3R-391

Groundwater Report

DATE:
02/24/2010

Chevron

Endah Rumbiyanti
Project Manager

Upstream Business Unit
Chevron Environmental
Management Company
1400 Smith Street
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Houston, Texas 77002
Tel 713 372 1034
ERumbi@Chevron.com

February 24, 2010

Mr. Bill Freeman
Navajo Nation Environmental Protection Agency
PO Box 1999
Shiprock, NM 87420

Dear Mr. Freeman,

Please find enclosed the 2009 Annual Groundwater Monitoring Report and Site Closure Request for the Gallegos-Gallup Sand Pit Site (NMOCD No. 3R391) located in San Juan County, New Mexico near Gallegos Canyon in Section 7, Township 26N, and Range 7W. In addition to documenting the reported groundwater sample analytical testing results for the last five groundwater sampling events, the enclosed document also contains a request for Site Closure.

A review of the groundwater sample analytical data collected from the Site over the last four quarters indicates that all Site COC concentrations have been consistently reported at concentrations below their respective NMWQCC regulatory standards during the past four quarterly sampling events. Based upon previous discussions and communications with the NNEPA, this Site appears to meet the criteria for closure.

Should you have any question regarding the enclosed document, please contact me at (713) 372-1034 or via email at Erumbi@chevron.com.

Yours truly,

for

Endah Rumbiyanti

Enclosure

cc: Mr. Glenn von Gonten, NMOCD

GALLEGOS GROUNDWATER MONITORING AND SITE CLOSURE REPORT

Gallegos-Gallup Sand Pit
San Juan County, NM
212201122

Stantec

Prepared by

Stantec Consulting Corporation

Daniel Woodward, Project Manager

Reviewed by

D. Scott Olivier, Senior Project Manager

Chad Vowell, Senior Project Manager

February 24, 2010

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1.0 INTRODUCTION

1.1 Site Setting and Background

The Gallegos-Gallup Sand Pit is an unlined earthen pit with operations dating back to as early as 1962. The pit is located in San Juan County, New Mexico near Gallegos Canyon in Section 7, Township 26N, Range 7W (**Figure 1**). The pit is located on the Navajo Indian Reservation and falls under the regulatory oversight of the Navajo Nation Environmental Protection Agency (NNEPA) and Region VI of the United States Environmental Protection Agency (USEPA). The New Mexico Oil Conservation Division (NMOCD) maintains a limited oversight role in this project; however, the NMOCD defaults to the decisions made by the primary regulatory agency, the NNEPA. The Site has been assigned a site number by the NMOCD: 3R391.

Six monitor wells (MW-1 through MW-6) were installed by Envirotech in September 2001 and December 2002 to assess and monitor groundwater conditions at the Gallegos-Gallup Sand Pit. In November 2003, the original six monitor wells were plugged and abandoned. Affected soils within the pit were excavated to a depth of 25 feet below ground surface (bgs) which is where groundwater was expected to be encountered. Approximately 4,380 yd^3 of soil were transported to a landfarm operated by Envirotech. Confirmation samples collected from the pit walls and bottom during excavation showed that concentrations of total petroleum hydrocarbons (TPH) on the north wall (4,800 mg/kg), northwest corner (1,890 mg/kg), and bottom (2,270 mg/kg) exceeded the negotiated closure level of 1,000 mg/kg. Groundwater was not encountered during the excavation. The NNEPA and USEPA subsequently approved backfilling the pit following application of a potassium permanganate solution and installation of a monitor well (MW-7) in the center of the former pit. The pit backfilling was completed on November 25, 2003.

Monitor well (MW-7) was installed to a depth of 45 feet bgs near the center of the former Gallegos-Gallup Sand Pit that was backfilled in 2003. During installation, a layer of black crude oil staining was identified at a depth of approximately 30 ft below grade in the soil samples retrieved from the borehole for monitor well MW-7. During well development, approximately 0.01 feet of phase separated hydrocarbon (PSH), believed to be heavy crude oil, was identified on the water surface. A groundwater sample was collected from the newly installed monitor well and analyzed for benzene, toluene, ethylbenzene and xylene (BTEX). Laboratory analytical results indicated a benzene concentration of 14.9 µg/L. This concentration exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard of 10.0 µg/L. Other BTEX constituents were detected but all concentrations were below the NMWQCC standards.

A second groundwater sampling event, conducted in April 2004, identified the polycyclic aromatic hydrocarbon (PAH) analyte, naphthalene, at a concentration of 115 µg/L, exceeding the NMWQCC standard of 30 µg/L. BTEX constituents were not detected above the NMWQCC standards. A third

sampling event, conducted in October 2004, confirmed the presence of naphthalene at 128 µg/L. BTEX constituents were again not detected above NMWQCC standards.

Three additional monitor wells (MW-8, MW-9 and MW-10) were installed by SECOR in June 2005 to complete the delineation of BTEX and naphthalene at the site. Groundwater samples were collected from all four monitor wells (MW-7 through MW-10) on August 3, 2006, November 28, 2006, February 22, 2007, and April 26, 2007. The Groundwater Monitoring and Site Closure Report, by SECOR in June 2007, summarizes those results.

Additional groundwater samples were collected from the four monitor wells (MW-7 through MW-10) on August 8, 2007, November 14, 2007, February 13, 2008, and May 13, 2008. The Groundwater Monitoring Report, dated July 2008 by SECOR, summarizes those results.

On November 13, 2008, SECOR (now Stantec) injected a 10% calcium peroxide (CaO_2) solution (PermeOx Plus) into the upper groundwater bearing unit ten feet up-gradient of monitor well location MW-7 at a maximum depth of approximately 46 feet bgs. PermeOx Plus is a granular calcium peroxide-based product that slowly releases oxygen when wetted, for the purpose of accelerating the growth of microbes that biodegrade contaminants. It is well documented by Panther Technologies (a subsidiary of FMC Environmental Solutions) that the release of oxygen in the subsurface environment enhances the biodegradation of petroleum hydrocarbons. PermeOx Plus releases oxygen at higher rates of release than other solid peroxygen products and therefore provides a useful and cost-effective mechanism for enhancing the aerobic bioremediation of petroleum contaminants.

This report summarizes the last five groundwater monitoring and sampling events and utilizes historical Site reports to analyze trends and demonstrate that the Site closure criterion is met.

2.0 FIELD ACTIVITIES

The scope of work for field activities executed from November 2008 through November 2009 included the following:

- Conducting quarterly groundwater sampling (4Q08 through 4Q09); and,
- Completing a groundwater sampling report summarizing analytical results.

2.1 Monitor Well Gauging

Groundwater elevation measurements were collected with an electronic oil/water interface probe prior to sampling. The historic static groundwater elevations are documented in **Table 1**. The depth to groundwater averages approximately 31.43 feet below top-of-casing at the Site. Potentiometric groundwater surface maps are provided as **Figures 2 through 6**. The direction of groundwater flow is toward the northwest with an average hydraulic gradient of approximately 0.013 vertical feet per horizontal foot. There has been very little change in gradient or direction of groundwater flow during the past 12 months. The depth to groundwater has been consistent throughout the past 12 months with less than 0.39 feet in variation per well.

2.1 Groundwater Sample Collection

Groundwater samples collected during the five events (November 12, 2008, February 2, 2009, April 24, 2009, August 18, 2009, and November 17, 2009) were delivered under chain-of-custody to Lancaster Laboratories located in Lancaster, Pennsylvania. The groundwater samples were analyzed for poly-aromatic hydrocarbon constituents including naphthalene, 1-methylnaphthalene and 2-methylnaphthalene by EPA Method 8270C.

To ensure representative samples were collected, each well was purged and sampled using low-flow purging and sampling techniques. Purged groundwater was collected in plastic totes and transported to the Buckeye site for disposal.

Samples were labeled by the groundwater sampler, placed on ice in a cooler, kept near a temperature of 4°C, and shipped under chain-of-custody to the analytical laboratory. The analytical results for the five sampling events are presented in **Table 2** and depicted on **Figure 7**. Laboratory analytical reports for each sampling event are included in **Appendix A**.

3.0 ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Monitor well MW-7 exhibited naphthalene, 1-methylnaphthalene and 2-methylnaphthalene concentrations above the NMWQCC standard of 30 µg/L on November 12, 2008, prior to the 10% CaO_2 solution injection event. However, Naphthalene, 1-methylnaphthalene and 2-methylnaphthalene were not detected at concentrations above the regulatory limit in any of the groundwater samples collected from monitor wells MW-7 through MW-10 during the 2009 quarterly sampling events conducted after the 10% CaO_2 solution injection event on November 13, 2009 (**Table 2**).

4.0 SUMMARY

Quarterly groundwater level measurements indicate that the groundwater flow direction is consistently toward the northwest with an average hydraulic gradient of approximately 0.013 vertical feet per horizontal foot.

In summary,

- Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene concentrations have been below the NMWQCC standard of 30 µg/L from monitor wells MW-8 through MW-10 for ten consecutive quarters;
- A review of the groundwater sample analytical results reported for groundwater samples collected from monitor well MW-7 indicate that the groundwater samples previously exhibited naphthalene and 2-methylnaphthalene concentrations above the NMWQCC standard of 30 µg/L prior to and during the November 2008 sampling event (prior to the November 2008 CaO_2 solution injection event).
- Groundwater sampling results for monitor well MW-7 indicate naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene concentrations below the NMWQCC standard of 30 µg/L for four consecutive quarterly sampling events during 2009; and
- Based upon a review of the groundwater sample analytical data collected during the most recent four quarters of groundwater monitoring, the Site appears to meet the criteria for closure as stipulated by the NNEPA.

5.0 REQUEST FOR CLOSURE

Based on the data gathered during the previous five sampling events, CEMC requests that the NNEPA issue a 'no further action' (NFA) letter for this Site to facilitate site closure. The COCs associated with the Site, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene, have been reported at concentrations below their respective NMWQCC standards in the groundwater samples collected from the groundwater monitor wells located at the Site (groundwater monitor wells MW-7 through MW-10) for the last four consecutive quarters of groundwater monitoring; therefore, it is appropriate for the NNEPA to issue the NFA letter for this Site.

Following issuance of the NFA letter, CEMC will facilitate the plugging and abandonment of the four groundwater monitor wells in accordance New Mexico regulations and will document the well abandonment activities in a brief letter report to the NNEPA and NMOCD.

6.0 STATEMENT OF LIMITATIONS

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to the Site. Stantec derived the data in this report primarily from visual inspections, examination of data collected from consulting professionals previously conducting site activities, examination of records in the public domain, and interviews with individuals having information about the Site.

