

CON 12-15
Doc #14163

June 29, 2007

Mr. Greg Fuhrmann
Contaminated Sites Section
Iowa Department of Natural Resources
Wallace State Office Building
Des Moines, Iowa 50319



Subject: Semi-Annual Groundwater Monitoring Report
Pep Gas
801 W. Monroe Street
Mount Pleasant, Iowa

Dear Mr. Fuhrmann:

Delta Environmental Consultants, Inc. (Delta) has completed the subject report. Enclosed please find one (1) original.

Should you have any questions or require additional information, please do not hesitate to contact me at (636) 916-8105 or Chris Macdonald at (636) 916-8114.

Sincerely,
Delta Environmental Consultants, Inc.

Sara Kammerer
Project Engineer
Iowa Certified Groundwater
Professional #1999

Chris Macdonald
Project Manager

cc: Mr. Tony Fedler, Pep Gas
Project File

Enclosure: Semi-Annual Groundwater Monitoring Report

00521 JUL02'07 AM 9:58

Semi-Annual Groundwater Monitoring Report

Pep Gas
801 W. Monroe Street
Mount Pleasant, Iowa

Delta Project #A005-504

June 29, 2007

Prepared for:

Mr. Tony Fedler
Pep Gas
2431 Iowa Avenue
Mount Pleasant, Iowa 52641

Prepared by:



Ms. Sara Kammerer
Project Engineer
Iowa Certified Groundwater Professional #1999

Reviewed by:



Mr. Chris Macdonald
Project Manager

Copies Submitted to:

Mr. Greg Fuhrmann, IDNR
Mr. Tony Fedler, Pep Gas
File #A005-504



2240 Bluestone Drive, St. Charles, Missouri 63303
636 949 6799 800 477 7411

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June 29, 2007

Mr. Greg Fuhrmann
Iowa Department of Natural Resources
Contaminated Sites Section
Wallace State Office Building
Des Moines, Iowa 50319

Subject: **Semi-Annual Groundwater Monitoring Report**
 Pep Gas
 801 W. Monroe Street
 Mount Pleasant, Iowa

Dear Mr. Fuhrmann:

Delta Environmental Consultants, Inc. (Delta) is pleased to submit the following Semi-Annual Groundwater Monitoring Report which documents the completion of two quarterly groundwater sampling events.

INTRODUCTION

Per the approved Site Assessment Report dated June 7, 2005 prepared and submitted by Delta, petroleum impacts in both soil and groundwater were identified above current Iowa Department of Natural Resources (IDNR) action levels. In response to this occurrence, Delta proposed to complete a soil overexcavation and conduct subsequent groundwater sampling as discussed in the Overexcavation and Groundwater Monitoring Work Plan dated August 4, 2005.

On October 31, 2005 through November 2, 2005 a soil overexcavation was conducted to remove the noted soil impacts identified at BH-2/MW-2 (please see Figure 1 – Site Plan Map). An estimated total of 1370 cubic yards (cy) of soil was removed and landfarmed.

Impacts remaining in soil, upon completion of the soil overexcavation, are greater than the Tier 1 lookup for soil leaching to groundwater. However, utilizing the resourceful Cumulative Risk Calculator available at the IDNR website, Delta has noted that an apparent zero cancer risk remains for a residential property. Delta assigned a residential zoning designation during the calculation as a conservative measure. Further, Delta is not aware of any institutional controls prohibiting the re-zoning of the site property and developing into residential property(ies).

GROUNDWATER SAMPLING

On October 11 and December 20, 2006 a Delta representative returned to the site to conduct two quarterly approved groundwater monitoring events. Prior to collection of groundwater samples, depth to water information was collected from monitoring wells BH-1/MW-1, BH-3/MW-3, MGP-MW-3, MGP-MW-4, and MGP-MW-6 utilizing a water level indicator. Groundwater elevations calculated from the depth to groundwater measurements are depicted on Groundwater Elevation Maps. Shallow groundwater flow is to the southeast at the subject site.

Groundwater samples were collected from monitoring wells BH-1/MW-1, BH-3/MW-3, MGP-MW-3, MGP-MW-4, and MGP-MW-6. Monitoring wells were purged until at least three saturated well volumes were removed. If a well was observed to bail dry prior to three well volumes being removed, the well was allowed to recharge and was then sampled. The groundwater sample was poured from a dedicated bailer into clean, labeled, containers. The samples were placed in a cooler with ice and sent under Chain-of-Custody to Pace for analysis. Groundwater samples were analyzed for BTEX, MTBE 8260 and TEH OA-2. Analytical results are summarized in the Groundwater Analytical Summary table. A copy of the Groundwater Analytical Reports is attached.

As previously mentioned, the non-replacement of the well BH-2/MW-2 was discussed with Mr. Matt Culp of IDNR on June 15, 2006. The discussion was in response to a request from Mr. Tony Fedler of Pep Gas who was understood to have contacted IDNR and requested the same. It is also understood the well MW-3 exists in the downgradient direction between the former bulk fuel above ground tanks/loading dock area and the surface water body receptor immediately east of the site (please see Figures 2 and 3 – Groundwater Elevation Maps). The surface water body is understood to be the most limiting receptor at the site. As a result, it is Delta's position that re-installation of the well MW-2 is unnecessary and compliance groundwater sampling can be accomplished using the existing monitoring well network.

DISCUSSION OF RESULTS/CONCLUSIONS

Recent groundwater sampling efforts conducted on October 11 and December 20, 2006 are the second and third groundwater sampling events conducted since the overexcavation, which was completed on November 2, 2005. It is Delta's opinion that contaminant trends are not immediately apparent aside from the noted decreases as reported in the most recent laboratory analysis to the previous event conducted on May 17, 2005 (please see Table 1). Further, and in consideration of the discussion above with regard to non-replacement of the well MW-2, since the monitoring well MW-3 currently exists between the understood source location of the former bulk fuel ASTs and loading dock and the surface water body receptor, it is believed that a sufficient amount of groundwater analytical data will be generated using the current monitoring well network. And the data generated is believed to satisfy the evaluation requirements. As such, Delta believes the non-replacement of the well MW-2 and the use of existing monitoring well network of MW-1, MW-3, MGP-MW-3, MGP-MW-4, and MGP-MW-6 to evaluate the effectiveness of the completed overexcavation is sufficient.

Considering the limited amount of available data, the groundwater contaminant plume appears at this time to be stable or decreasing. The justification for such includes the fact that during four (4) groundwater sampling events, wide variations in contaminant concentrations and major increases are not observed.

Based upon the analytical reports for the soil samples collected in association with the soil overexcavation and subsequent groundwater sampling conducted at BH-1/MW-1, BH-3/MW-3, MGP-MW-4, and MGP-MW-6, at least initially, appears that the soil overexcavation was successful. This conclusion is based upon the noted concentrations that remain in soil, though above the current IDNR soil leaching to groundwater target levels, measured groundwater concentrations from the initial sampling event conducted on May 17, 2005 to the most recent events note a decline in measured benzene and diesel concentrations.

