

Construction Documentation Sub-Slab Depressurization System Second-Phase Expansion – Building C Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

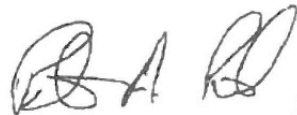
Prepared by:

Tetra Tech, Inc.

September 2013



Michael Martin, P.G.
Regional Manager



Peter A. Rich, P.E.
Project Manager/Principal Engineer

September 06, 2013

Mr. Tom Blackman
Lockheed Martin Corporation
6801 Rockledge Drive —MP CCT 246
Bethesda, Maryland 20817

Subject: Construction documentation:
Sub-Slab Depressurization System Second-Phase Expansion—Building C
Middle River Complex, Middle River, Maryland

Dear Mr. Blackman:

Tetra Tech, Inc. (Tetra Tech) has completed the second-phase expansion of the sub-slab depressurization system (SSDS) operating in Building C of the Middle River Complex in Middle River, Maryland. This letter summarizes the work performed. The second-phase expansion was completed in accordance with the approved *Sub-Slab Depressurization System Expansion, 100% Design—Building C* report, dated March 25, 2013. The SSDS was expanded to address an additional area in the middle of the Building C basement with elevated levels of volatile organic compounds (VOCs), and to continue to address the southern basement target area. The objective is to maintain a negative pressure of 0.01-inches water column in the sub-slab target area to prevent potential vapor migration to indoor air.

The expansion activities involved the following tasks:

- Review and approval of proposed extraction-point locations during the kickoff meeting on December 04, 2012 and the follow-up meeting on January 30, 2013 with the facility tenant, MRA Systems, Inc., dba Middle River Aircraft Systems (MRAS)
- Geophysical utility clearance of proposed extraction points on January 16, 2013
- Subcontractor and equipment mobilization on April 08, 2013
- Removal of the original system blower-skid on April 18, 2013
- Installation of five vertical extraction points designated SV-30-C, SV-31-C, SV-32-C, SV-33-C, and SV-34-C, completed on April 19, 2013

- Installation of overhead polyvinyl chloride (PVC) lines to connect the new extraction wells and the original extraction wells (SV-21-C and SV-23-C) to the system, completed on April 19, 2013
- Installation of system-effluent overhead pipe and mist-eliminator pad, and completion of system discharge-stack piping modifications, completed on April 23, 2013
- Installation of replacement blower skid with heat exchanger and associated appurtenances on April 23, 2013
- Installation of post-heat-exchanger moisture separator on April 24, 2013
- Relocation and connection of the vapor-treatment units to the system, completed on April 24, 2013
- Pre-startup inspection and testing of equipment and piping on April 29, 2013
- Installation of two-inch-diameter steel bollards at three new well locations (SV-30-C, SV-31-C, and SV-32-C) on April 25, 2013
- Installation of two-inch-diameter steel bollards around the system on April 30, 2013
- Construction of frame for blower-skid soundproof enclosure on April 30, 2013
- Subcontractor demobilization on April 30, 2013
- System startup testing and balancing on May 01, 2013
- Collection of air samples from all new extraction wells (including SV-26-C, SV-27-C, SV-28-C, and SV-29-C, which were installed during the first-phase expansion) on May 02, 2013
- Installation of blower-skid soundproof enclosure, completed on May 08, 2013
- Pre-startup full-day system-test run on May 10, 2013
- Operational readiness review conference call with Lockheed Martin Corporation and CDM Smith on May 14, 2013
- Installation of additional foam board in the interior of the soundproof enclosure on May 16, 2013
- Startup of expanded system on May 16, 2013
- Shipment of the drum of waste generated during the expansion to off-site disposal on May 17, 2013

The air samples were collected from each monitoring point a few hours after the SSDS restart during start-up testing on May 02, 2013. Air samples were collected directly from each extraction well's sampling port using one-liter Summa[®] canisters. Samples were shipped to

TestAmerica in Knoxville, Tennessee for VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15; results are summarized as follows:

**Summary of Analytical Detections (μm^3)
in Extraction Well Samples
May 02, 2013
Sub-Slab Depressurization System Second-Phase Expansion
Building C, Middle River Complex, Middle River, Maryland**

Constituent	Extraction well								
	SV-26-C	SV-27-C	SV-28-C	SV-29-C	SV-30-C	SV-31-C	SV-32-C	SV-33-C	SV-34-C
cis-1,2-Dichloro-ethene	42	ND	63	16	140	10	ND	2400	ND
Ethyl-benzene	ND	ND	71	190	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND		ND	ND	140	ND	ND
Toluene	9.9	10	14	17	ND	9.3	ND	ND	ND
Trichloroethene	290	400	1400	1100	480	150	4000	89000	260
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	120	ND	ND	ND	ND	440	ND	ND
Styrene	ND	ND	ND	33	ND	ND	ND	ND	ND
m-xylene and p-xylene	ND	ND	410	970	ND	ND	ND	ND	ND
o-xylene	ND	ND	190	450	ND	ND	ND	ND	ND

All concentrations are in micrograms per cubic meter (μm^3).
ND—not detected

System samples (influent, mid-GAC, and effluent) were collected on May 10, 2013, approximately one week after the air samples from the extraction point samples were taken. The system samples were also collected using one-liter Summa[®] canisters and were shipped to TestAmerica in Knoxville, Tennessee for VOC analysis by USEPA Method TO-15. The analytical results are summarized in the following table. Total VOCs in the system influent increased from 117 μm^3 on April 08, 2013 to 3,020 μm^3 on May 10, 2013 after startup of the expanded system with the new extraction points.

**Summary of Analytical Detections (μm^3)
in Sub-Slab Depressurization System Samples
May 10, 2013
Building C, Middle River Complex, Middle River, Maryland**

Sample	Influent	Mid-GAC	Effluent
Benzene	ND	ND	9.9
cis-1,2-Dichloroethene	120	ND	ND
Trichloroethene	2900	87	34
Total VOCs	3020	87	44

All concentrations are in micrograms per cubic meter air (μm^3).

GAC— granular activated-carbon

ND— not detected

VOCs—volatile organic compounds

Additional details for the system expansion tasks are in Table 1 (in Attachment 2). The removed blower/equipment skid was transported to Tetra Tech's storage space at Martin State Airport for temporary storage, where it will remain until it is moved to its final destination at another Lockheed Martin Corporation (Lockheed Martin) project site. The wastes generated from the expansion consisted of approximately one-third drum of soil and concrete cores from the installation of the extraction points. This drum was transported on May 17, 2013 for proper off-site disposal by Clean Harbors of Baltimore, Maryland, using the same waste profile as had been used for the drum of waste soil generated during the first-phase system expansion.

Minor changes from the design documents were made in the field during the construction, as follows:

- The proposed locations for extraction wells SV-30-C, SV-33-C, and SV-31-C were offset because a second layer of concrete was encountered at each location during coring.
- The post-heat-exchanger moisture separator (MS-2) was anchored on 4×4-inch wooden posts to match skid height.
- A soundproof enclosure was constructed around the entire perimeter of the skid containing the blower with heat exchanger, rather than constructing a soundproof enclosure for the blower only; this enclosure will insulate the sound from both the blower and heat exchanger, and allow for operator access to the system switches.

During the pre-startup system inspection and testing, leaks were observed at some flex-hose connections, both moisture-separator flanges and the heat-exchanger-effluent pipe. Band clamps at the flex-hose connections were replaced with tighter clamps and bolts on the moisture-separator flanges were tightened. Leaks in the slab floor at SV-21-C, SV-23-C, and SV-34-C were detected using dry ice on May 02, 2013. These leaks, and a leak found in the seal of vapor monitoring point SV-60-C, were repaired with a pre-mixed concrete floor patch. All piping, sumps, and valves were labeled.

Tetra Tech provided on-site inspections during construction to ensure that the work complied with the design documents. Lockheed Martin's managing contractor (CDM Smith) also conducted oversight and independent inspections of the work on April 25, 2013 and May 01, 2013. Following fieldwork, the latest version of the SSDS operation and maintenance (O&M) manual was updated to include the new extraction points, the new blower skid with heat exchanger, the post-heat-exchanger moisture separator, and associated equipment manufacturer manuals and O&M procedures. As-built drawings, extraction-point construction logs, laboratory results for air samples, and the updated SSDS operation and maintenance manual are included as Attachments 3, 4, 5, and 7, respectively.

A high-water alarm in the pre-blower moisture separator (MS-1) occurred on May 16, 2013 following system startup, resulting in system shutdown on May 18, 2013. The system was

restarted on May 20, 2013 after removing approximately 50 gallons of condensate from moisture separator MS-1 and the pipe sumps (on the vacuum side). Extraction well SV-30 was temporarily closed on May 20, 2013, as it appeared to be the main condensate producer. Similar volumes of condensate were drained from the vacuum side of the system on May 23, 2013 (48 gallons) and May 28, 2013 (31 gallons). Subsequently, less than two gallons of condensate were drained on May 31, 2013, and, to date, no additional condensate requiring draining has accumulated.

To date, adequate induced-vacuum influence is being seen in most of the target zone; exceptions are vapor monitoring points 133-C, 141-C, and 126-C. Further monitoring and extraction adjustments will be made to improve vacuum influence. Figure 1 (in Attachment 1) shows the vacuum influence observed on May 20, 2013, following startup of the expanded system.

If you have any questions regarding the Building C SSDS second-phase expansion, please contact me at (410) 990-4607 or via email at peter.rich@tetrattech.com.

Sincerely,



Peter A. Rich, P.E.
Project Manager/Principal Engineer
Tetra Tech, Inc.

