Environmental Resources Management

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18 August 2009

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Site Investigation Results
Lucasey Site- 2744 East 11th Street, Oakland

Dear Mr Wickham:

Environmental Resources Management (ERM) is pleased to present this report documenting results of additional site investigation at the Lucasey site in Oakland, California.

BACKGROUND

The scope of work documented in this report was conducted to fill data gaps identified by Alameda County Environmental Health (ACEH) in their letter of 1 October 2008 to Lucasey Manufacturing Corporation. A work plan was submitted to ACEH on 27 March 2009, and approved on 30 April 2009.

SCOPE OF WORK

ERM conducted the following scope of work:

DEVELOPMENT AND SAMPLING OF THREE PRODUCT RECOVERY WELLS

The three on-site wells (RW-1, -2 and -3) were developed on 5 June 2009 using a truck-mounted development rig equipped with a 4 inch submersible pump, and a stainless steel bailer. Well development consisted of alternately bailing and swabbing the well to settle the sand pack and remove fine-grained materials. Approximately 10 well volumes were evacuated from each well during development, and electrical conductivity, pH, dissolved oxygen, temperature, and turbidity were

monitored at regular intervals during evacuation. The monitoring well development logs are included as an attachment.

On the following Monday (June 8) the wells were sampled using the low-flow technique as outlined in the work plan. Temperature, dissolved oxygen, pH, oxygen reduction potential (ORP), were monitored and recorded during the purging process.

Samples were submitted for total petroleum hydrocarbon (TPH) extractable analysis by McCampbell Analytical using U.S. Environmental Protection Agency (EPA) Method SW 8015 to. The lab followed the gravity separation protocol specified in the work plan prior to extraction of the samples to ensure that the dissolved phase of the samples was accurately quantified. Following the gravity separation procedure, sample aliquots with and without silica gel cleanup were analyzed.

SOIL VAPOR SAMPLING

To evaluate the potential for indoor air impacts from soil and groundwater at the Lucasey site, soil vapor sampling was conducted at locations shown on Figure 1.

Soil vapor samples were collected at 11 locations (ASV-1 to ASV-11). The work plan specified 12 locations, however, based on repeatedly encountering drilling refusal at the location on the easement to the animal shelter, that location was eliminated. To avoid obstructions and minimize damage to sidewalks, locations ASV- 1, ASV-2, ASV-9 and ASV-11 were moved slightly from the work plan proposed locations.

A direct-push rig was utilized for collection of soil vapor samples. Samples were collected with 1-liter Summa© canisters equipped with flow controllers with a pre-set sampling rate of 200 milliliters per minute Samples were submitted to Air Toxics, Ltd. for analysis via Modified EPA Method TO-15 for benzene, toluene, ethylbenzene, xylenes, and naphthalene, and for oxygen, carbon dioxide, and methane using Method ASTM D-1946. An ambient air sample collected at the northwestern corner of E 11th Street and Lisbon Street and a trip blank prepared by the laboratory was also submitted for the same analyses.

RESULTS

MONITORING WELL SAMPLING

Results of the sample analyses are presented in Table 1. In general, all results were low, with two of the three wells exhibiting non-detect following silica gel cleanup.

No evidence of free product was found during development, purging or sampling of the wells.

There are no federal or state maximum contaminant levels (MCLs) for TPH as diesel (TPHd), therefore the results were compared to the secondary odor and taste MCL of 100 ug/L. None of the wells exceeded the secondary MCL following silica gel cleanup. Two of the three wells exceeded the secondary MCL without silica gel cleanup.

SOIL VAPOR SAMPLING

Results of the soil vapor sample analyses are presented in Table 2. The data was compared to the residential and commercial/industrial California Environmental Protection Agency Office for Environmental and Health Hazard Assessment (OEHHA) California Human Health Screening Levels (CHHSLs) and San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). The data indicated the following:

- Samples collected on the Lucasey site (ASV-6, -7, -8, -9, -10, -11) had no exceedances of residential or commercial/industrial CHHSLs or ESLs;

- Samples collected southwest of the site on the northeast side of E. 11th Street exceeded the ESL and CHHSL for benzene:

    - ASV-1 exceeded the residential and commercial/industrial CHHSL and the residential ESL;

    - ASV-2 exceeded the residential CHHSl and ESL.

    - No other CHHSls or ESLs were exceeded.

- Samples collected further to the southwest, across E. 11th Street exceeded benzene ESLs and CHHSLs and ethylbenzene ESLs (ethylbenzene does not have an established CHHSL):
    - ASV-3 exceeded ESLs and CHHSLs for benzene and the residential ESL for ethylbenzene;
    - ASV-4 exceeded ESLs and CHHSLs for benzene and the residential ESL for ethylbenzene;
    - ASV-5 had no exceedances of any CHSSLs and ESLs.

WATER SUPPLY WELLS

Based on the technical comment in the ACEH work plan approval letter (30 April 2009) ERM conducted the following additional research on water supply wells in the vicinity of the site (information attached):

- The Detailed Well Survey conducted at the nearby Mel Senna Brake Service site was retrieved from the ACEH online database. The well survey information is included as an attachment;
- James Yoo of the Alameda County Public Works Department was contacted to determine if any additional information regarding the four identified wells (Wells 2S/3W/7B – 2, -3, -4, -5) was available. It was determined that the information in the Detailed Well Survey was all that was available. Mr. Yoo suggested contacting the California Department of Water Resources (DWR) for additional information;
- Joe Garibaldi of the California DWR was contacted to inquire about the wells. The attached form documents that request and the lack of additional information available.
- Del Monte (site owner until 1977) was contacted to inquire about the well. ERM is advised that Del Monte searched its available records and could not find any information on the wells.

- A search undertaken of information about or from site owners subsequent to Del Monte did not find any additional information on the wells.

CONCLUSIONS AND RECOMMENDATIONS

The data collected indicates the following:

- There is no evidence of free product at the site. The existing wells were installed in areas expected to contain free product based on previous investigations. Based on observations prior to and during the current field investigation and analytical data from the samples collected from the wells, it is clear that free product is not an issue at this site. It is likely that previous grab samples of ground water contained entrained petroleum-affected soil particles resulting from collection methods;

- The data indicates that only minor levels of dissolved TPHd are present on the site. Even without silica gel cleanup, the TPHd concentrations were only slightly above the secondary drinking water taste and odor criterion. With silica gel cleanup, none of the samples exceeded the criterion. The results following silica gel cleanup compared to the results without cleanup indicate that the organic mass measured as "TPHd" is the presence of polar compounds that are evidence of intrinsic biodegradation of the petroleum in the subsurface. The ORP data suggest that biodegradation is occurring. The TPHd and ORP data confirm that the residual petroleum in soil at this site is weathered to the extent that it is not a source of dissolved petroleum constituents to groundwater that exceed water quality objectives.

- Shallow groundwater in the vicinity of the site is not used a source of municipal water supply. Previous surveys of wells for this and adjacent sites did not identify any use of shallow ground water.

- Based on a survey referred to in the ACEH work plan approval there were four deep supply wells in the vicinity of the Lucasey site. One of the wells was located south of the current Lucasey

site and was properly abandoned in 1977. Given the distance from the Lucasey site, the lack of evidence indicating significant dissolved impacts from the site and the fact that the well was properly abandoned, there is no potential for this well to be a receptor for contamination from the Lucasey site. No information was found for the remaining three wells, however given the lack of a dissolved petroleum plume, there is no potential for these wells to be a receptor for contamination from the Lucasey site.

- The soil vapor results indicate low levels of benzene, toluene, ethylbenzene, or xylene (BTEX) or naphthalene on the Lucasey site below applicable thresholds.

- Soil vapor results from locations southwest of the Lucasey site indicate BTEX impacts from an off-site source unrelated to the Lucasey site. Tables 3 and 4 are comprehensive tabulations of all soil and groundwater data collected at the site, including grab ground water samples. The data clearly illustrates no detections of BTEX in groundwater on the Lucasey site. The specific source of the BTEX in soil vapor is unknown, however given the history of commercial and industrial facilities in the area of the site, there are numerous potential sources for these impacts.

Based on the above, we recommend that the Lucasey site be considered for low-risk closure pursuant to the Regional Water Quality Control Board's guidelines (*Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low Risk Fuel Sites*, 1996). Site closure is recommended because:

- There is no evidence of an ongoing source of impact to groundwater;

- The site has been adequately characterized;

- There is no dissolved plume of contaminants;

- No water wells, surface water or other sensitive receptors are likely to be impacted,

- TPH impacts to soil are documented in past investigations to occur at depths greater than 10 feet, therefore pose no human health risk for contact;

- The site presents no significant risk to human health or the environment based on soil, groundwater and soil vapor data.

Please direct any comments or questions regarding this report to me at (925) 279-3240. Thank you for your consideration.

Sincerely,

John Moe
Project Manager

Paul Hausmann
Partner-in-Charge

JCM/Enclosures

Cc: Bruce Flushman
Scott Rickman
Chuck Lucasey

Jerry Wickham
18 August 2009

INVESTIGATION RESULTS

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HISTORICAL BTEX DATA

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FIELD NOTES

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WATER SUPPLY WELL INFORMATION

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LAB REPORTS

Jerry Wickham
1 August 2009

INVESTIGATION RESULTS

CAD File:	Drawn By:	Date:	Project No.
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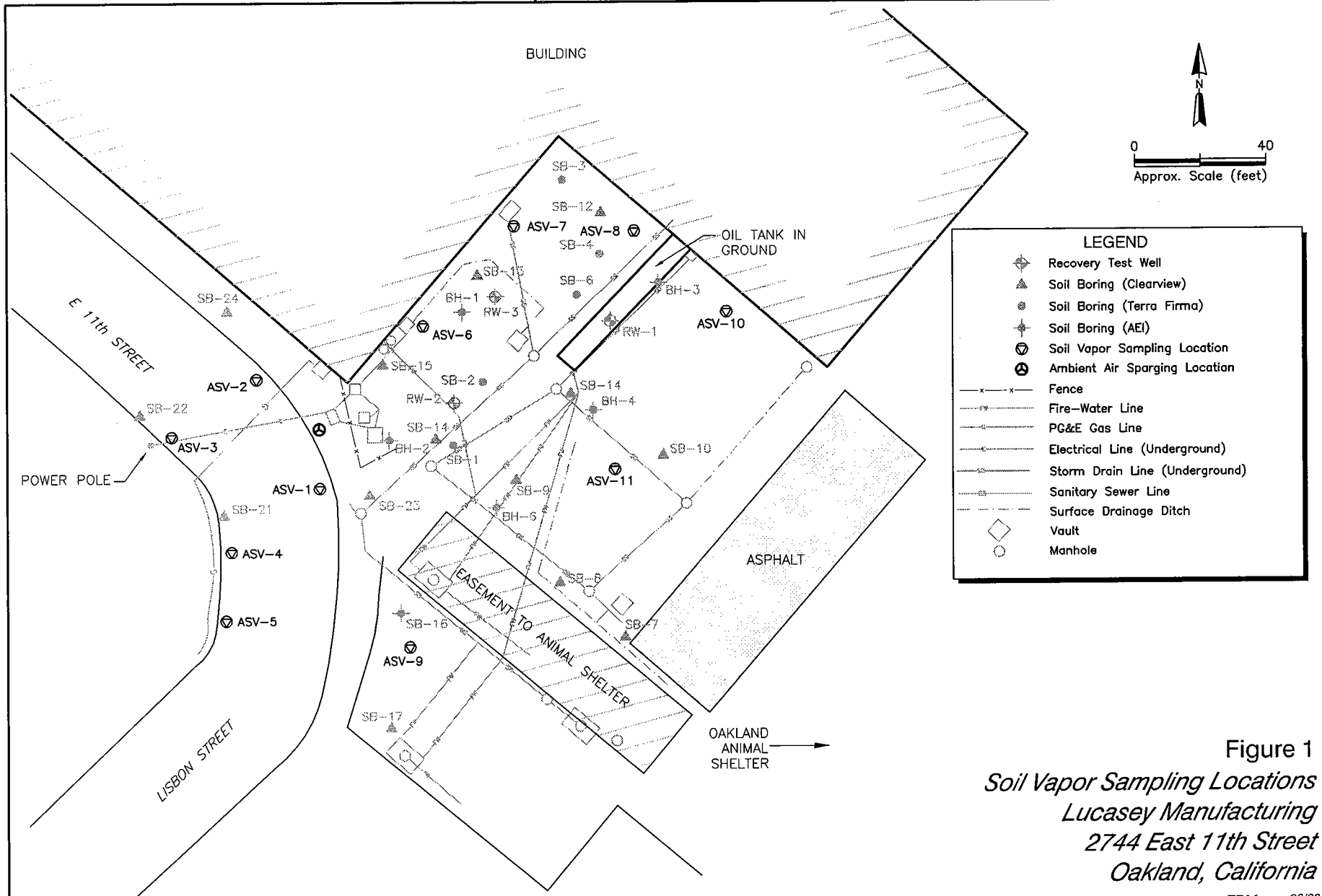

Figure 1

Soil Vapor Sampling Locations
Lucasey Manufacturing
2744 East 11th Street
Oakland, California

ERM 06/09

Table 1 *Monitoring Well Sampling Results*
Lucasey Manufacturing
2744 East 11th Street
Oakland, California

Sample ID	Sample Date	TPH diesel	TPH diesel (w/ silica gel cleanup)
USEPA MCL		NA	NA
DHS MCL		NA	NA
Secondary MCL (taste and odor)		100	100
RW-1	06/08/09	58	<50
RW-2	06/08/09	**120**	<50
RW-2 duplicate	06/08/09	**140**	<50
RW-3	06/08/09	**210**	88

Key:
USEPA MCLs = Federal EPA maximum contaminant levels
DHS MCLs = California Department of Health Services maximun
Concentrations reported in micrograms per Liter
Bold values exceed secondary MCL
< = Less than; compound not detected at the laboratory reporting

Table 2 ***Soil Vapor Sampling Results***
Lucasey Manufacturing
2744 East 11th Street
Oakland, California

Sample ID	Sample Date	Benzene	Toluene	Ethyl-benzene	m,p-Xylene	o-Xylene	Naphthalene	Oxygen (%)	Methane (%)	Carbon Dioxide (%)
CHHSL-residential		36.2	135,000	NA	319,000	315,000	31.9	NA	NA	NA
CHHSL-commercial		122	378,000	NA	887,000	879,000	106	NA	NA	NA
ESL-residential		84	63,000	980	21,000	21,000	72	NA	NA	NA
ESL-commercial		280	180,000	3,300	58,000	58,000	240	NA	NA	NA
ASV-1	06/17/09	**150**	2,100	130	280	47	<48	16	0.00031	1.1
ASV-1 duplicate	06/17/09	**170**	2,200	140	310	52	<97	16	0.0003	1
ASV-2	06/17/09	**110**	2,900	250	810	180	<46	20.0	0.00039	2.6
ASV-3	06/17/09	**740**	20,000	**1,900**	7,000	1,800	<460	19	<0.00022	1.4
ASV-4	06/17/09	**570**	22,000	**2,600**	10,000	2,900	<470	15.0	0.00023	2
ASV-5	06/17/09	33	690	62	230	69	<31	18.0	<0.00029	0.86
ASV-6	06/18/09	14	470	44	180	55	<24	22.0	0.00023	0.26
ASV-7	06/18/09	21	700	70	290	90	<25	21.0	0.00024	0.34
ASV-7 duplicate	06/18/09	22	720	71	290	88	<25	21.0	0.00024	0.34
ASV-8	06/18/09	18	690	54	220	72	<25	21.0	0.00029	0.34
ASV-9	06/18/09	12	500	55	230	70	<24	21.0	<0.00023	0.082
ASV-10	06/18/09	12	370	40	160	54	<23	21.0	0.00024	0.16
ASV-11	06/18/09	15	480	49	200	65	<23	20.0	0.00640	0.41
Ambient air	06/18/09	4	7	<4.7	<4.7	<4.7	<23	21.0	<0.00022	0.042
					Blank Samples					
Travel blank		21	18	<2.2	<2.2	<2.2	<10	0.31	<0.00010	<0.010

Key:
CHHSL = OEHHA California Human Health Screening Levels for Soil Gas
ESL = SF Bay Regional Water Quality Control Board Environmental Screening Levels
Concentrations reported in micrograms per cubic meter ($\mu g/m^3$) except for oxygen, methane and carbon dioxide (%).
Bold values exceed one or more of ESL or CHHSL criteria
< = Less than; compound not detected at the laboratory reporting limit.