Additionally, as discussed previously in the July 12, 2006 Remedial Action Report, the cumulative cancer risk has been demonstrated to equal zero for a residentially-zoned property using maximum concentrations of benzene remaining in soil.

Recommendations contained in this report represent Delta's professional opinions based upon currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Should you have any questions or require additional information, please do not hesitate to contact me at (636) 916-8105 or Chris Macdonald at (636) 916-8114.

Sincerely,

Delta Environmental Consultants, Inc.



Sara Kammerer
Project Engineer
Iowa Certified Groundwater
Professional #1999



Chris Macdonald
Project Manager

cc: Mr. Tony Fedler, Pep Gas
File #A005-504

GROUNDWATER ANALYTICAL SUMMARY

[illegible]

Notes:

* Action level established per IAC 567, Chapter 133.2 - per discussion with Mick Leat @ IDNR on 05/27/05 acceptable to use Tier 1 Look-Up Table established per IAC 567, Chapter 135.9

* **Bold** are exceedances of applicable target level(s) as reported in units of ug/l or ppb

* The well MW-2 was destroyed in response to soil overexcavation conducted on October 31, 2005 to November 2, 2005

* The well MGP-MW-3 was inaccessible on the sampling date of June 7, 2006. A padlock was present on the protective casing.

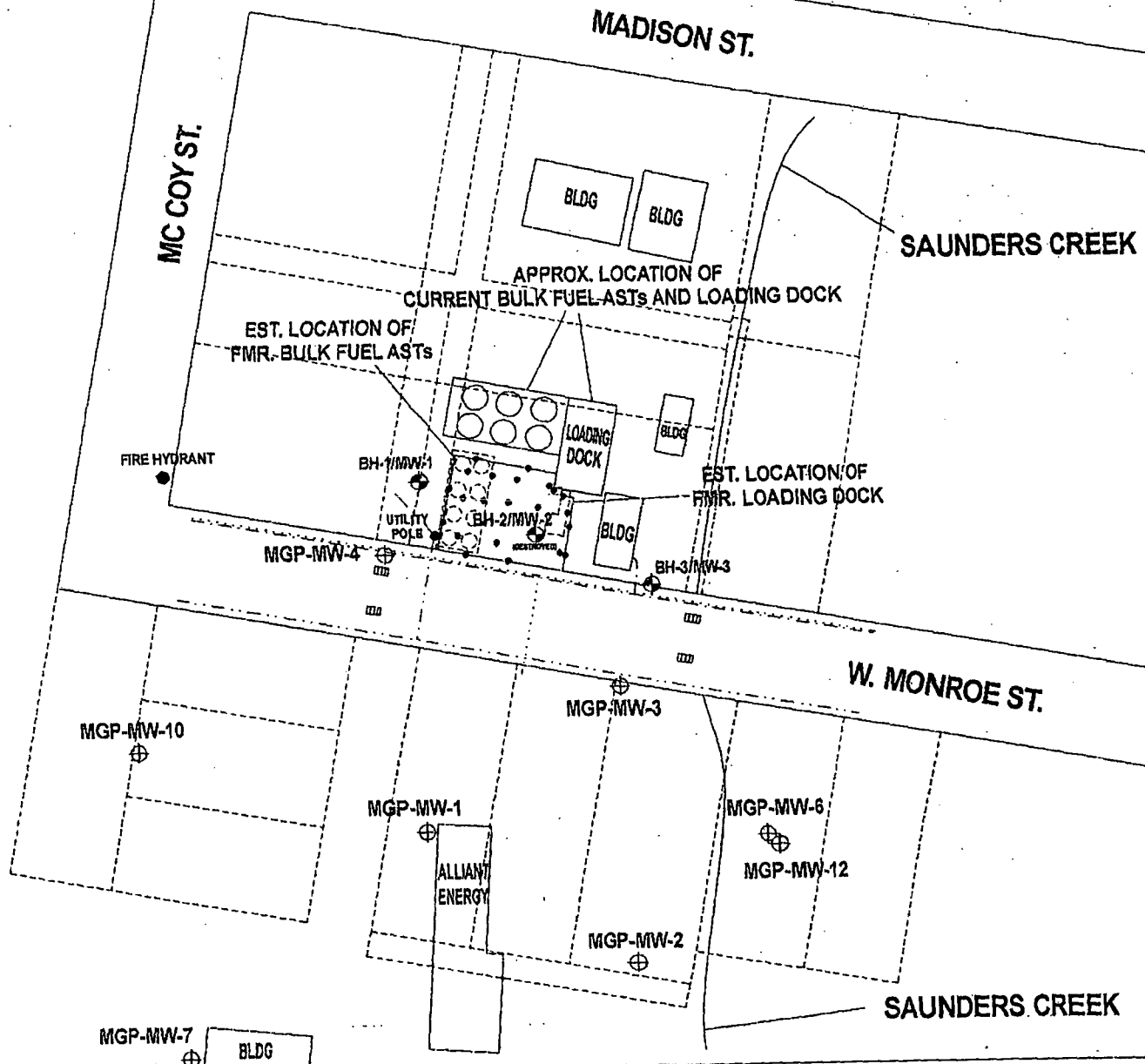
Attempted to gain access by talking with Alliant personnel present at site however was unsuccessful.

¹ Total Petroleum Hydrocarbons - The sample does not match a profile of laboratory standards. Quantitation achieved using diesel fuel as a reference standard.

LEGEND

- SOIL BORING/PERMANENT MONITORING WELL BY DELTA
- MONITORING WELL BY OTHERS (FOR ALLIANT ENERGY MGP SITE)
- SOIL EXCAVATION SAMPLE BY DELTA
- WATER
- COMMUNICATIONS
- OVERHEAD ELECTRIC
- PROPERTY LINE
- STORM GRATE

NOTE: THIS DRAWING, INCLUDING PROPERTY LINES, STRUCTURES, AND LOCATIONS OF BURIED UTILITIES IS NOT EXACT. FOR PRECISE LOCATIONS, CONSULT A REGISTERED LAND SURVEYOR AND APPROPRIATE UTILITY COMPANIES. DRAWING PRODUCED PER PLAT MAP RECEIVED FROM HENRY COUNTY ASSESSOR'S OFFICE ON MAY 16, 2006.



