January 19, 2012

Ms. Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Quarterly Summary Report, Fourth Quarter 2011**

Site: **76 Station No. 6277**
15803 East 14th Street
San Leandro, California
Fuel Leak Case No. RO0002969

Dear Ms. Jakub;

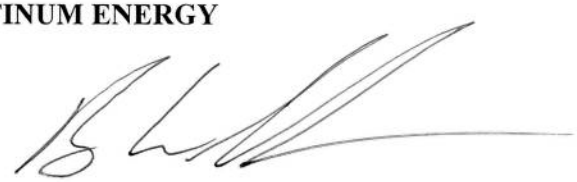
I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call:

Brian Whalen
Platinum Energy
30343 Canwood Street, Suite 200
Agoura Hills, Ca 91301
Tel: (818) 206-5704
Fax: (818) 206-5721
bwhalen@platinum-energy.net

Sincerely,

PLATINUM ENERGY



BRIAN WHALEN

Attachment

Quarterly Summary Report, Fourth Quarter 2011

76 Service Station No. 6277
15803 East 14th Street
San Leandro, California

Alameda County Health Care Services
Agency Fuel leak Case No. RO0002969

GeoTracker Global ID No.T0619718179

Antea Group Project No. I40256277

January 19, 2012

Prepared for:
Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Prepared by:
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1.0 INTRODUCTION

Antea™Group is pleased to submit this *Quarterly Summary Report, Fourth Quarter 2011*, for the referenced site in San Leandro, CA (**Figure 1**). The subject site is currently an operating 76 service station located at 15803 East 14th Street in San Leandro, California (**Figure 1**). Station facilities include two, 12,000 gallon fuel underground storage tanks (USTs), a 520-gallon waste-oil UST, two dispenser islands, and a service station building, containing three service bays (**Figure 2**). A total of four groundwater monitoring wells are located at the site (**Figure 2**). Please refer to **Appendix A** for additional site information and for the history of environmental investigations and remedial actions.

This report summarizes the data obtained from the recent groundwater monitoring and sampling event conducted on October 14, 2011. Included herein are site figures and groundwater contaminant data tables and a discussion of trends. This report has received a technical review by Mr. Dennis Dettloff, California Professional Geologist No. 7480.

1.1 Work Performed [Fourth Quarter 2011]

1. Antea Group submitted the *Quarterly Summary Report, Third Quarter 2011*, dated October 20, 2011 to the Alameda County Health Care Services Agency (ACHCSA).
2. Blaine Tech Services, Inc. (Blaine Tech) conducted the fourth quarter 2011 groundwater monitoring and sampling event on October 14, 2011.

1.2 Work Proposed [First Quarter 2012]

1. Antea Group will submit the *Quarterly Summary Report, Fourth Quarter 2011* (contained herein) to the ACHCSA.
2. Antea Group will prepare and submit a Case Closure Request to the ACHCSA for their consideration.
3. Blaine tech will conduct the first quarter 2012 monitoring and sampling event.

2.0 CURRENT PROJECT STATUS

Current phase of project:	Quarterly Groundwater Monitoring
Local Oversight Program (LOP) – Lead agency for cleanup oversight:	Alameda County Health Care Services Agency Case No. RO0002969
Secondary agency(s):	None
Monitoring well gauging schedule:	Quarterly: MW-7 through MW-10
Monitoring well sampling schedule:	Quarterly: MW-7 through MW-10
Total number of monitoring/remediation wells:	Four
Range of well depths (total depth below ground surface, bgs):	Wells are set from 19 feet to 24 feet bgs.

Wells with historical measurable LNAPL (light non-aqueous phase liquid):	None
Historical depth to water range, in feet below top of casing (BTOC):	Min: 9.35 (MW-8, Q4 2011) Max: 10.75 (MW-10, Q4 2011)
Historical groundwater elevation range (ft) for wells MW-1 through MW-3:	Min: 25.17 (MW-7, Q3 2011) Max: 25.55 (MW-9, Q4 2011)
Local receptors:	See **Attachment A**
Current remediation technique	None

2.1 Regulatory Correspondence

Antea Group sent an email to the ACHCSA on December 6, 2011 indicating their intentions to submit a Case Closure Request for their consideration and requested that quarterly groundwater monitoring and sampling be suspended pending site closure. The ACHCSA responded in an email, dated December 7, 2011, that they wanted to review the most recent quarterly summary report, contained herein, before allowing the suspension of quarterly groundwater monitoring and sampling.

2.2 Remedial Activities

No remedial activities took place during the fourth quarter 2011.

2.3 Groundwater Monitoring

For the July 2011 groundwater monitoring and sampling event, four wells were gauged, purged, and sampled by Blaine Tech per standard sampling protocol (**Appendix B**). Copies of Blaine Tech's field data sheets are presented as **Appendix C**. The recent gauging and sampling data are summarized below and in **Table 1**.

Well gauging and sampling date:	October 14, 2011
Wells gauged:	MW-7 through MW-10
Wells sampled:	MW-7 through MW-10
Purge method:	3 well casing volumes via electric, submersible pump
Sample collection method:	Disposable bailers
Groundwater parameters measured (**Appendix C**):	Temperature, pH, Conductivity, Oxidation-reduction potential (ORP), Turbidity, Dissolved Oxygen (DO)
Wells with measurable LNAPL:	None
Current depth to water range (ft below top of casing (BTOC)):	Min: 9.35 (MW-8) Max: 10.75 (MW-10)
Current groundwater elevation range (ft):	Min: 25.23 (MW-7) Max: 25.55 (MW-9)
Change in water depths from previous event (average change for all gauged wells):	0.04 foot decrease

Groundwater flow direction and gradient in foot per foot (ft/ft):	Northwest at 0.005 ft/ft

2.3.1 Groundwater Flow Gradient and Direction

The fourth quarter 2011 groundwater monitoring and sampling event was performed by Blaine Tech on October 14, 2011. The average groundwater elevation was 25.38 feet above mean sea level. The average groundwater elevation increased 0.04 feet from the September 2011 event. Depth to groundwater in the site monitoring wells ranged from 9.35 feet (MW-8) to 10.75 feet (MW-10) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the northwest at 0.005 ft/ft during the current event. A groundwater elevation contour map is presented on **Figure 3**.

2.3.2 Groundwater Quality Data

Groundwater samples collected during the fourth quarter 2011 were submitted with chain-of-custody (COC) documentation to Pace Analytical Services, Inc. (Pace), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 01153CA). The complete analytical report and Antea Group's laboratory data validation checklist are presented as **Appendix D**. Groundwater samples were analyzed for one or more of the following:

- Total petroleum hydrocarbons as gasoline (TPHg) by CA LUFT Method;
- Benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary amyl-methyl ether (TAME), 1,2-dibromoethane (EDB), 1,2-dichloroethane (1,2-DCA), and ethanol by Environmental Protection Agency (EPA) Method 8260.

Groundwater analytical results are presented in **Tables 1** (current) and **Tables 2** (historical samples). The following ranges of contaminant concentrations were reported in the specified site wells groundwater samples collected on October 14, 2011. Only the reported contaminants are listed in the table below.

Constituents	Number of Reported Samples Above LRL of the Samples Collected	Minimum Reported Concentration, in µg/L (Sample ID)	Maximum Reported Concentration, in µg/L (Sample ID)
TPHg	4 of 4	141* (MW-10)	1,480 (MW-7)
Benzene	2 of 4	2.2 (MW-8)	45.0 (MW-7)
Toluene	1 of 4	6.6 (MW-7)	6.6 (MW-7)
Ethylbenzene	2 of 4	0.59 (MW-10)	58.2 (MW-7)
Total Xylenes	1 of 4	184 (MW-7)	184 (MW-7)
MTBE	4 of 4	2.2 (MW-9)	110 (MW-7)
TBA	3 of 4	5.5 (MW-8)	23.0 (MW-7)

Explanations:

µg/L = Micrograms per liter LRL = Laboratory reporting limit
* = The TPHg result for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of tetrachloroethene in the sample.

2.3.3 Groundwater Contaminant Trends

During the fourth quarter 2011, analytical results from the sample collected from monitoring well MW-7 indicated that TPHg, toluene, ethylbenzene, and total xylenes decreased in concentration and benzene, MTBE, and TBA increased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-8 indicated a decrease in TPHg, benzene, and MTBE concentrations and an increase in TBA concentrations. Analytical results from the groundwater sample collected from monitoring well MW-9 indicated a decrease in TPHg and an increase in MTBE. Analytical results from the groundwater samples collected from monitoring wells MW-10 indicated a decrease in TPHg and ethylbenzene concentrations and an increase in MTBE and TBA concentrations. Isoconcentration maps for TPHg, benzene, and MTBE are presented on **Figures 4** through **6** and historical flow directions are presented on **Figure 7**.

2.3.4 Waste Disposal Summary

Approximately 25 gallons of waste water were generated during well purging/sampling and equipment cleaning during the fourth quarter event. The waste water was transported to Blaine Tech's bulk facility in San Jose, California. After the batching process, the wastewater was transported to Seaport Environmental in Redwood City, California for disposal. A copy of the waste manifest is presented as **Appendix E.**

2.3.5 Quality Assurance / Quality Control

Antea Group's QA/QC measures included a detailed QA/QC data validation check on the Pace Laboratory analytical results for the July 2011 sampling event. Antea Group's laboratory data validation checklist and the Pace laboratory report are presented as **Appendix C**.

Laboratory QA/QC Performed:	Yes (validated by Antea Group)
Laboratory Data Qualifiers:	Yes – five qualifiers*
Are the data valid for their intended purpose?	Yes, the data are valid

*1n – The TPHg result for this sample did not match the laboratory standard for gasoline. This is likely due to the presence of tetrachloroethene in the sample.
*C0 – Result confirmed by second analysis.
*CL – The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The result may be biased low.
*E – Analyte concentration exceeded the calibration range. The reported result is estimated.
*M1 – Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample recovery.

Based on a review of the laboratory's analytical report, including their QA/QC procedures and those implemented by Antea Group, we conclude that the laboratory data obtained during this groundwater sampling event are valid for their intended purpose.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of soil samples taken during the monitoring well installation activities and the groundwater samples collected on April 18, 2011 it appears that site conditions have remained consistent with conditions present when the site was granted closure in 2000. This appears to indicate that there has not been a new release since the site was granted closure.

Antea Group recommends that quarterly monitoring and sampling of the site monitoring wells be discontinued and that a Case Closure Request be submitted in preparation for case closure.

