



February 22, 2012

Mr. Tony Russell, Chief
Assessment Remediation Branch
Mississippi Department of Environmental Quality
515 East Amite Street
Jackson, Mississippi 39201

Re: Groundwater Monitoring Well Installation
Kuhlman Electric Corporation
Crystal Springs, Mississippi
EMS Project # KUH0-11-007

Dear Mr. Russell:

Under the direction of BorgWarner, Inc., ARCADIS prepared the *Corrective Action Plan, Kuhlman Electric Corporation Facility, Crystal Springs, Mississippi* (CAP), dated March 15, 2011. In accordance with the CAP, Environmental Management Services, Inc. (EMS) installed five groundwater monitoring wells and completed a groundwater sampling event at the new monitoring well locations. The monitoring well installation activities were conducted from November 8 – 14, 2011, the new wells were developed on November 21 and 23, 2011, and sampled on December 1 and 2, 2011. Provided below is a summary of the monitoring well installation, well development, and groundwater sampling events.

Monitoring Well Installation

Monitoring wells MW-30 through MW-34 were installed at the locations shown in Figure 1 in November, 2011. The wells were installed by Walker Hill Environmental (WHE) using a sonic drill rig.

At each location an approximately 4 foot “test hole” was dug by hand to ensure no underground utilities were present near the surface. Upon completion of each 10 foot “push”, the sample was collected and the soil was visually described and recorded by the on-site field geologist in accordance with the Unified Soil Classification System. At the locations MW-33 and MW-34 the drill stem was pushed to a depth of 60 feet below ground surface (bgs) before samples were collected for characterization. Boring logs providing soil descriptions and graphical well completion details showing screened interval, filter pack, bentonite plug, grout and initial

Groundwater Monitoring Well Installation
Kuhlman Electric Corporation
February 22, 2012

groundwater elevations are included in Attachment 1 of this report. Well construction details are included as Table 1.

Once borehole logging was completed the appropriate depth for the well screen was determined by the historical contamination data of surrounding monitoring wells and the nature of the subsurface geology identified during the soil boring characterization. The wells were constructed of 2-inch 0.010-inch flush threaded pvc factory slotted well screen and flush treaded pvc riser. Each well consists of a 15 foot screened interval. The total depths of the monitoring wells ranged between 75 and 108 feet bgs. A filter sand pack was placed in the annulus between the screen and boring wall from the bottom of the borehole to approximately 2 feet above the top of the screen. Above the sand pack a bentonite seal was placed in the void and allowed to cure overnight, and the seal overlain by a bentonite-portland cement grout plug. The monitoring wells are completed with a flush mount casing and a 2 foot by 2 foot cement pad. A typical schematic depicting the monitoring well design is provided as Figure 2.

On November 21 and 23, 2011, EMS personnel developed all five newly constructed monitoring wells by pumping approximately 3 to 5 well volumes of water from each well and visible evidence of fine material was negligible. Groundwater levels observed in the monitor wells were recorded prior to and after development.

Groundwater Monitoring System

The newly installed groundwater monitoring wells for the Kuhlman Electric Corporation (KEC) Facility in Crystal Springs, Mississippi (site) were installed to complement the existing network of 38 groundwater monitoring wells. Monitoring well MW-30 was installed west of the site across the train tracks and MW-31 was installed on-site. According to the CAP, these two wells will act as corrective action performance monitoring wells and as interior plume trends wells. Monitoring well MW-32 is located hydraulically downgradient from the site on Independence Street between West Georgetown Street and West Marion Avenue. According to the CAP, this well will serve as an interior plume trend monitoring well. Monitoring wells MW-33 and MW-34 are located hydraulically downgradient of the site and outside of the leading edge of the DCE plume. In accordance with the CAP, these wells will serve as sentinel wells. MW-33 is located on West Marion Avenue east of Highway 51 and MW-34 is located along the eastern side of the railroad south of Kirk Street.

Groundwater Sampling

All five newly installed monitoring wells were sampled on December 1 and 2, 2011 and will be sampled on a quarterly schedule for at least one year. The second sampling event will be coupled with the semi-annual sampling event for the other 38 monitoring wells in May, 2012. Groundwater levels observed in the monitor wells were recorded prior to purging and sampling of each well.

At each well, a new polyethylene bailer was used to purge the well of approximately 3 well volumes and then sample. The groundwater samples were collected for Volatile Organic Compounds (VOCs) and 1,4-Dioxane (Dioxane).

Following collection, the samples were placed in an ice chest containing ice packs and delivered to Pace Analytical, Inc., located in Minneapolis, Minnesota, for analysis.

Quality Assurance/Quality Control

Quality control samples included analysis of a trip blank provided by the laboratory and a blind duplicate. Well MW-32 was selected for the blind duplicate sample. The blind duplicate sample was labeled KEP-GW-DUP-01 so as not to be recognizable by the laboratory. The sample was analyzed for VOCs and Dioxane. The relative percent difference (RPD) was calculated for 1,1-Dichloroethene (DCE) and Dioxane using the following formula:

$$RPD = \frac{2(X_S - X_D)}{(X_S + X_D)}$$

X_S = *The original sample's contamination level*

X_D = *The duplicate's contamination level*

The RPD calculations for the analytes of concern were 16% for Dioxane and 2% for DCE. A copy of the analytical report with chain-of-custody documentation is provided in Attachment 3.

Discussion of Results

Table 2 provides a summary of the analytical results for the December 1 and 2, 2011 sampling. The data indicates that the contaminants of concern (COC), DCE and Dioxane, were detected above their respective Mississippi Department of Environmental Quality's (MDEQ) Target

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Remedial Goals (TRGs) during the December 2011 sampling event. DCE was detected above its respective MDEQ TRG in two, MW-32 and MW-34, of the five wells. Dioxane was detected above its respective MDEQ TRG in one, MW-34, of the five wells. DCE was detected above its method detection limit (MDL) in four of the five monitoring wells (MW-30, MW-31, MW-32, and MW-34). Dioxane was detected above its MDL in four of the five monitoring wells (MW-30, MW-32, MW-33, and MW-34).

Other analytes detected during the sampling event include Acetone, Benzene, Chloroform, Tetrachloroethene (PCE), Bromodichloromethane, and Dibromochloromethane. Of these non-COC analytes Chloroform, Bromodichloromethane, and Dibromochloromethane were the only ones detected above their respective MDEQ TRGs. Chloroform was detected above its MDEQ TRG in MW-30 and MW-33. Bromodichloromethane was detected above its respective MDEQ TRG in MW-33. Dibromochloromethane was detected above its MDEQ TRG in MW-33. Acetone, which was detected below its MDEQ TRG in MW-30, is a common cross contamination analyte due to its frequent use as a laboratory cleaning agent. Benzene, which was detected below its MDEQ TRG in MW-30 and MW-31, was also detected at low concentrations in the trip blank, which may indicate contamination during the shipping and handling process. Acetone, Benzene, and Bromodichloromethane historically have not been reported as detects in the groundwater samples associated with the site. The other non-COC analytes have intermittently been detected within the groundwater samples associated with the site.

Chloroform, Bromodichloromethane, and Dibromochloromethane are part of a group of chemicals known as Trihalomethanes (THM), which are formed along with other disinfection byproducts when disinfectants used in water treatment plants react with bromide and/or natural organic matter present in the source water. Tap water was obtained through the city water system during the installation of the monitoring wells, which could explain the presence of the THMs. Because these chemicals are produced during dechlorination and not contamination, the Environmental Protection Agency (EPA) has set a maximum allowable annual average level for total trihalomethanes at 80 µg/L, which is well above the concentrations that these chemicals are being detected.

Groundwater Monitoring Well Installation
Kuhlman Electric Corporation
February 22, 2012

If you have questions or require additional information, please call the undersigned at (601) 544-3674.

Sincerely,
Environmental Management Services, Inc.

A handwritten signature in blue ink, appearing to read 'Ethan Allen', is written over a faint, larger signature.

Ethan Allen, RPG
Project Geologist

Attachments

Tables
Figures
Boring Logs
Field Logs
Analytical Report

Groundwater Investigation Status Report
Kuhlman Electric Corporation
Crystal Springs, Mississippi
EMS Project KUH0-11-007
February 22, 2012

The field work and report for this project have been prepared by Environmental Management Services, Inc. under the direct supervision of the environmental professional indicated below. To the best of our knowledge all appropriate standards of care and practices were utilized to collect and report the data contained within this document. Services performed were conducted in a manner consistent with that degree of care and skill ordinarily exercised by reputable members of the same profession as practicing in the same locality under similar conditions as exists at the time the service was provided. No other representation, express or implied, and no warranty or guarantee is included or intended in this proposal, or any report, opinion, document or otherwise as a result of, or part of the work, its subcontractors, or vendors.

Prepared By:



Ethan Allen, RPG

MS Professional Geologist No. 0759

Date:



TABLES

Table 1
Groundwater Monitoring Well Construction Data and Elevation Data
December 2011
Kuhlman Electric Corporation
Crystal Springs, Mississippi

MONITORING WELL CONSTRUCTION DETAILS						
Well No.	Date Installed	Screen Length (ft)	Screen Interval (ft bgs)	Ground Surface Elevation (ft msl)	Top of Casing Elevation (ft msl)	GW Elevation December-2011 (ft msl)
MW-30	11/11/2011	15	70-85	470.03	469.77	403.72
MW-31	11/12/2011	15	60-75	468.27	468.06	404.76
MW-32	11/8/2011	15	80-95	462.88	462.55	401.55
MW-33	11/9/2011	15	85-100	461.13	460.91	401.44
MW-34	11/10/2011	15	93-108	457.36	457.10	396.21

GW = groundwater

TABLE 2

Groundwater Monitoring Results - New Monitoring Wells

December 2011

Kuhlman Electric Corporation

Crystal Springs, Mississippi

Well ID	Sample ID	Date Collected	1,1-Dichloro-ethene	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Chloro-form	Dibromo-chloro-methane	Trichloro-ethene (TCE)	Tetra-chloro-ethene (PCE)	1,4-Dioxane	Benzene	Bromo-dichloro-methane
MDEQ TRGs (µg/L)			7	798	5	200	5	0.155	0.126	5	5	6.09	5	0.168
MW-30	KEP-GW-030-001	12/1/2011	2.82 ^J	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	0.530 ^J	<5.0 ¹	<5.0 ¹	<5.0 ¹	2.1 ^J	0.540 ^J	<5.0 ¹
MW-31	KEP-GW-031-001	12/2/2011	2.29 ^J	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<3.0	<5.0 ¹	<5.0 ¹
MW-32	KEP-GW-032-001	12/2/2011	20.6	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	0.74 ^J	<5.0 ¹	<5.0 ¹
MW-32	KEP-GW-DUP-001	12/2/2011	21.0	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	0.63 ^J	<5.0 ¹	<5.0 ¹
MW-33	KEP-GW-033-001	12/2/2011	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	1.88 ^J	0.560 ^J	<5.0 ¹	<5.0 ¹	0.60 ^J	<5.0 ¹	0.820 ^J
MW-34	KEP-GW-034-001	12/1/2011	13.0	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	<5.0 ¹	0.510 ^J	6.6	<5.0 ¹	<5.0 ¹

Concentrations are expressed as micrograms per liter (µg/L).