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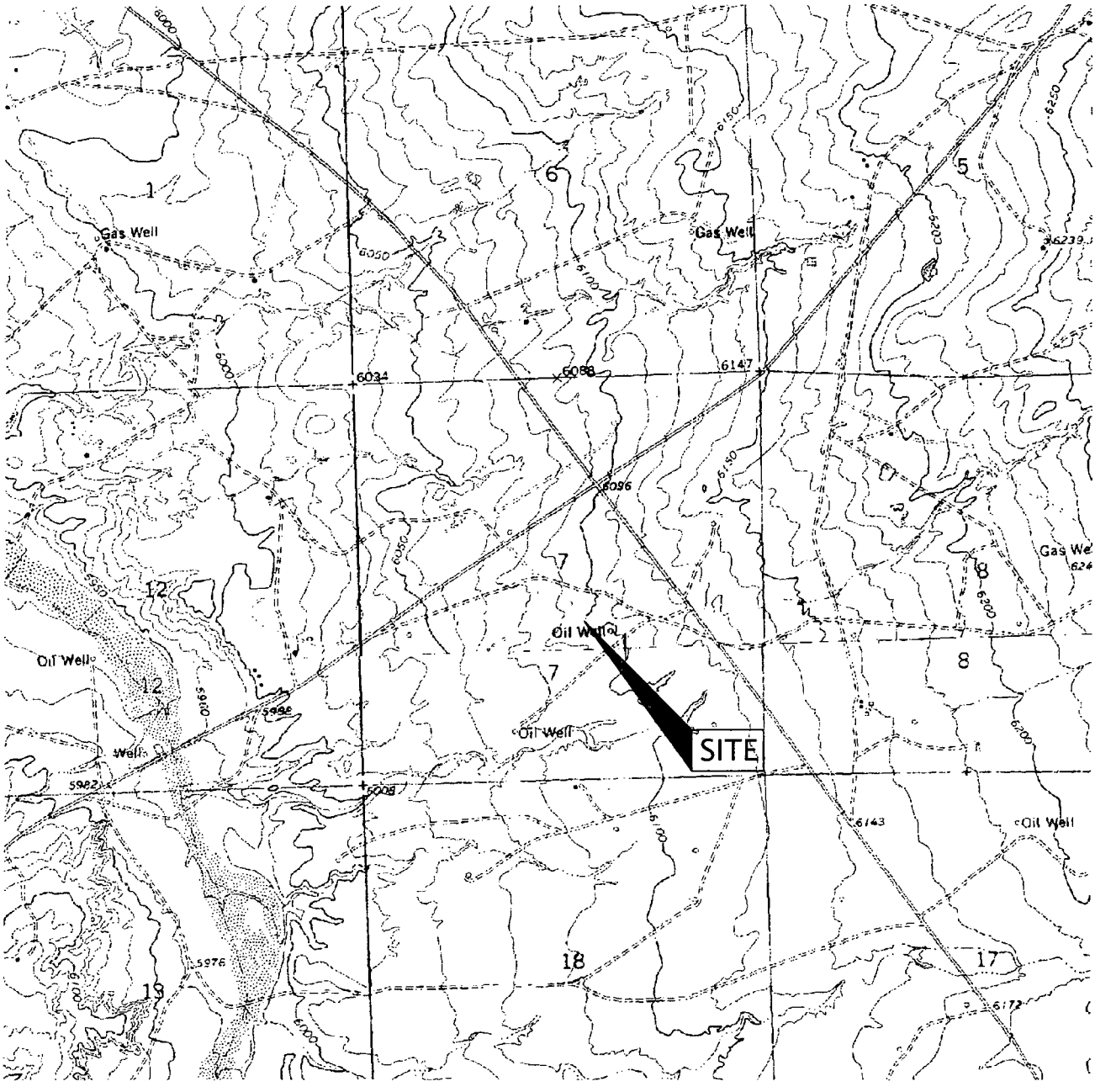
FIGURE 1

Site Location Map



1 1/2 0 1

SCALE (MILES)

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE (FEET)

N

NEW MEXICO

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; GALLEGOS TRADING POST AND CARSON TRADING POST, NEW MEXICO, 1995

Stantec 10235 W. LITTLE YORK, SUITE 400 HOUSTON, TEXAS 77040-3251 (713) 937-7973	FOR: CHEVRON GALLEGOS - GALLUP SAND PIT NW SW S7 T26N R11W NEW MEXICO	**SITE LOCATION MAP**		FIGURE: **1**
	JOB NUMBER: 212201122	DRAWN BY: ARA	CHECKED BY: GM	APPROVED BY: CV	DATE: 12/15/08

FILEPATH:K:\CADD_files\Other_offices_work\HOUSTON\SITE-Gallegos, NM\gallegos-topo.dwg|aandrews|Jan 05, 2010 at 11:00|Layout: TOPO

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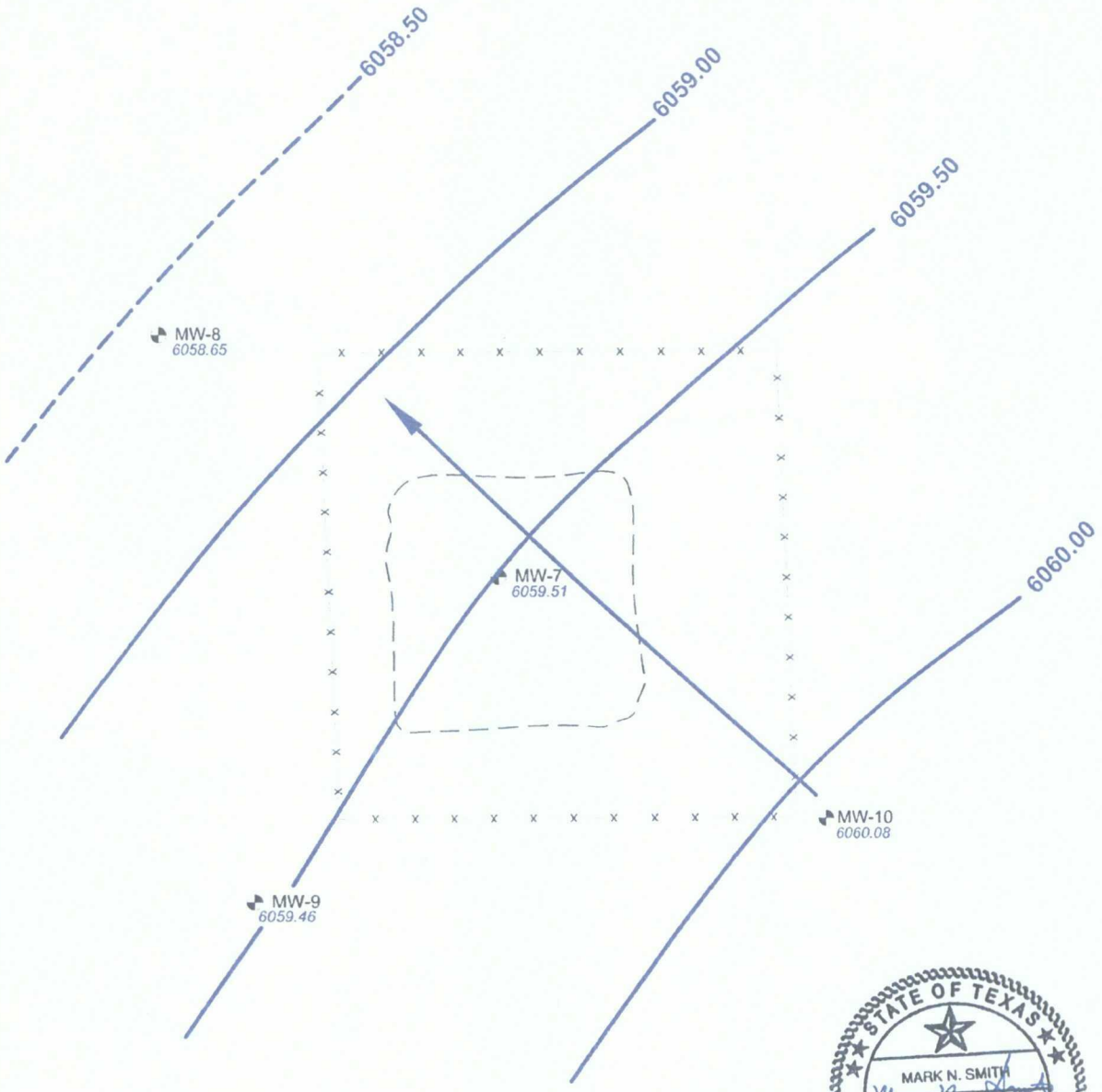
FIGURE 2

Potentiometric Surface Map: November 12, 2009



STATE OF TEXAS
MARK N. SMITH
GEOLOGY
10020
2-24-10
LICENSED
PROFESSIONAL GEOSCIENTIST

LEGEND

- MONITORING WELL LOCATION
- x x FENCE LINE/PROPERTY BOUNDARY
- — — — SAND PIT EXCAVATION OUTLINE
- 6058.74 GROUNDWATER ELEVATION IN FEET RELATIVE TO A COMMON DATUM
- 6060 CONTOUR LINE OF ESTIMATED EQUAL POTENTIOMETRIC ELEVATION IN FEET
- ESTIMATED GROUNDWATER FLOW DIRECTION

0 30 60

APPROXIMATE SCALE (FEET)

N

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NEW MEXICO

POTENTIOMETRIC SURFACE MAP
NOVEMBER 12, 2009

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
89CH.49547.07	ARA	GM	CV	12/15/08

FILEPATH:K:\CADD_files\Other_offices_work\HOUSTON\SITE-Gallegos, NM\gallegos-Q808.dwg|aandrews|Jan 15, 2010 at 8:59|Layout: POT MAP 11-08

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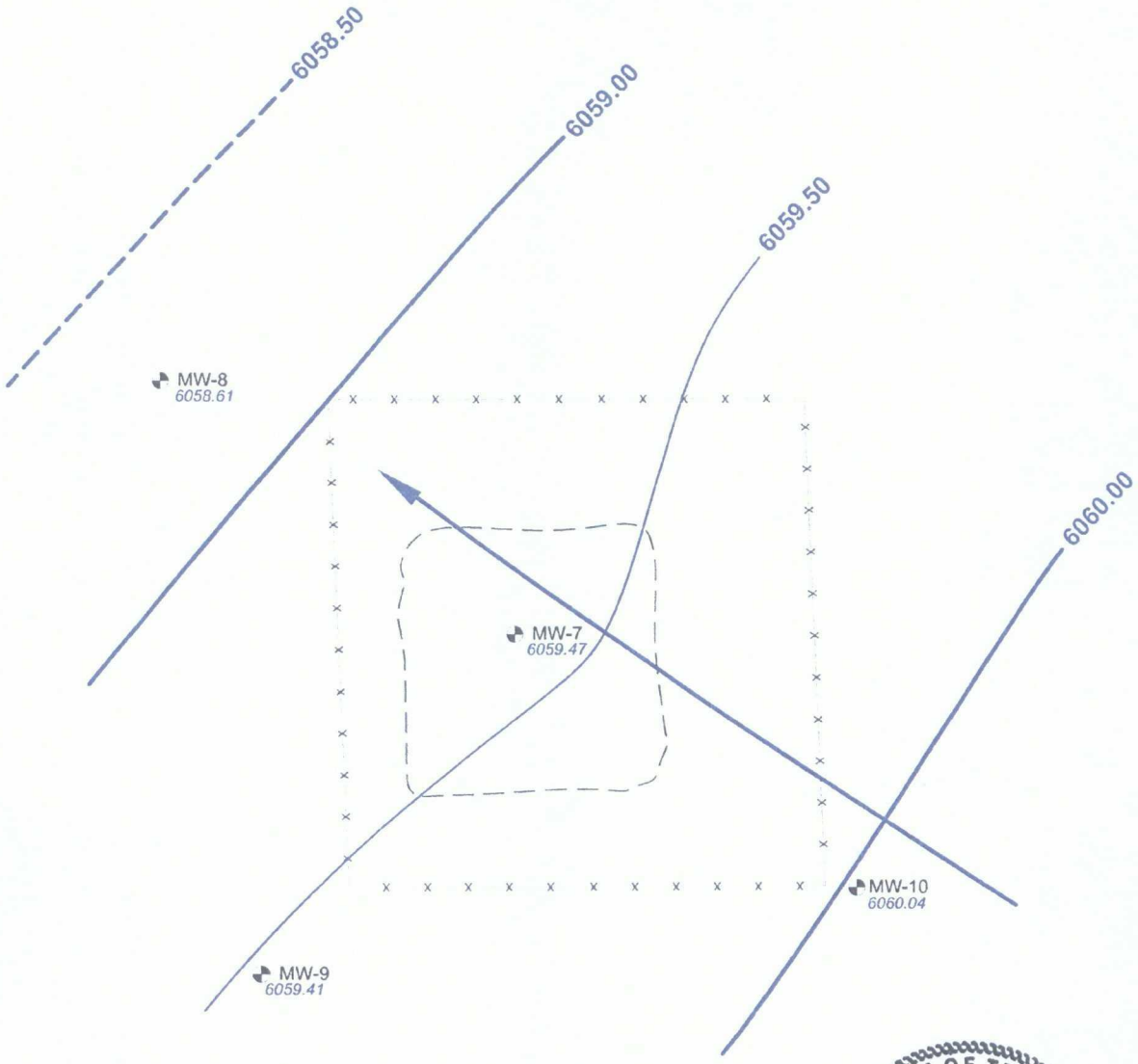
FIGURE 3

Potentiometric Surface Map: February 2, 2009



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0 30 60

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NEW MEXICO

POTENTIOMETRIC SURFACE MAP
FEBRUARY 24, 2009

FIGURE: **3**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201122	ARA	GM	DW	12/9/09

