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Soil Vapor Extraction (SVE) Pilot Study

Sangamo Weston, Inc. Plant Site
Pickens, South Carolina

February 2009



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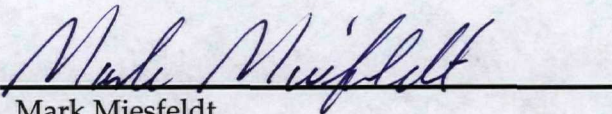


Soil Vapor Extraction (SVE) Pilot Study

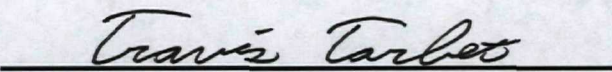
Sangamo Weston, Inc. Plant Site

Pickens, South Carolina

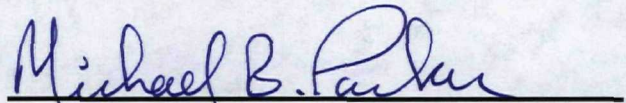
February 2009



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SVE Pilot Study - Sangamo Weston, Inc. Plant Site

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Section 1

Introduction

1.1 Background

Sangamo-Weston (Schlumberger) owned and operated a capacitor manufacturing plant near Pickens, South Carolina. The plant began operation in 1955 and manufactured capacitors and other related electrical components until the business was sold in 1987.

On June 18, 1987, Schlumberger and the United States Environmental Protection Agency (USEPA) Region 4, signed an Administrative Order of Consent that specified actions to assess the presence and extent of waste constituents in soil and groundwater at the Plant Site. Project planning documents were submitted and approved in January 1988. Following completion of the remedial investigation/feasibility study (RI/FS) the USEPA issued its Record of Decision (ROD) in December 1990, which called for soil and groundwater remediation.

RMT, Inc. (RMT) designed and implemented remedial activities as required and in an effort to accelerate the groundwater remediation, RMT performed horizontal delineation of potential source areas (Phase 1) in March 2007 and a residual source investigation (Phase 2) in June 2007. These investigations focused on the Former Plant Area and Areas D and H as potential source areas for volatile organic compound (VOC) detections in groundwater. Based on the results of the Phase 1 and Phase 2 investigations and in collaboration with Schlumberger's Water Services group, pilot soil vapor extraction (SVE) well locations were selected and SVE was chosen as a potential source remedy.

1.2 Source Investigations

On February 15, 2007, RMT submitted a workplan to the USEPA and South Carolina Department of Health and Environmental Control (SC DHEC) to conduct a residual VOC source investigation for the Plant Site. This source investigation focused on the Former Manufacturing Building, and former suspected source areas D, G, and H. A workplan for Phase 2 of the residual VOC source investigation, as well as a summary of results from the Phase 1 investigation were submitted to the USEPA and SC DHEC on May 15, 2007.

The Phase 1 investigation was conducted in March 2007 using soil vapor screening and real-time field analyses to determine the horizontal limits of residual source material. The data indicated that residual VOCs were present in the subsurface beneath the western half of the Former Manufacturing Building, Area D, and Area H. The Phase 2 workplan included profiling

the saprolite lithology and delineating the vertical extent of residual VOCs. The Phase 2 investigation was conducted in June 2007.

On October 16, 2007, RMT submitted the findings of the Phase 2 residual VOC source investigation to USEPA and SC DHEC. Vertical delineation of soil gas concentrations were presented, showing the distribution of VOCs in the source zone. Profiles of the general lithology and microstructures of the saprolite typical of those found in the residual source areas were also presented in the October 16, 2007 submittal. The results of the two phases of supplemental source delineation indicated that a potentially significant mass of residual VOCs remained in the saprolite zone beneath the former Plant Site Area, Area D, and Area H. Therefore, the focus of remediation technologies was placed on addressing the residual VOCs in the unsaturated saprolite zone in the Former Plant Site Area, Area D, and Area H using SVE Technology. The source areas targeted were based on the Phase 1 and Phase 2 horizontal and vertical residual source delineations.

1.3 Pilot Testing Objectives

The objectives of the SVE pilot test were to:

- Evaluate the effectiveness of SVE in removing residual VOCs from the vadose zone within the source areas identified above. The VOCs observed in the subsurface are thought to be contributing to the continuing high concentrations of VOCs in the groundwater down gradient from the source areas.
- Estimate the total VOC mass present in each source area and evaluate if a full-scale SVE approach could be used to effectively address residual source removal.

Section 2

Soil Vapor Extraction Well Installation

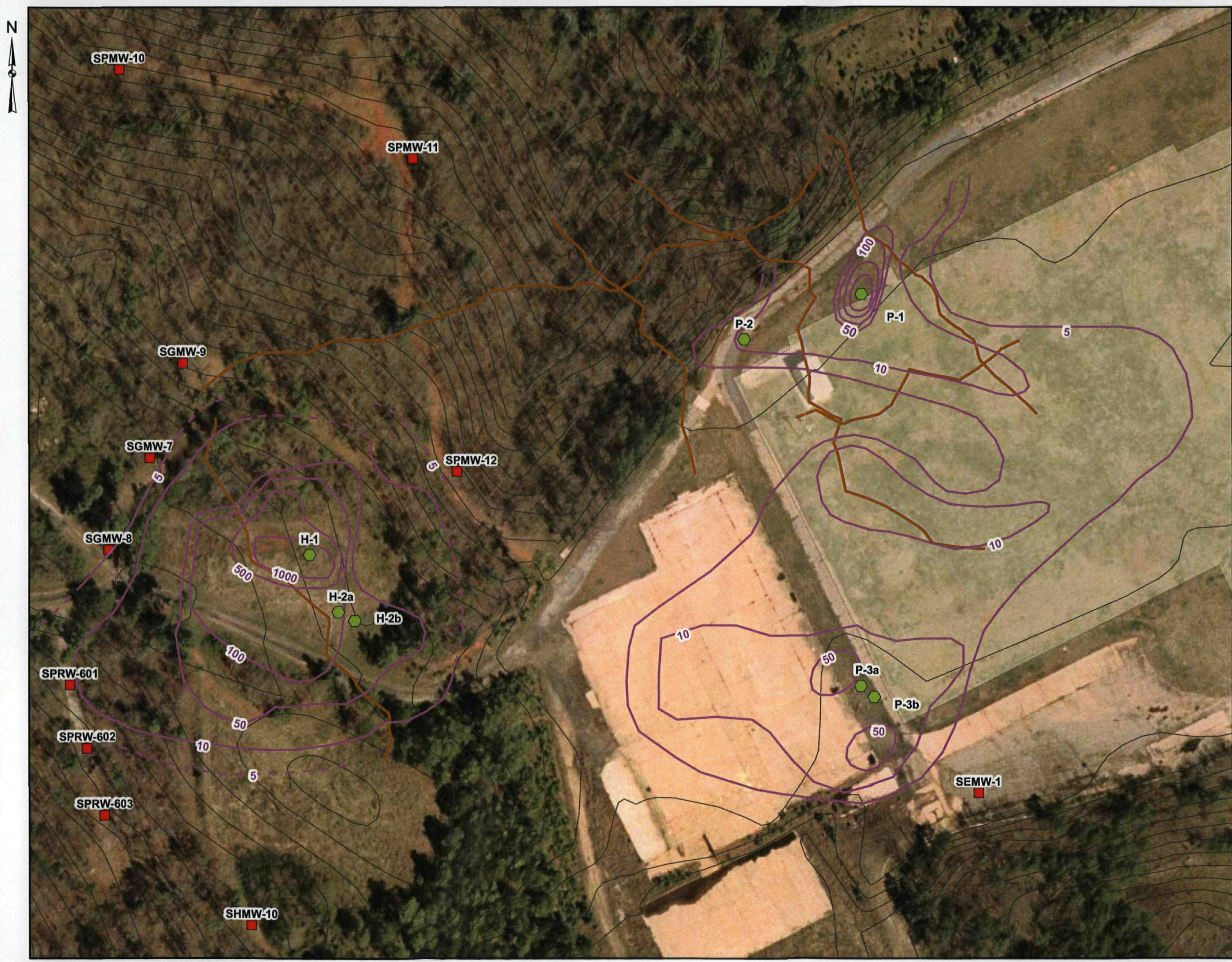
A total of nine 4-inch polyvinyl chloride (PVC) SVE wells were installed in July and August, 2008, at locations selected on the basis of the Phase 1 and Phase 2 source investigations. Table 1 is a summary of the SVE well construction and locations. The locations of the SVE wells, overlain on the technical data used to select the locations (*e.g.*, soil gas concentrations and bedrock fractures determined by the geophysical survey) are shown on Figures 1 and 2. Well construction diagrams are provided in Appendix A and soil boring logs are provided in Appendix B.

Table 1
Well Installation Summary

SVE WELL ID	WELL SCREEN INTERVAL (ft bgs)	TOTAL DEPTH (ft bgs)
Plant Area		
P-1	15.0 – 35.0	35.0
P-2	36.5 – 61.5	61.5
P-3a	12.0 – 27.0	27.0
P-3b	26.5 – 41.5	41.5
Area H		
H-1	13.5 – 23.5	23.5
H-2a	10.0 – 25.0	25.0
H-2b	24.0 – 34.0	34.0
Area D		
D-1	25.0 – 35.0	35.0
D-2	10.0 – 20.0	20.0

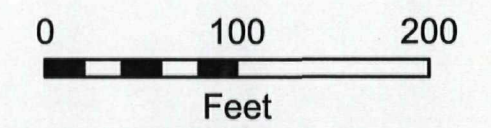
The SVE wells were constructed of nominal 4-inch diameter PVC casing with pre-packed PVC screen segments. Wells were installed using conventional hollow-stem auger drilling technology. The wells were advanced to auger refusal. Screen length, as shown in Table 1, was varied at the SVE well locations to intersect the impacted soil horizons identified during the supplemental source delineation. The top of the screened interval was set at a minimum depth of 10 feet below ground surface (bgs) to minimize potential short-circuiting with atmospheric air. Split-spoon samples were collected at five foot intervals, and soils were described in general accordance with the Unified Soil Classification System (USCS).

Depth to bedrock beneath the site ranges from 3 feet bgs (monitoring well SWMW-4) to 62 feet bgs (SVE well P-2). Soils overlying the bedrock consist primarily of fine to coarse-grained silty sand saprolite throughout the site. Quartz, feldspar, and mica are the most prominent minerals, with some areas intruded by granitic dikes. Groundwater beneath the site is encountered below the bedrock surface.



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

- ◆ SVE Well Location
- Existing Monitoring Well
- Trace of Fracture/Fault
- Soil Gas Contour (ppm)
- Topographic Contour

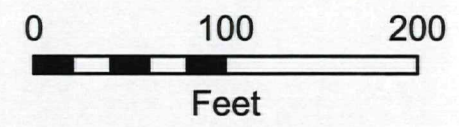


SANGAMO, OU-1 PICKENS, SOUTH CAROLINA		
AREA H AND AREA P SITE LAYOUT		
DRAWN BY: TLH	SCALE AS NOTED	PROJECT NO.: 71238.35 T5
CHECKED BY: TAT		DATE: JANUARY 2009
APPROVED BY: TAT		FIGURE NO.: 1
RMT		Patewood Plaza One, Suite 100 30 Patewood Drive Greenville, SC 29615-3535 Phone: 864-281-0030 FAX: 864-281-0288



LEGEND

-  SVE Well Location
-  Existing Monitoring Well
-  Trace of Fracture/Fault
-  Soil Gas Contour (ppm)
-  Topographic Contour
-  Area D



SANGAMO, OU-1 PICKENS, SOUTH CAROLINA		
AREA D SITE LAYOUT		
DRAWN BY: TLH	SCALE AS NOTED	PROJECT NO.: 71238.35 T5
CHECKED BY: TAT		DATE: JANUARY 2009
APPROVED BY: TAT		FIGURE NO.: 2
RMT		Patewood Plaza One, Suite 100 30 Patewood Drive Greenville, SC 29615-3535 Phone: 864-281-0030 FAX: 864-281-0288

Section 3 System Design

The SVE unit flow rate and vacuum pressures were based on the design parameters for the Area D system, which operated from September 1998 to June 2002 at the site. Regenerative type blowers were chosen for the skid-mounted SVE units as a result of their ability to produce the desired vacuum pressure of 100 inches of water column (w.c.) while maintaining a relatively high rate of air flow. Regenerative blowers can generally sustain a higher air flow rate at 100 inches of w.c. than rotary or liquid-ring positive displacement pumps. Blower specifications are presented in Appendix C. Table 2 is a summary of each SVE unit.

Table 2
Unit Design Parameters

LOCATION	SVE WELL ID	SVE SYSTEM TYPE	SVE UNIT FLOW RATE (scfm)
Former Plant Site	P-1, P-2	Skid-mounted	200 – 250
Former Plant Site	P-3a, P-3b	Skid-mounted	200 – 250
Area H	H-1, H-2a, H-2b	Skid-mounted	300 – 350
Area D	D-1, D-2	Skid-mounted	200 – 250

Each SVE unit consisted of a 55-gallon knockout drum to remove condensate from the extracted air stream, an air filter to remove particulate matter (PM), and an in-line make-up air valve prior to the blower. The knockout drum contained a vacuum relief valve set to open at 100 inches of w.c. to protect the blower in the event of a limited flow and high vacuum pressure situation. A vacuum gauge was also attached to the knockout drum. Downstream of the blower, the exhaust was routed through a 55-gallon activated carbon drum before being released through a stack to the atmosphere. The stack contained a sample port and in-line flow meter.

Each skid-mounted unit consisted of a two zone manifold (Plant Area and Area D wells) or a three zone manifold (Area H). Each manifold contained an in-line flow meter, vacuum gauge, sample port, and ball valve to control flow to each well. A temperature gauge was attached to the header at the tie in of the manifold. Photographs of the SVE units and manifolds are presented in Appendix D.

Section 4

Air Permitting Exemption

After the each SVE unit had been designed, RMT sent a letter to SC DHEC to exempt the pilot study from obtaining an air emissions permit in accordance with South Carolina Air Pollution Control Regulations and Standards (SC Regulations 61-62). SC DHEC exempted the site under SC Regulation 61-62.1, Section II(B)(2)h, because it has been determined that the alteration will have a total uncontrolled emission rate of less than 1,000 lbs/month of VOCs. Correspondences relating to the air permitting exemption are presented in Appendix E.

Section 5

System Operating Parameters

Area H and Area D units were started on September 3, 2008. Plant area wells were started on September 8, 2008. During the pilot test period, air flow, vacuum, and temperature were measured at the manifold and/or discharge stack. Operating parameters were measured on sample collection days. Variations in temperature were dependant on ambient temperature and air flow rate, and fluctuations in flow and vacuum pressure were minor. Flow measurements were read directly from the in-line flow meters present on each manifold and the discharge stack, given in standard cubic feet per minute (scfm). Vacuum for each well was read from a vacuum gauge located on each extraction well's manifold line, as well as from a composite system vacuum gauge located on the knockout drum. A complete table listing SVE operating parameters is presented in Appendix F. A summary table of average operating parameters for each of the four SVE units is presented in Table 3.

Table 3
Operating Parameter Summary

SVE WELL ID	AVERAGE VACUUM PRESSURE (in. H ₂ O)	AVERAGE TEMPERATURE (°C)	AVERAGE FLOW (scfm)
P-1, P-2	58	81	110
P-3a, P-3b	63	84	85
H-1, H-2a, H-2b	46	82	150
D-1, D-2	46	93	<25

A GasTec® 100 mL sampler was used to draw air samples through trichloroethylene (TCE) indicator tubes from the well sample ports during each sampling event and from the stack during baseline sampling. Sample results were adjusted using temperature correction factors provided by GasTec® after sample measurements had been taken. A manual pump was used with SKC Inc. charcoal sorbent tubes to collect samples for laboratory VOC analysis (Method N1003) as shown on the sampling schedule presented in Table 4.

Table 4
Sampling Schedule

OPERATING DAY	OPERATING PARAMETERS	TCE INDICATOR SAMPLE	CARBON TUBE SAMPLE
1 (baseline)	X	X	X
2	X	X	
3	X	X	X

**Table 4
Sampling Schedule**

OPERATING DAY	OPERATING PARAMETERS	TCE INDICATOR SAMPLE	CARBON TUBE SAMPLE
7	X	X	X
14	X	X	X
28	X	X	X
42	X	X	X
130	X	X	

SVE Well D-1 produced very low air flow rates (<5 scfm) during operation of the SVE system in Area D. This well was screened in a clayey silt layer which was not characteristic of the soil types encountered at the other locations and may have contributed to the low flow rate. RMT discontinued operation of SVE Well D-1 on September 18, 2008. In an attempt to stimulate flow and determine if the reduced flow was due to skin effects caused by the drilling process, the well was filled with a surfactant dose recommended by the licensed driller who installed the well, surged, and redeveloped. The well was refilled with water each weekday until September 25, 2008, and the water was allowed to seep out into the surrounding formation. The formation was observed to be accepting the water at a rate of approximately 0.8 gallons per minute (gal/min).

On September 25, 2008, the licensed driller was on the site with a boom truck and four inch surge block. The well was repeatedly filled with water and surged in an attempt to remove any clayey soil that may have been smeared on the well screen during well installation. Moderate changes in formation permeability were observed when the well was again filled with water, but no change in air flow was observed once the well was drained and reconnected to the SVE unit. The well was left connected to the SVE system for the remainder of the pilot study.

Section 6 Results

Laboratory analysis of the carbon tube samples resulted in detections of TCE and perchloroethylene (PCE) in varying concentrations among the SVE wells sampled. VOCs were not detected in air samples collected from sample ports located downstream of the activated carbon drums following startup of the SVE units. Laboratory reports from each sampling event are presented in Appendix G.

Concentrations of TCE and PCE dropped rapidly in the first five days of the SVE pilot test. Figure 3 shows the rapid decline in measured PCE concentrations over time from the three wells with the highest mass extraction rates (H-1, H-2b, and D-2). Figure 4 shows the decline in mass removal by date.

Almost 90 percent of the total mass of TCE and PCE removed was from three of the nine SVE wells (206 lb out of a total of 235 lb). Based on the results from the Phase I and Phase II soil gas studies, the largest residual mass of TCE and PCE were expected to be extracted from Area H. The pilot study corroborates this assessment, with a total mass removed of TCE and PCE of 192 lb. from Area H during the six week trial. Initial soil gas readings in Area P wells were lower than the Area H, and the estimated mass of contaminated soil was less, but the relatively small quantity (12.11 lb) of TCE and PCE removed was unexpected. Table 5 provides a summary of the total mass removed from each well.

**Table 5
Total Mass Extracted**

SVE WELL ID	TCE (lb)	PCE (lb)
P-1	0.6	2.39
P-2	.29	1.85
P-3a	0	3.10
P-3b	.44	3.44
H-1	63.71	77.92
H-2a	6.27	6.30
H-2b	18.69	18.97
D-1	1.57	2.65
D-2	6.46	20.64
Total	98.03	137.26

Approximately 3 months after shut down of the pilot test program, the individual systems were started back up, and sampled using TCE indicator tubes upon stabilization of operating parameters (approximately five minutes). The purpose of this supplemental assessment was to evaluate potential scenarios that could explain the rapid reduction in observed VOC concentrations observed during the first 5 days of operations. The two possible scenarios being evaluated were 1) small radius of influence in the clayey saprolite soils, and 2) low desorption rates of VOCs off of the subsurface soils. The working hypothesis for this evaluation was simply, if VOC concentrations rebounded to near the levels observed at startup, low desorption rates was the more likely explanation. If, however, the observed concentrations remained low, the most likely explanation would be a limited radius of influence.

Analytical results obtained from this evaluation were comparable to the results obtained prior to shutting down the pilot test. Evidence of rebound was not observed. Sampling results are summarized on Table 6.