4.0 REMARKS

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. For any reports cited that were not generated by Delta or Antea Group, the data from those reports is used "as is" and is assumed to be accurate. Antea Group does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. The contract between Antea USA, Inc. 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 Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

Prepared by:

Edward T. Weyrens, G.I.T.
Staff Geologist

Information, conclusions, and recommendations provided by Antea Group in this document regarding the site have been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

Licensed Approver:

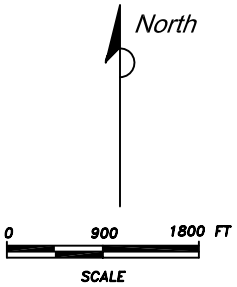
PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

Date: 1/19/12

Dennis S. Dettloff
Project Manager
California Registered Professional Geologist No. 7480

cc: GeoTracker (upload)

Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, SAN LEANDRO QUADRANGLE (1973)

FIGURE 1

SITE LOCATION MAP

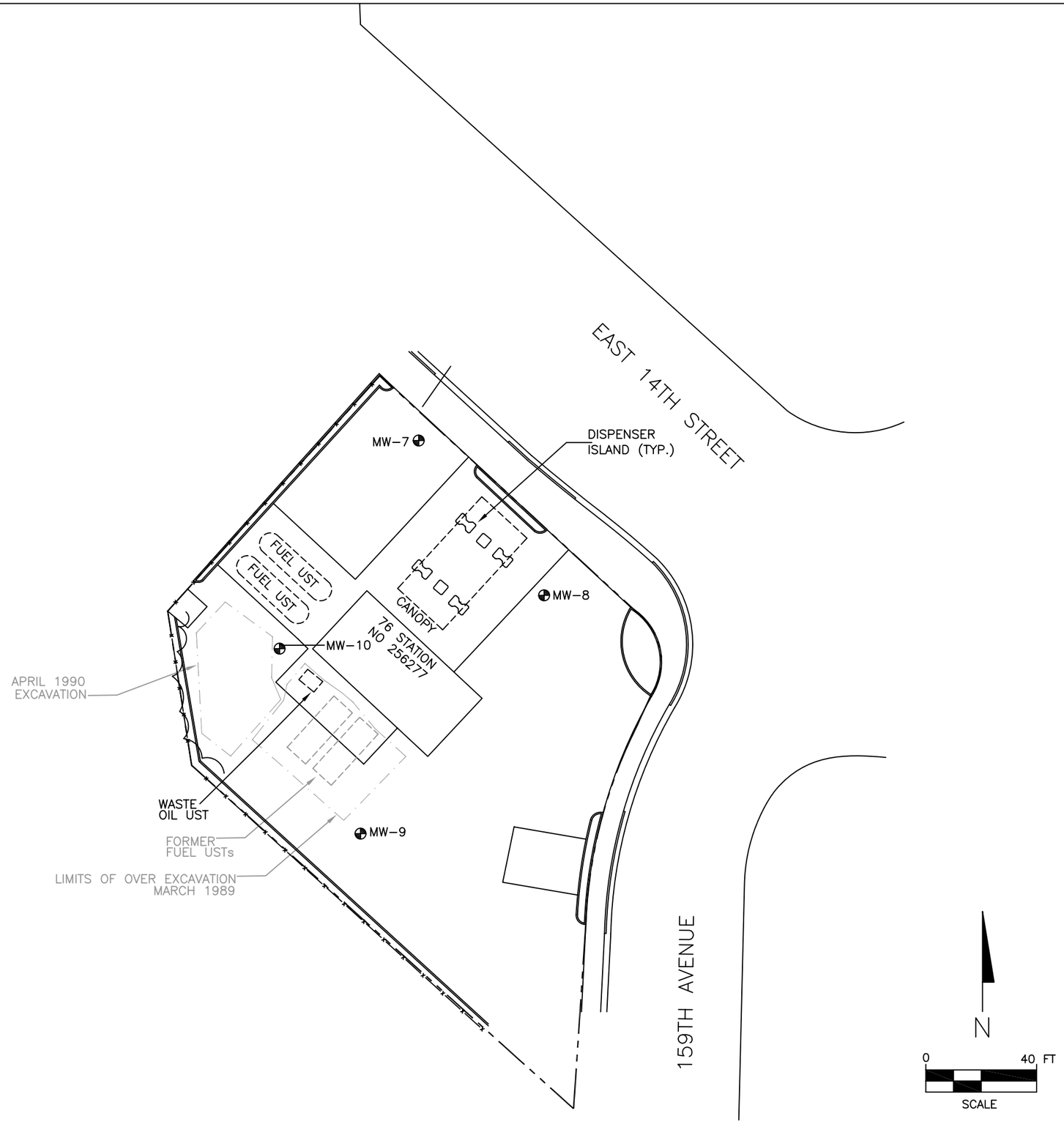
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO. I4256277	DRAWN BY JH 05/13/11
FILE NO. 6277-SiteLocator	PREPARED BY EW
REVISION NO.	REVIEWED BY

anteagroup

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)



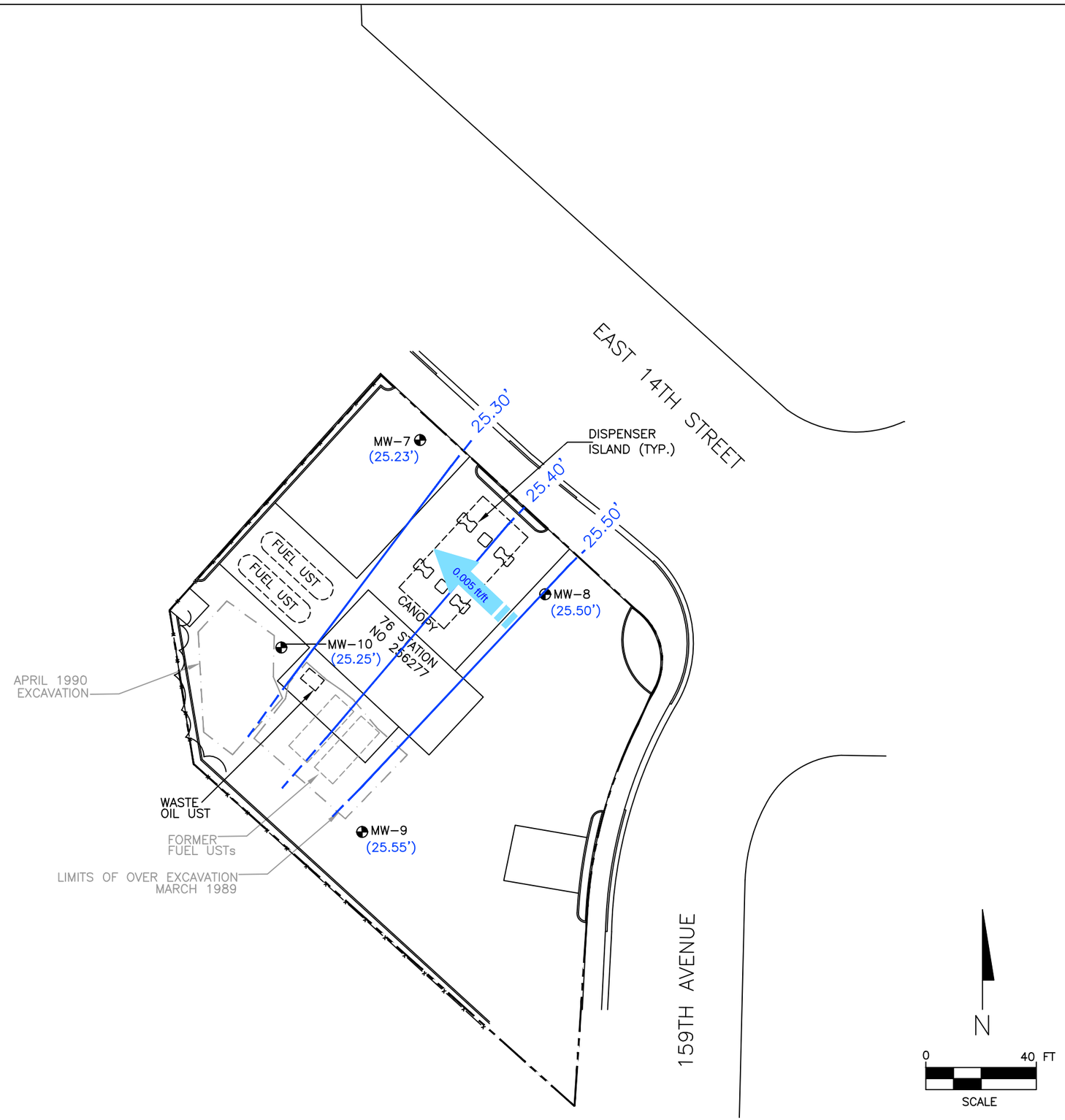
SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 2
SITE PLAN

76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
04/21/11	DD	6277-SMS

anteagroup



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (25.50') GROUNDWATER ELEVATON IN FEET ABOVE MEAN SEA LEVEL (ft/msl)
- 25.50' GROUNDWATER ELEVATION CONTOUR LINE (ft/msl) –DASHED WHERE INFERRED
  (CONTOUR INTERVAL: 0.10 ft)
- 0.005 ft/ft GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT (ft/ft)

N

0 40 FT

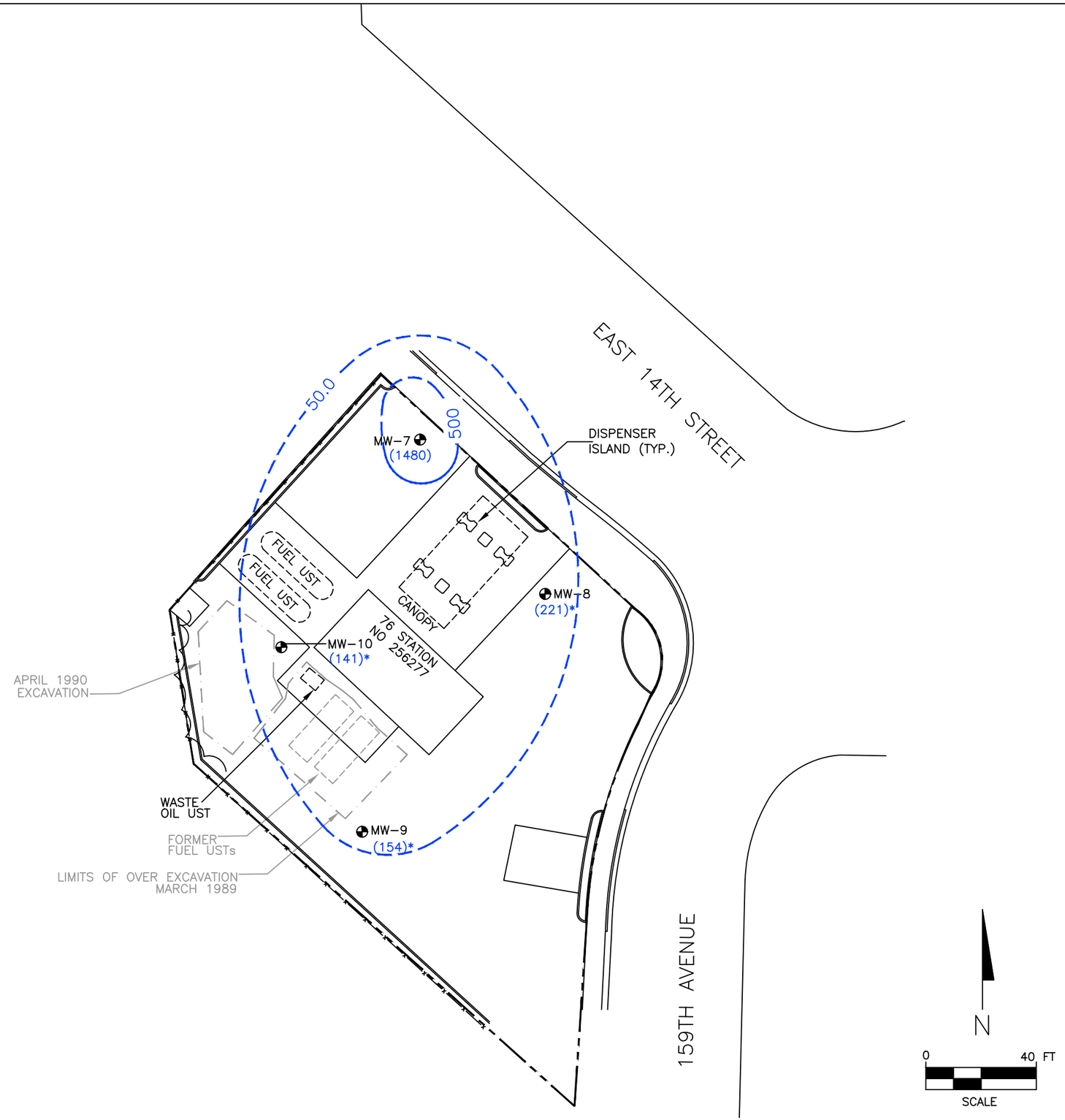
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
OCTOBER 14, 2011
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
11/4/11	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (1480) DISSOLVED PHASE TPHg ISOCONCENTRATION (µg/L)
- 500 DISSOLVED PHASE TPHg ISOCONTOUR (µg/L)
  –DASHED WHERE INFERRED

NOTES:

TPHg = TOTAL PETROLEUM HYDROCABONS AS GASOLINE
µg/L = MICROGRAMS PER LITER
* = TPHg RESULT DOES NOT MATCH THE PATTERN OF THE LABORATORY STANDARD FOR GASOLINE. THIS IS LIKELY DUE TO THE PRESENCE OF TETRACHLOROETHANE IN THE SAMPLE.