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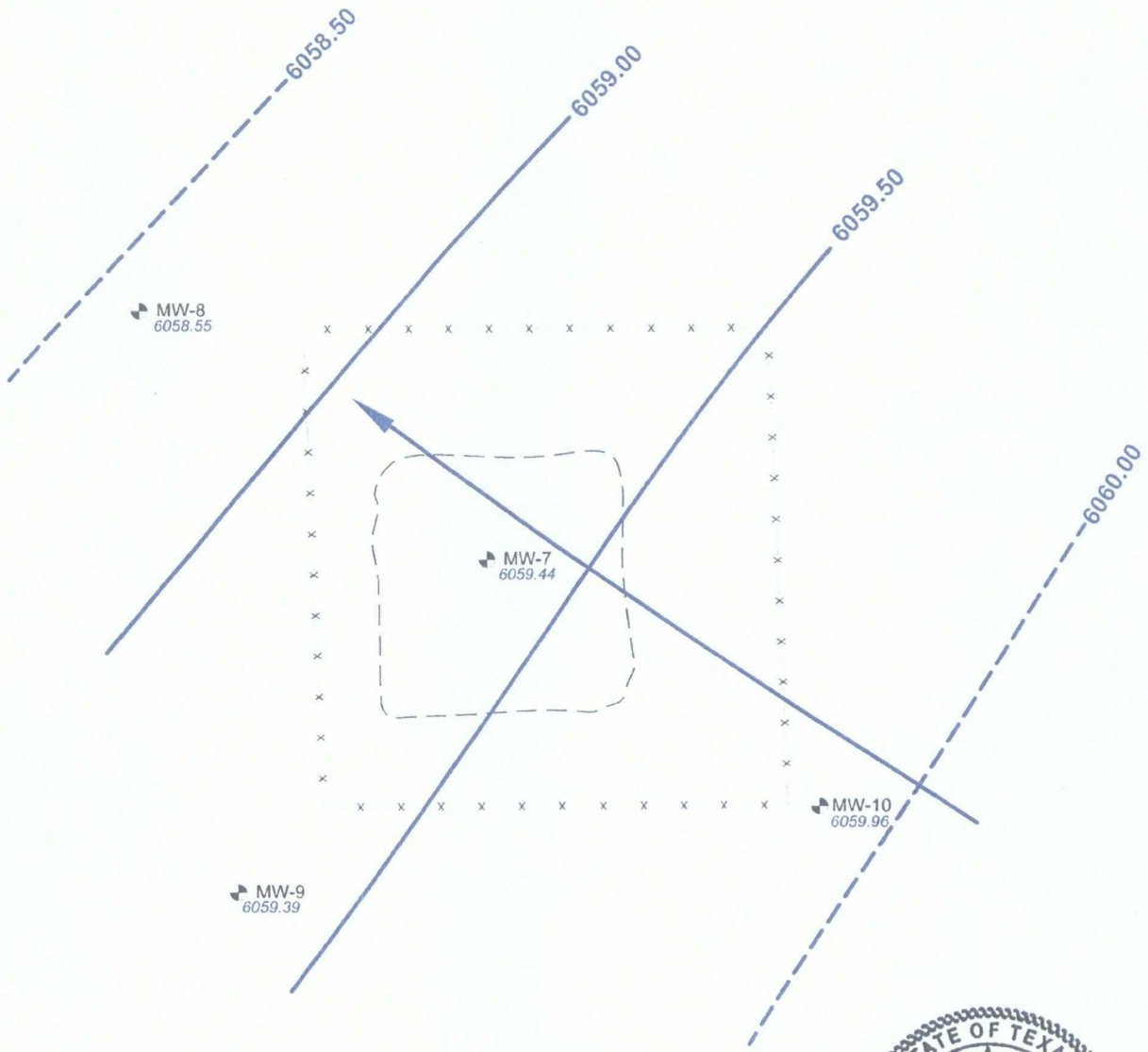
FIGURE 4

Potentiometric Surface Map: April 24, 2009



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0 30 60

APPROXIMATE SCALE (FEET)

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POTENTIOMETRIC SURFACE MAP
APRIL 28, 2009

FIGURE: **4**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201122	ARA	GM	DW	12/9/09

FILEPATH:K:\CADD_files\Other_offices_work\HOUSTON\SITE-Gallegos, NM\gallegos-2009data.dwg|aandrews|Dec 10, 2009 at 14:19|Layout: POT MAP 4-09

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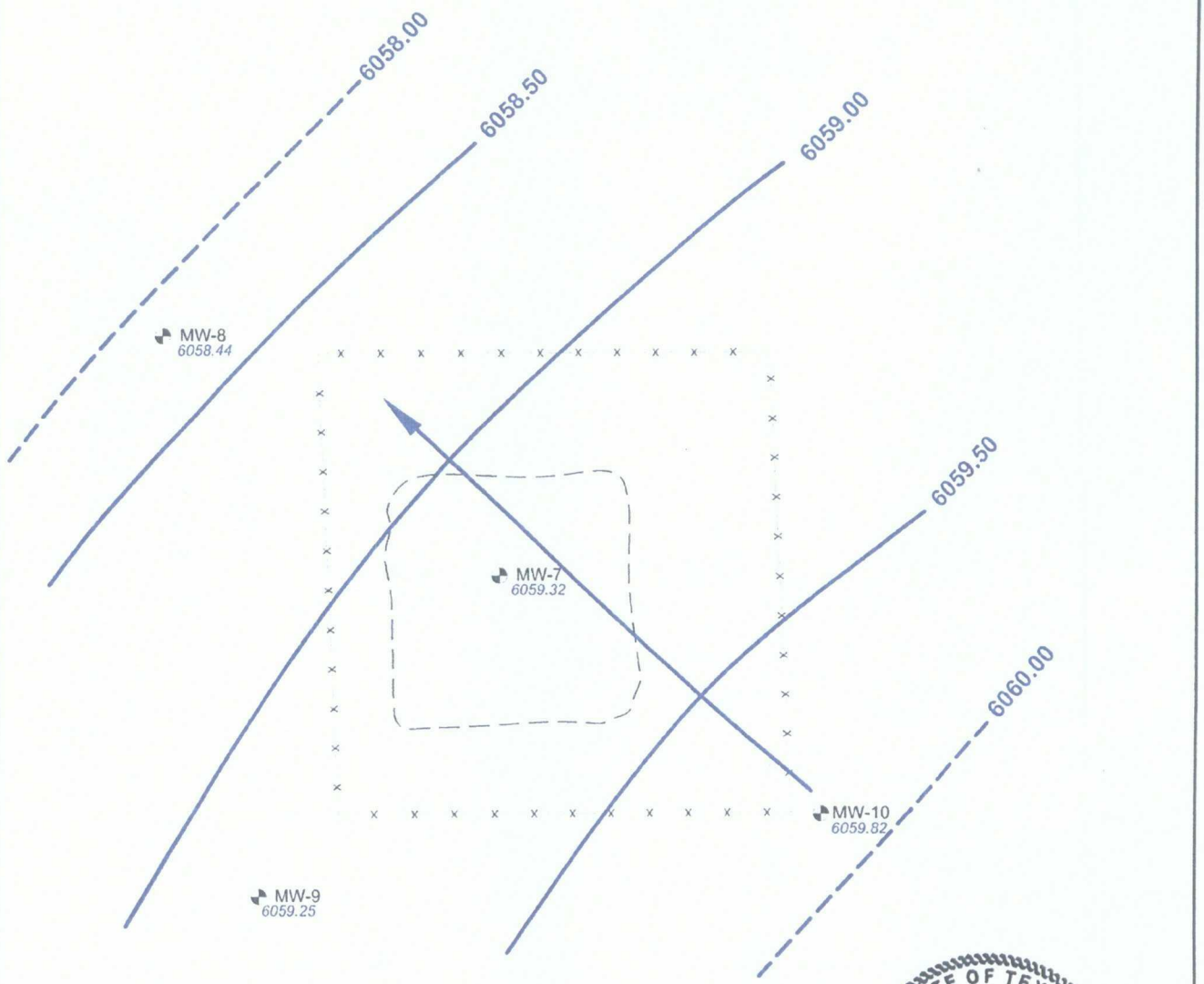
FIGURE 5

Potentiometric Surface Map: August 18, 2009



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- ESTIMATED GROUNDWATER FLOW DIRECTION

0 30 60

APPROXIMATE SCALE (FEET)

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POTENTIOMETRIC SURFACE MAP
AUGUST 18, 2009

FIGURE: **5**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201122	ARA	GM	DW	12/9/09

FILEPATH:K:\CADD_files\Other_offices_work\HOUSTON\SITE-Gallegos, NM\gallegos-2009data.dwg|aandrews|Dec 10, 2009 at 14:21|Layout: POT MAP 8-09

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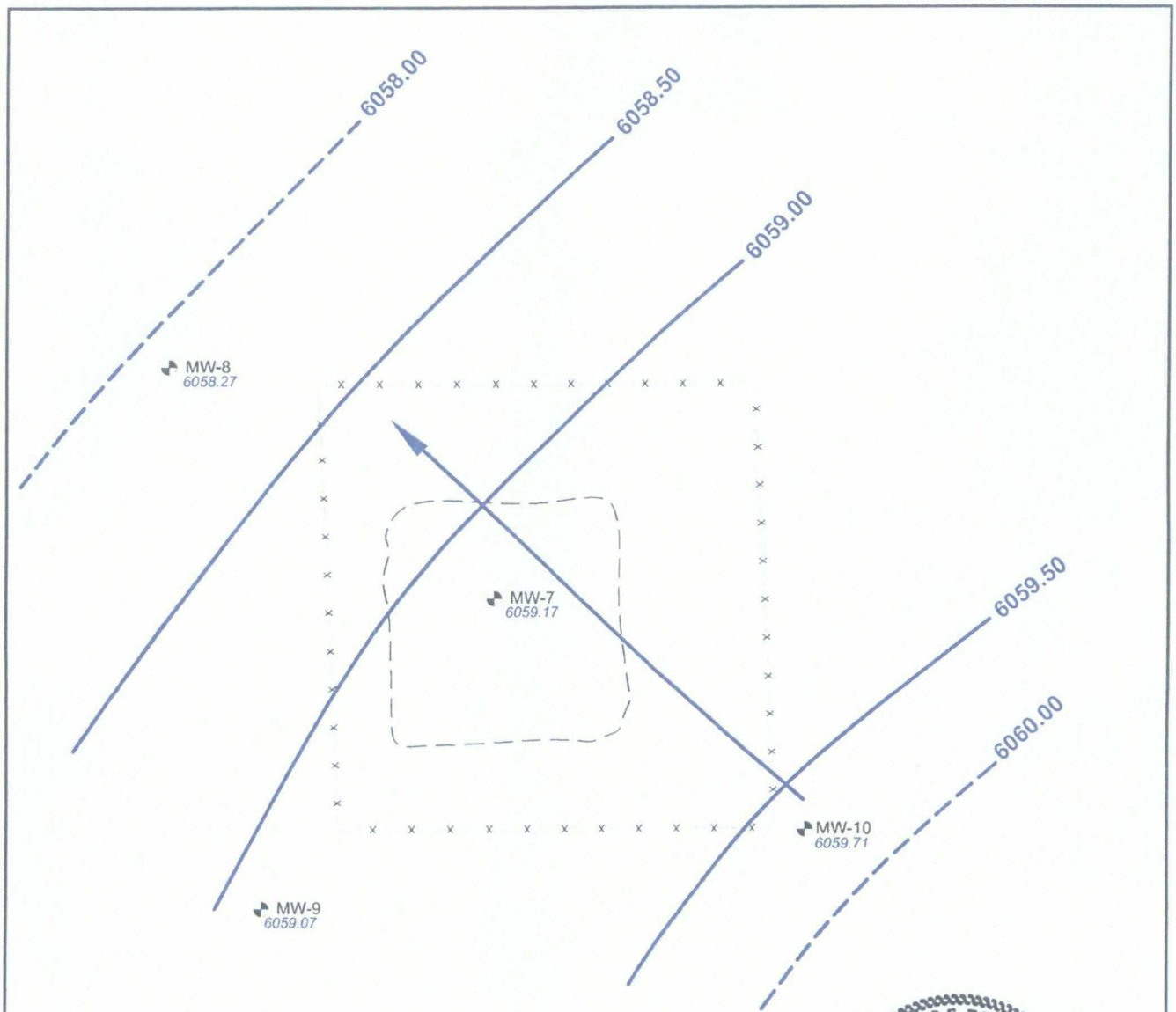
FIGURE 6

