January 13, 2009

CON 12-15
Doc #20434

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

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

Dear Mr. Fuhrmann:

DELTA

Delta Consultants (Delta) is pleased to submit the following Groundwater Monitoring Update Report which documents the groundwater sampling event requested by the Iowa Department of Natural Resources (IDNR). Following scheduled 2008 sampling events, Delta submitted a groundwater monitoring report documenting the sampling event and the results of the groundwater analysis collected from onsite and offsite wells. The IDNR responded with written correspondence dated August 26, 2008, requesting that Delta together with consultant Black & Veatch, the consulting firm conducting assessment work on the offsite property south of the Pep Gas site, conduct a follow up groundwater split-sampling event to verify the stability of groundwater concentrations at the subject site and offsite locations. The requested groundwater sampling event was conducted November 18, 2008.

SITE HISTORY

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. An estimated total of 1370 cubic yards of soil was removed and landfarmed.

Impacts remaining in soil, upon completion of the soil overexcavation, were greater than the Tier 1 lookup for soil leaching to groundwater. Following overexcavation, onsite and offsite conditions were monitored by means of quarterly groundwater sampling events.

GROUNDWATER SAMPLING

As requested by the IDNR in correspondence dated August 26, 2008, a Delta representative as well as a representative from Black & Veatch were onsite on November 18, 2008 to conduct a groundwater sampling event to determine the stability of groundwater concentrations at the subject site and the offsite property. On November 18, 2008 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 samples were collected from monitoring wells BH-1/MW-1, BH-3/MW-3, MGP-MW-3, MGP-MW-4, and MGP-MW-6 during the November 18, 2008 site visit. 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 only during the November 18, 2008 site visit. Analytical results are summarized in the Groundwater Analytical Summary table. Copies of the Groundwater Analytical Reports are attached.

DISCUSSION OF RESULTS/CONCLUSIONS

Recent groundwater sampling efforts conducted on November 18, 2008 are in response to the IDNR correspondence dated August 26, 2008 in which the IDNR states "No further groundwater monitoring will be necessary if the sampling results indicate contaminant concentrations are steady and/or declining". Following the November 2005 overexcavation the monitoring wells sampled from the monitoring plan have demonstrated significant decreases in concentrations of all chemicals of concern. Further, all wells except monitoring well MGP-MW-3 and MGP-MW-6 have reached concentrations below laboratory detection limits. Monitoring well MGP-MW-3 rebounded somewhat from the March 25, 2008 sampling event which could be attributed to the flood conditions experienced in the summer months of 2008. However, concentrations still demonstrate an overall decreasing trend from the initial samples collected in October 2006. Monitoring well MGP-MW-6 results were only slightly above laboratory detection limits. Furthermore, Delta believes the effectiveness of the completed overexcavation to be successful as demonstrated by the concentration trends (**Figures 2, 3 and 4** benzene concentration graphs attached) of the last 3 plus years and the groundwater contamination plume being decreased to at or near non-detect levels.

It is Delta's opinion that the remediation objectives for this site have been achieved. As a result of overexcavation activities the soil contamination source has been removed and groundwater sampling has demonstrated that the groundwater contamination plume has decreased and stabilized. If site conditions were evaluated using non-residential protected groundwater source target levels (290 ppb), the most conservative receptor target levels when utilizing the Iowa RBCA software, concentrations in all onsite and offsite monitoring wells would be well below SSTLs. The site is zoned for commercial use and it is unlikely that the site would ever be redeveloped into a residential area. Delta requests that this be taken into consideration when evaluating conditions for future recommendations. For actual site conditions (non-residential) target levels have already been met, and the conservative residential target levels have nearly been met, even though contamination exists only on commercially zoned property. Based on continued general reduction in concentrations of chemicals of concern following corrective action and source removal activities, and due to the fact that the groundwater contamination plume is located on commercially zoned properties, Delta recommends that no further remediation/monitoring (NFR) be granted at this time.

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) 916-8127 or Chris Macdonald at (636) 916-8114.

Sincerely,
Delta Consultants

Richard Hart
Project Geologist

Chris Macdonald
Project Manager

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

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GROUNDWATER ANALYTICAL SUMMARY