ND - No Data

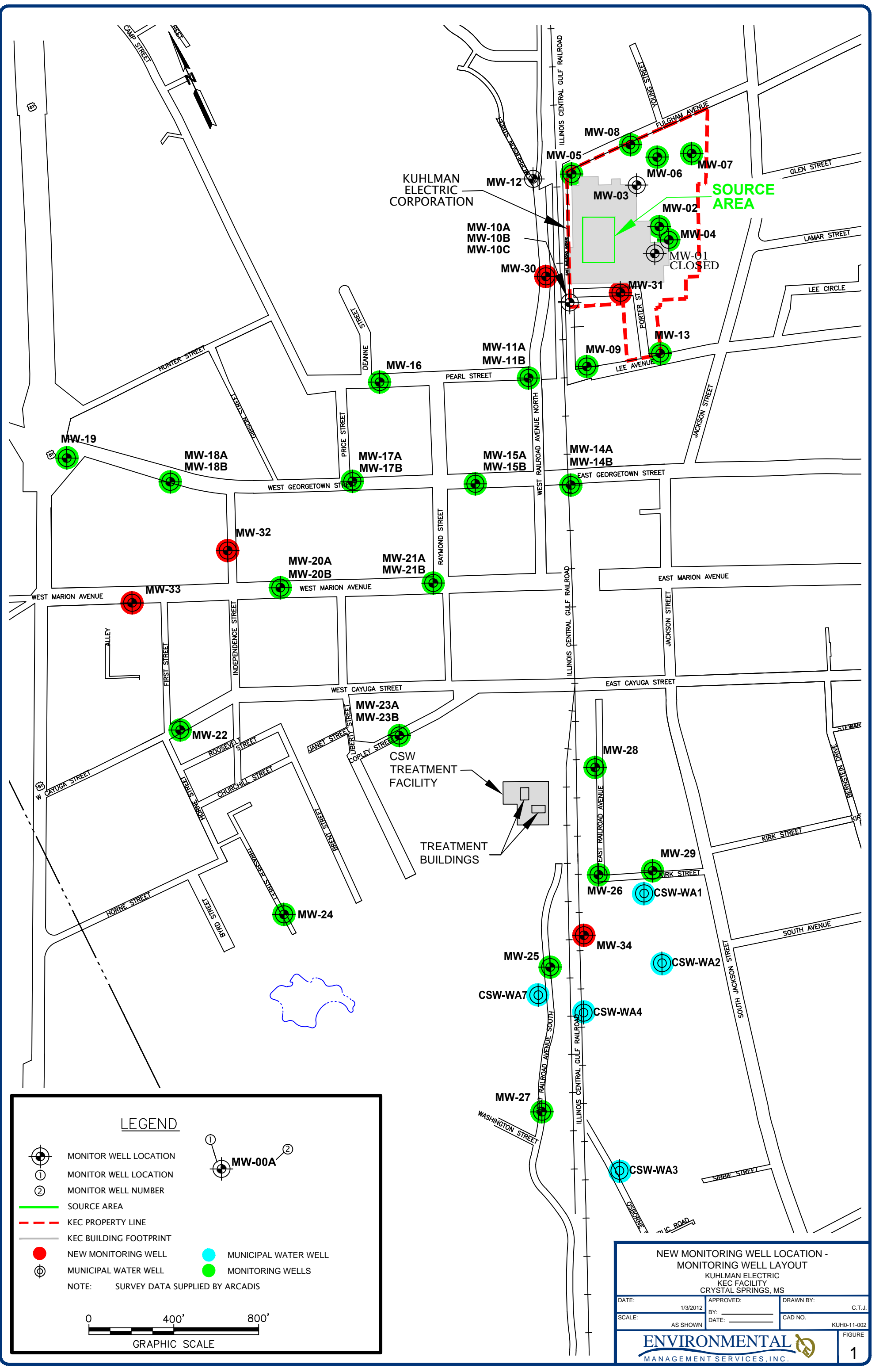
NA - Not Analyzed

Concentrations in **bold** exceed their respective TRGs

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

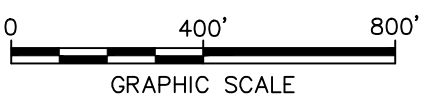
1 - Concentrations were reported to adjusted method detection limit, which is less than the expressed adjusted reporting limit

FIGURES



LEGEND

- MONITOR WELL LOCATION
 - MONITOR WELL LOCATION
 - MONITOR WELL NUMBER
 - SOURCE AREA
 - KEC PROPERTY LINE
 - KEC BUILDING FOOTPRINT
 - NEW MONITORING WELL
 - MUNICIPAL WATER WELL
 - MUNICIPAL WATER WELL
 - MONITORING WELLS
- NOTE: SURVEY DATA SUPPLIED BY ARCADIS

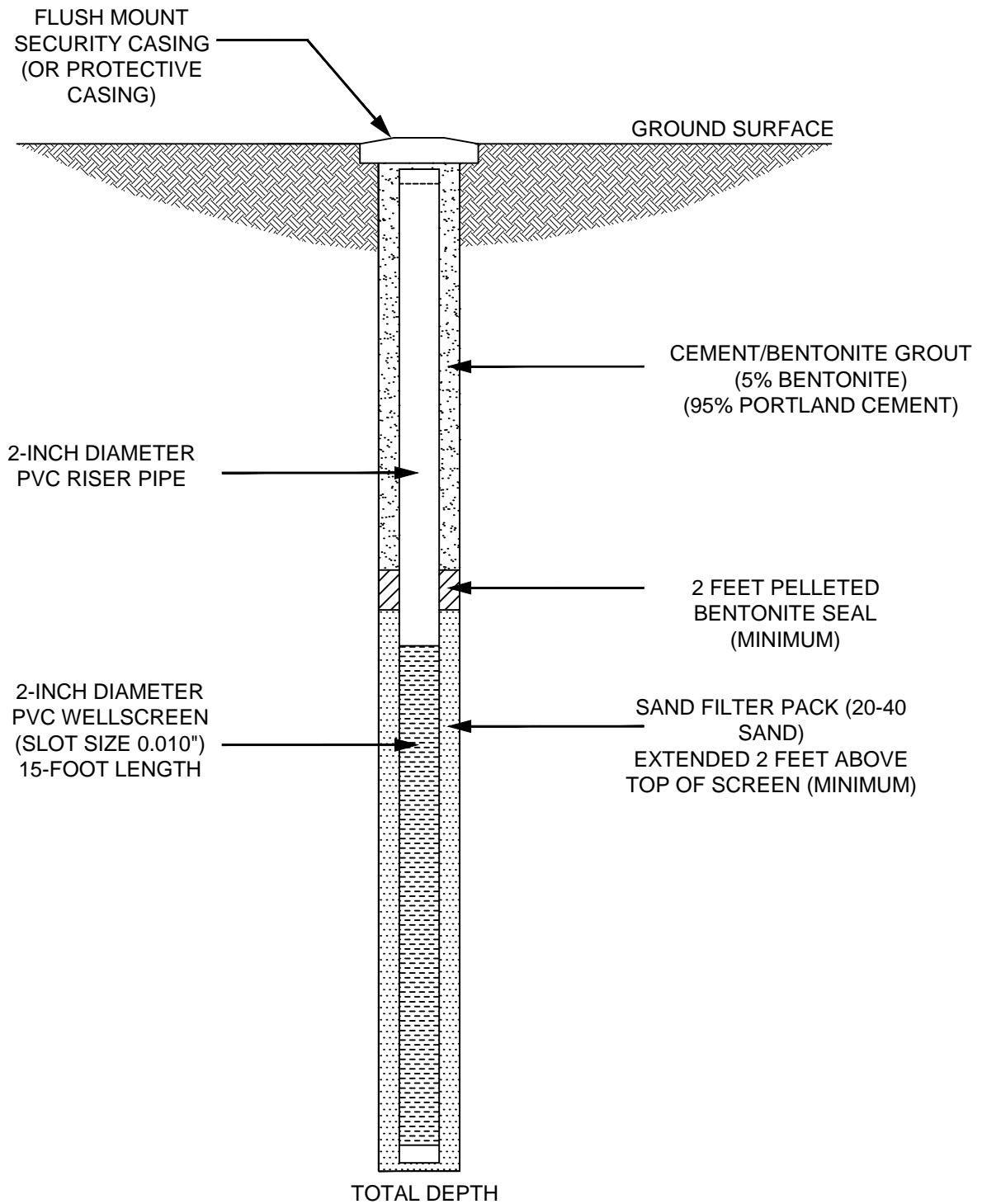


NEW MONITORING WELL LOCATION -
MONITORING WELL LAYOUT
KUHLMAN ELECTRIC
KEC FACILITY
CRYSTAL SPRINGS, MS

DATE: 1/3/2012	APPROVED:	DRAWN BY: C.T.J.
SCALE: AS SHOWN	BY: DATE:	CAD NO. KUHO-11-002

ENVIRONMENTAL MANAGEMENT SERVICES, INC.

FIGURE 1



MONITORING WELL DETAIL

GROUNDWATER MONITORING WELL INSTALLATION

KUHLMAN ELECTRIC CORPORATION
CRYSTAL SPRINGS, MS

DATE: 9/27/2011	APPROVED: BY: _____ DATE: _____	DRAWN BY: KRK
SCALE: N.T.S.		CAD NO. KUHLMAN MON WELL

ENVIRONMENTAL
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FIGURE

2

ATTACHMENT 1


BORING LOGS

Project No.: KUH0-11-007 Northing: 905732.67 Geologist: EA
 Project: KEC Easting: 2289252.21 Drill Method: Sonic
 Location: Crystal Springs, MS rd. Elev: 470.03 Driller: WHE
 Date: 11-11-11 Total Depth (ft. bls) 90.0 Checked By: _____

Page: 1 of 3

Boring No.: MW-30

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SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
0		Ground Surface			
		Not Sampled			
5				0.2	
		Light brown somewhat soft Silty CLAY		0.3	
				0.1	
10		Reddish orange Clayey SAND with Gravel		1.0	
		6" seam soft CLAY with Gravel		0.5	
				0.6	
		Very hard, indurated		0.0	
15		No Recovery		135.5	
		Brown soft CLAY		31.7	
		Yellowish brown Clayey SAND with Gravel		16.2	
20		Sand becoming coarser		1.7	
				2.8	
				4.5	
25		Gray SILT with fine-grained Sand		2.2	
		Yellowish orange coarse-grained SAND with Gravel		1.3	
		Whit coarse-grained SAND with Gravel		1.0	
30				2.1	
		White medium-grained SAND with Silt and Gravel		0.8	
35				4.6	

NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT GDT 2/17/12






Project No.: KUH0-11-007 Northing: 905732.67 Geologist: EA
 Project: KEC Easting: 2289252.21 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 470.03 Driller: WHE
 Date: 11-11-11 Total Depth (ft. bls) 90.0 Checked By: _____

Page: 2 of 3

Boring No.: MW-30

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV.MANAGEMENT.GDT 2/17/12


SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
35		Sand becoming coarser		0.6	
		No Recovery			
40		White to gray fine-grained SAND with some Gravel		2.3	
		6" layer dark brown Sandy SILT		0.9	
45				8.1	
		Very large GRAVEL		5.1	
		No Recovery			
50		Light gray well graded SAND with Gravel		0.4	
				1.0	
				3.1	
55		No Recovery			
				13.6	
60		Yellow to light gray well graded SAND with Gravel			
		4" Sandy CLAY with Gravel		3.2	
		White fine-grained SAND with some Silt		3.2	
65		No Recovery			
70					

Project No.: KUH0-11-007 Northing: 905508.44 Geologist: EA
 Project: KEC Easting: 2289533.63 Drill Method: Sonic
 Location: Crystal Springs, MS Elev: 468.27 Driller: WHE
 Date: 11-12-11 Total Depth (ft. bls) 80.0 Checked By: _____