Potentiometric Surface Map: November 17, 2009



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- ESTIMATED GROUNDWATER FLOW DIRECTION

0 30 60

APPROXIMATE SCALE (FEET)

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POTENTIOMETRIC SURFACE MAP
NOVEMBER 18, 2009

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201122	ARA	GM	DW	12/9/09

FILEPATH:K:\CADD_files\Other_offices_work\HOUSTON\SITE-Gallegos, NM\gallegos-2009data.dwg|aandrews|Dec 10, 2009 at 14:23|Layout: POT MAP 11-09

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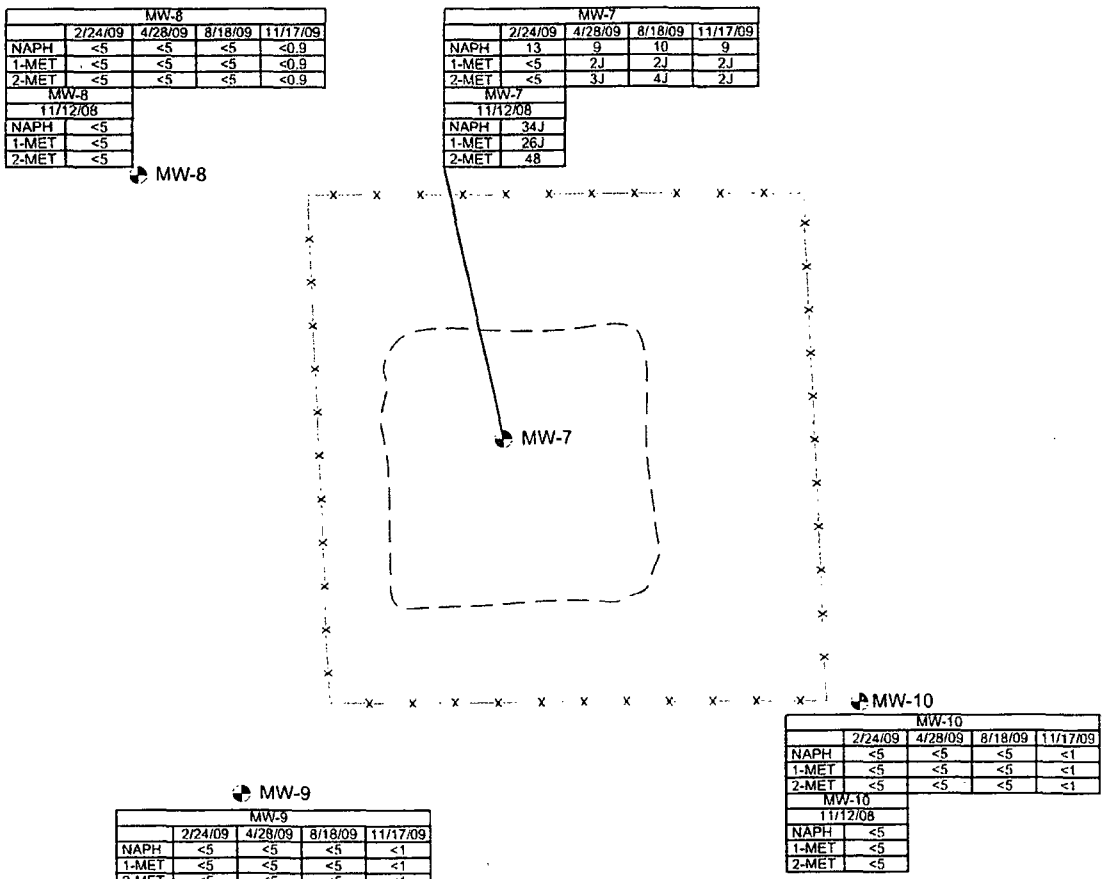
FIGURE 7

Chemicals of Concern Groundwater Concentration Map



MW-8				
	2/24/09	4/28/09	8/18/09	11/17/09
NAPH	<5	<5	<5	<0.9
1-MET	<5	<5	<5	<0.9
2-MET	<5	<5	<5	<0.9

MW-8	
11/12/08	
NAPH	<5
1-MET	<5
2-MET	<5

MW-7				
	2/24/09	4/28/09	8/18/09	11/17/09
NAPH	13	9	10	9
1-MET	<5	2J	2J	2J
2-MET	<5	3J	4J	2J

MW-7	
11/12/08	
NAPH	34J
1-MET	26J
2-MET	48

MW-10				
	2/24/09	4/28/09	8/18/09	11/17/09
NAPH	<5	<5	<5	<1
1-MET	<5	<5	<5	<1
2-MET	<5	<5	<5	<1

MW-10	
11/12/08	
NAPH	<5
1-MET	<5
2-MET	<5

MW-9				
	2/24/09	4/28/09	8/18/09	11/17/09
NAPH	<5	<5	<5	<1
1-MET	<5	<5	<5	<1
2-MET	<5	<5	<5	<1

MW-9	
11/12/08	
NAPH	<5
1-MET	<5
2-MET	<5

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LEGEND

- MONITORING WELL LOCATION
- FENCE LINE/PROPERTY BOUNDARY
- SAND PIT EXCAVATION OUTLINE

MW-9	WELL ID
8/3/06	SAMPLE DATE
NAPH <1.0	NAPHTHALENE CONCENTRATION ug/L
1-MET <1.0	1-METHYLNAPHTHALENE CONCENTRATION ug/L
2-MET <1.0	2-METHYLNAPHTHALENE CONCENTRATION ug/L

J ESTIMATED VALUE

0 30 60

APPROXIMATE SCALE (FEET)

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CHEMICALS OF CONCERN GROUNDWATER CONCENTRATION MAP

FIGURE: **7**

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212201122	ARA	GM	DW	12/9/09

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TABLE 1

Historical Groundwater Elevations

Table 1
Historical Groundwater Elevations
Gallegos-Gallup Sand Pit
Farmington, NM

Monitor Well ID	Date Gauged	TOC Elevation (ft. AMSL)	Depth To Groundwater (ft. TOC)	Water Elevation (ft. AMSL)	Depth to PSH (ft. TOC)	PSH Elevation (ft. AMSL)	PSH Thickness (ft.)	Thickness Adjustment (ft.)	Corrected Water Elevation (ft. AMSL)
MW-7	12/01/03	6,092.37	34.21	6,058.16	34.20	6,058.17	**0.01**	0.01	6,058.17
	04/16/04	6,092.37	34.03	6,058.34	34.0	6,058.37	**0.03**	0.03	6,058.37
	10/22/04	6,092.37	32.77	6,059.60	NA	NA	NA	NA	6,059.60
	06/24/05	6,092.37	33.03	6,059.34	33.0	6,059.37	**0.03**	0.03	6,059.37
	09/29/05	6,092.37	32.96	6,059.41	NA	NA	NA	NA	6,059.41
	12/21/05	6,092.37	32.87	6,059.50	NA	NA	NA	NA	6,059.50
	03/21/06	6,092.37	33.03	6,059.34	NA	NA	NA	NA	6,059.34
	08/03/06	6,092.37	33.19	6,059.18	NA	NA	NA	NA	6,059.18
	02/22/07	6,092.37	32.87	6,059.50	NA	NA	NA	NA	6,059.50
	04/26/07	6,092.37	32.82	6,059.55	NA	NA	NA	NA	6,059.55
	08/28/07	6,092.37	32.84	6,059.53	NA	NA	NA	NA	6,059.53
	11/13/07	6,092.37	32.85	6,059.52	NA	NA	NA	NA	6,059.52
	02/13/08	6,092.37	32.77	6,059.60	NA	NA	NA	NA	6,059.60
	05/13/08	6,092.37	32.71	6,059.66	NA	NA	NA	NA	6,059.66
	11/12/08	6,092.37	32.86	6,059.51	NA	NA	NA	NA	6,059.51
	02/24/09	6,092.37	32.90	6,059.47	NA	NA	NA	NA	6,059.47
	04/28/09	6,092.37	32.93	6,059.44	NA	NA	NA	NA	6,059.44
	08/18/09	6,092.37	33.05	6,059.32	NA	NA	NA	NA	6,059.32
	11/17/09	6,092.37	33.20	6,059.17	NA	NA	NA	NA	6,059.17
MW-8	06/24/05	6,087.06	28.43	6,058.63	NA	NA	NA	NA	6,058.63
	09/29/05	6,087.06	28.43	6,058.63	NA	NA	NA	NA	6,058.63
	12/21/05	6,087.06	28.32	6,058.74	NA	NA	NA	NA	6,058.74
	03/21/06	6,087.06	28.49	6,058.57	NA	NA	NA	NA	6,058.57
	08/03/06	6,087.06	28.66	6,058.40	NA	NA	NA	NA	6,058.40
	02/22/07	6,087.06	28.39	6,058.67	NA	NA	NA	NA	6,058.67
	04/26/07	6,087.06	28.33	6,058.73	NA	NA	NA	NA	6,058.73
	08/28/07	6,087.06	28.33	6,058.73	NA	NA	NA	NA	6,058.73
	11/13/07	6,087.06	28.36	6,058.70	NA	NA	NA	NA	6,058.70
	02/13/08	6,087.06	28.31	6,058.75	NA	NA	NA	NA	6,058.75
	05/13/08	6,087.06	28.27	6,058.79	NA	NA	NA	NA	6,058.79
	11/12/08	6,087.06	28.41	6,058.65	NA	NA	NA	NA	6,058.65
	02/24/09	6,087.06	28.45	6,058.61	NA	NA	NA	NA	6,058.61
	04/28/09	6,087.06	28.51	6,058.55	NA	NA	NA	NA	6,058.55
	08/18/09	6,087.06	28.62	6,058.44	NA	NA	NA	NA	6,058.44
	11/17/09	6,087.06	28.79	6,058.27	NA	NA	NA	NA	6,058.27
MW-9	06/24/05	6,089.63	30.18	6,059.45	NA	NA	NA	NA	6,059.45
	09/29/05	6,089.63	30.09	6,059.54	NA	NA	NA	NA	6,059.54
	12/21/05	6,089.63	30.03	6,059.60	NA	NA	NA	NA	6,059.60
	03/21/06	6,089.63	30.21	6,059.42	NA	NA	NA	NA	6,059.42
	08/03/06	6,089.63	30.39	6,059.24	NA	NA	NA	NA	6,059.24
	02/22/07	6,089.63	30.13	6,059.50	NA	NA	NA	NA	6,059.50
	04/26/07	6,089.63	30.06	6,059.57	NA	NA	NA	NA	6,059.57
	08/28/07	6,089.63	30.09	6,059.54	NA	NA	NA	NA	6,059.54
	11/13/07	6,089.63	30.11	6,059.52	NA	NA	NA	NA	6,059.52
	02/13/08	6,089.63	30.05	6,059.58	NA	NA	NA	NA	6,059.58
	05/13/08	6,089.63	30.02	6,059.61	NA	NA	NA	NA	6,059.61
	11/12/08	6,089.63	30.17	6,059.46	NA	NA	NA	NA	6,059.46
	02/24/09	6,089.63	30.22	6,059.41	NA	NA	NA	NA	6,059.41
	04/28/09	6,089.63	30.24	6,059.39	NA	NA	NA	NA	6,059.39
	08/18/09	6,089.63	30.38	6,059.25	NA	NA	NA	NA	6,059.25
	11/17/09	6,089.63	30.56	6,059.07	NA	NA	NA	NA	6,059.07
MW-10	06/24/05	6,093.83	33.70	6,060.13	NA	NA	NA	NA	6,060.13
	09/29/05	6,093.83	33.70	6,060.13	NA	NA	NA	NA	6,060.13
	12/21/05	6,093.83	33.59	6,060.24	NA	NA	NA	NA	6,060.24
	03/21/06	6,093.83	33.76	6,060.07	NA	NA	NA	NA	6,060.07
	08/03/06	6,093.83	34.00	6,059.83	NA	NA	NA	NA	6,059.83
	02/22/07	6,093.83	33.65	6,060.18	NA	NA	NA	NA	6,060.18
	04/26/07	6,093.83	33.59	6,060.24	NA	NA	NA	NA	6,060.24
	08/28/07	6,093.83	33.61	6,060.22	NA	NA	NA	NA	6,060.22
	11/13/07	6,093.83	33.64	6,060.19	NA	NA	NA	NA	6,060.19
	02/13/08	6,093.83	33.59	6,060.24	NA	NA	NA	NA	6,060.24
	05/13/08	6,093.83	33.50	6,060.33	NA	NA	NA	NA	6,060.33
	11/12/08	6,093.83	33.75	6,060.08	NA	NA	NA	NA	6,060.08
	02/24/09	6,093.83	33.79	6,060.04	NA	NA	NA	NA	6,060.04
	04/28/09	6,093.83	33.87	6,059.96	NA	NA	NA	NA	6,059.96
	08/18/09	6,093.83	34.01	6,059.82	NA	NA	NA	NA	6,059.82
	11/17/09	6,093.83	34.12	6,059.71	NA	NA	NA	NA	6,059.71