Monitoring Well	Date Sampled	Benzene ppb	Toluene ppb	Ethylbenzene ppb	Xylenes ppb	TEH-D ppb	TEH-WO ppb	MTBE ppb
MW-1	05/17/2005	<1.0	<1.0	<1.0	<3.0	<380	<380	<1.0
MW-1	06/07/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MW-1	10/11/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MW-1	12/20/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MW-1	3/25/2008	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	< 1.0
MW-1	6/10/2008	< 1.0	< 1.0	< 1.0	< 3.0	<400	<400	< 1.0
MW-1	11/18/2008	<1.0	<1.0	<1.0	<3.0	NA	NA	NA
MW-2	05/17/2005	5,570	366	1,130	3,230	4,950	<380	747
MW-3	05/17/2005	249	8.8	13.0	33	1,440	<380	527
MW-3	06/07/2006	208	<2.0	<2.0	<6.0	<400	<400	480
MW-3	10/11/2006	348	<5.0	<5.0	<15.0	850 [1]	<400	471
MW-3	12/20/2006	80.9	<1.0	<1.0	<3.0	720 [1]	<400	454
MW-3	3/25/2008	7.9	< 5.0	< 5.0	< 15.0	NA	NA	235
MW-3	6/10/2008	16.5	< 5.0	< 5.0	< 15.0	<400	<400	300
MW-3	11/18/2008	<5.0	<5.0	<5.0	<15.0	NA	NA	NA
MGP-MW-3	10/11/2006	1,130	1020	268	490	4,700 [1]	<400	268
MGP-MW-3	12/20/2006	542	566	180	319	2,600 [1]	<400	108
MGP-MW-3	3/25/2008	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	< 1.0
MGP-MW-3	11/18/2008	140	127	31.8	61.4	NA	NA	NA
MGP-MW-4	06/07/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MGP-MW-4	10/11/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MGP-MW-4	12/20/2006	<1.0	<1.0	<1.0	<3.0	<400	<400	<1.0
MGP-MW-4	3/25/2008	< 1.0	< 1.0	<1.0	< 3.0	NA	NA	<1
MGP-MW-4	6/10/2008	< 1.0	< 1.0	<1.0	< 3.0	<400	<400	<1
MGP-MW-4	11/18/2008	< 1.0	< 1.0	<1.0	< 3.0	NA	NA	NA
MGP-MW-6	06/07/2006	29.3	19.8	33.7	29.8	<400	<400	8.2
MGP-MW-6	10/11/2006	2.3	<1.0	2.1	<3.0	<400	<400	11.9
MGP-MW-6	12/20/2006	8.1	<1.0	12.2	5.9	<400	<400	8.9
MGP-MW-6	3/25/2008	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	<1.0
MGP-MW-6	11/18/2008	7.3	2.5	10.9	10.4	NA	NA	NA

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

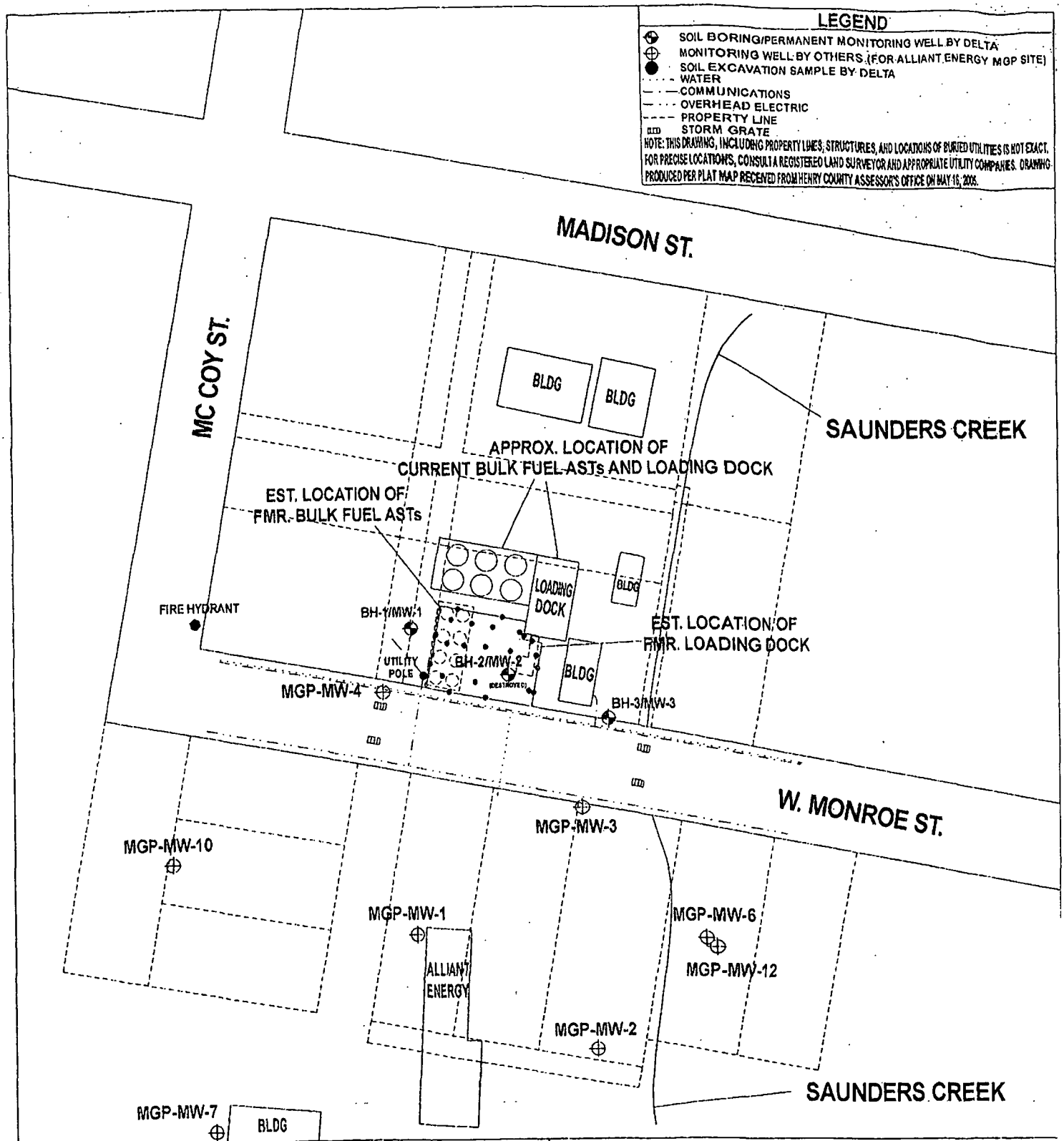
* The well MW-2 was destroyed in response to soil overexcavation conducted on October 31, 2005 to November 2, 2005

