHA Vacated PELs:** Glycerol: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear

**Odor:** faint odor

**pH:** Not available.

**Vapor Pressure:** 0.003 mbar @ 50 deg C

**Vapor Density:** 3.17 (H<sub>2</sub>O=1)

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 290 deg C

**Freezing / Melting Point:** -6.7 deg C

**Decomposition Temperature:** 290 deg C

**Solubility:** Miscible in water. Insol. in chloroform,

**Specific Gravity / Density:** 1.4746

**Molecular Formula:** C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

**Molecular Weight:** 92.05

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat.

**Incompatibilities with Other Materials:** Not available.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information



**RTECS#:****CAS#** 56-81-5: MA8050000**LD50/LC50:****CAS#** 56-81-5:

Draize test, rabbit, eye: 126 mg Mild;  
 Draize test, rabbit, eye: 500 mg/24H Mild;  
 Draize test, rabbit, skin: 500 mg/24H Mild;  
 Inhalation, rat: LC50 = >570 mg/m<sup>3</sup>/1H;  
 Oral, mouse: LD50 = 4090 mg/kg;  
 Oral, rabbit: LD50 = 27 gm/kg;  
 Oral, rat: LD50 = 12600 mg/kg;  
 Skin, rabbit: LD50 = >10 gm/kg;

**Carcinogenicity:****CAS#** 56-81-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.**Epidemiology:** No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Mutagenicity:** No information available.**Neurotoxicity:** No information available.**Other Studies:**

|                                            |
|--------------------------------------------|
| <b>Section 12 - Ecological Information</b> |
|--------------------------------------------|

**Ecotoxicity:** No data available. Cas# 56-81-5:LC50 (96 Hr.) rainbow trout = 50-67 mg/L; 12 degrees CLC50 (96 Hr.) goldfish = >5000 mg/L

**Environmental:** No information available.**Physical:** No information available.**Other:** No information available.

|                                             |
|---------------------------------------------|
| <b>Section 13 - Disposal Considerations</b> |
|---------------------------------------------|

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

|                                           |
|-------------------------------------------|
| <b>Section 14 - Transport Information</b> |
|-------------------------------------------|

|                       | US DOT                                                    | Canada TDG                |
|-----------------------|-----------------------------------------------------------|---------------------------|
| <b>Shipping Name:</b> | Please contact Fisher Scientific for shipping information | No information available. |
| <b>Hazard Class:</b>  |                                                           |                           |
| <b>UN Number:</b>     |                                                           |                           |

|                       |  |
|-----------------------|--|
| <b>Packing Group:</b> |  |
|-----------------------|--|

|                                            |
|--------------------------------------------|
| <b>Section 15 - Regulatory Information</b> |
|--------------------------------------------|

**US FEDERAL****TSCA**

CAS# 56-81-5 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 56-81-5: delayed.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 56-81-5 can be found on the following state right to know lists: Pennsylvania, Minnesota, Massachusetts.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European / International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

**Risk Phrases:****Safety Phrases:**

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water

**WGK (Water Danger/Protection)**

CAS# 56-81-5: 0

**Canada - DSL/NDSL**

CAS# 56-81-5 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

|                                            |
|--------------------------------------------|
| <b>Section 16 - Additional Information</b> |
|--------------------------------------------|

**MSDS Creation Date:** 7/20/1999**Revision #8 Date:** 11/14/2007

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*

THANK YOU FOR YOUR ORDER... ANY QUESTIONS REGARDING THIS ORDER,  
CALL 1-(800) 766-7000 TO SPEAK TO A CUSTOMER SERVICE REPRESENTATIVE

ORDER NBR: A90975709      ACCT NBR: 953755-001      ORDER DATE: APR 07, 2009  
CUST PURCH NBR: 22289090108      REL NBR:  
CALLER: CHRISTOPHER PATRICK      PHONE NBR: (909)381-1674

SHIP TO: TETRA TECH INC      SOLD TO: TETRA TECH INC  
348 W HOSPITALITY LN      348 W HOSPITALITY LN  
STE 100      STE 100  
  