Notes:
AMSL - Above mean sea level
TOC - Top of casing
PSH - Phase separated hydrocarbon
NA - Not applicable (no PSH present)

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TABLE 2

Groundwater Analytical Results

Table 2
Groundwater Analytical Results
Gallegos-Gallup Sand Pit
Farmington, NM

Parameter		Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene
Analytical Method		EPA Method 8260B*	EPA Method 8260B	EPA Method 8260B	EPA Method 8260B	EPA Method 8260B	Method 8270C	EPA Method 8260B/8270C	EPA Method 8260B/8270C
NMWQCC Remediation Standards (ug/L)		10	750	750	620	30	30	30	30
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sample Identification	Sample Date								
MW-7	12/01/03	14.9	36.1	21.2	80.1	NA	NA	NA	NA
	04/16/04	<10	<10	<10	208	115	NA	NA	NA
	10/22/04	<5	<5	46.7	188	128	NA	NA	NA
	06/24/05	<1	<1	49.40	6.15	124	NA	124	234
	09/29/05	<0.5	<0.7	3J	1J	7.0	NA	NA	62
	12/21/05	<0.5	<0.7	5J	0.9J	11	37	NA	50
	03/21/06	<0.5	<0.7	37.0	4J	45	22	NA	54
	08/03/06**	NA	NA	NA	NA	NA	17	8	33
	11/28/06	NA	NA	NA	NA	NA	19	7	22
	02/22/07	NA	NA	NA	NA	NA	33	12	25
	04/26/07	NA	NA	NA	NA	NA	18	11	40
	08/28/07	NA	NA	NA	NA	NA	19	10	19
	11/14/07	NA	NA	NA	NA	NA	28	14J	27
	02/13/08	NA	NA	NA	NA	NA	56	36	70
	05/13/08	NA	NA	NA	NA	NA	38	21	38
	11/12/08	NA	NA	NA	NA	NA	34J	26J	48
	02/24/09	NA	NA	NA	NA	NA	13	<5	6
	04/28/09	NA	NA	NA	NA	NA	9	2J	3J
	08/18/09	NA	NA	NA	NA	NA	10	2J	4J
	11/17/09	NA	NA	NA	NA	NA	9	2J	2J
MW-8	06/24/05	1.89	<1	1.83	<1	1.93	NA	4.17	6.45
	09/29/05	<0.5	<0.7	<0.8	<0.8	<1	NA	NA	2J
	12/21/05	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	<2
	03/21/06	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	3J
	08/03/06**	NA	NA	NA	NA	NA	<0.9	<0.9	<0.9
	11/28/06	NA	NA	NA	NA	NA	<1	<1	<1
	02/22/07	NA	NA	NA	NA	NA	<1	<1	<1
	04/26/07	NA	NA	NA	NA	NA	<1	<1	<1
	08/28/07	NA	NA	NA	NA	NA	<1	<1	<1
	11/14/07	NA	NA	NA	NA	NA	<0.9	<0.9	<0.9
	02/13/08	NA	NA	NA	NA	NA	<5	<5	<5
	05/13/08	NA	NA	NA	NA	NA	<5	<5	<5
	11/12/08	NA	NA	NA	NA	NA	<5	<5	<5
	02/24/09	NA	NA	NA	NA	NA	<5	<5	<5
	04/28/09	NA	NA	NA	NA	NA	<5	<5	<5
	08/18/09	NA	NA	NA	NA	NA	<5	<5	<5
	11/17/09	NA	NA	NA	NA	NA	<0.9	<0.9	<0.9
MW-9	06/24/05	<1	<1	<1	<1	<1	NA	<2	<2
	09/29/05	<0.5	<0.7	<0.8	<0.8	<1	NA	NA	<2
	12/21/05	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	<2
	03/21/06	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	<2
	08/03/06**	NA	NA	NA	NA	NA	<1	<1	<2
	11/28/06	NA	NA	NA	NA	NA	<1	<1	<2
	02/22/07	NA	NA	NA	NA	NA	<1	<1	<1
	04/26/07	NA	NA	NA	NA	NA	<1	<1	<1
	08/28/07	NA	NA	NA	NA	NA	<1	<1	<1
	11/14/07	NA	NA	NA	NA	NA	<1	<1	<1
	02/13/08	NA	NA	NA	NA	NA	<5	<5	<5
	05/13/08	NA	NA	NA	NA	NA	<5	<5	<5
	11/12/08	NA	NA	NA	NA	NA	<5	<5	<5
	02/24/09	NA	NA	NA	NA	NA	<5	<5	<5
	04/28/09	NA	NA	NA	NA	NA	<5	<5	<5
	08/18/09	NA	NA	NA	NA	NA	<5	<5	<5
	11/17/09	NA	NA	NA	NA	NA	<1	<1	<1
MW-10	06/24/05	<1	<1	<1	<1	<1	NA	<2	<2
	09/29/05	<0.5	<0.7	<0.8	<0.8	<1	NA	NA	<2
	12/21/05	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	<2
	03/21/06	<0.5	<0.7	<0.8	<0.8	<1	<1	NA	<2
	08/03/06**	NA	NA	NA	NA	NA	<1	<1	<1
	11/28/06	NA	NA	NA	NA	NA	<1	<1	<1
	02/22/07	NA	NA	NA	NA	NA	<1	<1	<1
	04/26/07	NA	NA	NA	NA	NA	<1	<1	<1
	08/28/07	NA	NA	NA	NA	NA	<1	<1	<1
	11/14/07	NA	NA	NA	NA	NA	<10	<10	<10
	02/13/08	NA	NA	NA	NA	NA	<5	2J	3J
	05/13/08	NA	NA	NA	NA	NA	<5	<5	<5
	11/12/08	NA	NA	NA	NA	NA	<5	<5	<5
	02/24/09	NA	NA	NA	NA	NA	<5	<5	<5
	04/28/09	NA	NA	NA	NA	NA	<5	<5	<5
	08/18/09	NA	NA	NA	NA	NA	<5	<5	<5
	11/17/09	NA	NA	NA	NA	NA	<1	<1	<1

Notes
* - EPA Method 8021B was used for samples collected on 12/1/2003
** - EPA Method 8270C was used for samples collected on and after 8/3/2006
NMWQCC - New Mexico Water Quality Control Commission
1 Based on NMWQCC Standards published in Document Title 20, Chapter 6, Part 2
ug/l - micrograms per liter
NA = Not analyzed
Bold - Result exceeds NMWQCC Standard
J - The reported result is an estimated value

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APPENDIX A

Laboratory Analytical Reports

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1119931. Samples arrived at the laboratory on Thursday, November 13, 2008. The PO# for this group is 89CH.49547.07 and the release number is GALLEGOS.

Client Description	Lancaster Labs Number
MW-10 Grab Water Sample	5527548
MW-9 Grab Water Sample	5527549
MW-8 Grab Water Sample	5527550
MW-7 Grab Water Sample	5527551

ELECTRONIC COPY TO STANTEC International, Inc. Attn: Chad Vowell

Lancaster Laboratories

Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Chad A. Moline
Group Leader

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. WW5527548 **Group No. 1119931**

MW-10 Grab Water Sample
Gallegos Sand Pits

Collected:11/12/2008 09:54 by SB

Account Number: 11842

Submitted: 11/13/2008 08:50
Reported: 11/26/2008 at 11:10
Discard: 12/27/2008

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSM10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	11/24/2008 20:43	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	11/18/2008 02:15	Sherry L Morrow	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. WW5527549 **Group No. 1119931**

MW-9 Grab Water Sample
Gallegos Sand Pits

Collected:11/12/2008 11:55 by SB

Account Number: 11842

Submitted: 11/13/2008 08:50
Reported: 11/26/2008 at 11:10
Discard: 12/27/2008

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSMW9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	11/24/2008 21:08	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	11/18/2008 02:15	Sherry L Morrow	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5527550 **Group No. 1119931**

MW-8 Grab Water Sample
Gallegos Sand Pits

Collected:11/12/2008 12:25 by SB

Account Number: 11842

Submitted: 11/13/2008 08:50
Reported: 11/26/2008 at 11:10
Discard: 12/27/2008

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSMW8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	11/24/2008 21:32	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	11/18/2008 02:15	Sherry L Morrow	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5527551 **Group No. 1119931**

MW-7 Grab Water Sample
Gallegos Sand Pits

Collected:11/12/2008 12:55 by SB

Account Number: 11842

Submitted: 11/13/2008 08:50
Reported: 11/26/2008 at 11:10
Discard: 12/27/2008

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSMW7

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
07805	PAHs in Water by GC/MS						
02752	1-Methylnaphthalene	90-12-0	26	J	9	ug/l	10
03905	2-Methylnaphthalene	91-57-6	48		9	ug/l	10
03947	Naphthalene	91-20-3	34	J	9	ug/l	10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	11/24/2008 21:57	Gregory J Drahovsky	10
07807	BNA Water Extraction	SW-846 3510C	1	11/18/2008 02:15	Sherry L Morrow	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1119931
Reported: 11/26/08 at 11:10 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 08322WAE026	Sample number(s): 5527548-5527551							
1-Methylnaphthalene	N.D.	1.	ug/l	94	91	78-105	3	30
2-Methylnaphthalene	N.D.	1.	ug/l	96	93	78-107	3	30
Naphthalene	N.D.	1.	ug/l	96	94	77-107	2	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in Water by GC/MS
Batch number: 08322WAE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
5527548	95	95	91
5527549	97	101	78
5527550	99	103	76
5527551	91	79	79
Blank	102	106	100
LCS	96	101	90
LCSD	99	103	91
Limits:	44-127	63-114	30-126

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Generic Analysis Request/Chain of Custody

009643

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 11842 Sample #: 552-7548-51 SCR#:

Grp# 1119931

Facility #: Gallegos Sand Pits
Site Address: Farmington New Mexico
Chevron PM: E. Page Lead Consultant: C. Vowell
Consultant/Office: Stantec - Houston
Consultant Prj. Mgr.: Chad Vowell
Consultant Phone #: 713-977-7973 Fax #: 713-501-8790
Sampler: SR/GM
Service Order #: ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable ☐ NPDES ☑)	Matrix: Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan	Oxygenates	TPH G	TPH D Extended Rng. ☐ Silica Gel Cleanup ☐	Lead Total ☐ Diss. ☐ Method	VPH/EPH	NWTPH H HCID ☐ quantification	PAH's 8270
MW-10	11-12-08	0954	✓			✓		2									✓
MW-9	11-12-08	1155	✓			✓		2									✓
MW-8	11-12-08	1229	✓			✓		2									✓
MW-7	11-12-08	1255	✓			✓		2									✓

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I - Full
Type VI (Raw Data) Disk / EDD
WIP (RWQCB) Standard Format
Disk _____ Other.

	Date	Time		Date	Time
Relinquished by:	11/12/08	1345	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:		
Temperature Upon Receipt 1-2 C°			Custody Seals Intact? Yes No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1133638. Samples arrived at the laboratory on Wednesday, February 25, 2009. The PO# for this group is 89CH.49547.08 and the release number is GALLEGOS.