* 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.

NA - not analyzed

FIGURES



SITE PLAN MAP

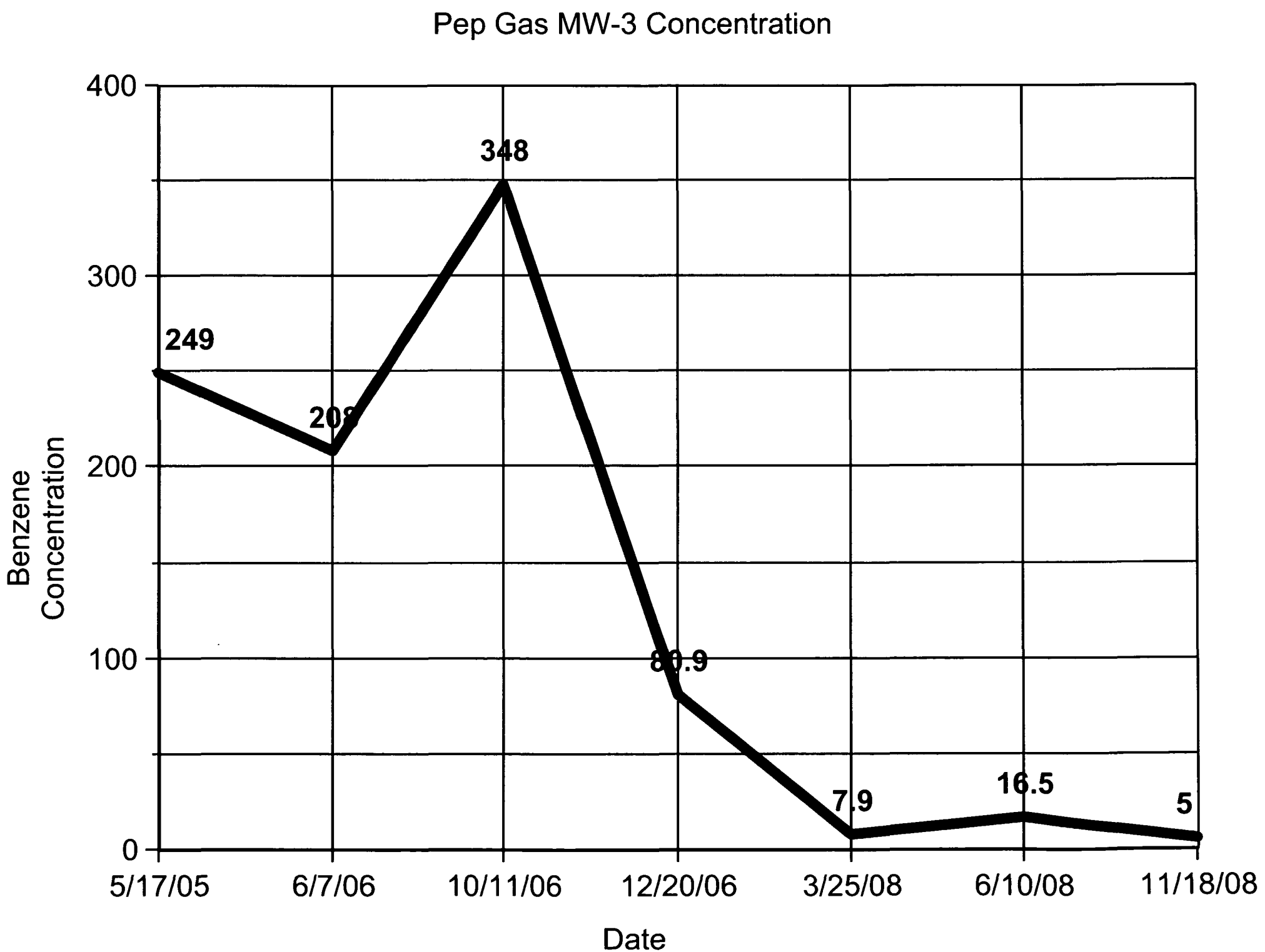
SCALE

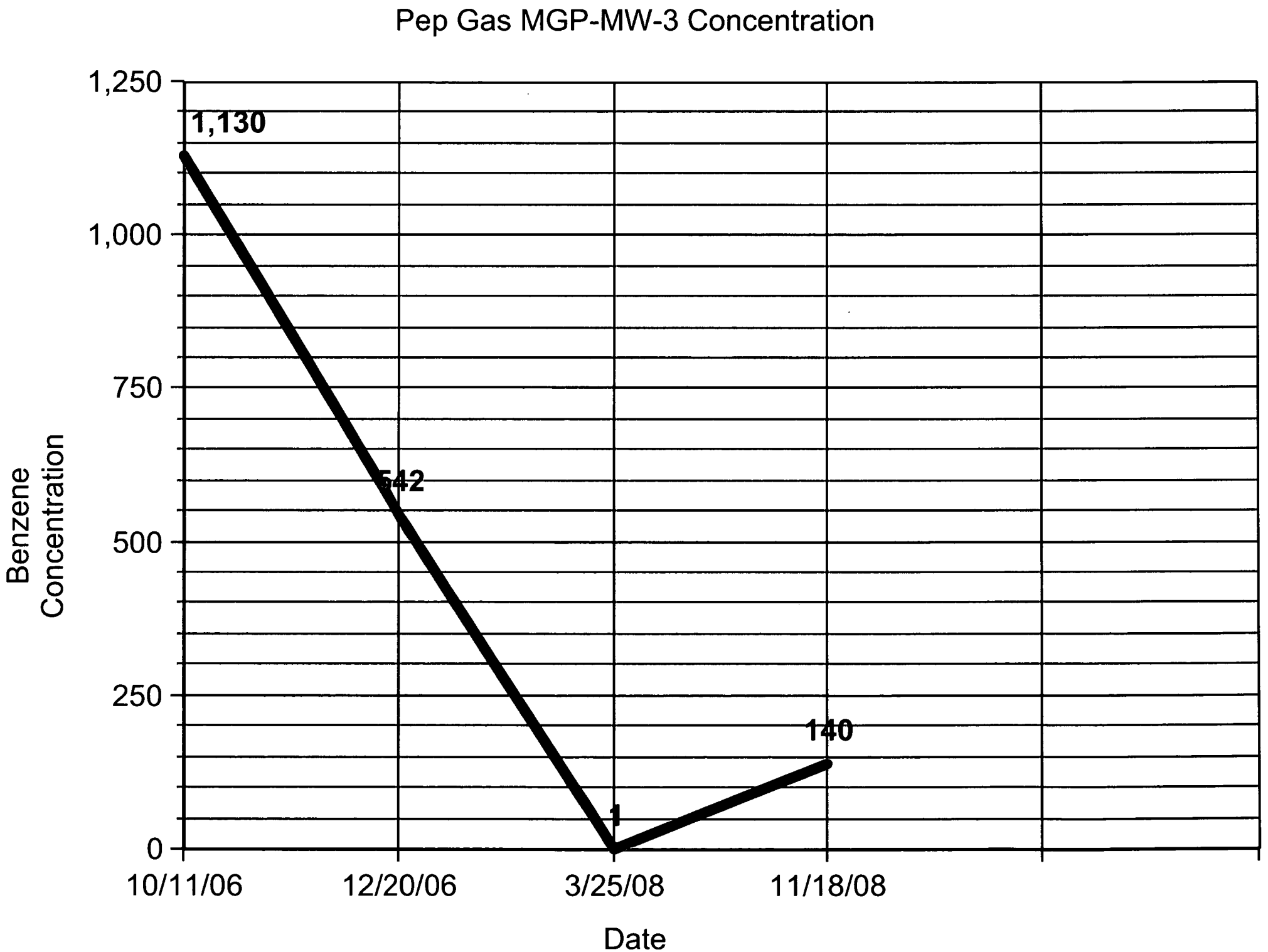
0 FT. 100 FT.