SCALE

0 FT. 100 FT.



SITE PLAN MAP

PEP GAS
801 WEST MONROE STREET
MT. PLEASANT, IOWA

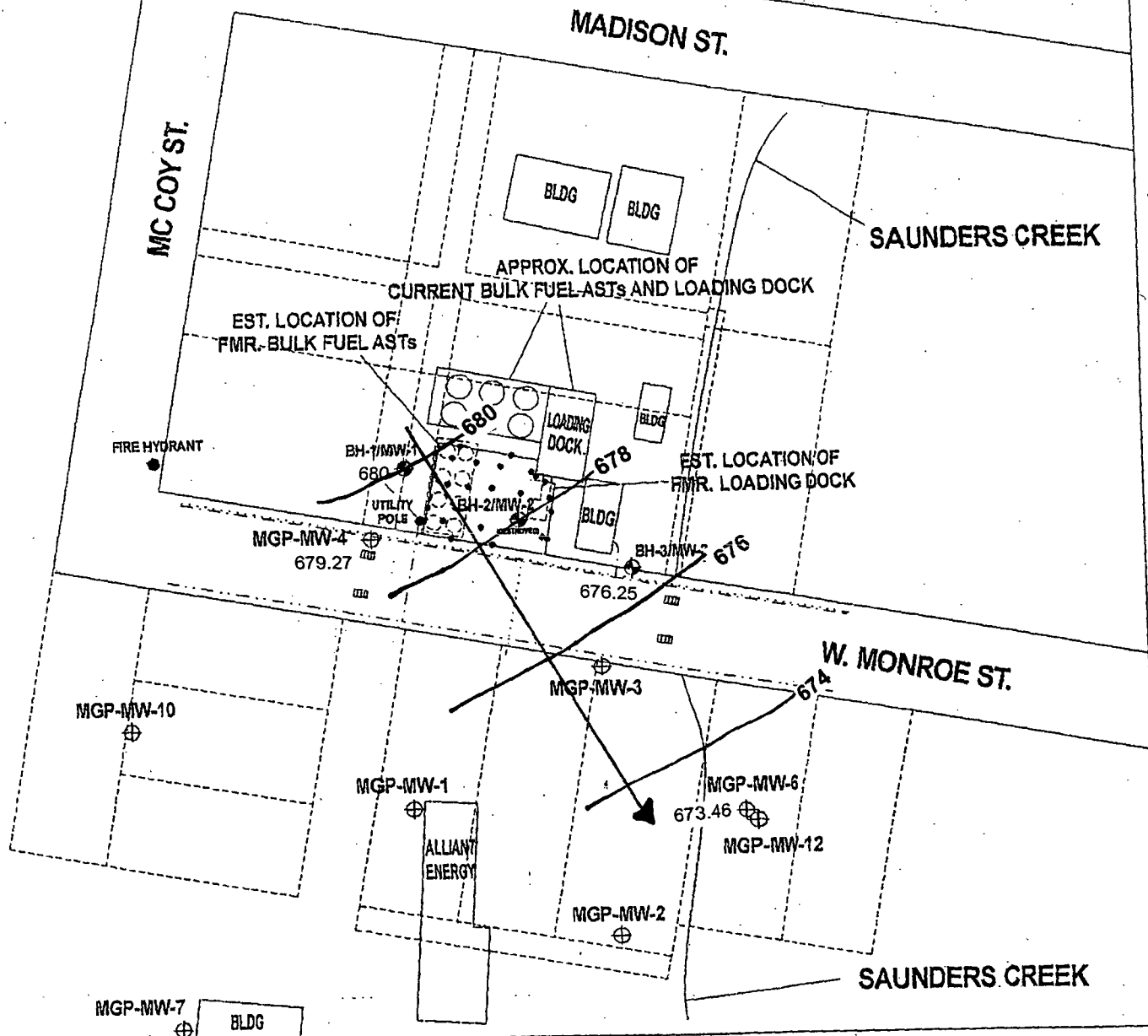
PROJECT NO: A005-504	APPENDIX NO:	DATE: 06/15/06	DRAWN BY: JMO	CHECKED BY:
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GROUNDWATER ELEVATIONS MEASURED 10/11/06

CONTOUR INTERVAL = 2 FT

LEGEND

- ⊕ SOIL BORING/PERMANENT MONITORING WELL BY DELTA
 - ⊕ MONITORING WELL BY OTHERS (FOR ALLIANT ENERGY MGP SITE)
 - SOIL EXCAVATION SAMPLE BY DELTA
 - WATER
 - COMMUNICATIONS
 - OVERHEAD ELECTRIC
 - PROPERTY LINE
 - STORM GRATE
- NOTE: THIS DRAWING, INCLUDING PROPERTY LINES, STRUCTURES, AND LOCATIONS OF BURIED UTILITIES IS NOT EXACT. FOR PRECISE LOCATIONS, CONSULT A REGISTERED LAND SURVEYOR AND APPROPRIATE UTILITY COMPANIES. DRAWING PRODUCED PER PLAT MAP RECEIVED FROM HENRY COUNTY ASSESSOR'S OFFICE ON MAY 18, 2006.



SCALE

0 FT. 100 FT.



GROUNDWATER ELEVATION MAP

PEP GAS
801 WEST MONROE STREET
MT. PLEASANT, IOWA

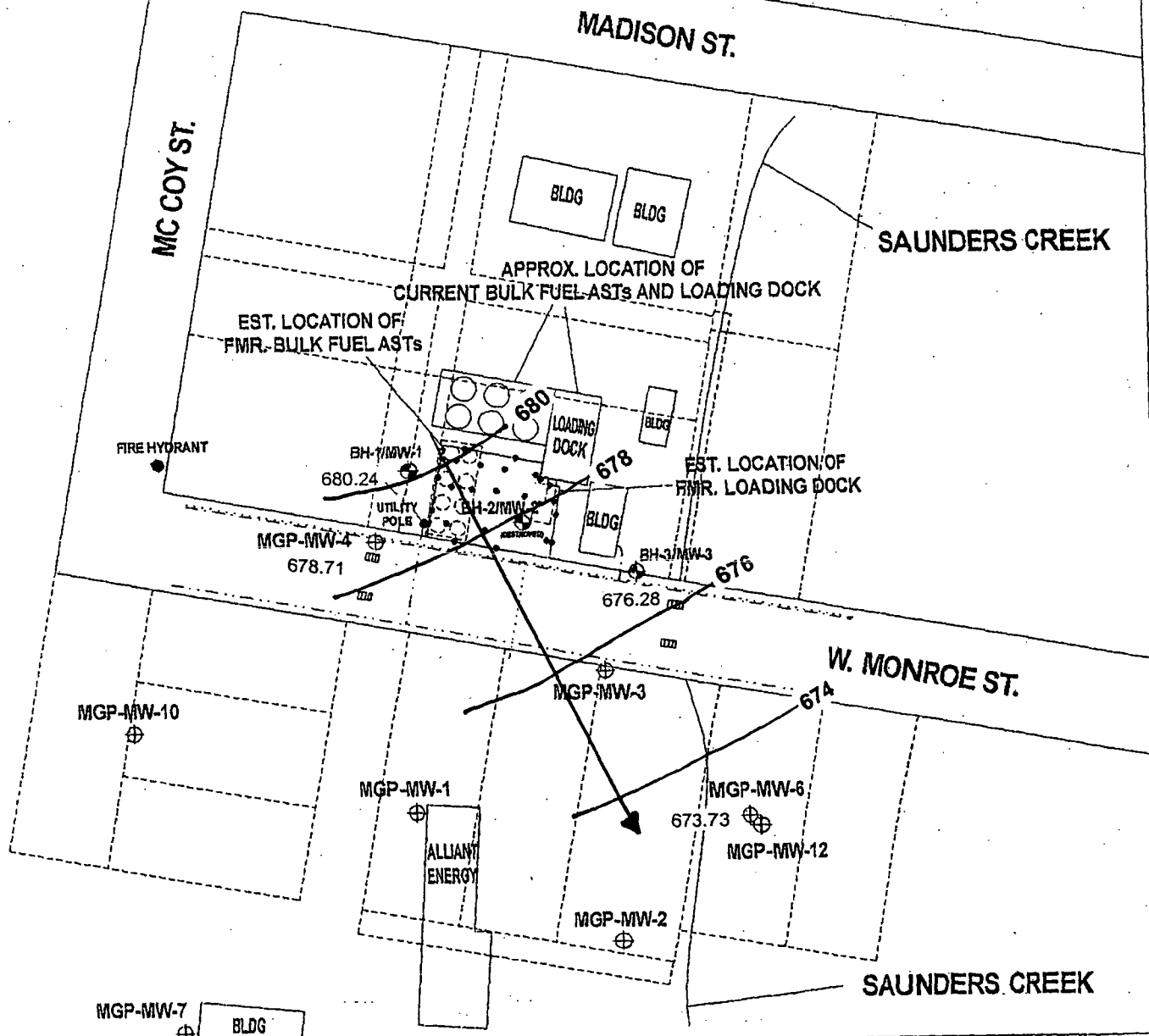
PROJECT NO: A005-504	APPENDIX NO:	DATE: 06/15/06	DRAWN BY: JMO	CHECKED BY:
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GROUNDWATER ELEVATIONS MEASURED 12/20/06