Jerry Wickham
1 August 2009

HISTORICAL BTEX DATA

Table 3 *Compounds Detected in Groundwater*
Lucasey Site
2744 E.11th Street
Oakland, California

Sample ID	Sample Date	Volatile Organic Compounds					Total Petroleum Hydrocarbons		
		Benzene	Toluene	Ethyl-benzene	Xylenes (Total)	MTBE	TPH (as Gasoline)	TPH (as Diesel)	TPH (as Motor Oil)
Grab Groundwater Samples									
SB-1W	08/31/04	<0.5	<0.5	<0.5	<0.5	<0.5	650	520,000	520,000
SB-2W	08/31/04	<0.5	<0.5	<0.5	<0.5	<0.5	2,200	110,000	89,000
SB-3W	08/31/04	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<50	<250
SB-4W	08/31/04	<0.5	<0.5	<0.5	<0.5	<0.5	3,800	560,000	410,000
SB-6W	08/31/04	<0.5	<0.5	<0.5	<0.5	<0.5	130	8,700	6,900
BH-2	07/09/06	<0.5	<0.5	<0.5	<0.5	<0.5	310	580,000	510,000
BH-4	07/09/06	<0.5	<0.5	<0.5	<0.5	<0.5	<50	160,000	150,000
BH-5	07/09/06	<0.5	<0.5	<0.5	<0.5	<0.5	<50	670	2,800
SB7-W	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	<50	<500
SB8-W	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	<50	<500
SB8-W23.5	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	390	<500
SB10-W16	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	<50	<500
SB10-W23	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	340	<500
SB14-W	01/12/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	11,000	4,500
SB21-W17	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	730	<500
SB21-W26	01/11/07	<0.5	0.54	<0.5	1.7	1.2	<25	1,500	580
SB23-W	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	2,800	1,500
SB23-W23	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<25	630	<500
Monitoring Well Samples									
RW-1	06/08/09	-	-	-	-	-	-	58/<50	-
RW-2	06/08/09	-	-	-	-	-	-	140/<50	-
RW-3	06/08/09	-	-	-	-	-	-	210/88	-

Key:
Concentrations reported in micrograms per liter (µg/L).
- Not analyzed for this analyte
< = Less than; compound not detected at the laboratory reporting limit.

Table 4

Soil Sample Results
Lucasey Site
2744 E.11th Street
Oakland, California

Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds					Total Petroleum Hydrocarbons		
			Benzene	Toluene	Ethyl-benzene	Xylenes (Total)	MTBE	TPH (as Gasoline)	TPH (as Diesel)	TPH (as Motor Oil)
BH-1	16	07/09/05	-	-	-	-	-	4.8	48	46
BH-3	7.5	07/09/05	-	-	-	-	-	4.7	50	79
BH-6	16	07/09/05	-	-	-	-	-	73	1,800	1,700
SB7-5	5	01/11/07	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB7-17.5	17.5	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB7-23	23	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB8-5	5	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB8-15	15	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB8-23.5	23.5	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB8-26.5	26.5	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB9-5	5	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB9-10	10	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB9-18	18	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	18.0	<50
SB9-22	22	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB10-5	5	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB10-12	12	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB10-23	23	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB11-5	5	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB11-22	22	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB11-23.5	23.5	01/10/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB12-5	5	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB12-11	11	01/08/09	<0.025	<0.025	<0.025	<0.025	<0.025	<1	370.0	85.0
SB12-26	26	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB12-34	34	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	1.4	170.0	<50
SB13-5	5	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB13-10	10	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB13-18	18	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB13-30	30	01/08/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB14-10.5	10.5	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB14-13.5	13.5	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB14-23	23	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB15-5	5	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB15-27	27	01/09/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB21-5	5	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB21-10	10	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB21-22	22	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB22-10	10	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB22-15	15	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB23-5	5	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB23-15	15	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB23-23	23	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB23-29	29	01/11/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50
SB24-5	5	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	23.0	<50
SB24-18	18	01/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<1	<10	<50

Concentrations reported in micrograms per liter (µg/L).
- Not analyzed for this analyte
< = Less than; compound not detected at the laboratory reporting limit.

CAD File:	Drawn By:	Date:	Project No.
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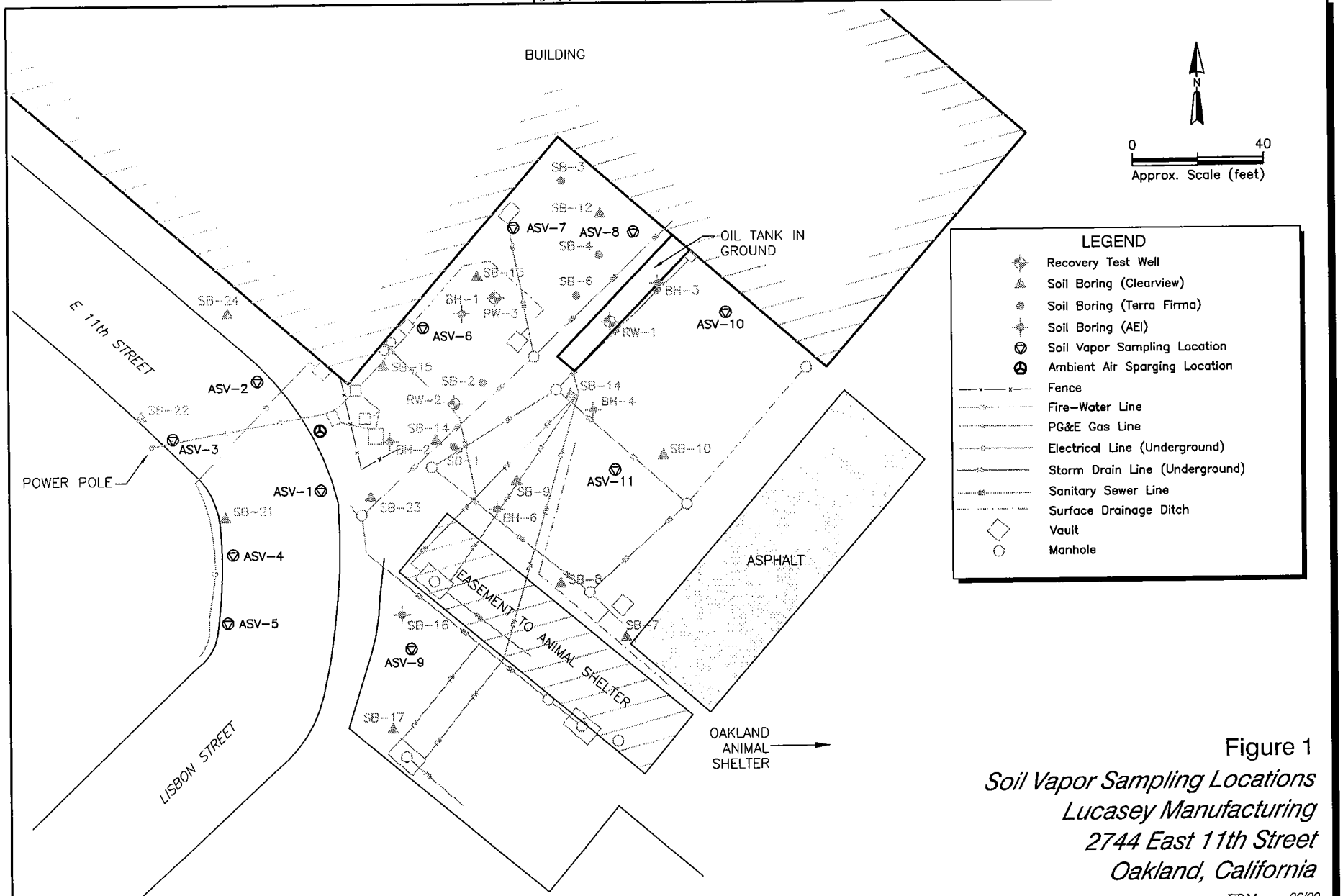


Figure 1

Soil Vapor Sampling Locations
Lucasey Manufacturing
2744 East 11th Street
Oakland, California

ERM 06/09

Jerry Wickham
1 August 2009

WATER SUPPLY WELL INFORMATION

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY **ARNOLD SCHWARZENEGGER**, *Governor*

DEPARTMENT OF WATER RESOURCES
NORTH CENTRAL REGION OFFICE
3500 INDUSTRIAL BOULEVARD
WEST SACRAMENTO, CA 95691

August 3, 2009

Mr. John Moe
ERM
1777 Botelho Drive, Suite #260
Walnut Creek, California 94596

Dear Mr. Moe:

Based on the information provided, we are unable to locate a Well Completion Report for:

1100 29th Avenue
Township 02S, Range 03W, Section 07B

If you have any questions, please contact Joe Garibaldi at (916) 376-9612 or fax (916) 376-9676.

Sincerely,

Juan M. Escobar, Chief
Groundwater Supply Assessment and
Special Studies Section

J.W. SILVEIRA CO.

499 Embarcadero
Oakland, CA 94606

Tel: (510) 834-9810 Fax: (510) 763-9996
jw_silveira@hotmail.com

Real Estate

December 16, 2008

Mr. Jerry Wickham
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SENSITIVE RECEPTOR SURVEY REPORT CERTIFICATION
County File # RO 387
Mel Senna Brake Service
2301 East 12th Street
Oakland, CA

Dear Mr. Wickham:

P&D Environmental, Inc. has prepared the following document:

- Sensitive Receptor Survey Report dated December 8, 2008 (document 0404.R2).

I declare under penalty of perjury that the contents and conclusions in the document are true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to contact me at (510) 834-9811.

Sincerely,

J.W. Silveira Realty

J.W. Silveira

0404.L5

P&D ENVIRONMENTAL, INC.
55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

December 8, 2008
Report 0404.R2

Mr. J.W. Silveira
J.W. Silveira Realty
499 Embarcadero
Oakland, CA 94606

SUBJECT: SENSITIVE RECEPTOR SURVEY REPORT
County File #RO 387
Mel Senna Brake Service
2301 East 12th Street
Oakland, California

Dear Mr. Silveira:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the results of a well survey and sensitive receptor survey for a ½-mile radius for the subject site. This report is written in response to a request from Mr. Jerry Wickham of the Alameda County Department of Environmental Health (ACDEH) in a letter dated January 31, 2006. A U.S. Geological Survey topographic map showing the location of the subject site and a circle around the site with a ½-mile radius and showing wells identified during the well survey is attached with this report as Figure 1.

BACKGROUND

The well survey was requested by the ACDEH as part of the investigation of a release from an Underground Storage Tank (UST) at the subject site. Documentation of the investigation of the UST release is presented in greater detail in other reports for the subject site. The presently known extent of impacted groundwater at and near the subject site associated with the UST release is shown in Figures 2, 3 and 4.

WELL SURVEY

P&D submitted a request to Mr. James Yoo of the Alameda County Public Works Agency (ACPWA) for available well information within a ½-mile radius of the subject site. On October 9, 2008 Ms. Vicky Hamlin of ACPWA provided tables via e-mail to P&D that transmitted the findings of the ACPWA database search. Ms. Hamlin stated in her transmittal that the search area is in Township T2S, Range R3W, and included all or part of Section 6 Tracts E,F,G,H,J,K,L,M,N,P,Q,R, Section 7 Tracts A,B,C,D; and also in Township T2S, Range R4W, and included all or part of Section 1 Tracts J and R, and Section 12 Tract A. Ms. Hamlin also stated that there were no results for wells in the search area in the ACPWA database in the underlined Sections identified above.

A total of 78 well records in the study area were included in the spreadsheet provided by ACPWA. All wells identified by ACPWA within 1/2–mile of the site (including destroyed wells and abandoned but not destroyed wells) and associated well information are summarized in Table 1. Almost all of the wells were groundwater monitoring wells that extended to a maximum depth of 35 feet, with the exception of four wells that were identified as industrial wells with total depths ranging from 385 to 875 feet (all four wells are located at the same address, one of which is identified as having been destroyed), and two wells identified as abandoned and not being used but not having been destroyed through a permitted process. These two additional wells had reported depths of 345 feet and 166 feet. The locations of wells not identified as groundwater monitoring wells are shown on Figure 2. The locations of the wells identified from the ACPWA data that are shown on Figure 2 were located on Figure 2 by locating the site address provided by ACPWA using the internet services Mapquest and Google Earth. The wells at the Del Monte facility were included in Table 1 because a portion of the Del Monte property is located within the search area. The wells in Table 1 that are not identified as groundwater monitoring wells are high-lighted with bold. A legend provided by ACPWA for the well search that defines the various well search result abbreviations is also attached with Table 1.

P&D also submitted a request to Ms. Ann Roth of the California Department of Water Resources (DWR) for available well information within a ½-mile radius of the subject site. On October 2, 2008 Ms. Roth provided a total of 409 tif images on a compact disk, some of which consisted of multiple images. Review of these images showed that a total of 52 wells were identified within a ½-mile radius of the subject site. Information regarding the wells from the DWR database that are located within ½-mile of the subject site is summarized in Table 2. The majority of the wells are groundwater monitoring wells. A total of four of the wells were identified as not being groundwater monitoring wells and have a use identified in Table 2 as "OTHER." Two of these four wells were not identified in the ACPWA database, and had reported depths of 168 feet and 681 feet. One of the four wells was identified as having been destroyed. The locations of wells not identified as groundwater monitoring wells are shown on Figure 2. The locations of the wells identified from the DWR data that are shown on Figure 2 were located on Figure 2 by locating the site address provided by the DWR using the internet service Mapquest and Google Earth. The wells in Table 2 that are not identified as monitoring wells are high-lighted with bold.