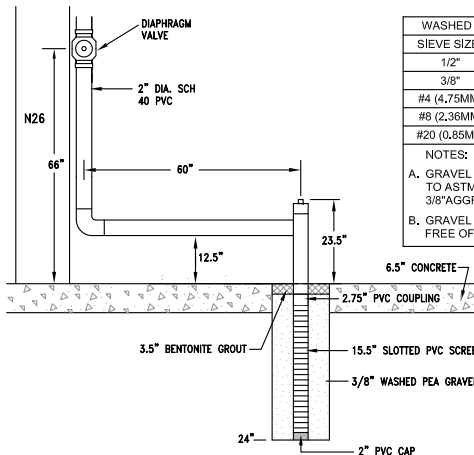
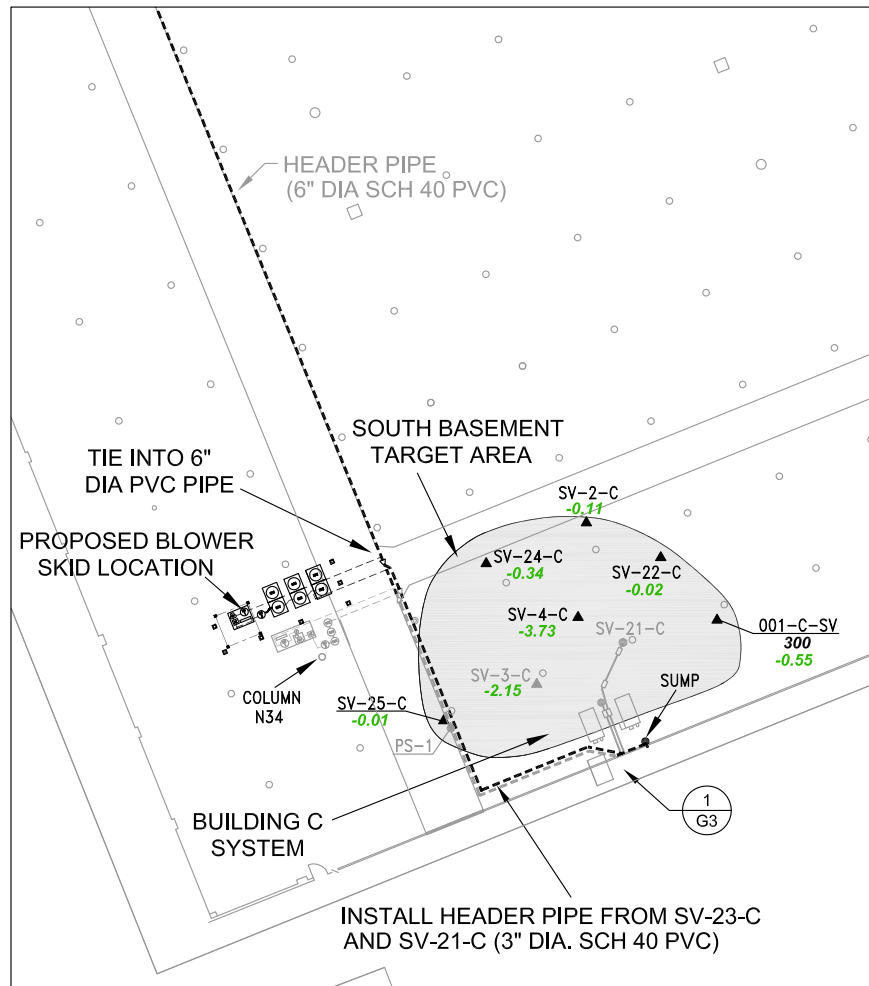
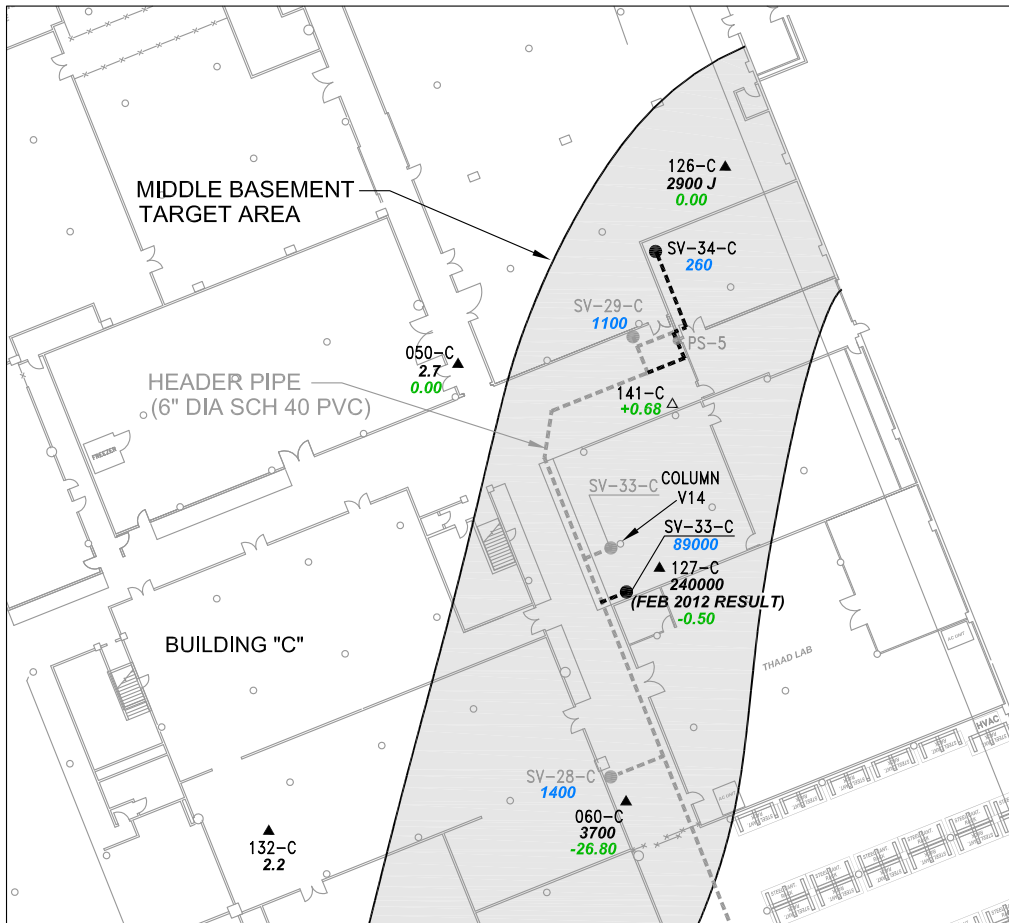
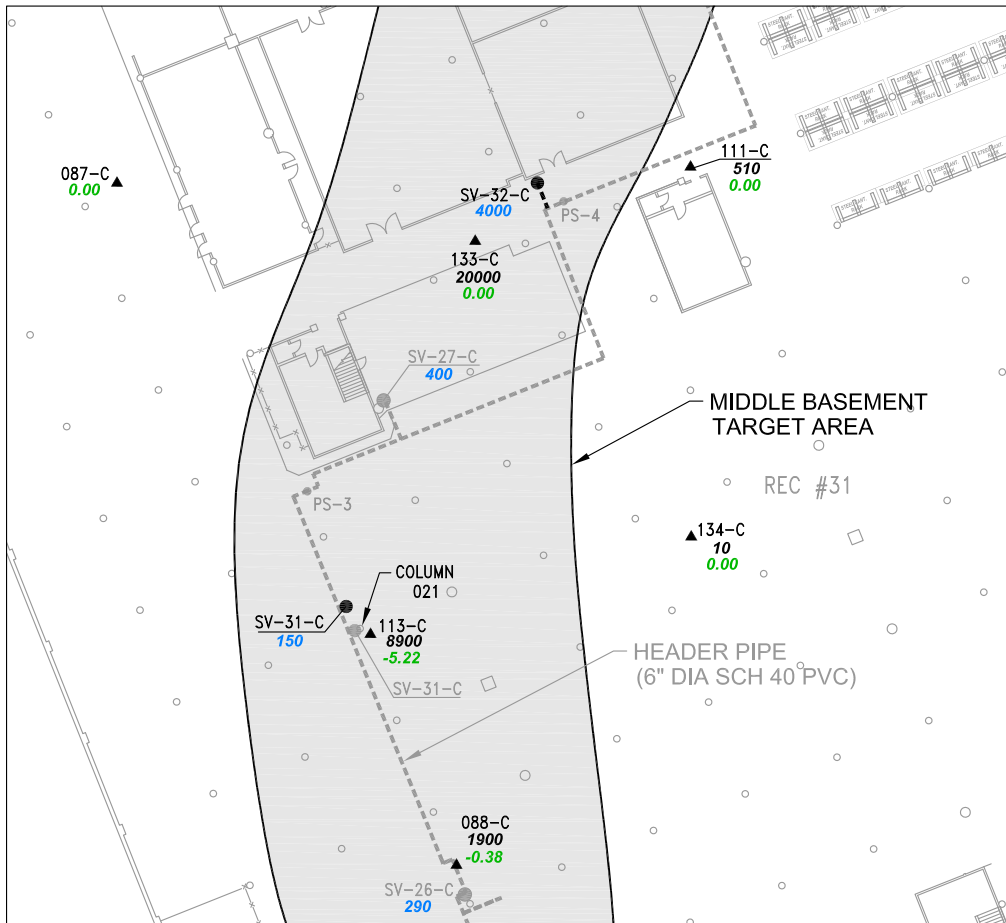
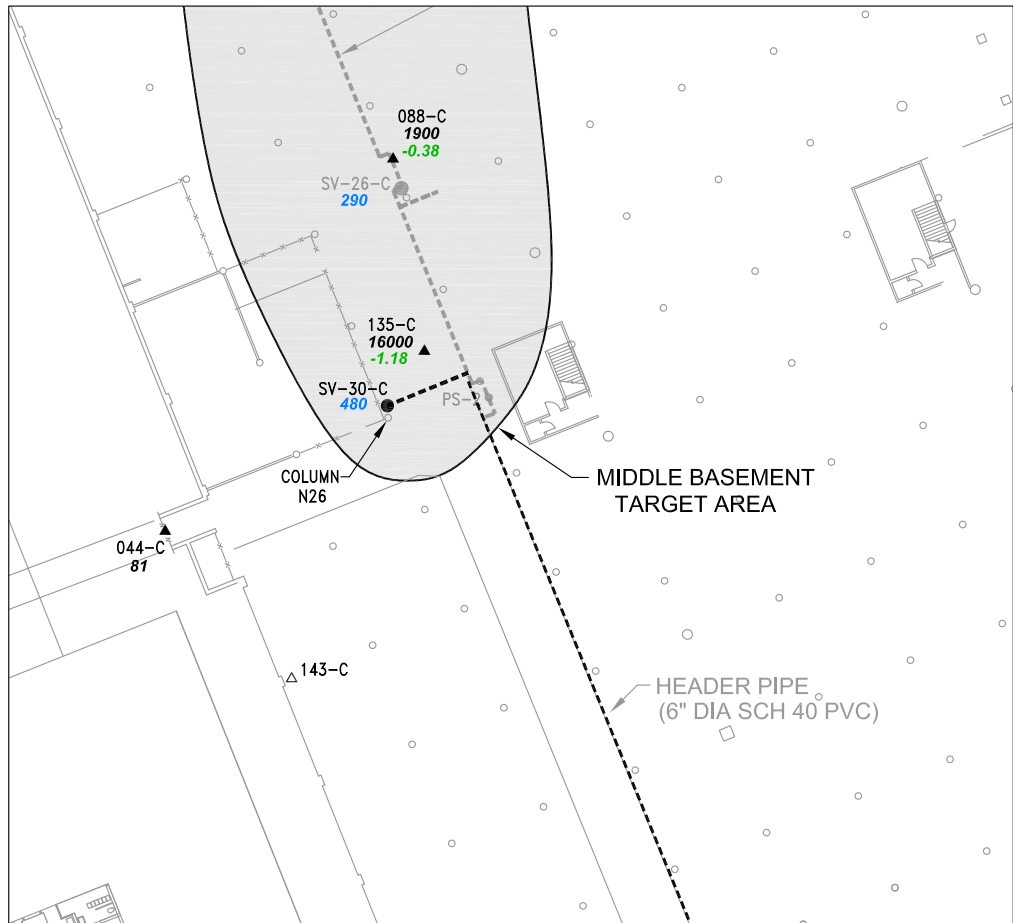
Attachments:

- (1) Figure 1—Vacuum Influence, May 20, 2013
- (2) Table 1—Summary of Construction Activities
- (3) “As-Built Drawings”
- (4) SV-30-C, SV-31-C, SV-32-C, SV-33-C, and SV-34-C Construction Logs
- (5) *TestAmerica Analytical Report—Extraction-Well Air Sampling*
- (6) “Waste Disposal Documentation”
- (7) *Updated Building C Sub-Slab Depressurization System Operation and Maintenance Manual*

ATTACHMENT 1

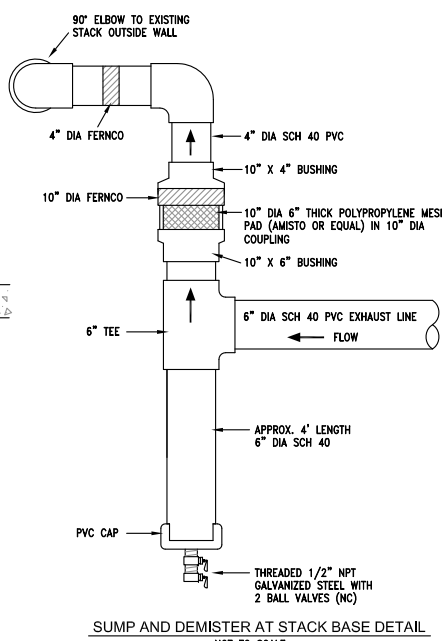
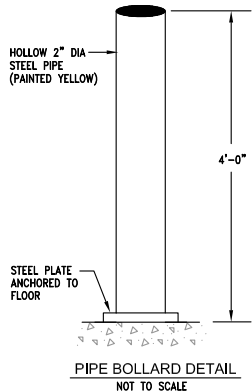
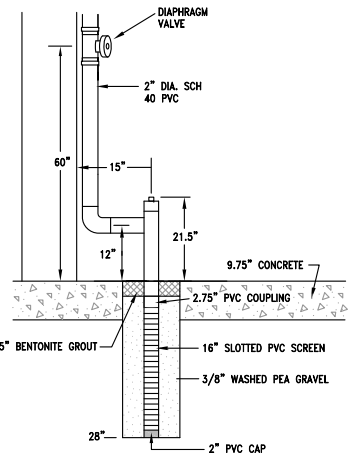
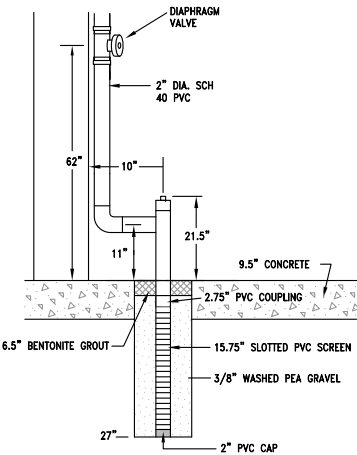
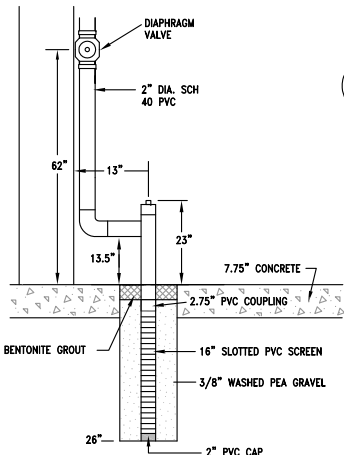
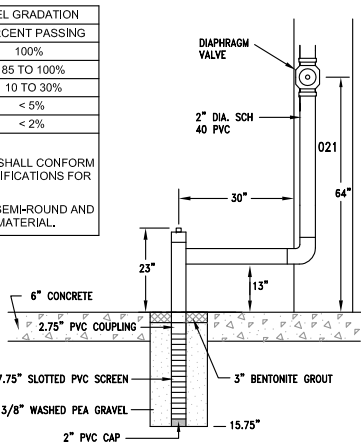
FIGURE 1—VACUUM INFLUENCE

May 20, 2013

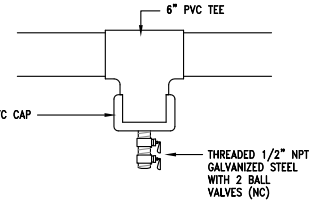


WASHED PEA GRAVEL GRADATION	
SIEVE SIZE	PERCENT PASSING
1/2"	100%
3/8"	85 TO 100%
#4 (4.75MM)	10 TO 30%
#8 (2.36MM)	< 5%
#20 (0.85MM)	< 2%

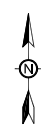
NOTES:
A. GRAVEL MATERIAL SHALL CONFORM TO ASTM C-33 SPECIFICATIONS FOR 3/8" AGGREGATE.
B. GRAVEL SHALL BE SEMI-ROUND AND FREE OF ORGANIC MATERIAL.



- LEGEND
- GROUNDWATER MONITORING WELL
 - SUBSLAB VAPOR MONITORING POINT
 - MONITORING POINT TO BE INSTALLED FEBRUARY 2013
 - PROPOSED SUBSLAB VAPOR EXTRACTION POINT
 - SUBSLAB VAPOR EXTRACTION POINT
 - PIPE SUMP
 - HEADER PIPE (6" DIA. SCH 40)
 - PROPOSED PIPE EXTENSION (2", 3", 4" OR 6" DIA. SCH 40)
 - TCE CONCENTRATION ($\mu\text{g}/\text{m}^3$) FROM AUGUST 2012
 - ESTIMATED TCE CONCENTRATION
 - SUBSLAB DEPRESSURIZATION
 - TCE CONCENTRATION ($\mu\text{g}/\text{m}^3$) FROM 02 MAY 2013
 - VACUUM INFLUENCE (H_2O) FROM 20 MAY 2013
- NOTE: PIPE HANGERS PLACED NEXT TO EXISTING SUPPORT BRACKETS FOR STEEL PIPING IN CEILING APPROX. 6-12 FT APART.



NOTE: INSTALL AT PIPING LOW POINT AS NEEDED. SUMP DEPTH KEPT TO A MINIMUM DUE TO FACILITY HEIGHT CLEARANCE REQUIREMENTS.