N

0 40 FT

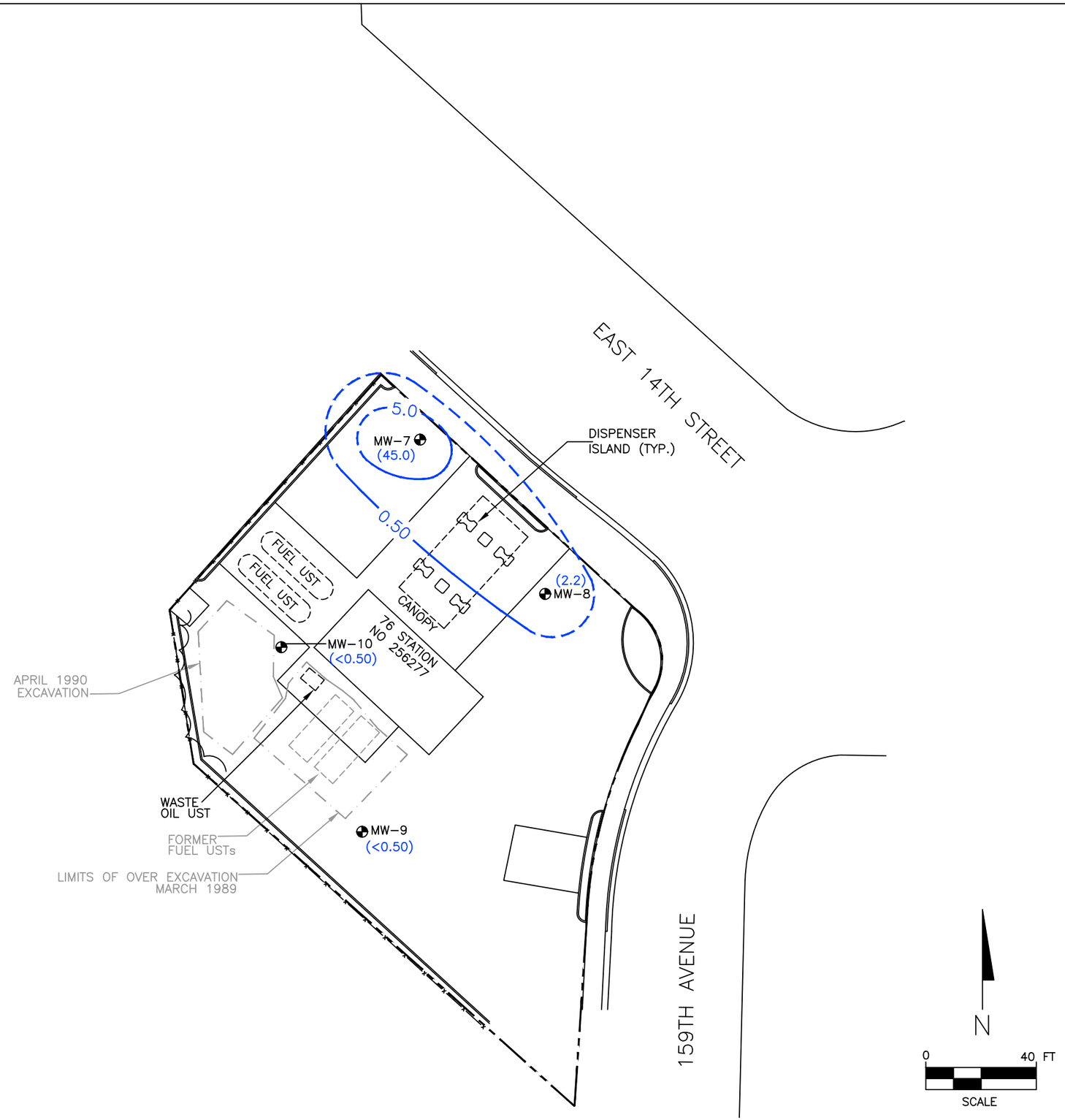
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 4
DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
OCTOBER 14, 2011
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
11/4/11	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (45.0) DISSOLVED PHASE BENZENE ISOCONCENTRATION (µg/L)
- 5.0 DISSOLVED PHASE BENZENE ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:

µg/L = MICROGRAMS PER LITER
<0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMITS

N

0 40 FT

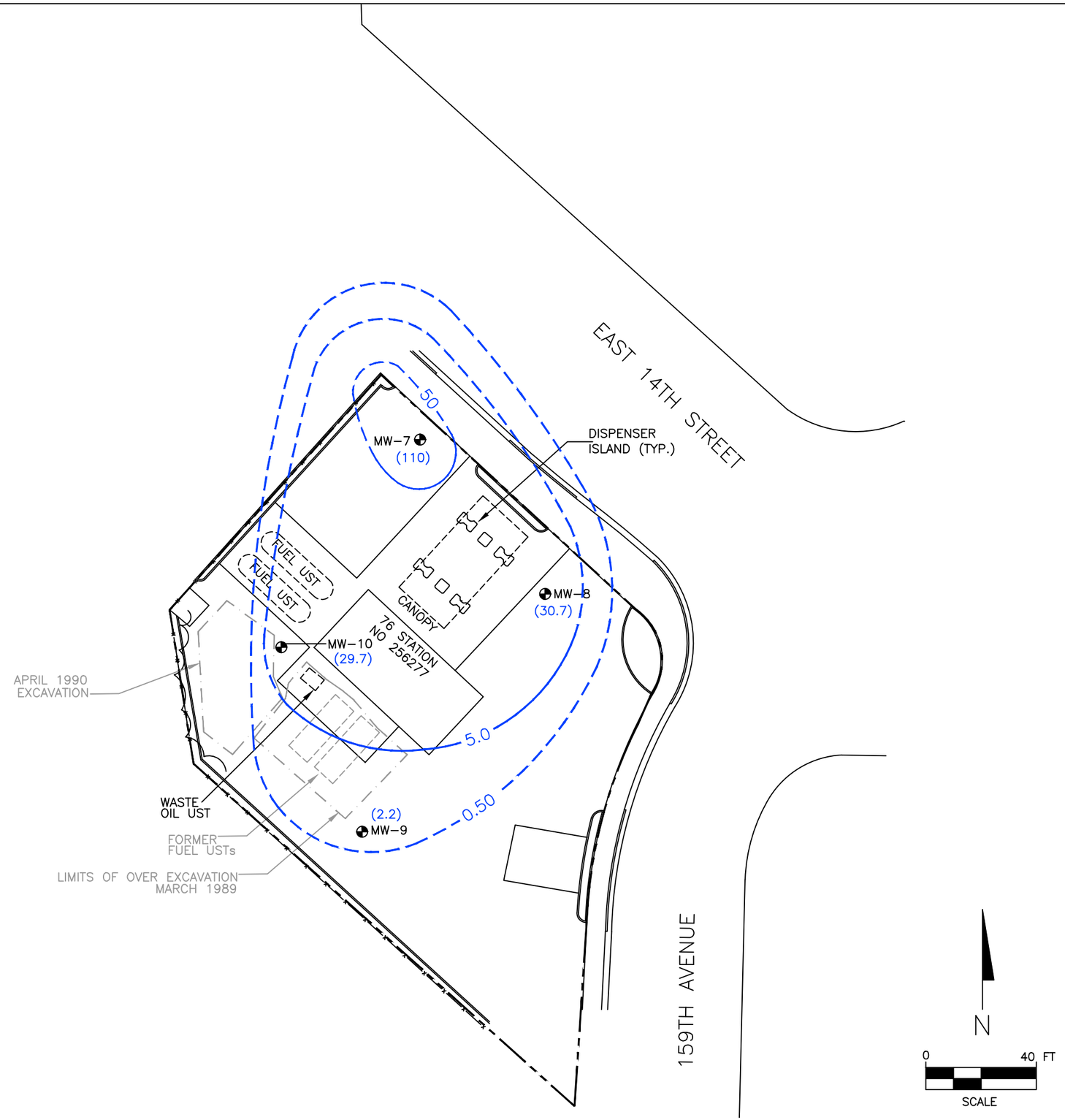
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 5
DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
OCTOBER 14, 2011
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
11/4/11	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (110) DISSOLVED PHASE MTBE ISOCONCENTRATION (µg/L)
- 5.0 DISSOLVED PHASE MTBE ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:
MTBE = METHYL TERTIARY BUTYL ETHER
µg/L = MICROGRAMS PER LITER
<0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMITS

N

0 40 FT
SCALE

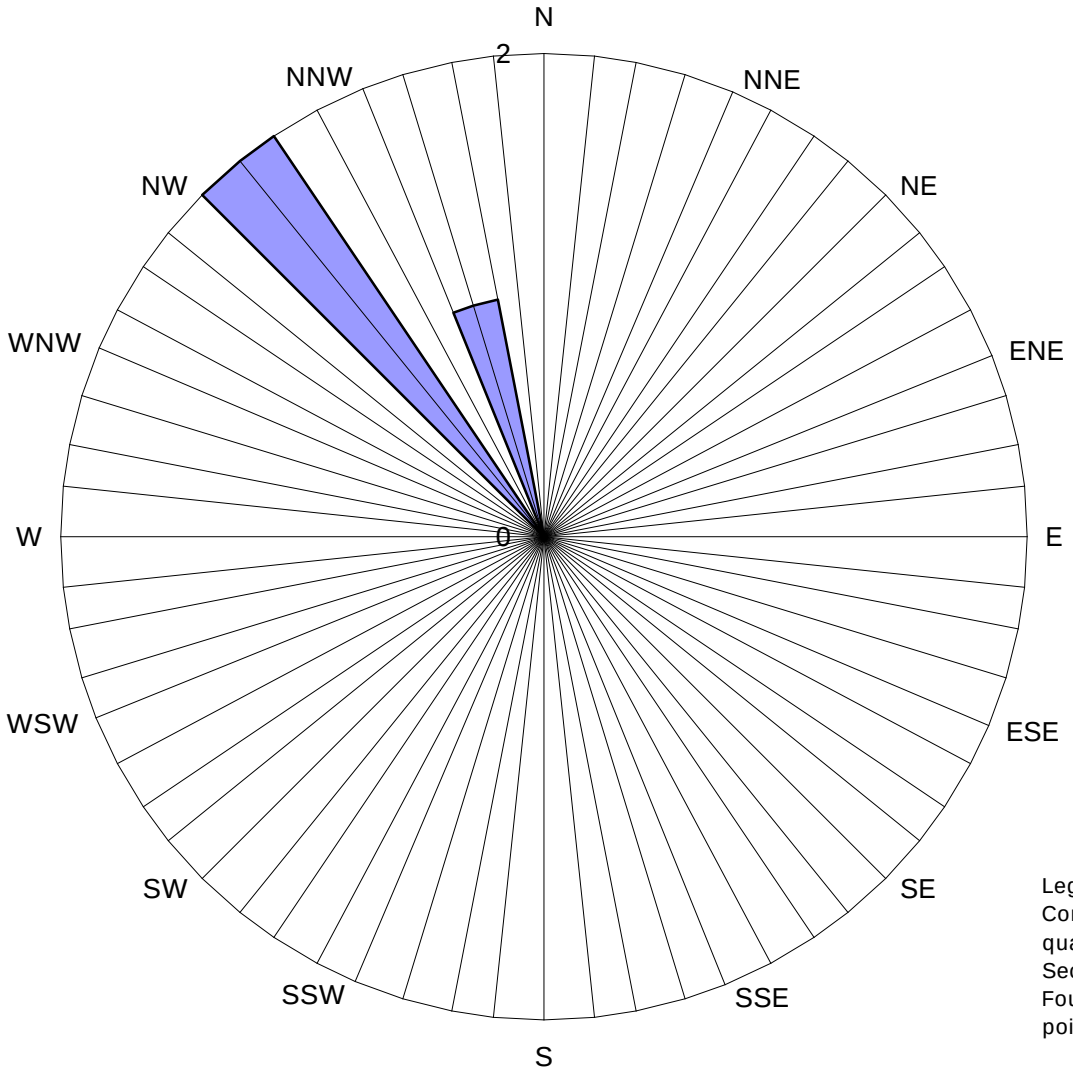
SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 6
DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
OCTOBER 14, 2011
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
11/4/11	DD	6277-SMS

antea group

Figure 7
Historical Groundwater Flow Directions
76 Service Station No. 6277
15803 East 14th Street
San leandro, California