Table 6
TCE Indicator Tube Results from Post-Shutdown Sampling

SVE WELL ID	FIRST ROUND OF SAMPLING WEEK OF 9/3/08	SIX WEEK SAMPLING WEEK OF 10/16/08	3-MONTH POST-SHUTDOWN SAMPLING 01/20/09
P-1	160	7	5
P-2	80	3	2
P-3a	80	3	7
P-3b	80	2	7
H-1	>690	50	35
H-2a	280	10	21
H-2b	170	15	12
D-1	0	0	0
D-2	550	3	9

Figure 3
PCE Concentrations in Wells H-1, H-2b, and D-2

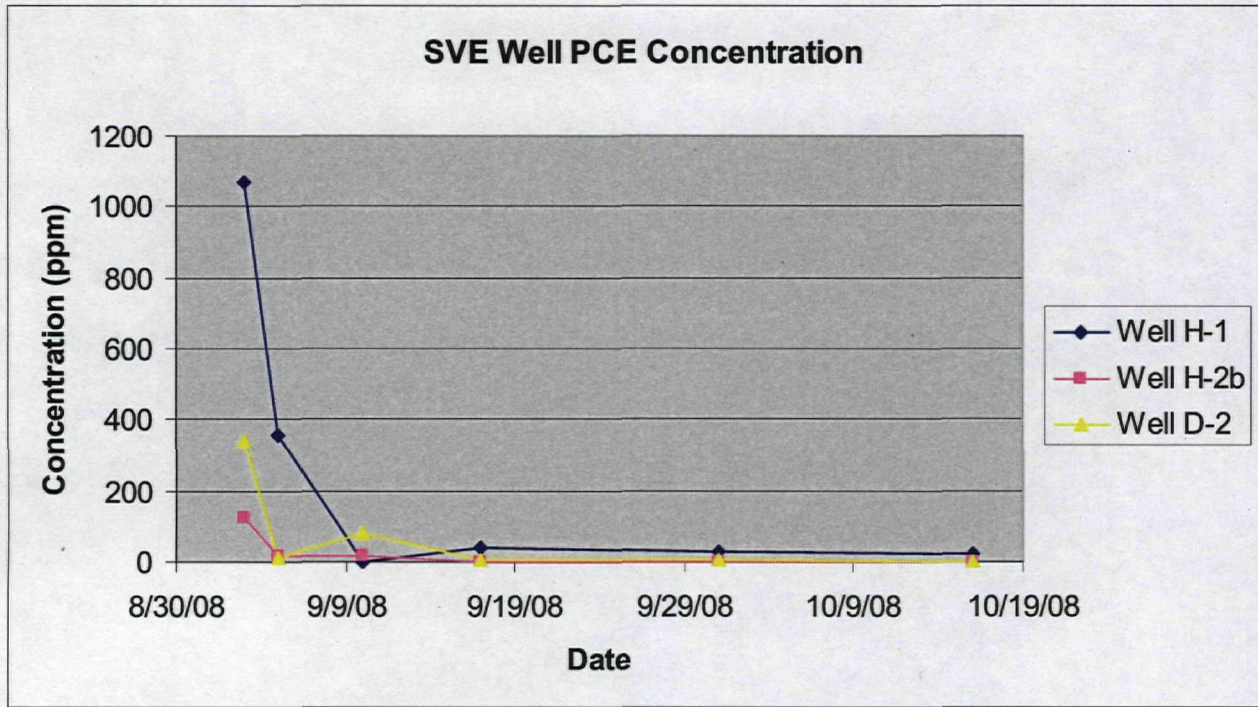
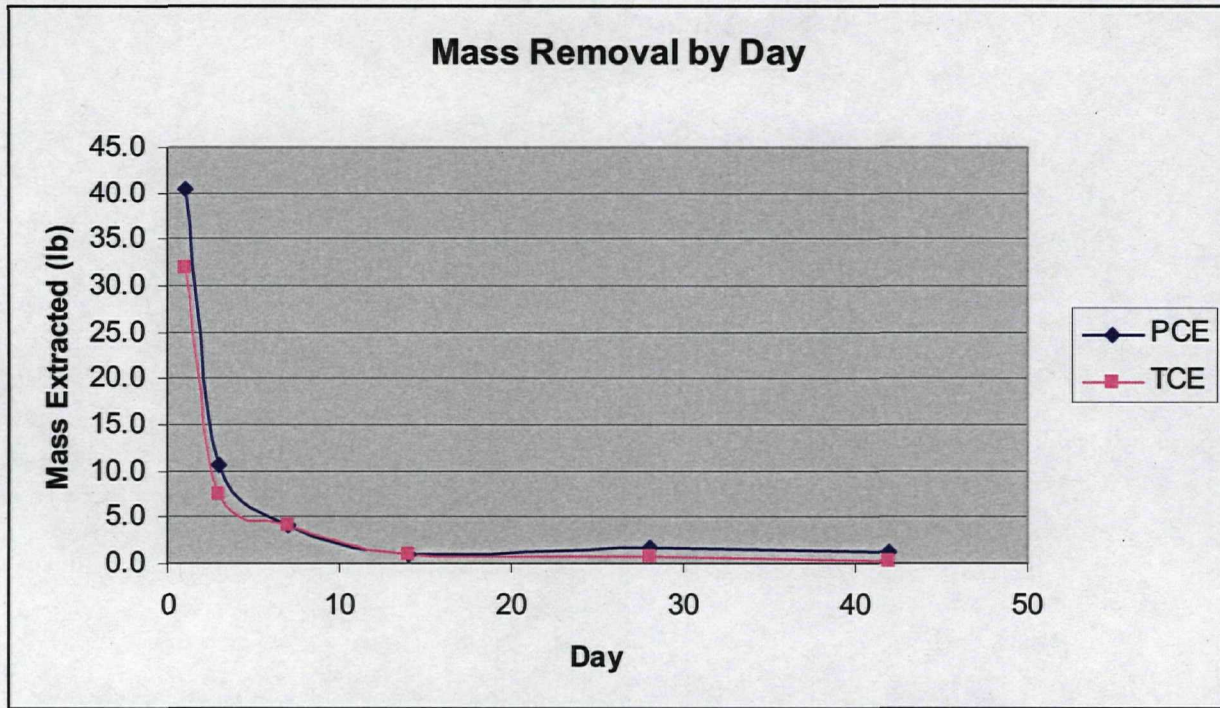


Figure 4
Total Mass of PCE and TCE Removed by Day



Section 7

Conclusions/Recommendations

RMT's analysis of the drilling logs, operating parameters, and analytical results has lead to the following conclusions and recommendations.

Conclusions

- Visual observations of soil types and textural characteristics are consistent with operating parameters in that lower flow rates were recorded in the more clayey soil horizons.
- Two potential scenarios have been identified to explain the correlation between the high soil gas reading recorded during the Phase 1 and Phase 2 source delineation, the rapid decline in VOC concentration observed during the first five days of operation, and the absence of rebound following a three month shut-down period. These two scenarios are as follows:
 1. Extraction system effectively removed the residual source material contained in the pore spaces and adsorbed to the soil matrix within close proximity to the extraction wells, but the low permeability of the subsurface soils, combined with the modest vacuum pressures, restricted the area of influence.
 2. There is no residual source material adsorbed to the soil matrix. The soil gas readings recorded during the Phase 1 and Phase 2 source delineation represent a VOC halo, or vapor cloud emanating from the groundwater plume. The VOCs were quickly extracted from the subsurface and without additional mass adsorbed to the soil matrix, the concentrations quickly declined and did not recover.

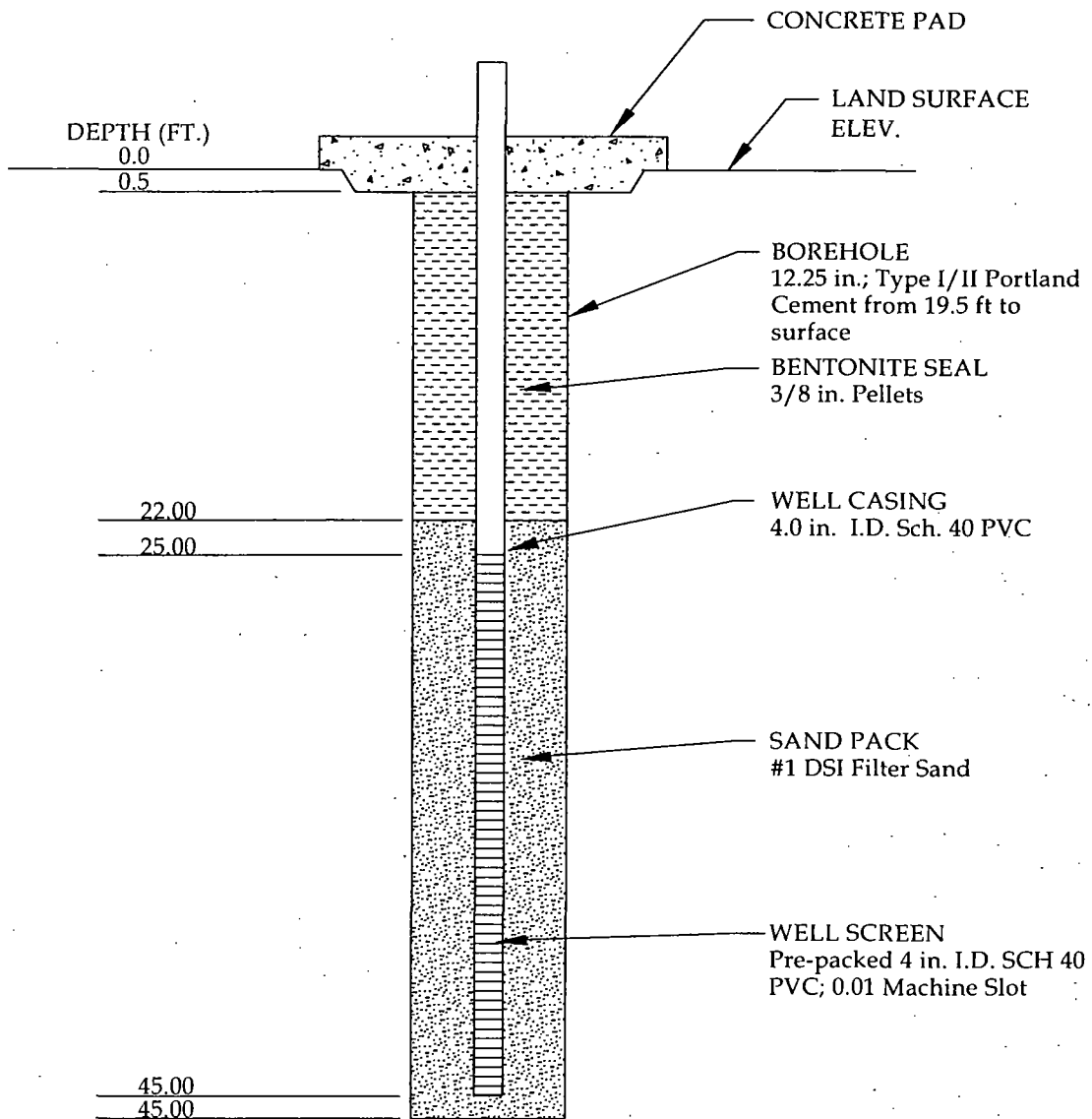
Recommendation

- Based on the conclusions presented above, and taking into consideration the extent of the "hot spots" as determined from the Phase 1 and Phase 2 source delineation and the evidence of residual source material observed during drilling operations, RMT recommends further evaluation of the nature of the residual source and development of additional design parameters. Continuing to evaluate VOC mass removal, via SVE, in Area D and Area H, is appropriate.

Appendix A

Well Construction Diagrams

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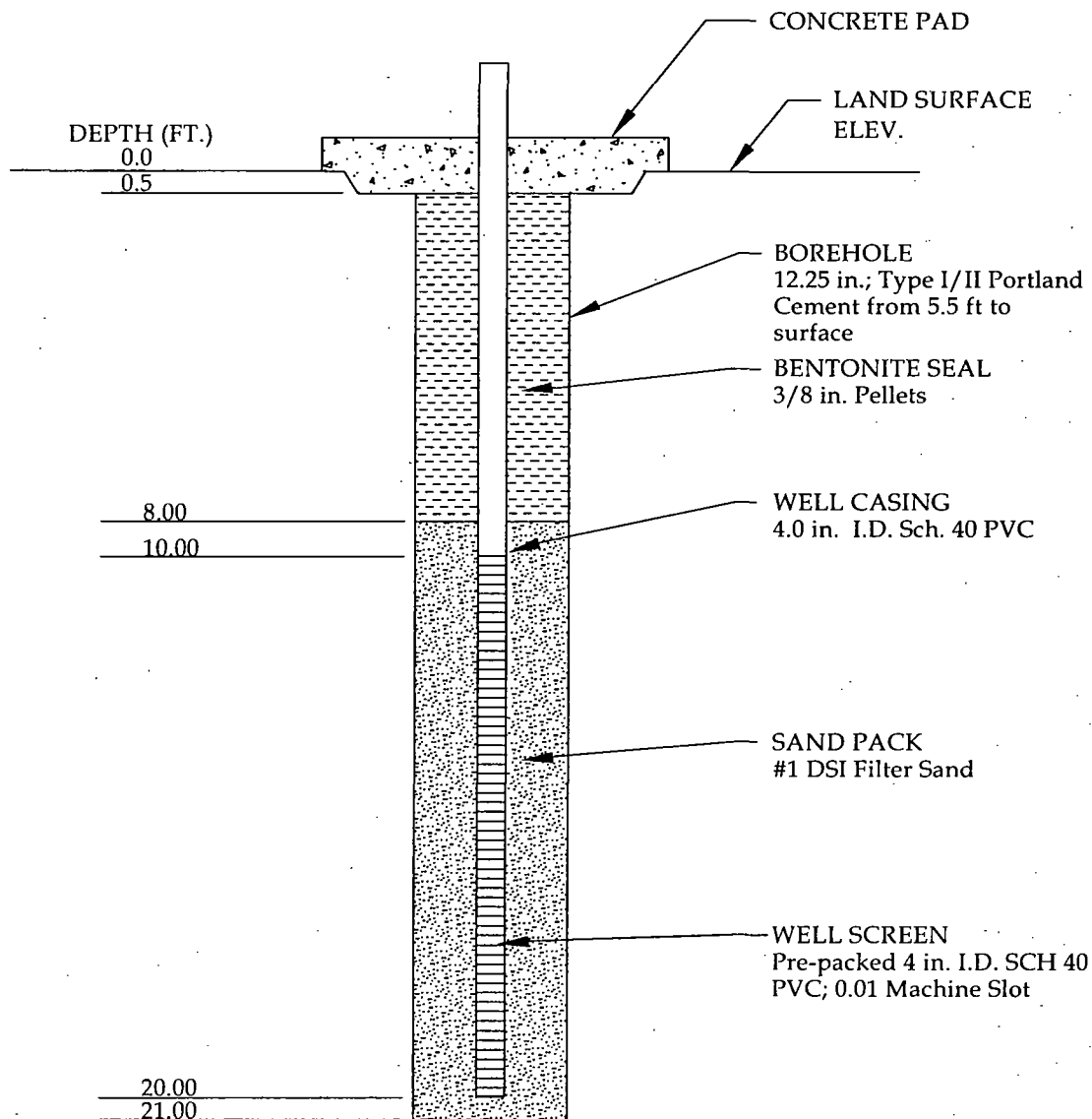
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	D-1
DATE INSTALLED	7/22/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

WEL-DIA \ VW00000P



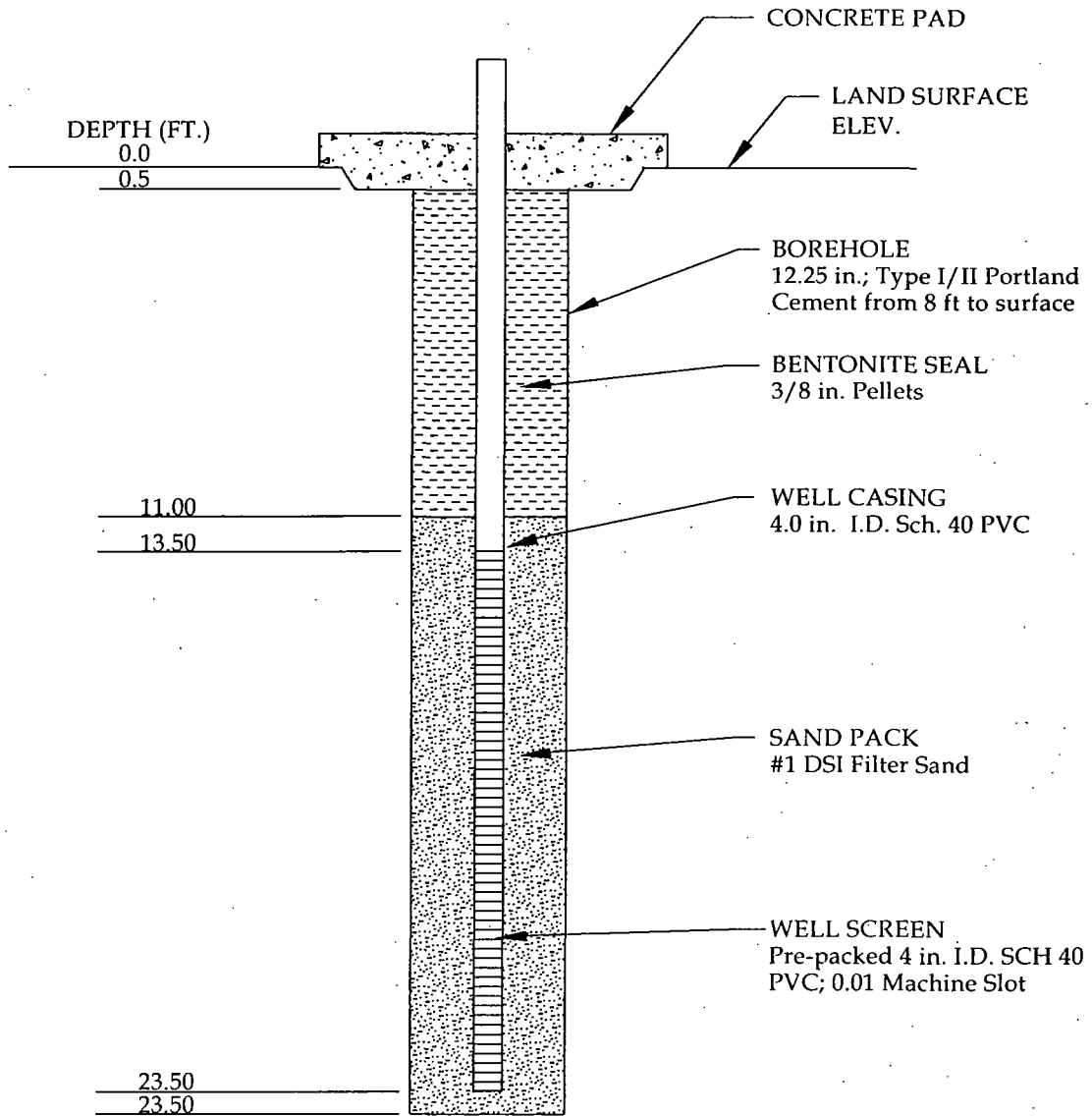
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	D-2
DATE INSTALLED	7/24/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

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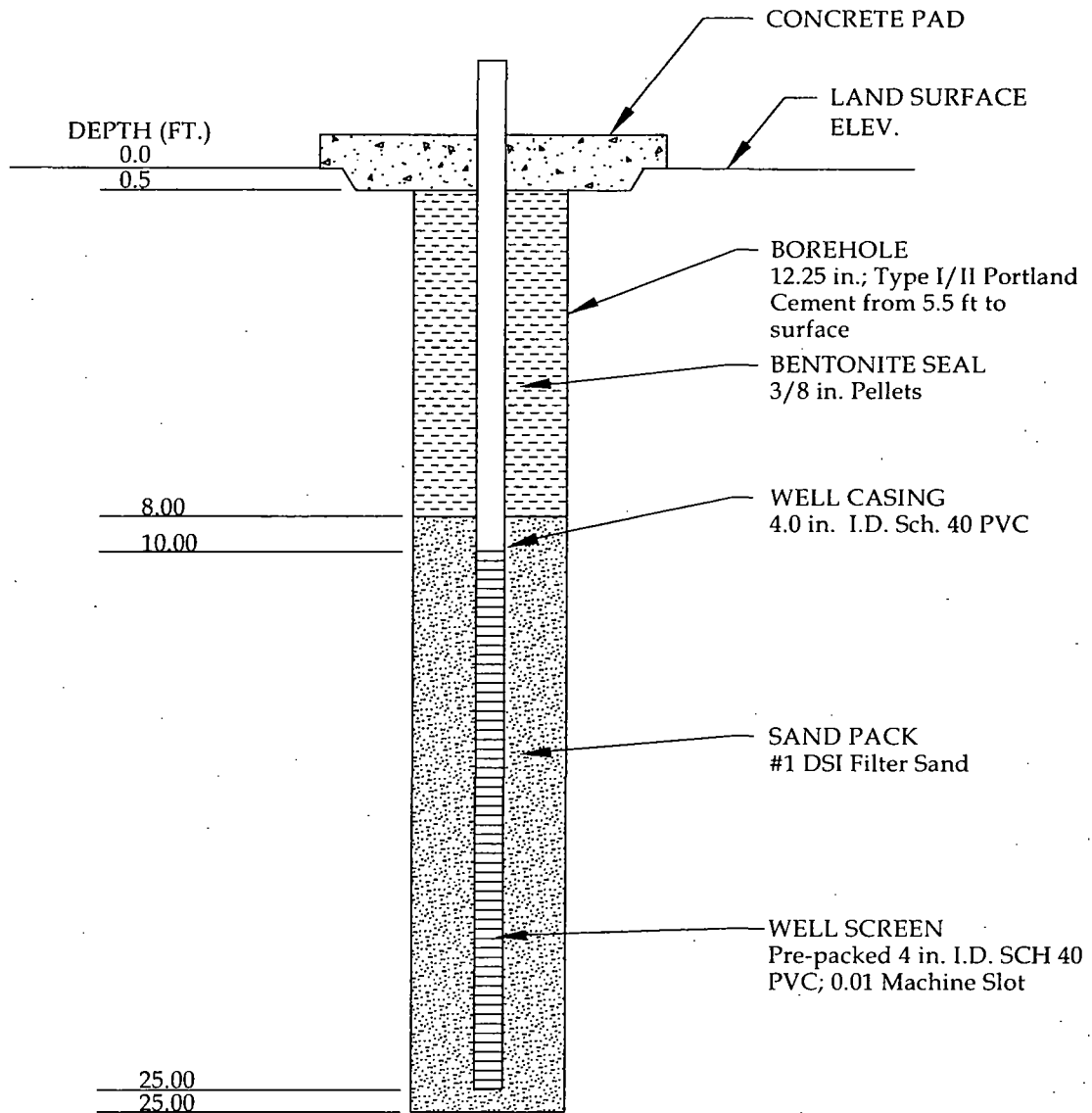
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT
PROJECT NO. 71238.35
WELL NO. H-1
DATE INSTALLED 7/24/2008
DRILLING CONTRACTOR Parratt-Wolff
RMT GEOLOGIST JJC