Information regarding the wells shown in Figure 1 is summarized in Table 3.

HYDROGEOLOGY

Review of Figure 1 shows that the Brooklyn Basin (connected to San Francisco Bay by way of a Tidal Canal to the south and the Oakland Inner Harbor to the north) is located approximately 1,800 feet to the west of the subject site, and Sausal Creek is located approximately 2,900 feet to the east of the subject site.

The measured depth to water in groundwater monitoring wells at the subject site have historically ranged from approximately 5 to 9 feet below the ground surface. The groundwater flow direction at

Table 1
Alameda County Public Works Agency Well Summary Information

Township /Range	Section, Tract, and Well Number	Address	City	Owner	Update	Xcoord	Ycoord	Total Depth	Water Depth	Casing Diameter (inches)	Drilldate	Use
2S/3W	6N 6	P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	20	7	2	6/88	MON
2S/3W	6N 7	P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	0	0	0		
2S/3W	6N12	1050 22nd Av	Oakland	Cottonmill	12/26/1997	122239203	37782018	28	15	2	5/94	MON
2S/3W	6N 9	2100 Livingston St.	Oakland	Kipatrick's Bakeries MW1	6/23/1993	122239616	37780850	25	9	2	9/92	MON
2S/3W	6N 4	EMBARCADERO ST	Oakland	PORT OF OAKLAND	6/28/1989	122297000	37801400	20	6	2	11/88	**DES**
2S/3W	6N 8	EMBARCADERO ST	Oakland	PORT OF OAKLAND	6/28/1989	122297000	37801400	20	7	2	11/88	MON
2S/3W	6N11	Embarcadero & Dennison St	Oakland	Port of Oakland W-9	7/22/1993	122241466	37779424	24	0	2	10/92	**DES**
2S/3W	6N10	Embarcadero & Dennison St	Oakland	Port of Oakland W-9R	7/15/1993	122241472	37779429	20	0	4	10/92	MON
2S/3W	6N 4					0	0	20	5	2	6/88	MON
2S/3W	**6P 1**	**1091 CALCOT ST**	**Oakland**	**SPACE 4 U MGMT**	**7/30/1984**	**122236818**	**37781262**	**345**	**37**	**0**	**?**	**ABN**
2S/3W	6Q 7	2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	23	15	2	12/89	TES
2S/3W	6Q 6	2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	25	16	2	12/89	TES
2S/3W	6Q 5	2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	29	15	2	12/89	TES
2S/3W	6Q 8	2530 E. 14th St. MW-15	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	18	7	2	6/94	MON
2S/3W	6Q 9	2530 E. 14th St. MW-16	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	17	6	2	6/94	MON
2S/3W	6Q10	2530 E. 14th St. MW-17	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	17	12	2	6/94	MON
2S/3W	6Q 1	E14TH & 25TH AVE	Oakland	STANDARD BRANDS PAINT CO	5/21/1986	122230469	37781079	31	17	0	9/85	MON
2S/3W	6Q 2	2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	19	8	2	3/90	TES
2S/3W	6Q 3	2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	18	9	2	3/90	TES
2S/3W	6Q 4	2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	18	7	2	3/90	TES
2S/3W	**7B 4**	**1100 29TH Ave**	**Oakland**	**DEL MONTE CORP**	**8/1/1984**	**122157622**	**37722364**	**704**	**0**	**14**	**7/54**	**IND**
2S/3W	**7B 5**	**1100 29TH Ave**	**Oakland**	**DEL MONTE CORP.**	**8/1/1984**	**122157622**	**37722364**	**385**	**0**	**14**	**?**	**IND**
2S/3W	**7B 3**	**1100 29TH AVE**	**Oakland**	**DEL MONTE CORP**	**8/7/1984**	**122229770**	**37777290**	**873**	**87**	**0**	**?**	**IND**
2S/3W	**7B 2**	**1100 29TH AVE**	**Oakland**	**DEL MONTE CORP.**	**7/30/1984**	**122229770**	**37777290**	**875**	**0**	**12**	**4/25**	**DES**
2S/3W	**7B 1**	**2619 E 12TH ST**	**Oakland**	**SPARK STOVE CO.**	**7/30/1984**	**122230750**	**37779200**	**166**	**79**	**0**	**?**	**ABN**
2S/3W	7C 6	646 Kennedy St	Oakland	Fidelity Packaging	9/11/1997	122236083	37775792	16	11	2	5/93	MON
2S/3W	7C 7	646 Kennedy St	Oakland	Fidelity Packaging	9/11/1997	122236083	37775792	17	15	2	5/93	MON
2S/3W	7C 9	727 Kennedy St	Oakland	Glen Duncan for Saroni Fo	2/17/1998	122236534	37776748	17	7	2	8/95	MON
2S/3W	7C 8	800 Kennedy St	Oakland	Holt Graphics	9/19/1997	122236488	37777328	20	11	2	12/93	MON
2S/3W	7C 1	955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW1	6/23/1993	122237258	37778954	25	9	2	8/92	MON
2S/3W	7C 2	955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW2	6/23/1993	122237258	37778954	30	10	3	8/92	MON
2S/3W	7C 3	955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW3	6/23/1993	122237258	37778954	27	9	2	8/92	MON
2S/3W	7C 4	955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW4	6/23/1993	122237258	37778954	34	10	2	8/92	MON
2S/3W	7C 5	955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW5	6/23/1993	122237258	37778954	34	13	2	8/92	MON

NOTES: Well Locations in **bold** are shown on Figure 1.

Report 0404.R2
Table 1

ACPWA Well Search Results Legend

DOM=Domestic well

IRR=Irrigation well

MUN= Municipal well

IND=Industrial well

CAT=Cathodic well

DES=well destroyed (through permit)

ABN=Abandoned and not being used (but has not been destroyed through permit process)

TES=Test well

BOR= Geotechnical investigation

MON= Monitoring well

EXT=Extraction/ Vapor wells

PIE=Piezometers

REC=Recovery well (extraction/ vapor)

? = Unknown or no information found or given

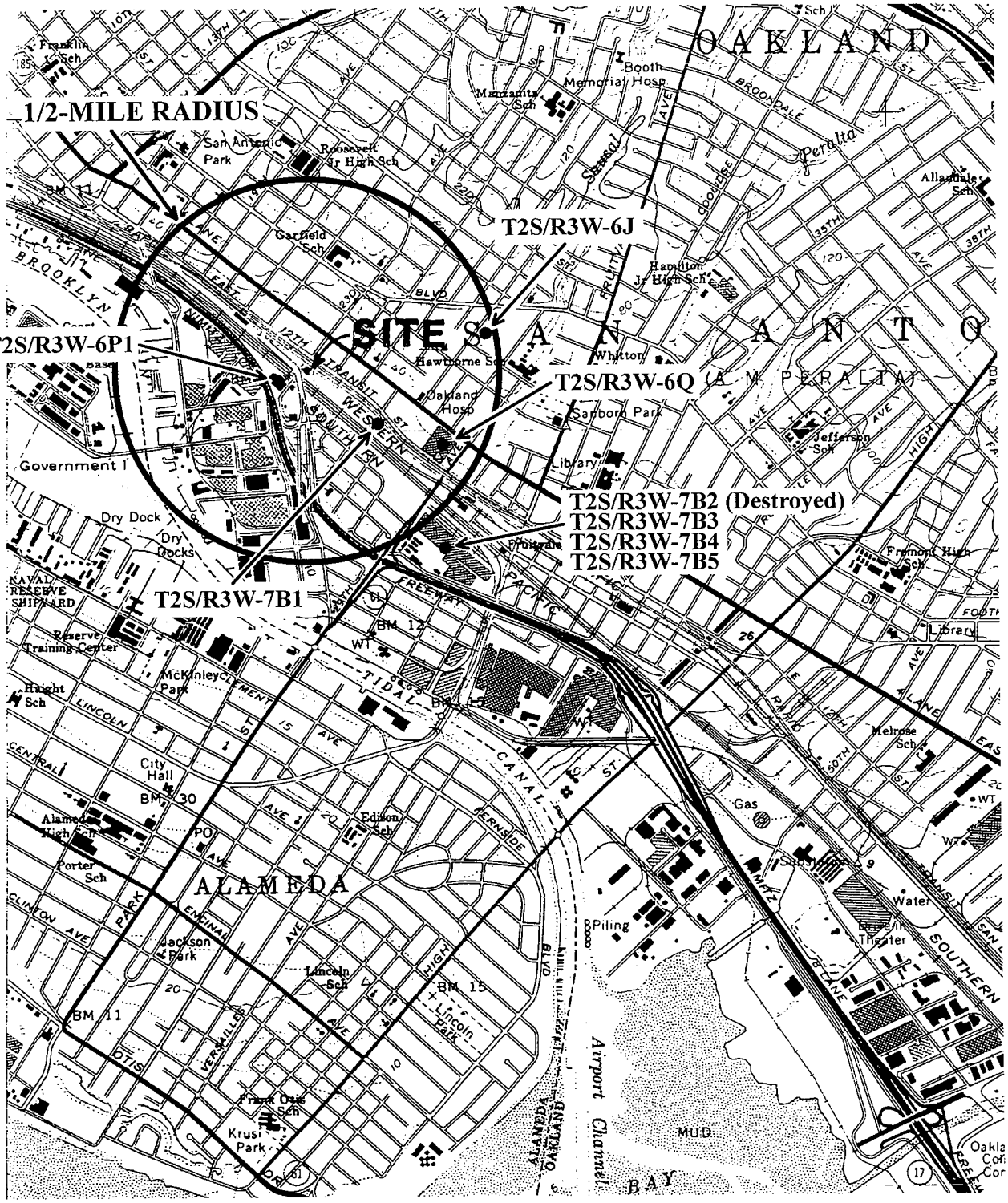


Figure 1
Well Location Map
Mel Senna Brake Service
2301 East 12th Street
Oakland, California

Base Map From:
U.S.Geological Survey
Oakland East, California
7.5 Minute Quadrangle
Photorevised 1980

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 1,000 2,000
SCALE IN FEET

CONFIDENTIAL

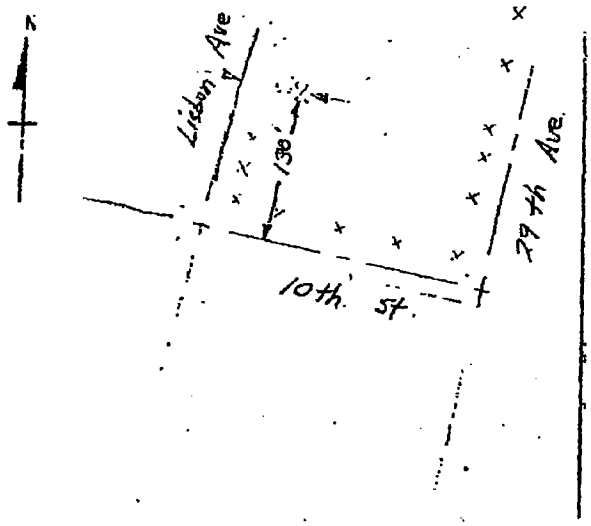
STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