Legend
Concentric circles represent quarterly montoring events Second Quarter 2011 through Fourth Quarter 2011 3 data points shown

Tables

TABLE 1
CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Service Station No. 6277
15803 EAST 14TH ST
SAN LEANDRO, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA												
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	10/14/2011	34.60	9.37	NP	25.23	**1,480**	**45.0**	**6.6**	**58.2**	**184**	**110**	<0.50	<0.50	<0.50	**23.0**	<250	<1.0	<1.0
MW-8	10/14/2011	34.85	9.35	NP	25.50	**221 1n**	**2.2**	<0.50	<0.50	<1.5	**30.7**	<0.50	<0.50	<0.50	**5.5**	<250	<1.0	<1.0
MW-9	10/14/2011	35.09	9.54	NP	25.55	**154 1n**	<0.50	<0.50	<0.50	<1.5	**2.2**	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-10	10/14/2011	36.00	10.75	NP	25.25	**141 1n**	<0.50	<0.50	**0.59**	<1.5	**29.7**	<0.50	<0.50	<0.50	**6.1**	<250	<1.0	<1.0

Gauging Notes:
TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available

Analytical Notes:
< - Below laboratory's indicated reporting limit
BOLD- Above laboratory's indicated reporting limit
ug/L - micrograms/liter
TPHg- Total petroleum hydrocarbons as gasoline
MTBE- Methyl tertiary-butly ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether
1n- The TPHg result does not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of tetrachloroethene in the sample.

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Service Station No. 6277
15803 EAST 14TH ST
SAN LEANDRO, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA												
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	4/18/2011	34.60	9.40	NP	25.20	2420	22.4	12.4	11.3	449	152	<0.50	<0.50	<0.50	5.7	<250	<1.0	<1.0
	7/26/2011	34.60	9.43	NP	25.17	1770	27.3	18.9	66.4	341	102	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	34.60	9.37	NP	25.23	1480	45.0	6.6	58.2	184	110	<0.50	<0.50	<0.50	23.0	<250	<1.0	<1.0
MW-8	4/18/2011	34.85	9.40	NP	25.45	439	1.4	0.75	2.8	14.2	28.3	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	34.85	9.42	NP	25.43	336	4.0	<0.50	<0.50	<1.5	42.7	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	34.85	9.35	NP	25.50	221	2.2	<0.50	<0.50	<1.5	30.7	<0.50	<0.50	<0.50	5.5	<250	<1.0	<1.0
MW-9	4/18/2011	35.09	9.55	NP	25.54	208	<0.50	<0.50	<0.50	<1.5	1.6	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	35.09	9.58	NP	25.51	176	<0.50	<0.50	<0.50	<1.5	1.7	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	35.09	9.54	NP	25.55	154	<0.50	<0.50	<0.50	<1.5	2.2	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-10	4/18/2011	36.00	10.55	NP	25.45	513	<0.50	<0.50	6.9	40.0	14.9	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	36.00	10.74	NP	25.26	169	<0.50	<0.50	1.4	<1.5	22.9	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	36.00	10.75	NP	25.25	141	<0.50	<0.50	0.59	<1.5	29.7	<0.50	<0.50	<0.50	6.1	<250	<1.0	<1.0

Gauging Notes:
TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available

Analytical Notes:
< - Below laboratory's indicated reporting limit
ug/L - micrograms/liter
TPHg- Total petroleum hydrocarbons as gasoline
MTBE- Methyl tertiary-butly ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether

25.23
25.5
25.55
25.25
101.53
25.3825

TABLE 3
Historical Groundwater Gradient and Flow Direction Data
76 Service Station No. 6277
15803 East 14th Street
San Leandro, California

Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction															
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
	04/18/11	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
	07/26/11	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
	10/14/11	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
		0.004 Average	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**

Explanation
NA = Not available
Number of Events = 3

Appendix A

Previous Investigation and Site History Summary

PREVIOUS INVESTIGATION AND SITE HISTORY SUMMARY

1969 - Reported site history indicates the site was first developed as a gas station from an empty lot in 1969.

March 1989 - Two 10,000-gallon gasoline USTs, one 550-gallon waste-oil UST, and the product piping were removed from the site during UST replacement activities. Kaprealian Engineering Inc. (KEI) advanced two exploratory borings designated as EB-1 and EB-2 at the site. The borings were advanced at the request of Alameda County to assess the possible presence of hydrocarbon impact to the soil in the vicinity of the proposed UST excavation.

The borings were advanced to depths of 10.5 feet below ground surface (bgs) and 13.5 feet bgs. Ground water was encountered in the borings at depths of 11 to 12 feet bgs. The analytical results of the soil samples were as follows:

- At a depth of 5 feet bgs soil samples analyzed for total petroleum hydrocarbons as gasoline (TPHg) ranged from below the laboratory's indicated reporting limit in boring EB-2 to 2.1 parts per million (ppm) in boring EB-1.
- At a depth of 10 feet bgs TPHg concentrations ranged from 200 ppm in boring EB-1 to 620 ppm in boring EB-2.

Based on results of this preliminary investigation, KEI recommended that the contractor excavate the existing UST excavation to a depth of approximately 13 feet bgs. Water was encountered in the fuel UST excavation at a depth of approximately 11 feet bgs, thus prohibiting the collection of any soil samples from immediately beneath the USTs.

Six soil samples, labeled SW1 through SW6, were collected from the sidewalls of the fuel UST pit at depths of approximately 1 foot above the water table; and one soil sample, labeled W0-1, was collected from beneath the waste-oil UST at a depth of about 10 feet bgs. Based on observations in the field, it was decided to excavate additional soil from three of the four excavation sidewalls.

March 14, 1989: Four trenches were installed to assess the limits of additional soil excavation needed. Four soil samples were then collected at depths of approximately 10 feet bgs. The soil analytical results were as follows:

- In the fuel UST excavation, TPHg concentrations ranged from 24 ppm to 150 ppm.
- A sample collected adjacent to the existing station building indicated that TPHg was present at a concentration of 3,500 ppm.
- The soil sample collected after excavating 2 feet of sidewall toward the station building indicated that TPHg was present at a concentration of 100 ppm.
- Soil sample (SW-2) contained TPHg at a concentration of 390 ppm.
- The soil sample collected from the waste-oil UST excavation (WO-1) contained total oil and grease (TOG) at a concentration of 280 ppm. A side wall sample, SW-7 collected after excavating 14 feet of sidewall contained TOG at a concentration of 41 ppm.

The analytical results of the water sample (W1) collected from the waste-oil/fuel UST excavation contained TPHg at a concentration of 19,000 parts per billion (ppb) and benzene at a concentration of 230 ppb.

March 23, 1989: KEI returned to the site for pipe trench soil sampling. Six soil samples, labeled P1 through P6, were collected from beneath the product lines at depths of approximately 3 to 3.5 feet below grade. The analytical results of the soil samples P1 through P6 collected from the pipe trenches indicated concentrations of TPHg ranging from 1.1 ppm to 6.8 ppm.

The fuel UST pit and the waste-oil UST pit were over-excavated in order to remove hydrocarbon-impacted soil. The majority of the hydrocarbon-impacted soil appeared to have been removed from the site, except for the capillary fringe in the vicinity of the former UST pit and the building.

May 24, 1989: Four two-inch diameter monitoring wells, MW-1 through MW-4 were installed at the site. The four wells were installed to depths ranging from 24.5 to 25 feet bgs. Ground water was encountered at depths ranging from 11 to 12 feet bgs during drilling.

July 1989: The monitoring and sampling program was initiated.

February 1990: Monitoring well MW-2 was destroyed on February 1 in preparation for additional soil excavation in the vicinity of this well. Soil was excavated to a depth of approximately 6 to 12 inches below the level of the groundwater, which was encountered at a depth of about 11.5 feet below grade. After additional excavation, four soil samples were collected from the sidewalls of the excavation, each approximately 6 to 12 inches above ground water. Soil excavation activities were terminated due to the close proximity of the former and new UST excavations and the site's property line.

The analytical results of three soil samples indicated that TPHg was present at concentrations ranging from 140 ppm to 1,100 ppm, while concentrations of total petroleum hydrocarbons as diesel (TPHd) ranged from below the laboratory's indicated reporting limits to 280 ppm. The analytical results also indicated Environmental Protection Agency (EPA) Method 8010 constituents and TOG from each of the four samples were below the laboratory's indicated reporting limits, except in sample SW11A which contained TOG at a concentration of 210 ppm.

Over-excavation in the vicinity of monitoring well MW-2 was completed in April of 1990. Monitoring well MW-2 was then replaced with a new monitoring well (MW-2A) in March 1991.

1991: Due to the regular occurrence of tetrachloroethene (PCE), trichloroethene (TCE) and 1,2-dichlorethane (1,2-DCA) in sampled groundwater, a review of records documenting historic site activities was performed in 1991 to assess whether there were any up-gradient sources contributing to the impacted groundwater at the site. The file review was conducted by KEI at the Regional Water Quality Control Board (RWQCB).

The review focused on three sites with monitoring wells located within a half mile of the station. The Okada property, located at 16109 Ashland Avenue, a former USA Petroleum station located at 15120 Hesperian Boulevard, and Kaufman and Broad, located at 1620 162nd Avenue, approximately 1,800 feet east-southeast of the site. The file review is outlined in Delta's *Addendum to Additional Site Assessment Work Plan*, dated April 3, 2009.

December 1992: A file review was conducted at the ACHCSA. Four sites with existing or former USTs were located in the vicinity of the site during the file review. These sites are as follows: 1.) Nayou Properties, 1500 Thrush Avenue; 2.) ABC Auto Repair, 15960 East 14th Street; 3. Petsas Property, 16035 East 14th Street, and; 4.) SpeeDee Oil Change, 15900 East 14th Street.

1991-1993: The California EPA, Department of Toxic Substances Control (DTSC), identified regional chlorinated solvent contamination of the upper aquifer in the San Leandro area.

1993: Based on the results of the site history research, site reconnaissance, and file review, and based upon the fact that no evidence of an on-site solvent source area in the vicinity of monitoring wells MW-3 and MW-4 was found, it was concluded that there was no likely on-site source of the halogenated volatile organic compound (HVOC) impact.

The potential of an off-site HVOC source is further supported by the fact that the highest HVOC concentrations have been reported in samples collected from monitoring wells MW-3 and MW-4, located on the up-gradient side of the site. HVOC concentrations reported in the groundwater samples collected from these monitoring wells are likely coming from a source (E.G. reaching sanitary sewer lines, etc.) up-gradient of the site.

March 1993: Monitoring wells MW-5 and MW-6 were installed on March 9, 1993. These wells were monitored monthly and sampled on a quarterly basis until 1996. Groundwater flow predominantly ranged from southwest to north during the course of the investigation. Chlorinated solvents have consistently been reported in up-gradient wells MW-3 and MW-4, and it appears that the chlorinated solvent impact at the site may be due to an unidentified source (or sources) located up-gradient of the site, or is part of a regional chlorinated solvent plume. The perimeter monitoring wells, MW-5 and MW-6, have historically shown a maximum concentration of 72 micrograms per liter (µg/L) of TPHg and below the laboratory's indicated reporting limits for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

March 1997: An off-site investigation was conducted in March 1997 to assess any impacts in the down-gradient direction from monitoring well MW-1. Monitoring well MW-1 is the most down-gradient of the wells at the site and has historically contained the highest concentrations of petroleum hydrocarbons in groundwater throughout the duration of the site investigation.