RMT

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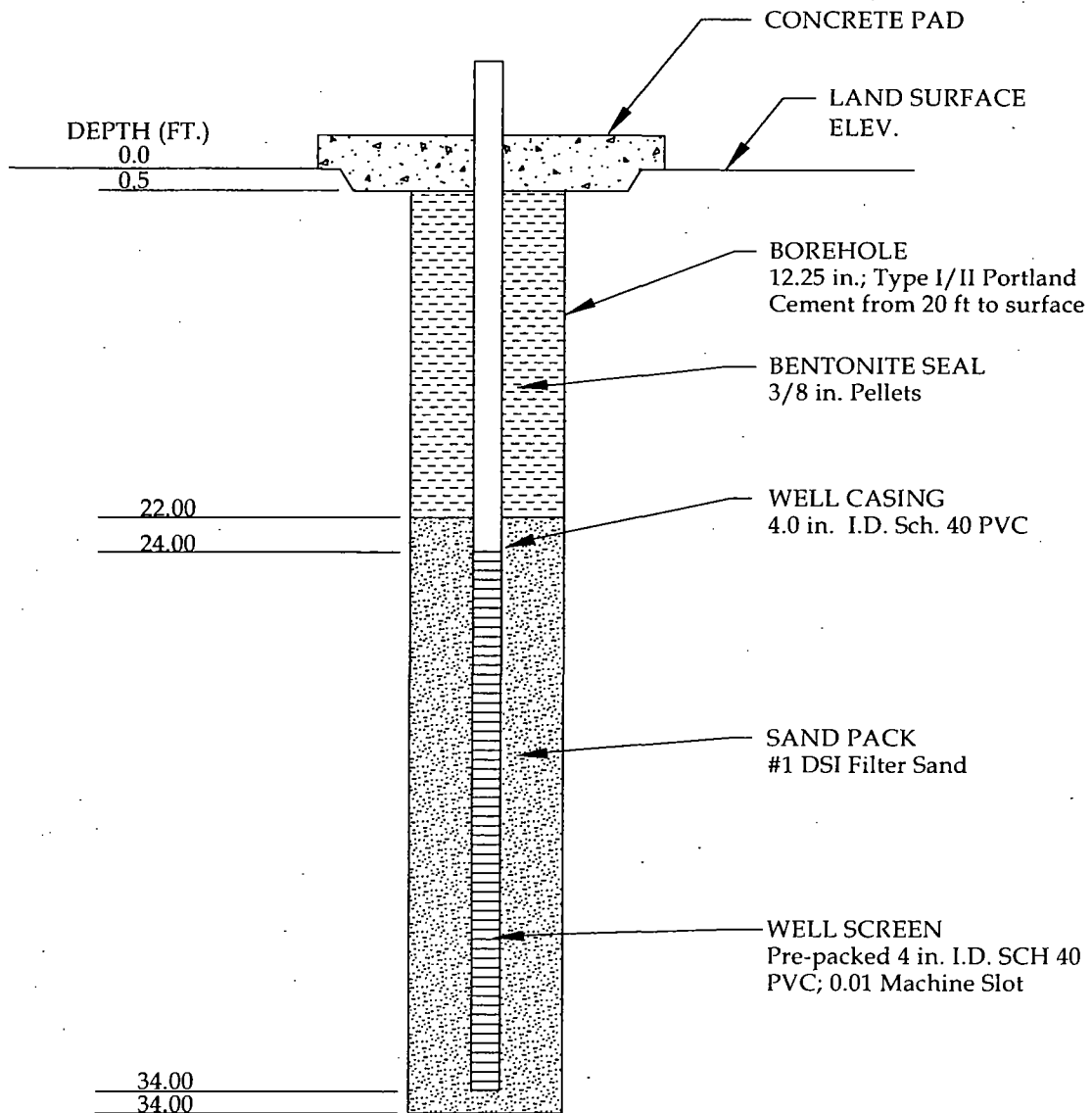
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	H-2a
DATE INSTALLED	7/23/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

| WEL-DIA | VW00000P



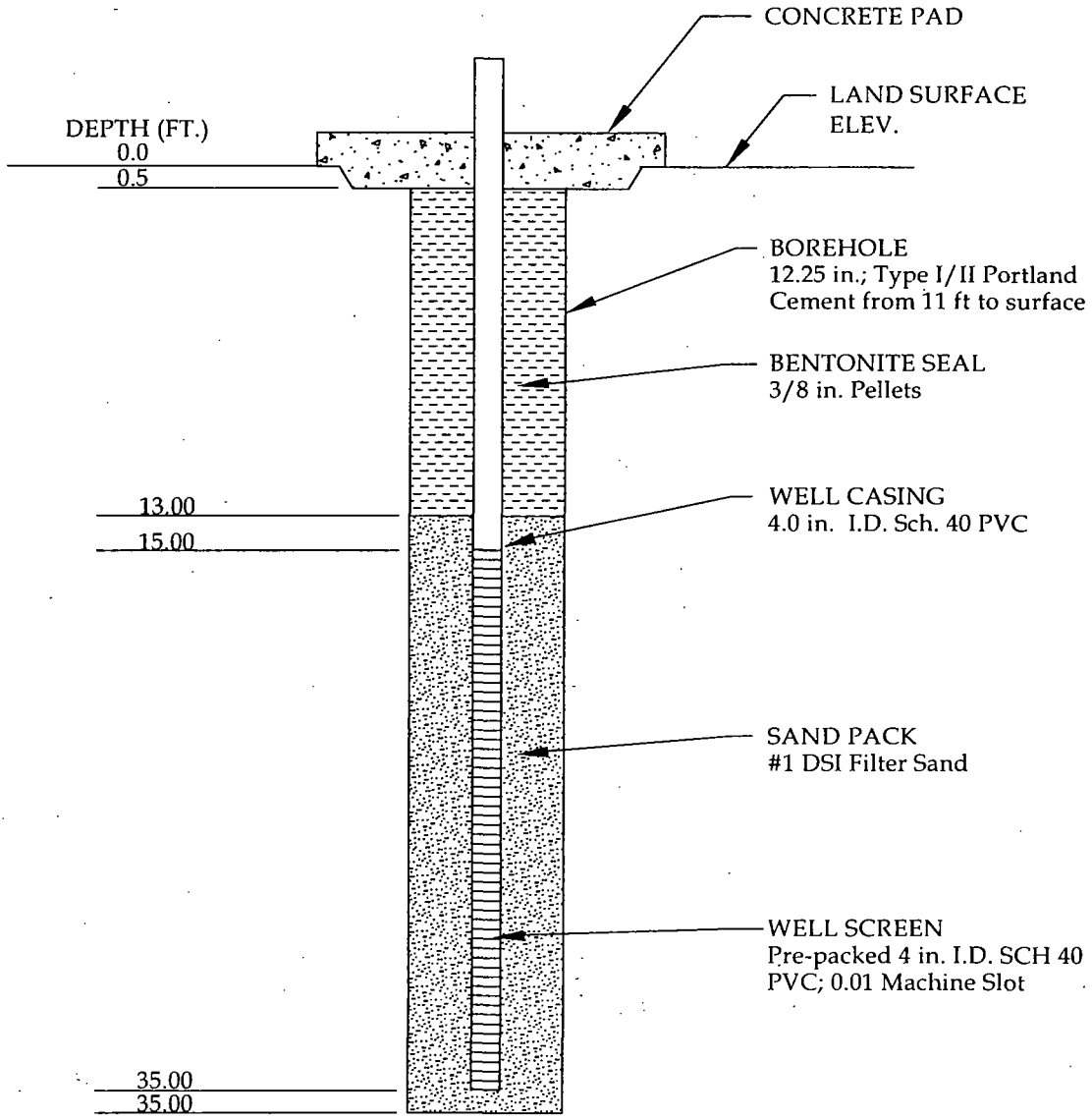
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	H-2b
DATE INSTALLED	7/23/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

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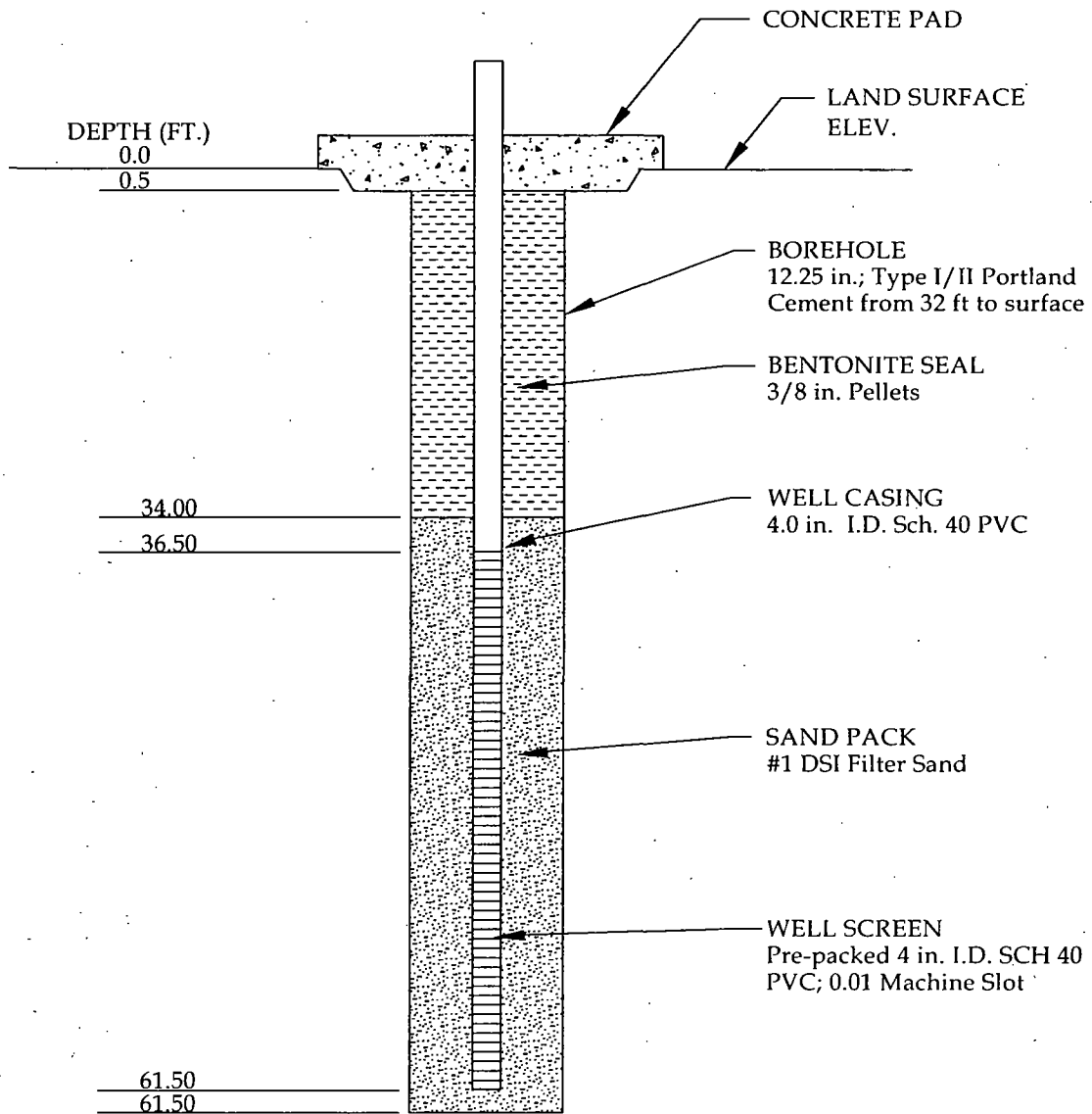
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	P-1
DATE INSTALLED	7/17/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC



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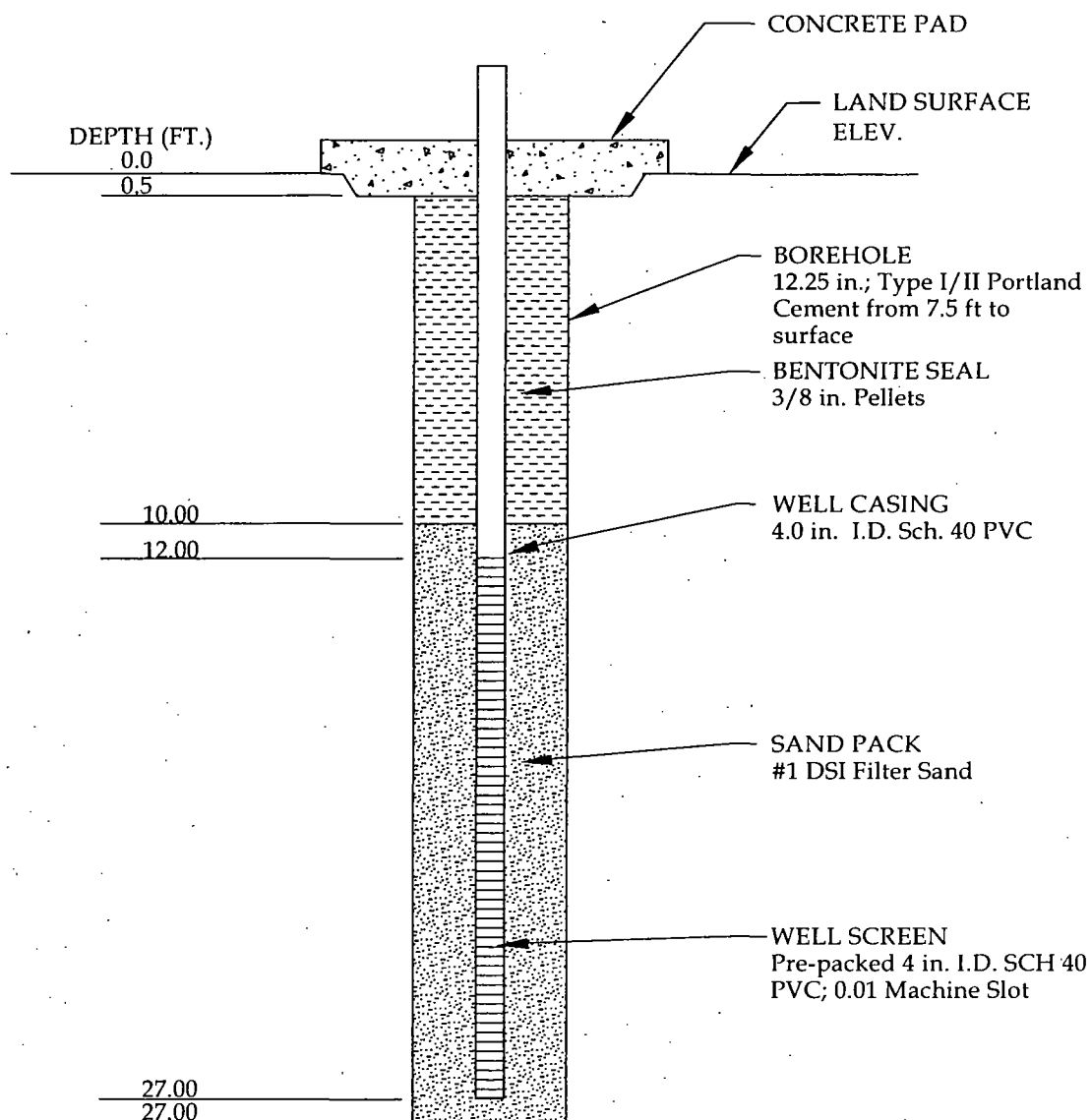
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	P-2
DATE INSTALLED	7/16/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

WEL-DIA \ VW00000P



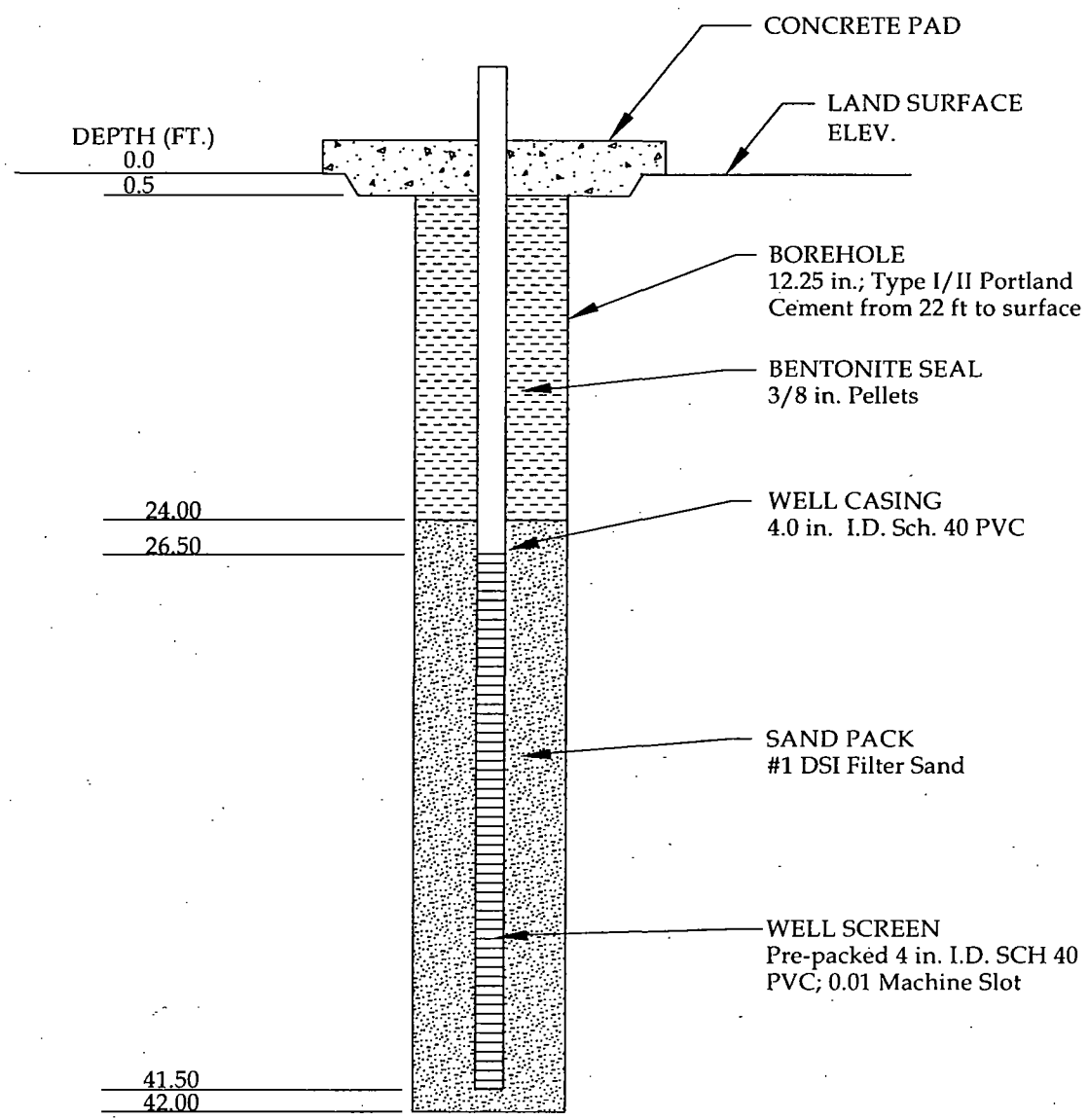
VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	P-3a
DATE INSTALLED	7/21/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC

RMT

WEL-DIA \VW00000P



VAPOR MONITORING WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT	Schlumberger
PROJECT NO.	71238.35
WELL NO.	P-3b
DATE INSTALLED	7/18/2008
DRILLING CONTRACTOR	Parratt-Wolff
RMT GEOLOGIST	JJC