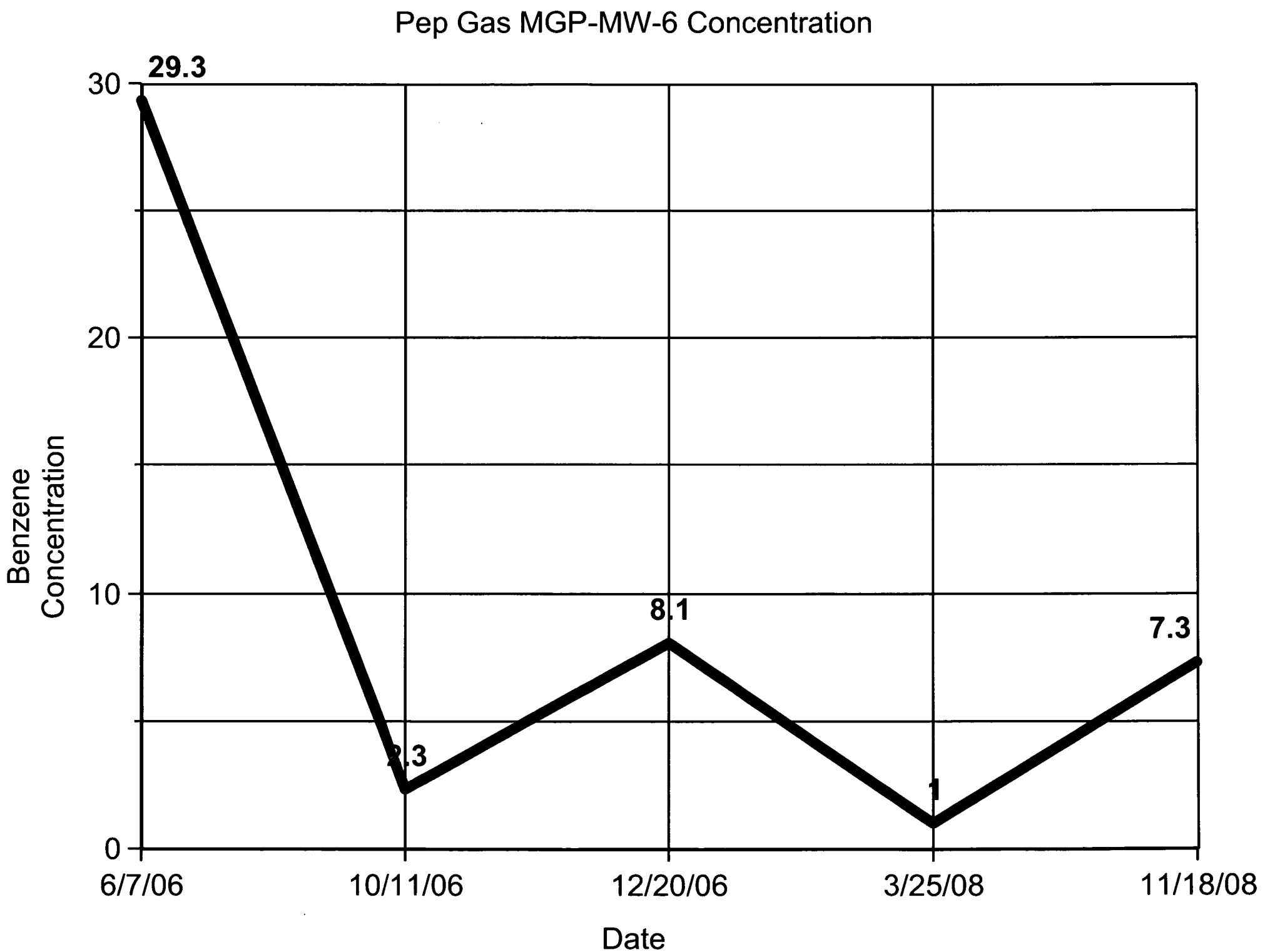
Delta Environmental Consultants, Inc.

PEP GAS
801 WEST MONROE STREET
MT. PLEASANT, IOWA

PROJECT NO:	APPENDIX NO:	DATE:	DRAWN BY:	CHECKED BY:
A005-504		06/15/06	JMO	


Pep Gas MW-3 Concentration
400
300
200
100
0
Benzene Concentration
249
208
348
80.9
7.9
16.5
5
5/17/05
6/7/06
10/11/06
12/20/06
3/25/08
6/10/08
11/18/08
Date


Pep Gas MGP-MW-3 Concentration
1,250
1,000
750
500
250
0
Benzene Concentration
1,130
542
1
140
10/11/06
12/20/06
3/25/08
11/18/08
Date


Pep Gas MGP-MW-6 Concentration
29.3
2.3
8.1
1
7.3
30
20
10
0
Benzene Concentration
6/7/06
10/11/06
12/20/06
3/25/08
11/18/08
Date