Three direct push borings (EB-3, EB-4, and EB-5) were advanced through East 14th Street in a northerly transect from the site. The three borings were each advanced to total depths ranging from 11 to 15 feet below grade. Groundwater was encountered at depths ranging from 10.5 to 15 feet bgs during drilling. No reportable target compounds were identified in either soil or groundwater samples.

1998 – A *Case Closure Summary* was prepared by the Alameda County Environmental Protection Department. This document concluded that drinking water wells are not affected. It also documented the maximum contaminant concentrations – before and after cleanup as follows:

Contaminant	Soil (ppm)			Water (ppb)	
	Before	After		Before	After
TPHg	3,500	1,100		19,000	510
TPHd	ND	6.2		NA	NA
Benzene	40	8		230	72
Toluene	280	43		79	ND
Xylenes	600	230		1,300	17
Ethyl-benzene	100	37		ND	ND
Methyl tert-butyl ether (MTBE)	NA	NA		NA	390
TOG	7,700	1,300		NA	NA
Heavy Metals	NA	NA		NA	NA
Other HVOC TCE	0.063	ND	TCE	4.4	ND
			PCE	110	950
			1,2-DCA	2.8	ND

The *Case Closure Summary* concluded that "there are no known municipal or residential water wells or surface water bodies within 750 feet down-gradient of the subject site that would be impacted by shallow groundwater from this site".

December 2000: The ACHCSA issued a *Case Closure* letter dated December 26, 2000.

2003: Six groundwater monitoring wells (MW-1, MW-2A, and MW-3 through MW-6) destroyed. Groundwater was at 6-11 feet bgs.

September 2007: Six soil borings (ATC-1 through ATC-6) were advanced in the vicinity of the existing fuel and waste-oil USTs and dispensers on September 25 and 26, 2007. The borings were advanced to total depths of

approximately 20 feet bgs (ATC-2, ATC-3, ATC-4, and ATC-5) and 25 feet bgs (ATC-1 and ATC-6). Groundwater was initially encountered at depths ranging from 14 feet bgs to 24 feet bgs during drilling activities.

Groundwater samples were collected from each of the six borings. A duplicate groundwater sample designated as "Duplicate B-1" was collected from boring ATC-1. Photo ionization detector (PID) readings from the screened soil samples ranged from 1.4 ppm to 2,272 ppm. The analytical results from the ATC Investigation are outlined in Delta's *Addendum to Additional Site Assessment Work Plan* dated April 3, 2009.

December 2009: Delta advanced six soil borings (B-1 through B-5, and B-7) to assess the extent of petroleum hydrocarbon impact to the soil and groundwater. The borings were advanced to total depths ranging from 24 to 32 feet bgs. First groundwater was encountered at depths ranging from 21 to 28.5 feet bgs during drilling activities.

Soil and groundwater samples were collected from each of the six borings. PID readings from the screened soil samples ranged from 0.2 ppm to 197 ppm. The analytical results indicated that TPHg was present in the soil at a maximum concentration of 603 mg/kg (B-1 at 12 feet) and in the groundwater at a maximum concentration of 2,110 µg/L (B-1). The analytical results from the December 2009 Investigation are outlined in Delta's *Subsurface Soil and Groundwater Investigation Report* dated March 23, 2010.

April 5, 2011: Antea Group completed a site investigation consisting of the installation of four on-site monitoring wells (MW-7 through MW-10). The results of the investigation are presented in the *Site Investigation Report*, dated July 5, 2011.

SENSITIVE RECEPTORS

1991: The well survey performed by KEI focused on the area within a one-half mile radius of the subject site, and was based upon data obtained from the Alameda County Flood Control and Water Conservation District. The information revealed the presence of 15 producing wells designated as irrigation wells and had depths ranging from 20 to 440 feet bgs.

The Alameda County Flood Control and Water Conservation District records suggested that the status of many of the irrigation wells is unknown. In the 1991 survey, it was stated that "no producing wells that could possibly influence the groundwater flow direction at the subject site were located". The closest irrigation well (148 feet deep) installed in 1949 was noted in the north corner of East 14th Street and 159th Avenue.

2008: This survey entailed a request to the California Department of Water Resources (DWR) office in Sacramento to provide well log records. DWR well log records were reviewed in order to assess the location of any water-supply wells in the vicinity of the subject site. Using the DWR well logs, a total of five wells had verifiable addresses within a half-mile radius of the site.

Stains and spills have been documented at the adjacent site to the east, SpeeDee Oil Change shop, located at 15900 East 14th Street, including staining from leaking automobiles, spills not cleaned up immediately, a spill migrating toward a storm drain inlet, a spill in the driveway not cleaned up, and a spill beneath the waste-oil UST was not appropriately addressed. Moreover, it is documented that solvents were used at this adjacent site in 1993 and based on that site history; it appears that solvents have been used at that site for decades.

Current Consultant: **Antea Group**

Appendix B

Blaine Tech Services Groundwater Sampling Procedures

BLAINE TECH SERVICES, INC.
METHODS AND PROCEDURES
FOR THE ROUTINE MONITORING OF
GROUNDWATER WELLS

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for DELTA comply with safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40 hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any DELTA COP/ELT site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic sounders which are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of Immiscibles or sheen and when free product is suspected, it is confirmed using an electronic interface probe (e.g. MMC). No samples are collected from a well containing free product.

EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.
Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well. Small volumes of purgewater are often removed by hand bailing with a disposable bailer.

PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less

than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not recharge.

Wells known to dewater are evacuated as early as possible during each site visit in order to allow for the greatest amount of recovering. Any well that does not recharge to 80% of its original volume will be sampled prior to the departure of our personnel from the site in order to eliminate the need of a return visit.

In jurisdictions where a certain percentage of recovery is included in the local completion standard, our personnel follow the regulatory expectation.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous manifest to a Blaine Tech Services, Inc. facility before being transported to an approved disposal facility.

SAMPLE COLLECTION DEVICES

All samples are collected using disposable bailers.

SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory which will analyze the samples. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

TRIP BLANKS

Upon request, a Trip Blank is carried to each site and is kept inside the cooler for the duration of the sampling event. It is turned over to the laboratory for analysis with the samples from that site.

DUPLICATES

Upon request, one Duplicate sample is collected at each site. It is up to the Field Technician to choose the well at which the Duplicate is collected. Typically, a duplicate is collected from one of the most contaminated wells. The Duplicate sample is labeled DUP thus rendering the sample blind.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the analytical laboratory that will perform the intended analytical procedures. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

Each and every sample container has a label affixed to it. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time at which the sample was collected and the initials of the person collecting the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer which is then operated with high quality deionized water which is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps

and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, sounder etc.) that cannot be washed using the hot high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

EXAMPLE: The sounder is cleaned between wells using the non-phosphate soap and deionized water solution followed by deionized water rinses. The sounder is then washed with the steam cleaner between sites or as necessitated by use in a particularly contaminated well.

DISSOLVED OXYGEN READINGS

All Dissolved Oxygen readings are taken using YSI meters (e.g. YSI Model 550 meter). These meters are equipped with membrane probe that enables them to collect accurate in-situ readings.

The probe and reel is decontaminated between wells as described above. The meter is calibrated as per the instructions in the operating manual. The probe is lowered into the water column allowed to stabilize before use.

OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual. In use the probe is placed in a cup of freshly obtained monitoring well water and allowed to stabilize.

Appendix C

Blaine Tech Services Groundwater Sampling Field Data Sheets

Well-Head Inspection & Well Gauging Form

Antea Group Project No: 256277 **Site Address:** 15803 E. 14th St., SAN LEANDRO

Field Technician: COREY KILPATRICK BLAINE TECH *(Print Full Name & Company*)* **Date:** 10/14/14 **Weather:**

Sample Order	Field Point	Well Condition: Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time Gauged	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Comments
4	MW-7	G	G	G	G	G	N	2	1358	9.37	18.85			
2	MW-8	G	G	G	G	G	N	2	1346	9.35	19.63			
1	MW-9	G	G	G	G	G	N	2	1340	9.54	23.95			
3	MW-10	G	G	G	G	G	N	2	1352	10.75	19.62			

Notes:

** All well caps opened at least 15 minutes or longer before gauging wells:
CIRCLE ONE: YES or NO**

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*Form provided by Antea Group

Note: Use G=good and P=poor for well condition

Groundwater Sampling Form

Site Address:	15803 E 14th St., SAN LEANDRO		
Project No:	256277	Field Technician:	C. KILPATRICK
Field Point:	MW-7	Date:	10/14/11
Depth to Water (DTW) (ft bgs):	9.37	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	18.85	Water Column Height (ft):	9.48

Purging Info and Calculations:

Purge Method: Low-Flow; (3 casing volumes); Other:_____

Purge Equipment: Disposable Bailer; (Electric Submersible); Peristaltic Pump; Bladder Pump; Other:_____

Sample Collection Method: (Disposable Bailer w/ BED); Extraction Port; Dedicated Tubing; Disposable Tubing; Other:_____

Water Column Height (ft): 9.48 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.6

Casing Volume (gal): 1.6 X Specified Volumes: 3 = Calculated Purge (gal): 4.8

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163

Purge: Start Time: 1535 **Stop Time:**

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1536	22.6	7.44	1314	-13.0	277	1.56	0.8	
1537	22.4	7.39	1312	-27.5	159	1.31	1.6	
1538	22.3	7.39	1307	-32.0	>1000	1.11	2.4	
1539	21.8	7.40	1294	-35.4	>1000	0.80	3.2	
1540	21.5	7.41	1286	-36.2	791	0.78	4.0	
1541	21.5	7.41	1284	-37.3	504	0.76	4.8	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 4.8

Other Comments: 80%: 11.27
DTW: 9.45 * PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-7_20111031	Sample Date and Time:	10/14/11 1545
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: _____ Date: 10/14/11

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Antea™Group, 1-800-477-7411

LNAPL= light non-aqueous phase liquids
bgs = below ground surface
ORP = Oxidation-Reduction Potential
D.O.= dissolved oxygen
gal = gallon/s
temp = temperature
NTU = Nephelometric Turbidity Units
mV = millivolts

Groundwater Sampling Form

Site Address:	15803 E 14th St., SAN LEANDRO		
Project No:	256277	Field Technician:	C. KILPATRICK
Field Point:	MW-8	Date:	10/14/11
Depth to Water (DTW) (ft bgs):	9.35	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.63	Water Column Height (ft):	10.28

Purging Info and Calculations:

Purge Method:
Low-Flow
(3 casing volumes)
Other:_____

Purge Equipment:
Disposable Bailer
(Electric Submersible)
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
(Disposable Bailer W/ BED)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 10.28 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.7

Casing Volume (gal): 1.7 X Specified Volumes: 3 = Calculated Purge (gal): 5.1

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius² * 0.163

Purge: Start Time: 1446 Stop Time: 1455

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1448	22.6	7.45	1199	-55.9	840	1.48	0.90	
1449	23.5	7.43	1206	-53.9	>1000	2.75	~~0.91.70~~	
1450	23.3	7.43	1207	-49.4	>1000	1.60	2.5	
1451	23.1	7.42	1199	-49.3	>1000	1.18	3.4	
1452	23.0	7.42	1197	-50.2	>1000	0.60	4.2	
1453	23.0	7.42	1196	-52.4	>1000	0.58	5.1	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 5.1

Other Comments: 80%: 11.41
DTW: 9.75 * PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-8_20111031	Sample Date and Time:	10/14/11 1455
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: _____ Date: 10/14/11

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LNAPL= light non-aqueous phase liquids
bgs = below ground surface
ORP = Oxidation-Reduction Potential
D.O.= dissolved oxygen

gal = gallon/s
temp = temperature
NTU = Nephelometric Turbidity Units
mV = millivolts