Appendix B

Well Boring Logs



SOIL BORING LOG

BORING NO. D-1

Client: Schlumberger		Drilling Start Date: 7-22-08	Drilling End Date: 7-22-08	Page 1	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 45.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		FINE SAND (SP) - orangeish red; micaceous; dry; with organics; some silty sand
				2		SILTY FINE SAND (SM) - reddish brown; micaceous; organics; small pebbles
				3		- as above; orangeish red; micaceous; moist
				4		FINE SANDY SILT (MLS) - orangeish red; micaceous; moist; some silty clay
				5		
				6		
				7		
				8		
				9		
				10		
				11		FINE SANDY SILT (MLS) - reddish brown; micaceous; moist; some clay
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		

SOIL_2 71238BALL_PLANTSITE.GPJ 7/28/08

RMT

SOIL BORING LOG

BORING NO. D-1

Client: Schlumberger		Drilling Start Date: 7-22-08	Drilling End Date: 7-22-08	Page 2	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 45.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		
				22		FINE SANDY CLAY (CLS) - orangeish reddish brown; micaceous; moist
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		

SOIL 2 71238ALL PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. D-1

Client: Schlumberger		Drilling Start Date: 7-22-08	Drilling End Date: 7-22-08	Page 3	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 45.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				41	BORING TERMINATED ft	
				42		
				43		
				44		
				45		
				46		
				47		
				48		
				49		
				50		
				51		
				52		
				53		
				54		
				55		
				56		
				57		
				58		
				59		



SOIL BORING LOG

BORING NO. D-2

Client: Schlumberger		Drilling Start Date: 7-24-08	Drilling End Date: 7-24-08	Page 1	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 21.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		SILTY SAND (SM) - well-graded sand; reddish brown; dry; some gravel; few cobbles; organics
				2		SILTY SAND (SM) - well-graded; medium brown; dry; darker with depth; hard
				3		- as above; dark gry to black; dry; little clay; odor like burned charcoal
				4		
				5		
				6		- as above; reddish medium brown becoming lighter in color with depth; softer than above
				7		SILT AND FINE SAND (SP) - brownish red; dry
				8		
				9		
				10		- as above; reddish brown to maroon; some clay
				11		
				12		- as above; orangeish brown; odor
				13		- as above; medium brown
				14		SILTY SAND (SM) - maroon to medium brown with depth; poorly-graded; strong odor
				15		
				16		
				17		
				18		
				19		

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RMT

SOIL BORING LOG

BORING NO. D-2

Client: Schlumberger		Drilling Start Date: 7-24-08	Drilling End Date: 7-24-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E: 21.00			Total Depth (ft.): 21.00	Measuring Point Elevation (ft.):	
Datum Description:			Datum Elevation (ft.):	Checked by:	

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		- as above; with gravel
				22		BORING TERMINATED - AUGER REFUSAL 21 ft
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		

SOIL 2 71238ALL PLANTSITE.GPJ 7/28/08

RMT

SOIL BORING LOG

BORING NO. H-1

Client: Schlumberger		Drilling Start Date: 7-23-08	Drilling End Date: 7-24-08	Page 1	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 23.50	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		SILTY FINE SAND (SM) - orangeish brown; micaceous; dry; organics
				2		- as above; medium brown; micaceous; dry
				3		CLAYEY SILT (CL-ML) - brownish red; slightly moist; hard;
				4		SILTY FINE SAND (SM) - orangeish red; dry
				5		SILTY SAND (SM) - light orangeish brown; dry; micaceous; well-graded sand; becoming darker brown with depth
				6		
				7		
				8		
				9		
				10		
				11		
				12		
				13		- as above; medium brown; siltier; low amount mica
				14		
				15		
				16		
				17		
				18		
				19		

SOIL 2 71238ALL_PLANTSITE.GPJ 7/28/08

RMT

SOIL BORING LOG

BORING NO. H-1

Client: Schlumberger		Drilling Start Date: 7-23-08	Drilling End Date: 7-24-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300	Borehole Diameter (in.): 12.25 in.	
Boring Coordinates: N: E:		Total Depth (ft.): 23.50	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		FINE SANDY SILT (MLS) - lineated black, red, orange and gray; micaceous; damp
				22		- as above; white, gray, black; faint lineations; micaceous; weathered amphibole
				23		
				24		BORING TERMINATED - AUGER REFUSAL 23.5 ft
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		

SOIL 2 71238ALL_PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. H-2a

Client: Schlumberger		Drilling Start Date: 7-23-08	Drilling End Date: 7-23-08	Page 1	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 25.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		SILTY FINE SAND (SM) - orangeish red; micaceous; dry; organics
				2		- as above; few pea-sized pebbles
				3		SILT AND CLAY (CL-ML) - brownish red; micaceous; moist; with fine sand
				4		
				5		
				6		
				7		
				8		
				9		
				10		- as above; medium brown; micaceous; moist; soft; with fine sand
				11		
				12		
				13		
				14		
				15		
				16		- as above; medium brown; moist; trace coarse sand to pea-sized pebbles
				17		
				18		
				19		

SOIL 2 71238ALL PLANTSITE GPJ 7/28/08



SOIL BORING LOG

BORING NO. H-2a

Client: Schlumberger		Drilling Start Date: 7-23-08	Drilling End Date: 7-23-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
				Borehole Diameter (in.): 12.25 in.	
Boring Coordinates: N: E:		Total Depth (ft.): 25.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION	
				21		- as above; medium brown; some fine sand	
				22			
				23			
				24			
				25			
				26			BORING TERMINATED 25 ft
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			

SOIL_2 71238ALL_PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. H-2b

Client: Schlumberger	Drilling Start Date: 7-22-08	Drilling End Date: 7-23-08	Page 1	of 2
Site: Plant Site, Pickens, SC	Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC	Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300	Borehole Diameter (in.): 12.25 in.	
Boring Coordinates: N: E:	Total Depth (ft.): 34.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:	

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				0		FINE SANDY SILT (MLS) - medium brown; dry; organics
				1		SILT AND CLAY (CL-ML) - orangeish brownish red; micaceous; dry
				2		
				3		
				4		
				5		
				6		
				7		SILTY CLAY (CL-ML) - reddish brown; micaceous; moist
				8		
				9		
				10		
				11		
				12		SILTY CLAY (CL-ML) - medium brown; micaceous; moist; soft
				13		
				14		
				15		
				16		
				17		
				18		
				19		

SOIL 2 71238BALL_PLANTSITE_GPJ 7/28/08



SOIL BORING LOG

BORING NO. H-2b

Client: Schlumberger		Drilling Start Date: 7-22-08	Drilling End Date: 7-23-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 34.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21	Stratigraphy	CLAYEY SILT (CL-ML) - medium brown; micaceous; moist
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		BORING TERMINATED - AUGER REFUSAL 34 ft
				36		
				37		
				38		
				39		

SOIL_2 71238ALL PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. P-1

Client: Schlumberger		Drilling Start Date: 7-17-08	Drilling End Date: 7-17-08	Page 1 of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300	Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 35.00	Measuring Point Elevation (ft.):	
Datum Description:		Datum Elevation (ft.):	Checked by:	

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		SILTY FINE SAND (SP-SM) - brownish red; micaceous; organics in top 0.5 ft; clay and silt with fine sand from 2 to 3 ft
				2		
				3		- as above with coarse sand; odor
				4		CLAYEY SILT AND SAND (MLS) - reddish brown; moist
				5		
				6		- as above; brownish red
				7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		

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SOIL BORING LOG

BORING NO. P-1

Client: Schlumberger		Drilling Start Date: 7-17-08	Drilling End Date: 7-17-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 35.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21	[Hatched pattern]	SILT AND CLAY (CL-ML) - reddish brown; micaceous; soft
				22		
				23	[Vertical lines pattern]	CLAYEY SILT (MH) - reddish brown; micaceous; moist
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		- as above; medium brown; micaceous; moist; trace amounts coarse to fine sand
				34		
				35		BORING TERMINATED 35 ft
				36		
				37		
				38		
				39		

SOIL 2 71238ALL_PLANTSITE GPJ 7/28/08

RMT

SOIL BORING LOG

BORING NO. P-2

Client: Schlumberger		Drilling Start Date: 7-14-08	Drilling End Date: 7-16-08	Page 1	of 4
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 61.50	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION	
				1		FINE SANDY SILT (MLS) - brownish red; dry; micaceous; some clay; color becomes more brown at 1 ft bgs	
				2		FINE SANDY CLAYEY SILT (MLS) - brownish red; dry; micaceous with 2 cm pieces of mica; clayey silt forming pea-sized balls in a fine sandy silt matrix; material becoming harder and darker at 7 ft	
				3			
				4			
				5			
				6			
				7			
				8			CLAYEY SILT (CL-ML) - reddish dark brown; dry; micaceous; cuttings resemble ground coffee
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			- as above; darker brown; dry; micaceous; cuttings are very hot, indicating the material is difficult to drill through
				17			
				18			
				19		MEDIUM SANDY SILT (SM) - dark brown; micaceous; hot cuttings	

SOIL 2 71238ALL PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. P-2

Client: Schlumberger		Drilling Start Date: 7-14-08	Drilling End Date: 7-16-08	Page 2	of 4
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 61.50	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		SAND AND SILT (SP) - pink and white fine to coarse sand and silt; saprolitic structure SILT () - dark brown to gray; large flecks of mica; slippery to touch
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		

SOIL_2 71238ALL_PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. P-2

Client: Schlumberger		Drilling Start Date: 7-14-08	Drilling End Date: 7-16-08	Page 3	of 4
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 61.50	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				41		
				42		
				43		
				44		
				45		SAND (SW) - well-graded with pebbles and gravel; weathered white with gray and black dike
				46		
				47		SILT AND SAND (SM) - dark orangeish brown; micaceous; black, orange, gray, and white lineations
				48		
				49		FINE SAND AND SILT (SM) - alternating bands of pinkish orange, white, light gray, and medium brown; white material resembles above dike in hardness and composition; brownish gray material is tough fine sand and silt
				50		FINE SANDY SILT (MLS) - dark brown; micaceous; trace fine sand; some bands of light gray and orange clayey silt
				51		
				52		
				53		
				54		
				55		
				56		
				57		
				58		
				59		

SOIL 2 7123BALL_PLANTSITE.GPJ 7/28/08



SOIL BORING LOG

BORING NO. P-2

Client: Schlumberger		Drilling Start Date: 7-14-08	Drilling End Date: 7-16-08	Page 4	of 4
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 61.50	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				61		SAND (SW) - well-graded with pebbles and gravel; weathered white, gray, black partially weathered rock
				62		BORING TERMINATED - AUGER REFUSAL 62 ft
				63		
				64		
				65		
				66		
				67		
				68		
				69		
				70		
				71		
				72		
				73		
				74		
				75		
				76		
				77		
				78		
				79		

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SOIL BORING LOG

BORING NO. P-3a

Client: Schlumberger	Drilling Start Date: 7-21-08	Drilling End Date: 7-21-08	Page of 1 2
Site: Plant Site, Pickens, SC	Drilling Method: HSA		Project Number: 71238.35
Geologist/Technician: JJC	Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300	Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 27.00	Measuring Point Elevation (ft.):
Datum Description:		Datum Elevation (ft.):	Checked by:

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		SILTY FINE SAND (SM) - orangeish red; dry; organics; gravel
				2		- as above; brownish red; gravelly silty fine sand
				3		FINE SANDY CLAYEY SILT (MLS) - red; micaceous; dry
				4		
				5		
				6		- as above; medium brown; moist; micaceous; soft
				7		
				8		
				9		
				10		
				11		
				12		FINE SANDY SILT (MLS) - micaceous; moist
				13		
				14		
				15		
				16		
				17		
				18		
				19		

SOIL 2 71238ALL PLANTSITE.GPJ 7/28/08

**SOIL BORING LOG****BORING NO.** P-3a

Client: Schlumberger		Drilling Start Date: 7-21-08	Drilling End Date: 7-21-08	Page 2	of 2
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 27.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		
				22		FINE SANDY CLAYEY SILT (MLS) - medium brown; micaceous; moist; clayey
				23		
				24		
				25		
				26		
				27		BORING TERMINATED 27 ft
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		

RMT

SOIL BORING LOG

BORING NO. P-3b

Client: Schlumberger		Drilling Start Date: 7-17-08	Drilling End Date: 7-18-08	Page 1	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
Boring Coordinates: N: E:		Total Depth (ft.): 42.00	Measuring Point Elevation (ft.):	Borehole Diameter (in.): 12.25 in.	
Datum Description: /		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				1		FINE SANDY SILT (MLS) - brownish red; micaceous; dry; some gravel
				2		- as above; no gravel
				3		
				4		
				5		
				6		SILTY CLAY (CL-ML) - dark brownish red; moist; with fine sandy silt; foil and plastic wrapping at 6 ft
				7		
				8		
				9		- as above; moist; red; micaceous
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		SILT AND CLAY (CL-ML) - medium brown; moist; micaceous; faint odor
				18		
				19		FINE SANDY SILT (MLS) - medium brown; moist; micaceous; some clay; harder material than above

SOIL 2 71238ALL_PLANTSITE.GPJ 7/28/08

RMT

SOIL BORING LOG

BORING NO. P-3b

Client: Schlumberger		Drilling Start Date: 7-17-08	Drilling End Date: 7-18-08	Page 2	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff		Drill Rig Type: Ingersoll Rand A300	
				Borehole Diameter (in.): 12.25 in.	
Boring Coordinates:		Total Depth (ft.): 42.00	Measuring Point Elevation (ft.):		
N:	E:	Datum Elevation (ft.):		Checked by:	
Datum Description:					

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		
				33		
				34		
				35		
				36		
				37		
				38		
				39		



SOIL BORING LOG

BORING NO. P-3b

Client: Schlumberger		Drilling Start Date: 7-17-08	Drilling End Date: 7-18-08	Page 3	of 3
Site: Plant Site, Pickens, SC		Drilling Method: HSA		Project Number: 71238.35	
Geologist/Technician: JJC		Driller (name/company): Parratt-Wolff	Drill Rig Type: Ingersoll Rand A300		Borehole Diameter (in.): 12.25 in.
Boring Coordinates: N: E:		Total Depth (ft.): 42.00	Measuring Point Elevation (ft.):		
Datum Description:		Datum Elevation (ft.):	Checked by:		

Sample Interval	% Recovery	Sample Type	Blow Counts	Depth (feet)	Stratigraphy	LITHOLOGIC DESCRIPTION
				41		BORING TERMINATED - AUGER REFUSAL 42 ft
				42		
				43		
				44		
				45		
				46		
				47		
				48		
				49		
				50		
				51		
				52		
				53		
				54		
				55		
				56		
				57		
				58		
				59		

SOIL_2 71238ALL_PLANTSITE.GPJ 7/28/08

Appendix C

Blower Specifications

ROTRON Regenerative Blowers

EN 707 & CP 707 Three-Phase Sealed Regenerative Blower w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA – ISO 9001 compliant
- Maximum flow: 295 SCFM
- Maximum pressure: 85 IWG
- Maximum vacuum: 87 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, cover, impeller & manifold; cast iron flanges (threaded); teflon lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

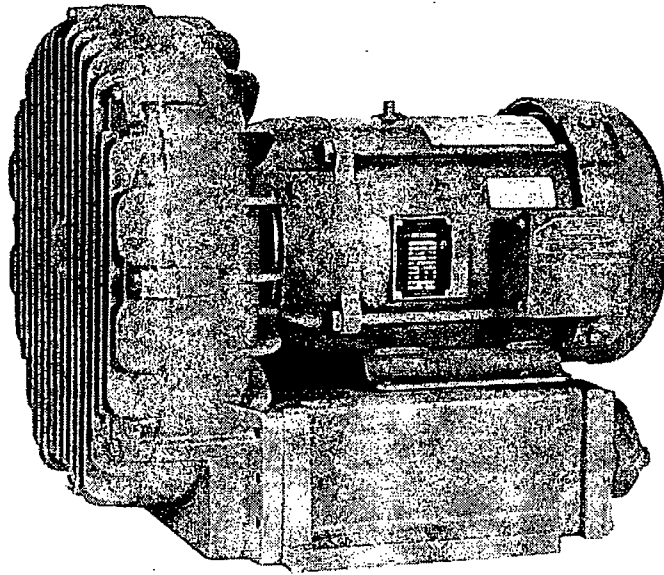
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepower for application-specific needs

BLOWER OPTIONS

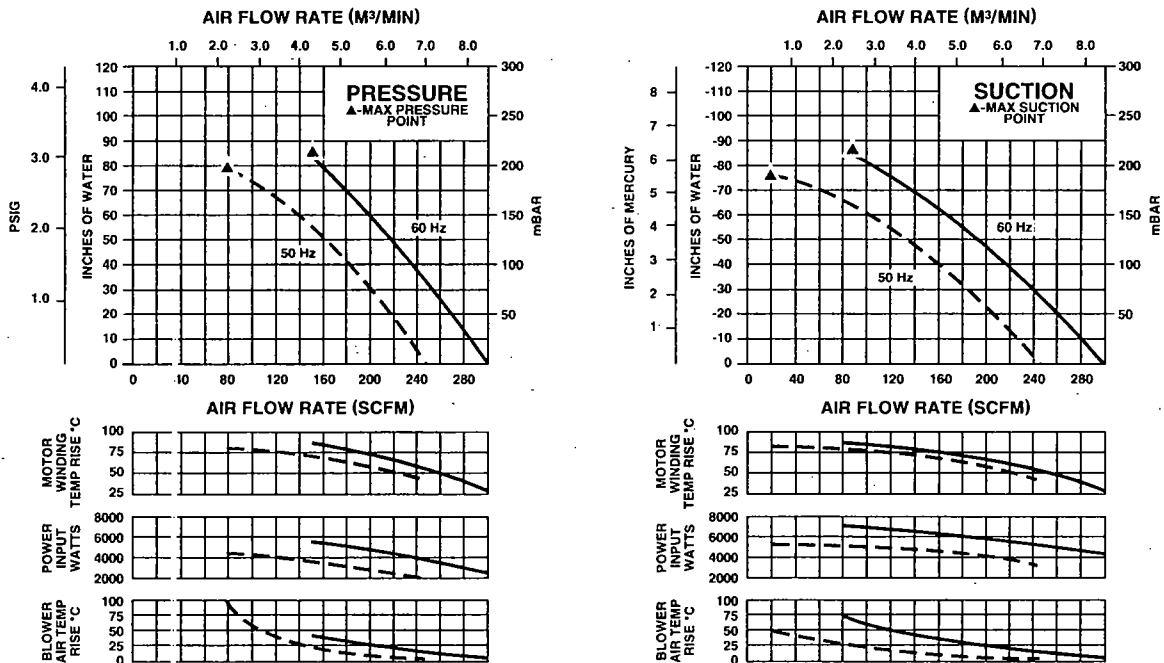
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES (See Catalog Accessory Section)

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges & relief valves
- Switches – air flow, pressure, vacuum or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package



BLOWER PERFORMANCE AT STANDARD CONDITIONS



Rev. 2/04

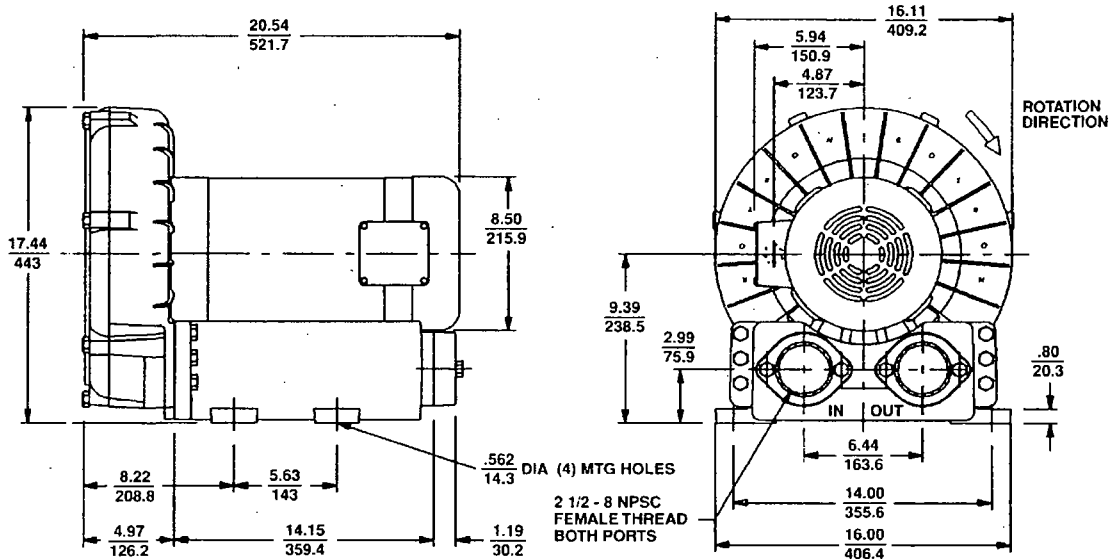
C-17

AMI,TEK Technical and Industrial Products, Kent, OH 44240 • e mail: rotronindustrial@ametek.com • internet: www.ametekimd.com

ROTRON Regenerative Blowers

EN 707 & CP 707 Three-Phase Sealed Regenerative Blower w/ Explosion-Proof Motor

Scale CAD drawing available upon request.