Page: 1 of 3

Boring No.: MW-31

ENVIRONMENTAL 
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SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
0		Ground Surface			
5		Not sampled			
		Brown soft Silty CLAY		0.5	
				0.4	
				0.6	
10		Cemented Clayey SAND and Gravel			
		Brown soft Silty CLAY		12.8	
15		Red to orange cemented Clayey SAND with Gravel		21.9	
20		Light gray SILT		0.3	
25		No Recovery			
30					

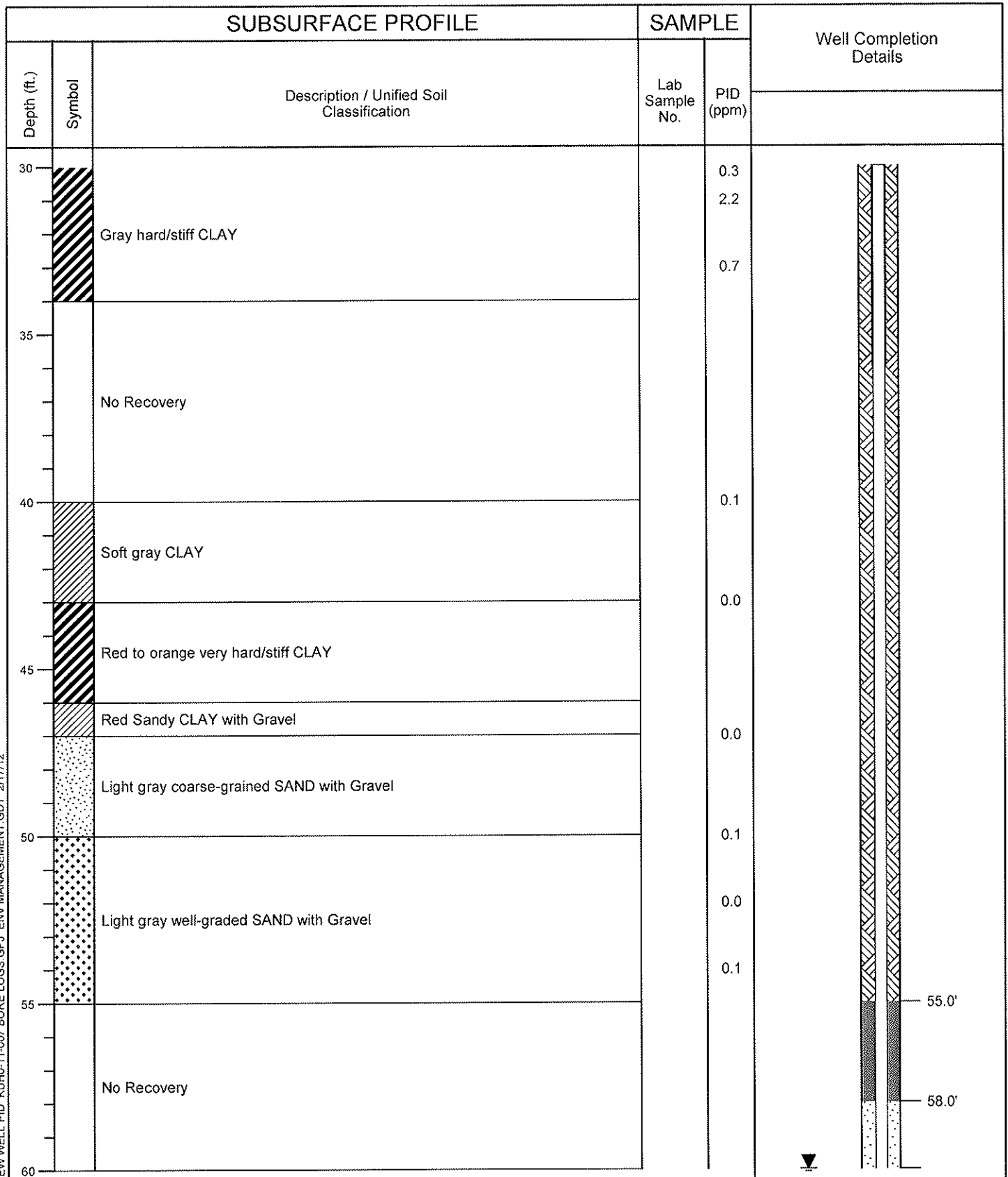
NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

Project No.: KUH0-11-007 Northing: 905508.44 Geologist: EA
 Project: KEC Easting: 2289533.63 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 468.27 Driller: WHE
 Date: 11-12-11 Total Depth (ft. bls) 80.0 Checked By: _____

Page: 2 of 3

Boring No.: MW-31

ENVIRONMENTAL 
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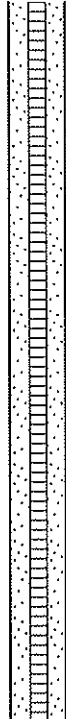





Project No.: KUH0-11-007 Northing: 905508.44 Geologist: EA
 Project: KEC Easting: 2289533.63 Drill Method: Sonic
 Location: Crystal Springs, MS Elev: 468.27 Driller: WHE
 Date: 11-12-11 Total Depth (ft. bls) 80.0 Checked By: _____

Page: 3 of 3

Boring No.: MW-31

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
60		GRAVEL with Sand		0.3	 60.0'
		Light gray Clayey SAND		0.1	
		Light gray coarse-grained SAND with fine Gravel		0.1	
65		No Recovery			
70		Light gray fine-grained SAND		0.1	
		6" seam with Gravel			 75.0'
75		No Recovery			
80		Total Depth = 80 feet			
85					
90					

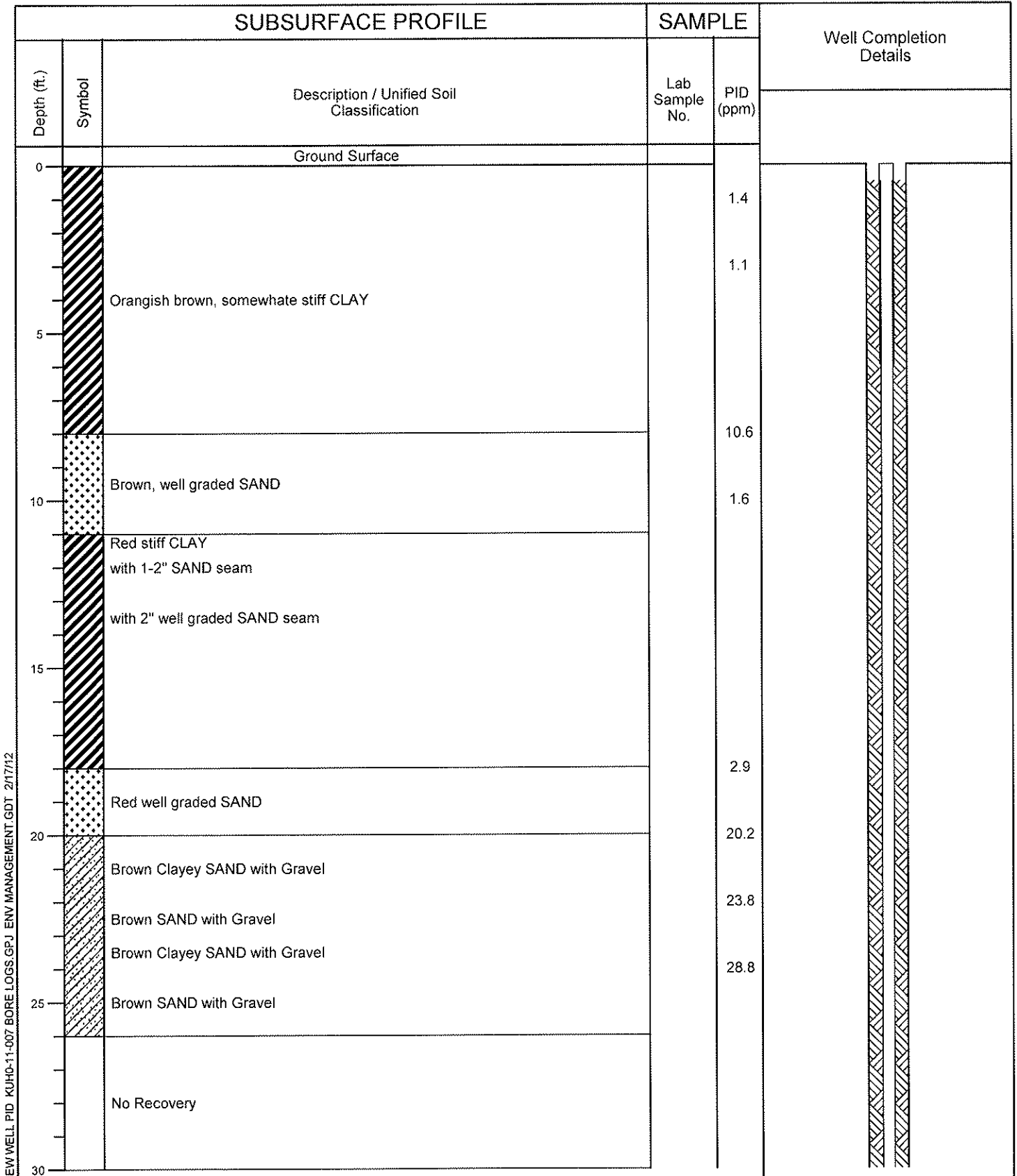
NEW WELL PID KUH0-11-007 BORE LOGS G.P.J. ENV MANAGEMENT, GDT 2/17/12

Project No.: KUH0-11-007 Northing: 905235.90 Geologist: EA
 Project: KEC Easting: 2287336.12 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 462.88 Driller: WHE
 Date: 11-08-11 Total Depth (ft. b/s) 100.0 Checked By: _____

Page: 1 of 4

Boring No.: MW-32

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.




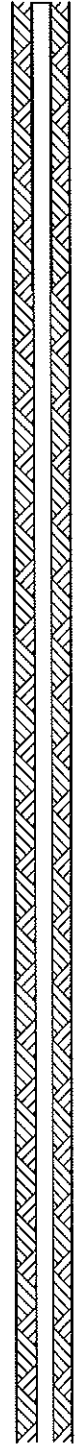










NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

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 Date: 11-08-11 Total Depth (ft. bls) 100.0 Checked By: _____

Page: 2 of 4

Boring No.: MW-32

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
30		Brown SAND with Gravel			
		Gray SAND with Gravel		23.7	
		Light orange Clay SAND with Gravel		4.2	
35		Reddish Sandy Clayey GRAVEL		5.9	
		No Recovery		0.8	
40		Brownish gray Clayey SAND and GRAVEL		3.8	
		Reddish orange Clayey SAND and GRAVEL		0.1	
45		Orange well graded SAND with Gravel		0.4	
		to red color with more Gravel		1.0	
		No Recovery			
50		Brownish gray Clayey SAND with Gravel		0.5	
		Brown to red SAND and GRAVEL		1.0	
		Brownish Clayey SAND with Gravel			
55		Yellow to red to brown well graded SAND with Gravel			
		No Recovery		2.3	
60					