APPROVED BY:	DATE	REVISION	APRVD.	TITLE:
				MAY 2013
				BUILDING C BASEMENT SSD SYSTEM SECOND-PHASE EXPANSION VACUUM INFLUENCE AND TCE RESULTS
				LOCATION:
				Middle River, Maryland
				APPROVED
				PAR
				DRAFTED
				CMP
				PROJECT#
				117-0507537
				DATE
				5-21-13

G2

ATTACHMENT 2

TABLE 1—SUMMARY OF CONSTRUCTION ACTIVITIES

TABLE 1
Summary of Construction Activities
Second-Phase Expansion of the Building C Sub-Slab Depressurization System
Middle River Complex, Middle River, Maryland

Date	Building C Sub-Slab Depressurization System Expansion Activity
08 April 2013	<ul style="list-style-type: none"> • Mobilized equipment to site.
09 April 2013	<ul style="list-style-type: none"> • Concrete-cored for installation of extraction wells SV-30-C, SV-31-C and SV-32-C and partially cored SV-33-C. • Stopped coring due to problems with core drill. • Hand-augered soil boring for SV-32-C to a depth of 26 inches below grade surface (bgs).
10 April 2013	<ul style="list-style-type: none"> • Received delivery of spare potassium permanganate zeolite unit from Siemens Industry, Inc. • Hand-augered soil boring for SV-30-C; encountered second layer of concrete at 16 inches bgs. Concrete-cored offset location for SV-30-C. • Concrete-cored for SV-34-C and hand-augered soil boring to a depth of 27.5 inches bgs. • Hand-augered soil boring for SV-31-C; encountered second layer of concrete at 8 inches bgs. Need to off-set location.
11 April 2013	<ul style="list-style-type: none"> • Concrete-cored offset location for SV-31-C and hand-augered soil boring to a depth of 15.5 inches bgs. • Hand-augered soil boring for SV-30-C; encountered second layer of concrete at 16 inches bgs. Concrete-cored second offset location for SV-30-C and hand-augered soil boring to a depth of 24 inches bgs. • Concrete-cored for SV-33-C at planned location and offset location as a second layer of concrete was encountered at 8 inches bgs at both locations. Concrete-cored second offset location and hand-augered soil boring to a depth of 27.5 inches bgs. • Received delivery of 2-inch and 6-inch diameter polyvinyl chloride (PVC) pipe and pipe fittings from Harrington Industrial Plastics. • Received delivery of scissor lift from Volvo Rentals.
12 April 2013	<ul style="list-style-type: none"> • Installed extraction wells SV-30-C, SV-31-C, SV-32-C, SV-33-C, and SV-34-C. • Installed valve, sample/measurement port, and 2-inch diameter PVC tie-in pipe for SV-34-C.
15 April 2013	<ul style="list-style-type: none"> • Installed valve, sample/measurement port, and tied-in extraction wells SV-32-C, SV-33-C, and SV-34-C to main 6-inch diameter PVC influent header pipe.
16 April 2013	<ul style="list-style-type: none"> • Installed valve, sample/measurement port, and tied-in extraction wells SV-30-C and SV-31-C to main header pipe. • Began hanging pipe supports for 3-inch diameter PVC pipe to be used to tie original extraction wells, SV-21-C and SV-23-C, to system at new location.
18 April 2013	<ul style="list-style-type: none"> • Installed 3-inch diameter pipe on ceiling to tie SV-21-C and SV-23-C to main header pipe. • Received delivery of new blower skid from Gasho, Inc. • Removed old blower skid and temporarily placed it at column O26. • Began installing system effluent 6-inch diameter pipe on building's south wall.
19 April 2013	<ul style="list-style-type: none"> • Installed valve, sample/measurement port, for SV-21-C and SV-23-C and tied-in to 3-inch diameter manifold pipe. • Continued installing system effluent pipe on south wall.
22 April 2013	<ul style="list-style-type: none"> • Moved new blower skid and vapor treatment units into place at column N33. • Rerouted main influent header pipe from original skid location to new skid location. • Tied-in 3-inch diameter pipe (SV-21-C and SV-23-C manifold) to main header pipe.

TABLE 1
Summary of Construction Activities
Second-Phase Expansion of the Building C Sub-Slab Depressurization System
Middle River Complex, Middle River, Maryland

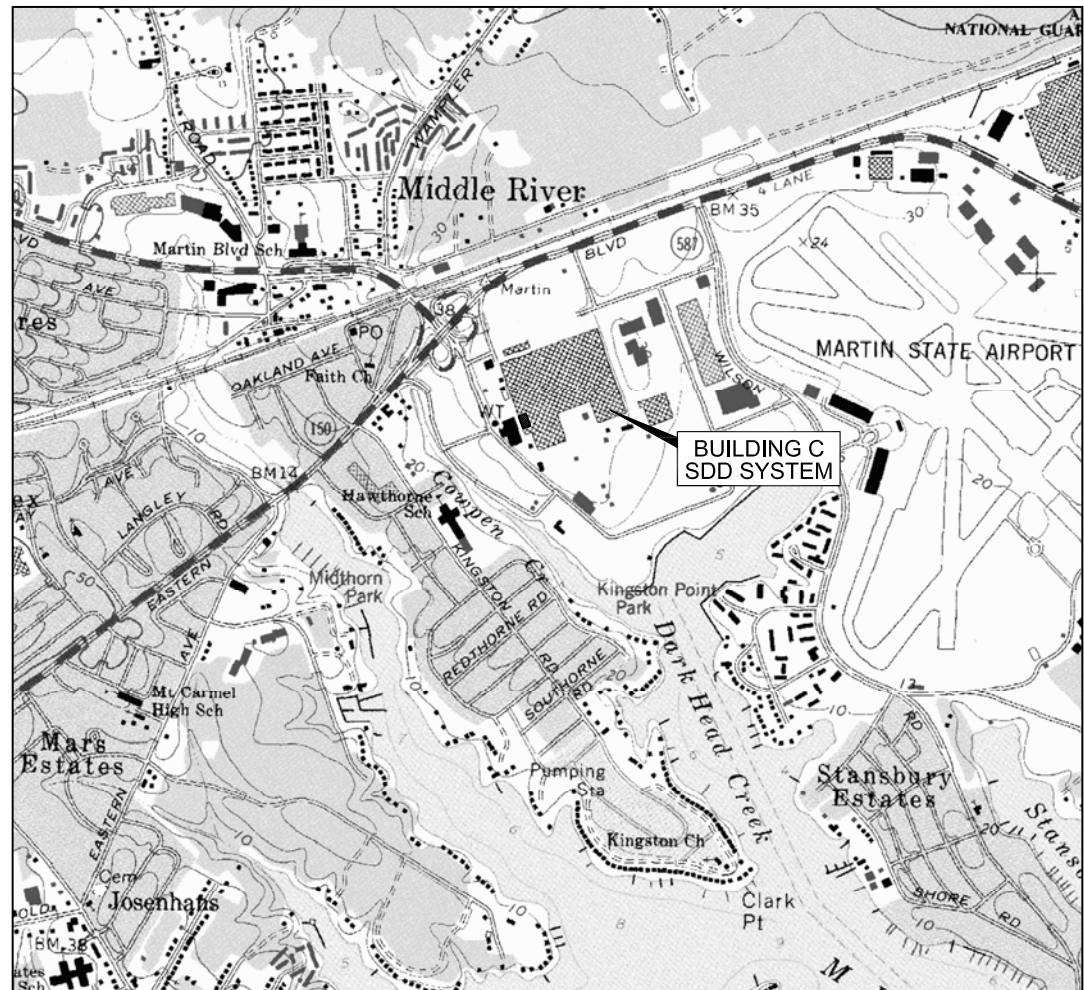
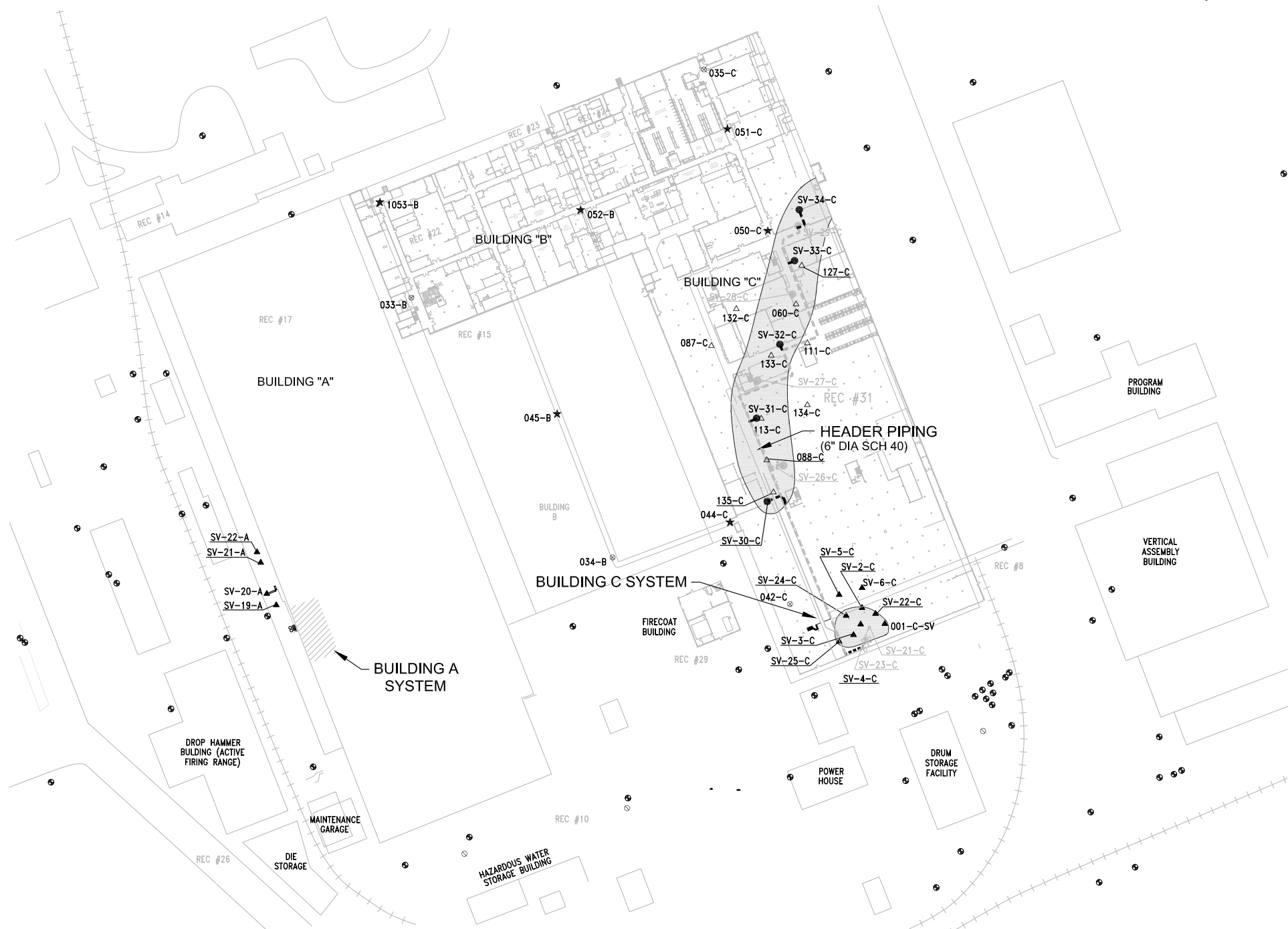
Date	Building C Sub-Slab Depressurization System Expansion Activity
	<ul style="list-style-type: none"> Installed system effluent pipe at new system location and tied-in to existing 6-inch diameter effluent header pipe.
23 April 2013	<ul style="list-style-type: none"> Completed 4-inch and 6-inch diameter system effluent piping on south wall including installation of mist eliminator pad. Connected 4-inch diameter effluent pipe to existing exhaust stack on the south wall. Connected main influent header pipe to blower skid. Facility (EMCOR) began electrical wiring to provide power for system.
24 April 2013	<ul style="list-style-type: none"> EMCOR completed electrical wiring for system power. Installed flex hose, fittings, and drains for system's vapor treatment units. Anchored post-heat exchanger moisture separator (MS-2) on 4x4 inch wood posts. Labeled moisture separators and pipe sumps. Setup level (float) switch for moisture separator MS-2. Setup phone line for autodialer. Received delivery of 2-inch diameter steel bollards. Checked blower rotation direction (changed to necessary clockwise direction).
25 April 2013	<ul style="list-style-type: none"> CDM Smith inspected system expansion progress. Installed 2-inch diameter bollards around SV-30-C, SV-31-C, and SV-32-C. Installed sample ports at SV-30-C, SV-31-C, SV-32-C, SV-33-C, and SV-34-C. Turned system on briefly to check for leaks at newly installed points and around system components. Cleaned up around system and removed unused equipment and supplies from site. Scissor lift picked up by Volvo Rentals.
29 April 2013	<ul style="list-style-type: none"> Conducted troubleshooting of high pressure alarm (ambient air valve was open) Tested all system alarms. Began completing the Pre-Startup Equipment Inspection Checklist. Programed auto-dialer. Installed drain hose for moisture separator MS-2. Connected high level switch for MS-2 to system's control panel.
30 April 2013	<ul style="list-style-type: none"> Installed 2-inch diameter steel bollards (total of 7) around system skid. Transported previous blower skid to Martin State Airport/Hangar 3 (Tetra Tech storage). Constructed frame for soundproof enclosure with 3-inch diameter galvanized steel corner posts and 1x6 wood. Replaced loose band clamps on vapor treatment units flex hoses.
01 May 2013	<ul style="list-style-type: none"> CDM Smith inspected system expansion progress. Drilled holes in dilution and effluent valve handles to install valve lock-out/tag-out cable. Installed locks on new extraction wells. Labeled main influent 6-inch diameter and 3-inch manifold diameter pipe from original extraction wells with "vacuum" self-adhesive pipe markers spaced approximately every 50 feet. Installed zip ties to camlocks on hoses of vapor treatment units. Installed metal identification tags on system valves. Cut off excess all-thread on blower skid platform. Completed Pre-Startup Equipment Inspection Checklist.

TABLE 1
Summary of Construction Activities
Second-Phase Expansion of the Building C Sub-Slab Depressurization System
Middle River Complex, Middle River, Maryland

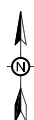
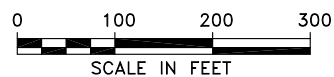
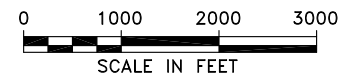
Date	Building C Sub-Slab Depressurization System Expansion Activity
	<ul style="list-style-type: none"> Began system startup and testing: <ul style="list-style-type: none"> Tested new extraction wells for maximum possible flow. Opened SV-21-C, SV-23-C, SV-26-C, SV-27-C, SV-28-C, SV-29-C, and SV-30-C during testing to prevent system vacuum relief valve from opening due high vacuum. Leak observed at connection point of steel pipe and heat exchanger effluent. Left system OFF upon departure.
02 May 2013	<ul style="list-style-type: none"> Leak tested floor slab using dry ice; leaks detected in floor slab at SV-21-C, SV-23-C, and SV-24-C. Patched holes found during leak test and leak in SV-60-C with concrete patch. Patched previous system vent and effluent penetrations on south wall with foam sealant/insulation. Turned system ON and conducted a full round of measurements. Adjusted extraction wells to achieve higher flows: <ul style="list-style-type: none"> Closed SV-23-C. Possible leak detected at SV-26-C valve (to be checked during next visit). Collected vapor samples with 1-liter Summa canisters from all new extraction wells as well as wells installed during the first-phase expansion (SV-26-C through SV-34-C). Left system OFF upon departure.
07 May 2013	<ul style="list-style-type: none"> Retested new extraction wells for maximum possible; opened SV-21-C, SV-23-C, SV-26-C, SV-27-C, SV-28-C, and SV-29-C during testing to prevent system vacuum relief valve from opening due high vacuum. Left system OFF upon departure.
08 May 2013	<ul style="list-style-type: none"> Installed soundproof enclosure around system skid using flexible noise barrier, ½-inch plywood, 2x6-inch wood beams, and 1-inch thick foam board.
09 May 2013	<ul style="list-style-type: none"> Installed duct work and louver for heat exchanger fan. Set vacuum relief valve to 85 inches of water column.
10 May 2013	<ul style="list-style-type: none"> Conducted system test run.
14 May 2013	<ul style="list-style-type: none"> Conducted system Operational Readiness Review via teleconference. Reviewed draft As-Built Drawings and updated operation and maintenance manual. Copies of these documents placed on system control panel.
15 May 2013	<ul style="list-style-type: none"> Began installation of 1-inch thick foam board on interior sides of the soundproof enclosure.
16 May 2013	<ul style="list-style-type: none"> Completed installation of 1-inch thick foam board on interior sides of the soundproof enclosure. Started system up for continuous operation.
17 May 2013	<ul style="list-style-type: none"> Shipped waste soil drum (from extraction well installation) for off-site disposal.