Groundwater Sampling Form

Site Address:	15803 E 14th St., SAN LEANDRO		
Project No:	256277	Field Technician:	C. KILPATRICK
Field Point:	MW-9	Date:	10/14/11
Depth to Water (DTW) (ft bgs):	9.54	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	23.95	Water Column Height (ft):	14.41

Purging Info and Calculations:

Purge Method: Low-Flow; (3 casing volumes); Other:_____

Purge Equipment: Disposable Bailer; (Electric Submersible); Peristaltic Pump; Bladder Pump; Other:_____

Sample Collection Method: (Disposable Bailer w/ BED); Extraction Port; Dedicated Tubing; Disposable Tubing; Other:_____

Water Column Height (ft): 14.41 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 2.4

Casing Volume (gal): 2.4 X Specified Volumes: 3 = Calculated Purge (gal): 7.2

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163

Purge: Start Time: 1412 Stop Time: 1419

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1414	28.8	7.16	2335	-203.4	831	0.57	1.2	
1415	25.8	7.23	1267	-119.0	>1000	1.20	2.4	
1416	23.1	7.21	1216	-110.0	>1000	1.06	3.6	
1417	22.0	7.22	1205	-109.7	>1000	0.92	4.8	
1418	21.6	7.23	1201	-108.5	>1000	0.64	6.0	
1419	21.5	7.23	1200	-109.7	>1000	0.59	7.2	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 7.2

Other Comments: 80%: 12.42 DTW: 9.74 * PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-9_20111031	Sample Date and Time:	10/14/11 1425
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: _____ Date: 10/14/11

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Antea™Group, 1-800-477-7411

LNAPL= light non-aqueous phase liquids
bgs = below ground surface
ORP = Oxidation-Reduction Potential
D.O.= dissolved oxygen
gal = gallon/s
temp = temperature
NTU = Nephelometric Turbidity Units
mV = millivolts

Groundwater Sampling Form

Site Address:	15803 E 14th St., SAN LEANDRO		
Project No:	256277	Field Technician:	C. KILPATRICK
Field Point:	MW-10	Date:	10/14/11
Depth to Water (DTW) (ft bgs):	10.75	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.62	Water Column Height (ft):	8.87

Purging Info and Calculations:

Purge Method:
Low-Flow
(3 casing volumes)
Other:_____

Purge Equipment:
Disposable Bailer
(Electric Submersible)
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
(Disposable Bailer w/ BED)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 8.87 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.5

Casing Volume (gal): 1.5 X Specified Volumes: 3 = Calculated Purge (gal): 4.5

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163

Purge: Start Time: 1512 Stop Time: 1518

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1513	23.4	7.52	1198	-22.0	>1000	1.47	0.75	
1514	23.6	7.46	1205	-33.3	>1000	2.65	1.5	
1515	23.1	7.41	1295	-29.8	>1000	1.80	2.25	
1516	22.2	7.33	1316	-28.9	>1000	1.07	3.0	
1517	22.1	7.30	1307	-30.0	>1000	1.07	3.75	
1518	22.1	7.29	1308	-31.2	>1000	1.00	4.5	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 4.5

Other Comments:
80%: 12.52
DTW: 10.93
* MS/MSD TAKEN
* PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-10_20111031	Sample Date and Time:	10/14/11 1520
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) COREY KILPATRICK, an employee of Blaine Tech Services, Inc.

Signature: _____ Date: 10/14/11

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Antea™Group, 1-800-477-7411

LNAPL= light non-aqueous phase liquids
bgs = below ground surface
ORP = Oxidation-Reduction Potential
D.O.= dissolved oxygen
gal = gallon/s
temp = temperature
NTU = Nephelometric Turbidity Units
mV = millivolts

20111031.256277.San Leandro

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COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

COPY

Page: 1 of

Cooler # ____ of ____

4Q11 GW Event

Required Lab Information:

Lab Name:	Pace-Seattle
Address:	940 S. Harney Street Seattle WA 98108
Lab PM:	Regina Ste. Marie
Phone/Fax:	P: 206-957-2433 F: 206-767-5063
Lab PM email	Regina.SteMarie@pacelabs.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	256277
Task:	WG_Q_201110
AnteaGrp proj#	140256277
Site Address	15803 East 14th Street
City	San Leandro
State	CA
AG PM Name:	Dennis Dettloff
Phone/Fax:	P: 916-503-1261 F: 916-638-8385
AG PM Email:	Dennis.Dettloff@anteagroup.com

Required Invoice Information:

Send Invoice to:	Tara Bosch
Address:	11050 White Rock Road Suite 110
City/State	Rancho Cordova CA 95670
Phone #:	916-503-1267
Reimbursement project?	
Non-reimbursement project?	Y
Mark one	
Send EDD to	copeltdata@intelligentehs.com
CC Hardcopy report to	
CC Hardcopy report to	

Turn around time (days)	10
QC level Required: Standard	Special — Mark one
NJ Reduced Deliverable Package?	
MA MCP Cert?	CT RCP Cert? — Mark One
Lab Project ID (lab use)	

Valid Matrix Codes

MATRIX		MATRIX	
DRINKING WATER	WP	WATER	W
GROUND WATER	WG	SURFACE WATER	WS
WASTE WATER	WW	WATER QC	WD
FREE PRODUCT	LF	SLUDGE	SI
SOIL	SO	RINSEATE	WH
OIL	OL	OTHER	OT
WIPE	SW	ANIMAL TISSUE	TA
AMBIENT AIR	AA		
SVE AIR	AE		
SOIL GAS	GS		

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analyses: 8260 GC/MS GRO	8260BTEXMTBE7OXY/CA	Comments/Lab Sample I.D.
1	MW-10_20111031	WG		10/14/11	1520	10	N				10					X	X	7 Oxy's = DIPE, TBA, TAME, ETBE, 1,2DCA, EDB, and Ethanol
2	MW-7_20111031	WG		↓	1545	6	N				6					X	X	
3	MW-8_20111031	WG			1455	6	N				6					X	X	
4	MW-9_20111031	WG			~~1450~~ 1450	6	N				6					X	X	
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

Global ID: T0619718179

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Corey Kilpatrick / BTS	10/14/11	1720	Corey Kilpatrick SAMPLE CONTROL	10/14/11	1735

Sample Receipt Conditions

	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SHIPPING METHOD: (mark as appropriate) UPS COURIER FEDEX US MAIL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: COREY KILPATRICK

SIGNATURE of SAMPLER: Corey Kilpatrick DATE Signed 10/14/11 Time:

Temp in °C | Samples on Ice? | Sample intact? | Trip Blank?

Final 11/13/06. AMTait

Inogen Environmental Alliance

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 15803 E. 14th St. San Leandro | PROJECT NUMBER 111014-CK1

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556	08A100352	10/14/11 1400	3900us Conduct.	3902us	3900us YES		CK
			D/O 100%	103.2%	100% YES		CK
			pH 7.00 10.00 4.00	7.05 9.84 4.10	7.00 10.00 4.00 YES		CK
			ORP 232.0	225.0	232.0 YES		CK

Appendix D

Certified Laboratory Analytical Report and Data Validation Form

Is the Data Set Valid?	Preservation Temperature
(circle) **Yes** / **No**	(if Known): 4.6 °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: 76 Service Station No. 6277
Project #: I4025627 7
Date of Validation: 11-2-11 **Date of Analysis:** 10-20-11 & 10-28-11
Sample Date: 10-14-11 **Completed By:** ETW
Signature:

Circle or Highlight **Yes** / **No** (below)

Analytical Lab Used and Report # (if any): Pace #259654

1.	Were the analyses the ones requested?	**Yes** / No
2.	Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet?	**Yes** / No
3.	Were samples prepared (extracted, filtered, etc.) within EPA holding times?	**Yes** / No
4.	Once prepared/extracted, were the samples analyzed within the EPA holding times?	**Yes** / No
5.	Were Laboratory blanks performed, if so, were they non-detect?	**Yes** / No
6.	Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m^3,etc.)	**Yes** / No
7.	Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample?	**Yes** / No
8.	In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples?	**Yes** / No
9.	Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approximately 80-120%, depending on the analyte)?	Yes / **No**
10.	Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?	**Yes** / No
11.	Were Relative Percent Difference values within the acceptable range (i.e. ±25%)?	**Yes** / No

If any answer is no, explain why and what corrective action was taken (use additional sheet(s), as necessary:

#9. M1: Matrix spike recovery exceeded QC limits. Batch accepted based on LCS recovery Note) on TPH$_g$ (MS/MSD) 923320 & 923321, Ethylbenzene and Total Xylenes (MS/MSD) 923322 & 923323

Other Qualifiers: In, CO, CL, E, M1

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

November 01, 2011

Dennis Dettloff
Antea USA
11050 White Rock Rd. #110
Rancho Cordova, CA 95670

RE: Project: 256277
Pace Project No.: 259654

Dear Dennis Dettloff:
Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,

Regina SteMarie

regina.stemarie@pacelabs.com
Project Manager

Enclosures

cc: Tara Bosch, Antea USA
Jonathon Fillingame, Antea USA
Lia Holden, Antea USA
Dan Keltner, Antea USA
Josh Mahoney, Antea USA
Stephen Meninger, Antea USA
Tony Perini, Antea USA
Nicole Persaud, Antea USA
Don Pinkerton, Antea USA
Doug Umland, Antea USA
Ed Weyrens, Antea USA

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: 256277
Pace Project No.: 259654

Washington Certification IDs
940 South Harney Street, Seattle, WA 98108
Alaska CS Certification #: UST-025
Arizona Certification #: AZ0770
California Certification #: 01153CA
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C555

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

SAMPLE ANALYTE COUNT

Project: 256277
Pace Project No.: 259654

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
259654001	MW-10_20111031	EPA 5030B/8260	LNH	16	PASI-S
		CA LUFT	LNH	2	PASI-S
259654002	MW-7_20111031	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
259654003	MW-8_20111031	EPA 5030B/8260	LNH	16	PASI-S
		CA LUFT	LNH	2	PASI-S
259654004	MW-9_20111031	EPA 5030B/8260	LNH	16	PASI-S
		CA LUFT	LNH	2	PASI-S

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Seattle, WA 98108
(206)767-5060

HITS ONLY

Project: 256277
Pace Project No.: 259654

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
259654001	**MW-10_20111031**					
EPA 5030B/8260	tert-Butyl Alcohol	6.1	ug/L	5.0	10/20/11 06:20	
EPA 5030B/8260	Ethylbenzene	0.59	ug/L	0.50	10/20/11 06:20	
EPA 5030B/8260	Methyl-tert-butyl ether	29.7	ug/L	0.50	10/20/11 06:20	
CA LUFT	TPH-Gasoline (C05-C12)	141	ug/L	50.0	10/20/11 06:20	1n
259654002	**MW-7_20111031**					
EPA 5030B/8260	Benzene	45.0	ug/L	0.50	10/28/11 20:23	
EPA 5030B/8260	tert-Butyl Alcohol	23.0	ug/L	5.0	10/28/11 20:23	C0,CL
EPA 5030B/8260	Ethylbenzene	58.2	ug/L	0.50	10/28/11 20:23	
EPA 5030B/8260	Methyl-tert-butyl ether	110	ug/L	0.50	10/28/11 20:23	
EPA 5030B/8260	Toluene	6.6	ug/L	0.50	10/28/11 20:23	
EPA 5030B/8260	Xylene (Total)	184	ug/L	1.5	10/28/11 20:23	
CA LUFT	TPH-Gasoline (C05-C12)	1480	ug/L	50.0	10/28/11 20:23	
259654003	**MW-8_20111031**					
EPA 5030B/8260	Benzene	2.2	ug/L	0.50	10/20/11 06:38	
EPA 5030B/8260	tert-Butyl Alcohol	5.5	ug/L	5.0	10/20/11 06:38	
EPA 5030B/8260	Methyl-tert-butyl ether	30.7	ug/L	0.50	10/20/11 06:38	
CA LUFT	TPH-Gasoline (C05-C12)	221	ug/L	50.0	10/20/11 06:38	1n
259654004	**MW-9_20111031**					
EPA 5030B/8260	Methyl-tert-butyl ether	2.2	ug/L	0.50	10/20/11 06:56	
CA LUFT	TPH-Gasoline (C05-C12)	154	ug/L	50.0	10/20/11 06:56	1n