APPENDIX 1

GROUNDWATER LABORATORY ANALYTICAL DATA

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

December 03, 2008

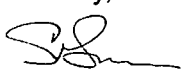
Chris Macdonald
Delta Environmental
2240 Bluestone Drive
Saint Charles, MO 63303

RE: Project: PEP GAS
Pace Project No.: 6050173

Dear Chris Macdonald:
Enclosed are the analytical results for sample(s) received by the laboratory on November 19, 2008. The results relate only to the samples included in this report. 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,



Sherri Guess

sherri.guess@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: PEP GAS
Pace Project No.: 6050173

Kansas Certification IDs

Utah Certification Number: 9135995665
Texas Certification Number: T104704407-08-TX
Oklahoma Certification Number: 9205/9935
Nevada Certification Number: KS000212008A
Louisiana Certification Number: 03055
Iowa Certification Number: 118
Illinois Certification Number: 001191
Arkansas Certification Number: 05-008-0
A2LA Certification Number: 2456.01
Kansas/NELAP Certification Number: E-10116

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SAMPLE SUMMARY

Project: PEP GAS
Pace Project No.: 6050173

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6050173001	MW-1	Water	11/18/08 11:30	11/19/08 09:35
6050173002	MW-3	Water	11/18/08 11:45	11/19/08 09:35
6050173003	MGP-MW-3	Water	11/18/08 10:55	11/19/08 09:35
6050173004	MGP-MW-4	Water	11/18/08 11:10	11/19/08 09:35
6050173005	MGP-MW-6	Water	11/18/08 11:40	11/19/08 09:35
6050173006	TRIP BLANK	Water	11/18/08 00:00	11/19/08 09:35

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SAMPLE ANALYTE COUNT

Project: PEP GAS
Pace Project No.: 6050173

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6050173001	MW-1	EPA 5030B/8260	NPM	10
6050173002	MW-3	EPA 5030B/8260	NPM	10
6050173003	MGP-MW-3	EPA 5030B/8260	NPM	10
6050173004	MGP-MW-4	EPA 5030B/8260	NPM	10
6050173005	MGP-MW-6	EPA 5030B/8260	NPM	10
6050173006	TRIP BLANK	EPA 5030B/8260	NPM	10

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: MW-1 **Lab ID: 6050173001** Collected: 11/18/08 11:30 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		12/01/08 16:04	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/01/08 16:04	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/01/08 16:04	1634-04-4	
Toluene	ND	ug/L	1.0	1		12/01/08 16:04	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/01/08 16:04	1330-20-7	
Toluene-d8 (S)	100	%	82-114	1		12/01/08 16:04	2037-26-5	
1,2-Dichloroethane-d4 (S)	104	%	81-118	1		12/01/08 16:04	17060-07-0	
Dibromofluoromethane (S)	101	%	85-114	1		12/01/08 16:04	1868-53-7	
4-Bromofluorobenzene (S)	95	%	85-119	1		12/01/08 16:04	460-00-4	
Preservation pH	**1.0**		0.10	1		12/01/08 16:04		

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: MW-3 **Lab ID: 6050173002** Collected: 11/18/08 11:45 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	5.0	5		12/01/08 16:20	71-43-2	
Ethylbenzene	ND	ug/L	5.0	5		12/01/08 16:20	100-41-4	
Methyl-tert-butyl ether	**318**	ug/L	5.0	5		12/01/08 16:20	1634-04-4	
Toluene	ND	ug/L	5.0	5		12/01/08 16:20	108-88-3	
Xylene (Total)	ND	ug/L	15.0	5		12/01/08 16:20	1330-20-7	
Toluene-d8 (S)	98	%	82-114	5		12/01/08 16:20	2037-26-5	
1,2-Dichloroethane-d4 (S)	104	%	81-118	5		12/01/08 16:20	17060-07-0	
Dibromofluoromethane (S)	102	%	85-114	5		12/01/08 16:20	1868-53-7	
4-Bromofluorobenzene (S)	97	%	85-119	5		12/01/08 16:20	460-00-4	
Preservation pH	**1.0**		0.10	5		12/01/08 16:20		

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: MGP-MW-3 **Lab ID: 6050173003** Collected: 11/18/08 10:55 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	**140**	ug/L	5.0	5		11/27/08 21:10	71-43-2	
Ethylbenzene	**31.8**	ug/L	5.0	5		11/27/08 21:10	100-41-4	
Methyl-tert-butyl ether	**36.8**	ug/L	5.0	5		11/27/08 21:10	1634-04-4	
Toluene	**127**	ug/L	5.0	5		11/27/08 21:10	108-88-3	
Xylene (Total)	**61.4**	ug/L	15.0	5		11/27/08 21:10	1330-20-7	
Toluene-d8 (S)	98	%	82-114	5		11/27/08 21:10	2037-26-5	
1,2-Dichloroethane-d4 (S)	108	%	81-118	5		11/27/08 21:10	17060-07-0	
Dibromofluoromethane (S)	103	%	85-114	5		11/27/08 21:10	1868-53-7	
4-Bromofluorobenzene (S)	99	%	85-119	5		11/27/08 21:10	460-00-4	
Preservation pH	**1.0**		0.10	5		11/27/08 21:10		