ATTACHMENT 3

AS-BUILT DRAWINGS



SITE LOCATION MAP



LEGEND

- SUBSLAB VAPOR EXTRACTION POINT INSTALLED MARCH 2008
- ⊙ GROUNDWATER MONITORING WELL
- ▲ SUBSLAB VAPOR MONITORING POINT
- △ MONITORING POINT INSTALLED JANUARY 2010
- PROPOSED SUBSLAB VAPOR EXTRACTION POINT
- ★ TARGET OF OPPORTUNITY
- ⊙ INDOOR AIR SAMPLE
- ⊙ ABANDONED WELL BORING
- SUBSLAB VAPOR EXTRACTION POINT INSTALLED OCTOBER 2012

SSD SUBSLAB DEPRESSURIZATION

----- SYSTEM PIPING

----- PROPOSED PIPE EXTENSION (OVERHEAD)

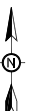
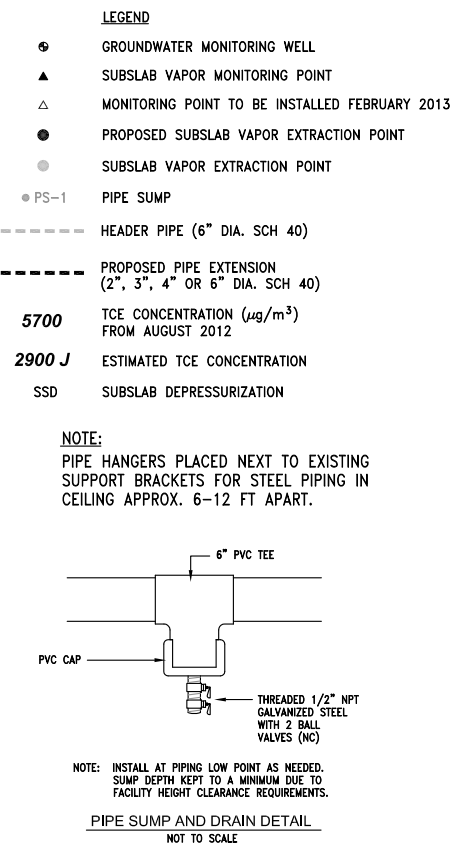
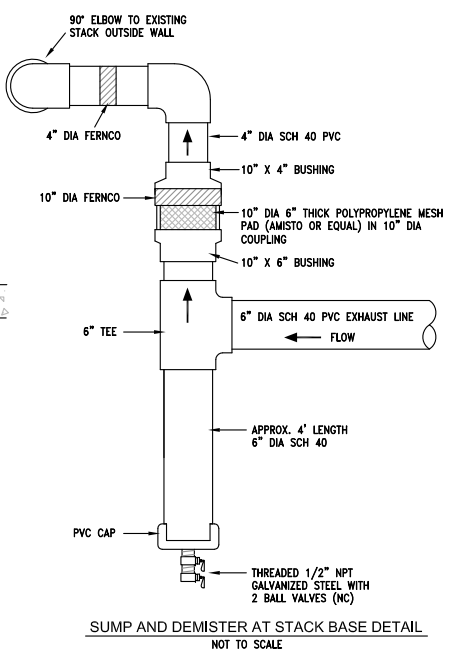
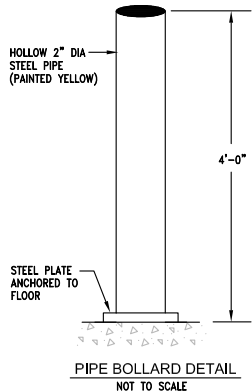
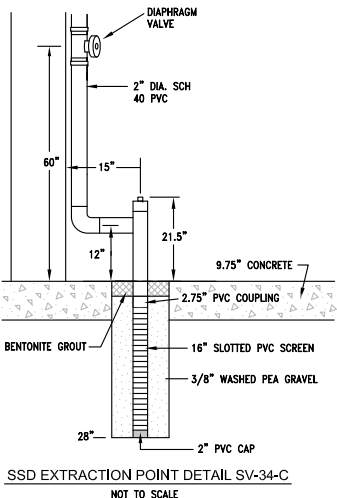
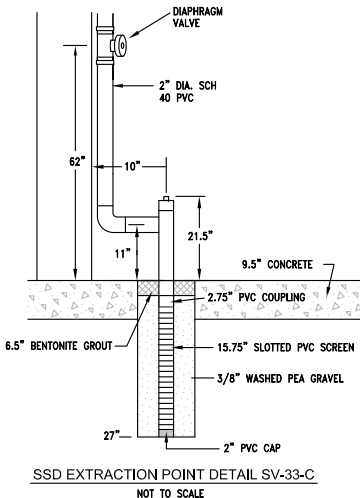
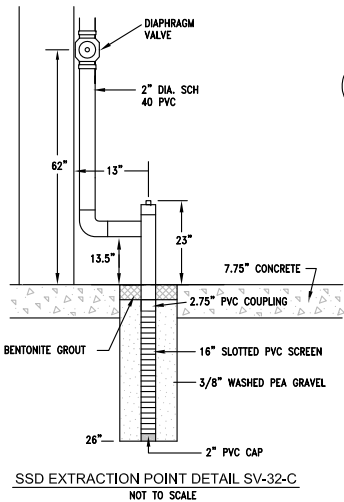
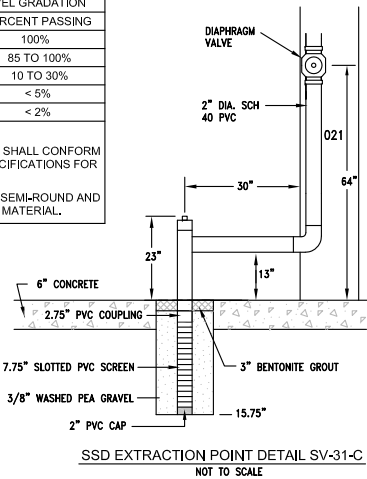
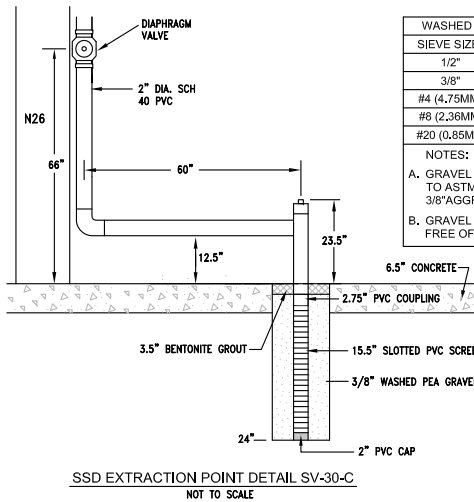
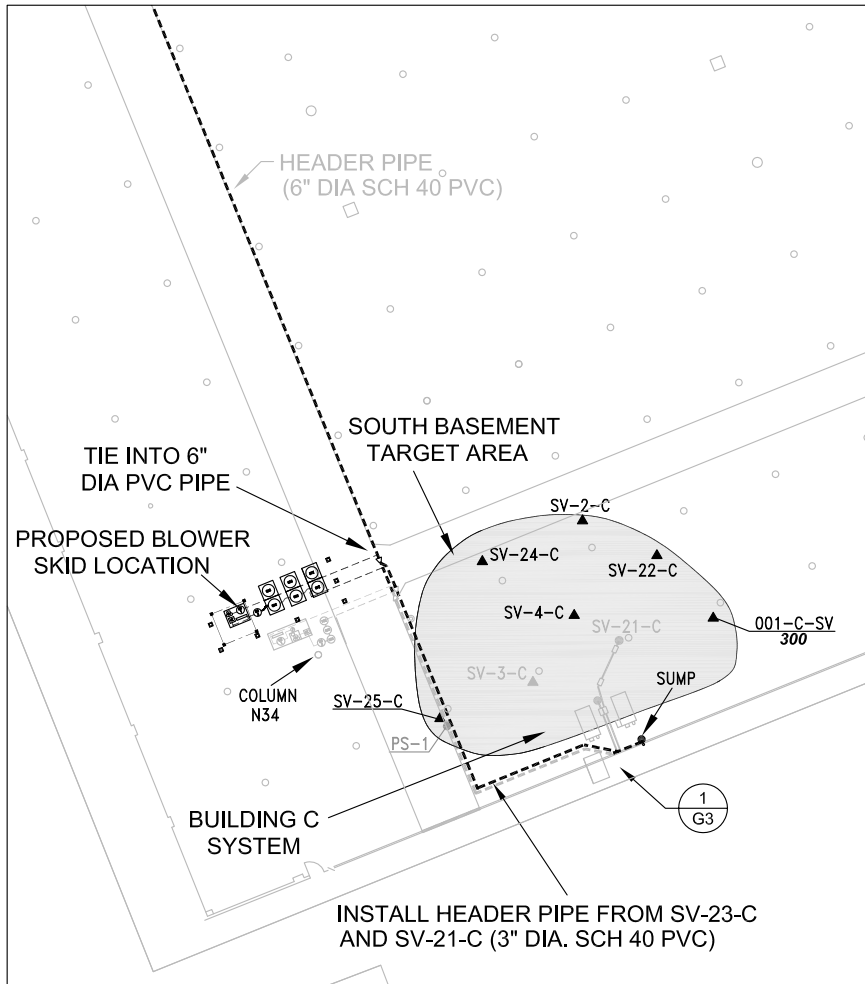
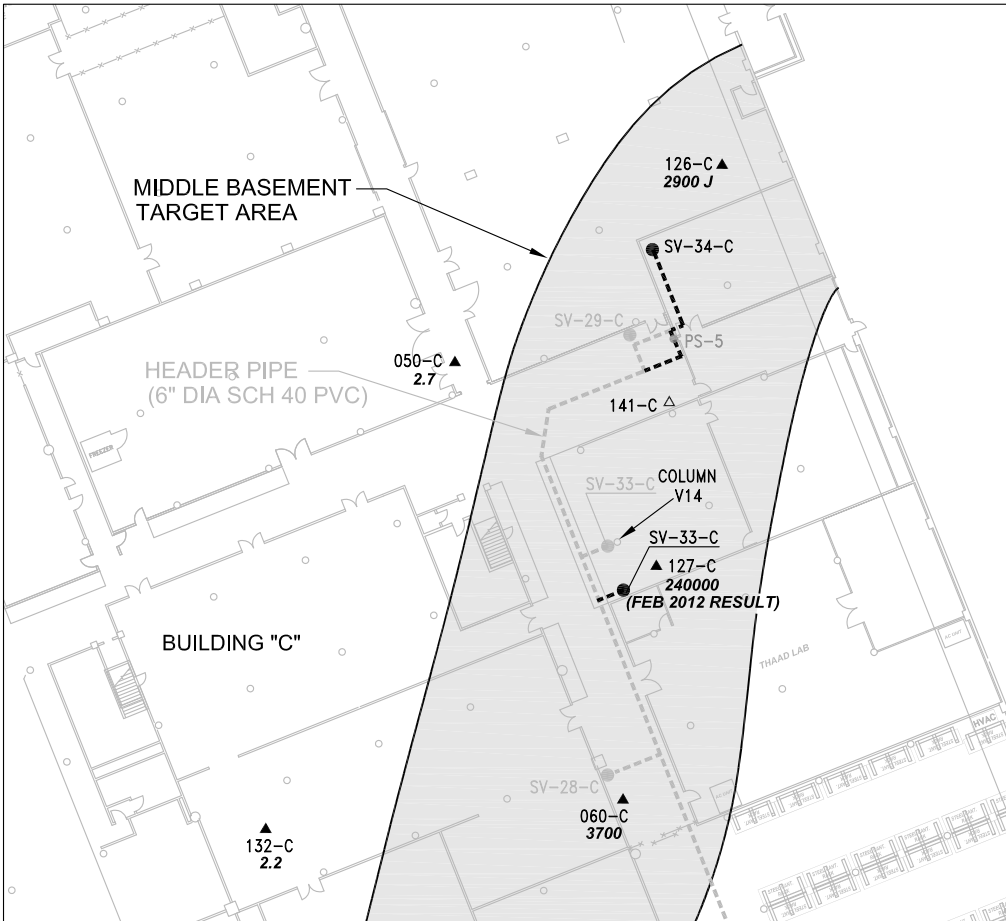
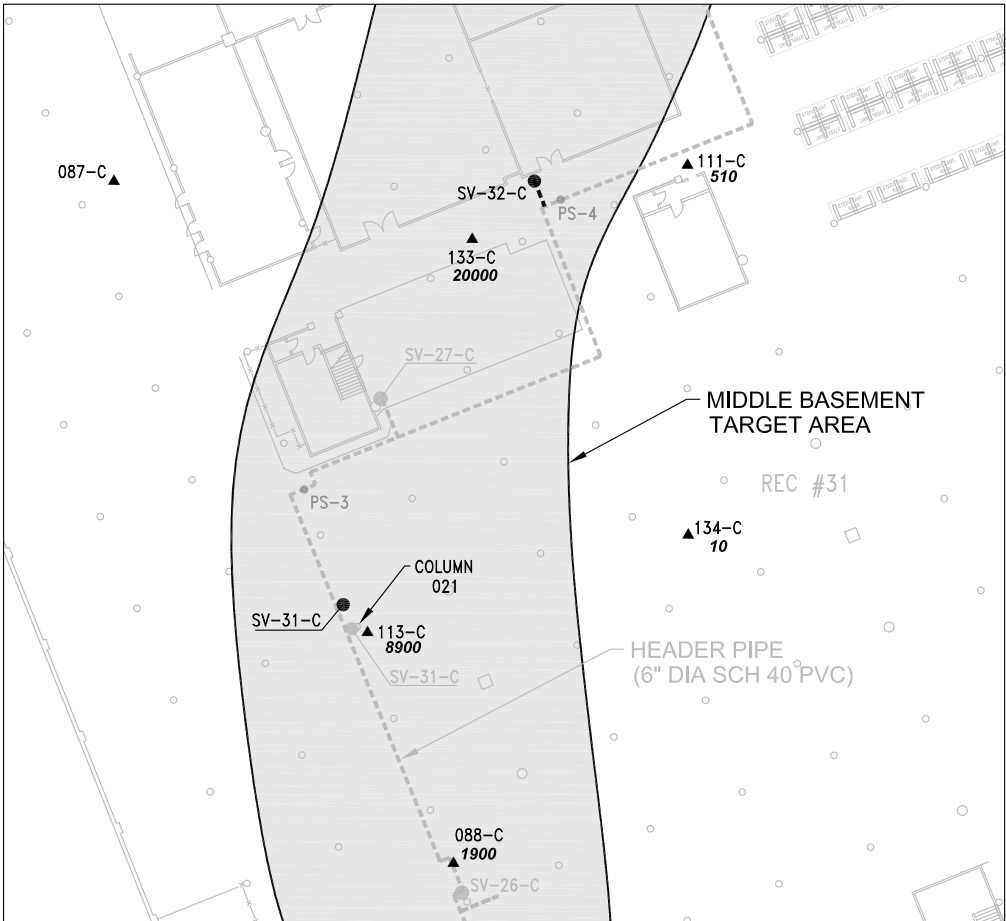
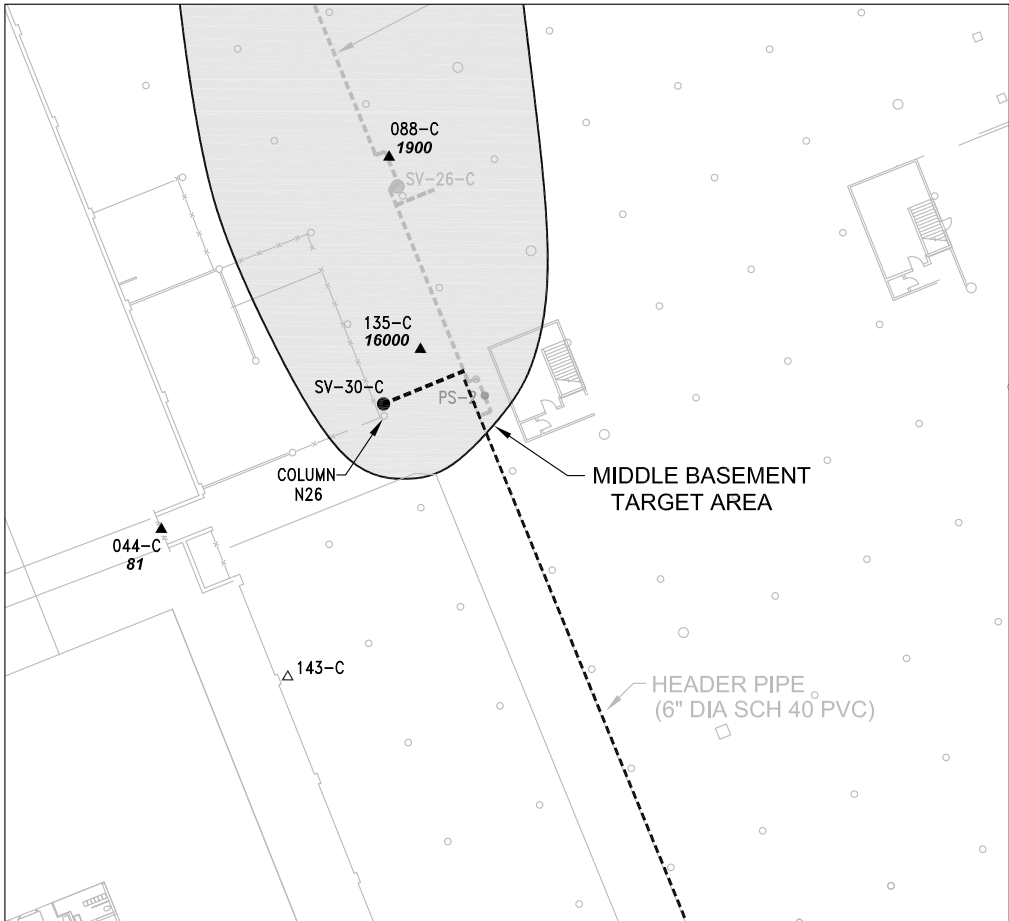
○ TARGET AREA FOR INDUCED VACUUM