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940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 256277
Pace Project No.: 259654

Sample: MW-10_20111031 **Lab ID: 259654001** Collected: 10/14/11 15:20 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
tert-Amylmethyl ether	ND	ug/L	0.50	1		10/20/11 06:20	994-05-8	
Benzene	ND	ug/L	0.50	1		10/20/11 06:20	71-43-2	
tert-Butyl Alcohol	**6.1**	ug/L	5.0	1		10/20/11 06:20	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/20/11 06:20	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/20/11 06:20	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		10/20/11 06:20	108-20-3	
Ethanol	ND	ug/L	250	1		10/20/11 06:20	64-17-5	
Ethylbenzene	**0.59**	ug/L	0.50	1		10/20/11 06:20	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		10/20/11 06:20	637-92-3	
Methyl-tert-butyl ether	**29.7**	ug/L	0.50	1		10/20/11 06:20	1634-04-4	
Toluene	ND	ug/L	0.50	1		10/20/11 06:20	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		10/20/11 06:20	1330-20-7	
4-Bromofluorobenzene (S)	95	%	79-121	1		10/20/11 06:20	460-00-4	
Dibromofluoromethane (S)	96	%	81-119	1		10/20/11 06:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	72-127	1		10/20/11 06:20	17060-07-0	
Toluene-d8 (S)	101	%	77-120	1		10/20/11 06:20	2037-26-5	
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	**141**	ug/L	50.0	1		10/20/11 06:20		1n
4-Bromofluorobenzene (S)	95	%	76-121	1		10/20/11 06:20	460-00-4	

Sample: MW-7_20111031 **Lab ID: 259654002** Collected: 10/14/11 15:45 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
tert-Amylmethyl ether	ND	ug/L	0.50	1		10/28/11 20:23	994-05-8	
Benzene	**45.0**	ug/L	0.50	1		10/28/11 20:23	71-43-2	
tert-Butyl Alcohol	**23.0**	ug/L	5.0	1		10/28/11 20:23	75-65-0	C0,CL
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/28/11 20:23	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/28/11 20:23	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		10/28/11 20:23	108-20-3	
Ethanol	ND	ug/L	250	1		10/28/11 20:23	64-17-5	C0,CL
Ethylbenzene	**58.2**	ug/L	0.50	1		10/28/11 20:23	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		10/28/11 20:23	637-92-3	
Methyl-tert-butyl ether	**110**	ug/L	0.50	1		10/28/11 20:23	1634-04-4	
Toluene	**6.6**	ug/L	0.50	1		10/28/11 20:23	108-88-3	
Xylene (Total)	**184**	ug/L	1.5	1		10/28/11 20:23	1330-20-7	
4-Bromofluorobenzene (S)	99	%	79-121	1		10/28/11 20:23	460-00-4	
Dibromofluoromethane (S)	101	%	81-119	1		10/28/11 20:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	72-127	1		10/28/11 20:23	17060-07-0	
Toluene-d8 (S)	100	%	77-120	1		10/28/11 20:23	2037-26-5	
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	**1480**	ug/L	50.0	1		10/28/11 20:23		

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 256277
Pace Project No.: 259654

Sample: MW-7_20111031 **Lab ID: 259654002** Collected: 10/14/11 15:45 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO	Analytical Method: CA LUFT							
4-Bromofluorobenzene (S)	99	%	76-121	1		10/28/11 20:23	460-00-4	

Sample: MW-8_20111031 **Lab ID: 259654003** Collected: 10/14/11 14:55 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
tert-Amylmethyl ether	ND	ug/L	0.50	1		10/20/11 06:38	994-05-8	
Benzene	**2.2**	ug/L	0.50	1		10/20/11 06:38	71-43-2	
tert-Butyl Alcohol	**5.5**	ug/L	5.0	1		10/20/11 06:38	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/20/11 06:38	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/20/11 06:38	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		10/20/11 06:38	108-20-3	
Ethanol	ND	ug/L	250	1		10/20/11 06:38	64-17-5	
Ethylbenzene	ND	ug/L	0.50	1		10/20/11 06:38	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		10/20/11 06:38	637-92-3	
Methyl-tert-butyl ether	**30.7**	ug/L	0.50	1		10/20/11 06:38	1634-04-4	
Toluene	ND	ug/L	0.50	1		10/20/11 06:38	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		10/20/11 06:38	1330-20-7	
4-Bromofluorobenzene (S)	94	%	79-121	1		10/20/11 06:38	460-00-4	
Dibromofluoromethane (S)	96	%	81-119	1		10/20/11 06:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	72-127	1		10/20/11 06:38	17060-07-0	
Toluene-d8 (S)	102	%	77-120	1		10/20/11 06:38	2037-26-5	
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	**221**	ug/L	50.0	1		10/20/11 06:38		1n
4-Bromofluorobenzene (S)	94	%	76-121	1		10/20/11 06:38	460-00-4	

Sample: MW-9_20111031 **Lab ID: 259654004** Collected: 10/14/11 14:25 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
tert-Amylmethyl ether	ND	ug/L	0.50	1		10/20/11 06:56	994-05-8	
Benzene	ND	ug/L	0.50	1		10/20/11 06:56	71-43-2	
tert-Butyl Alcohol	ND	ug/L	5.0	1		10/20/11 06:56	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/20/11 06:56	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/20/11 06:56	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		10/20/11 06:56	108-20-3	
Ethanol	ND	ug/L	250	1		10/20/11 06:56	64-17-5	
Ethylbenzene	ND	ug/L	0.50	1		10/20/11 06:56	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		10/20/11 06:56	637-92-3	
Methyl-tert-butyl ether	**2.2**	ug/L	0.50	1		10/20/11 06:56	1634-04-4	
Toluene	ND	ug/L	0.50	1		10/20/11 06:56	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 256277
Pace Project No.: 259654

Sample: MW-9_20111031 **Lab ID: 259654004** Collected: 10/14/11 14:25 Received: 10/18/11 09:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Xylene (Total)	ND	ug/L	1.5	1		10/20/11 06:56	1330-20-7	
4-Bromofluorobenzene (S)	95	%	79-121	1		10/20/11 06:56	460-00-4	
Dibromofluoromethane (S)	96	%	81-119	1		10/20/11 06:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	72-127	1		10/20/11 06:56	17060-07-0	
Toluene-d8 (S)	100	%	77-120	1		10/20/11 06:56	2037-26-5	
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	**154**	ug/L	50.0	1		10/20/11 06:56		1n
4-Bromofluorobenzene (S)	95	%	76-121	1		10/20/11 06:56	460-00-4	

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QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

QC Batch: MSV/5661 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 259654001, 259654003, 259654004

METHOD BLANK: 90862 Matrix: Water
Associated Lab Samples: 259654001, 259654003, 259654004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	10/20/11 03:02	
1,2-Dichloroethane	ug/L	ND	1.0	10/20/11 03:02	
Benzene	ug/L	ND	0.50	10/20/11 03:02	
Diisopropyl ether	ug/L	ND	0.50	10/20/11 03:02	
Ethanol	ug/L	ND	250	10/20/11 03:02	
Ethyl-tert-butyl ether	ug/L	ND	0.50	10/20/11 03:02	
Ethylbenzene	ug/L	ND	0.50	10/20/11 03:02	
Methyl-tert-butyl ether	ug/L	ND	0.50	10/20/11 03:02	
tert-Amylmethyl ether	ug/L	ND	0.50	10/20/11 03:02	
tert-Butyl Alcohol	ug/L	ND	5.0	10/20/11 03:02	
Toluene	ug/L	ND	0.50	10/20/11 03:02	
Xylene (Total)	ug/L	ND	1.5	10/20/11 03:02	
1,2-Dichloroethane-d4 (S)	%	96	72-127	10/20/11 03:02	
4-Bromofluorobenzene (S)	%	95	79-121	10/20/11 03:02	
Dibromofluoromethane (S)	%	94	81-119	10/20/11 03:02	
Toluene-d8 (S)	%	100	77-120	10/20/11 03:02	

LABORATORY CONTROL SAMPLE: 90863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	16.4	82	65-123	
1,2-Dichloroethane	ug/L	20	16.6	83	63-131	
Benzene	ug/L	20	17.3	87	66-123	
Diisopropyl ether	ug/L	20	16.8	84	70-136	
Ethanol	ug/L	800	416	52	40-160	
Ethyl-tert-butyl ether	ug/L	20	16.9	84	65-135	
Ethylbenzene	ug/L	20	16.6	83	67-122	
Methyl-tert-butyl ether	ug/L	20	17.0	85	65-138	
tert-Amylmethyl ether	ug/L	20	16.7	84	68-138	
tert-Butyl Alcohol	ug/L	100	65.1	65	57-153	
Toluene	ug/L	20	16.9	84	64-118	
Xylene (Total)	ug/L	60	52.0	87	68-122	
1,2-Dichloroethane-d4 (S)	%			91	72-127	
4-Bromofluorobenzene (S)	%			99	79-121	
Dibromofluoromethane (S)	%			94	81-119	
Toluene-d8 (S)	%			101	77-120	

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91073 91074

Parameter	Units	259503043 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	18.2	17.8	91	89	61-127	2	
1,2-Dichloroethane	ug/L	ND	20	20	18.2	18.4	91	92	60-138	1	
Benzene	ug/L	3.5	20	20	23.9	23.8	102	101	63-138	.4	
Diisopropyl ether	ug/L	ND	20	20	18.0	19.0	90	95	68-146	5	
Ethanol	ug/L	ND	800	800	453	521	57	65	40-160	14	
Ethyl-tert-butyl ether	ug/L	ND	20	20	18.2	19.1	91	95	63-138	4	
Ethylbenzene	ug/L	ND	20	20	20.9	19.9	103	98	65-135	5	
Methyl-tert-butyl ether	ug/L	ND	20	20	17.9	18.8	89	94	59-143	5	
tert-Amylmethyl ether	ug/L	ND	20	20	18.3	18.8	91	94	62-142	3	
tert-Butyl Alcohol	ug/L	ND	100	100	73.5	81.1	69	77	46-156	10	
Toluene	ug/L	ND	20	20	19.9	19.3	99	96	64-128	3	
Xylene (Total)	ug/L	ND	60	60	62.5	60.4	103	100	65-133	3	
1,2-Dichloroethane-d4 (S)	%						96	90	72-127		
4-Bromofluorobenzene (S)	%						99	98	79-121		
Dibromofluoromethane (S)	%						93	95	81-119		
Toluene-d8 (S)	%						102	101	77-120		

Pace Analytical Services, Inc.
940 South Harney
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(206)767-5060

QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

QC Batch: MSV/5724
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 259654002

METHOD BLANK: 92194 Matrix: Water
Associated Lab Samples: 259654002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	10/28/11 19:47	
1,2-Dichloroethane	ug/L	ND	1.0	10/28/11 19:47	
Benzene	ug/L	ND	0.50	10/28/11 19:47	
Diisopropyl ether	ug/L	ND	0.50	10/28/11 19:47	
Ethanol	ug/L	ND	250	10/28/11 19:47	CL
Ethyl-tert-butyl ether	ug/L	ND	0.50	10/28/11 19:47	
Ethylbenzene	ug/L	ND	0.50	10/28/11 19:47	
Methyl-tert-butyl ether	ug/L	ND	0.50	10/28/11 19:47	
tert-Amylmethyl ether	ug/L	ND	0.50	10/28/11 19:47	
tert-Butyl Alcohol	ug/L	ND	5.0	10/28/11 19:47	CL
Toluene	ug/L	ND	0.50	10/28/11 19:47	
Xylene (Total)	ug/L	ND	1.5	10/28/11 19:47	
1,2-Dichloroethane-d4 (S)	%	95	72-127	10/28/11 19:47	
4-Bromofluorobenzene (S)	%	97	79-121	10/28/11 19:47	
Dibromofluoromethane (S)	%	103	81-119	10/28/11 19:47	
Toluene-d8 (S)	%	100	77-120	10/28/11 19:47	