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: MGP-MW-4 **Lab ID: 6050173004** Collected: 11/18/08 11:10 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		11/27/08 21:26	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/27/08 21:26	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/27/08 21:26	1634-04-4	
Toluene	ND	ug/L	1.0	1		11/27/08 21:26	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/27/08 21:26	1330-20-7	
Toluene-d8 (S)	97	%	82-114	1		11/27/08 21:26	2037-26-5	
1,2-Dichloroethane-d4 (S)	110	%	81-118	1		11/27/08 21:26	17060-07-0	
Dibromofluoromethane (S)	106	%	85-114	1		11/27/08 21:26	1868-53-7	
4-Bromofluorobenzene (S)	98	%	85-119	1		11/27/08 21:26	460-00-4	
Preservation pH	**1.0**		0.10	1		11/27/08 21:26		

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: MGP-MW-6 **Lab ID: 6050173005** Collected: 11/18/08 11:40 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	**7.3**	ug/L	1.0	1		11/27/08 21:42	71-43-2	
Ethylbenzene	**10.9**	ug/L	1.0	1		11/27/08 21:42	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/27/08 21:42	1634-04-4	
Toluene	**2.5**	ug/L	1.0	1		11/27/08 21:42	108-88-3	
Xylene (Total)	**10.4**	ug/L	3.0	1		11/27/08 21:42	1330-20-7	
Toluene-d8 (S)	99	%	82-114	1		11/27/08 21:42	2037-26-5	
1,2-Dichloroethane-d4 (S)	110	%	81-118	1		11/27/08 21:42	17060-07-0	
Dibromofluoromethane (S)	105	%	85-114	1		11/27/08 21:42	1868-53-7	
4-Bromofluorobenzene (S)	98	%	85-119	1		11/27/08 21:42	460-00-4	
Preservation pH	**1.0**		0.10	1		11/27/08 21:42		

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ANALYTICAL RESULTS

Project: PEP GAS
Pace Project No.: 6050173

Sample: TRIP BLANK **Lab ID: 6050173006** Collected: 11/18/08 00:00 Received: 11/19/08 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Iowa UST	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		11/27/08 21:58	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/27/08 21:58	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/27/08 21:58	1634-04-4	
Toluene	ND	ug/L	1.0	1		11/27/08 21:58	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/27/08 21:58	1330-20-7	
Toluene-d8 (S)	100	%	82-114	1		11/27/08 21:58	2037-26-5	
1,2-Dichloroethane-d4 (S)	113	%	81-118	1		11/27/08 21:58	17060-07-0	
Dibromofluoromethane (S)	104	%	85-114	1		11/27/08 21:58	1868-53-7	
4-Bromofluorobenzene (S)	97	%	85-119	1		11/27/08 21:58	460-00-4	
Preservation pH	**1.0**		0.10	1		11/27/08 21:58		

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QUALITY CONTROL DATA

Project: PEP GAS
Pace Project No.: 6050173

QC Batch: MSV/18281 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Iowa UST
Associated Lab Samples: 6050173003, 6050173004, 6050173005, 6050173006

METHOD BLANK: 414614 Matrix: Water
Associated Lab Samples: 6050173003, 6050173004, 6050173005, 6050173006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	11/27/08 18:29	
Ethylbenzene	ug/L	ND	1.0	11/27/08 18:29	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/27/08 18:29	
Toluene	ug/L	ND	1.0	11/27/08 18:29	
Xylene (Total)	ug/L	ND	3.0	11/27/08 18:29	
1,2-Dichloroethane-d4 (S)	%	117	81-118	11/27/08 18:29	
4-Bromofluorobenzene (S)	%	97	85-119	11/27/08 18:29	
Dibromofluoromethane (S)	%	106	85-114	11/27/08 18:29	
Toluene-d8 (S)	%	99	82-114	11/27/08 18:29	

LABORATORY CONTROL SAMPLE: 414615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	9.7	97	87-117	
Ethylbenzene	ug/L	10	9.6	96	84-123	
Methyl-tert-butyl ether	ug/L	10	7.8	78	69-115	
Toluene	ug/L	10	9.1	91	81-124	
Xylene (Total)	ug/L	30	27.8	93	83-125	
1,2-Dichloroethane-d4 (S)	%			114	81-118	
4-Bromofluorobenzene (S)	%			103	85-119	
Dibromofluoromethane (S)	%			105	85-114	
Toluene-d8 (S)	%			96	82-114	