DIMENSIONS: IN / MM
 TOLERANCES: .XX ± $\frac{.1}{25}$
 (UNLESS OTHERWISE NOTED)

A 0.75" NPT CONDUIT CONNECTION AT 12 O'CLOCK POSITION

SPECIFICATIONS

MODEL	EN707F72MXL		EN707F86MXL	CP707FW72MXLR
Part No.	038710		038711	038974
Motor Enclosure - Shaft Material	Explosion-proof - CS		Explosion-proof - CS	Chem XP - SS
Horsepower	5.0		5.0	Same as EN707F72MXL - 038710 except add Chemical Processing (CP) features from catalog inside front cover
Phase - Frequency ¹	Three - 60 Hz		Three - 60 Hz	
Voltage ¹	230	460	575	
Motor Nameplate Amps	14	7	5.7	
Max. Blower Amps ³	15	7.5	6.3	
Inrush Amps	152	76	61	
Starter Size	1	0	0	
Service Factor	1.0		1.0	
Thermal Protection ²	Class B - Pilot Duty		Class B - Pilot Duty	
XP Motor Class - Group	I-D, II-F&G		I-D, II-F&G	
Shipping Weight	174 lb (79 kg)		174 lb (79 kg)	

¹ Rotron motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: 208-230/415-460 VAC-3 ph-60 Hz and 190-208/380-415 VAC-3 ph-50 Hz. Our dual voltage 1 phase motors are factory tested and certified to operate on both: 104-115/208-230 VAC-1 ph-60 Hz and 100-110/200-220 VAC-1 ph-50 Hz. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

² Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

³ Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

Specification: subject to change without notice. Please consult your Local Field Sales Engineer for specification updates.

Rev. 2/04

AMETEK Technical and Industrial Products, Kent, OH 44240 • e mail: rotronindustrial@ametek.com • internet: www.ametekind.com

C-18

ROTRON Regenerative Blowers

EN 808 & CP 808 Three-Phase Sealed Regenerative Blower w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA – ISO 9001 compliant
- Maximum flow: 350 SCFM
- Maximum pressure: 90 IWG
- Maximum vacuum: 97 IWG
- Standard motor: 7.5 HP, explosion-proof
- Cast aluminum blower housing, cover, impeller & manifold; cast iron flanges (threaded); teflon lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

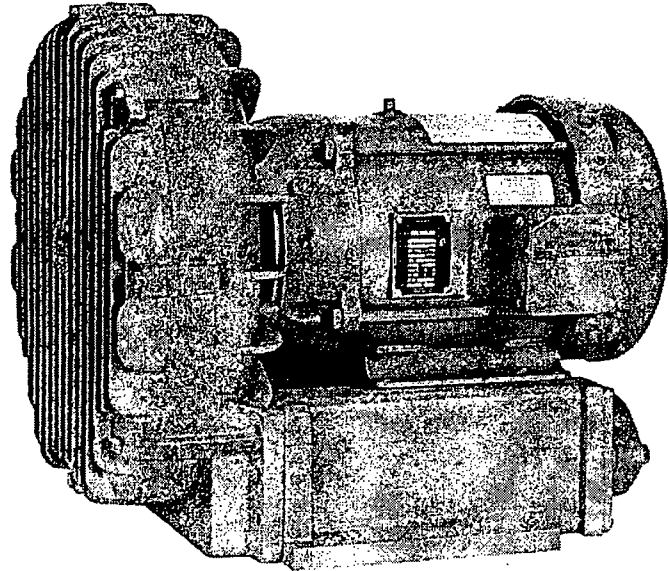
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepower for application-specific needs

BLOWER OPTIONS

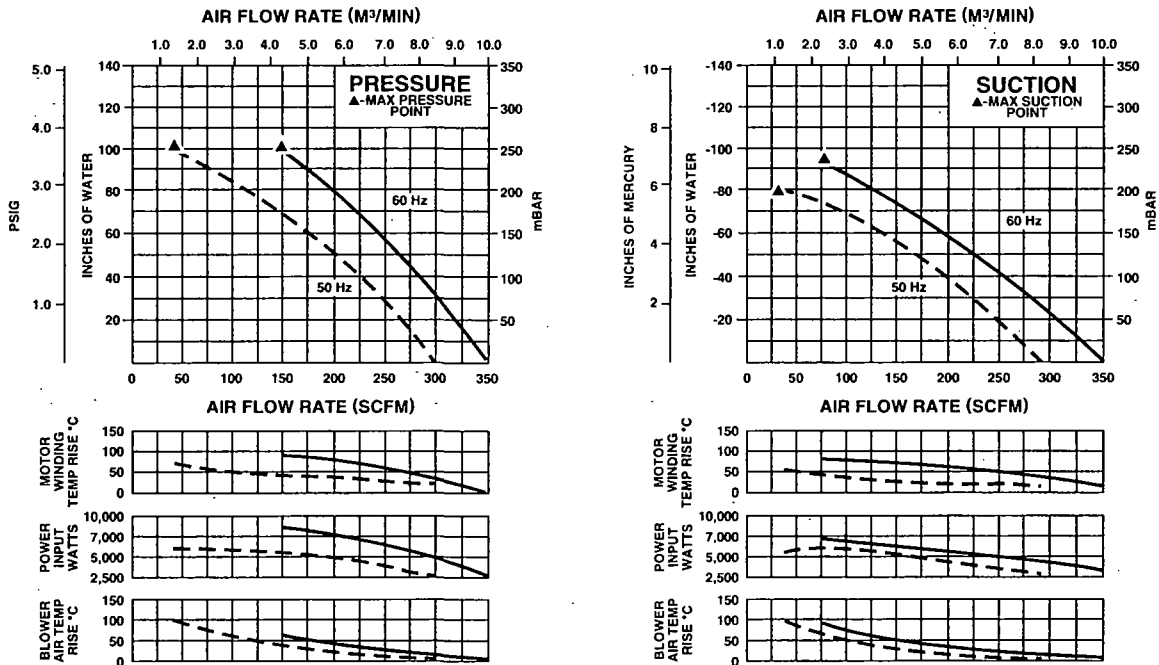
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES (See Catalog Accessory Section)

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges & relief valves
- Switches – air flow, pressure, vacuum or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package



BLOWER PERFORMANCE AT STANDARD CONDITIONS



Rev. 2/04

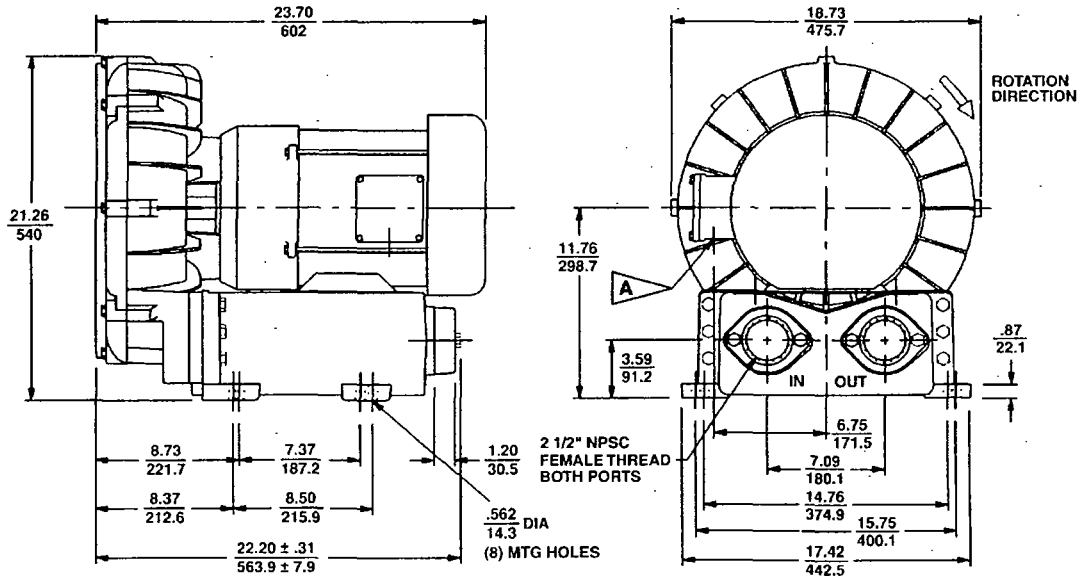
C-23

AMETEK Technical and Industrial Products, Kent, OH 44240 • e mail: rotronindustrial@ametek.com • internet: www.ametekmd.com

ROTRON Regenerative Blowers

EN 808 & CP 808 Three-Phase Sealed Regenerative Blower w/Explosion-Proof Motor

Scale CAD drawing available upon request.



DIMENSIONS: IN
MM
TOLERANCES: .XX ± .1
/ 2.5
(UNLESS OTHERWISE NOTED)

A 0.75" NPT CONDUIT CONNECTION AT 12 O'CLOCK POSITION

SPECIFICATIONS

MODEL	EN808BA72MXL	EN808BA86MXL	CP808FY72MXLR
Part No.	038729	038731	038976
Motor Enclosure - Shaft Material	Explosion-proof - CS	Explosion-proof - CS	Chem XP - SS
Horsepower	7.5	7.5	Same as EN808BA72MXL - 038729 except add Chemical Processing (CP) features from catalog inside front cover
Phase - Frequency ¹	Three - 60 Hz	Three - 60 Hz	
Voltage ¹	230 460	575	
Motor Nameplate Amps	18.6 9.3	7.4	
Max. Blower Amps ³	20.8 10.4	8.1	
Inrush Amps	126 63	56	
Starter Size	1 1	1	
Service Factor	1.0	1.0	
Thermal Protection ²	Class B - Pilot Duty	Class B - Pilot Duty	
XP Motor Class - Group	I-D, II-F&G	I-D, II-F&G	
Shipping Weight	304 lb (138 kg)	304 lb (138 kg)	

¹ Rotron motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: 208-230/415-460 VAC-3 ph-60 Hz and 190-208/380-415 VAC-3 ph-50 Hz. Our dual voltage 1 phase motors are factory tested and certified to operate on both: 104-115/208-230 VAC-1 ph-60 Hz and 100-110/200-220 VAC-1 ph-50 Hz. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

² Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

³ Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

Specifications subject to change without notice. Please consult your Local Field Sales Engineer for specification updates.

Rev. 2/04

Appendix D Photographs

Photographic Log

Photo No.

1

Description

Plant Site System



Photo No.

2

Description

Area H System 1



Photographic Log

Photo No.	
3	
Description	
Area H System 2	



Photo No.	
4	
Description	
Three Zone Manifold	



Photographic Log



Photo No. 5		
Description Well Head Connection		

Photo No. 6		
Description Area H Stack Flow		

Appendix E
Air Permitting Exemption Correspondence

BOARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

BOARD:
Henry C. Scott

M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

September 30, 2008

Mr. Robert VandenMeiracker
RMT, Inc.
30 Patewood Drive, Suite 100
Greenville, SC 29615

RE: Construction Permit Exemption for Additional SVE Units on Sangamo/Weston Superfund Site
(Permit No. 1880-0056)

Dear Mr. VandenMeiracker:

The Bureau of Air Quality has received your request, dated August 21, 2008, for a construction permit exemption for two new extraction wells at Area D, and three new skid mounted SVE units connected to extraction wells in the Former Pant Area and Area H to remove chlorinated VOCs from the soil. This project is scheduled to take approximately 6-weeks, and the Bureau will be notified if RMT shall need more time.

Based on the information above and that contained in your letter, the Bureau exempts the additional SVE Units. This change is exempted in accordance with the following regulations:

- SC Regulation 61-62.1, Section II(B)(2)(h), because it has been determined that the alteration will have a total uncontrolled emission rate of less than 1000 lbs/month of VOC.

Although the project is exempt from permitting, it is still subject to all applicable SC Air Pollution Control Regulations and Standards (SC Regulations 61-62). Should any of the information concerning this project be found in error/superseded, be determined, a new review shall be required. Any alterations or deviations must have prior approval before being implemented. If you should have any questions, please call me at (803) 898-4108 or email me at trowhijj@dhec.sc.gov.

Sincerely,

Janelle J. Trowhill
Engineering Services Division
Bureau of Air Quality

cc: Bill Williamson, Region 2, Greenville EQC Office
Permit File – 1880-0056 (01x)
Main File – 1880-0056

Appendix F

Operating Parameters

Appendix F
TCE Indicator Tube and System Field Measurements

LOCATION	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	09/03/08					09/04/08					09/05/08					09/08/08				
						VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)
P-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	40	-	160	Y					
P-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	70	-	80	Y					
P-1 & P-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	110	86	0	Y					
P-3a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	40	-	80	Y					
P-3b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	25	-	80	Y					
P-3a & P-3b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	100	88	0	Y					
H-1	52	50	-	>690	Y	26	50	-	680	N	26	25	-	650	Y	26	40	-	600	N					
H-2a	50	50	-	280	Y	28	50	-	230	N	28	50	-	190	Y	28	60	-	160	N					
H-2b	68	25	-	170	Y	30	<25	-	90	N	30	<25	-	90	Y	30	<25	-	80	N					
H-1&H-2a&H-2b	45	150	96	0	Y	42	150	90	0	N	44	150	86	0	N	45	150	86	0	N					
D-1	42	0	-	0	Y	44	0	-	70	N	46	<25	-	10	Y	44	<25	-	20	N					
D-2	43	<25	-	550	Y	46	<25	-	170	N	46	<25	-	100	Y	46	25	-	70	N					
D-1 & D-2	47	<25	108	0	Y	46	<25	102	0	N	46	<25	100	0	N	46	25	102	0	N					

LOCATION	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	09/10/08					09/15/08					09/17/08					09/22/08				
						VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)
P-1	52	25	-	90	Y	52	25	-	70	Y	54	25	-	-	N	54	25	-	41	Y					
P-2	52	80	-	50	Y	52	70	-	70	Y	52	70	-	-	N	52	70	-	12	Y					
P-1 & P-2	58	110	78	-	N	58	100	96	-	N	60	120	70	-	N	60	120	82	-	N					
P-3a	60	40	-	50	Y	58	25	-	-	Y	60	50	-	-	N	59	50	-	7	Y					
P-3b	62	25	-	80	Y	60	<25	-	30	Y	62	<25	-	-	N	61	<25	-	18	Y					
P-3a & P-3b	68	80	84	-	N	64	75	100	30	N	66	90	71	-	N	64	80	86	-	N					
H-1	26	40	-	450	Y	26	40	-	-	N	27	40	-	330	Y	27	50	-	-	N					
H-2a	28	50	-	90	Y	28	50	-	-	N	28	50	-	-	Y	28	50	-	-	N					
H-2b	30	<25	-	50	Y	32	25	-	-	N	31	<25	-	40	Y	32	<25	-	-	N					
H-1&H-2a&H-2b	48	150	78	-	N	45	150	86	-	N	47	150	73	-	N	49	150	78	-	N					
D-1	48	<25	-	30	Y	44	<25	-	-	N	46	<25	-	20	Y	Turned off for rehabilitation									
D-2	48	25	-	40	Y	44	<25	-	-	N	48	<25	-	90	Y	46	<25	-	-	N					
D-1 & D-2	48	25	88	-	N	44	<25	100	-	N	48	<25	74	-	N	46	<25	92	-	N					

LOCATION	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	10/01/08					10/06/08					10/16/08					10/20/08				
						VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)	VAC. PRESS (in. H ₂ O)	FLOW (scfm)	TEMP (°F)	TCE (ppm)	CARBON SAMPLE (Y/N)
P-1	43	25	-	-	-	52	25	-	3	Y	52	40	-	-	N	53	20	-	7	Y					
P-2	42	70	-	-	-	52	70	-	2	Y	52	70	-	-	N	53	70	-	3	Y					
P-1 & P-2	58	100	70	-	-	58	120	86	-	N	61	110	74	-	N	60	110	78	-	N					
P-3a	54	50	-	-	-	60	50	-	8	Y	48	70	-	-	N	56	40	-	3	Y					
P-3b	57	25	-	-	-	62	25	-	6	Y	52	25	-	-	N	58	25	-	2	Y					
P-3a & P-3b	61	80	72	-	-	66	90	88	-	N	54	100	78	-	N	66	90	76	-	N					
H-1	28	50	-	60	Y	28	50	-	-	N	28	50	-	50	Y	-	-	-	-	-					
H-2a	29	50	-	4	Y	29	50	-	-	N	30	50	-	10	Y	-	-	-	-	-					
H-2b	32	<25	-	1	Y	32	<25	-	-	N	32	<25	-	15	Y	-	-	-	-	-					
H-1&H-2a&H-2b	48	150	72	-	N	48	150	72	-	N	48	150	78	-	N	-	-	-	-	-					
D-1	48	<25	-	1	Y	48	<25	-	-	N	46	<25	-	1	Y	-	-	-	-	-					
D-2	48	<25	-	1	Y	48	<25	-	-	N	48	25	-	3	Y	-	-	-	-	-					
D-1 & D-2	48	<25	80	-	N	48	<25	80	-	N	47	<25	88	-	N	-	-	-	-	-					

< - The analyte was not detected at or above the reporting limit.

TCE samples measured with GasTec Indicator tubes and temperature corrected

(-) The value was not measured

* TCE results obtained by taking 100 mL sample with a GasTec pump and indicator tubes.
Results were corrected for temperature per GasTec instructions

* System data measured directly from gauges during sampling events

Appendix G
Laboratory Reports



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 11, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX (864) 281-0288

RE: Sangamo SVE

Order No.: 0809404

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 7 samples on 9/6/2008 10:50:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 9 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

080404

76898

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: SANGAMO SUR		Total Number of Containers	MATRIX	Filtered (Yes/No)										PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____
Project Manager/Contact Person: Mike Parker / Travis Tarbit						Preserved (Code)										
Lab No.	Yr. 08 Date	Time	Sample Station ID			Analyses Requested VOC's										
	9-3	1442	D-2	1	Air	X									Quick Turn on 9-3-08 Samples Thanks B. Medlin	
	9-3	1444	D-1	1	Air	X										
	9-3	1450	D-1 + D-2	1	Air	X										
	9-3	1604	H-1, H-2a + H-2b	1	Air	X										
	9-3	1618	H-1	1	Air	X										
	9-3	1623	H-2a	1	Air	X										
	9-3	1628	H-2b	1	Air	X										

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature) <i>B. Medlin</i>	Date/Time 1730 9/3/08	Received by (Signature) <i>Fred Ex</i>	Date/Time 3796 9/3/08	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list)	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) <i>Erin</i>	Date/Time 10:50 9/6/08		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		(For Lab Use Only) Receipt Temp: _____ Receipt pH (Wet/Metals) _____ Temp Blank Y N
Custody Seal: Present/Absent Intact/Not Intact Seal #s					

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809404

Checklist completed by Prothel 9-6-8
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ²⁰ (4°C ± 2)* Yes No

Cooler #1 Ambicel Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

CLIENT: RMT
Project: Sangamo SVE
Lab Order: 0809404

CASE NARRATIVE

The samples were analyzed at a 2 day rush turnaround time.

Volatile Organic Analysis by Method N1003:

Due to the amount of charcoal provided by the client, samples 0809404-001, -002, -003, -004, -005, -006, and -007 required additional solvent during preparation resulting in elevated reporting limits.