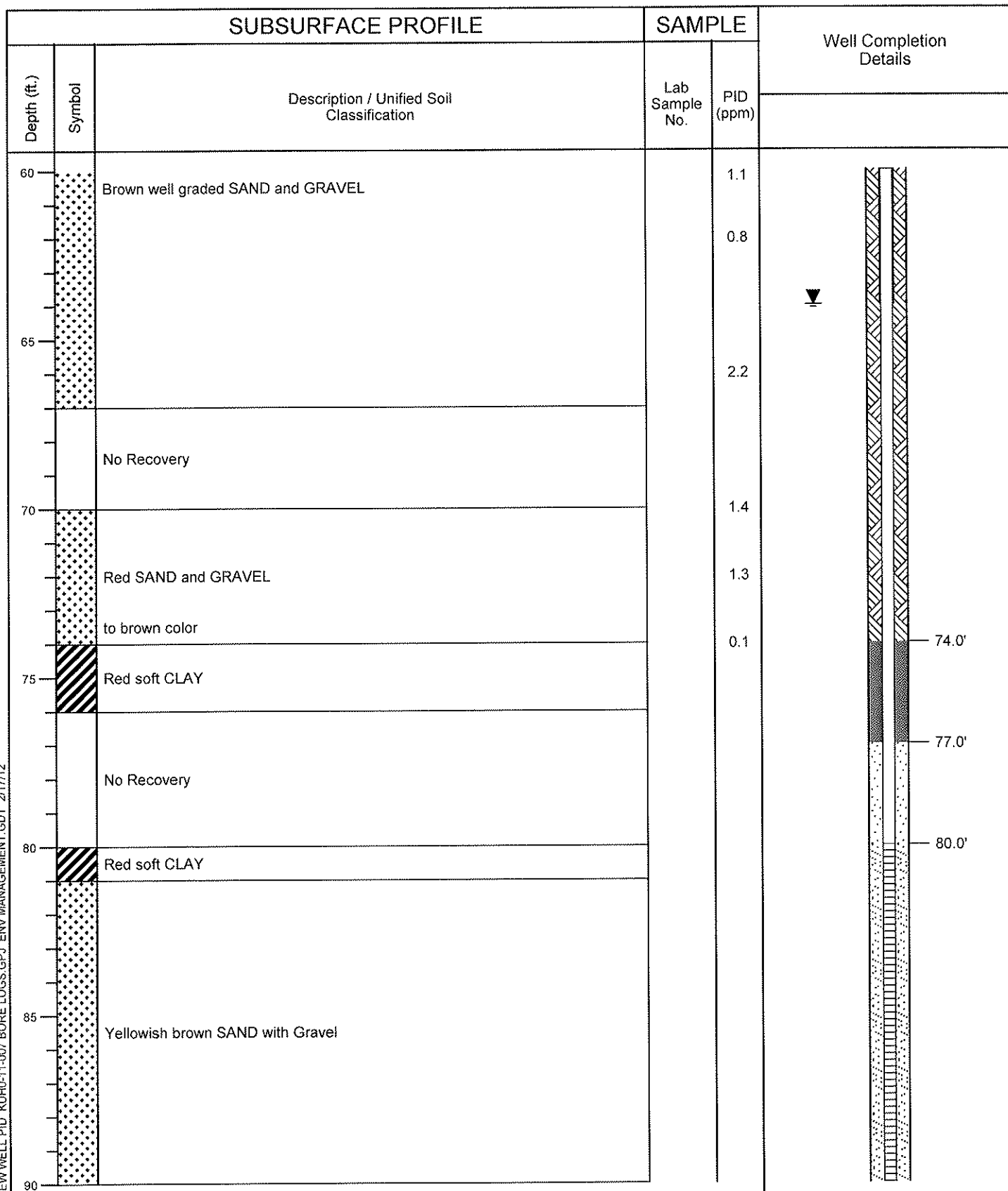
NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV.MANAGEMENT.GDT 2/17/12

Project No.: KUH0-11-007 Northing: 905235.90 Geologist: EA
 Project: KEC Easting: 2287336.12 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 462.88 Driller: WHE
 Date: 11-08-11 Total Depth (ft. b/s) 100.0 Checked By: _____

Page: 3 of 4

Boring No.: MW-32

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.




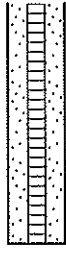
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Project No.: KUH0-11-007 Northing: 905235.90 Geologist: EA
 Project: KEC Easting: 2287336.12 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 462.88 Driller: WHE
 Date: 11-08-11 Total Depth (ft. b/s) 100.0 Checked By: _____

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Boring No.: **MW-32**

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
90		Grayish brown well graded SAND		0.2	
				0.3	
95				0.3	
		No Recovery			
100		Total Depth = 100 feet			
105					
110					
115					
120					


NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

Project No.: KUH0-11-007 Northing: 905213.62 Geologist: EA
 Project: KEC Easting: 2286823.32 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 461.12 Driller: WHE
 Date: 11-09-11 Total Depth (ft. bls) 100.0 Checked By: _____

Page: 1 of 4

Boring No.: MW-33

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

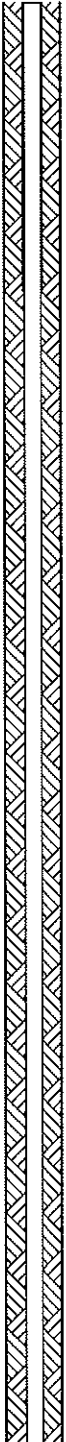
SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
0		Ground Surface			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15		Not Sampled			
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Project No.: KUH0-11-007 Northing: 905213.62 Geologist: EA
 Project: KEC Easting: 2286823.32 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 461.12 Driller: WHE
 Date: 11-09-11 Total Depth (ft. bls) 100.0 Checked By: _____

Page: 2 of 4

Boring No.: MW-33

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

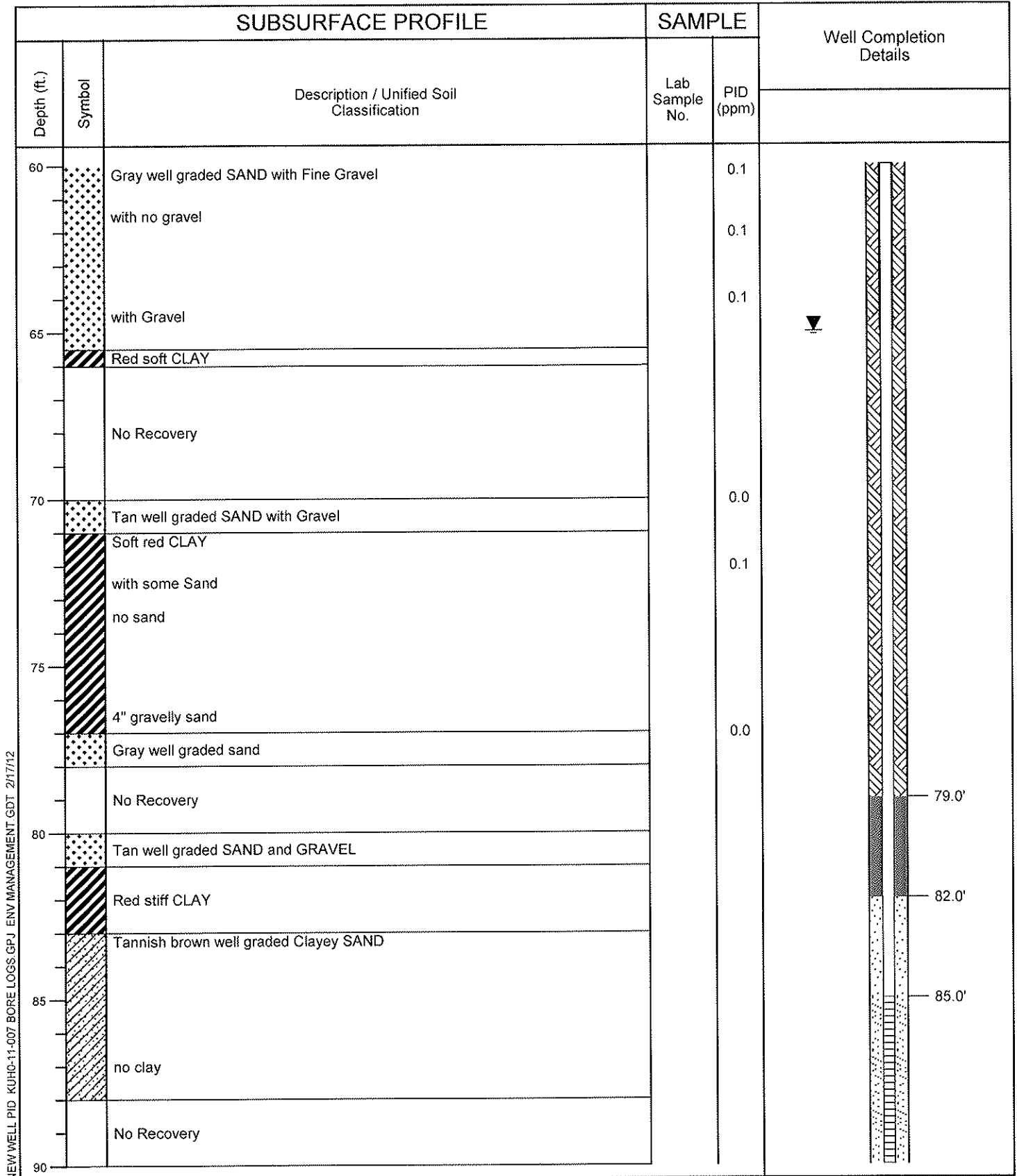
SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
30		Not Sampled (Continued)			
35					
40					
45					
50					
55					
60					

Project No.: KUH0-11-007 Northing: 905213.62 Geologist: EA
 Project: KEC Easting: 2286823.32 Drill Method: Sonic
 Location: Crystal Springs, MS Elev: 461.12 Driller: WHE
 Date: 11-09-11 Total Depth (ft. b/s) 100.0 Checked By: _____

Page: 3 of 4

Boring No.: MW-33

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.


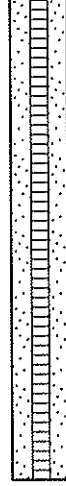


Project No.: KUH0-11-007 Northing: 905213.62 Geologist: EA
 Project: KEC Easting: 2286823.32 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 461.12 Driller: WHE
 Date: 11-09-11 Total Depth (ft. bls) 100.0 Checked By: _____

Page: 4 of 4

Boring No.: MW-33

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.


SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
90		Tan fine-grained SAND			 100.0'
95		Reddish tan coarse-grained SAND			
		3" Sandy CLAY sear			
		No Recovery			
100		Total Depth = 100 feet			
105					
110					
115					
120					

NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

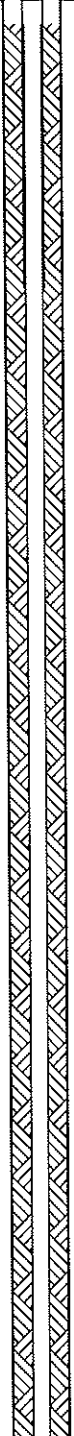
Project No.:	<u>KUH0-11-007</u>	Northing:	<u>902868.08</u>	Geologist:	<u>EA</u>
Project:	<u>KEC</u>	Easting:	<u>2288043.49</u>	Drill Method:	<u>Sonic</u>
Location:	<u>Crystal Springs, MS</u>	Grd. Elev:	<u>457.36</u>	Driller:	<u>WHE</u>
Date:	<u>11-10-11</u>	Total Depth (ft. bis)	<u>110.0</u>	Checked By:	<u></u>

Page: 1 of 4

Boring No.: MW-34



ENVIRONMENTAL
MANAGEMENT SERVICES, INC.

SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
0		Ground Surface			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15		Not Sampled			
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					


NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

Project No.: KUH0-11-007 Northing: 902868.08 Geologist: EA
 Project: KEC Easting: 2288043.49 Drill Method: Sonic
 Location: Crystal Springs, MO Grd. Elev: 457.36 Driller: WHE
 Date: 11-10-11 Total Depth (ft. b/s) 110.0 Checked By: _____

Page: 2 of 4

Boring No.: MW-34

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.