SAN BERNARDINO CA 92408      SAN BERNARDINO CA 92408  
ATTN: CHRISTOPHER PATRICK

| LN  | QTY | UN | CATALOG NBR | DESCRIPTION                                                                                                         | UNIT PRC | TOTAL AMT |
|-----|-----|----|-------------|---------------------------------------------------------------------------------------------------------------------|----------|-----------|
| 001 | 4   | EA | S799011     | AMMONIUM PHOS 500G DIBASIC<br>3 SHIPPING FROM EMW<br>1 BACKORDERED<br>ESTIMATED DELIVERY DATE 04/28/09              | 22.00    | 88.00     |
|     |     |    |             | MERCHANDISE TOTAL:                                                                                                  |          | 88.00     |
|     |     |    |             | THE INVOICE AMOUNT MAY INCLUDE TRANSPORTATION, TAX, AND<br>OTHER MISC ORDER CHARGES AS DETERMINED BY YOUR CONTRACT. |          |           |

# Material Safety Data Sheet

## Ammonium phosphate, dibasic

ACC# 01350

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Ammonium phosphate, dibasic**Catalog Numbers:** AC201820000, AC201822500, AC201825000, AC423370000, AC423370050, 42337-5000, A686-500, A686500LC, BP361-500**Synonyms:** Diammonium hydrogen phosphate; DAP.**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

| CAS#      | Chemical Name               | Percent | EINECS/ELINCS |
|-----------|-----------------------------|---------|---------------|
| 7783-28-0 | Ammonium phosphate, dibasic | 99+     | 231-987-8     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white solid.

**Warning!** Causes eye, skin, and respiratory tract irritation.**Target Organs:** Respiratory system, eyes, skin.**Potential Health Effects****Eye:** Causes eye irritation.**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled.**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 1

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

| Chemical Name               | ACGIH       | NIOSH       | OSHA - Final PELs |
|-----------------------------|-------------|-------------|-------------------|
| Ammonium phosphate, dibasic | none listed | none listed | none listed       |

**OSHA Vacated PELs:** Ammonium phosphate, dibasic: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** white

**Odor:** Not available.

**pH:** 7.9 - 8.3 (5% aq.sol. 20°C)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not applicable.

**Boiling Point:** Not available.

**Freezing / Melting Point:** Not available.

**Decomposition Temperature:** 100 deg C

**Solubility:** 58 g/100mL (20°C)

**Specific Gravity / Density:** 1.619

**Molecular Formula:** (NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>

**Molecular Weight:** 132.06

## Section 10 - Stability and Reactivity

**Chemical Stability:** Air sensitive.

**Conditions to Avoid:** Incompatible materials, dust generation, exposure to air, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, sodium hypochlorite.

**Hazardous Decomposition Products:** Nitrogen oxides, oxides of phosphorus, ammonia.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7783-28-0 unlisted.

**LD50 / LC50:**

Not available.

**Carcinogenicity:**

CAS# 7783-28-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

|                                            |
|--------------------------------------------|
| <b>Section 12 - Ecological Information</b> |
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**Ecotoxicity:** No data available. No information available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Do not empty into drains.

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| <b>Section 13 - Disposal Considerations</b> |
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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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| <b>Section 14 - Transport Information</b> |
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|                       | US DOT        | Canada TDG    |
|-----------------------|---------------|---------------|
| <b>Shipping Name:</b> | Not regulated | Not Regulated |
| <b>Hazard Class:</b>  |               |               |
| <b>UN Number:</b>     |               |               |
| <b>Packing Group:</b> |               |               |

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| <b>Section 15 - Regulatory Information</b> |
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**US FEDERAL****TSCA**

CAS# 7783-28-0 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 7783-28-0: immediate.

**Section 313** No chemicals are reportable under Section 313.



**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 7783-28-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European / International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

XI

**Risk Phrases:**

R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

**WGK (Water Danger / Protection)**

CAS# 7783-28-0: 1

**Canada - DSL / NDSL**

CAS# 7783-28-0 is listed on Canada's DSL List.

**Canada - WHMIS**

not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7783-28-0 is not listed on the Canadian Ingredient Disclosure List.

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| <b>Section 16 - Additional Information</b> |
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**MSDS Creation Date:** 7/19/1999

**Revision #9 Date:** 2/11/2008

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*