APPROVED BY:	DATE	REVISION	APRVD.	TITLE:
				AS-BUILT
				BUILDING C BASEMENT SSD
				SYSTEM SECOND-PHASE EXPANSION PLAN
				LOCATION:
				Middle River, Maryland
				APPROVED
				PAR
				DRAFTED
				CMP
				PROJECT#
				117-0507537
				DATE
				5-14-13

TETRA TECH

APPROVED
PAR
DRAFTED
CMP
PROJECT#
117-0507537
DATE
5-14-13

DRAWING:
G1



NOTE: EXTRACTION POINT PIPING SUPPORTED ON WALL OR COLUMN WITH PIPE SUPPORTS.

APPROVED BY:	DATE	REVISION	APRVD.	TITLE:
				AS-BUILT
				BUILDING C BASEMENT SSD
				SYSTEM SECOND-PHASE EXPANSION LAYOUT AND DETAILS
				LOCATION:
				Middle River, Maryland
				APPROVED
				PAR
				DRAFTED
				CMP
				PROJECT#
				117-0507537
				DATE
				5-14-13

APPROVED

PAR

DRAFTED

CMP

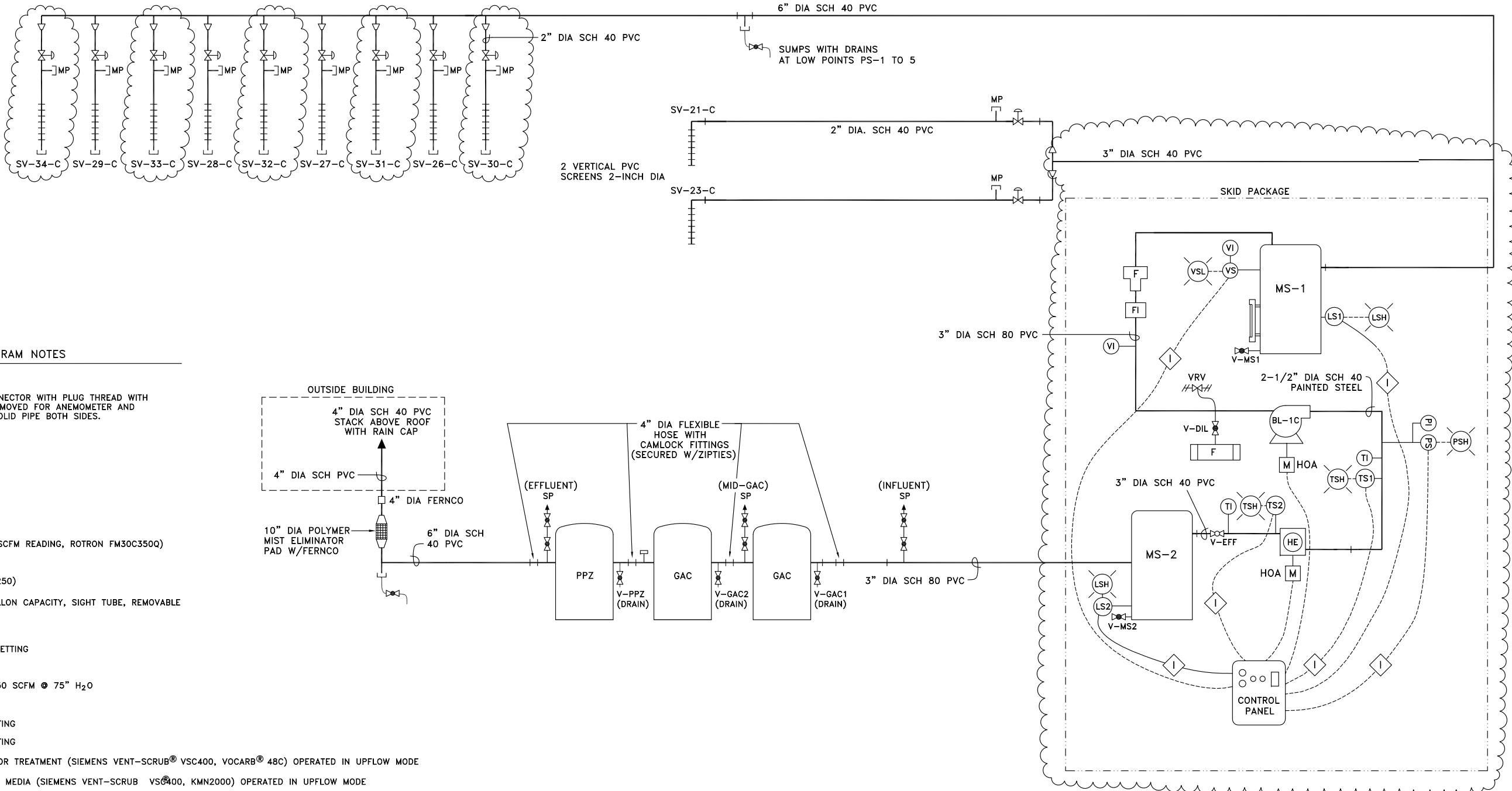
PROJECT#

117-0507537

DATE

5-14-13


G2



PROCESS AND INSTRUMENTATION DIAGRAM NOTES

VI	VACUUM INDICATOR – 0–160" H ₂ O
MP	MEASURING POINT 1/4" MALE CONNECTOR WITH PLUG THREAD WITH TEFLON TAPE. FITTING MAY BE REMOVED FOR ANEMOMETER AND VACUUM READINGS PROVIDE 20" SOLID PIPE BOTH SIDES.
▽	REDUCER
↔	BALL VALVE – NORMALLY OPEN
↔	BALL VALVE – NORMALLY CLOSED
⋈	DIAPHRAGM VALVE (LOCKABLE)
↗	CHECK VALVE
FI	FLOW INDICATOR (DIRECT 70–350 SCFM READING, ROTRON FM30C350Q)
F	INLET AIR FILTER
HE	HEAT EXCHANGER (XCHANGER AA–250)
MS	MOISTURE SEPARATOR WITH 30 GALLON CAPACITY, SIGHT TUBE, REMOVABLE TOP, DRAIN VALVE
LS	LEVEL SWITCH
VRV	VACUUM RELIEF VALVE, 85" H ₂ O SETTING
SP	SAMPLE PORT 1/4" DIAMETER
BL	ROTRON DR858, 7.5 HP MOTOR, 150 SCFM @ 75" H ₂ O
PI	PRESSURE INDICATOR 0–160" H ₂ O
TS1	TEMPERATURE SWITCH, 215° F SETTING
TS2	TEMPERATURE SWITCH, 140° F SETTING
GAC	GRANULAR ACTIVATED CARBON VAPOR TREATMENT (SIEMENS VENT–SCRUB® VSC400, VOCARB® 48C) OPERATED IN UPFLOW MODE
PPZ	POTASSIUM PERMANGANATE ZEOLITE MEDIA (SIEMENS VENT–SCRUB VSC400, KMN2000) OPERATED IN UPFLOW MODE
TI	TEMPERATURE INDICATOR 0–250° F
PS	PRESSURE SWITCH (HIGH)
VS	VACUUM SWITCH (LOW)
V–MS1	PROCESS VALVE LABELS
HOA	PANEL MOUNTED HAND/OFF/AUTO SWITCH
◇	INTERLOCK BLOWER SHUTDOWN
○	LOCALLY MOUNTED INSTRUMENT
⊗	PANEL ALARM LIGHT
H	HIGH
L	LOW
M	MOTOR
⊥	TAP PLUG


CONNECT FIVE (5) NEW SUBSLAB VAPOR EXTRACTION POINTS. REPLACE EXISTING BLOWER SKID WITH NEW SKID WITH LARGER BLOWER, MOISTURE SEPARATOR, HEAT EXCHANGER, AND CONTROL PANEL. RELOCATE BLOWER SKID AND VAPOR TREATMENT (GAC AND PPZ) UNITS. ADD EXHAUST SIDE MOISTURE SEPARATOR (RE–USE EXISTING SEPARATOR). TIE IN CONTROLS.

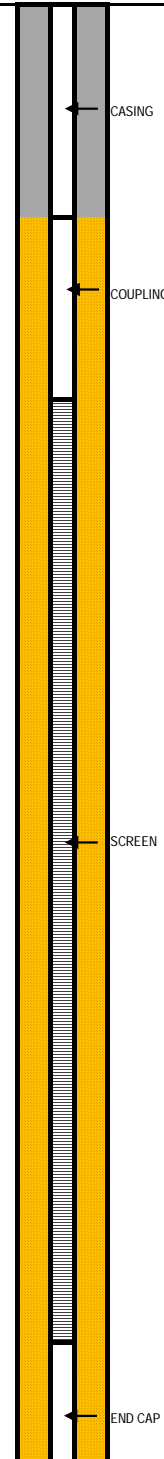
APPROVED BY:	DATE	REVISION	APRVD.	TITLE: AS-BUILT			
				BUILDING C BASEMENT SSD SYSTEM SECOND-PHASE EXPANSION PROCESS AND INSTRUMENTATION DIAGRAM			
				LOCATION: Middle River, Maryland			
					APPROVED	PAR	DRAWING: G4
					DRAFTED	CMP	
					PROJECT#	117-0507537	
					DATE	5-14-13	

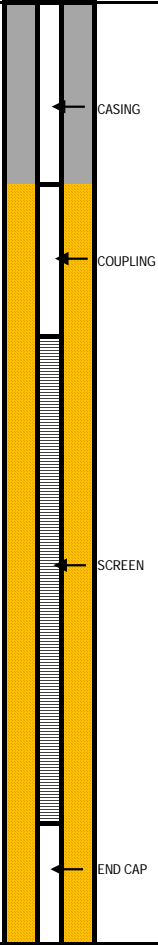
ATTACHMENT 4




CONSTRUCTION LOGS

SV-30-C, SV-31-C, SV-32-C, SV-33-C, SV-34-C

PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX		JOB NO. 117-0507537		WELL NUMBER SV-30-C		CLIENT: LOCKHEED MARTIN CORPORATION			
				DRILLING METHOD: HAND AUGER							
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220		COMPANY: S&S TECHNOLOGIES							
				OPERATOR: #N/A						SHEET 1 OF 1	
				SAMPLING METHOD: #N/A							
WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED											
RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING											
FILTER PACK: 3/8-INCH WASHED PEA GRAVEL											
SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER											
NOTE: SUB-SLAB VAPOR EXTRACTION WELL											
				LOGGED BY: TETRA TECH/DAWN MONICO				DRILLING			
				WELL DEPTH: 24.0 INCHES				START DATE			
				DATUM: #N/A N/L: #N/A E/L: #N/A				FINISH DATE			
				PERMIT NO.: #N/A				4/11/2013 4/11/2013			
				GROUND ELEVATION: #N/A							
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE		USCS		
							BENTONITE GROUT  PEA GRAVEL				
	1						CONCRETE		N/A		
	2										
	3				N/A	N/A					
	4										
	5								SC		
	6										
	7										
	8										
	9						BROWN, CLAYEY SAND, SOME SILT, FINE-GRAINED, COMPACT				
	10										
	11										
	12	N/A	N/A	N/A							
	13										
	14										
	15				MOIST	0.0					
	16										
	17										
	18										
	19										
	20										
	21										
	22										
	23										
	24										
END OF BORING = 24.0 INCHES											



PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO. 117-0507537		WELL NUMBER SV-31-C		CLIENT: LOCKHEED MARTIN CORPORATION	
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER					
						COMPANY: S&S TECHNOLOGIES					
						OPERATOR: #N/A					SHEET 1 OF 1
						SAMPLING METHOD: #N/A					
WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED											
RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING						LOGGED BY: TETRA TECH/DAWN MONICO				DRILLING	
FILTER PACK: 3/8-INCH WASHED PEA GRAVEL						WELL DEPTH: 15.75 INCHES				START DATE	FINISH DATE
SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER						DATUM: #N/A		N/L: #N/A		E/L: #N/A	
						PERMIT NO.: #N/A				4/11/2013	4/11/2013
NOTE: SUB-SLAB VAPOR EXTRACTION WELL						GROUND ELEVATION: #N/A					
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE		USCS	WELL INSTALLATION	
							BENTONITE GROUT PEA GRAVEL				
1							CONCRETE		N/A		
2											
3				N/A	N/A						
4											
5											
6							RED-BROWN, YELLOW-BROWN, SANDY SILTY CLAY , MOTTLED, SOFT, LOW PLASTICITY		CL		
7											
8	N/A	N/A	N/A								
9											
10				MOIST	0.0						
11											
12											
13											
14											
15				WET							
END OF BORING = 15.75 INCHES											

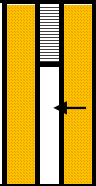
PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO.		WELL NUMBER		CLIENT: LOCKHEED MARTIN CORPORATION			
						117-0507537		SV-32-C					
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER							
						COMPANY: S&S TECHNOLOGIES						SHEET 1 OF 1	
						OPERATOR: #N/A							
						SAMPLING METHOD: #N/A							
WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED													
RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING						LOGGED BY: TETRA TECH/DAWN MONICO				DRILLING			
FILTER PACK: 3/8-INCH WASHED PEA GRAVEL						WELL DEPTH: 26.0 INCHES				START DATE			
SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER						DATUM: #N/A		N/L: #N/A		E/L: #N/A			
						PERMIT NO.: #N/A				4/9/2013			
NOTE: SUB-SLAB VAPOR EXTRACTION WELL						GROUND ELEVATION: #N/A							
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE			USCS	WELL INSTALLATION		
							BENTONITE GROUT PEA GRAVEL						
1							CONCRETE			N/A			
2													
3													
4													
5													
6							RED-BROWN, CREAM (COLOR INCREASING WITH DEPTH), CLAY , SOME SILT, MOTTLED, HARD, LOW PLASTICITY			CL			
7													
8													
9													
10													
11													
12													
13	N/A	N/A	N/A										
14													
15													
16					0.2								
17					SLIGHT MOIST								
18													
19													
20													
21													
22													
23													
24													
25						0.0	RED-BROWN, YELLOW-BROWN, CREAM, CLAY , MOTTLED, STIFF, LOW PLASTICITY						

PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO. 117-0507537		WELL NUMBER SV-32-C		CLIENT: LOCKHEED MARTIN CORPORATION		
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER						
						COMPANY: S&S TECHNOLOGIES						
						OPERATOR: #N/A					SHEET 1 OF 1	
						SAMPLING METHOD: #N/A						
		WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED										
		RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING				LOGGED BY: TETRA TECH/DAWN MONICO					DRILLING	
		FILTER PACK: 3/8-INCH WASHED PEA GRAVEL				WELL DEPTH: 26.0 INCHES					START DATE	
		SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, -1 GAL. WATER				DATUM: #N/A N/L: #N/A E/L: #N/A					FINISH DATE	
						PERMIT NO.: #N/A					4/9/2013 4/9/2013	
		NOTE: SUB-SLAB VAPOR EXTRACTION WELL				GROUND ELEVATION: #N/A						
		DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE			USCS	WELL INSTALLATION
								BENTONITE GROUT PEA GRAVEL				
		26										
END OF BORING = 26.0 INCHES												

PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO.		WELL NUMBER		CLIENT: LOCKHEED MARTIN CORPORATION																																																																																																																																																																																																																																																																																																																											
						117-0507537		SV-33-C																																																																																																																																																																																																																																																																																																																													
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER																																																																																																																																																																																																																																																																																																																															
						COMPANY: S&S TECHNOLOGIES						SHEET 1 OF 1																																																																																																																																																																																																																																																																																																																									
						OPERATOR: #N/A																																																																																																																																																																																																																																																																																																																															
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WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED																																																																																																																																																																																																																																																																																																																																					
RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING						LOGGED BY: TETRA TECH/DAWN MONICO						DRILLING																																																																																																																																																																																																																																																																																																																									
FILTER PACK: 3/8-INCH WASHED PEA GRAVEL						WELL DEPTH: 27.0 INCHES						START DATE																																																																																																																																																																																																																																																																																																																									
SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER						DATUM: #N/A N/L: #N/A E/L: #N/A						FINISH DATE																																																																																																																																																																																																																																																																																																																									
						PERMIT NO.: #N/A						4/11/2013 4/11/2013																																																																																																																																																																																																																																																																																																																									
NOTE: SUB-SLAB VAPOR EXTRACTION WELL						GROUND ELEVATION: #N/A																																																																																																																																																																																																																																																																																																																															
<table><tr><td rowspan="2"></td><td rowspan="2">DEPTH (INCHES)</td><td rowspan="2">SAMPLE INTERVAL</td><td rowspan="2">RECOVERY (INCHES)</td><td rowspan="2">BLOW COUNT "N"</td><td rowspan="2">MOISTURE CONTENT</td><td rowspan="2">PID READING (ppm)</td><td colspan="2">SURFACE CONDITIONS: CONCRETE</td><td rowspan="2">USCS</td><td colspan="2" rowspan="2">WELL INSTALLATION</td></tr><tr><td colspan="2"><div>BENTONITE GROUT</div><div>PEA GRAVEL</div></td></tr><tr><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td></td><td></td><td></td><td>N/A</td><td>N/A</td><td></td><td>CONCRETE</td><td>N/A</td><td></td><td></td></tr><tr><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td>UNKNOWN BLACK MATERIAL</td><td></td><td></td><td></td></tr><tr><td></td><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>13</td><td>N/A</td><td>N/A</td><td>N/A</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>16</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>17</td><td></td><td></td><td></td><td></td><td></td><td></td><td>RED-BROWN, LIGHT GRAY, YELLOW-BROWN, CLAY, MOTTLED, HARD, LOW PLASTICITY</td><td></td><td></td><td></td></tr><tr><td></td><td>18</td><td></td><td></td><td></td><td>SLIGHT MOIST</td><td>4.0</td><td></td><td></td><td>CL</td><td></td><td></td></tr><tr><td></td><td>19</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>21</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>22</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>23</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>24</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>25</td><td></td><td></td><td></td><td></td><td></td><td></td><td>RED-BROWN CLAY HARD LOW PLASTICITY</td><td></td><td></td><td></td></tr></table>													DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE		USCS	WELL INSTALLATION		<div>BENTONITE GROUT</div> <div>PEA GRAVEL</div>			1												2												3												4												5				N/A	N/A		CONCRETE	N/A				6												7												8												9												10							UNKNOWN BLACK MATERIAL					11												12												13	N/A	N/A	N/A									14												15												16												17							RED-BROWN, LIGHT GRAY, YELLOW-BROWN, CLAY , MOTTLED, HARD, LOW PLASTICITY					18				SLIGHT MOIST	4.0			CL				19												20												21												22												23												24												25							RED-BROWN CLAY HARD LOW PLASTICITY			
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE		USCS	WELL INSTALLATION																																																																																																																																																																																																																																																																																																																											
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PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO. 117-0507537		WELL NUMBER SV-33-C		CLIENT: LOCKHEED MARTIN CORPORATION		
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER						
						COMPANY: S&S TECHNOLOGIES						
						OPERATOR: #N/A					SHEET 1 OF 1	
						SAMPLING METHOD: #N/A						
		WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED										
		RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING				LOGGED BY: TETRA TECH/DAWN MONICO					DRILLING	
		FILTER PACK: 3/8-INCH WASHED PEA GRAVEL				WELL DEPTH: 27.0 INCHES					START DATE	
		SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER				DATUM: #N/A N/L: #N/A E/L: #N/A					FINISH DATE	
						PERMIT NO.: #N/A					4/11/2013 4/11/2013	
		NOTE: SUB-SLAB VAPOR EXTRACTION WELL				GROUND ELEVATION: #N/A						
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE			USCS	WELL INSTALLATION	
							BENTONITE GROUT PEA GRAVEL					
26							RED-BROWN, CLAY, HARD, LOW PLASTICITY				END CAP	
27												
END OF BORING = 27.0 INCHES												

[illegible]

PROJECT:		BUILDING C SUB-SLAB DEPRESSURIZATION SYSTEM SECOND-PHASE EXPANSION LOCKHEED MARTIN MIDDLE RIVER COMPLEX				JOB NO. 117-0507537	WELL NUMBER SV-34-C	CLIENT: LOCKHEED MARTIN CORPORATION		
LOCATION:		2323 EASTERN BOULEVARD, MIDDLE RIVER MARYLAND 21220				DRILLING METHOD: HAND AUGER				
						COMPANY: S&S TECHNOLOGIES			SHEET 1 OF 1	
						OPERATOR: #N/A				
						SAMPLING METHOD: #N/A				
WELL SCREEN: 2-INCH DIA. SCH. 40 PVC, 0.020 INCH SLOTTED										
RISER: 2-INCH DIA. SCH. 40 PVC, SOLID CASING						LOGGED BY: TETRA TECH/DAWN MONICO			DRILLING	
FILTER PACK: 3/8-INCH WASHED PEA GRAVEL						WELL DEPTH: 28.0 INCHES			START DATE	
SEAL/GROUT: 10 OZ. BENTONITE, 60 LBS. CONCRETE, ~1 GAL. WATER						DATUM: #N/A N/L: #N/A E/L: #N/A			FINISH DATE	
						PERMIT NO.: #N/A			4/10/2013 4/10/2013	
NOTE: SUB-SLAB VAPOR EXTRACTION WELL						GROUND ELEVATION: #N/A				
	DEPTH (INCHES)	SAMPLE INTERVAL	RECOVERY (INCHES)	BLOW COUNT "N"	MOISTURE CONTENT	PID READING (ppm)	SURFACE CONDITIONS: CONCRETE		USCS	WELL INSTALLATION
							BENTONITE GROUT PEA GRAVEL			
	24									
	26									
	27									
	28									
END OF BORING = 28.0 INCHES										

ATTACHMENT 5

TESTAMERICA ANALYTICAL REPORT—

EXTRACTION-WELL AIR SAMPLING

Tetra Tech GEO

Client Sample ID: SV-30-C

GC/MS Volatiles

Lot-Sample # H3E080423 - 001

Work Order # M0R0C1AA

Matrix.....: AIR

Date Sampled...: 05/02/2013

Date Received..: 05/08/2013

Prep Date.....: 05/10/2013

Analysis Date... 05/11/2013

Prep Batch #.....: 3133018

Dilution Factor.: 124.78

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	25	ND	80
Benzyl chloride	ND	50	ND	260
Bromomethane	ND	25	ND	97
Carbon tetrachloride	ND	25	ND	160
Chlorobenzene	ND	25	ND	110
Chloroethane	ND	25	ND	66
Chloroform	ND	25	ND	120
Chloromethane	ND	62	ND	130
1,2-Dibromoethane (EDB)	ND	25	ND	190
1,2-Dichlorobenzene	ND	25	ND	150
1,3-Dichlorobenzene	ND	25	ND	150
1,4-Dichlorobenzene	ND	25	ND	150
Dichlorodifluoromethane	ND	25	ND	120
1,1-Dichloroethane	ND	25	ND	100
1,2-Dichloroethane	ND	25	ND	100
cis-1,2-Dichloroethene	35	25	140	99
1,1-Dichloroethene	ND	25	ND	99
1,2-Dichloropropane	ND	25	ND	120
cis-1,3-Dichloropropene	ND	25	ND	110
trans-1,3-Dichloropropene	ND	25	ND	110
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	25	ND	170
Ethylbenzene	ND	25	ND	110
Hexachlorobutadiene	ND	120	ND	1300
Methylene chloride	ND	62	ND	220
Styrene	ND	25	ND	110
1,1,2,2-Tetrachloroethane	ND	25	ND	170
Tetrachloroethene	ND	25	ND	170
Toluene	ND	25	ND	94
1,2,4-Trichlorobenzene	ND	120	ND	930
1,1,1-Trichloroethane	ND	25	ND	140
1,1,2-Trichloroethane	ND	25	ND	140
Trichloroethene	90	25	480	130
Trichlorofluoromethane	ND	25	ND	140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	25	ND	190
1,2,4-Trimethylbenzene	ND	25	ND	120
1,3,5-Trimethylbenzene	ND	25	ND	120
Vinyl chloride	ND	25	ND	64

Tetra Tech GEO
Client Sample ID: SV-30-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 001 **Work Order #** M0R0C1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	25	ND	110
o-Xylene	ND	25	ND	110
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		102		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: SV-26-C

GC/MS Volatiles

Lot-Sample # H3E080423 - 002

Work Order # M0R0D1AA

Matrix.....: AIR

Date Sampled...: 05/02/2013

Date Received..: 05/08/2013

Prep Date.....: 05/09/2013

Analysis Date... 05/10/2013

Prep Batch #.....: 3130012

Dilution Factor.: 10

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	2.0	ND	6.4
Benzyl chloride	ND	4.0	ND	21
Bromomethane	ND	2.0	ND	7.8
Carbon tetrachloride	ND	2.0	ND	13
Chlorobenzene	ND	2.0	ND	9.2
Chloroethane	ND	2.0	ND	5.3
Chloroform	ND	2.0	ND	9.8
Chloromethane	ND	5.0	ND	10
1,2-Dibromoethane (EDB)	ND	2.0	ND	15
1,2-Dichlorobenzene	ND	2.0	ND	12
1,3-Dichlorobenzene	ND	2.0	ND	12
1,4-Dichlorobenzene	ND	2.0	ND	12
Dichlorodifluoromethane	ND	2.0	ND	9.9
1,1-Dichloroethane	ND	2.0	ND	8.1
1,2-Dichloroethane	ND	2.0	ND	8.1
cis-1,2-Dichloroethene	11	2.0	42	7.9
1,1-Dichloroethene	ND	2.0	ND	7.9
1,2-Dichloropropane	ND	2.0	ND	9.2
cis-1,3-Dichloropropene	ND	2.0	ND	9.1
trans-1,3-Dichloropropene	ND	2.0	ND	9.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ND	14
Ethylbenzene	ND	2.0	ND	8.7
Hexachlorobutadiene	ND	10	ND	110
Methylene chloride	ND	5.0	ND	17
Styrene	ND	2.0	ND	8.5
1,1,2,2-Tetrachloroethane	ND	2.0	ND	14
Tetrachloroethene	ND	2.0	ND	14
Toluene	2.6	2.0	9.9	7.5
1,2,4-Trichlorobenzene	ND	10	ND	74
1,1,1-Trichloroethane	ND	2.0	ND	11
1,1,2-Trichloroethane	ND	2.0	ND	11
Trichloroethene	54	2.0	290	11
Trichlorofluoromethane	ND	2.0	ND	11
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ND	15
1,2,4-Trimethylbenzene	ND	2.0	ND	9.8
1,3,5-Trimethylbenzene	ND	2.0	ND	9.8
Vinyl chloride	ND	2.0	ND	5.1