CONTOUR INTERVAL = 2 FT

LEGEND

- ⊕ SOIL BORING/PERMANENT MONITORING WELL BY DELTA
 - ⊕ MONITORING WELL BY OTHERS (FOR ALLIANT ENERGY MGP SITE)
 - ⊕ SOIL EXCAVATION SAMPLE BY DELTA
 - WATER
 - COMMUNICATIONS
 - OVERHEAD ELECTRIC
 - PROPERTY LINE
 - STORM GRATE
- NOTE: THIS DRAWING, INCLUDING PROPERTY LINES, STRUCTURES, AND LOCATIONS OF BURIED UTILITIES IS NOT EXACT. FOR PRECISE LOCATIONS, CONSULT A REGISTERED LAND SURVEYOR AND APPROPRIATE UTILITY COMPANIES. DRAWING PRODUCED PER PLAT MAP RECEIVED FROM HENRY COUNTY ASSESSOR'S OFFICE ON MAY 18, 2006.



SCALE

0 FT. 100 FT.



GROUNDWATER ELEVATION MAP

PEP GAS
801 WEST MONROE STREET
MT. PLEASANT, IOWA

PROJECT
NO. A005-504

APPENDIX
NO.

DATE
06/15/06

DRAWN
BY: JMO

CHECKED
BY:

APPENDIX A

GROUNDWATER ANALYTICAL REPORTS

October 24, 2006

RECEIVED
OCT 31 2006

Chris Macdonald
Delta Environmental
2240 Bluestone Drive
Saint Charles, MO 63303

RE: Project: PEP GAS
Pace Project No.: 6014367

Dear Chris Macdonald:

Enclosed are the analytical results for sample(s) received by the laboratory on October 12, 2006. 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,



Derek Varney

derek.varney@pacelabs.com
Project Manager

A2LA Certification Number: 2456.01
Arkansas Certification Number: 05-008-0
California Certification Number: 02109CA
Illinois Certification Number: 001191
Iowa Certification Number: 118
Kansas/NELAP Certification Number: E-10116
Louisiana Certification Number: 03055
Oklahoma Certification Number: 9205/9935
Utah Certification Number: 9135995665

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 14

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SAMPLE SUMMARY

Project: PEP GAS
Pace Project No.: 6014367

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6014367001	MW-1	Water	10/11/06 12:10	10/12/06 08:50
6014367002	MW-3	Water	10/11/06 12:00	10/12/06 08:50
6014367003	MGP-MW-3	Water	10/11/06 11:20	10/12/06 08:50
6014367004	MGP-MW-4	Water	10/11/06 10:50	10/12/06 08:50
6014367005	MGP-MW-6	Water	10/11/06 11:35	10/12/06 08:50

REPORT OF LABORATORY ANALYSIS

Page 2 of 14

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SAMPLE ANALYTE COUNT

Project: PEP GAS
Pace Project No.: 6014367

Lab ID	Sample ID	Method	Analytes Reported
6014367001	MW-1	EPA 5030B/8260	10
		OA2	9
6014367002	MW-3	EPA 5030B/8260	10
		OA2	9
6014367003	MGP-MW-3	EPA 5030B/8260	10
		OA2	9
6014367004	MGP-MW-4	EPA 5030B/8260	10
		OA2	9
6014367005	MGP-MW-6	EPA 5030B/8260	10
		OA2	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6014367

Sample: MW-1		Lab ID: 6014367001	Collected: 10/11/06 12:10	Received: 10/12/06 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	94114-58-6	
Kerosene	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	8030-30-6	
Motor Oil	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	10/16/06 00:00	10/19/06 23:16		
p-Terphenyl (S)	95 %		64-117	1	10/16/06 00:00	10/19/06 23:16	92-94-4	
n-Tetracosane (S)	98 %		65-125	1	10/16/06 00:00	10/19/06 23:16	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		1.0	1		10/23/06 10:16	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/23/06 10:16	100-41-4	
Methyl-tert-butyl ether	ND ug/L		1.0	1		10/23/06 10:16	1634-04-4	
Toluene	ND ug/L		1.0	1		10/23/06 10:16	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/23/06 10:16	1330-20-7	
Toluene-d8 (S)	101 %		83-113	1		10/23/06 10:16	2037-26-5	
1,2-Dichloroethane-d4 (S)	108 %		80-126	1		10/23/06 10:16	17060-07-0	
Dibromofluoromethane (S)	104 %		87-116	1		10/23/06 10:16	1868-53-7	
4-Bromofluorobenzene (S)	93 %		84-117	1		10/23/06 10:16	460-00-4	
Preservation pH	1.0			1		10/23/06 10:16		

ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6014367

Sample: MW-3		Lab ID: 6014367002	Collected: 10/11/06 12:00		Received: 10/12/06 08:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	68334-30-5	
Fuel Oil	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	68553-00-4	
Jet Fuel	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	94114-58-6	
Kerosene	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	8008-20-6	
Mineral Spirits	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	8030-30-6	
Motor Oil	ND	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16	64742-65-0	
Total Petroleum Hydrocarbons	0.85	mg/L	0.40	1	10/16/06 00:00	10/20/06 00:16		1e
p-Terphenyl (S)	90	%	64-117	1	10/16/06 00:00	10/20/06 00:16	92-94-4	
n-Tetracosane (S)	93	%	65-125	1	10/16/06 00:00	10/20/06 00:16	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	348	ug/L	5.0	5		10/20/06 17:25	71-43-2	
Ethylbenzene	ND	ug/L	5.0	5		10/20/06 17:25	100-41-4	
Methyl-tert-butyl ether	471	ug/L	5.0	5		10/20/06 17:25	1634-04-4	
Toluene	ND	ug/L	5.0	5		10/20/06 17:25	108-88-3	
Xylene (Total)	ND	ug/L	15.0	5		10/20/06 17:25	1330-20-7	
Toluene-d8 (S)	99	%	83-113	5		10/20/06 17:25	2037-26-5	
1,2-Dichloroethane-d4 (S)	106	%	80-126	5		10/20/06 17:25	17060-07-0	
Dibromofluoromethane (S)	105	%	87-116	5		10/20/06 17:25	1868-53-7	
4-Bromofluorobenzene (S)	104	%	84-117	5		10/20/06 17:25	460-00-4	
Preservation pH	2.0			5		10/20/06 17:25		

ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6014367

Sample: MGP-MW-3	Lab ID: 6014367003	Collected: 10/11/06 11:20	Received: 10/12/06 08:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

OA2 GCS

Analytical Method: OA2 Preparation Method: OA2

Diesel Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	94114-58-6	
Kerosene	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	8030-30-6	
Motor Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36	64742-65-0	
Total Petroleum Hydrocarbons	4.7 mg/L		0.40	1	10/16/06 00:00	10/20/06 00:36		1e
p-Terphenyl (S)	96 %		64-117	1	10/16/06 00:00	10/20/06 00:36	92-94-4	
n-Tetracosane (S)	97 %		65-125	1	10/16/06 00:00	10/20/06 00:36	646-31-1	

8260 MSV Iowa UST

Analytical Method: EPA 5030B/8260

Benzene	1130 ug/L		10.0	10		10/21/06 15:20	71-43-2	
Ethylbenzene	268 ug/L		10.0	10		10/21/06 15:20	100-41-4	
Methyl-tert-butyl ether	268 ug/L		10.0	10		10/21/06 15:20	1634-04-4	
Toluene	1020 ug/L		10.0	10		10/21/06 15:20	108-88-3	
Xylene (Total)	490 ug/L		30.0	10		10/21/06 15:20	1330-20-7	
Toluene-d8 (S)	97 %		83-113	10		10/21/06 15:20	2037-26-5	
1,2-Dichloroethane-d4 (S)	112 %		80-126	10		10/21/06 15:20	17060-07-0	
Dibromofluoromethane (S)	100 %		87-116	10		10/21/06 15:20	1868-53-7	
4-Bromofluorobenzene (S)	105 %		84-117	10		10/21/06 15:20	460-00-4	
Preservation pH	2.0			10		10/21/06 15:20		

ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6014367

Sample: MGP-MW-4		Lab ID: 6014367004	Collected: 10/11/06 10:50	Received: 10/12/06 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	94114-58-6	
Kerosene	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	8030-30-6	
Motor Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 00:57		
p-Terphenyl (S)	97 %		64-117	1	10/16/06 00:00	10/20/06 00:57	92-94-4	
n-Tetracosane (S)	101 %		65-125	1	10/16/06 00:00	10/20/06 00:57	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		1.0	1		10/23/06 16:40	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/20/06 18:02	100-41-4	
Methyl-tert-butyl ether	ND ug/L		1.0	1		10/20/06 18:02	1634-04-4	
Toluene	ND ug/L		1.0	1		10/20/06 18:02	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/20/06 18:02	1330-20-7	
Toluene-d8 (S)	98 %		83-113	1		10/20/06 18:02	2037-26-5	
1,2-Dichloroethane-d4 (S)	107 %		80-126	1		10/20/06 18:02	17060-07-0	
Dibromofluoromethane (S)	106 %		87-116	1		10/20/06 18:02	1868-53-7	
4-Bromofluorobenzene (S)	103 %		84-117	1		10/20/06 18:02	460-00-4	
Preservation pH	2.0			1		10/20/06 18:02		

ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6014367

Sample: MGP-MW-6		Lab ID: 6014367005	Collected: 10/11/06 11:35	Received: 10/12/06 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	94114-58-6	
Kerosene	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	8030-30-6	
Motor Oil	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	10/16/06 00:00	10/20/06 01:17		
p-Terphenyl (S)	101 %		64-117	1	10/16/06 00:00	10/20/06 01:17	92-94-4	
n-Tetracosane (S)	103 %		65-125	1	10/16/06 00:00	10/20/06 01:17	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	2.3 ug/L		1.0	1		10/23/06 10:33	71-43-2	
Ethylbenzene	2.1 ug/L		1.0	1		10/23/06 10:33	100-41-4	
Methyl-tert-butyl ether	11.9 ug/L		1.0	1		10/23/06 10:33	1634-04-4	
Toluene	ND ug/L		1.0	1		10/23/06 10:33	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/23/06 10:33	1330-20-7	
Toluene-d8 (S)	102 %		83-113	1		10/23/06 10:33	2037-26-5	
1,2-Dichloroethane-d4 (S)	111 %		80-126	1		10/23/06 10:33	17060-07-0	
Dibromofluoromethane (S)	109 %		87-116	1		10/23/06 10:33	1868-53-7	
4-Bromofluorobenzene (S)	90 %		84-117	1		10/23/06 10:33	460-00-4	
Preservation pH	1.0			1		10/23/06 10:33		

QUALITY CONTROL DATA

Project: PEP GAS
Pace Project No.: 6014367

QC Batch: OEXT/4203 Analysis Method: OA2
QC Batch Method: OA2 Analysis Description: OA2 GCS
Associated Lab Samples: 6014367001, 6014367002, 6014367003, 6014367004, 6014367005

METHOD BLANK: 115440

Associated Lab Samples: 6014367001, 6014367002, 6014367003, 6014367004, 6014367005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Fuel	mg/L	ND	0.40	
Fuel Oil	mg/L	ND	0.40	
Jet Fuel	mg/L	ND	0.40	
Kerosene	mg/L	ND	0.40	
Mineral Spirits	mg/L	ND	0.40	
Motor Oil	mg/L	ND	0.40	
Total Petroleum Hydrocarbons	mg/L	ND	0.40	
n-Tetracosane (S)	%	111	65-125	
p-Terphenyl (S)	%	105	64-117	

LABORATORY CONTROL SAMPLE: 115441

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	12.5	13.9	111	58-127	
n-Tetracosane (S)	%			118	65-125	
p-Terphenyl (S)	%			117	64-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115442 115443

Parameter	Units	6014469002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Diesel Fuel	mg/L	ND	16.7	16.7	15.6	14.7	94	88	50-144	6	24
n-Tetracosane (S)	%						97	95	65-125		
p-Terphenyl (S)	%						98	95	64-117		

QUALITY CONTROL DATA

Project: PEP GAS

Pace Project No.: 6014367

QC Batch: MSV/5487

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Iowa UST

Associated Lab Samples: 6014367002, 6014367004

METHOD BLANK: 116738

Associated Lab Samples: 6014367002, 6014367003, 6014367004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Methyl-tert-butyl ether	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	99	80-126	
4-Bromofluorobenzene (S)	%	99	84-117	
Dibromofluoromethane (S)	%	102	87-116	
Toluene-d8 (S)	%	99	83-113	