Client Description	Lancaster Labs Number
MW-10 Grab Water Sample	5608248
MW-9 Grab Water Sample	5608249
MW-8 Grab Water Sample	5608250
MW-7 Grab Water Sample	5608251

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell

Lancaster Laboratories

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Analysis Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5608248 **Group No. 1133638**

MW-10 Grab Water Sample
Gallegos Sand Pits

Collected:02/24/2009 09:14 by SB

Account Number: 11842

Submitted: 02/25/2009 09:10
Reported: 03/05/2009 at 15:54
Discard: 04/05/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSP10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	02/27/2009 03:05	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	02/26/2009 18:45	Elaine F Stoltzfus	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5608249 **Group No. 1133638**

MW-9 Grab Water Sample
Gallegos Sand Pits

Collected:02/24/2009 09:46 by SB

Account Number: 11842

Submitted: 02/25/2009 09:10
Reported: 03/05/2009 at 15:54
Discard: 04/05/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSP09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	02/27/2009 03:28	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	02/26/2009 18:45	Elaine F Stoltzfus	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5608250 **Group No. 1133638**

MW-8 Grab Water Sample
Gallegos Sand Pits

Collected:02/24/2009 10:15 by SB

Account Number: 11842

Submitted: 02/25/2009 09:10
Reported: 03/05/2009 at 15:54
Discard: 04/05/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSP08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	*PAHs in Water by GC/MS*					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	< 5	5	ug/l	1
03947	Naphthalene	91-20-3	< 5	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	02/27/2009 03:52	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	02/26/2009 18:45	Elaine F Stoltzfus	1

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Analysis Report

Lancaster Laboratories Sample No. WW5608251 **Group No. 1133638**

MW-7 Grab Water Sample
Gallegos Sand Pits

Collected:02/24/2009 10:49 by SB

Account Number: 11842

Submitted: 02/25/2009 09:10
Reported: 03/05/2009 at 15:54
Discard: 04/05/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSP07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
07805	PAHs in Water by GC/MS					
02752	1-Methylnaphthalene	90-12-0	< 5	5	ug/l	1
03905	2-Methylnaphthalene	91-57-6	6	5	ug/l	1
03947	Naphthalene	91-20-3	13	5	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	02/27/2009 04:16	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	02/26/2009 18:45	Elaine F Stoltzfus	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc.
Reported: 03/05/09 at 03:54 PM

Group Number: 1133638

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 09057WAD026	Sample number(s): 5608248-5608251							
1-Methylnaphthalene	< 5	5.	ug/l	104	97	78-105	6	30
2-Methylnaphthalene	< 5	5.	ug/l	102	96	78-107	6	30
Naphthalene	< 5	5.	ug/l	103	98	77-107	5	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in Water by GC/MS
Batch number: 09057WAD026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
5608248	106	99	89
5608249	108	98	89
5608250	107	98	89
5608251	117	100	82
Blank	107	99	86
LCS	108	98	88
LCSD	103	96	85
Limits:	64-121	63-114	47-114

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only
Acct. # 11842 Group# 1133638 Sample # 5608248-51

COC # 205303

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 1.0°C

For Lab Use Only
FSC:
SCR#: 71870

(1) Client: Stantec Acct. #: 11842
Project Name/#: Gallegos Sand Pits 212201122 PWSID #:
Project Manager: Chad Vowell P.O.#:
Sampler: SB Quote #:
Name of state where samples were collected: NM

(5) Analyses Requested — Preservation Codes

Preservation Codes: H=HCl T=Thiosulfate N=HNO_3 B=NaOH S=H_2SO_4 O=Other

(2)	Date Collected	Time Collected	(3)			(4)			PAH's - 8270	Remarks
mw10	2-24-09	0914	✓			✓		2	✓	
mw-9	2-24-09	0946	✓			✓		2	✓	
mw-8	2-24-09	1015	✓			✓		2	✓	
mw-7	2-24-09	1049	✓			✓		2	✓	

All times are Central time Zone

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: 713-937-7973 Fax #: 713-383-8328
E-mail address: Chad.Vowell@Stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-9-09	0955			
[signature]	2/24/09	1440			
			[signature]	2-25-09	0910

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102.03

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

May 06, 2009

SAMPLE GROUP

The sample group for this submittal is 1142470. Samples arrived at the laboratory on Wednesday, April 29, 2009. The PO# for this group is 89CH.49547.08 and the release number is GALLEGOS.

Client Description	Lancaster Labs Number
MW-10 Grab Water Sample	5657919
MW-9 Grab Water Sample	5657920
MW-8 Grab Water Sample	5657921
MW-7 Grab Water Sample	5657922

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Chronicle.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell

Lancaster Laboratories

Analysis Report

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Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Barbara F. Reedy
Senior Specialist

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5657919

Group No.. 1142470
NM

MW-10 Grab Water Sample
Gallegos Sand Pits

Collected: 04/28/2009 08:34 by SB

Account Number: 11842

Submitted: 04/29/2009 09:15
Reported: 05/06/2009 at 23:38
Discard: 06/06/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
SW-846 8270C	**GC/MS Semivolatiles**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09119WAJ026	05/05/2009 23:20	Ryan P Byrne	1
07807	BNA Water Extraction	SW-846 3510C	1	09119WAJ026	04/30/2009 02:30	Tracy L Schickel	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5657920

Group No. 1142470
NM

MW-9 Grab Water Sample
Gallegos Sand Pits

Collected: 04/28/2009 09:07 by SB

Account Number: 11842

Submitted: 04/29/2009 09:15
Reported: 05/06/2009 at 23:38
Discard: 06/06/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
SW-846 8270C	**GC/MS Semivolatiles**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09119WAJ026	05/05/2009 23:43	Ryan P Byrne	1
07807	BNA Water Extraction	SW-846 3510C	1	09119WAJ026	04/30/2009 02:30	Tracy L Schickel	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5657921

Group No. 1142470
NM

MW-8 Grab Water Sample
Gallegos Sand Pits

Collected: 04/28/2009 09:45 by SB

Account Number: 11842

Submitted: 04/29/2009 09:15
Reported: 05/06/2009 at 23:38
Discard: 06/06/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
SW-846 8270C	**GC/MS Semivolatiles**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09119WAJ026	05/06/2009 00:07	Ryan P Byrne	1
07807	BNA Water Extraction	SW-846 3510C	1	09119WAJ026	04/30/2009 02:30	Tracy L Schickel	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5657922

Group No. 1142470
NM

MW-7 Grab Water Sample
Gallegos Sand Pits

Collected: 04/28/2009 10:22 by SB

Account Number: 11842

Submitted: 04/29/2009 09:15
Reported: 05/06/2009 at 23:38
Discard: 06/06/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-7

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
SW-846 8270C	**GC/MS Semivolatiles**		ug/l		ug/l	
07805	1-Methylnaphthalene	90-12-0	2	J	0.9	1
07805	2-Methylnaphthalene	91-57-6	3	J	0.9	1
07805	Naphthalene	91-20-3	9		0.9	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09119WAJ026	05/06/2009 00:31	Ryan P Byrne	1
07807	BNA Water Extraction	SW-846 3510C	1	09119WAJ026	04/30/2009 02:30	Tracy L Schickel	1

Lancaster Laboratories

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1142470
Reported: 05/06/09 at 11:38 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 09119WAJ026	Sample number(s): 5657919-5657922							
1-Methylnaphthalene	N.D.	1.	ug/l	91	91	78-105	1	30
2-Methylnaphthalene	N.D.	1.	ug/l	94	94	78-107	0	30
Naphthalene	N.D.	1.	ug/l	96	96	77-107	0	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in Water by GC/MS
Batch number: 09119WAJ026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
5657919	97	101	87
5657920	97	104	88
5657921	96	102	89
5657922	97	101	85
Blank	96	103	92
LCS	98	102	89
LCSD	96	102	89
Limits:	64-121	63-114	47-114

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 114270 Sample # 5657919-22

COC # 211611

Please print. Instructions on reverse side correspond with circled numbers.

(1) Client: Chevron Acct. #: 11842

Project Name/#: Gallegos Sand P.-5 PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: SB/JA Quote #:

Name of state where samples were collected: New Mexico

For Lab Use Only
FSC:
SCR#: 746007

(2) Sample Identification	Date Collected	Time Collected	(3) Grab	Composite	(4) Matrix: Soil	Water	Other	Total # of Containers	(5) Analyses Requested: Preservation Codes — PAH's in Water by 8270 SIM	Remarks
MW-10	4-28-09	0834	✓			✓		2	✓	
MW-9	4-28-09	0907	✓			✓		2	✓	
MW-8	4-28-09	0945	✓			✓		2	✓	
MW-7	4-28-09	1022	✓			✓		2	✓	

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6) Temperature of samples upon receipt

All times are Central Time Zone

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: 713-937-7973 Fax #: 713-983-8328
E-mail address: Chad.Vowell@Stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9) Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/13/09	1330			
Steve Bell	4/28/09	1055			
			[signature]	4/29/09	0915

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102.03

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

August 26, 2009

SAMPLE GROUP

The sample group for this submittal is 1158246. Samples arrived at the laboratory on Wednesday, August 19, 2009. The PO# for this group is 89CH.49547.08 and the release number is GALLEGOS.

Client Description	Lancaster Labs Number
MW-10 Grab Water Sample	5753433
MW-9 Grab Water Sample	5753434
MW-8 Grab Water Sample	5753435
MW-7 Grab Water Sample	5753436

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell

Lancaster Laboratories

Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Chad A. Moline
Group Leader

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. WW 5753433

Group No. 1158246
NM

MW-10 Grab Water Sample
Gallegos Sand Pits

Collected: 08/18/2009 08:55 by SB

Account Number: 11842

Submitted: 08/19/2009 09:00
Reported: 08/26/2009 at 13:58
Discard: 09/26/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSP10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l	ug/l	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09232WAE026	08/24/2009 19:30	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	09232WAE026	08/20/2009 16:35	Timothy J Attenberger	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5753434

Group No. 1158246
NM

MW-9 Grab Water Sample
Gallegos Sand Pits

Collected: 08/18/2009 09:35 by SB

Account Number: 11842

Submitted: 08/19/2009 09:00
Reported: 08/26/2009 at 13:58
Discard: 09/26/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSPM9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09232WAE026	08/24/2009 19:54	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	09232WAE026	08/20/2009 16:35	Timothy J Attenberger	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5753435

Group No. 1158246
NM

MW-8 Grab Water Sample
Gallegos Sand Pits

Collected: 08/18/2009 10:11 by SB

Account Number: 11842

Submitted: 08/19/2009 09:00
Reported: 08/26/2009 at 13:58
Discard: 09/26/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSPM8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l	ug/l	
07805	1-Methylnaphthalene	90-12-0	< 5	5	1
07805	2-Methylnaphthalene	91-57-6	< 5	5	1
07805	Naphthalene	91-20-3	< 5	5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09232WAE026	08/24/2009 20:18	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	09232WAE026	08/20/2009 16:35	Timothy J Attenberger	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5753436

Group No. 1158246
NM

MW-7 Grab Water Sample
Gallegos Sand Pits

Collected: 08/18/2009 11:01 by SB

Account Number: 11842

Submitted: 08/19/2009 09:00
Reported: 08/26/2009 at 13:58
Discard: 09/26/2009

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GSPM7

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	
07805	1-Methylnaphthalene	90-12-0	2	J	1	1
07805	2-Methylnaphthalene	91-57-6	4	J	1	1
07805	Naphthalene	91-20-3	10		1	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09232WAE026	08/24/2009 20:42	Gregory J Drahovsky	1
07807	BNA Water Extraction	SW-846 3510C	1	09232WAE026	08/20/2009 16:35	Timothy J Attenberger	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc.
Reported: 08/26/09 at 01:58 PM

Group Number: 1158246

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 09232WAE026	Sample number(s): 5753433-5753436							
1-Methylnaphthalene	N.D.	1.	ug/l	95	96	78-105	2	30
2-Methylnaphthalene	N.D.	1.	ug/l	97	97	78-107	1	30
Naphthalene	N.D.	1.	ug/l	98	99	77-107	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in Water by GC/MS
Batch number: 09232WAE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
5753433	85	99	72
5753434	86	101	78
5753435	88	105	80
5753436	88	97	81
Blank	83	97	76
LCS	88	106	79
LCSD	88	105	77
Limits:	64-121	63-114	47-114

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Generic Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 11842 Sample #: 575343-36 SCR#: 79011 013531

Grp #1158246

Facility #: Gallegos Sand Pits - 21220122
Site Address: Farmington New Mexico
Chevron PM: Rumbi Lead Consultant: C. Vowell
Consultant/Office: Stantec - Houston
Consultant Prj. Mgr.: Chad Vowell
Consultant Phone #: 713-937-7473 Fax #: 713-583-8738
Sampler: SB
Service Order #: ____ ☐ Non SAR: ____

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (☐ Potable ☐ NPDES)	Matrix: Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan	Oxygenates	TPH G	TPH D ☐ Extended Rng. ☐ Silica Gel Cleanup	Lead Total ☐ Diss. ☐ Method ____	VPH/EPH	NWTPH H HCID ☐ quantification	PA-1/s 8270	1
MW-10	8-18-09	0855	✓			✓		2									✓	
MW-9	8-18-09	0935	✓			✓		2									✓	
MW-8	8-18-09	1011	✓			✓		2									✓	
MW-7	8-18-09	1101	✓			✓		2									✓	

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks

All times are Central Time Zone

Turnaround Time Requested (TAT) (please circle)
STD. TAT | 72 hour | 48 hour
24 hour | 4 day | 5 day

Data Package Options (please circle if required)
QC Summary | Type I - Full
Type VI (Raw Data) | Disk / EDD
WIP (RWQCB) | Standard Format
Disk | ____ Other.