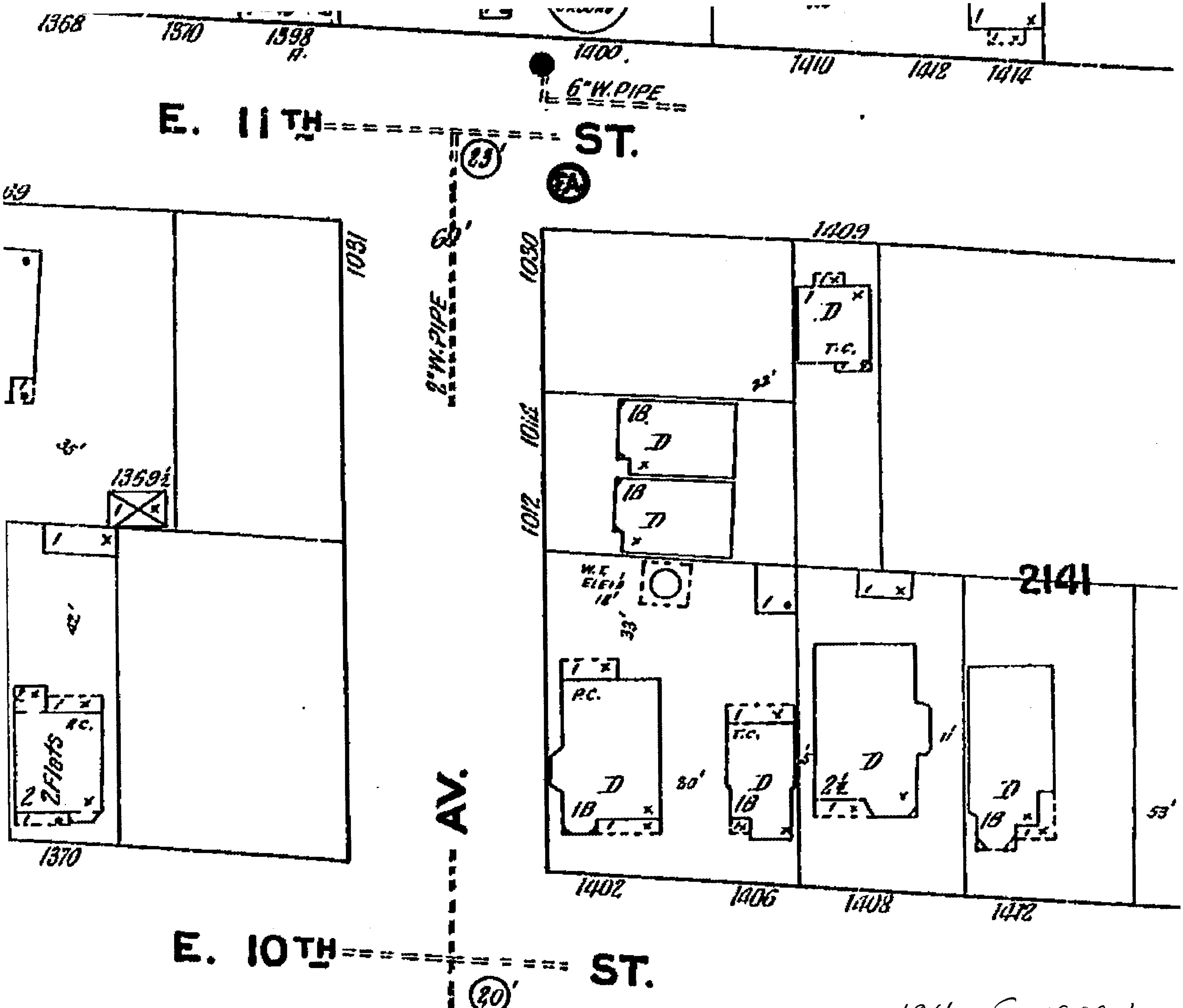
REMOVED

LMC01592

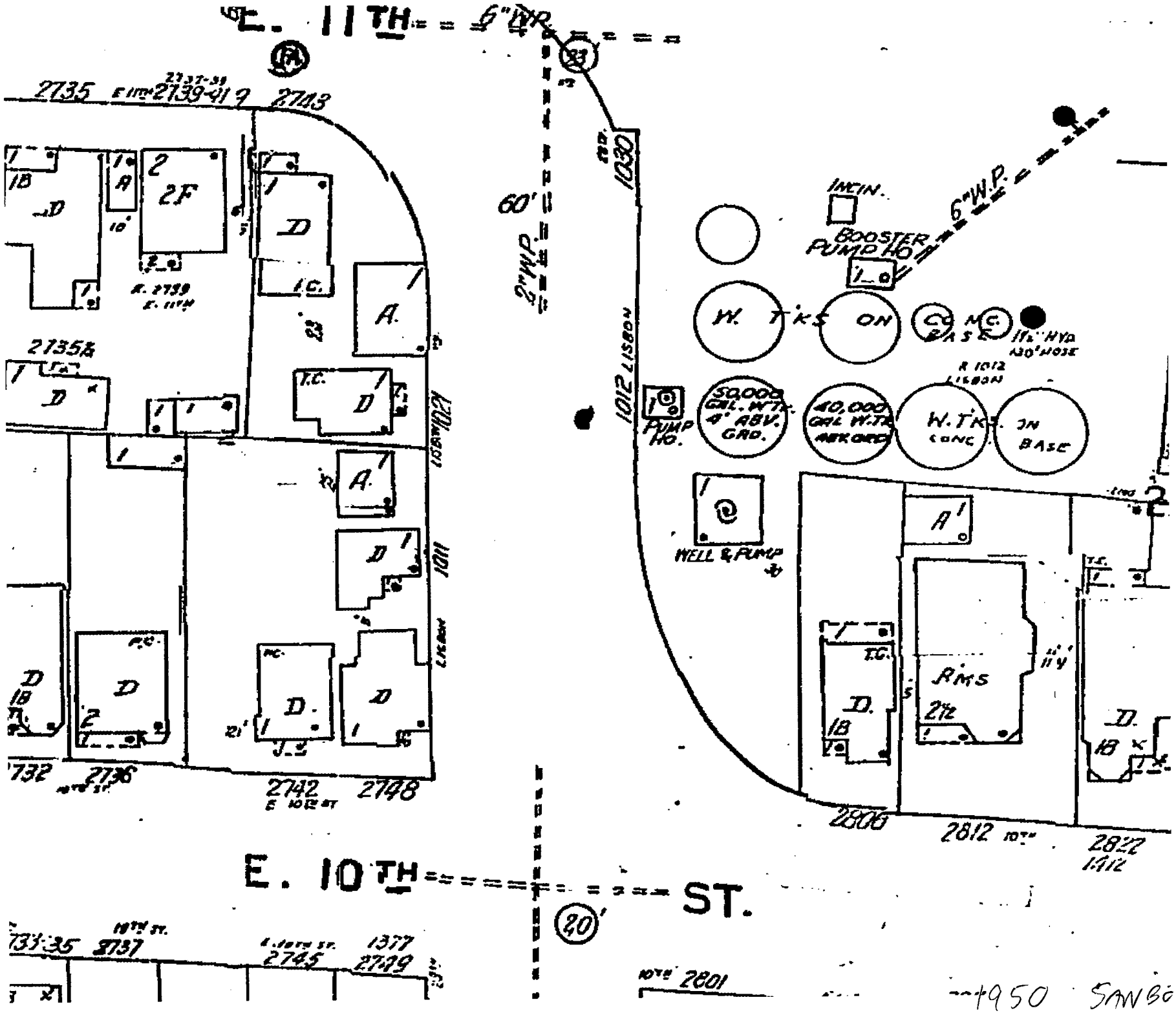
33107

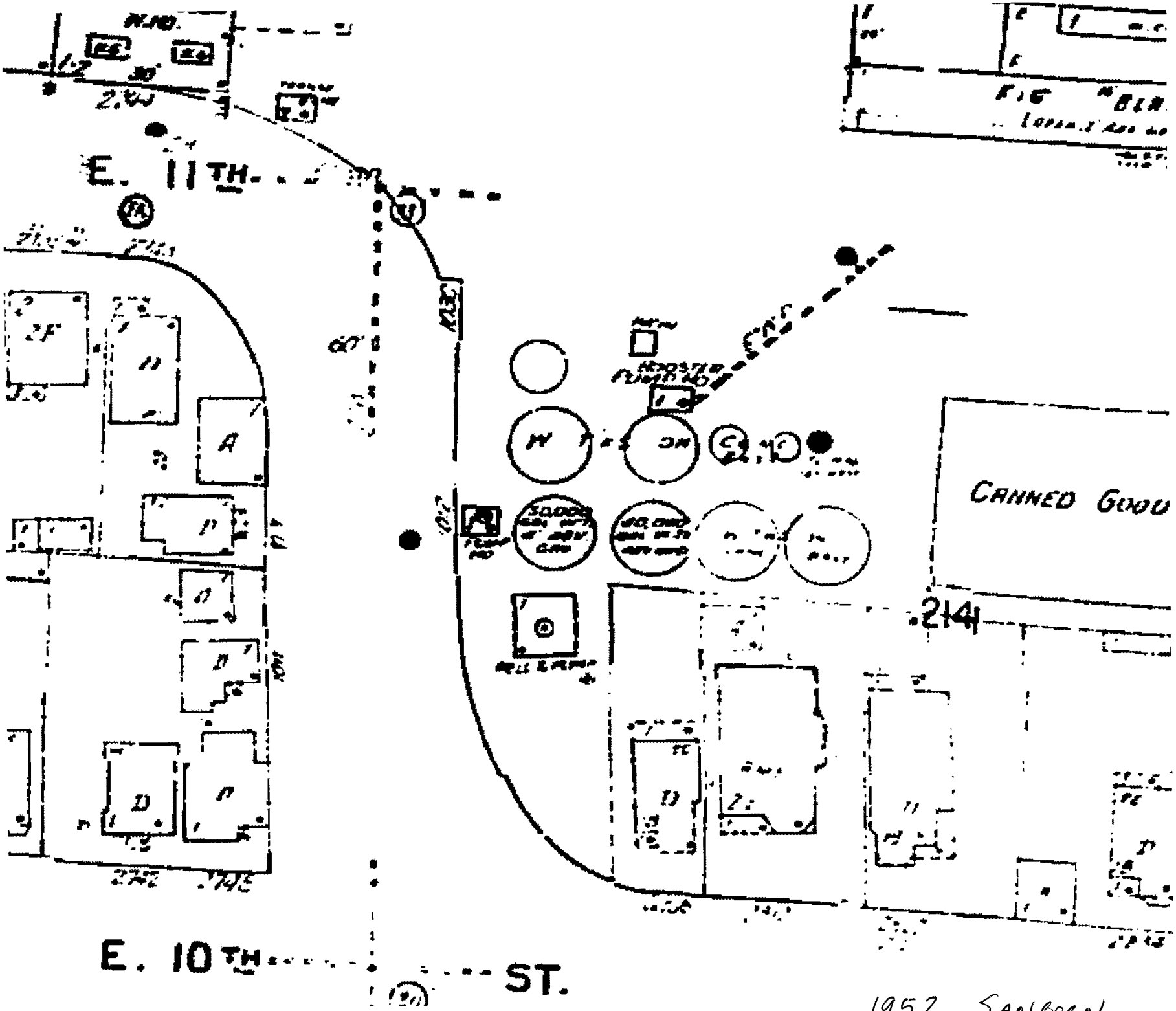
SKETCH
No scale.
ACFC & WCD





1911 Sanborn


E. 11TH
6" W.P.
2735
2737-39
2739-41
2743
2F
2735½
2732
2736
2742
2748
E. 10TH
ST.
2737
2745
2749
2801
1030
1012 LISBON
IMP'N.
BOOSTER PUMP HO.
6" W.P.
W. TK'S ON
PUMP HO.
50,000 GAL. W.TK. 4' ABV. GRD.
40,000 GAL W.TK ABV GRD
W. TK CONC
ON BASE
WELL & PUMP
RMS
2806
2812
2822
1412
1377
1011
20'
60'
1950 SANSOM



1952 SANBORN

Jerry Wickham
1 August 2009

FIELD NOTES

LUCASEY MANUFACTURING
2744 EAST 11th STREET, OAKLAND, CA.
GROUNDWATER SAMPLING
FIELD NOTES / ERM WEST 0097888

Date: 6/8/09
Set up time: 0720
Weather: OVERCAST / COOL
Samplers: EKO

WELL # RW-1

HISTORIC CONCENTRATIONS :

Location:
Construction: 4 inch pvc/
Groundwater Zone:
Screened Interval: 7 - 25 feet bgs

Construction Depth: 25 feet bgs
Depth to Packer: -
Pump Intake: 17'

Purge Setting: Discharge: / Refill:
Sample Setting: Discharge:

Depth to Water: 9.27
Height of Water Column: 15.73
Volume of one casing: 10.27

Packer Pressure:
Purge Start Time: 0754
Discharge Rate:
Purge End Time: 0813

Purge calculations
15.73 ft. x .653 gals. / ft. x 3 = _____ gallons

Time	~~Gallons~~ mL	Temp. (±1) / DO (±10%)	pH (±0.1) / ORP (±10%)	EC	WL / Water clarity
0757	500	19.08 / 1.56	6.60 / 179.3	574	9.30 / clear
0802	1300	18.94 / 0.36	6.21 / 174.2	564	9.30 / clear
0807	2100	18.94 / 0.20	6.15 / 170.8	563	9.30 / clear
0810	2600	18.93 / 0.19	6.14 / 169.4	560	9.30 / clear
0813	3250	18.94 / 0.19	6.14 / 168.7	558	9.30 / clear
		C / mg/L	pH / ORP	mS/cm	ft.

ANALYSES REQUIRED	SAMPLE TIME	CONTAINER TYPE	FILTRATION?
TPH (D) WSG	0814	1 L AMBER (HCl)	N
TPH (D)	0814	1 L AMBER (HCl)	N

FIELD OBSERVATIONS (Well condition, repairs needed)

PID reading when well cap opened: -
Dissolved Oxygen reading: -
Turbidity Measurement: -

Disposal method of purge water: DRUMS
Decontamination procedure: DI WATER / ALCONOX

Other notes:

Sampler Signature(s) : EKO

LUCASEY MANUFACTURING
2744 EAST 11th STREET, OAKLAND, CA.
GROUNDWATER SAMPLING
FIELD NOTES / ERM WEST 0097888

Date: 6/8/09
Set up time: 1000
Weather: OVERCAST / COOL
Samplers: ERD

WELL # RW-2

HISTORIC CONCENTRATIONS :

Location:
Construction: 4 inch pvc/
Groundwater Zone:
Screened Interval: 7 - 25 feet bgs

Construction Depth: 25 feet bgs
Depth to Packer:
Pump Intake: 18'

Purge Setting: Discharge: / Refill:
Sample Setting: Discharge:

Depth to Water: 10.89
Height of Water Column: 14.11
Volume of one casing: 9.21

Packer Pressure:
Purge Start Time: 1025
Discharge Rate:
Purge End Time:

Purge calculations
14.11 ft. x .653 gals. / ft. x 3 =
_____ gallons

Time	~~Gallons~~	Temp. / DO	pH / ORP	EC	WL / Water clarity
1028	500	19.74 / 0.86	6.47 / 233.0	574	10.94 / clear
1033	1100	19.62 / 0.45	6.34 / 169.5	574	10.96 / clear
1036	1500	19.70 / 0.41	6.30 / 146.5	574	10.96 / clear
1039	1850	19.76 / 0.38	6.30 / 133.6	574	10.96 / clear
1042	2150	19.78 / 0.36	6.33 / 127.8	575	10.96 / clear

ANALYSES REQUIRED	SAMPLE TIME	CONTAINER TYPE	FILTRATION?
TPH(D) WSG	1043	1 L AMBER (HCl)	N
TPH(D)	1043	1 L AMBER (HCl)	N

DUPLICATE TAKEN

FIELD OBSERVATIONS (Well condition, repairs needed)

PID reading when well cap opened: —
Dissolved Oxygen reading: —
Turbidity Measurement: —

Disposal method of purge water: DRUM
Decontamination procedure: ALONOX / DI H_2O

Other notes:

Sampler Signature(s) :

LUCASEY MANUFACTURING
2744 EAST 11th STREET, OAKLAND, CA.
GROUNDWATER SAMPLING
FIELD NOTES / ERM WEST 0097888

Date: 6/8/09
Set up time: 0850
Weather: OVERCAST / COOL
Samplers: EKO

WELL # RW-3

HISTORIC CONCENTRATIONS :

Location:
Construction: 4 inch pvc/
Groundwater Zone:
Screened Interval: 7 - 25 feet bgs

Construction Depth: 25 feet bgs
Depth to Packer: -
Pump Intake: 18.5'

Purge Setting: Discharge: / Refill:
Sample Setting: Discharge:

Depth to Water: 11.82
Height of Water Column: 13.18
Volume of one casing: 8.61

Packer Pressure:
Purge Start Time: 0910
Discharge Rate:
Purge End Time: 0930

Purge calculations
13.18 ft. x .653 gals. / ft. x 3 =
_____ gallons

Time	~~Gallons~~ mL	Temp. / DO	pH / ORP	EC	WL	Water clarity
0913	500	19.59 / 1.14	6.47 / 71.1	655	11.86	/ clear
0918	1400	19.59 / 0.75	6.43 / 62.5	657	11.88	/ clear
0923	2300	19.58 / 0.41	6.39 / 52.9	659	11.88	/ clear
0926	2700	19.62 / 0.32	6.37 / 52.6	660	11.88	/ clear
0928	3100	19.66 / 0.30	6.37 / 50.9	660	11.88	/ clear
0930	3450	19.65 / 0.29	6.37 / 52.0	661	11.89	/ clear
		C / mg/L		mS/cm	ft.	

ANALYSES REQUIRED	SAMPLE TIME	CONTAINER TYPE	FILTRATION?
TPH(D) WSG	0931	1L AMBER (HCl)	N

FIELD OBSERVATIONS (Well condition, repairs needed)

PID reading when well cap opened: -
Dissolved Oxygen reading: -
Turbidity Measurement: -

Disposal method of purge water: DRUMS
Decontamination procedure: ALCONOX / DI H_2O

Other notes:

Sampler Signature(s) : E Ou

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MONITORING WELL DEVELOPMENT LOG

Page _____ of _____

All measurements taken from: ☑ Top of Casing ☐ Protective Casing ☐ Ground Level

Well Number RW1
Date 6-5-09
Time Start: 7:30 End: 9:20
Client ERM
Project
Job Number
Installation Date
Well Diameter 4"

Borehole Diameter 10"
Screen Length
Measured Depth (pre-development) 24.5
Measured Depth (post-development) 24.9
Static Water Level (ft.) 9.5
Standing Water Column (ft.) 15
One Well Volume (gal.) pre 9.9 post 9.5
One Annulus Vol. (gal.)