LABORATORY CONTROL SAMPLE: 116739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	9.8	98	73-127	
Ethylbenzene	ug/L	10	9.4	94	74-120	
Methyl-tert-butyl ether	ug/L	10	9.5	95	60-122	
Toluene	ug/L	10	8.9	89	72-126	
Xylene (Total)	ug/L	30	29.2	97	77-123	
1,2-Dichloroethane-d4 (S)	%			107	80-126	
4-Bromofluorobenzene (S)	%			102	84-117	
Dibromofluoromethane (S)	%			101	87-116	
Toluene-d8 (S)	%			100	83-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116740

116741

Parameter	Units	6014367004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	10	10	12.6	13.4	121	129	44-160	6	19	
Ethylbenzene	ug/L	ND	10	10	10.6	11.9	102	115	44-152	12	31	
Methyl-tert-butyl ether	ug/L	ND	10	10	12.7	14.1	127	141	26-156	10	27	
Toluene	ug/L	ND	10	10	10.1	11.2	91	102	63-135	11	37	
Xylene (Total)	ug/L	ND	30	30	32.7	35.5	106	115	54-144	8	23	
1,2-Dichloroethane-d4 (S)	%						127	127	80-126			S0
4-Bromofluorobenzene (S)	%						106	107	84-117			
Dibromofluoromethane (S)	%						112	115	87-116			
Toluene-d8 (S)	%						91	90	83-113			
Preservation pH		2.0			2.0	2.0				0		

QUALITY CONTROL DATA

Project: PEP GAS

Pace Project No.: 6014367

QC Batch: MSV/5515

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Iowa UST

Associated Lab Samples: 6014367001, 6014367005

METHOD BLANK: 117441

Associated Lab Samples: 6014367001, 6014367005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Methyl-tert-butyl ether	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	105	80-126	
4-Bromofluorobenzene (S)	%	94	84-117	
Dibromofluoromethane (S)	%	105	87-116	
Toluene-d8 (S)	%	100	83-113	

LABORATORY CONTROL SAMPLE: 117442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	10.6	106	73-127	
Ethylbenzene	ug/L	10	10.6	106	74-120	
Methyl-tert-butyl ether	ug/L	10	10.8	108	60-122	
Toluene	ug/L	10	10.7	107	72-126	
Xylene (Total)	ug/L	30	30.8	103	77-123	
1,2-Dichloroethane-d4 (S)	%			109	80-126	
4-Bromofluorobenzene (S)	%			99	84-117	
Dibromofluoromethane (S)	%			106	87-116	
Toluene-d8 (S)	%			102	83-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117448

117449

Parameter	Units	6014556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Benzene	ug/L	9090	1000	1000	9560	9180	46	8	44-160	4	19 M2
Ethylbenzene	ug/L	1240	1000	1000	2200	2050	96	81	44-152	7	31
Methyl-tert-butyl ether	ug/L	ND	1000	1000	1090	1050	109	105	26-156	4	27
Toluene	ug/L	419	1000	1000	1480	1360	106	94	63-135	9	37
Xylene (Total)	ug/L	2780	3000	3000	5760	5240	99	82	54-144	10	23
1,2-Dichloroethane-d4 (S)	%						107	110	80-126		
4-Bromofluorobenzene (S)	%						96	98	84-117		
Dibromofluoromethane (S)	%						108	105	87-116		
Toluene-d8 (S)	%						102	103	83-113		
Preservation pH		1.0			1.0	1.0				0	

QUALITY CONTROL DATA

Project: PEP GAS
Pace Project No.: 6014367

QC Batch:	MSV/5535	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Iowa UST
Associated Lab Samples:	6014367003		

METHOD BLANK: 117792
Associated Lab Samples: 6014367003

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Methyl-tert-butyl ether	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	98	80-126	
4-Bromofluorobenzene (S)	%	99	84-117	
Dibromofluoromethane (S)	%	101	87-116	
Toluene-d8 (S)	%	99	83-113	

LABORATORY CONTROL SAMPLE: 117793

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	10.9	109	73-127	
Ethylbenzene	ug/L	10	11.0	110	74-120	
Methyl-tert-butyl ether	ug/L	10	9.9	99	60-122	
Toluene	ug/L	10	10.5	105	72-126	
Xylene (Total)	ug/L	30	32.2	107	77-123	
1,2-Dichloroethane-d4 (S)	%			103	80-126	
4-Bromofluorobenzene (S)	%			98	84-117	M5
Dibromofluoromethane (S)	%			99	87-116	
Toluene-d8 (S)	%			99	83-113	

QUALIFIERS

Project: PEP GAS

Pace Project No.: 6014367

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

ANALYTE QUALIFIERS

M2 Matrix spike recovery was below QC limits due to sample dilution. Data acceptance based on laboratory control sample (LCS) recovery.

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

S0 Surrogate recovery outside laboratory control limits.

1e The sample does not match a profile of laboratory standards. Quantitation achieved using diesel fuel as a reference standard.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PEP GAS
Pace Project No.: 6014367

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6014367001	MW-1	OA2	OEXT/4203	OA2	GCSV/2453
6014367002	MW-3	OA2	OEXT/4203	OA2	GCSV/2453
6014367003	MGP-MW-3	OA2	OEXT/4203	OA2	GCSV/2453
6014367004	MGP-MW-4	OA2	OEXT/4203	OA2	GCSV/2453
6014367005	MGP-MW-6	OA2	OEXT/4203	OA2	GCSV/2453
6014367002	MW-3	EPA 5030B/8260	MSV/5487		
6014367004	MGP-MW-4	EPA 5030B/8260	MSV/5487		
6014367001	MW-1	EPA 5030B/8260	MSV/5515		
6014367005	MGP-MW-6	EPA 5030B/8260	MSV/5515		
6014367003	MGP-MW-3	EPA 5030B/8260	MSV/5535		

January 02, 2007

Chris Macdonald
Delta Environmental
2240 Bluestone Drive
Saint Charles, MO 63303

RE: Project: Pep Gas
Pace Project No.: 6017228

Dear Chris Macdonald:

Enclosed are the analytical results for sample(s) received by the laboratory on December 21, 2006. 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,



Derek Varney

derek.varney@pacelabs.com
Project Manager

A2LA Certification Number: 2456.01
Arkansas Certification Number: 05-008-0
California Certification Number: 02109CA
Illinois Certification Number: 001191
Iowa Certification Number: 118
Kansas/NELAP Certification Number: E-10116
Louisiana Certification Number: 03055
Oklahoma Certification Number: 9205/9935
Utah Certification Number: 9135995665

Enclosures

cc: Ms. Sara Kammerer, Delta Environmental Consultants,
Inc.