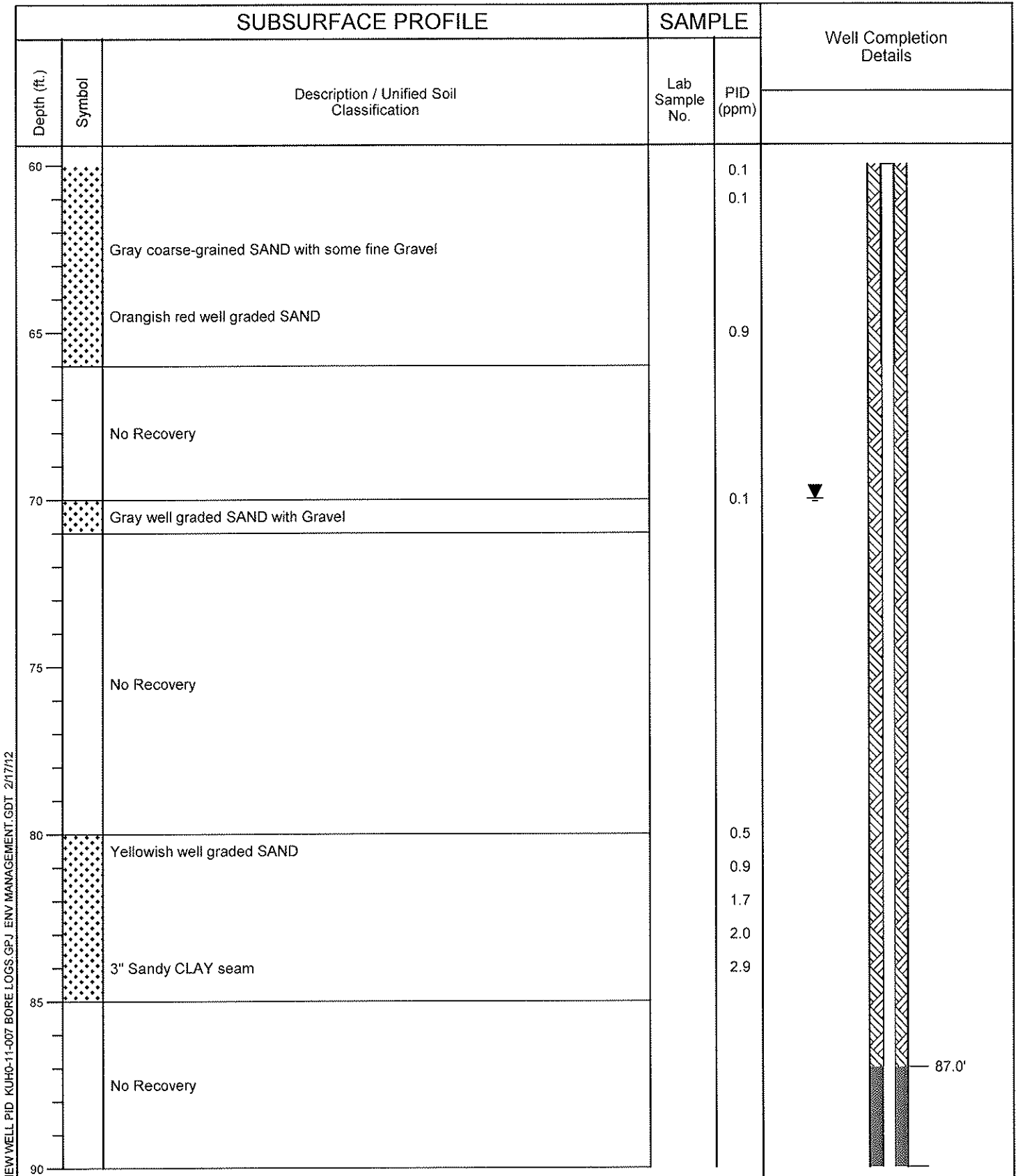
SUBSURFACE PROFILE			SAMPLE		Well Completion Details
Depth (ft.)	Symbol	Description / Unified Soil Classification	Lab Sample No.	PID (ppm)	
30		Not Sampled (Continued)			
35					
40					
45					
50					
55					
60					

Project No.: KUH0-11-007 Northing: 902868.08 Geologist: EA
 Project: KEC Easting: 2288043.49 Drill Method: Sonic
 Location: Crystal Springs, MS rd. Elev: 457.36 Driller: WHE
 Date: 11-10-11 Total Depth (ft. b/s) 110.0 Checked By: _____

Page: 3 of 4

Boring No.: MW-34

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.



NEW WELL PID KUH0-11-007 BORE LOGS GPJ ENV MANAGEMENT.GDT 2/17/12

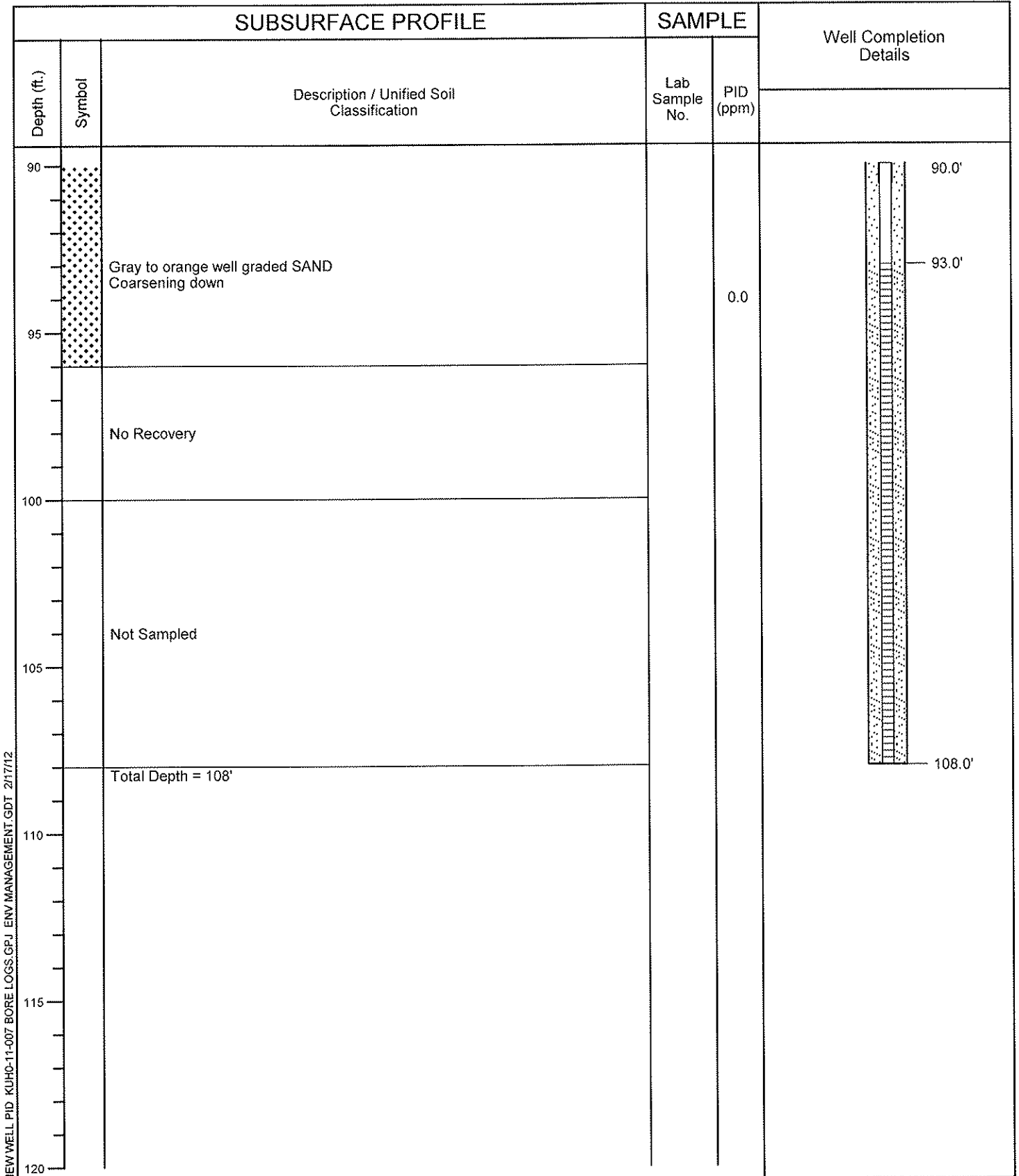
87.0'

Project No.: KUH0-11-007 Northing: 902868.08 Geologist: EA
 Project: KEC Easting: 2288043.49 Drill Method: Sonic
 Location: Crystal Springs, MS Grd. Elev: 457.36 Driller: WHE
 Date: 11-10-11 Total Depth (ft. b/s) 110.0 Checked By: _____

Page: 4 of 4

Boring No.: MW-34

ENVIRONMENTAL 
 MANAGEMENT SERVICES, INC.



NEW WELL PID KUH0-11-007 BORE LOGS.GPJ ENV MANAGEMENT.GDT 2/17/12

ATTACHMENT 2

**FIELD LOGS
DECEMBER 1 & 2, 2011 SAMPLING EVENT**

Well Number Mw-30

Monitoring Well Information

10:25^{am}

12/1/11

Method of sampling	BALDER
--------------------	--------

Gallons per well volume	3.15
-------------------------	------

Total gallons evacuated	10 6.41
-------------------------	---------

Sample Data

[illegible]

General Information

Weather Condition:

Sample Characteristics:

Containers/Amounts KEP-6W-036-001 3vials

Recommend/Observations

Sampler/Collector

Stabilization recommendations: Three successive readings within +/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for ORP, and +/- 10% for turbidity and DO. *these are rough estimates*

Well Casing Volumes[gal/ft]				
1/2"=0.0205	1"=0.041	2"=0.16	3"=0.37	4"=0.65
3/4"=0.3075	1 1/2"=0.10	2 1/2"=0.24	3 1/2"=0.50	4 1/2"=1.46

Site KEC Well Number MW-31
Collector/Operator ETHAN ALLEN

Monitoring Well Information

Evacuation date/time	12/2/11 1530	Sampling date/time	12/2/11 16:45
Method of evacuation	BAILEY	Method of sampling	BAILEY
Top of casing to water	63.30	Gallons per well volume	1.8
Top of casing to bottom	74.82	Total gallons evacuated	1.7
Water level after evacuation	64.81		

Sample Data

[illegible]

General Information

Weather Condition: _____

Sample Characteristics: TURBID, CLEARED UP BY SAMPLING.