Sample ID
Qty. of Drilling Fluid Lost
Minimum Gal. to be Purged
Development Method Surge, bail, pump
Purging Equipment SS bailer 4" pump
Water Level Equipment Solinst
pH/EC Meter horiba U-10
Turbidity Meter
Other

Time	Amount Purged (gal.)	Field Parameters Measured							Comments	Field Tech.
		pH	EC	Turbidity	D.O.	D.O. Temp. C	SAL.	GPM / W.L.		
8:40	35	6.02	.425	999	1.60	19.8	0.01	2.5	bailed 20 gallons	
8:42	40	6.10	.430	999	1.60	20.1	0.01		Removed all sediments	
8:44	45	6.16	.430	999	1.60	20.9	0.01		water dropped to 12 feet	
8:46	50	6.17	.430	999	1.60	20.8	0.01		started to surge at 8:00	
8:48	55	6.20	.426	999	1.60	20.5	0.01		stopped at 8:30 bailed	
8:50	60	6.19	.426	999	1.60	20.5	0.01		10 more gallons water	
8:52	65	6.19	.424	924	1.60	20.5	0.01		free of fines. started to	
8:54	70	6.19	.424	835	1.60	20.5	0.01		pump at 8:38 at 2.50	
8:56	75	6.19	.424	720	1.60	20.5	0.01		gallon a min water	
8:58	80	6.19	.424	650	1.60	20.5	0.01		started to clear up at	
9:00	85	6.19	.424	420	1.60	20.5	0.01		65 to 70 gallons	
FINAL FIELD PARAMETER MEASUREMENTS										
9:02	90	6.19	.424	301	1.60	20.5	0.01			

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MONITORING WELL DEVELOPMENT LOG

Page _____ of _____

All measurements taken from: ☑ Top of Casing ☐ Protective Casing ☐ Ground Level

Sample ID _____

Well Number RW2
Date 6-5-09
Time Start: 11:45 End: 1:10
Client ERM
Project _____
Job Number _____
Installation Date _____
Well Diameter 4"

Borehole Diameter 10"
Screen Length _____
Measured Depth (pre-development) ~~24.9~~ 24.9
Measured Depth (post-development) 24.9
Static Water Level (ft.) pre 11.9 post 12
Standing Water Column (ft.) ~~8~~ 13
One Well Volume (gal.) ~~8.58~~ 8.58
One Annulus Vol. (gal.) _____

Qty. of Drilling Fluid Lost _____
Minimum Gal. to be Purged _____
Development Method Surge & Gal pump
_____
Purging Equipment SS Bailer 4" pump
Water Level Equipment Solinst
pH/EC Meter Horiba U-10
Turbidity Meter ↓
Other _____

Time	Amount Purged (gal.)	Field Parameters Measured: pH	EC	Turbidity	D.O.	D.O. Temp. C	SAL.	GPM / W.L.	Comments	Field Tech.
~~55~~ 12:36	55	6.63	.447	999	1.46	20.7	0.01	2.50	Bailed 15 gallons removed	
~~60~~ 12:38	60	6.50	.444	965	1.42	20.6	0.01		fines started to surge out	
~~65~~ 12:40	65	6.49	.443	741	1.30	20.6	0.01		12:00 stopped at 12:20	
~~70~~ 12:42	70	6.44	.444	655	1.30	20.6	0.01		Bailed 15 more gallons	
~~75~~ 12:44	75	6.44	.444	505	1.30	20.6	0.01		some fines started to pump	
~~80~~ 12:46	80	6.44	.444	420	1.30	20.6	0.01		at 12:30	
~~85~~ 12:48	85	6.44	.444	360	1.30	20.6	0.01			
~~90~~ 12:50	90	6.44	.444	301	~~1.30~~	20.6	0.01			

FINAL FIELD PARAMETER MEASUREMENTS

~~90~~ 12:50	90	6.49	.444	301	1.30	20.6	0.01			

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MONITORING WELL DEVELOPMENT LOG

Page _____ of _____

All measurements taken from: ☑ Top of Casing ☐ Protective Casing ☐ Ground Level

Sample ID _____

Well Number RW 3
Date 6-5-09
Time Start: 9:40 End: 11:25
Client ERM
Project _____
Job Number _____
Installation Date _____
Well Diameter 4"

Borehole Diameter 8"
Screen Length _____
Measured Depth (pre-development) 23.4
Measured Depth (post-development) 24.7
Static Water Level (ft.) pre 11.4 post 12
Standing Water Column (ft.) ~~pre~~ 12 ~~post~~
One Well Volume (gal.) 7.92
One Annulus Vol. (gal.) _____

Qty. of Drilling Fluid Lost _____
Minimum Gal. to be Purged _____
Development Method Surge Bail pump
Purging Equipment SS bailer 4" pump
Water Level Equipment Solinst
pH/EC Meter horiba U-10
Turbidity Meter _____
Other _____

Time	Amount Purged (gal.)	Field Parameters Measured: pH	EC	Turbidity	D.O.	D.O. Temp. C	SAL.	GPM / W.L.	Comments	Field Tech.
10:35	55	6.34	.426	999	1.49	21.2	0.01	2.50	Bailed 15 gallons Removed	
10:37	60	6.30	.430	999	1.52	21.5	0.01		fines started to surge at	
10:39	65	6.30	.429	999	1.50	21.3	0.01		9:55 stopped at 10:15	
10:41	70	6.31	.429	999	1.50	21.2	0.01		Bailed 15 gallons started	
10:43	75	6.31	.429	869	1.50	21.2	0.01		to pump at 10:25 at	
10:45	80	6.31	.429	681	1.50	21.2	0.01		2.50 gallon a min purged	
10:47	85	6.31	.429	520	1.50	21.2	0.01		20 gallons after taking	
									readings	
FINAL FIELD PARAMETER MEASUREMENTS										
10:50	90	6.31	.429	390	1.50	21.2	0.01			

ERM

Drilling Log

Project _____ Owner _____

Location _____ Project Number _____

Boring Number ~~AST-6~~ _____ Total Depth of Auger _____ Auger Diameter _____

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler _____ Total Depth of Ground Water Sampler _____

Ground Water Sample Interval(s) _____

Drilling Company _____ Drilling Method _____

Driller _____ Log By _____ Date Drilled _____

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					~~START 1410~~
					0700 ONSITE
					0930 DIAMOND - CORE 7 1200 FINISH SET 1-5
					1230 GROUT INSPECTOR ONSITE
					1245 START GROUT 1-5. OAKLAND ONSITE PAUL KRUM. WANTS FLAGMAN SIGNS. HAVE ANOTHER LOCATION CORED
					1400 DONE WITH 1-5.
					1410 TRY TO CLEAR LOCATIONS FOR ONE MORE SAMPLE.
					1570. SLAB OR ROCK OR UTILITY UNDER 3 LOCATIONS. ABANDON TRYING TO SAMPLE 1 MORE. PROBE REMAINING CORED LOCATIONS FOR INFO TO STRATEGIZE FOR TOMORROW. 1 NOT PROBED, 2 LOOK GOOD 1.5' DOWN, REFUSAL ON FOUR.
					1600 OFFSITE. 1645 END DAY
					0700 ONSITE 0710 SAFETY 0720 SET PROBES @ 6, 7, 8, and 9. 1030 VIRONEX LUNCH. 0830 SAMPLE PROBES. 1100 DEL SECO ONSITE. SAFETY. CORE 2 LOCATIONS WHERE REFUSAL. (1330) VIRONEX WAIT TO GROUT WHILE SAMPLING. (1345) VIRONEX GROUT (1210) DEL SECO OFF AMBIENT AIR SAMPLE TAKEN @ CORNER OF EAST 11TH AND LISBON NEXT THE LIGHT POLE. CAN 6717 FLOW CONTROLLER 6717 SAMPLE TIME 1405/1416 -30/-3 -30/-3
					1500 OFFSITE. 1530 UNLOAD TRUCK 1600 END DAY

ERM

Drilling Log

Project LUCASEY Owner —

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-1 Total Depth of Auger 4' Auger Diameter —

Surface Elevation — Water Level: Initial — 24-hrs —

Total Depth of Soil Sampler — Total Depth of Ground Water Sampler —

Ground Water Sample Interval(s) —

Drilling Company VIRONEX Drilling Method HAND AUGER/DIRECT PUSH

Driller JEREMY Log By EKO Date Drilled 6/17/09

Sketch Map

Notes HAND AUGER 4'
DP 1' to 5'

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval
5				

Soil Description and Observations
(Color, Texture, Structures, Odor, Foreign Matter)

START 0743 END 0835

0-4' 2 1/4 inches diameter.

4-5' 1 1/2 inches diameter.
4-4.5' dry granular bentonite
4.5-5' sand pack ; 0-4' wet granular bentonite
4.85' probe tip.
6.00' 1/4 inch O.D. teflon tubing
PRE PURGE LEAK TEST 0815 -29.5/-30 in. Hg
0825 -29.5/-30 in. Hg
PROBE SET AND SEALED @ 0835

CANISTER: 1044
FLOW CONTROLLER: NO ID.
PURGE TIME 0917 (30 SEC.) 90 mL
SAMPLE TIME START 0919.00
SAMPLE TIME END 0927.25
LEAK TEST 1,1 DFA 0920
PROBE VACUUM -5 in. Hg (START)
SAMPLE VACUUM END -4.5 in. Hg
INITIAL/FINAL VACUUM -30/-6.5 in. Hg.

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097588.02

Boring Number ASV-2 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller JEREMY Log By EKO Date Drilled 6/17/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0845 END 0915
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED 0915
					FLOW CONTROLLER #: 100950
					CANISTER ID: 2062 INITIAL/FINAL VACUUM -30/-5
					PRE PURGE LEAK TEST 0945 -29.5/-30 in. Hg
					0955 -29.5/-30 in. Hg
					PURGE 6' 1/4" OD TUBING 30 SEC/90 mL 1010
					SAMPLE TIME START 1013.00
					SAMPLE TIME END 1022.00
					PROBE VACUUM START/END -2.5/-2
					SAMPLE VACUUM START/END -30/-4
					LEAK TEST 1,1 DFA 1014

Page of

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number

Boring Number ASV-3 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller JEREMY Log By ELKE Date Drilled 6/17/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0925 END 1000
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED @ 1000
					FLOW CONTROLLER 100957
					CANISTER ID 3979 INITIAL/FINAL VACUUM -30/-5
					PRE PURGE LEAK TEST 1035 -28/-27.5 in.Hg.
					1045 -28/-27.5 in.Hg
					PURGE 6' 1/4" OD TUBING 30 sec/90 mL 1054
					SAMPLE TIME START/END 1055/1105
					SAMPLE VACUUM START/END -30/-4
					PROBE VACUUM START/END -2/-1
					LEAK TEST 1,1-DFA 1056

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-4 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller JEREMY Log By EKO Date Drilled 6/17/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 1015 END 1105
					SEE ASV-1 FOR CONSTRUCTION DETAILS
					PROBE SET AND SEALED @ 1105
					FLOW CONTROLLER 100473
					CANISTER 1955 INITIAL/FINAL VACUM -30/-5.5
					PRE PURGE LEAK TEST 1119 -28.5/-28.5
					1129 -28.5/-28.5
					PURGE 6' 1/4" OD TUBING 30 sec/90mL 1140
					SAMPLE TIME START/END 1141/1150
					SAMPLE VACUUM START/END -30/-4
					PROBE VACUUM START/END -2.5/-1.5
					LEAK TEST 1,1-DFA 1142

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-5 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller JEREMY Log By EKO Date Drilled 6/17/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 1115 END 1150
					SEE ASV-1 FOR CONSTRUCTION DETAILS
					PROBE SET AND SEALED @ 1150
					FLOW CONTROLLER 6415
					CANISTER 5524 INITIAL/FINAL VACUUM -30/-10.5
					PRE PURGE LEAK TEST 1210 -21/24.5
					1220 -21/24.5
					PURGE 6' 1/4" OD TUBING- 30 sec/90 mL 1228
					SAMPLE TIME START/END ~~-23/~~ 1230/1243
					SAMPLE VACUUM START/END ~~-7.5/~~ -23/-4
					PROBE VACUUM START/END -7.5/-8
					LEAK TEST 1,1 DFA 1231
					VACUUM @ 1237 -10/-11

ERM

Drilling Log

Project LUCASY Owner

Location OAKLAND, CA Project Number 0077888.02

Boring Number ASV-6 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIROSEY Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0720 END 0755
					SEE ASV-1 FOR CONSTRUCTIONS DETAILS
					PROBE SET AND SEALED @ 0755
					FLOW CONTROLLER 6532
					CANISTER 2064 INITIAL/FINAL VACUUM -30/-5
					PRE PURGE LEAK TEST 0730 -27.5/-26.5
					0740 -27.5/-26.5
					PURGE 6' 1/4" OD TUBING 30 sec/90 mL 0830
					SAMPLE TIME START/END 0831/0841
					SAMPLE VACUUM START/END -30/-4
					PROBE VACUUM START/END -1/-1
					LEAK TEST 1,1-DFA 0832

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-7 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0800 END 0815
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED @ 0815
					FLOW CONTROLLER 100467
					CANISTER 3818 INITIAL/FINAL VACUUM -30/-6
					CANISTER DUP 1004 INITIAL/FINAL VACUUM -30/-6
					PRE PURGE LEAK TEST 0912 -26/-25 0922 -26/-25
					PURGE 6' 1/4" OD TUBING 30 SEC/90 mL 0932
					SAMPLE TIME START/END 0933/0950
					SAMPLE VACUUM START/END -30/-4
					PROBE VACUUM START/END -1.5/-1
					LEAK TEST 1,1-DFA 0935

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-8 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0815 END 0840
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED @ 0840
					FLOW CONTROLLER 2930
					CANISTER 3875 INITIAL/FINAL VACUUM -30/-6
					PRE PURGE LEAK TEST 1008 -24.5/24.5 1018 -24.5/-24.5
					PURGE 6' 1/4" OD TUBING 30 sec/90 mL 1023
					SAMPLE TIME START/END 1024/1033
					SAMPLE VACUUM START/END -30/-4
					PROBE VACUUM START/END -1/-1
					LEAK TEST 1,1-DFA 1025

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-9 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 0905 END 0925
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED @ 0925
					FLOW CONTROLLER 100446
					CANISTER 3280 INITIAL/FINAL VACUUM -30/-5
					PRE PURGE LEAK TEST 1052 -23.5/-25.5 1102 -23.5/-25.5
					PURGE 6' 1/4" OD TUBING 1115 30 sec/90 mL
					SAMPLE TIME START/END 1116/1124.30
					SAMPLE VACUUM START/END -29/-3
					PROBE VACUUM START/END -1/-1
					LEAK TEST 1,1-DFA 1117

ERM

Drilling Log

Project LUCASUM Owner

Location OAKLAND, CA Project Number 00975886.02

Boring Number ASV-10 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 1200 END 1235
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED AT 1235
					FLOW CONTROLLER 100462
					CANISTER 2548 INITIAL/FINAL VACUUM -30/-4
					PRE PURGE LEAK TEST 1216 -23.5/-23.5 1226 -23.5/-23.5
					PURGE 6' 1/4" OD TUBING 30 sec/90 mL 1307
					SAMPLE TIME START/END 1308/ 1317
					SAMPLE VACUUM START/END -30/-3
					PROBE VACUUM START/END -2/-1
					LEAK TEST 1,1-DFA 1309