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Pep Gas

Pace Project No.: 6017228

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6017228001	MW-1	Water	12/20/06 10:45	12/21/06 09:35
6017228002	MGP-MW-4	Water	12/20/06 10:35	12/21/06 09:35
6017228003	MGP-MW-6	Water	12/20/06 10:10	12/21/06 09:35
6017228004	MW-3	Water	12/20/06 10:55	12/21/06 09:35
6017228005	MGP-MW-3	Water	12/20/06 10:25	12/21/06 09:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Pep Gas

Pace Project No.: 6017228

Lab ID	Sample ID	Method	Analytes Reported
6017228001	MW-1	EPA 5030B/8260	10
		OA2	9
6017228002	MGP-MW-4	EPA 5030B/8260	10
		OA2	9
6017228003	MGP-MW-6	EPA 5030B/8260	10
		OA2	9
6017228004	MW-3	EPA 5030B/8260	10
		OA2	9
6017228005	MGP-MW-3	EPA 5030B/8260	10
		OA2	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pep Gas

Pace Project No.: 6017228

Sample: MW-1		Lab ID: 6017228001	Collected: 12/20/06 10:45	Received: 12/21/06 09:35	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	94114-58-6	
Kerosene	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	8030-30-6	
Motor Oil	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 05:48		
p-Terphenyl (S)	105 %		64-117	1	12/26/06 00:00	12/29/06 05:48	92-94-4	
n-Tetracosane (S)	107 %		65-125	1	12/26/06 00:00	12/29/06 05:48	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		1.0	1		12/29/06 23:38	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/29/06 23:38	100-41-4	
Methyl-tert-butyl ether	ND ug/L		1.0	1		12/29/06 23:38	1634-04-4	
Toluene	ND ug/L		1.0	1		12/29/06 23:38	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/29/06 23:38	1330-20-7	
Toluene-d8 (S)	102 %		83-113	1		12/29/06 23:38	2037-26-5	
1,2-Dichloroethane-d4 (S)	95 %		80-126	1		12/29/06 23:38	17060-07-0	
Dibromofluoromethane (S)	93 %		87-116	1		12/29/06 23:38	1868-53-7	
4-Bromofluorobenzene (S)	105 %		84-117	1		12/29/06 23:38	460-00-4	
Preservation pH	1.0			1		12/29/06 23:38		

ANALYTICAL RESULTS

Project: Pep Gas

Pace Project No.: 6017228

Sample: MGP-MW-4 **Lab ID:** 6017228002 **Collected:** 12/20/06 10:35 **Received:** 12/21/06 09:35 **Matrix:** Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	94114-58-6	
Kerosene	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	8030-30-6	
Motor Oil	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	12/26/06 00:00	12/29/06 06:08		
p-Terphenyl (S)	99 %		64-117	1	12/26/06 00:00	12/29/06 06:08	92-94-4	
n-Tetracosane (S)	103 %		65-125	1	12/26/06 00:00	12/29/06 06:08	646-31-1	

8260 MSV Iowa UST

Analytical Method: EPA 5030B/8260

Benzene	ND ug/L		1.0	1		12/29/06 23:58	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/29/06 23:58	100-41-4	
Methyl-tert-butyl ether	ND ug/L		1.0	1		12/29/06 23:58	1634-04-4	
Toluene	ND ug/L		1.0	1		12/29/06 23:58	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/29/06 23:58	1330-20-7	
Toluene-d8 (S)	105 %		83-113	1		12/29/06 23:58	2037-26-5	
1,2-Dichloroethane-d4 (S)	96 %		80-126	1		12/29/06 23:58	17060-07-0	
Dibromofluoromethane (S)	97 %		87-116	1		12/29/06 23:58	1868-53-7	
4-Bromofluorobenzene (S)	100 %		84-117	1		12/29/06 23:58	460-00-4	
Preservation pH	1.0			1		12/29/06 23:58		

ANALYTICAL RESULTS

Project: Pep Gas

Pace Project No.: 6017228

Sample: MGP-MW-6		Lab ID: 6017228003	Collected: 12/20/06 10:10		Received: 12/21/06 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	68334-30-5	
Fuel Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	68553-00-4	
Jet Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	94114-58-6	
Kerosene	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	8008-20-6	
Mineral Spirits	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	8030-30-6	
Motor Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:27		
p-Terphenyl (S)	95 %		64-117	1	12/26/06 00:00	12/29/06 06:27	92-94-4	
n-Tetracosane (S)	98 %		65-125	1	12/26/06 00:00	12/29/06 06:27	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	8.1	ug/L	1.0	1		12/30/06 00:17	71-43-2	
Ethylbenzene	12.2	ug/L	1.0	1		12/30/06 00:17	100-41-4	
Methyl-tert-butyl ether	8.9	ug/L	1.0	1		12/30/06 00:17	1634-04-4	
Toluene	ND	ug/L	1.0	1		12/30/06 00:17	108-88-3	
Xylene (Total)	5.9	ug/L	3.0	1		12/30/06 00:17	1330-20-7	
Toluene-d8 (S)	103	%	83-113	1		12/30/06 00:17	2037-26-5	
1,2-Dichloroethane-d4 (S)	102	%	80-126	1		12/30/06 00:17	17060-07-0	
Dibromofluoromethane (S)	99	%	87-116	1		12/30/06 00:17	1868-53-7	
4-Bromofluorobenzene (S)	98	%	84-117	1		12/30/06 00:17	460-00-4	
Preservation pH	1.0			1		12/30/06 00:17		

ANALYTICAL RESULTS

Project: Pep Gas

Pace Project No.: 6017228

Sample: MW-3		Lab ID: 6017228004	Collected: 12/20/06 10:55	Received: 12/21/06 09:35	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	68334-30-5	
Fuel Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	68553-00-4	
Jet Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	94114-58-6	
Kerosene	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	8008-20-6	
Mineral Spirits	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	8030-30-6	
Motor Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47	64742-65-0	
Total Petroleum Hydrocarbons	0.72	mg/L	0.40	1	12/26/06 00:00	12/29/06 06:47		1e
p-Terphenyl (S)	89	%	64-117	1	12/26/06 00:00	12/29/06 06:47	92-94-4	
n-Tetracosane (S)	93	%	65-125	1	12/26/06 00:00	12/29/06 06:47	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	80.9	ug/L	1.0	1		12/30/06 01:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/30/06 01:15	100-41-4	
Methyl-tert-butyl ether	454	ug/L	5.0	5		01/02/07 10:58	1634-04-4	
Toluene	ND	ug/L	1.0	1		12/30/06 01:15	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/30/06 01:15	1330-20-7	
Toluene-d8 (S)	91	%	83-113	1		12/30/06 01:15	2037-26-5	
1,2-Dichloroethane-d4 (S)	98	%	80-126	1		12/30/06 01:15	17060-07-0	
Dibromofluoromethane (S)	98	%	87-116	1		12/30/06 01:15	1868-53-7	
4-Bromofluorobenzene (S)	105	%	84-117	1		12/30/06 01:15	460-00-4	
Preservation pH	1.0			1		12/30/06 01:15		