Containers/Amounts 6 ver's REP-6W-031-001

Recommend/Observations	
------------------------	--

Sampler/Collector EP all

Stabilization recommendations: Three successive readings within +/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for ORP, and +/- 10% for turbidity and DO. *these are rough estimates*

Well Casing Volumes[gal/ft]				
1/2"=0.0205	1"=0.041	2"=0.16	3"=0.37	4"=0.65
3/4"=0.3075	1 1/2"=0.10	2 1/2"=0.24	3 1/2"=0.50	4 1/2"=1.46

Monitoring Well Information

Sample Data

General Information

Stabilization recommendations: Three successive readings within +/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for ORP, and +/- 10% for turbidity and DO. *these are rough estimates*

Well Casing Volumes[gal/ft]				
1/2"=0.0205	1"=0.041	2"=0.16	3"=0.37	4"=0.65
3/4"=0.3075	1 1/2"=0.10	2 1/2"=0.24	3 1/2"=0.50	4 1/2"=1.46

Collector/Operator Erhan Allen

Evacuation date/time	12/2/11	0630	Sampling date/time	12/2/11	0900
Method of evacuation	BAILER		Method of sampling	BAILER	
Top of casing to water	59.47		Gallons per well volume	7.2	
Top of casing to bottom	104.62		Total gallons evacuated	25	
Water level after evacuation	59.48				

[illegible]

Weather Condition: _____

Sample Characteristics:

Containers/Amounts	KEP-GW-033-001	3 VOA
	SPUR in MDEQ	

Recommend/Observations	
------------------------	--

Sampler/Collector

Stabilization recommendations: Three successive readings within +/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for ORP, and +/- 10% for turbidity and DO. *these are rough estimates*

Well Casing Volumes[gal/ft]				
1/2"=0.0205	1"=0.041	2"=0.16	3"=0.37	4"=0.65
3/4"=0.3075	1 1/2"=0.10	2 1/2"=0.24	3 1/2"=0.50	4 1/2"=1.46

Well Number MW-34

Monitoring Well Information

Sampling date/time 12/1/11 1600

Method of sampling BAILER

Gallons per well volume	7.5
-------------------------	-----

Total gallons evacuated	22.5
-------------------------	------

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Journal compilation © 2006 Blackwell Publishing Ltd

Sample Data

General Information

Sample Characteristics:

SPLIT w/ MPDQ

Recommend/Observations

Stabilization recommendations: Three successive readings within +/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for ORP, and +/- 10% for turbidity and DO. *these are rough estimates*

Well Casing Volumes[gal/ft]

1/2"=0.0205	1"=0.041	2"=0.16	3"=0.37	4"=0.65
3/4"=0.3075	1 1/2"=0.10	2 1/2"=0.24	3 1/2"=0.50	4 1/2"=1.46

ATTACHMENT 3

**PACE ANALYTICAL REPORT
DECEMBER 1 & 2, 2011 SAMPLING EVENT**

December 16, 2011

Ethan Allen
Environmental Management Services
7350 Hwy 98
P.O. Box 15369
Hattiesburg, MS 39404

RE: Project: KEL Groundwater
Pace Project No.: 10177374

Dear Ethan Allen:

Enclosed are the analytical results for sample(s) received by the laboratory on December 03, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Michelle Hubbling

michelle.hubbling@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Page 1 of 8

CERTIFICATIONS

Project: KEL Groundwater

Pace Project No.: 10177374

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

EPA Region 8 Certification #: Pace

Florida/NELAP Certification #: E87605

Georgia Certification #: 959

Idaho Certification #: MN00064

Illinois Certification #: 200011

Iowa Certification #: 368

Kansas Certification #: E-10167

Louisiana Certification #: 03086

Louisiana Certification #: LA080009

Maine Certification #: 2007029

Maryland Certification #: 322

Michigan DEQ Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT CERT0092

Nevada Certification #: MN_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New Mexico Certification #: Pace

New York Certification #: 11647

North Carolina Certification #: 530

North Dakota Certification #: R-036

North Dakota Certification #: R-036A

Ohio VAP Certification #: CL101

Oklahoma Certification #: D9921

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Tennessee Certification #: 02818

Texas Certification #: T104704192

Washington Certification #: C754

Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

Page 2 of 8

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SAMPLE SUMMARY

Project: KEL Groundwater

Pace Project No.: 10177374

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10177374001	KEP-GW-0300-001	Water	12/01/11 12:00	12/03/11 08:00
10177374002	TRIP BLANK	Water	12/01/11 12:00	12/03/11 08:00
10177374003	KEL-GW-034-001	Water	12/01/11 16:00	12/03/11 08:00
10177374004	KEL-GW-033-001	Water	12/02/11 09:00	12/03/11 08:00
10177374005	KEL-GW-032-001	Water	12/02/11 11:25	12/03/11 08:00
10177374006	KEL-GW-031-001	Water	12/02/11 16:45	12/03/11 08:00
10177374007	KEL-GW-DUP-001	Water	12/02/11 08:00	12/03/11 08:00

REPORT OF LABORATORY ANALYSIS

Page 3 of 8

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SAMPLE ANALYTE COUNT

Project: KEL Groundwater

Pace Project No.: 10177374

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10177374001	KEP-GW-0300-001	EPA 8260B Mod.	ECB	3	PASI-M
10177374003	KEL-GW-034-001	EPA 8260B Mod.	ECB	3	PASI-M
10177374004	KEL-GW-033-001	EPA 8260B Mod.	ECB	3	PASI-M
10177374005	KEL-GW-032-001	EPA 8260B Mod.	ECB	3	PASI-M
10177374006	KEL-GW-031-001	EPA 8260B Mod.	ECB	3	PASI-M
10177374007	KEL-GW-DUP-001	EPA 8260B Mod.	ECB	3	PASI-M

REPORT OF LABORATORY ANALYSIS

Page 4 of 8

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ANALYTICAL RESULTS

Project: KEL Groundwater

Pace Project No.: 10177374

Sample: KEP-GW-0300-001		Lab ID: 10177374001		Collected: 12/01/11 12:00		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM Analytical Method: EPA 8260B Mod.									
1,4-Dioxane (SIM)	2.1J	ug/L	3.0	0.51	1		12/12/11 16:00	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101 %		75-125		1		12/12/11 16:00	17060-07-0	
Toluene-d8 (S)	101 %		75-125		1		12/12/11 16:00	2037-26-5	

Sample: KEL-GW-034-001		Lab ID: 10177374003		Collected: 12/01/11 16:00		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM Analytical Method: EPA 8260B Mod.									
1,4-Dioxane (SIM)	6.6	ug/L	3.0	0.51	1		12/12/11 16:19	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101 %		75-125		1		12/12/11 16:19	17060-07-0	
Toluene-d8 (S)	100 %		75-125		1		12/12/11 16:19	2037-26-5	

Sample: KEL-GW-033-001		Lab ID: 10177374004		Collected: 12/02/11 09:00		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM Analytical Method: EPA 8260B Mod.									
1,4-Dioxane (SIM)	0.60J	ug/L	3.0	0.51	1		12/12/11 16:38	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101 %		75-125		1		12/12/11 16:38	17060-07-0	
Toluene-d8 (S)	100 %		75-125		1		12/12/11 16:38	2037-26-5	

Sample: KEL-GW-032-001		Lab ID: 10177374005		Collected: 12/02/11 11:25		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM Analytical Method: EPA 8260B Mod.									
1,4-Dioxane (SIM)	0.74J	ug/L	3.0	0.51	1		12/12/11 16:59	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101 %		75-125		1		12/12/11 16:59	17060-07-0	
Toluene-d8 (S)	100 %		75-125		1		12/12/11 16:59	2037-26-5	

ANALYTICAL RESULTS

Project: KEL Groundwater

Pace Project No.: 10177374

Sample: KEL-GW-031-001		Lab ID: 10177374006		Collected: 12/02/11 16:45		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM		Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	0.51	1		12/12/11 17:19	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%	75-125		1		12/12/11 17:19	17060-07-0	
Toluene-d8 (S)	101	%	75-125		1		12/12/11 17:19	2037-26-5	

Sample: KEL-GW-DUP-001		Lab ID: 10177374007		Collected: 12/02/11 08:00		Received: 12/03/11 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM		Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	0.63J	ug/L	3.0	0.51	1		12/12/11 17:39	123-91-1	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%	75-125		1		12/12/11 17:39	17060-07-0	
Toluene-d8 (S)	100	%	75-125		1		12/12/11 17:39	2037-26-5	

QUALITY CONTROL DATA

Project: KEL Groundwater

Pace Project No.: 10177374

QC Batch: MSV/18865 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 10177374001, 10177374003, 10177374004, 10177374005, 10177374006, 10177374007

METHOD BLANK: 1113669 Matrix: Water
Associated Lab Samples: 10177374001, 10177374003, 10177374004, 10177374005, 10177374006, 10177374007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	ND	3.0	12/12/11 15:41	
1,2-Dichloroethane-d4 (S)	%	100	75-125	12/12/11 15:41	
Toluene-d8 (S)	%	101	75-125	12/12/11 15:41	

LABORATORY CONTROL SAMPLE & LCSD: 1113670		1115054								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (SIM)	ug/L	20	19.6	19.8	98	99	75-125	.7	20	
1,2-Dichloroethane-d4 (S)	%				100	100	75-125			
Toluene-d8 (S)	%				101	101	75-125			

QUALIFIERS

Project: KEL Groundwater
Pace Project No.: 10177374

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

BATCH QUALIFIERS

Batch: MSV/18865

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.



Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

December 12, 2011

Michelle Hubbling
PASI Minnesota
1700 Elm Street
Suite 200
Minneapolis, MN 55414

RE: Project 20131921
Project ID: 10177374/EMS

Dear Michelle Hubbling:

Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 2011. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen Brown", written in a cursive style.

Karen Brown
karen.brown@pacelabs.com



REPORT OF LABORATORY ANALYSIS

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Cover No Results 12/12/2011 11:4



Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Client: PASI Minnesota

Project ID: 10177374/EMS

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

12/12/2011 11:41:10



REPORT OF LABORATORY ANALYSIS

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Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Client: PASI Minnesota

Project ID: 10177374/EMS

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
KEP-GW-030-001	20942653	Water	01-Dec-11 12:00	06-Dec-11 09:40
TRIP BLANK	20942654	Water	01-Dec-11 12:00	06-Dec-11 09:40
KEL-GW-034-001	20942655	Water	01-Dec-11 16:00	06-Dec-11 09:40
KEL-GW-033-001	20942656	Water	02-Dec-11 09:00	06-Dec-11 09:40
KEL-GW-032-001	20942657	Water	02-Dec-11 11:25	06-Dec-11 09:40
KEL-GW-031-001	20942658	Water	02-Dec-11 16:45	06-Dec-11 09:40
KEL-GW-DUP-001	20942659	Water	02-Dec-11 08:00	06-Dec-11 09:40



Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Narrative detail for project management:

This is a resubmitted report. At the request of the client, the results in this project are reported with "J" flags.



Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.



QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Analytical Method	Batch	Sample used for QC
EPA 8260	173782	Batch sample from another client

Narrative1 12/12/2011 11:42:10

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.

Client sample means a sample from the same client but in a different project was used.