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QUALITY CONTROL DATA

Project: PEP GAS
Pace Project No.: 6050173

QC Batch: MSV/18317 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Iowa UST
Associated Lab Samples: 6050173001, 6050173002

METHOD BLANK: 414939 Matrix: Water
Associated Lab Samples: 6050173001, 6050173002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/01/08 14:28	
Ethylbenzene	ug/L	ND	1.0	12/01/08 14:28	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/01/08 14:28	
Toluene	ug/L	ND	1.0	12/01/08 14:28	
Xylene (Total)	ug/L	ND	3.0	12/01/08 14:28	
1,2-Dichloroethane-d4 (S)	%	100	81-118	12/01/08 14:28	
4-Bromofluorobenzene (S)	%	98	85-119	12/01/08 14:28	
Dibromofluoromethane (S)	%	99	85-114	12/01/08 14:28	
Toluene-d8 (S)	%	102	82-114	12/01/08 14:28	

LABORATORY CONTROL SAMPLE: 414940

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	10.1	101	87-117	
Ethylbenzene	ug/L	10	10	100	84-123	
Methyl-tert-butyl ether	ug/L	10	9.2	92	69-115	
Toluene	ug/L	10	10.0	100	81-124	
Xylene (Total)	ug/L	30	29.6	99	83-125	
1,2-Dichloroethane-d4 (S)	%			103	81-118	
4-Bromofluorobenzene (S)	%			96	85-119	
Dibromofluoromethane (S)	%			98	85-114	
Toluene-d8 (S)	%			99	82-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 414941 414942

Parameter	Units	6050378002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	502	200	200	733	682	115	90	30-162	7	22	
Ethylbenzene	ug/L	395	200	200	571	525	88	65	37-154	8	18	
Methyl-tert-butyl ether	ug/L	ND	200	200	197	187	98	94	42-146	5	18	
Toluene	ug/L	92.3	200	200	287	264	98	86	49-143	9	20	
Xylene (Total)	ug/L	854	600	600	1430	1310	96	76	32-154	9	15	
1,2-Dichloroethane-d4 (S)	%						101	107	81-118			
4-Bromofluorobenzene (S)	%						100	98	85-119			
Dibromofluoromethane (S)	%						100	103	85-114			
Toluene-d8 (S)	%						98	96	82-114			
Preservation pH		1.0			1.0	1.0				0		

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QUALIFIERS

Project: PEP GAS
Pace Project No.: 6050173

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

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

BATCH QUALIFIERS

Batch: MSV/18281

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PEP GAS
Pace Project No.: 6050173

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6050173003	**MGP-MW-3**	EPA 5030B/8260	MSV/18281		
6050173004	**MGP-MW-4**	EPA 5030B/8260	MSV/18281		
6050173005	**MGP-MW-6**	EPA 5030B/8260	MSV/18281		
6050173006	**TRIP BLANK**	EPA 5030B/8260	MSV/18281		
6050173001	**MW-1**	EPA 5030B/8260	MSV/18317		
6050173002	**MW-3**	EPA 5030B/8260	MSV/18317		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Delta Environmental	Report To: Chris Macdonald	Attention: Chris Macdonald
Address: 2240 Bluestone Drive	Copy To:	Company Name: Delta Environmental
Saint Charles, MO 63303		Address: 2240 Bluestone Drive, Saint Charles, MO
Email To: rhart@deltaenv.com	Purchase Order No.	Pace Quote Reference:
Phone: (636) 916-8114 Fax:	Client Project ID: PEP GAS	Pace Project Manager: Guess, Sherri
Requested Due Date/TAT: 10 Day (Default)	Container Order Number: 5491	Pace Profile #:

Regulatory Agency: UST - Underground Storage Tank

State / Location: Iowa

Requested Analysis Filtered (Y/N)

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

ITEM#	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	8260 Iowa	TEH		Residual Chlorine (Y/N)	Pace Project No./Lab I.D. (6050793)
1	MW-1	WT				11/18/08	11:30		3				3						x	X	3(DG4U)		001
2	MW-3	WT				↓	11:45		↓				↓						x	X	↓		002
3	MGP-MW-3	WT				↓	10:55		↓				↓						x	X	↓		003
4	MGP-MW-4	WT				↓	11:10		↓				↓						x	X	↓		004
5	MGP-MW-6	WT				↓	10:40		↓				↓						x	X	↓		005
6																					2(DG4U)TB		006
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Dan Zahner / Delta	11/18/08	15:42	[signature] / PACE	11/18/08	1542				
	[signature] / PACE	11-18-08	1830	[signature] / Pace	11/19/08	935	2.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dan Zahner

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11/18/08