ERM

Drilling Log

Project LUCASEY Owner

Location OAKLAND, CA Project Number 0097888.02

Boring Number ASV-11 Total Depth of Auger Auger Diameter

Surface Elevation Water Level: Initial 24-hrs

Total Depth of Soil Sampler Total Depth of Ground Water Sampler

Ground Water Sample Interval(s)

Drilling Company VIRONEX Drilling Method

Driller TIM Log By EKO Date Drilled 6/18/09

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
					START 1235 END 1250
					SEE ASV-1 FOR CONSTRUCTION DETAILS.
					PROBE SET AND SEALED @ 1250
					FLOW CONTROLLER 6437
					CANISTER 2395 FINAL/INITIAL VACUUM -4/-30
					PRE PURGE LEAK TEST 1328 -24/-24.5 1338 -24/-24.5
					PURGE 6' 1/4" OD TUBING 30 sec/90 mL 1341
					SAMPLE TIME START/END 1342/1355
					SAMPLE VACUUM START/END -30/-3
					PROBE VACUUM START/END -2.5/-1.5
					LEAK TEST 1,1-DFA 1343

Jerry Wickham
1 August 2009

LAB REPORTS

Air Toxics LTD.
Laboratory Services Since 1989

7/1/2009
Ms. Chimi Yi
ERM-West
1777 Botelho Drive
Suite 260
Walnut Creek CA 94596-5042

Project Name: Lucasey
Project #: 0097888.02
Workorder #: 0906524B

Dear Ms. Chimi Yi

The following report includes the data for the above referenced project for sample(s) received on 6/22/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0906524B

Work Order Summary

CLIENT:	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042	**BILL TO:**	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042
PHONE:	925-946-0455	**P.O. #**	97888
FAX:	925-946-9968	**PROJECT #**	0097888.02 Lucasey
DATE RECEIVED:	06/22/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	07/01/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	ASV-1	Modified ASTM D-1946	3.8 "Hg	15 psi
01AA	ASV-1 Lab Duplicate	Modified ASTM D-1946	3.8 "Hg	15 psi
02A	ASV-2	Modified ASTM D-1946	2.4 "Hg	15 psi
03A	ASV-3	Modified ASTM D-1946	2.4 "Hg	15 psi
04A	ASV-4	Modified ASTM D-1946	3.0 "Hg	15 psi
05A	ASV-5	Modified ASTM D-1946	9.4 "Hg	15 psi
06A	ASV-6	Modified ASTM D-1946	3.2 "Hg	15 psi
07A	ASV-7	Modified ASTM D-1946	4.8 "Hg	15 psi
08A	ASV-7 DUP	Modified ASTM D-1946	4.4 "Hg	15 psi
09A	ASV-8	Modified ASTM D-1946	4.4 "Hg	15 psi
10A	ASV-9	Modified ASTM D-1946	4.0 "Hg	15 psi
11A	ASV-10	Modified ASTM D-1946	3.0 "Hg	15 psi
12A	ASV-11	Modified ASTM D-1946	2.8 "Hg	15 psi
13A	Ambient Air	Modified ASTM D-1946	2.0 "Hg	15 psi
14A	Trip Blank	Modified ASTM D-1946	28.0 "Hg	15 psi
15A	Lab Blank	Modified ASTM D-1946	NA	NA
16A	LCS	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Linda J. Truman DATE: 07/01/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
ERM-West
Workorder# 0906524B

Fourteen 1 Liter Summa Canister samples were received on June 22, 2009. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*ASTM D-1946*	*ATL Modifications*
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Sample Trip Blank has a reportable level of Oxygen present. Reanalysis confirmed the initial result.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: ASV-1

Lab ID#: 0906524B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	16
Methane	0.00023	0.00031
Carbon Dioxide	0.023	1.1

Client Sample ID: ASV-1 Lab Duplicate

Lab ID#: 0906524B-01AA

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	16
Methane	0.00023	0.00030
Carbon Dioxide	0.023	1.0

Client Sample ID: ASV-2

Lab ID#: 0906524B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	20
Methane	0.00022	0.00039
Carbon Dioxide	0.022	2.6

Client Sample ID: ASV-3

Lab ID#: 0906524B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	19
Carbon Dioxide	0.022	1.4

Client Sample ID: ASV-4

Lab ID#: 0906524B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	15
Methane	0.00022	0.00023
Carbon Dioxide	0.022	2.0

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: ASV-5

Lab ID#: 0906524B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.29	18
Carbon Dioxide	0.029	0.86

Client Sample ID: ASV-6

Lab ID#: 0906524B-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	22
Methane	0.00023	0.00023
Carbon Dioxide	0.023	0.26

Client Sample ID: ASV-7

Lab ID#: 0906524B-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00024
Carbon Dioxide	0.024	0.34

Client Sample ID: ASV-7 DUP

Lab ID#: 0906524B-08A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00024
Carbon Dioxide	0.024	0.34

Client Sample ID: ASV-8

Lab ID#: 0906524B-09A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00029
Carbon Dioxide	0.024	0.34

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: ASV-9

Lab ID#: 0906524B-10A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	21
Carbon Dioxide	0.023	0.082

Client Sample ID: ASV-10

Lab ID#: 0906524B-11A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	21
Methane	0.00022	0.00024
Carbon Dioxide	0.022	0.16

Client Sample ID: ASV-11

Lab ID#: 0906524B-12A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	20
Methane	0.00022	0.0064
Carbon Dioxide	0.022	0.41

Client Sample ID: Ambient Air

Lab ID#: 0906524B-13A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	21
Carbon Dioxide	0.022	0.042

Client Sample ID: Trip Blank

Lab ID#: 0906524B-14A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	0.31

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-1

Lab ID#: 0906524B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062406**	**Date of Collection: 6/17/09 9:27:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 6/24/09 04:24 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	16
Methane	0.00023	0.00031
Carbon Dioxide	0.023	1.1

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-1 Lab Duplicate

Lab ID#: 0906524B-01AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062407**	**Date of Collection: 6/17/09 9:27:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 6/24/09 04:59 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.23	16
Methane	0.00023	0.00030
Carbon Dioxide	0.023	1.0

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-2

Lab ID#: 0906524B-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062408**	**Date of Collection: 6/17/09 10:22:00 AM**	
Dil. Factor:	**2.20**	**Date of Analysis: 6/24/09 05:27 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	20
Methane	0.00022	0.00039
Carbon Dioxide	0.022	2.6

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-3

Lab ID#: 0906524B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062409**	**Date of Collection: 6/17/09 11:05:00 AM**	
Dil. Factor:	**2.20**	**Date of Analysis: 6/24/09 05:56 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	19
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	1.4

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-4

Lab ID#: 0906524B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062410**	**Date of Collection: 6/17/09 11:50:00 AM**	
Dil. Factor:	**2.24**	**Date of Analysis: 6/24/09 06:23 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	15
Methane	0.00022	0.00023
Carbon Dioxide	0.022	2.0

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-5

Lab ID#: 0906524B-05A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062411**	**Date of Collection: 6/17/09 12:43:00 PM**	
Dil. Factor:	**2.94**	**Date of Analysis: 6/24/09 07:41 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.29	18
Methane	0.00029	Not Detected
Carbon Dioxide	0.029	0.86

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-6

Lab ID#: 0906524B-06A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062412**	**Date of Collection: 6/18/09 8:41:00 AM**	
Dil. Factor:	**2.26**	**Date of Analysis: 6/24/09 08:08 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	22
Methane	0.00023	0.00023
Carbon Dioxide	0.023	0.26

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-7

Lab ID#: 0906524B-07A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062413**	**Date of Collection: 6/18/09 9:50:00 AM**	
Dil. Factor:	**2.40**	**Date of Analysis: 6/24/09 08:34 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00024
Carbon Dioxide	0.024	0.34

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-7 DUP

Lab ID#: 0906524B-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062414**	**Date of Collection: 6/18/09 9:50:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 6/24/09 08:55 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00024
Carbon Dioxide	0.024	0.34

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-8

Lab ID#: 0906524B-09A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062415**	**Date of Collection:**	**6/18/09 10:33:00 AM**
Dil. Factor:	**2.37**	**Date of Analysis:**	**6/24/09 09:21 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Methane	0.00024	0.00029
Carbon Dioxide	0.024	0.34

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-9

Lab ID#: 0906524B-10A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062416**	**Date of Collection: 6/18/09 11:24:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 6/24/09 09:49 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.23	21
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	0.082

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-10

Lab ID#: 0906524B-11A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062417**	**Date of Collection: 6/18/09 1:17:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 6/25/09 07:58 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	21
Methane	0.00022	0.00024
Carbon Dioxide	0.022	0.16

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-11

Lab ID#: 0906524B-12A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062418**	**Date of Collection: 6/18/09 1:55:00 PM**	
Dil. Factor:	**2.23**	**Date of Analysis: 6/25/09 08:20 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.22	20
Methane	0.00022	0.0064
Carbon Dioxide	0.022	0.41

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Ambient Air

Lab ID#: 0906524B-13A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062419**	**Date of Collection: 6/18/09 2:16:00 PM**	
Dil. Factor:	**2.16**	**Date of Analysis: 6/25/09 08:43 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	21
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	0.042

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Trip Blank

Lab ID#: 0906524B-14A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062420**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/09 09:05 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	0.31
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: 1 Liter Summa Canister

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0906524B-15A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/24/09 03:57 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0906524B-16A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**9062429**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/25/09 12:49 PM**	

Compound	%Recovery
Oxygen	100
Methane	102
Carbon Dioxide	101

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

7/7/2009
Ms. Chimi Yi
ERM-West
1777 Botelho Drive
Suite 260
Walnut Creek CA 94596-5042

Project Name: Lucasey
Project #: 0097888.02
Workorder #: 0906524A

Dear Ms. Chimi Yi

The following report includes the data for the above referenced project for sample(s) received on 6/22/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

WORK ORDER #: 0906524A

Work Order Summary

CLIENT:	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042	**BILL TO:**	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042
PHONE:	925-946-0455	**P.O. #**	97888
FAX:	925-946-9968	**PROJECT #**	0097888.02 Lucasey
DATE RECEIVED:	06/22/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	07/02/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	ASV-1	Modified TO-15	3.8 "Hg	15 psi
01AA	ASV-1 Lab Duplicate	Modified TO-15	3.8 "Hg	15 psi
02A	ASV-2	Modified TO-15	2.4 "Hg	15 psi
03A	ASV-3	Modified TO-15	2.4 "Hg	15 psi
04A	ASV-4	Modified TO-15	3.0 "Hg	15 psi
05A	ASV-5	Modified TO-15	9.4 "Hg	15 psi
06A	ASV-6	Modified TO-15	3.2 "Hg	15 psi
07A	ASV-7	Modified TO-15	4.8 "Hg	15 psi
08A	ASV-7 DUP	Modified TO-15	4.4 "Hg	15 psi
09A	ASV-8	Modified TO-15	4.4 "Hg	15 psi
10A	ASV-9	Modified TO-15	4.0 "Hg	15 psi
11A	ASV-10	Modified TO-15	3.0 "Hg	15 psi
12A	ASV-11	Modified TO-15	2.8 "Hg	15 psi
13A	Ambient Air	Modified TO-15	2.0 "Hg	15 psi
14A	Trip Blank	Modified TO-15	28.0 "Hg	15 psi
15A	Lab Blank	Modified TO-15	NA	NA
16A	CCV	Modified TO-15	NA	NA

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0906524A

Work Order Summary

CLIENT:	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042	**BILL TO:**	Ms. Chimi Yi ERM-West 1777 Botelho Drive Suite 260 Walnut Creek, CA 94596-5042
PHONE:	925-946-0455	**P.O. #**	97888
FAX:	925-946-9968	**PROJECT #**	0097888.02 Lucasey
DATE RECEIVED:	06/22/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	07/02/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
17A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Truman DATE: 07/06/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
ERM-West
Workorder# 0906524A

Fourteen 1 Liter Summa Canister samples were received on June 22, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: ASV-1

Lab ID#: 0906524A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.3	48	7.4	150
Toluene	2.3	560	8.7	2100
Ethyl Benzene	2.3	30	10	130
m,p-Xylene	2.3	66	10	280
o-Xylene	2.3	11	10	47

Client Sample ID: ASV-1 Lab Duplicate

Lab ID#: 0906524A-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	4.6	53	15	170
Toluene	4.6	600	17	2200
Ethyl Benzene	4.6	32	20	140
m,p-Xylene	4.6	72	20	310
o-Xylene	4.6	12	20	52

Client Sample ID: ASV-2

Lab ID#: 0906524A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.2	36	7.0	110
Toluene	2.2	770	8.3	2900
Ethyl Benzene	2.2	57	9.6	250
m,p-Xylene	2.2	190	9.6	810
o-Xylene	2.2	41	9.6	180

Client Sample ID: ASV-3

Lab ID#: 0906524A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	22	230	70	740
Toluene	22	5300	82	20000
Ethyl Benzene	22	440	95	1900
m,p-Xylene	22	1600	95	7000

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: ASV-3

Lab ID#: 0906524A-03A

o-Xylene	22	420	95	1800

Client Sample ID: ASV-4

Lab ID#: 0906524A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	22	180	72	570
Toluene	22	5700	84	22000
Ethyl Benzene	22	600	97	2600
m,p-Xylene	22	2300	97	10000
o-Xylene	22	670	97	2900

Client Sample ID: ASV-5

Lab ID#: 0906524A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.5	10	4.7	33
Toluene	1.5	180	5.5	690
Ethyl Benzene	1.5	14	6.4	62
m,p-Xylene	1.5	52	6.4	230
o-Xylene	1.5	16	6.4	69

Client Sample ID: ASV-6

Lab ID#: 0906524A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	4.2	3.6	14
Toluene	1.1	120	4.2	470
Ethyl Benzene	1.1	10	4.9	44
m,p-Xylene	1.1	42	4.9	180
o-Xylene	1.1	13	4.9	55

Client Sample ID: ASV-7

Lab ID#: 0906524A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: ASV-7

Lab ID#: 0906524A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	6.7	3.8	21
Toluene	1.2	180	4.5	700
Ethyl Benzene	1.2	16	5.2	70
m,p-Xylene	1.2	66	5.2	290
o-Xylene	1.2	21	5.2	90

Client Sample ID: ASV-7 DUP

Lab ID#: 0906524A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	6.9	3.8	22
Toluene	1.2	190	4.5	720
Ethyl Benzene	1.2	16	5.1	71
m,p-Xylene	1.2	67	5.1	290
o-Xylene	1.2	20	5.1	88

Client Sample ID: ASV-8

Lab ID#: 0906524A-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	5.5	3.8	18
Toluene	1.2	180	4.5	690
Ethyl Benzene	1.2	12	5.1	54
m,p-Xylene	1.2	51	5.1	220
o-Xylene	1.2	17	5.1	72