Tetra Tech GEO
Client Sample ID: SV-26-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 002 **Work Order #** M0R0D1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	2.0	ND	8.7
o-Xylene	ND	2.0	ND	8.7
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		96		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: SV-31-C

GC/MS Volatiles

Lot-Sample # H3E080423 - 003

Work Order # M0R0E1AA

Matrix.....: AIR

Date Sampled...: 05/02/2013

Date Received..: 05/08/2013

Prep Date.....: 05/09/2013

Analysis Date... 05/10/2013

Prep Batch #.....: 3130012

Dilution Factor.: 10

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	2.0	ND	6.4
Benzyl chloride	ND	4.0	ND	21
Bromomethane	ND	2.0	ND	7.8
Carbon tetrachloride	ND	2.0	ND	13
Chlorobenzene	ND	2.0	ND	9.2
Chloroethane	ND	2.0	ND	5.3
Chloroform	ND	2.0	ND	9.8
Chloromethane	ND	5.0	ND	10
1,2-Dibromoethane (EDB)	ND	2.0	ND	15
1,2-Dichlorobenzene	ND	2.0	ND	12
1,3-Dichlorobenzene	ND	2.0	ND	12
1,4-Dichlorobenzene	ND	2.0	ND	12
Dichlorodifluoromethane	ND	2.0	ND	9.9
1,1-Dichloroethane	ND	2.0	ND	8.1
1,2-Dichloroethane	ND	2.0	ND	8.1
cis-1,2-Dichloroethene	2.5	2.0	10.0	7.9
1,1-Dichloroethene	ND	2.0	ND	7.9
1,2-Dichloropropane	ND	2.0	ND	9.2
cis-1,3-Dichloropropene	ND	2.0	ND	9.1
trans-1,3-Dichloropropene	ND	2.0	ND	9.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ND	14
Ethylbenzene	ND	2.0	ND	8.7
Hexachlorobutadiene	ND	10	ND	110
Methylene chloride	ND	5.0	ND	17
Styrene	ND	2.0	ND	8.5
1,1,2,2-Tetrachloroethane	ND	2.0	ND	14
Tetrachloroethene	ND	2.0	ND	14
Toluene	2.5	2.0	9.3	7.5
1,2,4-Trichlorobenzene	ND	10	ND	74
1,1,1-Trichloroethane	ND	2.0	ND	11
1,1,2-Trichloroethane	ND	2.0	ND	11
Trichloroethene	29	2.0	150	11
Trichlorofluoromethane	ND	2.0	ND	11
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ND	15
1,2,4-Trimethylbenzene	ND	2.0	ND	9.8
1,3,5-Trimethylbenzene	ND	2.0	ND	9.8
Vinyl chloride	ND	2.0	ND	5.1

Tetra Tech GEO
Client Sample ID: SV-31-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 003 **Work Order #** M0R0E1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	2.0	ND	8.7
o-Xylene	ND	2.0	ND	8.7
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		97		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO
Client Sample ID: SV-27-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 004	Work Order # M0R0F1AA	Matrix.....: AIR
Date Sampled...: 05/02/2013	Date Received..: 05/08/2013	
Prep Date.....: 05/09/2013	Analysis Date... 05/10/2013	
Prep Batch #.....: 3130012		
Dilution Factor.: 10	Method.....: TO-15	

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	2.0	ND	6.4
Benzyl chloride	ND	4.0	ND	21
Bromomethane	ND	2.0	ND	7.8
Carbon tetrachloride	ND	2.0	ND	13
Chlorobenzene	ND	2.0	ND	9.2
Chloroethane	ND	2.0	ND	5.3
Chloroform	ND	2.0	ND	9.8
Chloromethane	ND	5.0	ND	10
1,2-Dibromoethane (EDB)	ND	2.0	ND	15
1,2-Dichlorobenzene	ND	2.0	ND	12
1,3-Dichlorobenzene	ND	2.0	ND	12
1,4-Dichlorobenzene	ND	2.0	ND	12
Dichlorodifluoromethane	ND	2.0	ND	9.9
1,1-Dichloroethane	ND	2.0	ND	8.1
1,2-Dichloroethane	ND	2.0	ND	8.1
cis-1,2-Dichloroethene	ND	2.0	ND	7.9
1,1-Dichloroethene	ND	2.0	ND	7.9
1,2-Dichloropropane	ND	2.0	ND	9.2
cis-1,3-Dichloropropene	ND	2.0	ND	9.1
trans-1,3-Dichloropropene	ND	2.0	ND	9.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ND	14
Ethylbenzene	ND	2.0	ND	8.7
Hexachlorobutadiene	ND	10	ND	110
Methylene chloride	ND	5.0	ND	17
Styrene	ND	2.0	ND	8.5
1,1,2,2-Tetrachloroethane	ND	2.0	ND	14
Tetrachloroethene	ND	2.0	ND	14
Toluene	2.7	2.0	10	7.5
1,2,4-Trichlorobenzene	ND	10	ND	74
1,1,1-Trichloroethane	ND	2.0	ND	11
1,1,2-Trichloroethane	ND	2.0	ND	11
Trichloroethene	75	2.0	400	11
Trichlorofluoromethane	ND	2.0	ND	11
1,1,2-Trichloro-1,2,2-trifluoroethane	16	2.0	120	15
1,2,4-Trimethylbenzene	ND	2.0	ND	9.8
1,3,5-Trimethylbenzene	ND	2.0	ND	9.8
Vinyl chloride	ND	2.0	ND	5.1

Tetra Tech GEO
Client Sample ID: SV-27-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 004 **Work Order #** M0R0F1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	2.0	ND	8.7
o-Xylene	ND	2.0	ND	8.7
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		98		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO
Client Sample ID: SV-32-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 005	Work Order # M0R0G1AA	Matrix.....: AIR
Date Sampled...: 05/02/2013	Date Received..: 05/08/2013	
Prep Date.....: 05/09/2013	Analysis Date...: 05/10/2013	
Prep Batch #.....: 3130012		
Dilution Factor.: 66.91	Method.....: TO-15	

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	13	ND	43
Benzyl chloride	ND	27	ND	140
Bromomethane	ND	13	ND	52
Carbon tetrachloride	ND	13	ND	84
Chlorobenzene	ND	13	ND	62
Chloroethane	ND	13	ND	35
Chloroform	ND	13	ND	65
Chloromethane	ND	33	ND	69
1,2-Dibromoethane (EDB)	ND	13	ND	100
1,2-Dichlorobenzene	ND	13	ND	80
1,3-Dichlorobenzene	ND	13	ND	80
1,4-Dichlorobenzene	ND	13	ND	80
Dichlorodifluoromethane	ND	13	ND	66
1,1-Dichloroethane	ND	13	ND	54
1,2-Dichloroethane	ND	13	ND	54
cis-1,2-Dichloroethene	ND	13	ND	53
1,1-Dichloroethene	ND	13	ND	53
1,2-Dichloropropane	ND	13	ND	62
cis-1,3-Dichloropropene	ND	13	ND	61
trans-1,3-Dichloropropene	ND	13	ND	61
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	13	ND	94
Ethylbenzene	ND	13	ND	58
Hexachlorobutadiene	ND	67	ND	710
Methylene chloride	ND	33	ND	120
Styrene	ND	13	ND	57
1,1,2,2-Tetrachloroethane	ND	13	ND	92
Tetrachloroethene	21	13	140	91
Toluene	ND	13	ND	50
1,2,4-Trichlorobenzene	ND	67	ND	500
1,1,1-Trichloroethane	ND	13	ND	73
1,1,2-Trichloroethane	ND	13	ND	73
Trichloroethene	740	13	4000	72
Trichlorofluoromethane	ND	13	ND	75
1,1,2-Trichloro-1,2,2-trifluoroethane	57	13	440	100
1,2,4-Trimethylbenzene	ND	13	ND	66
1,3,5-Trimethylbenzene	ND	13	ND	66
Vinyl chloride	ND	13	ND	34

Tetra Tech GEO
Client Sample ID: SV-32-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 005 **Work Order #** M0R0G1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	13	ND	58
o-Xylene	ND	13	ND	58
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		96		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: SV-28-C

GC/MS Volatiles

Lot-Sample # H3E080423 - 006

Work Order # M0R0H1AA

Matrix.....: AIR

Date Sampled...: 05/02/2013

Date Received...: 05/08/2013

Prep Date.....: 05/09/2013

Analysis Date...: 05/10/2013

Prep Batch #.....: 3130012

Dilution Factor.: 16.67

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	3.3	ND	11
Benzyl chloride	ND	6.7	ND	35
Bromomethane	ND	3.3	ND	13
Carbon tetrachloride	ND	3.3	ND	21
Chlorobenzene	ND	3.3	ND	15
Chloroethane	ND	3.3	ND	8.8
Chloroform	ND	3.3	ND	16
Chloromethane	ND	8.3	ND	17
1,2-Dibromoethane (EDB)	ND	3.3	ND	26
1,2-Dichlorobenzene	ND	3.3	ND	20
1,3-Dichlorobenzene	ND	3.3	ND	20
1,4-Dichlorobenzene	ND	3.3	ND	20
Dichlorodifluoromethane	ND	3.3	ND	16
1,1-Dichloroethane	ND	3.3	ND	13
1,2-Dichloroethane	ND	3.3	ND	13
cis-1,2-Dichloroethene	16	3.3	63	13
1,1-Dichloroethene	ND	3.3	ND	13
1,2-Dichloropropane	ND	3.3	ND	15
cis-1,3-Dichloropropene	ND	3.3	ND	15
trans-1,3-Dichloropropene	ND	3.3	ND	15
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.3	ND	23
Ethylbenzene	16	3.3	71	14
Hexachlorobutadiene	ND	17	ND	180
Methylene chloride	ND	8.3	ND	29
Styrene	ND	3.3	ND	14
1,1,2,2-Tetrachloroethane	ND	3.3	ND	23
Tetrachloroethene	ND	3.3	ND	23
Toluene	3.6	3.3	14	13
1,2,4-Trichlorobenzene	ND	17	ND	120
1,1,1-Trichloroethane	ND	3.3	ND	18
1,1,2-Trichloroethane	ND	3.3	ND	18
Trichloroethene	270	3.3	1400	18
Trichlorofluoromethane	ND	3.3	ND	19
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	3.3	ND	26
1,2,4-Trimethylbenzene	ND	3.3	ND	16
1,3,5-Trimethylbenzene	ND	3.3	ND	16
Vinyl chloride	ND	3.3	ND	8.5

Tetra Tech GEO
Client Sample ID: SV-28-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 006 **Work Order #** M0R0H1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	95	3.3	410	14
o-Xylene	43	3.3	190	14
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		102		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO
Client Sample ID: SV-33-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 007 **Work Order #** M0R0J1AA **Matrix.....:** AIR

Date Sampled...: 05/02/2013 **Date Received..:** 05/08/2013
Prep Date.....: 05/10/2013 **Analysis Date...** 05/10/2013
Prep Batch #.....: 3133018
Dilution Factor.: 1160.06 **Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	230	ND	740
Benzyl chloride	ND	460	ND	2400
Bromomethane	ND	230	ND	900
Carbon tetrachloride	ND	230	ND	1500
Chlorobenzene	ND	230	ND	1100
Chloroethane	ND	230	ND	610
Chloroform	ND	230	ND	1100
Chloromethane	ND	580	ND	1200
1,2-Dibromoethane (EDB)	ND	230	ND	1800
1,2-Dichlorobenzene	ND	230	ND	1400
1,3-Dichlorobenzene	ND	230	ND	1400
1,4-Dichlorobenzene	ND	230	ND	1400
Dichlorodifluoromethane	ND	230	ND	1100
1,1-Dichloroethane	ND	230	ND	940
1,2-Dichloroethane	ND	230	ND	940
cis-1,2-Dichloroethene	600	230	2400	920
1,1-Dichloroethene	ND	230	ND	920
1,2-Dichloropropane	ND	230	ND	1100
cis-1,3-Dichloropropene	ND	230	ND	1100
trans-1,3-Dichloropropene	ND	230	ND	1100
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	230	ND	1600
Ethylbenzene	ND	230	ND	1000
Hexachlorobutadiene	ND	1200	ND	12000
Methylene chloride	ND	580	ND	2000
Styrene	ND	230	ND	990
1,1,2,2-Tetrachloroethane	ND	230	ND	1600
Tetrachloroethene	ND	230	ND	1600
Toluene	ND	230	ND	870
1,2,4-Trichlorobenzene	ND	1200	ND	8600
1,1,1-Trichloroethane	ND	230	ND	1300
1,1,2-Trichloroethane	ND	230	ND	1300
Trichloroethene	17000	230	89000	1200
Trichlorofluoromethane	ND	230	ND	1300
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	230	ND	1800
1,2,4-Trimethylbenzene	ND	230	ND	1100
1,3,5-Trimethylbenzene	ND	230	ND	1100
Vinyl chloride	ND	230	ND	590

Tetra Tech GEO
Client Sample ID: SV-33-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 007 **Work Order #** M0R0J1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	230	ND	1000
o-Xylene	ND	230	ND	1000
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		102		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: SV-29-C

GC/MS Volatiles

Lot-Sample # H3E080423 - 008

Work Order # M0R0K1AA

Matrix.....: AIR

Date Sampled...: 05/02/2013

Date Received...: 05/08/2013

Prep Date.....: 05/09/2013

Analysis Date...: 05/10/2013

Prep Batch #.....: 3130012

Dilution Factor.: 16.67

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	3.3	ND	11
Benzyl chloride	ND	6.7	ND	35
Bromomethane	ND	3.3	ND	13
Carbon tetrachloride	ND	3.3	ND	21
Chlorobenzene	ND	3.3	ND	15
Chloroethane	ND	3.3	ND	8.8
Chloroform	ND	3.3	ND	16
Chloromethane	ND	8.3	ND	17
1,2-Dibromoethane (EDB)	ND	3.3	ND	26
1,2-Dichlorobenzene	ND	3.3	ND	20
1,3-Dichlorobenzene	ND	3.3	ND	20
1,4-Dichlorobenzene	ND	3.3	ND	20
Dichlorodifluoromethane	ND	3.3	ND	16
1,1-Dichloroethane	ND	3.3	ND	13
1,2-Dichloroethane	ND	3.3	ND	13
cis-1,2-Dichloroethene	3.9	3.3	16	13
1,1-Dichloroethene	ND	3.3	ND	13
1,2-Dichloropropane	ND	3.3	ND	15
cis-1,3-Dichloropropene	ND	3.3	ND	15
trans-1,3-Dichloropropene	ND	3.3	ND	15
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.3	ND	23
Ethylbenzene	44	3.3	190	14
Hexachlorobutadiene	ND	17	ND	180
Methylene chloride	ND	8.3	ND	29
Styrene	7.7	3.3	33	14
1,1,2,2-Tetrachloroethane	ND	3.3	ND	23
Tetrachloroethene	ND	3.3	ND	23
Toluene	4.6	3.3	17	13
1,2,4-Trichlorobenzene	ND	17	ND	120
1,1,1-Trichloroethane	ND	3.3	ND	18
1,1,2-Trichloroethane	ND	3.3	ND	18
Trichloroethene	200	3.3	1100	18
Trichlorofluoromethane	ND	3.3	ND	19
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	3.3	ND	26
1,2,4-Trimethylbenzene	ND	3.3	ND	16
1,3,5-Trimethylbenzene	ND	3.3	ND	16
Vinyl chloride	ND	3.3	ND	8.5