Analytical Results

for

RMT

WorkOrder: 0809404

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: D-2							
	Lab ID: 001A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	3220	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	196	--	--	50	N1003	09/09/2008	EGM
Client ID: D-1							
	Lab ID: 002A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Client ID: D-1 + D-2							
	Lab ID: 003A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Client ID: H-1, H-2a + H-2b							
	Lab ID: 004A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM

**Analytical Results
for:**

RMT

WorkOrder: 0809404

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				

Client ID: H-1	Lab ID: 005A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	10200	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	9200	--	--	50	N1003	09/09/2008	EGM

Client ID: H-2 a	Lab ID: 006A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM

Client ID: H-2 b	Lab ID: 007A	Date Sampled: 9/3/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/09/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/09/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/09/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Tetrachloroethene	1100	--	--	50	N1003	09/09/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/09/2008	EGM
Trichloroethene	1010	--	--	50	N1003	09/09/2008	EGM

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809404
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-103900	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712603

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-103900	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712730

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	87.02	10.0	100	0	87	70	130	0	0	0	
Carbon tetrachloride	85.84	10.0	100	0	85.8	70	130	0	0	0	
Chloroform	85.63	10.0	100	0	85.6	70	130	0	0	0	
Tetrachloroethene	85.08	10.0	100	0	85.1	70	130	0	0	0	
Trichloroethene	84.82	10.0	100	0	84.8	70	130	0	0	0	

Sample ID: LCS-103900-1	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712732

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	98.05	10.0	100	0	98	70	130	0	0	0	
trans-1,2-Dichloroethene	94.44	10.0	100	0	94.4	70	130	0	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809404
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-103900-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712756						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	90.06	10.0	100	0	90.1	70	130	0	0		
1,2-Dichloroethane	91.65	10.0	100	0	91.6	70	130	0	0		

Sample ID: LCS-103900	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712768						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	512.7	50.0	500	0	103	70	130	0	0		
Carbon tetrachloride	483.6	50.0	500	0	96.7	70	130	0	0		
Chloroform	502.5	50.0	500	0	101	70	130	0	0		
Tetrachloroethene	496.7	50.0	500	0	99.3	70	130	0	0		
Trichloroethene	494.7	50.0	500	0	98.9	70	130	0	0		

Sample ID: LCS-103900-1	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712768						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	511.6	50.0	500	0	102	70	130	0	0		
trans-1,2-Dichloroethene	496.7	50.0	500	0	99.3	70	130	0	0		

Sample ID: LCS-103900-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712770						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	484.2	50.0	500	0	96.8	70	130	0	0		
1,2-Dichloroethane	489.6	50.0	500	0	97.9	70	130	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809404
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCSD-103900		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/8/2008		RunNo: 132813	
Client ID:		Batch ID: 103900		TestNo: N1003				Analysis Date: 9/8/2008		SeqNo: 2712731	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	96.5	10.0	100	0	96.5	70	130	87.02	10.3	30	
Carbon tetrachloride	93.39	10.0	100	0	93.4	70	130	85.84	8.42	30	
Chloroform	93.3	10.0	100	0	93.3	70	130	85.63	8.57	30	
Tetrachloroethene	94.84	10.0	100	0	94.8	70	130	85.08	10.8	30	
Trichloroethene	94.59	10.0	100	0	94.6	70	130	84.82	10.9	30	

Sample ID: LCSD-103900-1		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/8/2008		RunNo: 132813	
Client ID:		Batch ID: 103900		TestNo: N1003				Analysis Date: 9/8/2008		SeqNo: 2712748	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	108.3	10.0	100	0	108	70	130	98.05	9.95	30	
trans-1,2-Dichloroethene	103.4	10.0	100	0	103	70	130	94.44	9.09	30	

Sample ID: LCSD-103900-2		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/8/2008		RunNo: 132813	
Client ID:		Batch ID: 103900		TestNo: N1003				Analysis Date: 9/9/2008		SeqNo: 2712757	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	98.94	10.0	100	0	98.9	70	130	90.06	9.40	30	
1,2-Dichloroethane	103.5	10.0	100	0	104	70	130	91.65	12.2	30	

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Estimated value above quantitation range
	H Holding times for preparation or analysis exceeded	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified
	R RPD outside limits due to matrix	Rpt Lim Reporting Limit	S Spike Recovery outside limits due to matrix



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 16, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535
TEL: (864) 281-0030
FAX: (864) 281-0288
RE: Sangamo SUE

Order No.: 0809405

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 5 samples on 9/6/2008 10:50:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

76891

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
 Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: SARGON SUIC		Total Number of Containers	MATRIX	Filtered (Yes/No)										PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____			
Project Manager/Contact Person: Mike Parker / Travis Tarbet						Preserved (Code)													
Lab No.	Yr. 08 Date	Time	Sample Station ID			Analyses Requested <i>VOC's</i>											Comments:		
	9-5	1132	D-2	1	Air	X													
	9-5	1144	D-1	1	Air	X													
	9-5	1224	H-1	1	Air	X													
	9-5	1230	H-2a	1	Air	X													
	9-5	1235	H-2b	1	Air	X													

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature) <i>Bill Medley</i>	Date/Time 1730 9/5/08	Received by (Signature) <i>Fed. Ex</i>	Date/Time 1730 9/5/08	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) <i>Errol</i>	Date/Time 9/6/08 10:50		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s					

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809405

Checklist completed by E. G. [Signature] 9-6-8
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ^{see 9/6/8} (4°C ± 2)* Yes No

Cooler #1 Ambient Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____
Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

**Analytical Results
for
RMT**

WorkOrder: 0809405

Client Reference: Sangamo SUE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: D-2							
	Lab ID: 001A	Date Sampled: 9/5/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/12/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/12/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/12/2008 RUF
Tetrachloroethene	1330	--	--	50		N1003	09/12/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/12/2008 RUF
Trichloroethene	151	--	--	50		N1003	09/12/2008 RUF
Client ID: D-1							
	Lab ID: 002A	Date Sampled: 9/5/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/12/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/12/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/12/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/12/2008 RUF
Tetrachloroethene	296	--	--	50		N1003	09/12/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/12/2008 RUF
Trichloroethene	80.7	--	--	50		N1003	09/12/2008 RUF
Client ID: H-1							
	Lab ID: 003A	Date Sampled: 9/5/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/13/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/13/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Tetrachloroethene	3720	--	--	50		N1003	09/13/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Trichloroethene	3210	--	--	50		N1003	09/13/2008 RUF
Client ID: H-2 a							
	Lab ID: 004A	Date Sampled: 9/5/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/13/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/13/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Tetrachloroethene	679	--	--	50		N1003	09/13/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Trichloroethene	684	--	--	50		N1003	09/13/2008 RUF

Analytical Results

for

RMT

WorkOrder: 0809405

Client Reference: Sangamo SUE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: H-2 b	Lab ID: 005A		Date Sampled: 9/5/2008	Media: Charcoal		Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/13/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/13/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/13/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Tetrachloroethene	204	--	--	50		N1003	09/13/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/13/2008 RUF
Trichloroethene	177	--	--	50		N1003	09/13/2008 RUF

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809405
 Project: Sangamo SUE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-103900	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712603

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-103900	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712730

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	87.02	10.0	100	0	87	70	130	0	0	0	
Carbon tetrachloride	85.84	10.0	100	0	85.8	70	130	0	0	0	
Chloroform	85.63	10.0	100	0	85.6	70	130	0	0	0	
Tetrachloroethene	85.08	10.0	100	0	85.1	70	130	0	0	0	
Trichloroethene	84.82	10.0	100	0	84.8	70	130	0	0	0	

Sample ID: LCS-103900-1	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712732

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	98.05	10.0	100	0	98	70	130	0	0	0	
trans-1,2-Dichloroethene	94.44	10.0	100	0	94.4	70	130	0	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809405
 Project: Sangamo SUE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-103900-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712756						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	90.06	10.0	100	0	90.1	70	130	0	0		
1,2-Dichloroethane	91.65	10.0	100	0	91.6	70	130	0	0		

Sample ID: LCS-103900	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712767						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	512.7	50.0	500	0	103	70	130	0	0		
Carbon tetrachloride	483.6	50.0	500	0	96.7	70	130	0	0		
Chloroform	502.5	50.0	500	0	101	70	130	0	0		
Tetrachloroethene	496.7	50.0	500	0	99.3	70	130	0	0		
Trichloroethene	494.7	50.0	500	0	98.9	70	130	0	0		

Sample ID: LCS-103900-1	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712768						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	511.6	50.0	500	0	102	70	130	0	0		
trans-1,2-Dichloroethene	496.7	50.0	500	0	99.3	70	130	0	0		

Sample ID: LCS-103900-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712770						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	484.2	50.0	500	0	96.8	70	130	0	0		
1,2-Dichloroethane	489.6	50.0	500	0	97.9	70	130	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809405
 Project: Sangamo SUE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCSD-103900	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712731						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	96.5	10.0	100	0	96.5	70	130	87.02	10.3	30	
Carbon tetrachloride	93.39	10.0	100	0	93.4	70	130	85.84	8.42	30	
Chloroform	93.3	10.0	100	0	93.3	70	130	85.63	8.57	30	
Tetrachloroethene	94.84	10.0	100	0	94.8	70	130	85.08	10.8	30	
Trichloroethene	94.59	10.0	100	0	94.6	70	130	84.82	10.9	30	

Sample ID: LCSD-103900-1	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/8/2008	SeqNo: 2712748						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	108.3	10.0	100	0	108	70	130	98.05	9.95	30	
trans-1,2-Dichloroethene	103.4	10.0	100	0	103	70	130	94.44	9.09	30	

Sample ID: LCSD-103900-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/8/2008	RunNo: 132813						
Client ID:	Batch ID: 103900	TestNo: N1003		Analysis Date: 9/9/2008	SeqNo: 2712757						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	98.94	10.0	100	0	98.9	70	130	90.06	9.40	30	
1,2-Dichloroethane	103.5	10.0	100	0	104	70	130	91.65	12.2	30	

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Estimated value above quantitation range
	H Holding times for preparation or analysis exceeded	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified
	R RPD outside limits due to matrix	Rpt Lim Reporting Limit	S Spike Recovery outside limits due to matrix



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 18, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030
FAX (864) 281-0288

RE: Schlumberger

Order No.: 0809851

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 9 samples on 9/11/2008 9:15:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 9 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

for Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

76151

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: Schlumberger		Total Number of Containers	MATRIX	Filtered (Yes/No)										PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____							
Project Manager/Contact Person: Mike Parker / Travis Tarbet						Preserved (Code)																	
Lab No.	Yr. 08 Date	Time	Sample Station ID			Analyses Requested VOC											Comments:						
	9/10	1010	D-2	1	charcoal	X																	
		1014	D-1																				
		1023	H-2b																				
		1027	H-2a																				
		1030	H-1																				
		1042	P-3a																				
		1045	P-3b																				
		1057	P-1																				
		1100	P-2																				

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature) <i>Travis Tarbet</i> Date/Time 9/10/08 1400		Received by (Signature) <i>Shirley Smith</i> Date/Time 9/11/08 915		HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush	
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) _____ Date/Time _____			Report Due _____	
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) _____ Date/Time _____			(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)	
Custody Seal: Present/Absent Intact/Not Intact Seal #s _____						

RMT

0809851

Letter of Transmittal

RMT, Inc.
 30 Patewood Drive, Suite 100
 Greenville, SC 29615-3535
 Tel. (864) 281-0030 • Fax (864) 281-0288

To: Analytical Environmental Services, Inc.
 c/o Chantelle Kanhai
 3785 Presidential Parkway
 Atlanta, GA 30340

Date: 9/10/08
Project No.: 00-71238.35
Subject: Chain of Custody Record with Samples

Prepared By: Travis Tarbet

Title: Environmental Technician

We are sending you: Samples

COPIES	DATE	NO.	DESCRIPTION
9	9/10/08		Samples

These items are transmitted as checked below:

For review and comment

Remarks:

cc: Central Files

RECEIVED

April Sutt 9/11/08
 915
 F.A.S. DHL

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809851

Checklist completed by E. Roth 9-11-8
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other DHL

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ^{ca 9/12/8} (4°C±2)* Yes No

Cooler #1 Ambic Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Results

for

RMT

WorkOrder: 0809851

Client Reference: Schlumberger

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst	
	(ug)	(mg/m ³)	(ppm)					
Client ID: D-2		Lab ID: 001A	Date Sampled: 9/10/2008	Media: Charcoal		Air Vol.(L): NA		
1,1,1-Trichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10		N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10		N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Tetrachloroethene	121	--	--	10		N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Trichloroethene	21.4	--	--	10		N1003	09/17/2008	RUF
Client ID: D-1		Lab ID: 002A	Date Sampled: 9/10/2008	Media: Charcoal		Air Vol.(L): NA		
1,1,1-Trichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10		N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10		N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Tetrachloroethene	27.7	--	--	10		N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Trichloroethene	12.2	--	--	10		N1003	09/17/2008	RUF
Client ID: H-2 b		Lab ID: 003A	Date Sampled: 9/10/2008	Media: Charcoal		Air Vol.(L): NA		
1,1,1-Trichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10		N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10		N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Tetrachloroethene	388	--	--	10		N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Trichloroethene	311	--	--	10		N1003	09/17/2008	RUF
Client ID: H-2 a		Lab ID: 004A	Date Sampled: 9/10/2008	Media: Charcoal		Air Vol.(L): NA		
1,1,1-Trichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10		N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10		N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Tetrachloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF
Trichloroethene	<10.0	--	--	10		N1003	09/17/2008	RUF

Analytical Results

for

RMT

WorkOrder: 0809851

Client Reference: Schlumberger

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m³)	(ppm)				

Client ID: H-1	Lab ID: 005A	Date Sampled: 9/10/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10	N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10	N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Tetrachloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Trichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF

Client ID: P-3 a	Lab ID: 006A	Date Sampled: 9/10/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10	N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10	N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Tetrachloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Trichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF

Client ID: P-3 b	Lab ID: 007A	Date Sampled: 9/10/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10	N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10	N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Tetrachloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Trichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF

Client ID: P-1	Lab ID: 008A	Date Sampled: 9/10/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,1-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
1,2-Dichloroethane	<10.0	--	--	10	N1003	09/17/2008	RUF
Carbon tetrachloride	<10.0	--	--	10	N1003	09/17/2008	RUF
Chloroform	<10.0	--	--	10	N1003	09/17/2008	RUF
cis-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Tetrachloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
trans-1,2-Dichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF
Trichloroethene	<10.0	--	--	10	N1003	09/17/2008	RUF

Analytical Results

for

RMT

WorkOrder: 0809851

Client Reference: Schlumberger

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: P-2	Lab ID: 009A	Date Sampled: 9/10/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<10.0	--	--	10		N1003	09/17/2008 RUF
1,1-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008 RUF
1,2-Dichloroethane	<10.0	--	--	10		N1003	09/17/2008 RUF
Carbon tetrachloride	<10.0	--	--	10		N1003	09/17/2008 RUF
Chloroform	<10.0	--	--	10		N1003	09/17/2008 RUF
cis-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008 RUF
Tetrachloroethene	<10.0	--	--	10		N1003	09/17/2008 RUF
trans-1,2-Dichloroethene	<10.0	--	--	10		N1003	09/17/2008 RUF
Trichloroethene	<10.0	--	--	10		N1003	09/17/2008 RUF

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809851
 Project: Schlumberger

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-104206	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725366						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0		
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0		
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0		
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0		
Chloroform	BRL	10.0	0	0	0	0	0	0	0		
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0		
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0		
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0		
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0		

Sample ID: LCS-104206	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725367						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	105.6	10.0	100	0	106	70	130	0	0		
Carbon tetrachloride	101.5	10.0	100	0	102	70	130	0	0		
Chloroform	102.4	10.0	100	0	102	70	130	0	0		
Tetrachloroethene	105.2	10.0	100	0	105	70	130	0	0		
Trichloroethene	103.6	10.0	100	0	104	70	130	0	0		

Sample ID: LCS-104206-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725370						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

cis-1,2-Dichloroethene	107.9	10.0	100	0	108	70	130	0	0		
trans-1,2-Dichloroethene	103.9	10.0	100	0	104	70	130	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809851
 Project: Schlumberger

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-104206-3	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725375						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	105	10.0	100	0	105	70	130	0	0		
1,2-Dichloroethane	106.7	10.0	100	0	107	70	130	0	0		

Sample ID: LCSD-104206	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725369						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	104.3	10.0	100	0	104	70	130	105.6	1.32	30	
Carbon tetrachloride	100.3	10.0	100	0	100	70	130	101.5	1.18	30	
Chloroform	101.1	10.0	100	0	101	70	130	102.4	1.34	30	
Tetrachloroethene	103.9	10.0	100	0	104	70	130	105.2	1.26	30	
Trichloroethene	102.3	10.0	100	0	102	70	130	103.6	1.29	30	

Sample ID: LCSD-104206-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725373						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	110.5	10.0	100	0	111	70	130	107.9	2.36	30	
trans-1,2-Dichloroethene	106.6	10.0	100	0	107	70	130	103.9	2.60	30	

Sample ID: LCSD-104206-3	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/16/2008	RunNo: 133388						
Client ID:	Batch ID: 104206	TestNo: N1003		Analysis Date: 9/17/2008	SeqNo: 2725377						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	105.6	10.0	100	0	106	70	130	105	0.559	30	
1,2-Dichloroethane	107.4	10.0	100	0	107	70	130	106.7	0.733	30	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside limits due to matrix	BRL Below Reporting Limit J Estimated value detected below Reporting Limit Rpt Lim Reporting Limit	E Estimated value above quantitation range N Analyte not NELAC certified S Spike Recovery outside limits due to matrix
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ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 26, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX: (864) 281-0288

RE: Sangamo-SVE

Order No.: 0809D55

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 9 samples on 9/19/2008 9:25:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.

-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

E. N. Ruoff

for
Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

0809455

75699

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
 Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: Saugamo - SUE		Total Number of Containers	MATRIX	Filtered (Yes/No)										Analyses Requested <i>VOC's</i>	PRESERVED CODES A - NONE B - HNO ₃ C - H ₂ SO ₄ D - NaOH E - HCl F - METHANOL G - _____			
Project Manager/Contact Person: Mike Parker / Travis Tarbet						Preserved (Code)														
Lab No.	Yr. 08 Date	Time	Sample Station ID			Comments:														
	9-15	1425	P-1	1	Air	X														
	9-15	1432	P-2	1	Air	X														
	9-15	1448	P-3a	1	Air	X														
	9-15	1456	P-3b	1	Air	X														
	9-17	0904	D-1	1	Air	X														
	9-17	0911	D-2	1	Air	X														
	9-17	0949	H-1	1	Air	X														
	9-17	0955	H-2a	1	Air	X														
	9-17	1001	H-2b	1	Air	X														

SPECIAL INSTRUCTIONS

8646 0562 4667

SAMPLER Relinquished by (Signature) Bill Madd Date/Time 1200 9/18/08		Received by (Signature) FedEx Date/Time 1200 9/18/08		HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) Matt Lee Date/Time 9/19/08 9:25			Report Due _____
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) _____ Date/Time _____			(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s _____					

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809035

Checklist completed by Nuni Daniels Signature Date 9/19/08

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ^{AD 9/19/08} (4°C±2)* Yes No

Cooler #1 ambient Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Results

for

RMT

WorkOrder: 0809D55

Client Reference: Sangamo-SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst	
	(ug)	(mg/m ³)	(ppm)					
Client ID: P-1	Lab ID: 001A	Date Sampled: 9/15/2008	Media: Charcoal	Air Vol.(L): NA				
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/22/2008	RUF
Chloroform	<50.0	--	--	50		N1003	09/22/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Trichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Client ID: P-2	Lab ID: 002A	Date Sampled: 9/15/2008	Media: Charcoal	Air Vol.(L): NA				
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/22/2008	RUF
Chloroform	<50.0	--	--	50		N1003	09/22/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Trichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Client ID: P-3A	Lab ID: 003A	Date Sampled: 9/15/2008	Media: Charcoal	Air Vol.(L): NA				
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/22/2008	RUF
Chloroform	<50.0	--	--	50		N1003	09/22/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Trichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Client ID: P-3B	Lab ID: 004A	Date Sampled: 9/15/2008	Media: Charcoal	Air Vol.(L): NA				
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/22/2008	RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/22/2008	RUF
Chloroform	<50.0	--	--	50		N1003	09/22/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF
Trichloroethene	<50.0	--	--	50		N1003	09/22/2008	RUF

Analytical Results

for

RMT

WorkOrder: 0809D55

Client Reference: Sangamo-SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: D-1	Lab ID: 005A	Date Sampled: 9/17/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/23/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/23/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Client ID: D-2	Lab ID: 006A	Date Sampled: 9/17/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/23/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/23/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Tetrachloroethene	52.1	--	--	50		N1003	09/23/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Client ID: H-1	Lab ID: 007A	Date Sampled: 9/17/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/23/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/23/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Tetrachloroethene	407	--	--	50		N1003	09/23/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Trichloroethene	311	--	--	50		N1003	09/23/2008 RUF
Client ID: H-2A	Lab ID: 008A	Date Sampled: 9/17/2008	Media: Charcoal			Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/23/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/23/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF

Analytical Results

for

RMT

WorkOrder: 0809D55

Client Reference: Sangamo-SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: H-2B	Lab ID: 009A			Date Sampled: 9/17/2008		Media: Charcoal	
						Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	09/23/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	09/23/2008 RUF
Chloroform	<50.0	--	--	50		N1003	09/23/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	09/23/2008 RUF

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809D55
 Project: Sangamo-SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-104414	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733362						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-104414	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733363						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	102.9	10.0	100	0	103	70	130	0	0	0	
Carbon tetrachloride	99.86	10.0	100	0	99.9	70	130	0	0	0	
Chloroform	100.1	10.0	100	0	100	70	130	0	0	0	
Tetrachloroethene	102.1	10.0	100	0	102	70	130	0	0	0	
Trichloroethene	100.8	10.0	100	0	101	70	130	0	0	0	

Sample ID: LCS-104414-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733367						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

cis-1,2-Dichloroethene	103	10.0	100	0	103	70	130	0	0	0	
trans-1,2-Dichloroethene	99.22	10.0	100	0	99.2	70	130	0	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809D55
 Project: Sangamo-SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-104414-3	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733370						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	108.5	10.0	100	0	109	70	130	0	0		
1,2-Dichloroethane	111.5	10.0	100	0	112	70	130	0	0		