Client Sample ID: ASV-9

Lab ID#: 0906524A-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	3.9	3.7	12
Toluene	1.2	130	4.4	500
Ethyl Benzene	1.2	13	5.0	55
m,p-Xylene	1.2	53	5.0	230

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: ASV-9

Lab ID#: 0906524A-10A

o-Xylene	1.2	16	5.0	70

Client Sample ID: ASV-10

Lab ID#: 0906524A-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	3.9	3.6	12
Toluene	1.1	98	4.2	370
Ethyl Benzene	1.1	9.1	4.9	40
m,p-Xylene	1.1	38	4.9	160
o-Xylene	1.1	12	4.9	54

Client Sample ID: ASV-11

Lab ID#: 0906524A-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	4.7	3.6	15
Toluene	1.1	130	4.2	480
Ethyl Benzene	1.1	11	4.8	49
m,p-Xylene	1.1	46	4.8	200
o-Xylene	1.1	15	4.8	65

Client Sample ID: Ambient Air

Lab ID#: 0906524A-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	1.1	3.4	3.6
Toluene	1.1	1.8	4.1	6.9

Client Sample ID: Trip Blank

Lab ID#: 0906524A-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	6.5	1.6	21
Toluene	0.50	4.7	1.9	18

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-1

Lab ID#: 0906524A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062912**	**Date of Collection: 6/17/09 9:27:00 AM**	
Dil. Factor:	**4.62**	**Date of Analysis: 6/29/09 03:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.3	48	7.4	150
Toluene	2.3	560	8.7	2100
Ethyl Benzene	2.3	30	10	130
m,p-Xylene	2.3	66	10	280
o-Xylene	2.3	11	10	47
Naphthalene	9.2	Not Detected	48	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	83	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-1 Lab Duplicate

Lab ID#: 0906524A-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062911**	**Date of Collection: 6/17/09 9:27:00 AM**	
Dil. Factor:	**9.24**	**Date of Analysis: 6/29/09 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	4.6	53	15	170
Toluene	4.6	600	17	2200
Ethyl Benzene	4.6	32	20	140
m,p-Xylene	4.6	72	20	310
o-Xylene	4.6	12	20	52
Naphthalene	18	Not Detected	97	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-2

Lab ID#: 0906524A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062913**	**Date of Collection: 6/17/09 10:22:00 AM**	
Dil. Factor:	**4.40**	**Date of Analysis: 6/29/09 04:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.2	36	7.0	110
Toluene	2.2	770	8.3	2900
Ethyl Benzene	2.2	57	9.6	250
m,p-Xylene	2.2	190	9.6	810
o-Xylene	2.2	41	9.6	180
Naphthalene	8.8	Not Detected	46	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-3

Lab ID#: 0906524A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062914**	**Date of Collection: 6/17/09 11:05:00 AM**	
Dil. Factor:	**43.8**	**Date of Analysis: 6/29/09 04:57 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	22	230	70	740
Toluene	22	5300	82	20000
Ethyl Benzene	22	440	95	1900
m,p-Xylene	22	1600	95	7000
o-Xylene	22	420	95	1800
Naphthalene	88	Not Detected	460	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-4

Lab ID#: 0906524A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062915**	**Date of Collection: 6/17/09 11:50:00 AM**	
Dil. Factor:	**44.8**	**Date of Analysis: 6/29/09 05:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	22	180	72	570
Toluene	22	5700	84	22000
Ethyl Benzene	22	600	97	2600
m,p-Xylene	22	2300	97	10000
o-Xylene	22	670	97	2900
Naphthalene	90	Not Detected	470	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-5

Lab ID#: 0906524A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062916**	**Date of Collection: 6/17/09 12:43:00 PM**	
Dil. Factor:	**2.94**	**Date of Analysis: 6/29/09 06:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.5	10	4.7	33
Toluene	1.5	180	5.5	690
Ethyl Benzene	1.5	14	6.4	62
m,p-Xylene	1.5	52	6.4	230
o-Xylene	1.5	16	6.4	69
Naphthalene	5.9	Not Detected	31	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-6

Lab ID#: 0906524A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062917**	**Date of Collection: 6/18/09 8:41:00 AM**	
Dil. Factor:	**2.26**	**Date of Analysis: 6/29/09 07:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	4.2	3.6	14
Toluene	1.1	120	4.2	470
Ethyl Benzene	1.1	10	4.9	44
m,p-Xylene	1.1	42	4.9	180
o-Xylene	1.1	13	4.9	55
Naphthalene	4.5	Not Detected	24	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	115	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-7

Lab ID#: 0906524A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062918**	**Date of Collection: 6/18/09 9:50:00 AM**	
Dil. Factor:	**2.41**	**Date of Analysis: 6/29/09 08:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	6.7	3.8	21
Toluene	1.2	180	4.5	700
Ethyl Benzene	1.2	16	5.2	70
m,p-Xylene	1.2	66	5.2	290
o-Xylene	1.2	21	5.2	90
Naphthalene	4.8	Not Detected	25	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-7 DUP

Lab ID#: 0906524A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062919**	**Date of Collection: 6/18/09 9:50:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 6/29/09 09:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	6.9	3.8	22
Toluene	1.2	190	4.5	720
Ethyl Benzene	1.2	16	5.1	71
m,p-Xylene	1.2	67	5.1	290
o-Xylene	1.2	20	5.1	88
Naphthalene	4.7	Not Detected	25	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	93	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-8

Lab ID#: 0906524A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062920**	**Date of Collection: 6/18/09 10:33:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 6/29/09 10:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	5.5	3.8	18
Toluene	1.2	180	4.5	690
Ethyl Benzene	1.2	12	5.1	54
m,p-Xylene	1.2	51	5.1	220
o-Xylene	1.2	17	5.1	72
Naphthalene	4.7	Not Detected	25	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-9

Lab ID#: 0906524A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062921**	**Date of Collection: 6/18/09 11:24:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 6/29/09 10:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	3.9	3.7	12
Toluene	1.2	130	4.4	500
Ethyl Benzene	1.2	13	5.0	55
m,p-Xylene	1.2	53	5.0	230
o-Xylene	1.2	16	5.0	70
Naphthalene	4.7	Not Detected	24	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	82	70-130
4-Bromofluorobenzene	93	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-10

Lab ID#: 0906524A-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062922**	**Date of Collection: 6/18/09 1:17:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 6/29/09 11:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	3.9	3.6	12
Toluene	1.1	98	4.2	370
Ethyl Benzene	1.1	9.1	4.9	40
m,p-Xylene	1.1	38	4.9	160
o-Xylene	1.1	12	4.9	54
Naphthalene	4.5	Not Detected	23	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	80	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: ASV-11

Lab ID#: 0906524A-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062923**	**Date of Collection: 6/18/09 1:55:00 PM**	
Dil. Factor:	**2.23**	**Date of Analysis: 6/30/09 12:07 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	4.7	3.6	15
Toluene	1.1	130	4.2	480
Ethyl Benzene	1.1	11	4.8	49
m,p-Xylene	1.1	46	4.8	200
o-Xylene	1.1	15	4.8	65
Naphthalene	4.5	Not Detected	23	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	82	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Ambient Air

Lab ID#: 0906524A-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062924**	**Date of Collection: 6/18/09 2:16:00 PM**	
Dil. Factor:	**2.16**	**Date of Analysis: 6/30/09 01:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	1.1	3.4	3.6
Toluene	1.1	1.8	4.1	6.9
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected
Naphthalene	4.3	Not Detected	23	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	80	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Trip Blank

Lab ID#: 0906524A-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062925**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/30/09 05:27 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	6.5	1.6	21
Toluene	0.50	4.7	1.9	18
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0906524A-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062905**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/29/09 09:59 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0906524A-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/29/09 07:32 AM**	

Compound	%Recovery
Benzene	108
Toluene	103
Ethyl Benzene	107
m,p-Xylene	108
o-Xylene	106
Naphthalene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0906524A-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**x062903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/29/09 08:27 AM**	

Compound	%Recovery
Benzene	91
Toluene	91
Ethyl Benzene	91
m,p-Xylene	92
o-Xylene	94
Naphthalene	111

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

Memorandum

Environmental
Resources
Management

101 SW Main Street,
Suite 804
Portland, OR 97204
(503) 488-5282
(503) 488-5124 (fax)

To: John Moe

From: Shira DeGrood

Date: 9 July 2009

Subject: Data Review of Lucasey Samples Collected 17 and 18 July 2009

Project Number: 0097222.02

Data Package: Air Toxics LTD. Data Packages 0906524A and 0906524B

The quality of the data was assessed and any necessary qualifiers were applied following the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* October 1999 and ASTM Method D-1946 (*ASTM D6968 - 03 Standard Test Method for Simultaneous Measurement of Sulfur Compounds and Minor Hydrocarbons in Natural Gas and Gaseous Fuels by Gas Chromatography and Atomic Emission Detection,* DOI: 10.1520/D6968-03).

HOLDING TIME AND PRESERVATION EVALUATION

The samples were prepared and analyzed within the method prescribed time period from the date of collection. None of the data were qualified based on holding time or preservation exceedances.

CANISTER VACUUM EVALUATION

The canister vacuums were received at acceptable pressures, therefore none of the data were qualified based on canister vacuum pressure exceedances.

BLANK EVALUATION

The method blank sample results were nondetected for each of the target analytes. The trip blanks contained several compounds at concentrations above the reporting limit. Associated sample data were qualified according to the 5x rule. The data qualified as anomalous (U) are presented in Table 1.

BLANK SPIKE EVALUATION

The laboratory control sample (LCS) recoveries were within the laboratory's limits of acceptance. The LCS recoveries indicate acceptable laboratory accuracy and precision.

FIELD DUPLICATE EVALUATION

One sample was submitted in duplicate. ERM calculated the relative percent difference (RPD) between detected results. The USEPA has not established control criteria for field duplicate samples; therefore, sample data are not qualified on the basis of field duplicate imprecision. The RPDs are presented in Table 2.

MATRIX SPIKE EVALUATION

There were no matrix spike (MS) recoveries presented in the laboratory report.

SURROGATE SPIKE EVALUATION

The surrogate recoveries were within acceptable limits. No qualifications were required based on surrogate recoveries. The surrogate recoveries indicate minimal matrix interference in the samples.

CONTINUING CALIBRATION VERIFICATION EVALUATION

The continuing calibration verification (CCV) recoveries were within the laboratory's limits of acceptance. The CCV recoveries indicate acceptable instrument qualitative and quantitative data.

LAB DUPLICATE EVALUATION

One air sample was analyzed in duplicate. ERM calculated the RPDs between detected results. All RPDs between the primary sample and the duplicate were less than 25 percent, indicating acceptable precision.

OVERALL ASSESSMENT

No data required rejection. All of the data, including qualified data, can be used for decision-making purposes. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Blank and Associated Suspect Sample Detections
Lucasey Project
Oakland, California

Lab Package	Blank ID	Associated Samples	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
0906524A	Trip Blank	--	Benzene	21	1.6	$\mu g/m^3$	--
0906524A	--	ASV-5	Benzene	33	4.7	$\mu g/m^3$	U
0906524A	--	ASV-6	Benzene	14	3.6	$\mu g/m^3$	U
0906524A	--	ASV-7	Benzene	21	3.8	$\mu g/m^3$	U
0906524A	--	ASV-7 DUP	Benzene	22	3.8	$\mu g/m^3$	U
0906524A	--	ASV-8	Benzene	18	3.8	$\mu g/m^3$	U
0906524A	--	ASV-9	Benzene	12	3.7	$\mu g/m^3$	U
0906524A	--	ASV-10	Benzene	12	3.6	$\mu g/m^3$	U
0906524A	--	ASV-11	Benzene	15	3.6	$\mu g/m^3$	U
0906524A	--	Ambient Air	Benzene	3.6	3.4	$\mu g/m^3$	U
0906524A	Trip Blank	--	Toluene	18	1.9	$\mu g/m^3$	--
0906524A	--	Ambient Air	Toluene	6.9	4.1	$\mu g/m^3$	U
0906524B	Trip Blank	--	Oxygen	0.31	0.10	%	--

Lab reports reviewed: 0906524A, 0906524B

Key:
$\mu g/m^3$ = Micrograms per cubic meter
% = Percent
U= Non-detected

Table 2
Field Duplicate Results and Calculated Relative Percent Differences
Lucasey Project
Oakland, California

Lab Package	Sample ID	Compound	Concentration		Report Limit		Units	RPD (%)
			Sample	Duplicate	Sample	Duplicate		
0906524A	ASV-7	Benzene	21	22	3.8	3.8	$\mu g/m^3$	4.7
0906524A	ASV-7	Toluene	700	720	4.5	4.5	$\mu g/m^3$	2.8
0906524A	ASV-7	Ethyl Benzene	70	71	5.2	5.1	$\mu g/m^3$	1.4
0906524A	ASV-7	m,p-Xylene	290	290	5.2	5.1	$\mu g/m^3$	0
0906524A	ASV-7	o-Xylene	90	88	5.2	5.1	$\mu g/m^3$	2.2
0906524B	ASV-7	Oxygen	21	21	0.24	0.24	%	0
0906524B	ASV-7	Methane	0.00024	0.00024	0.00024	0.00024	%	0
0906524B	ASV-7	Carbon Dioxide	0.34	0.34	0.024	0.024	%	0

Lab reports reviewed: 0906524A, 0906524B

Key:
$\mu g/m^3$ = Micrograms per cubic meter
% = Percent
RPD = Relative percent difference

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Environmental Resources Mngmn	Client Project ID: #0097888; Lucasey	Date Sampled: 06/08/09
1777 Botelho, Suite 260		Date Received: 06/08/09
Walnut Creek, CA 94596	Client Contact: John Moe	Date Reported: 06/16/09
	Client P.O.:	Date Completed: 06/16/09

WorkOrder: 0906247

June 16, 2009

Dear John:

Enclosed within are:

1) The results of the **4** analyzed samples from your project: **#0097888; Lucasey,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