Batch sample means a sample from a different client was used.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEP-GW-030-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942653

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 01-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	4.64	J	10.0	1.95		07-Dec-11 13:30 RMP
71-43-2	Benzene	1	0.540	J	5.00	0.350		07-Dec-11 13:30 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 13:30 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 13:30 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 13:30 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 13:30 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 13:30 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 13:30 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 13:30 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 13:30 RMP
67-66-3	Chloroform	1	0.530	J	5.00	0.334		07-Dec-11 13:30 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 13:30 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 13:30 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 13:30 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 13:30 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 13:30 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 13:30 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 13:30 RMP
75-35-4	1,1-Dichloroethene	1	2.82	J	5.00	0.443		07-Dec-11 13:30 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 13:30 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 13:30 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 13:30 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 13:30 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 13:30 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 13:30 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 13:30 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 13:30 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 13:30 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 13:30 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 13:30 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 13:30 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 13:30 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 13:30 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 13:30 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEP-GW-030-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942653

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

GCMS VOAs Water

Collected: 01-Dec-11

Received: 06-Dec-11

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 13:30 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 13:30 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 13:30 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 13:30 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 13:30 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 13:30 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 13:30 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 13:30 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: TRIP BLANK

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942654

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 01-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 13:51 RMP
71-43-2	Benzene	1	0.530	J	5.00	0.350		07-Dec-11 13:51 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 13:51 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 13:51 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 13:51 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 13:51 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 13:51 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 13:51 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 13:51 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 13:51 RMP
67-66-3	Chloroform	1	ND		5.00	0.334		07-Dec-11 13:51 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 13:51 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 13:51 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 13:51 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 13:51 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 13:51 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 13:51 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 13:51 RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.443		07-Dec-11 13:51 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 13:51 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 13:51 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 13:51 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 13:51 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 13:51 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 13:51 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 13:51 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 13:51 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 13:51 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 13:51 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 13:51 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 13:51 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 13:51 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 13:51 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 13:51 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: TRIP BLANK

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942654

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

GCMS VOAs Water

Collected: 01-Dec-11

Received: 06-Dec-11

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 13:51 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 13:51 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 13:51 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 13:51 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 13:51 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 13:51 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 13:51 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 13:51 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-034-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942655

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 01-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 14:12 RMP
71-43-2	Benzene	1	ND		5.00	0.350		07-Dec-11 14:12 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 14:12 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 14:12 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 14:12 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 14:12 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 14:12 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 14:12 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 14:12 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 14:12 RMP
67-66-3	Chloroform	1	ND		5.00	0.334		07-Dec-11 14:12 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 14:12 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 14:12 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 14:12 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 14:12 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 14:12 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 14:12 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 14:12 RMP
75-35-4	1,1-Dichloroethene	1	13.0		5.00	0.443		07-Dec-11 14:12 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 14:12 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 14:12 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 14:12 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 14:12 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 14:12 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 14:12 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 14:12 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 14:12 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 14:12 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 14:12 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 14:12 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 14:12 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 14:12 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 14:12 RMP
127-18-4	Tetrachloroethene	1	0.510	J	5.00	0.251		07-Dec-11 14:12 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-034-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942655

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

GCMS VOAs Water

Collected: 01-Dec-11

Received: 06-Dec-11

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 14:12 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 14:12 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 14:12 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 14:12 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 14:12 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 14:12 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 14:12 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 14:12 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-033-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942656

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 14:33 RMP
71-43-2	Benzene	1	ND		5.00	0.350		07-Dec-11 14:33 RMP
75-27-4	Bromodichloromethane	1	0.820	J	5.00	0.353		07-Dec-11 14:33 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 14:33 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 14:33 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 14:33 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 14:33 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 14:33 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 14:33 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 14:33 RMP
67-66-3	Chloroform	1	1.88	J	5.00	0.334		07-Dec-11 14:33 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 14:33 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 14:33 RMP
124-48-1	Dibromochloromethane	1	0.560	J	5.00	0.335		07-Dec-11 14:33 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 14:33 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 14:33 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 14:33 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 14:33 RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.443		07-Dec-11 14:33 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 14:33 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 14:33 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 14:33 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 14:33 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 14:33 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 14:33 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 14:33 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 14:33 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 14:33 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 14:33 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 14:33 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 14:33 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 14:33 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 14:33 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 14:33 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-033-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942656

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 14:33 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 14:33 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 14:33 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 14:33 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 14:33 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 14:33 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 14:33 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 14:33 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-032-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942657

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 14:54 RMP
71-43-2	Benzene	1	ND		5.00	0.350		07-Dec-11 14:54 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 14:54 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 14:54 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 14:54 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 14:54 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 14:54 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 14:54 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 14:54 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 14:54 RMP
67-66-3	Chloroform	1	ND		5.00	0.334		07-Dec-11 14:54 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 14:54 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 14:54 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 14:54 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 14:54 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 14:54 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 14:54 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 14:54 RMP
75-35-4	1,1-Dichloroethene	1	20.6		5.00	0.443		07-Dec-11 14:54 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 14:54 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 14:54 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 14:54 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 14:54 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 14:54 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 14:54 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 14:54 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 14:54 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 14:54 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 14:54 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 14:54 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 14:54 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 14:54 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 14:54 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 14:54 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-032-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942657

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

GCMS VOAs Water

Collected: 02-Dec-11

Received: 06-Dec-11

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 14:54 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 14:54 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 14:54 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 14:54 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 14:54 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 14:54 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 14:54 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 14:54 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-031-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942658

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 15:15 RMP
71-43-2	Benzene	1	0.680	J	5.00	0.350		07-Dec-11 15:15 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 15:15 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 15:15 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 15:15 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 15:15 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 15:15 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 15:15 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 15:15 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 15:15 RMP
67-66-3	Chloroform	1	ND		5.00	0.334		07-Dec-11 15:15 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 15:15 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 15:15 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 15:15 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 15:15 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 15:15 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 15:15 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 15:15 RMP
75-35-4	1,1-Dichloroethene	1	2.29	J	5.00	0.443		07-Dec-11 15:15 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 15:15 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 15:15 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 15:15 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 15:15 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 15:15 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 15:15 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 15:15 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 15:15 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 15:15 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 15:15 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 15:15 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 15:15 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 15:15 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 15:15 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 15:15 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-031-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942658

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 15:15 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 15:15 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 15:15 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 15:15 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 15:15 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 15:15 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 15:15 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 15:15 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-DUP-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942659

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

Collected: 02-Dec-11

Received: 06-Dec-11

GCMS VOAs Water

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	1.95		07-Dec-11 15:36 RMP
71-43-2	Benzene	1	ND		5.00	0.350		07-Dec-11 15:36 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353		07-Dec-11 15:36 RMP
75-25-2	Bromoform	1	ND		5.00	0.367		07-Dec-11 15:36 RMP
74-83-9	Bromomethane	1	ND		5.00	1.12		07-Dec-11 15:36 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976		07-Dec-11 15:36 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410		07-Dec-11 15:36 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452		07-Dec-11 15:36 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227		07-Dec-11 15:36 RMP
75-00-3	Chloroethane	1	ND		5.00	1.03		07-Dec-11 15:36 RMP
67-66-3	Chloroform	1	ND		5.00	0.334		07-Dec-11 15:36 RMP
74-87-3	Chloromethane	1	ND		5.00	0.316		07-Dec-11 15:36 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55		07-Dec-11 15:36 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335		07-Dec-11 15:36 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462		07-Dec-11 15:36 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456		07-Dec-11 15:36 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336		07-Dec-11 15:36 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525		07-Dec-11 15:36 RMP
75-35-4	1,1-Dichloroethene	1	21.0		5.00	0.443		07-Dec-11 15:36 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338		07-Dec-11 15:36 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446		07-Dec-11 15:36 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400		07-Dec-11 15:36 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326		07-Dec-11 15:36 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439		07-Dec-11 15:36 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306		07-Dec-11 15:36 RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557		07-Dec-11 15:36 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413		07-Dec-11 15:36 RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979		07-Dec-11 15:36 RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379		07-Dec-11 15:36 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571		07-Dec-11 15:36 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303		07-Dec-11 15:36 RMP
100-42-5	Styrene	1	ND		5.00	0.354		07-Dec-11 15:36 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615		07-Dec-11 15:36 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251		07-Dec-11 15:36 RMP

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: KEL-GW-DUP-001

Project: 20131921

Project ID: 10177374/EMS

Site: None

Lab ID: 20942659

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 173782

Method: EPA 8260

GCMS VOAs Water

Collected: 02-Dec-11

Received: 06-Dec-11

Prepared: 07-Dec-11

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.434		07-Dec-11 15:36 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458		07-Dec-11 15:36 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312		07-Dec-11 15:36 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400		07-Dec-11 15:36 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873		07-Dec-11 15:36 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331		07-Dec-11 15:36 RMP
	m&p-Xylene	1	ND		5.00	0.639		07-Dec-11 15:36 RMP
95-47-6	o-Xylene	1	ND		5.00	0.241		07-Dec-11 15:36 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol 12/12/2011 11:42:12
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 173782

Project: 20131921

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20942778	173782 BLANK 1		81	81	87					
20942779	173782 LCS 1		102	77	89					
20942658	KEL-GW-031-001		81	74	87					
20942657	KEL-GW-032-001		84	77	87					
20942656	KEL-GW-033-001		73	81	83					
20942655	KEL-GW-034-001		76	78	87					
20942659	KEL-GW-DUP-001		78	79	87					
20942653	KEP-GW-030-001		82	73	85					
20942780	PRETREATMENT 92 MS 1		99	76	87					
20942781	PRETREATMENT 92 MSD 1		100	80	91					
20942654	TRIP BLANK		78	77	87					

QC limits:

68-124

72-126

79-119

Sur 1: 4-Bromofluorobenzene (S)

Sur 2: Dibromofluoromethane (S)

Sur 3: Toluene-d8 (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.



Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 173782 **Project:** 20131921 **LCS:** 20942779 07-Dec-11 12:04
Method: Water GC/MS Volatile Organics **MS:** 20942780 07-Dec-11 16:18
Units: ug/L **MSD:** 20942781 07-Dec-11 16:40
Original for MS: Batch Sample 20942751

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits		Max	Qu
											LCS	MS/MSD	RPD	
Acetone	50.0	24.1	48	50.0	5.52	34.5	37.5	58	64	8	10-195	10-204	20	Q5
Benzene	50.0	43.4	87	50.0		47.9	50.6	96	101	5	66-132	58-140	20	Q5
Bromodichloromethane	50.0	48.1	96	50.0	4.76	54.1	55.9	99	102	3	67-132	63-137	20	Q5
Bromoform	50.0	51.1	102	50.0		51.4	50.7	103	101	1	53-152	49-156	20	Q5
Bromomethane	50.0	56.6	113	50.0		58.4	59.3	117	119	2	47-150	43-152	20	Q5
2-Butanone (MEK)	50.0	35.2	70	50.0		34.8	42.5	70	85	20	16-167	11-180	20	Q5
Carbon disulfide	50.0	31.7	63	50.0		52.5	53.7	105	108	2	18-173	10-184	20	Q5
Carbon tetrachloride	50.0	46.9	94	50.0		56.0	56.7	112	113	1	55-143	50-148	20	Q5
Chlorobenzene	50.0	50.5	101	50.0		51.4	52.1	103	104	1	71-131	69-136	20	Q5
Chloroethane	50.0	69.4	139	50.0		73.0	74.6	146	149	2	31-192	20-193	20	Q5
Chloroform	50.0	42.9	86	50.0	10.2	54.1	57.2	88	94	6	69-134	65-140	20	Q5
Chloromethane	50.0	42.1	84	50.0		43.8	47.0	88	94	7	29-157	27-160	20	Q5
1,2-Dibromo-3-chloropropane	50.0	57.7	115	50.0		57.7	59.0	115	118	2	37-151	34-159	20	Q5
Dibromochloromethane	50.0	49.0	98	50.0	1.09	50.5	52.5	99	103	4	61-138	59-143	20	Q5
1,2-Dibromoethane (EDB)	50.0	49.8	100	50.0		50.7	51.2	101	102	1	60-145	59-149	20	Q5
Dichlorodifluoromethane	50.0	56.8	114	50.0		60.2	62.6	120	125	4	10-179	10-173	20	Q5
1,1-Dichloroethane	50.0	40.3	81	50.0		47.1	48.6	94	97	3	62-137	59-143	20	Q5
1,2-Dichloroethane	50.0	50.8	102	50.0		55.9	58.0	112	116	4	59-145	58-151	20	Q5
1,1-Dichloroethene	50.0	34.9	70	50.0		51.9	52.6	104	105	1	46-156	32-169	20	Q5
cis-1,2-Dichloroethene	50.0	40.6	81	50.0		44.0	46.3	88	93	5	64-131	61-138	20	Q5
trans-1,2-Dichloroethene	50.0	35.2	70	50.0		44.3	45.8	89	92	3	55-138	51-145	20	Q5
1,2-Dichloropropane	50.0	45.3	91	50.0		48.1	49.3	96	99	3	65-130	63-134	20	Q5
cis-1,3-Dichloropropene	50.0	48.1	96	50.0		50.6	52.0	101	104	3	63-137	59-139	20	Q5
trans-1,3-Dichloropropene	50.0	54.2	108	50.0		56.5	57.6	113	115	2	61-143	57-149	20	Q5
Ethylbenzene	50.0	49.0	98	50.0		51.0	51.0	102	102	0	71-130	65-136	20	Q5
2-Hexanone	50.0	35.7	71	50.0		34.9	37.2	70	74	6	25-156	21-165	20	Q5
Isopropylbenzene (Cumene)	50.0	52.8	106	50.0		53.7	54.7	107	109	2	58-142	55-146	20	Q5
Methylene chloride	50.0	42.4	85	50.0		50.6	52.7	101	105	4	39-172	33-167	20	Q5
4-Methyl-2-pentanone (MIBK)	50.0	50.2	100	50.0		45.9	50.6	92	101	10	43-159	39-167	20	Q5
Methyl-tert-butyl ether	50.0	40.7	81	50.0		44.6	46.8	89	94	5	49-157	45-168	20	Q5
Styrene	50.0	53.1	106	50.0		48.5	49.1	97	98	1	72-134	62-141	20	Q5
1,1,2,2-Tetrachloroethane	50.0	53.0	106	50.0		53.1	55.1	106	110	4	40-157	35-164	20	Q5
Tetrachloroethene	50.0	46.1	92	50.0		48.5	48.2	97	96	1	55-156	44-162	20	Q5
Toluene	50.0	47.8	96	50.0		50.5	51.2	101	102	1	68-131	60-137	20	Q5
1,1,1-Trichloroethane	50.0	42.3	85	50.0		48.4	50.3	97	101	4	63-133	58-139	20	Q5
1,1,2-Trichloroethane	50.0	49.7	100	50.0		52.2	53.5	104	107	2	64-135	61-140	20	Q5
Trichloroethene	50.0	44.0	88	50.0		48.9	50.1	98	100	2	68-134	58-145	20	Q5
Trichlorofluoromethane	50.0	60.3	121	50.0		64.8	65.7	130	131	1	39-185	15-192	20	Q5
Vinyl chloride	50.0	48.0	96	50.0		50.4	52.6	101	105	4	40-152	32-157	20	Q5
m&p-Xylene	100.	98.6	99	100.		98.2	100.	98	100	2	68-134	62-139	20	Q5
o-Xylene	50.0	47.3	95	50.0		48.1	48.4	96	97	1	67-131	61-137	20	Q5