	Date	Time		Date	Time
Relinquished by:	8-18-09	1823	Received by:		
Relinquished by:	8/18/09	1209	Received by:		
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other ____			Received by:	8/19/09	0900
Temperature Upon Receipt 1.1 C°			Custody Seals Intact? Yes No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

December 02, 2009

Project: Gallegos Sand Pits

Samples arrived at the laboratory on Wednesday, November 18, 2009. The PO# for this group is 89CH.49547.08 and the release number is GALLEGOS. The group number for this submittal is 1171597.

Client Sample Description	Lancaster Labs (LLI) #
MW-10 Grab Water Sample	5840883
MW-9 Grab Water Sample	5840884
MW-8 Grab Water Sample	5840885
MW-7 Grab Water Sample	5840886

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell

Lancaster Laboratories

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Analysis Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Lancaster Laboratories

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Analysis Report

Sample Description: MW-10 Grab Water Sample
Gallegos Sand Pits

LLI Sample # WW 5840883
LLI Group # 1171597
NM

Project Name: Gallegos Sand Pits

Collected: 11/17/2009 11:56 by SB

Account Number: 11842

Submitted: 11/18/2009 09:00
Reported: 12/02/~~2009~~ at 12:29
Discard: 01/02/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	N.D.	1	1
07805	2-Methylnaphthalene	91-57-6	N.D.	1	1
07805	Naphthalene	91-20-3	N.D.	1	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09323WAG026	11/24/2009 09:48	Timothy J Trees	1
07807	BNA Water Extraction	SW-846 3510C	1	09323WAG026	11/20/2009 09:30	Cynthia J Salvatori	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-9 Grab Water Sample
Gallegos Sand Pits

LLI Sample # WW 5840884
LLI Group # 1171597
NM

Project Name: Gallegos Sand Pits

Collected: 11/17/2009 12:26 by SB

Account Number: 11842

Submitted: 11/18/2009 09:00
Reported: 12/02/2009 at 12:29
Discard: 01/02/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l	ug/l	
07805	1-Methylnaphthalene	90-12-0	N.D.	1	1
07805	2-Methylnaphthalene	91-57-6	N.D.	1	1
07805	Naphthalene	91-20-3	N.D.	1	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09323WAG026	11/24/2009 10:19	Timothy J Trees	1
07807	BNA Water Extraction	SW-846 3510C	1	09323WAG026	11/20/2009 09:30	Cynthia J Salvatori	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-8 Grab Water Sample
Gallegos Sand Pits

LLI Sample # WW 5840885
LLI Group # 1171597
NM

Project Name: Gallegos Sand Pits

Collected: 11/17/2009 12:55 by SB

Account Number: 11842

Submitted: 11/18/2009 09:00
Reported: 12/02/2009 at 12:29
Discard: 01/02/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	1-Methylnaphthalene	90-12-0	N.D.	0.9	1
07805	2-Methylnaphthalene	91-57-6	N.D.	0.9	1
07805	Naphthalene	91-20-3	N.D.	0.9	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09323WAG026	11/24/2009 10:47	Timothy J Trees	1
07807	BNA Water Extraction	SW-846 3510C	1	09323WAG026	11/20/2009 09:30	Cynthia J Salvatori	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-7 Grab Water Sample
Gallegos Sand Pits

LLI Sample # WW 5840886
LLI Group # 1171597
NM

Project Name: Gallegos Sand Pits

Collected: 11/17/2009 13:28 by SB

Account Number: 11842

Submitted: 11/18/2009 09:00
Reported: 12/02/2009 at 12:29
Discard: 01/02/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

GAL-7

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	
07805	1-Methylnaphthalene	90-12-0	2	J	0.9	1
07805	2-Methylnaphthalene	91-57-6	2	J	0.9	1
07805	Naphthalene	91-20-3	9		0.9	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs in Water by GC/MS	SW-846 8270C	1	09323WAG026	11/24/2009 11:16	Timothy J Trees	1
07807	BNA Water Extraction	SW-846 3510C	1	09323WAG026	11/20/2009 09:30	Cynthia J Salvatori	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1171597
Reported: 12/02/09 at 12:29 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 09323WAG026	Sample number(s): 5840883-5840886							
1-Methylnaphthalene	N.D.	1.	ug/l	95	95	78-105	1	30
2-Methylnaphthalene	N.D.	1.	ug/l	95	96	78-107	1	30
Naphthalene	N.D.	1.	ug/l	93	94	77-107	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in Water by GC/MS
Batch number: 09323WAG026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
5840883	89	95	80
5840884	85	92	76
5840885	92	97	83
5840886	92	94	83
Blank	94	102	90
LCS	90	102	91
LCSD	92	99	91
Limits:	64-121	63-114	47-114

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Generic Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

Acct. #: 11842 — For Lancaster Laboratories use only — Sample #: 5840883-86 — SCR#: 83272 014888

Group# 1171597

Facility #: Gallegos Sand Pits 21220122
Site Address: Farmington New Mexico
Chevron PM: Rumbi — Lead Consultant: C. Vowell
Consultant/Office: Stantec - Houston Tx
Consultant Prj. Mgr.: Danny Woodward
Consultant Phone #: 713-937-7973 — Cell Fax #: 832-341-1889
Sampler: SB
Service Order #: ____ ☐ Non SAR: ____

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil	Matrix: Potable	Matrix: NPDES	Matrix: Air	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX + MTBE 8021 / 8260 ☐ Naphth	8260 full scan	Oxygenates	TPH G	TPH D ☐ Extended Rng. ☐ Silica Gel Cleanup	Lead Total ☐ Diss. ☐ Method	VPH/EPH	NWTPH H HCID ☐ quantification	PAHs by 8270
MW-10	11-17-09	1156	✓			✓			✓		2									✓
MW-9	11-17-09	1226	✓			✓			✓		2									✓
MW-8	11-17-09	1255	✓			✓			✓		2									✓
MW-7	11-17-09	1328	✓			✓			✓		2									✓

Preservative Codes
H = HCl — T = Thiosulfate
N = HNO_3 — B = NaOH
S = H_2SO_4 — O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
All times are Mountain Time Zone

Turnaround Time Requested (TAT) (please circle)
STD. TAT — 72 hour — 48 hour
24 hour — 4 day — 5 day

Data Package Options (please circle if required)
QC Summary — Type I - Full
Type VI (Raw Data) — Disk / EDD
WIP (RWQCB) — Standard Format
Disk — ____ Other.

	Date	Time		Date	Time
Relinquished by:	11-16-09	0855	Received by:		
Relinquished by:	11-17-09	1425	Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other ____			Received by:	11/18/09	0900