ANALYTICAL RESULTS

Project: Pep Gas

Pace Project No.: 6017228

Sample: MGP-MW-3		Lab ID: 6017228005	Collected: 12/20/06 10:25		Received: 12/21/06 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	68334-30-5	
Fuel Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	68553-00-4	
Jet Fuel	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	94114-58-6	
Kerosene	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	8008-20-6	
Mineral Spirits	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	8030-30-6	
Motor Oil	ND	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06	64742-65-0	
Total Petroleum Hydrocarbons	2.6	mg/L	0.40	1	12/26/06 00:00	12/29/06 07:06		1e
p-Terphenyl (S)	97 %		64-117	1	12/26/06 00:00	12/29/06 07:06	92-94-4	
n-Tetracosane (S)	98 %		65-125	1	12/26/06 00:00	12/29/06 07:06	646-31-1	
8260 MSV Iowa UST		Analytical Method: EPA 5030B/8260						
Benzene	542	ug/L	5.0	5		01/02/07 11:18	71-43-2	
Ethylbenzene	180	ug/L	1.0	1		12/30/06 01:35	100-41-4	
Methyl-tert-butyl ether	108	ug/L	1.0	1		12/30/06 01:35	1634-04-4	
Toluene	566	ug/L	5.0	5		01/02/07 11:18	108-88-3	
Xylene (Total)	319	ug/L	3.0	1		12/30/06 01:35	1330-20-7	
Toluene-d8 (S)	102	%	83-113	1		12/30/06 01:35	2037-26-5	
1,2-Dichloroethane-d4 (S)	101	%	80-126	1		12/30/06 01:35	17060-07-0	
Dibromofluoromethane (S)	94	%	87-116	1		12/30/06 01:35	1868-53-7	
4-Bromofluorobenzene (S)	101	%	84-117	1		12/30/06 01:35	460-00-4	
Preservation pH	1.0			1		12/30/06 01:35		

QUALITY CONTROL DATA

Project: Pep Gas
Pace Project No.: 6017228

QC Batch: OEXT/4981 Analysis Method: OA2
QC Batch Method: OA2 Analysis Description: OA2 GCS
Associated Lab Samples: 6017228001, 6017228002, 6017228003, 6017228004, 6017228005

METHOD BLANK: 138265

Associated Lab Samples: 6017228001, 6017228002, 6017228003, 6017228004, 6017228005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Fuel	mg/L	ND	0.40	
Fuel Oil	mg/L	ND	0.40	
Jet Fuel	mg/L	ND	0.40	
Kerosene	mg/L	ND	0.40	
Mineral Spirits	mg/L	ND	0.40	
Motor Oil	mg/L	ND	0.40	
Total Petroleum Hydrocarbons	mg/L	ND	0.40	
n-Tetracosane (S)	%	119	65-125	
p-Terphenyl (S)	%	97	64-117	

LABORATORY CONTROL SAMPLE: 138266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	12.5	12.0	96	58-127	
n-Tetracosane (S)	%			114	65-125	
p-Terphenyl (S)	%			107	64-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 138267 138268

Parameter	Units	6017228003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diesel Fuel	mg/L	ND	12.5	12.5	11.1	11.9	89	96	50-144	7	24	
n-Tetracosane (S)	%						101	121	65-125			
p-Terphenyl (S)	%						98	107	64-117			

QUALITY CONTROL DATA

Project: Pep Gas

Pace Project No.: 6017228

QC Batch: MSV/6434 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Iowa UST
Associated Lab Samples: 6017228001, 6017228002, 6017228003, 6017228004, 6017228005

METHOD BLANK: 139377

Associated Lab Samples: 6017228001, 6017228002, 6017228003, 6017228004, 6017228005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Methyl-tert-butyl ether	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	99	80-126	
4-Bromofluorobenzene (S)	%	101	84-117	
Dibromofluoromethane (S)	%	98	87-116	
Toluene-d8 (S)	%	101	83-113	

LABORATORY CONTROL SAMPLE: 139378

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	9.4	94	73-127	
Ethylbenzene	ug/L	10	10	100	74-120	
Methyl-tert-butyl ether	ug/L	10	7.8	78	60-122	
Toluene	ug/L	10	9.5	95	72-126	
Xylene (Total)	ug/L	30	30.5	102	77-123	
1,2-Dichloroethane-d4 (S)	%			102	80-126	
4-Bromofluorobenzene (S)	%			96	84-117	
Dibromofluoromethane (S)	%			96	87-116	
Toluene-d8 (S)	%			101	83-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 139379 139380

Parameter	Units	6017228003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	8.1	10	10	16.3	19.0	82	109	44-160	15	19	
Ethylbenzene	ug/L	12.2	10	10	21.4	24.5	92	123	44-152	13	31	
Methyl-tert-butyl ether	ug/L	8.9	10	10	15.5	17.1	66	82	26-156	9	27	
Toluene	ug/L	ND	10	10	9.9	12.1	90	112	63-135	20	37	
Xylene (Total)	ug/L	5.9	30	30	33.4	40.6	91	116	54-144	20	23	
1,2-Dichloroethane-d4 (S)	%						98	104	80-126			
4-Bromofluorobenzene (S)	%						101	96	84-117			
Dibromofluoromethane (S)	%						95	100	87-116			
Toluene-d8 (S)	%						102	103	83-113			
Preservation pH		1.0			1.0	1.0					0	

QUALIFIERS

Project: Pep Gas

Pace Project No.: 6017228

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

ANALYTE QUALIFIERS

1e The sample does not match a profile of laboratory standards. Quantitation achieved using diesel fuel as a reference standard.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pep Gas

Pace Project No.: 6017228

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6017228001	MW-1	OA2	OEXT/4981	OA2	GCSV/2710
6017228002	MGP-MW-4	OA2	OEXT/4981	OA2	GCSV/2710
6017228003	MGP-MW-6	OA2	OEXT/4981	OA2	GCSV/2710
6017228004	MW-3	OA2	OEXT/4981	OA2	GCSV/2710
6017228005	MGP-MW-3	OA2	OEXT/4981	OA2	GCSV/2710
6017228001	MW-1	EPA 5030B/8260	MSV/6434		
6017228002	MGP-MW-4	EPA 5030B/8260	MSV/6434		
6017228003	MGP-MW-6	EPA 5030B/8260	MSV/6434		
6017228004	MW-3	EPA 5030B/8260	MSV/6434		
6017228005	MGP-MW-3	EPA 5030B/8260	MSV/6434		

Required Client Information: Section A

Required Client Information: Section B

Required Client Information:

Required Client Information:		Required Client Information:		Required Client Information:	
Company:	Delta Consultants	Report To:	Sara Kammerer	Email Results:	cmacdonald@deltaenv.com
Address:	2240 Bluestone Drive	P. O.		Requested Due Date:	Standard
	St. Charles MO 63303	Project Name:	Pep Gas	Quote Reference:	
Phone:	636-949-6799	Site Address:	801 W. Monroe St	Project Manager	Chris Macdonald
Fax:	636-949-5940		Mt Pleasant, IA	Project #	A005-504
Location: (State)	IOWA	Project No:	Pep Gas	Profile #	

[illegible]

SAMPLE CONDITION:

SAMPLE NOTES:

Temp in C	27
Received on ice	Y/N
Sealed Cooler	Y/N
Sample Intact	Y/N

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT NAME OF SAMPLER

SIGNATURE OF SAMPLER

DATE SIGNED: _____

DATE SIGNED: 12/20/06