Sample ID: LCSD-104414	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733365						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	103.2	10.0	100	0	103	70	130	102.9	0.245	30	
Carbon tetrachloride	100	10.0	100	0	100	70	130	99.86	0.170	30	
Chloroform	100.5	10.0	100	0	101	70	130	100.1	0.454	30	
Tetrachloroethene	101.9	10.0	100	0	102	70	130	102.1	0.134	30	
Trichloroethene	101	10.0	100	0	101	70	130	100.8	0.145	30	

Sample ID: LCSD-104414-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733369						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	110.8	10.0	100	0	111	70	130	103	7.34	30	
trans-1,2-Dichloroethene	106.6	10.0	100	0	107	70	130	99.22	7.21	30	

Sample ID: LCSD-104414-3	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/22/2008	RunNo: 133758						
Client ID:	Batch ID: 104414	TestNo: N1003		Analysis Date: 9/22/2008	SeqNo: 2733372						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	109.4	10.0	100	0	109	70	130	108.5	0.816	30	
1,2-Dichloroethane	112	10.0	100	0	112	70	130	111.5	0.399	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit	E	Estimated value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
R	RPD outside limits due to matrix	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix



AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 01, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX: (864) 281-0288

RE: Sangamo - SVE

Order No.: 0809G61

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 4 samples on 9/24/2008 9:35:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 7 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

for
Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

0809661

76892

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: SANGAMA - SVE		Total Number of Containers	MATRIX	Filtered (Yes/No)										PRESERVED CODES A - NONE B - HNO ₃ C - H ₂ SO ₄ D - NaOH E - HCl F - METHANOL G - _____							
Project Manager/Contact Person: Mike Parker / Travis Tarbet						Preserved (Code)																	
Lab No.	Yr. 08 Date	Time	Sample Station ID			Analyses Requested VOC's											Comments:						
	9-22	1102	P-1	1	Air	X																	
	9-22	1108	P-2	1	Air	X																	
	9-22	1138	P-3a	1	Air	X																	
	9-22	1148	P-3b	1	Air	X																	

SPECIAL INSTRUCTIONS

8646 0562 4678

SAMPLER Relinquished by (Signature) <i>Bill Medli</i>	Date/Time 1200 9/23/08	Received by (Signature) FedEx	Date/Time 1200 9/23/08	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) <i>MWJ/m</i>	Date/Time 9/24/08 9:35		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s _____					

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809661

Checklist completed by Pluka T- Signature Date 9/25/08

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? PT 9/25/08 Yes No Not Present

Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 ambicut Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Results

for

RMT

WorkOrder: 0809G61

Client Reference: Sangamo - SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				

Client ID: P-1	Lab ID: 001A	Date Sampled: 9/22/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
Carbon tetrachloride	<50.0	--	--	50	N1003	09/26/2008	RUF
Chloroform	<50.0	--	--	50	N1003	09/26/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Tetrachloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Trichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF

Client ID: P-2	Lab ID: 002A	Date Sampled: 9/22/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
Carbon tetrachloride	<50.0	--	--	50	N1003	09/26/2008	RUF
Chloroform	<50.0	--	--	50	N1003	09/26/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Tetrachloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Trichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF

Client ID: P-3a	Lab ID: 003A	Date Sampled: 9/22/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
Carbon tetrachloride	<50.0	--	--	50	N1003	09/26/2008	RUF
Chloroform	<50.0	--	--	50	N1003	09/26/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Tetrachloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Trichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF

Client ID: P-3b	Lab ID: 004A	Date Sampled: 9/22/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/26/2008	RUF
Carbon tetrachloride	<50.0	--	--	50	N1003	09/26/2008	RUF
Chloroform	<50.0	--	--	50	N1003	09/26/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Tetrachloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF
Trichloroethene	<50.0	--	--	50	N1003	09/26/2008	RUF

Analytical Results
for

RMT

WorkOrder: 0809G61

Client Reference: Sangamo - SVE

Analyte	Concentration			Limit of Detection	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809G61
 Project: Sangamo - SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-104609	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738918						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-104609	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738919						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	103.8	10.0	100	0	104	70	130	0	0	0	
Carbon tetrachloride	100.1	10.0	100	0	100	70	130	0	0	0	
Chloroform	100.5	10.0	100	0	101	70	130	0	0	0	
Tetrachloroethene	102.9	10.0	100	0	103	70	130	0	0	0	
Trichloroethene	101.1	10.0	100	0	101	70	130	0	0	0	

Sample ID: LCS-104609-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738923						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

cis-1,2-Dichloroethene	99.25	10.0	100	0	99.2	70	130	0	0	0	
trans-1,2-Dichloroethene	95.98	10.0	100	0	96	70	130	0	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809G61
 Project: Sangamo - SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-104609-3	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738926						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethane	100.3	10.0	100	0	100	70	130	0	0		
1,2-Dichloroethane	103.7	10.0	100	0	104	70	130	0	0		

Sample ID: LCSD-104609	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738921						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	101.5	10.0	100	0	101	70	130	103.8	2.21	30	
Carbon tetrachloride	98.41	10.0	100	0	98.4	70	130	100.1	1.72	30	
Chloroform	97.86	10.0	100	0	97.9	70	130	100.5	2.69	30	
Tetrachloroethene	99.95	10.0	100	0	99.9	70	130	102.9	2.90	30	
Trichloroethene	99.07	10.0	100	0	99.1	70	130	101.1	2.05	30	

Sample ID: LCSD-104609-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738925						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

cis-1,2-Dichloroethene	107.8	10.0	100	0	108	70	130	99.25	8.22	30	
trans-1,2-Dichloroethene	104.5	10.0	100	0	105	70	130	95.98	8.54	30	

Sample ID: LCSD-104609-3	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 9/25/2008	RunNo: 133984						
Client ID:	Batch ID: 104609	TestNo: N1003		Analysis Date: 9/26/2008	SeqNo: 2738929						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethane	105.5	10.0	100	0	105	70	130	100.3	5.02	30	
1,2-Dichloroethane	106.8	10.0	100	0	107	70	130	103.7	2.96	30	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside limits due to matrix	BRL Below Reporting Limit J Estimated value detected below Reporting Limit Rpt Lim Reporting Limit	E Estimated value above quantitation range N Analyte not NELAC certified S Spike Recovery outside limits due to matrix
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Wisconsin State Laboratory of Hygiene

University of Wisconsin

Analytical Results

LAB NUMBER FIELD NUMBER DESCRIPTION AIR VOLUME

1353065 JCT liters

P-3B

Table with 2 columns: Substance and Concentration. Includes Solvent Scan, Dichloroethylene (1,2-), Naphtha (Coal Tar), Perchloroethylene, Petroleum Distillates, Toluene, and Trichloroethylene.

COMMENTS: Dichloroethylene(1,2-) results for samples 1353065-1353068 consists solely of the cis isomer.

1353066 JCT liters

P-3A

Table with 2 columns: Substance and Concentration. Includes Solvent Scan, Dichloroethylene (1,2-), Naphtha (Coal Tar), Perchloroethylene, Petroleum Distillates, Toluene, and Trichloroethylene.

1353067 JCT liters

P-1

Table with 2 columns: Substance and Concentration. Includes Solvent Scan, Dichloroethylene (1,2-), Naphtha (Coal Tar), Perchloroethylene, Petroleum Distillates, Toluene, and Trichloroethylene.

1353068 JCT liters

P-2

Table with 2 columns: Substance and Concentration. Includes Solvent Scan, Dichloroethylene (1,2-), Naphtha (Coal Tar), Perchloroethylene, Petroleum Distillates, Toluene, and Trichloroethylene.



Wisconsin State Laboratory of Hygiene

University of Wisconsin

Displayed values on report have been rounded; however all calculations are performed using raw, unrounded intermediate results. Please contact the laboratory if you have any questions regarding our result calculation or rounding. All samples were received by the laboratory in acceptable condition unless otherwise noted.

<: Less Than. The analyte, if present, is at a level too low to be accurately quantitated by the method used. The actual amount is less than the reported value.

Analytical Methodology

GENERAL SOLVENTS:

These samples are analyzed using WOHL method WG006.5, which is based on the method, OSHA 7.

The collection media is a SMALL (SCT) (SKC 226-01), LARGE (LCT) (SKC 226-09), JUMBO (JCT) (226-16) or JUMBO2 (226-16-02) Activated Charcoal tube.

Front and back sections of the tube are separately desorbed in 1 ml for SMALL tubes, 3 ml for LARGE tubes, 5 ml for JUMBO tubes, or 10 ml for JUMBO2 tubes of Carbon Disulfide for 30 minutes prior to analysis.

The samples are run on a Hewlett-Packard Gas Chromatograph equipped with an FID. The Primary and Confirming columns were chosen from the following:

- Carbopack C /0.1% SP-1000
VoCol 105M Capillary
HP-5 Capillary
Supelcowax-10 Capillary
SPB-624 capillary

Samples may also have been confirmed on a Model 5972 Hewlett-Packard Gas Chromatograph Mass-Selective Detector containing a Nukol Capillary.

Reporting Limits are specific for each substance.

Results may be blank corrected for known solvent/media contamination.

REPORTING LIMITS:

This table contains the WOHL determined reporting limits for the compounds specified in this report. These numbers are based on the historical statistical data for a particular analyte or are based on WOHL determined values.

Table with 2 columns: Analyte and Reporting Limit. Rows include Dichloroethylene (1,2-) on JCT (13 µg/sample), Naphtha (Coal Tar) on JCT (9 µg/sample), Perchloroethylene on JCT (16 µg/sample), Petroleum Distillates on JCT (6.5 µg/sample), Toluene on JCT (8.5 µg/sample), and Trichloroethylene on JCT (14.5 µg/sample).



Wisconsin State Laboratory of Hygiene

University of Wisconsin

Analytical Quality Control

Laboratory prepared quality control (QC) samples were analyzed along with the samples included in the analytical report. The analysis results for these QC samples are listed below.

Instrument Used for Analysis: Gas Chromatograph with FID

Laboratory Control Sample: 134281

QC Sample Media: SCT lot 2000 charcoal

Table with 5 columns: Analyte, Target Value, Recovery (%), Acceptable Recovery (%), Pass/Fail. Row 1: Toluene, 867 µg/sample, 98.4, 88 - 112, PASS

Laboratory Control Sample: 134282

QC Sample Media: SCT lot 2000 charcoal

Table with 5 columns: Analyte, Target Value, Recovery (%), Acceptable Recovery (%), Pass/Fail. Row 1: Toluene, 2601 µg/sample, 99.8, 88 - 112, PASS

The acceptable range for an analyte is based on the standard deviation of each analyte, which has been determined from statistical evaluation of the historical performance of the assay. The acceptable range includes up to 3 standard deviations, so a result within 3 standard deviations is considered to have passed the QC requirements.

End of Analytical Report

The results in this report apply only to the samples, specifically listed above, tested at the Wisconsin Occupational Health Laboratory. This report is not to be reproduced except in full.



#41

CHAIN OF CUSTODY RECORD

76168

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
 Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: SANGAMU		Total Number of Containers	MATRIX	Filtered (Yes/No) N										PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____	
Project Manager/Contact Person: M. Parker / T. TARBIT						Preserved (Code) A											
Lab No.	Yr. 08 Date	Time	Sample Station ID S LAM			Analyses Requested VOC'S SCAM										Comments:	
	10/6	1304	P-3B 1353065	1	AIR	1											100 STROKES
		1315	P-3A 1353066	1	AIR	1											100 STROKES
		1340	P-1 1353067	1	AIR	1											100 STROKES
	10/6	1350	P-2 1353068	1	AIR	1											100 STROKES

SPECIAL INSTRUCTIONS

27334434131

SAMPLER Relinquished by (Signature) Larry Jehi	Date/Time 10-7-08 1600	Received by (Signature) DHL	Date/Time 10/7/08 1600	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) A. M. Chary	Date/Time OCT - 8 2008		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s					

Wisconsin State Laboratory of Hygiene

University of Wisconsin

Sample Charges Summary

Report #9153308

RMT
MATTHEW PARKERStatement Date: 10/24/2008
Report Number: 9153308

Billing Code: PROJ 71238.35 SANGAMO

SERVICE DATE	SAMPLE NUMBER	TEST DESCRIPTION		QTY	PRICE
10/24/2008	1353065	SOLVENT Scan	DISC*	1	\$158.40
10/24/2008	1353066	SOLVENT Scan	DISC*	1	\$158.40
10/24/2008	1353067	SOLVENT Scan	DISC*	1	\$158.40
10/24/2008	1353068	SOLVENT Scan	DISC*	1	\$158.40
		TOTAL CHARGES		4	\$633.60

*A DISC indicator means that your analysis price has been adjusted based on a negotiated discount with the laboratory.

THIS IS NOT A BILL. DO NOT PAY THIS AMOUNT AT THIS TIME!

This is a statement of work performed on the samples and results contained in this report only and does not include charges for special additional analyses requested, media charges, shipping charges or equipment rental. Charges for samples and tests not listed above will appear on a future statement once those tests have been reported.

This summary is supplied as a convenience to our customers at the time they receive their report. The actual invoice for the work performed will be mailed shortly and you will have 30 days from that invoice date to make your payment.

If you have any questions regarding the information on this statement please contact the laboratory at 1-800-446-0403.

THIS IS NOT A BILL. DO NOT PAY THIS AMOUNT AT THIS TIME!



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 09, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX: (864) 281-0288

RE: Sangamo SVE

Order No.: 0810282

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 5 samples on 10/3/2008 9:15:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

0810282
76893

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238.35		Project/Client: SANGAMO SUE		Total Number of Containers	MATRIX	Filtered (Yes/No)										Analyses Requested <i>VOC's</i>	PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____				
Project Manager/Contact Person: Mike Parker / Travis Tarbet						Preserved (Code)															
Lab No.	Yr 08 Date	Time	Sample Station ID			Comments:															
	10-1	0958	D-1	1	Air	X															
	10-1	1003	D-2	1	Air	X															
	10-1	1042	H-1	1	Air	X															
	10-1	1048	H-2a	1	Air	X															
	10-1	1053	H-2b	1	Air	X															

SPECIAL INSTRUCTIONS

8646 0562 4689

SAMPLER Relinquished by (Signature) Bill Miller	Date/Time 11/15 10/2/08	Received by (Signature) Fed Ex	Date/Time 11/15 10/2/08	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) Plummer T	Date/Time 10-3-08 9:15		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time F		(For Lab Use Only) Receipt Temp: _____ Temp Blank Y N _____ Receipt pH (Wet/Metals) _____

Custody Seal: Present/Absent Intact/Not Intact Seal #s

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client BMT

Work Order Number 0810282

Checklist completed by [Signature] Date 10-3-8
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ^{ca 10/3/8} (4°C±2)* Yes No

Cooler #1 Arbit Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Sample Condition: Good Other(Explain) _____ Adjusted? _____ Checked by _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

CLIENT: RMT
Project: Sangamo SVE
Lab Order: 0810282

CASE NARRATIVE

Volatile Organic Analysis by Method N1003:

Due to the amount of charcoal provided by the client, samples 0810282-001, -002, -003, -004, and -005 required additional solvent during preparation resulting in elevated reporting limits.

Analytical Results

for

RMT

WorkOrder: 0810282

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: D-1		Lab ID: 001A	Date Sampled: 10/1/2008	Media: Charcoal	Air Vol.(L): NA		
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/07/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/07/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Client ID: D-2		Lab ID: 002A	Date Sampled: 10/1/2008	Media: Charcoal	Air Vol.(L): NA		
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/07/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/07/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Tetrachloroethene	61.3	--	--	50		N1003	10/07/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Client ID: H-1		Lab ID: 003A	Date Sampled: 10/1/2008	Media: Charcoal	Air Vol.(L): NA		
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/07/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/07/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Tetrachloroethene	285	--	--	50		N1003	10/07/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Trichloroethene	184	--	--	50		N1003	10/07/2008 RUF
Client ID: H-2 a		Lab ID: 004A	Date Sampled: 10/1/2008	Media: Charcoal	Air Vol.(L): NA		
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/07/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/07/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF

Analytical Results

for

RMT

WorkOrder: 0810282

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: H-2 b	Lab ID: 005A		Date Sampled: 10/1/2008	Media: Charcoal		Air Vol.(L): NA	
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/07/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/07/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/07/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/07/2008 RUF

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0810282
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-104983	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754457

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0		
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0		
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0		
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0		
Chloroform	BRL	10.0	0	0	0	0	0	0	0		
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0		
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0		
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0		
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0		

Sample ID: LCS-104983	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754460

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	105.2	10.0	100	0	105	70	130	0	0		
Carbon tetrachloride	102.3	10.0	100	0	102	70	130	0	0		
Chloroform	99.91	10.0	100	0	99.9	70	130	0	0		
Tetrachloroethene	104.4	10.0	100	0	104	70	130	0	0		
Trichloroethene	104.4	10.0	100	0	104	70	130	0	0		

Sample ID: LCS-104983-3	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754463

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	103.4	10.0	100	0	103	70	130	0	0		
1,2-Dichloroethane	105.9	10.0	100	0	106	70	130	0	0		

Qualifiers: < Less than Result value > Greater than Result value B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Estimated value above quantitation range H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0810282
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-104983-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679						
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754505						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	110	10.0	100	0	110	70	130	0	0		
trans-1,2-Dichloroethene	105.7	10.0	100	0	106	70	130	0	0		

Sample ID: LCSD-104983	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679						
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754461						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	103.7	10.0	100	0	104	70	130	105.2	1.46	30	
Carbon tetrachloride	100.8	10.0	100	0	101	70	130	102.3	1.47	30	
Chloroform	98.99	10.0	100	0	99	70	130	99.91	0.929	30	
Tetrachloroethene	102.6	10.0	100	0	103	70	130	104.4	1.72	30	
Trichloroethene	103	10.0	100	0	103	70	130	104.4	1.37	30	

Sample ID: LCSD-104983-3	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679						
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754464						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	104.9	10.0	100	0	105	70	130	103.4	1.43	30	
1,2-Dichloroethane	107.2	10.0	100	0	107	70	130	105.9	1.17	30	

Sample ID: LCSD-104983-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/6/2008	RunNo: 134679						
Client ID:	Batch ID: 104983	TestNo: N1003		Analysis Date: 10/7/2008	SeqNo: 2754507						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	110.9	10.0	100	0	111	70	130	110	0.812	30	
trans-1,2-Dichloroethene	105.2	10.0	100	0	105	70	130	105.7	0.461	30	

Qualifiers:	< Less than Result value	> Greater than Result value	B Analyte detected in the associated Method Blank
	BRL Below Reporting Limit	E Estimated value above quantitation range	H Holding times for preparation or analysis exceeded
	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
	Rpt Lim Reporting Limit	S Spike Recovery outside limits due to matrix	



AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 24, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX (864) 281-0288

RE: Sangamo SVE

Order No.: 0810C85

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 5 samples on 10/17/2008 10:40:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.