LABORATORY CONTROL SAMPLE: 92195

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	19.4	97	65-123	
1,2-Dichloroethane	ug/L	20	20.1	100	63-131	
Benzene	ug/L	20	20.0	100	66-123	
Diisopropyl ether	ug/L	20	20.1	100	70-136	
Ethanol	ug/L	800	646	81	40-160	CL
Ethyl-tert-butyl ether	ug/L	20	21.1	105	65-135	
Ethylbenzene	ug/L	20	20.1	101	67-122	
Methyl-tert-butyl ether	ug/L	20	19.7	99	65-138	
tert-Amylmethyl ether	ug/L	20	18.9	94	68-138	
tert-Butyl Alcohol	ug/L	100	83.8	84	57-153	CL
Toluene	ug/L	20	19.2	96	64-118	
Xylene (Total)	ug/L	60	59.8	100	68-122	
1,2-Dichloroethane-d4 (S)	%			101	72-127	
4-Bromofluorobenzene (S)	%			99	79-121	
Dibromofluoromethane (S)	%			109	81-119	
Toluene-d8 (S)	%			99	77-120	

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92322 92323

Parameter	Units	259695001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	15.1	17.8	74	88	61-127	16	
1,2-Dichloroethane	ug/L	ND	20	20	17.2	19.5	86	98	60-138	13	
Benzene	ug/L	ND	20	20	17.4	20.7	87	103	63-138	17	
Diisopropyl ether	ug/L	ND	20	20	17.5	20.0	88	100	68-146	13	
Ethanol	ug/L	ND	800	800	522	591	65	74	40-160	12	CL
Ethyl-tert-butyl ether	ug/L	ND	20	20	18.7	21.7	93	109	63-138	15	
Ethylbenzene	ug/L	225	20	20	225	254	4	149	65-135	12	M1
Methyl-tert-butyl ether	ug/L	ND	20	20	16.8	18.9	84	94	59-143	12	
tert-Amylmethyl ether	ug/L	ND	20	20	15.9	18.3	79	92	62-142	14	
tert-Butyl Alcohol	ug/L	ND	100	100	68.2	73.2	68	73	46-156	7	CL
Toluene	ug/L	2.7	20	20	17.9	21.8	76	96	64-128	20	
Xylene (Total)	ug/L	330	60	60	352	404	37	123	65-133	14	M1
1,2-Dichloroethane-d4 (S)	%						109	99	72-127		
4-Bromofluorobenzene (S)	%						104	107	79-121		
Dibromofluoromethane (S)	%						112	108	81-119		
Toluene-d8 (S)	%						100	104	77-120		

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

QC Batch: MSV/5663 Analysis Method: CA LUFT
QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 259654001, 259654003, 259654004

METHOD BLANK: 90867 Matrix: Water
Associated Lab Samples: 259654001, 259654003, 259654004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	10/20/11 03:02	
4-Bromofluorobenzene (S)	%	95	76-121	10/20/11 03:02	

LABORATORY CONTROL SAMPLE: 90868

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	453	91	57-139	
4-Bromofluorobenzene (S)	%			95	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91091 91092

Parameter	Units	259676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-Gasoline (C05-C12)	ug/L	ND	500	500	489	476	97	94	40-150	3	
4-Bromofluorobenzene (S)	%						96	96	76-121		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA

Project: 256277
Pace Project No.: 259654

QC Batch: MSV/5723
QC Batch Method: CA LUFT
Analysis Method: CA LUFT
Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 259654002

METHOD BLANK: 92191 Matrix: Water
Associated Lab Samples: 259654002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	10/28/11 19:47	
4-Bromofluorobenzene (S)	%	97	76-121	10/28/11 19:47	

LABORATORY CONTROL SAMPLE: 92192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	520	104	57-139	
4-Bromofluorobenzene (S)	%			98	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92330 92331

Parameter	Units	259695001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-Gasoline (C05-C12)	ug/L	12500	500	500	13400	12900	186	92	40-150	4	E,M1
4-Bromofluorobenzene (S)	%						106	105	76-121		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALIFIERS

Project: 256277
Pace Project No.: 259654

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

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

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

LABORATORIES

PASI-S	Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

1n	The GRO result for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of tetrachloroethene in the sample.
C0	Result confirmed by second analysis.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 256277
Pace Project No.: 259654

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
259654001	**MW-10_20111031**	EPA 5030B/8260	MSV/5661		
259654002	**MW-7_20111031**	EPA 5030B/8260	MSV/5724		
259654003	**MW-8_20111031**	EPA 5030B/8260	MSV/5661		
259654004	**MW-9_20111031**	EPA 5030B/8260	MSV/5661		
259654001	**MW-10_20111031**	CA LUFT	MSV/5663		
259654002	**MW-7_20111031**	CA LUFT	MSV/5723		
259654003	**MW-8_20111031**	CA LUFT	MSV/5663		
259654004	**MW-9_20111031**	CA LUFT	MSV/5663		

259654

anteagroup

COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1
Cooler # ___ of ___

4Q11 GW Event

Required Lab Information:

Lab Name	Pace-Seattle
Address:	940 S. Harney Street Seattle WA 98108
Lab PM:	Regina Ste. Marie
Phone/Fax:	P: 206-957-2433 F: 206-767-5063
Lab PM email	Regina.SteMarie@pacelabs.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	256277	Task:	WG_Q_201110
AnteaGrp proj#	I40256277		
Site Address	15803 East 14th Street		
City	San Leandro	State	CA
AG PM Name:	Dennis Dettloff		
Phone/Fax:	P: 916-503-1261 F: 916-638-8385		
AG PM Email:	Dennis.Dettloff@anteagroup.com		

Required Invoice Information:

Send Invoice to:	Tara Bosch				
Address:	11050 White Rock Road Suite 110				
City/State	Rancho Cordova CA 95670	Phone #:	916-503-1267		
Reimbursement project?		Non-reimbursement project?	Y	Mark one	
Send EDD to	copeltdata@intelligentens.com				
CC Hardcopy report to					
CC Hardcopy report to					

Turn around time (days)	10			
QC level Required: Standard		Special		Mark one
NJ Reduced Deliverable Package?				
MA MCP Cert?		CT RCP Cert?		Mark One
Lab Project ID (lab use)				

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER W; GROUND WATER GW; SURFACE WATER WS; WASTE WATER WW; WATER QC WQ; PRODUCT P; SOLID SO; SLUDGE SL; OIL OL; OTHER OT; WIPE SW; ANIMAL TISSUE TS; AIR AIR; SOIL GAS SG

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analyses: 8260 GC/MS GRO	8260/BtexMTBE/TOM/CA	Comments/Lab Sample I.D.
1	MW-10_20111031	WG		10/14/11	1520	10	Y				10					X	X	7 Oxy's = DIPE, TBA, TAME, ETBE, 1,2DCA, EDB, and Ethanol
2	MW-7_20111031	WG			1545	6	Y				6					X	X	
3	MW-8_20111031	WG			1455	6	Y				6					X	X	
4	MW-9_20111031	WG			~~1450~~ 1500	6	Y				6					X	X	
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

Global ID: T0619718179

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / BTS	10/14/11	1730	[signature] SAMPLE CUSTODIAN	10/14/11	1735
Fedex			Renita Chew	10/18/11	0905

Sample Receipt Conditions

Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
1	Y/N	Y/N	Y/N
4.6	(Y)/N	(Y)/N	Y (N)
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SHIPPING METHOD: (mark as appropriate) UPS COURIER (FEDEX) US MAIL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: COREY KILPATRICK

SIGNATURE of SAMPLER: [signature] DATE Signed: 10/14/11 Time: 1700

Inogen Environmental Alliance

Sample Container Count

259654

Pace Analytical
www.pacelabs.com

CLIENT: Antea

COC PAGE 1 of 1

COC ID# _____

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU				Comments
1	10														
2	6														
3	6														
4	6														
5															
6															
7															
8															
9															
10															
11															
12															Trip Blank? N/a

AG1H	1 liter HCL amber glass		BP2S	500mL H2SO4 plastic		JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass		BP2U	500mL unpreserved plastic		R	terra core kit
AG2S	500mL H2SO4 amber glass		BP2Z	500mL NaOH, Zn Ac		U	Summa Can
AG2U	500mL unpreserved amber glass		BP3C	250mL NaOH plastic		VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass		BP3N	250mL HNO3 plastic		VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass		BP3S	250mL H2SO4 plastic		VG9U	40mL unpreserved **clear** vial
BG1U	1 liter unpreserved glass		BP3U	250mL unpreserved plastic		VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic		DG9B	40mL Na Bisulfate amber vial		VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic		DG9H	40mL HCL amber voa vial		WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic		DG9M	40mL MeOH clear vial		WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac		DG9T	40mL Na Thio amber vial		ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic		DG9U	40mL unpreserved **amber** vial			
BP2O	500mL NaOH plastic		I	Wipe/Swab			

259654

Sample Condition Upon Receipt

Pace Analytical

Client Name: Anka Project #

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

Tracking #: 8756 0531 5694

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

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Temp. Blank Yes ✓ No

Thermometer Used 132013 or 101731962 or 226099 Type of Ice: Wet Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 4.6 Biological Tissue is Frozen: Yes No

Temp should be above freezing ≤ 6°C

Comments:

Date and Initials of person examining contents: RC 101811

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Follow Up / Hold Analysis Requested:	☐Yes	☑No	☐N/A	8.
Sufficient Volume:	☑Yes	☐No	☐N/A	9.
Correct Containers Used:	☑Yes	☐No	☐N/A	10.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	11.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	12.
Sample Labels match COC:	☑Yes	☐No	☐N/A	13.
-Includes date/time/ID/Analysis Matrix: WT				
All containers needing preservation have been checked.	☐Yes	☑No	☐N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Exceptions: VOA, coliform, TOC, O&G				Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	15.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☐N/A	16.
Trip Blanks Present:	☐Yes	☐No	☐N/A	17.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Creation Date:				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: RSM **Date:** 10/18/11

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

Appendix E

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. n/a	Manifest Document No. 2562277-1011	2. Page 1 of 1
3. Generator's Name and Mailing Address: Platinum Energy c/o Shane Nolan 30343 Canwood Street Suite 200		Site # 2562277 15803 E 14th St. San Leandro, CA 94577	
4. Generator's Phone (818) 206-5705 Agoura Hills, CA 91301			
5. Transporter 1 Company Name: Blaine Tech Services	6. US EPA ID Number: —	A. State Transporter's ID: —	
		B. Transporter 1 Phone: 310-885-4455	
7. Transporter 2 Company Name: —	8. US EPA ID Number: —	C. State Transporter's ID: —	
		D. Transporter 2 Phone: —	
9. Designated Facility Name and Site Address: Seaport Environmental 700 Seaport Blvd. Redwood City, CA 94063	10. US EPA ID Number: 000013572	E. State Facility's ID: —	
		F. Facility's Phone: 650-364-1024	

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non hazardous waste liquid	1	TT	25	G
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Wear protective equipment while handling
weight and volumes are approximate
24 hr emergency phone No. (310) 885-4455

Approval # 500-1049
Direct bill Blaine Tech
Blaine Tech PO#

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

(Antea Group)

Printed/Typed Name	Signature	Date Month	Day	Year
Jerilyn Mendes on behalf of Plat. Energy	[signature]	9	21	11

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
COREY KILPATRICK	[signature]	10	14	11

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
Joaquin D Camren	[signature]	12	15	11

GENERATOR · TRANSPORTER · FACILITY · NON-HAZARDOUS WASTE