* denotes recovery outside of QC limits.

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 12/12/2011 11:42:15



Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 173782

Project: 20131921

LCS: 20942779 07-Dec-11 12:04

Method: Water GC/MS Volatile Organics

MS: 20942780 07-Dec-11 16:18

Units: ug/L

MSD: 20942781 07-Dec-11 16:40

Original for MS: Batch Sample 20942751

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
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41 compound(s) reported



Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 173782 BLANK 1

Project: 20131921

Lab ID: 20942778

Prep Level: Water

Batch: 173782

Method: Water GC/MS Volatile Organics

Prepared: 07-Dec-11

						Units: <u>ug/L</u>		
CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
67-64-1	Acetone	1	ND		10.0	1.95	07-Dec-11 11:43	RMP
71-43-2	Benzene	1	ND		5.00	0.350	07-Dec-11 11:43	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.353	07-Dec-11 11:43	RMP
75-25-2	Bromoform	1	ND		5.00	0.367	07-Dec-11 11:43	RMP
74-83-9	Bromomethane	1	ND		5.00	1.12	07-Dec-11 11:43	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	0.976	07-Dec-11 11:43	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.410	07-Dec-11 11:43	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.452	07-Dec-11 11:43	RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.227	07-Dec-11 11:43	RMP
75-00-3	Chloroethane	1	ND		5.00	1.03	07-Dec-11 11:43	RMP
67-66-3	Chloroform	1	ND		5.00	0.334	07-Dec-11 11:43	RMP
74-87-3	Chloromethane	1	ND		5.00	0.316	07-Dec-11 11:43	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	1.55	07-Dec-11 11:43	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.335	07-Dec-11 11:43	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.462	07-Dec-11 11:43	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.456	07-Dec-11 11:43	RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.336	07-Dec-11 11:43	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.525	07-Dec-11 11:43	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.443	07-Dec-11 11:43	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.338	07-Dec-11 11:43	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.446	07-Dec-11 11:43	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.400	07-Dec-11 11:43	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.326	07-Dec-11 11:43	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.439	07-Dec-11 11:43	RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.306	07-Dec-11 11:43	RMP
591-78-6	2-Hexanone	1	ND		10.0	0.557	07-Dec-11 11:43	RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.413	07-Dec-11 11:43	RMP
79-20-9	Methyl acetate	1	ND		10.0	0.979	07-Dec-11 11:43	RMP
75-09-2	Methylene chloride	1	ND		5.00	0.379	07-Dec-11 11:43	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	0.571	07-Dec-11 11:43	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.303	07-Dec-11 11:43	RMP
100-42-5	Styrene	1	ND		5.00	0.354	07-Dec-11 11:43	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	0.615	07-Dec-11 11:43	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.251	07-Dec-11 11:43	RMP

Protocol Blank 12/12/2011 11:42:1

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 173782 BLANK 1

Project: 20131921

Lab ID: 20942778

Prep Level: Water

Batch: 173782

Method: Water GC/MS Volatile Organics

Prepared: 07-Dec-11

						Units: <u>ug/L</u>		
CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
108-88-3	Toluene	1	ND		5.00	0.434	07-Dec-11 11:43	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.458	07-Dec-11 11:43	RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.312	07-Dec-11 11:43	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.400	07-Dec-11 11:43	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.873	07-Dec-11 11:43	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.331	07-Dec-11 11:43	RMP
	m&p-Xylene	1	ND		5.00	0.639	07-Dec-11 11:43	RMP
95-47-6	o-Xylene	1	ND		5.00	0.241	07-Dec-11 11:43	RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Protocol Blank 12/12/2011 11:42:1
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



Definitions/Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20131921

Value	Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Chains of Custody



Chain of Custody

20131921

Pace Analytical
www.pacelabs.com

Workorder: 10177374

Workorder Name: KEL Groundwater

Owner Received Date: 12/3/2011 Results Requested By: 12/15/2011

Michelle Hubbling
Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone (612)607-1700
Fax (612)607-6444

Pace Analytical New Orleans
1000 Riverbend Blvd
Suite F
St. Rose, LA 70087
Phone (504)469-0333

Report To:		Subcontractor:		Requested Analysis:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Michelle Hubbling Pace Analytical Services, Inc. 1700 Elm Street, Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Fax (612)607-6444		Pace Analytical New Orleans 1000 Riverbend Blvd Suite F St Rose, LA 70087 Phone (504)469-0333																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Transfers		Released By	Date/Time	Received By	Date/Time
1		<i>[Signature]</i>	12/5/11		
2		<i>[Signature]</i>	12-6-11 0940	<i>[Signature]</i>	12-6-11 0940
3					

Cooler Temperature on Receipt 2.1 °C		Custody Seal (Y or N)	Received on Ice (Y or N)	Samples Intact (Y or N)



Project # 20



Sample Cond

1000 Riverbend Blvd., Suite F
St. Rose, LA 70087
 Courier: ☐ Pace Courier ☐ Hackbarth ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals Intact: ☒ Yes ☐ No
 Thermometer Used: ☒ Therm Fisher IR 1
☐ Therm Fisher IR 2
☐ Therm Fisher IR 4
Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12-6-11

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Chain of Custody Complete:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Filtered vol. Rec. for Diss. tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
All containers received within manufacture's precautionary and/or expiration dates.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11
All containers needing preservation have been checked (except VOA, coliform, & O&G).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13
		If No, was preservative added? <input type="checkbox"/> Yes <input type="checkbox"/> No If added record lot no.: HNO3 _____ H2SO4 _____
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17
Pace Trip Blank Lot # (if purchased): <u>N/A</u>		18

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

NLL

MICHELLE HUBBARD QUOTE # EMS 09210

Micro-Methods Lab, Inc.
6500 Sunplex Drive, Ocean Springs, MS 39564
Ph: 228-875-6420 • Fax: 228-875-6423

Chain of Custody / Analysis Request Form

Print ALL Information. Put N/A in blanks not applicable

Field pH: _____ Tech: _____ Time: 10177374
Field Temperature: _____
Iced: Yes No
Sample Receipt Temperature: 10177344

REPORT RESULTS TO:

Company: EMS

Name: ETHAN ALLEN

Address: P.O. Box 15369

City: HATTIESBURG ZIP: 39404

State: MS ZIP: 39404

TEL: 601-544-3674 FAX: 601-544-0504

Sampled by: (Signature) ELL ELL

(Print) ETHAN ALLEN

SEND INVOICE TO:

Company: EMS PO#: KUH-11-007

Name: BRYAN SHERMAN

Address: P.O. Box 15369

City: HATTIESBURG

State: MS ZIP: 39404

TEL: 601-544-3674 FAX: 601-544-0504

Project Name: KEL GROUNDWATER

TURNAROUND TIME

Date Results needed by: _____

Standard turnaround time is 10 working days X

The following turnaround times require lab approval:

☐ 7-10 days ☐ 72 Hrs ☐ 48 Hrs☐ 24 Hrs Approved by _____

Date of Sample Shipment: 12/2/11

List Test Needed _____

Failure to complete shaded areas will hinder processing of samples.


Sampling

For Lab Use Only Sample Number	Station Location / Sample ID	DATE	TIME	C O M P	G R A B	14-Dioxane 8260	14-Dioxane 8260	CONTAINERS #
1.	KEP-GW-030-001	12/1/11	1200	X	X	X	X	3
2.	TRIP BLANK	12/1/11	1200	X	X	X	X	2
3.	KEP-GW-034-001	12/1/11	1600	X	X	X	X	3
4.	KEP-GW-033-001	12/2/11	0900	X	X	X	X	3
5.	KEP-GW-032-001	12/2/11	1125	X	X	X	X	3
6.	KEP-GW-031-001	12/2/11	1645	X	X	X	X	3
7.	KEP-GW-DUP-01	12/2/11	0800	X	X	X	X	3
8.								
9.								
10.								

Released By Signature	Date & Time Released	Received By Signature	Date & Time Received
ELL ELL	12/2/11	G E Pao	12/3/11
Printed Name		Printed Name	
ETHAN ALLEN	1730	JAMES EARP	
Released By Signature	Date & Time Released	Received By Signature	Date & Time Received
Printed Name		Printed Name	

Please indicate reporting requirements:
☐ 1. Results Only (EPA Level I)
☐ 2. Results & QC (EPA Level II)
☐ 3. Results, QC and Raw Data (EPA Level III)

TEMP=5.8°C

	Document Name:	Revised Date: 02Jun2011
	Sample Condition Upon Receipt Form	Page 1 of 1
	Document Number:	Issuing Authority:
	F-L-213 Rev.01	Pace Minnesota Quality Office

Sample Condition
Upon Receipt

Client Name: EMS

Project # 10177374
10177341 12-5-11

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: en1 160 3007

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional
Proj. Due Date
Proj. Name

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other Temp Blank: Yes ☒ No

Thermometer Used 80344042 or 80512447 Type of Ice: Wet Blue None ☒ Samples on ice, cooling process has begun

Cooler Temperature 5.8 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/5/11

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>08224-4</u>		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 12/5/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)