-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 7 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

for

Chantelle Kanhai
Project Manager



CHAIN OF CUSTODY RECORD

0810C85

75211

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No: **71238.35**
Project/Client: **Saugama SVGE**

Project Manager/Contact Person:
MIKE PARKER / TRAVIS TARDOT

Lab No.	Date	Time	Sample Station ID	Total Number of Containers	MATRIX
	10/16	1058	D-1	1	Air
		1106	D-2	1	Air
		1155	H-1	1	Air
		1202	H-2A	1	Air
	10/16	1208	H-2B	1	Air

Filtered (Yes/No)		Preserved (Code)		Anaylises Requested VOC's	Comments:
/		/			

- PRESERVED CODES:**
 A — NONE
 B — HNO₃
 C — H₂SO₄
 D — NaOH
 E — HCl
 F — METHANOL
 G — _____

SPECIAL INSTRUCTIONS

8555 7579 3945

SAMPLER Relinquished by (Signature) Bill Medli	Date/Time 1530 10/16/08	Received by (Signature) FedEx	Date/Time 1530 10/16/08	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature) Moby Lee	Date/Time 10/18 10:40		(For Lab Use Only)
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		Receipt Temp: Temp Blank Y N Receipt pH (Wet/Metals)

Custody Seal: Present/Absent Intact/Not Intact Seal #s

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0810C85

Checklist completed by [Signature] Date 10/17/08

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? (4°C±2)* Yes No 10/17/08

Cooler #1 Ambient Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No QR 10-2508

Proceed with Standard TAT as per project history? Yes No Not Applicable QR 10-2508

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Results

for

RMT

WorkOrder: 0810C85

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: D-1	Lab ID: 001A	Date Sampled: 10/16/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/21/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/21/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Client ID: D-2	Lab ID: 002A	Date Sampled: 10/16/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/21/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/21/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Client ID: H-1	Lab ID: 003A	Date Sampled: 10/16/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/21/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/21/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Tetrachloroethene	169	--	--	50		N1003	10/21/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Trichloroethene	104	--	--	50		N1003	10/21/2008 RUF
Client ID: H-2A	Lab ID: 004A	Date Sampled: 10/16/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,1-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
1,2-Dichloroethane	<50.0	--	--	50		N1003	10/21/2008 RUF
Carbon tetrachloride	<50.0	--	--	50		N1003	10/21/2008 RUF
Chloroform	<50.0	--	--	50		N1003	10/21/2008 RUF
cis-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Tetrachloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
trans-1,2-Dichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF
Trichloroethene	<50.0	--	--	50		N1003	10/21/2008 RUF

**Analytical Results
for**

RMT

WorkOrder: 0810C85

Client Reference: Sangamo SVE

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m³)	(ppm)				

Client ID: H-2B	Lab ID: 005A	Date Sampled: 10/10/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	10/21/2008	RUF
1,1-Dichloroethane	<50.0	--	--	50	N1003	10/21/2008	RUF
1,2-Dichloroethane	<50.0	--	--	50	N1003	10/21/2008	RUF
Carbon tetrachloride	<50.0	--	--	50	N1003	10/21/2008	RUF
Chloroform	<50.0	--	--	50	N1003	10/21/2008	RUF
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	10/21/2008	RUF
Tetrachloroethene	<50.0	--	--	50	N1003	10/21/2008	RUF
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	10/21/2008	RUF
Trichloroethene	<50.0	--	--	50	N1003	10/21/2008	RUF

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0810C85
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-105505	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470						
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/20/2008	SeqNo: 2771163						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-105505	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470						
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/20/2008	SeqNo: 2771164						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	105.1	10.0	100	0	105	70	130	0	0	0	
Carbon tetrachloride	102.5	10.0	100	0	102	70	130	0	0	0	
Chloroform	100.9	10.0	100	0	101	70	130	0	0	0	
Tetrachloroethene	102.6	10.0	100	0	103	70	130	0	0	0	
Trichloroethene	103.3	10.0	100	0	103	70	130	0	0	0	

Sample ID: LCS-105505-2	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470						
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/21/2008	SeqNo: 2771167						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	108.7	10.0	100	0	109	70	130	0	0	0	
trans-1,2-Dichloroethene	103.9	10.0	100	0	104	70	130	0	0	0	

Qualifiers: < Less than Result value > Greater than Result value B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Estimated value above quantitation range H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0810C85
 Project: Sangamo SVE

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-105505-3	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/21/2008	SeqNo: 2771170

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	104	10.0	100	0	104	70	130	0	0		
1,2-Dichloroethane	106.4	10.0	100	0	106	70	130	0	0		

Sample ID: LCSD-105505	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/21/2008	SeqNo: 2771165

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	101.6	10.0	100	0	102	70	130	105.1	3.39	30	
Carbon tetrachloride	98.7	10.0	100	0	98.7	70	130	102.5	3.74	30	
Chloroform	96.92	10.0	100	0	96.9	70	130	100.9	4.00	30	
Tetrachloroethene	99.58	10.0	100	0	99.6	70	130	102.6	2.98	30	
Trichloroethene	100.2	10.0	100	0	100	70	130	103.3	3.09	30	

Sample ID: LCSD-105505-2	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/21/2008	SeqNo: 2771169

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	110.5	10.0	100	0	110	70	130	108.7	1.66	30	
trans-1,2-Dichloroethene	106	10.0	100	0	106	70	130	103.9	2.06	30	

Sample ID: LCSD-105505-3	SampType: LCSD	TestCode: N1003	Units: ug, Total	Prep Date: 10/20/2008	RunNo: 135470
Client ID:	Batch ID: 105505	TestNo: N1003		Analysis Date: 10/21/2008	SeqNo: 2771172

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	105.1	10.0	100	0	105	70	130	104	1.02	30	
1,2-Dichloroethane	107.5	10.0	100	0	107	70	130	106.4	0.983	30	

Qualifiers:	< Less than Result value	> Greater than Result value	B Analyte detected in the associated Method Blank
	BRL Below Reporting Limit	E Estimated value above quantitation range	H Holding times for preparation or analysis exceeded
	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
	Rpt Lim Reporting Limit	S Spike Recovery outside limits due to matrix	



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 11, 2008

Travis Tarbet
RMT
30 Patewood Dr.
Suite 100 Patewood Plaza One
Greenville, SC 29615-3535

TEL: (864) 281-0030

FAX (864) 281-0288

RE: Schlumberger

Order No.: 0809411

Dear Travis Tarbet:

Analytical Environmental Services, Inc. received 6 samples on 9/9/2008 9:30:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.

-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 9 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Chantelle Kanhai

Project Manager



CHAIN OF CUSTODY RECORD

76150

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. **71238,35**
Project/Client: **Schlumberger**
Project Manager/Contact Person:
Mike Parker / Travis Tarbet (travis.tarbet@rmtinc.com)

Lab No.	Yr. <u>08</u> Date	Time	Sample Station ID	Total Number of Containers	MATRIX	Analyses Requested	Comments:
	9/8	1053	P-1	1	carbon tubes	X	Call Travis Tarbet with any questions: (864) 234-9487 (w) (864) 346-2916 (c)
		1057	P-2	1		X	
		1100	P-1 + P-2	1		X	
		1115	P-3a	1		X	
		1120	P-3a + P-3b	1		X	
		1118	P-3b	1		X	

Filtered (Yes/No)		
Preserved (Code)		A
Analyses Requested VOCs		PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature) <u>Travis Tarbet</u> Date/Time <u>9-8-08 1430</u>		Received by (Signature) <u>[Signature]</u> Date/Time <u>9/9/08 9:30</u>		HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal <input type="radio"/> Rush <input checked="" type="radio"/>
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) <u>DHE</u> Date/Time _____			Report Due _____
Relinquished by (Signature) _____ Date/Time _____		Received by (Signature) _____ Date/Time _____			(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N _____ (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s _____					

0809411

Letter of Transmittal

0809411

RMT, Inc.
30 Patewood Drive, Suite 100
Greenville, SC 29615-3535
Tel. (864) 281-0030 • Fax (864) 281-0288

To: Analytical Environmental Services, Inc.
c/o Chantelle Kanhai
3785 Presidential Parkway
Atlanta, GA 30340

Date: 9/8/08
Project No.: 00-71238.35
Subject: Chain of Custody Record with
Samples

Prepared By: Travis Tarbet Title Environmental Technician

We are sending you: Samples

COPIES	DATE	NO.	DESCRIPTION
6	9/8/08		VOC Samples

These items are transmitted as checked below:

For review and comment

Remarks:

cc: Central Files

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client RMT

Work Order Number 0809411

Checklist completed by [Signature] 9-9-8
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other DHL

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ^{ca 9/9/8} (4°C±2)* Yes No

Cooler #1 Ambient Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

CLIENT: RMT
Project: Schlumberger
Lab Order: 0809411

CASE NARRATIVE

Volatile Organic Analysis by Method N1003:

Due to the amount of charcoal provided by the client, samples 0809411-001, -002, -003, -004, -005, and -006 required additional solvent during preparation resulting in elevated reporting limits.

**Analytical Results
for
RMT**

WorkOrder: 0809411
Client Reference: Schlumberger

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				

Client ID: P-1	Lab ID: 001A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	102	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	60.6	--	--	50	N1003	09/10/2008	EGM

Client ID: P-2	Lab ID: 002A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	279	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM

Client ID: P-1 + P-2	Lab ID: 003A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM

Client ID: P-3a	Lab ID: 004A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	253	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM

Analytical Results

for

RMT

WorkOrder: 0809411

Client Reference: Schlumberger

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyst
	(ug)	(mg/m ³)	(ppm)				

Client ID: P-3a + P-3b	Lab ID: 005A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM

Client ID: P-3b	Lab ID: 006A	Date Sampled: 9/8/2008	Media: Charcoal	Air Vol.(L): NA			
1,1,1-Trichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,1-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
1,2-Dichloroethane	<50.0	--	--	50	N1003	09/10/2008	EGM
Carbon tetrachloride	<50.0	--	--	50	N1003	09/10/2008	EGM
Chloroform	<50.0	--	--	50	N1003	09/10/2008	EGM
cis-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Tetrachloroethene	364	--	--	50	N1003	09/10/2008	EGM
trans-1,2-Dichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM
Trichloroethene	<50.0	--	--	50	N1003	09/10/2008	EGM

(a) Analysis indicates possible breakthrough; back section result is greater than 10% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

--: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

CLIENT: RMT
 Work Order: 0809411
 Project: Schlumberger

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: MB-103977	SampType: MBLK	TestCode: N1003	Units: ug, Total	Prep Date: 9/9/2008	RunNo: 132848						
Client ID:	Batch ID: 103977	TestNo: N1003		Analysis Date: 9/10/2008	SeqNo: 2715163						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	10.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	10.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	10.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	10.0	0	0	0	0	0	0	0	0	

Sample ID: LCS-103977	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/9/2008	RunNo: 132848						
Client ID:	Batch ID: 103977	TestNo: N1003		Analysis Date: 9/10/2008	SeqNo: 2713557						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	97.4	10.0	100	0	97.4	70	130	0	0	0	
Carbon tetrachloride	91.77	10.0	100	0	91.8	70	130	0	0	0	
Chloroform	95.82	10.0	100	0	95.8	70	130	0	0	0	
Tetrachloroethene	95.24	10.0	100	0	95.2	70	130	0	0	0	
Trichloroethene	95.35	10.0	100	0	95.4	70	130	0	0	0	

Sample ID: LCS-103977-1	SampType: LCS	TestCode: N1003	Units: ug, Total	Prep Date: 9/9/2008	RunNo: 132848						
Client ID:	Batch ID: 103977	TestNo: N1003		Analysis Date: 9/10/2008	SeqNo: 2713606						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

cis-1,2-Dichloroethene	105.5	10.0	100	0	105	70	130	0	0	0	
trans-1,2-Dichloroethene	100.5	10.0	100	0	101	70	130	0	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

CLIENT: RMT
 Work Order: 0809411
 Project: Schlumberger

ANALYTICAL QC SUMMARY REPORT

TestCode: N1003

Sample ID: LCS-103977-2		SampType: LCS		TestCode: N1003		Units: ug, Total		Prep Date: 9/9/2008		RunNo: 132848	
Client ID:		Batch ID: 103977		TestNo: N1003				Analysis Date: 9/10/2008		SeqNo: 2713613	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	93.62	10.0	100	0	93.6	70	130	0	0		
1,2-Dichloroethane	94.16	10.0	100	0	94.2	70	130	0	0		

Sample ID: LCSD-103977		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/9/2008		RunNo: 132848	
Client ID:		Batch ID: 103977		TestNo: N1003				Analysis Date: 9/10/2008		SeqNo: 2713602	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	100.5	10.0	100	0	100	70	130	97.4	3.10	30	
Carbon tetrachloride	95.36	10.0	100	0	95.4	70	130	91.77	3.84	30	
Chloroform	97.44	10.0	100	0	97.4	70	130	95.82	1.68	30	
Tetrachloroethene	97.31	10.0	100	0	97.3	70	130	95.24	2.16	30	
Trichloroethene	97.61	10.0	100	0	97.6	70	130	95.35	2.34	30	

Sample ID: LCSD-103977-1		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/9/2008		RunNo: 132848	
Client ID:		Batch ID: 103977		TestNo: N1003				Analysis Date: 9/10/2008		SeqNo: 2713609	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	102.1	10.0	100	0	102	70	130	105.5	3.25	30	
trans-1,2-Dichloroethene	99.53	10.0	100	0	99.5	70	130	100.5	1.00	30	

Sample ID: LCSD-103977-2		SampType: LCSD		TestCode: N1003		Units: ug, Total		Prep Date: 9/9/2008		RunNo: 132848	
Client ID:		Batch ID: 103977		TestNo: N1003				Analysis Date: 9/10/2008		SeqNo: 2713619	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	99.87	10.0	100	0	99.9	70	130	93.62	6.46	30	
1,2-Dichloroethane	100.5	10.0	100	0	101	70	130	94.16	6.52	30	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Estimated value above quantitation range
 H Holding times for preparation or analysis exceeded J Estimated value detected below Reporting Limit N Analyte not NELAC certified
 R RPD outside limits due to matrix Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix



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Analytical Results

LAB NUMBER	DESCRIPTION	AIR VOLUME
FIELD NUMBER		liters

1354908	JCT	liters
P-3A		
Solvent Scan		
Chlorobenzene (Mono)	<18 µg/sample	
Dichloroethylene (1,2-)	<13 µg/sample	
Naphtha (Coal Tar)	<9.0 µg/sample	
Perchloroethylene	62 µg/sample	
Petroleum Distillates	<6.5 µg/sample	
Toluene	<8.5 µg/sample	
Trichloroethylene	<15 µg/sample	

COMMENTS: GCMS data suggests that traces of 124 and 123 trichlorobenzene are present. Quantitation of these chemicals requires separate collection.

1354909	JCT	liters
P-3B		
Solvent Scan		
Chlorobenzene (Mono)	<18 µg/sample	
Dichloroethylene (1,2-)	<13 µg/sample	
Naphtha (Coal Tar)	<9.0 µg/sample	
Perchloroethylene	110 µg/sample	
Petroleum Distillates	<6.5 µg/sample	
Toluene	<8.5 µg/sample	
Trichloroethylene	15 µg/sample	

1354910	JCT	liters
P-1		
Solvent Scan		
Chlorobenzene (Mono)	<18 µg/sample	
Dichloroethylene (1,2-)	100 µg/sample	
Naphtha (Coal Tar)	<9.0 µg/sample	
Perchloroethylene	110 µg/sample	
Petroleum Distillates	38 µg/sample	
Toluene	<8.5 µg/sample	
Trichloroethylene	30 µg/sample	

1354911	JCT	liters
P-2		
Solvent Scan		
Chlorobenzene (Mono)	<18 µg/sample	
Dichloroethylene (1,2-)	<13 µg/sample	
Naphtha (Coal Tar)	<9.0 µg/sample	
Perchloroethylene	35 µg/sample	
Petroleum Distillates	<6.5 µg/sample	
Toluene	<8.5 µg/sample	
Trichloroethylene	<15 µg/sample	



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Displayed values on report have been rounded; however all calculations are performed using raw, unrounded intermediate results. Please contact the laboratory if you have any questions regarding our result calculation or rounding. All samples were received by the laboratory in acceptable condition unless otherwise noted.

< : Less Than. The analyte, if present, is at a level too low to be accurately quantitated by the method used. The actual amount is less than the reported value.

Analytical Methodology

GENERAL SOLVENTS:

These samples are analyzed using WOHL method WG006.5, which is based on the method, OSHA 7.

The collection media is a SMALL (SCT) (SKC 226-01), LARGE (LCT) (SKC 226-09), JUMBO (JCT) (226-16) or JUMBO2 (226-16-02) Activated Charcoal tube.

Front and back sections of the tube are separately desorbed in 1 ml for SMALL tubes, 3 ml for LARGE tubes, 5 ml for JUMBO tubes, or 10 ml for JUMBO2 tubes of Carbon Disulfide for 30 minutes prior to analysis.

The samples are run on a Hewlett-Packard Gas Chromatograph equipped with an FID. The Primary and Confirming columns were chosen from the following:

- Carbopack C /0.1% SP-1000
VoCol 105M Capillary
HP-5 Capillary
Supelcowax-10 Capillary
SPB-624 capillary

Samples may also have been confirmed on a Model 5972 Hewlett-Packard Gas Chromatograph Mass-Selective Detector containing a Nukol Capillary.

Reporting Limits are specific for each substance.

Results may be blank corrected for known solvent/media contamination.

REPORTING LIMITS:

This table contains the WOHL determined reporting limits for the compounds specified in this report. These numbers are based on the historical statistical data for a particular analyte or are based on WOHL determined values.

Table with 2 columns: Analyte and Reporting Limit. Rows include Chlorobenzene (Mono) on JCT (18 ug/sample), Dichloroethylene (1,2-) on JCT (13 ug/sample), Naphtha (Coal Tar) on JCT (9 ug/sample), Perchloroethylene on JCT (16 ug/sample), Petroleum Distillates on JCT (6.5 ug/sample), Toluene on JCT (8.5 ug/sample), and Trichloroethylene on JCT (14.5 ug/sample).



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Analytical Quality Control

Laboratory prepared quality control (QC) samples were analyzed along with the samples included in the analytical report. The analysis results for these QC samples are listed below.

Instrument Used for Analysis: Gas Chromatograph with FID

Laboratory Control Sample: 134283

QC Sample Media: SCT lot 2000 charcoal

Table with 5 columns: Analyte, Target Value, Recovery (%), Acceptable Recovery (%), Pass/Fail. Row 1: Toluene, 1734 µg/sample, 95.9, 88 - 112, PASS

Laboratory Control Sample: 134284

QC Sample Media: SCT lot 2000 charcoal

Table with 5 columns: Analyte, Target Value, Recovery (%), Acceptable Recovery (%), Pass/Fail. Row 1: Toluene, 3468 µg/sample, 95.8, 88 - 112, PASS

The acceptable range for an analyte is based on the standard deviation of each analyte, which has been determined from statistical evaluation of the historical performance of the assay. The acceptable range includes up to 3 standard deviations, so a result within 3 standard deviations is considered to have passed the QC requirements. A result outside of the acceptable range is considered to have failed QC and may indicate the direction of possible bias for the samples included in the analytical report. The analytes used for QC determination will not always be the same analytes that appear in the samples for the report, however they are representative of the compounds found in the samples and indicative of overall assay performance.

End of Analytical Report

The results in this report apply only to the samples, specifically listed above, tested at the Wisconsin Occupational Health Laboratory. This report is not to be reproduced except in full.



CHAIN OF CUSTODY RECORD

#41

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71238135		Project/Client: SANDWALD		Total Number of Containers	MATRIX	Filtered (Yes/No) <i>N</i>										Analytes Requested <i>VOC'S</i>	Preserved (Code) <i>E</i>	Comments:	PRESERVED CODES A — NONE B — HNO ₃ C — H ₂ SO ₄ D — NaOH E — HCl F — METHANOL G — _____
Project Manager/Contact Person: M. PARKER / T. TARBIT																			
Lab No.	Yr. <i>08</i> Date	Time	Sample Station ID																
	10-20	1300	P-3A 1354908	1	AIR	1													
		1310	P-3B 1354909	1	S	1													
		1330	P-1 1354910	1	S	1													
	10-20	1340	P-2 1354911	1	AIR	1													

SPECIAL INSTRUCTIONS

27334440335

SAMPLER Relinquished by (Signature) <i>[Signature]</i>	Date/Time 10/20/08 1600	Received by (Signature) <i>DHL</i>	Date/Time 10/21/08 1630	HAZARDS ASSOCIATED WITH SAMPLES <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Highly Toxic <input type="checkbox"/> Other (list) _____	Turn Around (circle one) Normal Rush
Relinquished by (Signature)	Date/Time	Received by (Signature) <i>[Signature]</i>	Date/Time OCT 22 2008		Report Due _____
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time		(For Lab Use Only) Receipt Temp: _____ Receipt pH _____ Temp Blank Y N (Wet/Metals)
Custody Seal: Present/Absent Intact/Not Intact Seal #s					

JCT 2000 kr 10-22-08



Wisconsin Occupational
Health Laboratory

Mail:
P.O. Box 7996
Madison, WI 53707-7996
Phone: (800) 446-0403

Packages:
2601 Agriculture Dr.
Madison, WI 53718
Fax: (608) 224-6213

Wisconsin State Laboratory of Hygiene

University of Wisconsin

Sample Charges Summary

Report #9155506

RMT
MATTHEW PARKER

Statement Date: 11/4/2008
Report Number: 9155506

Billing Code: **MANAGER M PARKER PROJ 71238.35 SANGA**

SERVICE DATE	SAMPLE NUMBER	TEST DESCRIPTION		QTY	PRICE
11/4/2008	1354908	SOLVENT Scan	DISC*	1	\$158.40
11/4/2008	1354909	SOLVENT Scan	DISC*	1	\$158.40
11/4/2008	1354910	SOLVENT Scan	DISC*	1	\$158.40
11/4/2008	1354911	SOLVENT Scan	DISC*	1	\$158.40
TOTAL CHARGES				4	\$633.60

*A DISC indicator means that your analysis price has been adjusted based on a negotiated discount with the laboratory.

THIS IS NOT A BILL. DO NOT PAY THIS AMOUNT AT THIS TIME!

This is a statement of work performed on the samples and results contained in this report only and does not include charges for special additional analyses requested, media charges, shipping charges or equipment rental. Charges for samples and tests not listed above will appear on a future statement once those tests have been reported.

This summary is supplied as a convenience to our customers at the time they receive their report. The actual invoice for the work performed will be mailed shortly and you will have 30 days from that invoice date to make your payment.

If you have any questions regarding the information on this statement please contact the laboratory at 1-800-446-0403.

THIS IS NOT A BILL. DO NOT PAY THIS AMOUNT AT THIS TIME!