Tetra Tech GEO
Client Sample ID: SV-29-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 008 **Work Order #** M0R0K1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	220	3.3	970	14
o-Xylene	100	3.3	450	14
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		92		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO
Client Sample ID: SV-34-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 009	Work Order # M0R0L1AA	Matrix.....: AIR
Date Sampled...: 05/02/2013	Date Received..: 05/08/2013	
Prep Date.....: 05/10/2013	Analysis Date...: 05/11/2013	
Prep Batch #.....: 3133018		
Dilution Factor.: 55.44	Method.....: TO-15	

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	11	ND	35
Benzyl chloride	ND	22	ND	110
Bromomethane	ND	11	ND	43
Carbon tetrachloride	ND	11	ND	70
Chlorobenzene	ND	11	ND	51
Chloroethane	ND	11	ND	29
Chloroform	ND	11	ND	54
Chloromethane	ND	28	ND	57
1,2-Dibromoethane (EDB)	ND	11	ND	85
1,2-Dichlorobenzene	ND	11	ND	67
1,3-Dichlorobenzene	ND	11	ND	67
1,4-Dichlorobenzene	ND	11	ND	67
Dichlorodifluoromethane	ND	11	ND	55
1,1-Dichloroethane	ND	11	ND	45
1,2-Dichloroethane	ND	11	ND	45
cis-1,2-Dichloroethene	ND	11	ND	44
1,1-Dichloroethene	ND	11	ND	44
1,2-Dichloropropane	ND	11	ND	51
cis-1,3-Dichloropropene	ND	11	ND	50
trans-1,3-Dichloropropene	ND	11	ND	50
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	11	ND	78
Ethylbenzene	ND	11	ND	48
Hexachlorobutadiene	ND	55	ND	590
Methylene chloride	ND	28	ND	96
Styrene	ND	11	ND	47
1,1,2,2-Tetrachloroethane	ND	11	ND	76
Tetrachloroethene	ND	11	ND	75
Toluene	ND	11	ND	42
1,2,4-Trichlorobenzene	ND	55	ND	410
1,1,1-Trichloroethane	ND	11	ND	60
1,1,2-Trichloroethane	ND	11	ND	60
Trichloroethene	49	11	260	60
Trichlorofluoromethane	ND	11	ND	62
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	11	ND	85
1,2,4-Trimethylbenzene	ND	11	ND	55
1,3,5-Trimethylbenzene	ND	11	ND	55
Vinyl chloride	ND	11	ND	28

Tetra Tech GEO
Client Sample ID: SV-34-C
GC/MS Volatiles

Lot-Sample # H3E080423 - 009 **Work Order #** M0R0L1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	11	ND	48
o-Xylene	ND	11	ND	48
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		103		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: INTRA-LAB BLANK

GC/MS Volatiles

Lot-Sample # H3E100000 - 012B **Work Order #** M0TEH1AA **Matrix.....:** AIR
Prep Date.....: 05/02/2013 **Date Received..:** 05/08/2013
Prep Batch #.....: 05/09/2013 **Analysis Date...** 05/10/2013
Dilution Factor.: 3130012
Method.....: 1 TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	0.20	ND	0.64
Benzyl chloride	ND	0.40	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,2-Dibromoethane (EDB)	ND	0.20	ND	1.5
1,2-Dichlorobenzene	ND	0.20	ND	1.2
1,3-Dichlorobenzene	ND	0.20	ND	1.2
1,4-Dichlorobenzene	ND	0.20	ND	1.2
Dichlorodifluoromethane	ND	0.20	ND	0.99
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
1,1-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ND	1.4
Ethylbenzene	ND	0.20	ND	0.87
Hexachlorobutadiene	ND	1.0	ND	11
Methylene chloride	ND	0.50	ND	1.7
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,2,4-Trichlorobenzene	ND	1.0	ND	7.4
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Trichlorofluoromethane	ND	0.20	ND	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ND	1.5
1,2,4-Trimethylbenzene	ND	0.20	ND	0.98
1,3,5-Trimethylbenzene	ND	0.20	ND	0.98
Vinyl chloride	ND	0.20	ND	0.51

Tetra Tech GEO
Client Sample ID: INTRA-LAB BLANK
GC/MS Volatiles

Lot-Sample # H3E100000 - 012B **Work Order #** M0TEH1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	0.20	ND	0.87
o-Xylene	ND	0.20	ND	0.87
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		95		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3E100000 - 012C Work Order # M0TEH1AC Matrix.....: AIR

Prep Date.....: 05/02/2013 Date Received..: 05/08/2013

Prep Batch #.....: 05/09/2013 Analysis Date... 05/09/2013

Prep Batch #.....: 3130012

Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Benzene	5.00	4.40	16	14.1	88	70 - 130
Benzyl chloride	5.00	3.88	26	20.1	78	70 - 130
Bromomethane	5.00	5.23	19	20.3	105	70 - 130
Carbon tetrachloride	5.00	5.55	31	34.9	111	70 - 130
Chlorobenzene	5.00	4.51	23	20.8	90	70 - 130
Chloroethane	5.00	5.40	13	14.2	108	70 - 130
Chloroform	5.00	4.56	24	22.3	91	70 - 130
Chloromethane	5.00	5.30	10	11.0	106	60 - 140
1,2-Dibromoethane (EDB)	5.00	4.56	38	35.0	91	70 - 130
1,2-Dichlorobenzene	5.00	4.40	30	26.5	88	70 - 130
1,3-Dichlorobenzene	5.00	4.32	30	26.0	86	70 - 130
1,4-Dichlorobenzene	5.00	4.11	30	24.7	82	70 - 130
Dichlorodifluoromethane	5.00	5.15	25	25.5	103	60 - 140
1,1-Dichloroethane	5.00	4.69	20	19.0	94	70 - 130
1,2-Dichloroethane	5.00	4.73	20	19.1	95	70 - 130
cis-1,2-Dichloroethene	5.00	4.38	20	17.4	88	70 - 130
1,1-Dichloroethene	5.00	4.16	20	16.5	83	70 - 130
1,2-Dichloropropane	5.00	4.87	23	22.5	97	70 - 130
cis-1,3-Dichloropropene	5.00	4.59	23	20.9	92	70 - 130
trans-1,3-Dichloropropene	5.00	4.61	23	20.9	92	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	5.07	35	35.5	101	60 - 140
Ethylbenzene	5.00	4.41	22	19.1	88	70 - 130
Hexachlorobutadiene	5.00	4.02	53	42.8	80	60 - 140
Methylene chloride	5.00	4.18	17	14.5	84	70 - 130
Styrene	5.00	4.51	21	19.2	90	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.61	34	31.6	92	70 - 130
Tetrachloroethene	5.00	4.63	34	31.4	93	70 - 130
Toluene	5.00	4.46	19	16.8	89	70 - 130
1,2,4-Trichlorobenzene	5.00	3.60	37	26.7	72	60 - 140
1,1,1-Trichloroethane	5.00	4.66	27	25.4	93	70 - 130
1,1,2-Trichloroethane	5.00	4.72	27	25.7	94	70 - 130
Trichloroethene	5.00	4.51	27	24.2	90	70 - 130
Trichlorofluoromethane	5.00	5.21	28	29.2	104	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	4.33	38	33.2	87	70 - 130
1,2,4-Trimethylbenzene	5.00	4.50	25	22.1	90	70 - 130
1,3,5-Trimethylbenzene	5.00	4.42	25	21.7	88	70 - 130

Tetra Tech GEO

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3E100000 - 012C **Work Order #** M0TEH1AC **Matrix.....:** AIR

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Vinyl chloride	5.00	5.29	13	13.5	106	70 - 130
m-Xylene & p-Xylene	10.0	9.01	43	39.1	90	70 - 130
o-Xylene	5.00	4.53	22	19.7	91	70 - 130

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	100	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: INTRA-LAB BLANK

GC/MS Volatiles

Lot-Sample # H3E130000 - 018B **Work Order #** M0TP81AA **Matrix.....:** AIR
Prep Date.....: 05/06/2013 **Date Received..:** 05/09/2013
Prep Batch #.....: 05/10/2013 **Analysis Date...** 05/10/2013
Prep Batch #.....: 3133018
Dilution Factor.: 1 **Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Benzene	ND	0.20	ND	0.64
Benzyl chloride	ND	0.40	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,2-Dibromoethane (EDB)	ND	0.20	ND	1.5
1,2-Dichlorobenzene	ND	0.20	ND	1.2
1,3-Dichlorobenzene	ND	0.20	ND	1.2
1,4-Dichlorobenzene	ND	0.20	ND	1.2
Dichlorodifluoromethane	ND	0.20	ND	0.99
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
1,1-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ND	1.4
Ethylbenzene	ND	0.20	ND	0.87
Hexachlorobutadiene	ND	1.0	ND	11
Methylene chloride	ND	0.50	ND	1.7
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,2,4-Trichlorobenzene	ND	1.0	ND	7.4
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Trichlorofluoromethane	ND	0.20	ND	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ND	1.5
1,2,4-Trimethylbenzene	ND	0.20	ND	0.98
1,3,5-Trimethylbenzene	ND	0.20	ND	0.98
Vinyl chloride	ND	0.20	ND	0.51

Tetra Tech GEO**Client Sample ID: INTRA-LAB BLANK****GC/MS Volatiles****Lot-Sample #** H3E130000 - 018B **Work Order #** M0TP81AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	0.20	ND	0.87
o-Xylene	ND	0.20	ND	0.87
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		99		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Tetra Tech GEO

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3E130000 - 018C Work Order # M0TP81AC Matrix.....: AIR

Prep Date.....: 05/06/2013 Date Received..: 05/09/2013

Prep Batch #.....: 05/10/2013 Analysis Date... 05/10/2013

Prep Batch #.....: 3133018

Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Benzene	5.00	3.83	16	12.2	77	70 - 130
Benzyl chloride	5.00	4.23	26	21.9	85	70 - 130
Bromomethane	5.00	4.10	19	15.9	82	70 - 130
Carbon tetrachloride	5.00	4.86	31	30.6	97	70 - 130
Chlorobenzene	5.00	4.02	23	18.5	80	70 - 130
Chloroethane	5.00	3.80	13	10.0	76	70 - 130
Chloroform	5.00	3.95	24	19.3	79	70 - 130
Chloromethane	5.00	3.66	10	7.56	73	60 - 140
1,2-Dibromoethane (EDB)	5.00	4.21	38	32.3	84	70 - 130
1,2-Dichlorobenzene	5.00	4.22	30	25.4	84	70 - 130
1,3-Dichlorobenzene	5.00	4.22	30	25.4	84	70 - 130
1,4-Dichlorobenzene	5.00	4.21	30	25.3	84	70 - 130
Dichlorodifluoromethane	5.00	4.54	25	22.5	91	60 - 140
1,1-Dichloroethane	5.00	3.94	20	15.9	79	70 - 130
1,2-Dichloroethane	5.00	3.87	20	15.6	77	70 - 130
cis-1,2-Dichloroethene	5.00	4.14	20	16.4	83	70 - 130
1,1-Dichloroethene	5.00	4.34	20	17.2	87	70 - 130
1,2-Dichloropropane	5.00	3.80	23	17.6	76	70 - 130
cis-1,3-Dichloropropene	5.00	4.27	23	19.4	85	70 - 130
trans-1,3-Dichloropropene	5.00	4.51	23	20.5	90	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	4.68	35	32.7	94	60 - 140
Ethylbenzene	5.00	3.98	22	17.3	80	70 - 130
Hexachlorobutadiene	5.00	4.08	53	43.5	82	60 - 140
Methylene chloride	5.00	4.03	17	14.0	81	70 - 130
Styrene	5.00	4.00	21	17.0	80	70 - 130
1,1,2,2-Tetrachloroethane	5.00	3.91	34	26.8	78	70 - 130
Tetrachloroethene	5.00	4.07	34	27.6	81	70 - 130
Toluene	5.00	3.84	19	14.5	77	70 - 130
1,2,4-Trichlorobenzene	5.00	5.27	37	39.1	105	60 - 140
1,1,1-Trichloroethane	5.00	4.17	27	22.8	83	70 - 130
1,1,2-Trichloroethane	5.00	3.88	27	21.2	78	70 - 130
Trichloroethene	5.00	4.28	27	23.0	86	70 - 130
Trichlorofluoromethane	5.00	4.38	28	24.6	88	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	4.26	38	32.7	85	70 - 130
1,2,4-Trimethylbenzene	5.00	4.01	25	19.7	80	70 - 130
1,3,5-Trimethylbenzene	5.00	3.99	25	19.6	80	70 - 130

Tetra Tech GEO

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3E130000 - 018C **Work Order #** M0TP81AC **Matrix.....:** AIR

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Vinyl chloride	5.00	3.89	13	9.93	78	70 - 130
m-Xylene & p-Xylene	10.0	7.82	43	34.0	78	70 - 130
o-Xylene	5.00	3.98	22	17.3	80	70 - 130

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	102	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

ATTACHMENT 6

WASTE DISPOSAL DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

D45233766

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NONEREQUIRED		Manifest Document No.		2. Page 1 of 1	
3. Generator's Name and Mailing Address Lockheed Martin Corporation 195 Chesapeake Park Plaza Middle River, MD 21220				Site Address : 195 Chesapeake Park Plaza Middle River, MD 21220			
4. Generator's Phone (MD) 21220		5. Transporter 1 Company Name Clean Harbor Environmental Services Inc		6. US EPA ID Number MAD039322250		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone (761) 792-5000		C. State Transporter's ID	
9. Designated Facility Name and Site Address Spring Grove Resource Recovery Inc 4879 Spring Grove Avenue Cincinnati, OH 45232		10. US EPA ID Number OH0000616629		D. Transporter 2 Phone		E. State Facility's ID	
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity		14. Unit Wt./Vol.	
a. NON DOT REGULATED MATERIAL		No. 1 Type DM		400		P	
b. NON DOT REGULATED, (PURGE WATER)		No. 6 Type 2m		3000		P	
c.							
d.							
G. Additional Descriptions for Materials Listed Above 11a.CH604786 - 12/12/01 11b.CH295975 6-10-01				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information				EMERGENCY PHONE #: (800) 483-3718 GENERATOR: Lockheed Martin Corporation			
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name				Signature		Date Month Day Year 12/12/01	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature		Date Month Day Year 12/12/01	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date Month Day Year 12/12/01	
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				Signature		Date Month Day Year	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

ATTACHMENT 7

UPDATED OPERATION AND MAINTENANCE MANUAL

(PROVIDED SEPARATELY)