Temperature Upon Receipt 0-8 C°
Custody Seals Intact? Yes No

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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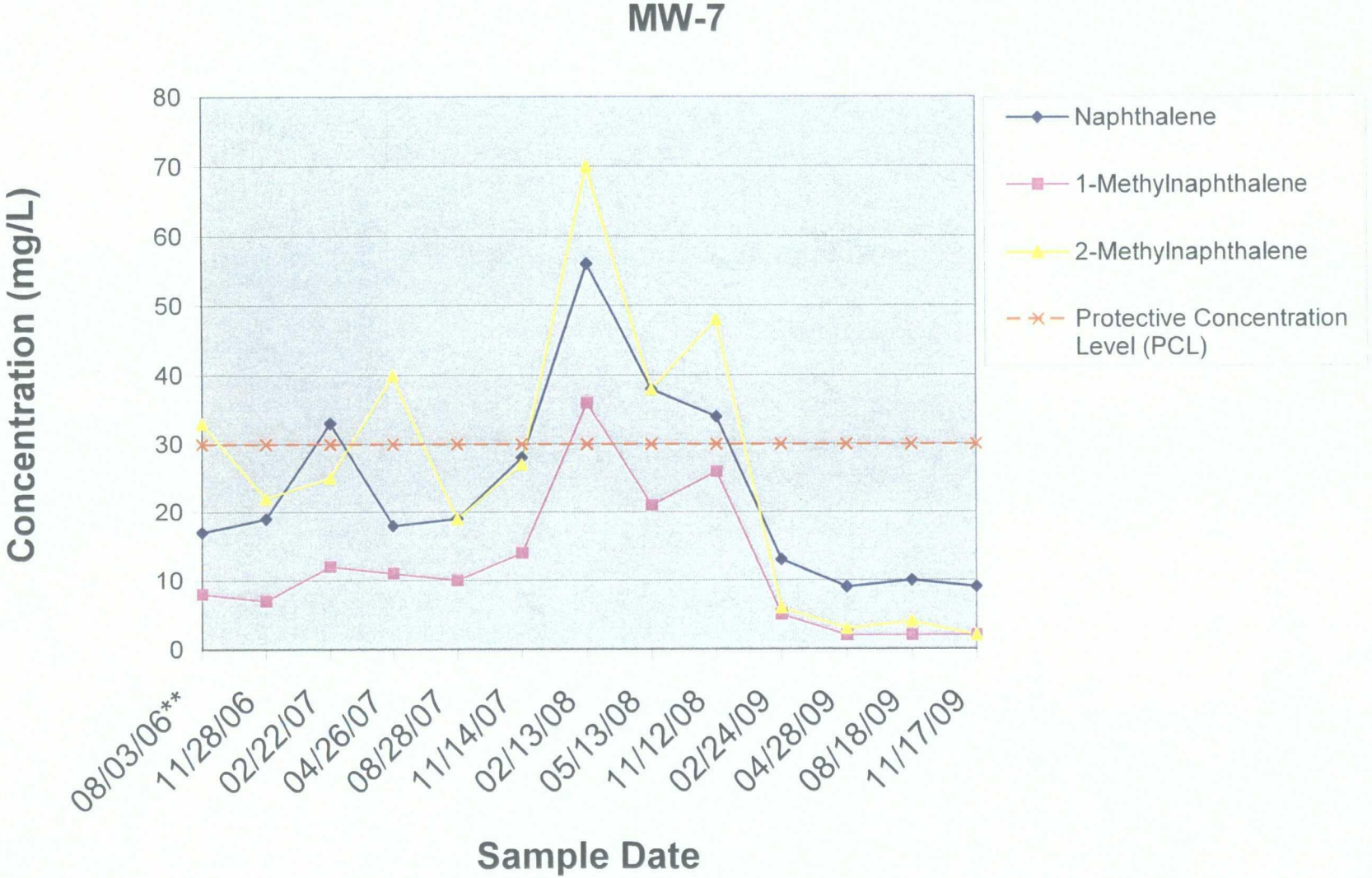
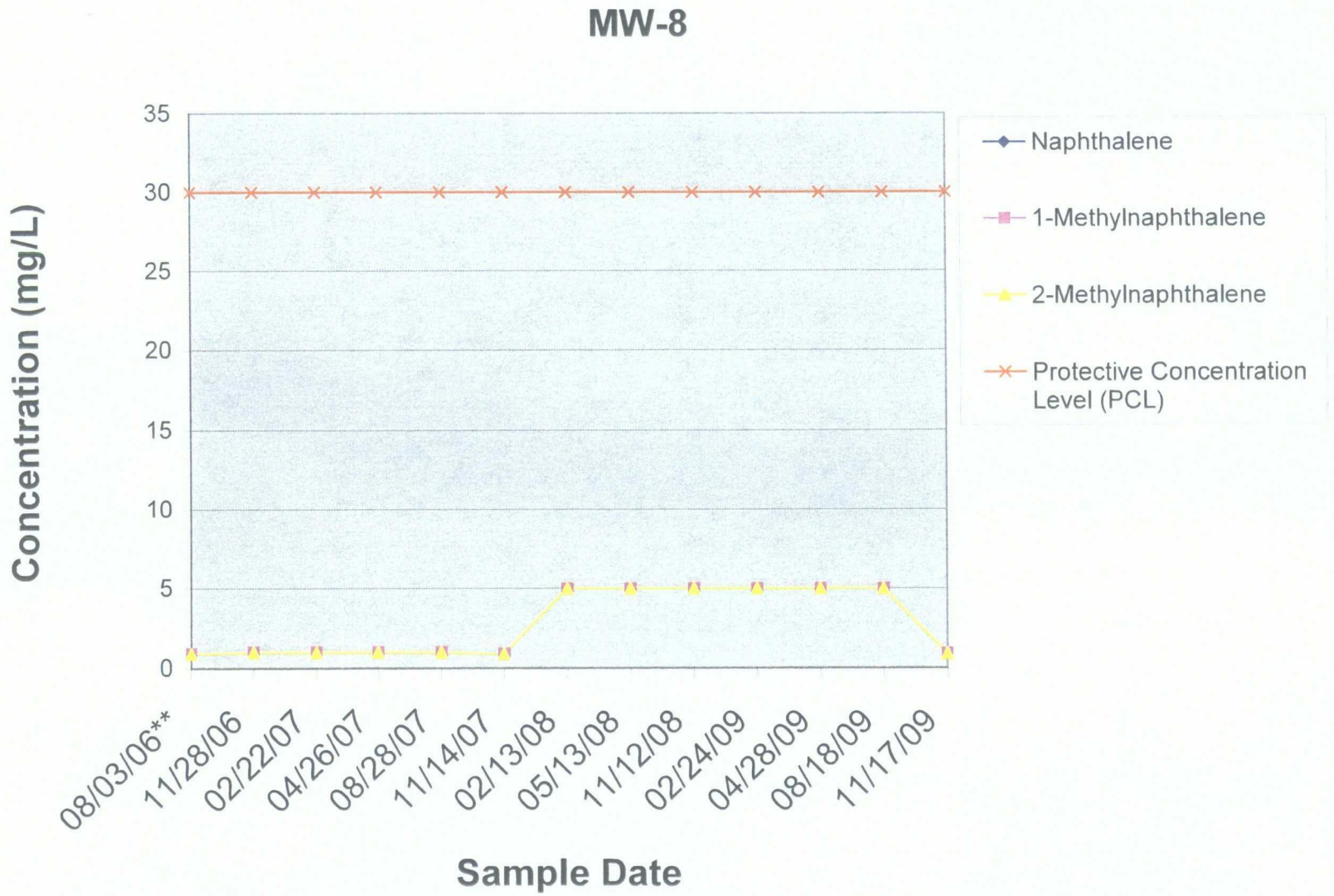
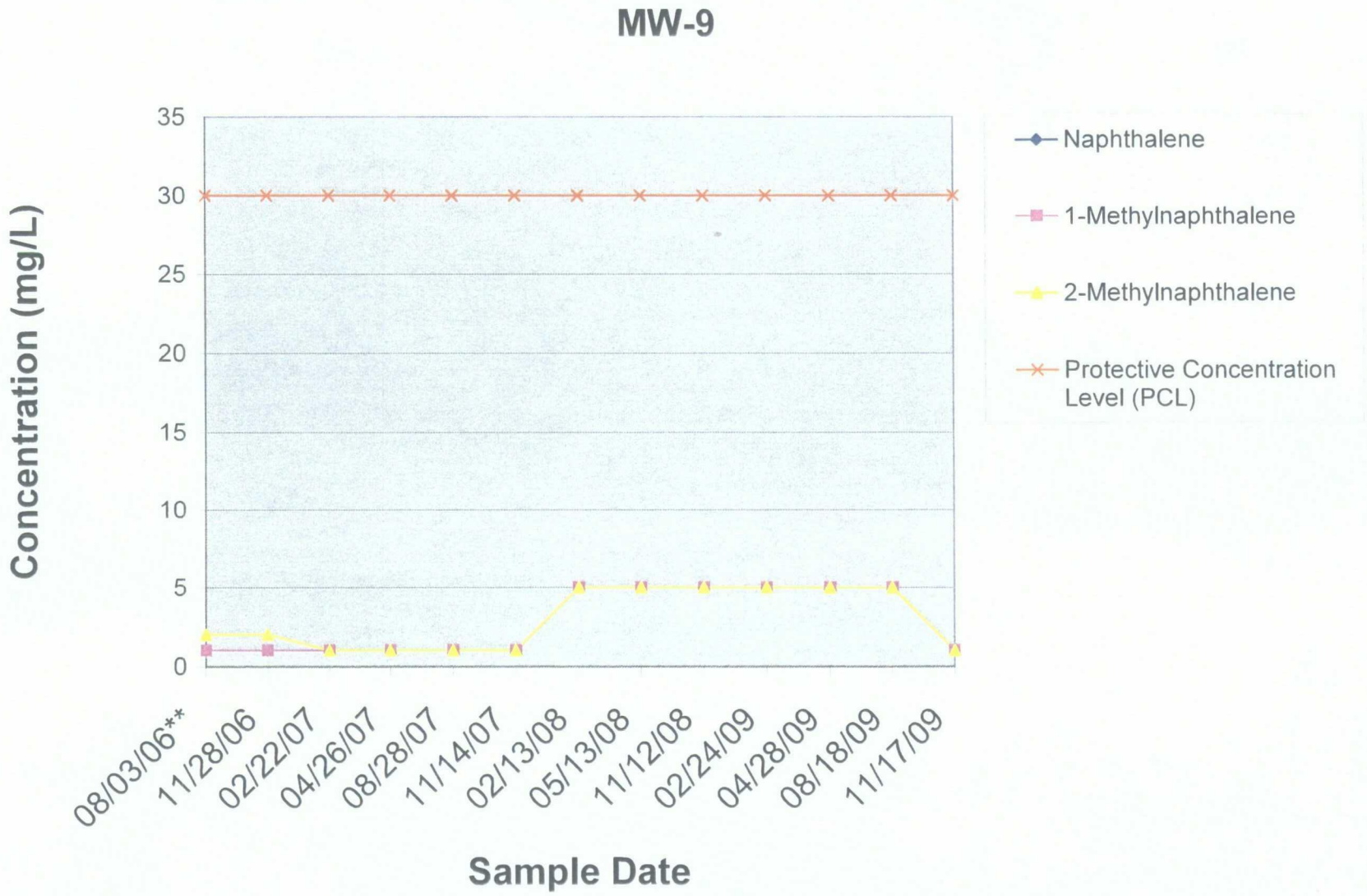
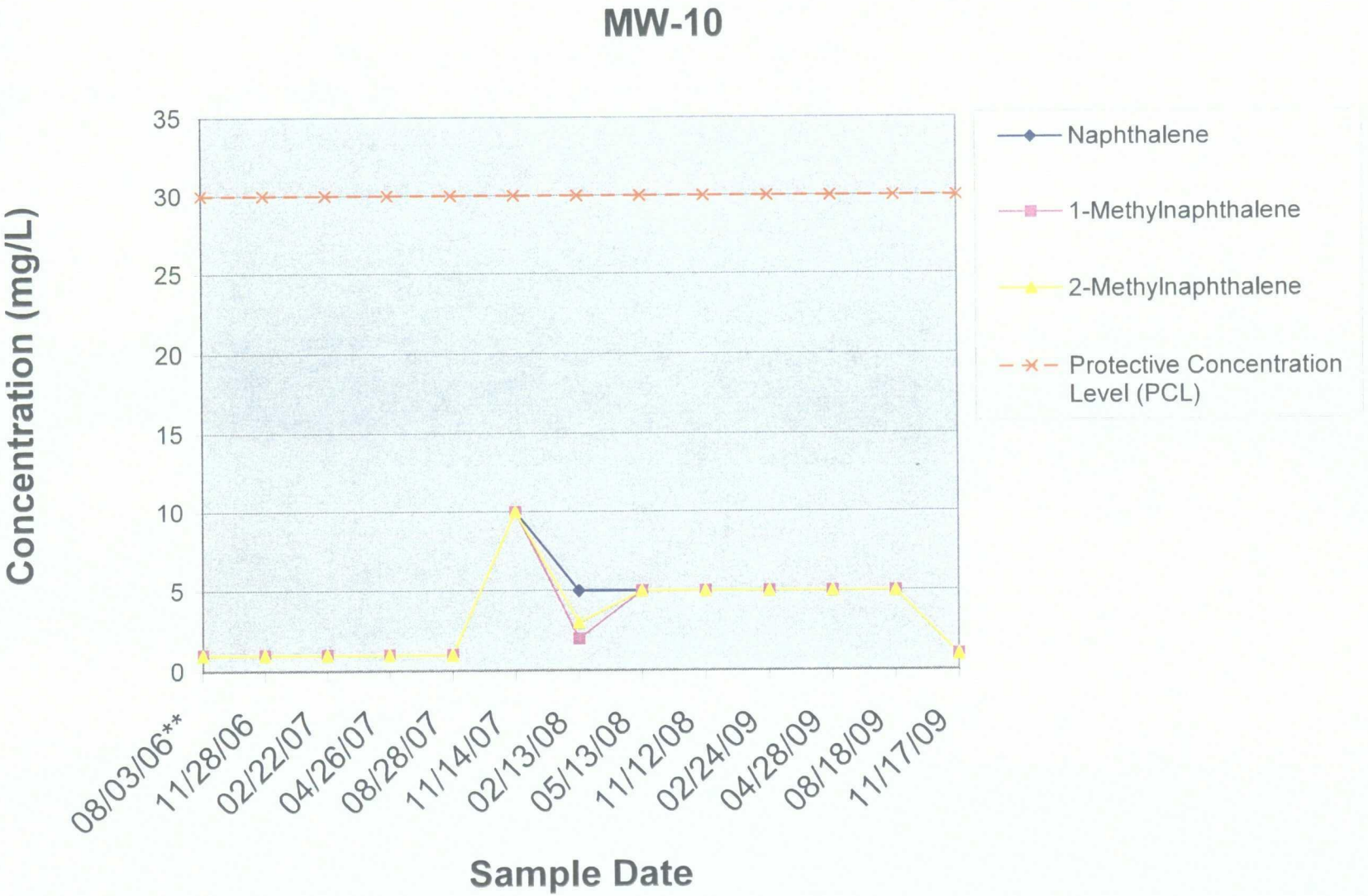
APPENDIX B

Monitor Well Trending Data


MW-7
Concentration (mg/L)
80
70
60
50
40
30
20
10
0
08/03/06**
11/28/06
02/22/07
04/26/07
08/28/07
11/14/07
02/13/08
05/13/08
11/12/08
02/24/09
04/28/09
08/18/09
11/17/09
Sample Date
Naphthalene
1-Methylnaphthalene
2-Methylnaphthalene
Protective Concentration Level (PCL)


MW-8
Concentration (mg/L)
35
30
25
20
15
10
5
0
08/03/06**
11/28/06
02/22/07
04/26/07
08/28/07
11/14/07
02/13/08
05/13/08
11/12/08
02/24/09
04/28/09
08/18/09
11/17/09
Sample Date
Naphthalene
1-Methylnaphthalene
2-Methylnaphthalene
Protective Concentration Level (PCL)


MW-9
Concentration (mg/L)
35
30
25
20
15
10
5
0
08/03/06**
11/28/06
02/22/07
04/26/07
08/28/07
11/14/07
02/13/08
05/13/08
11/12/08
02/24/09
04/28/09
08/18/09
11/17/09
Sample Date
Naphthalene
1-Methylnaphthalene
2-Methylnaphthalene
Protective Concentration Level (PCL)


MW-10
Concentration (mg/L)
35
30
25
20
15
10
5
0
08/03/06**
11/28/06
02/22/07
04/26/07
08/28/07
11/14/07
02/13/08
05/13/08
11/12/08
02/24/09
04/28/09
08/18/09
11/17/09
Sample Date
Naphthalene
1-Methylnaphthalene
2-Methylnaphthalene
Protective Concentration Level (PCL)