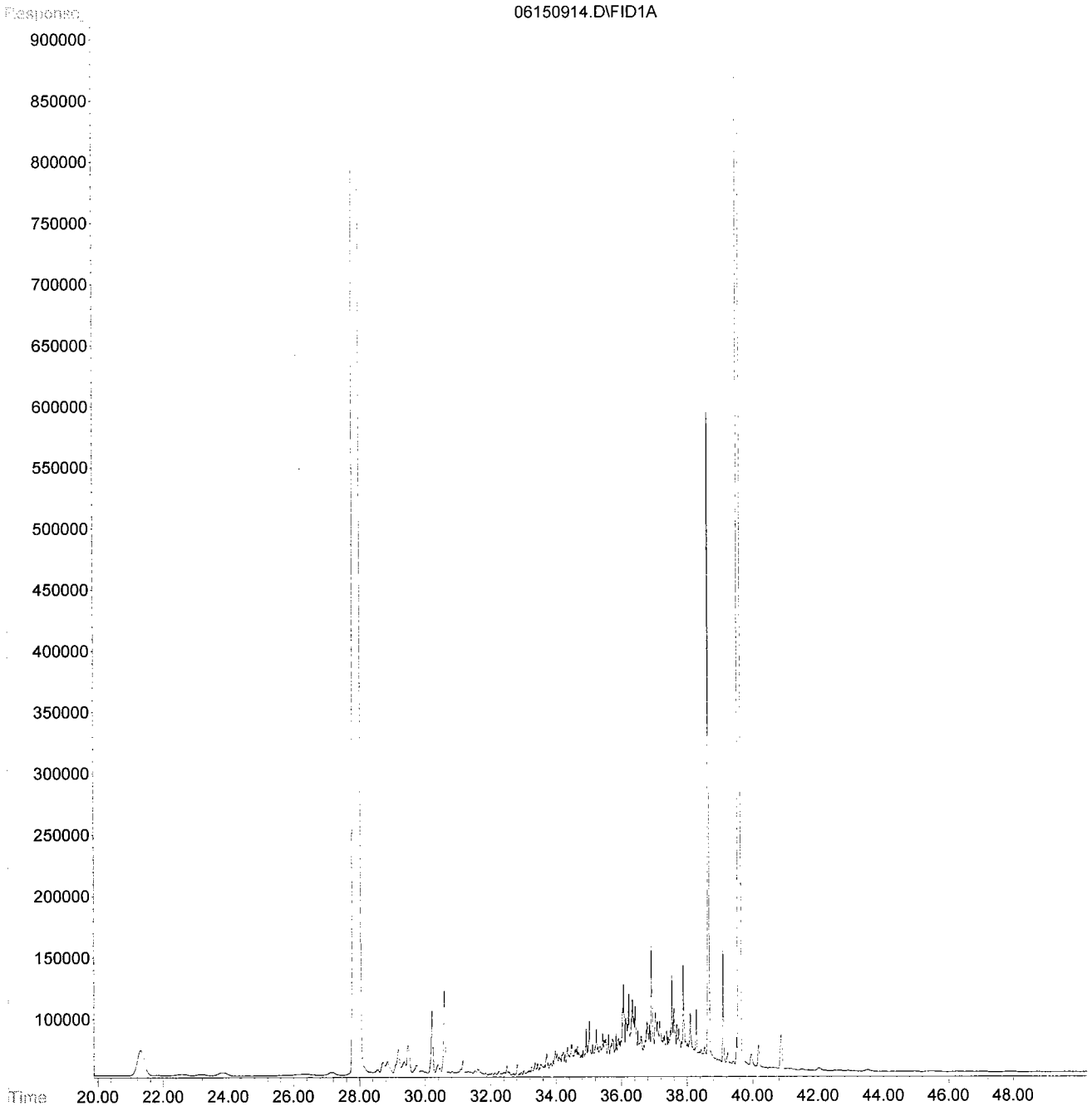
All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

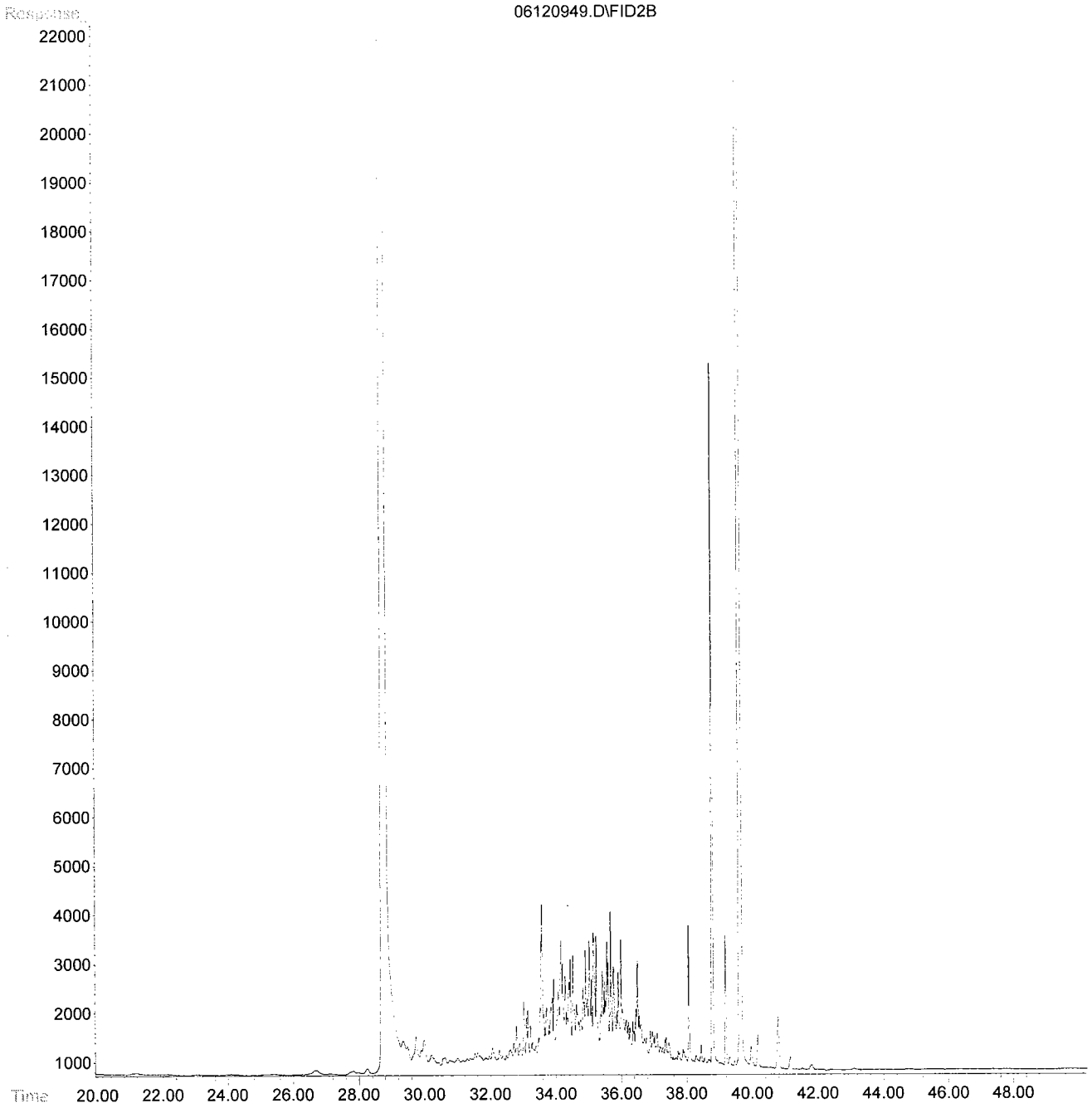
Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

File : D:\HPCHEM\GC11\DATAA\06150914.D
Operator : Thu
Acquired : 15 Jun 2009 5:09 pm using AcqMethod GC11AW.M
Instrument : GC-11
Sample Name: 0906247-001B
Misc Info : TPH-DZ_W
Vial Number: 7



File : D:\HPCHEM\GC6\DATAB\06120949.D
Operator :
Acquired : 13 Jun 2009 5:04 pm using AcqMethod GC6AW.M
Instrument : GC-6
Sample Name: 0906247-002A W RE
Misc Info : TPH-DZWSG_W
Vial Number: 75



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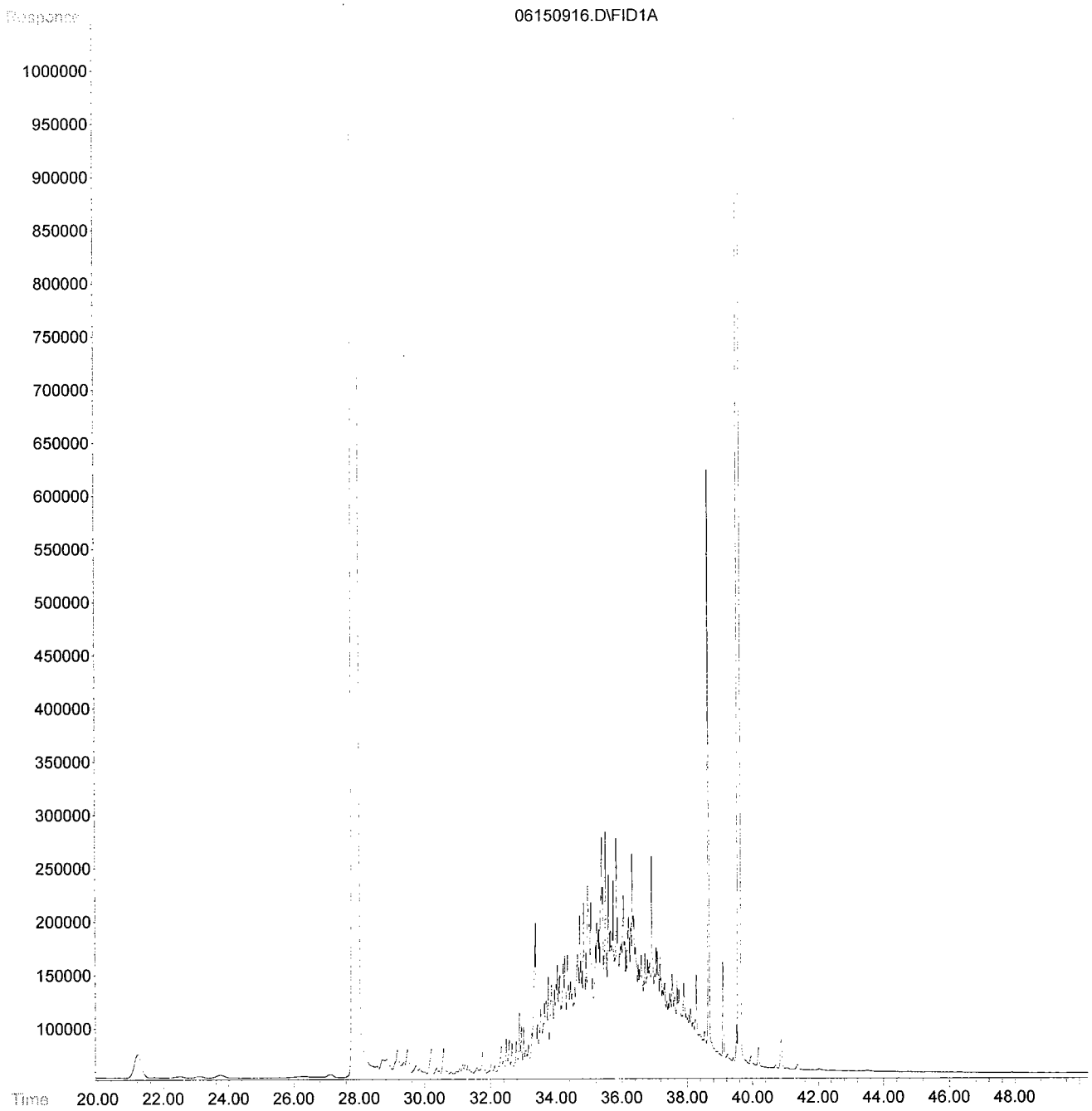
Operator : Thu
Acquired : 15 Jun 2009 6:17 pm using AcqMethod GC11AW.M
Instrument : GC-11
Sample Name: 0906247-002B W
Misc Info : TPH-DZ_W
Vial Number: 8



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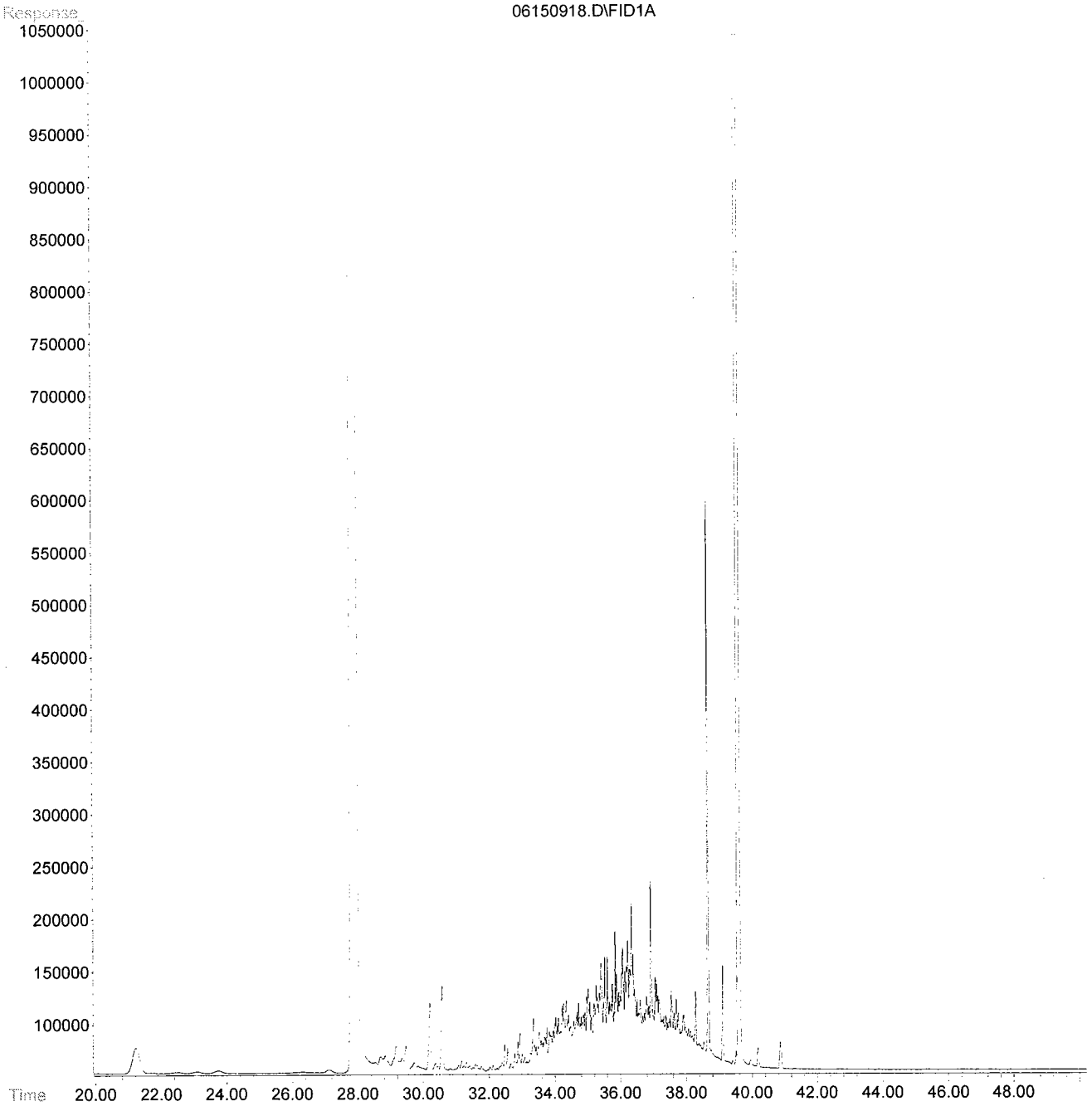
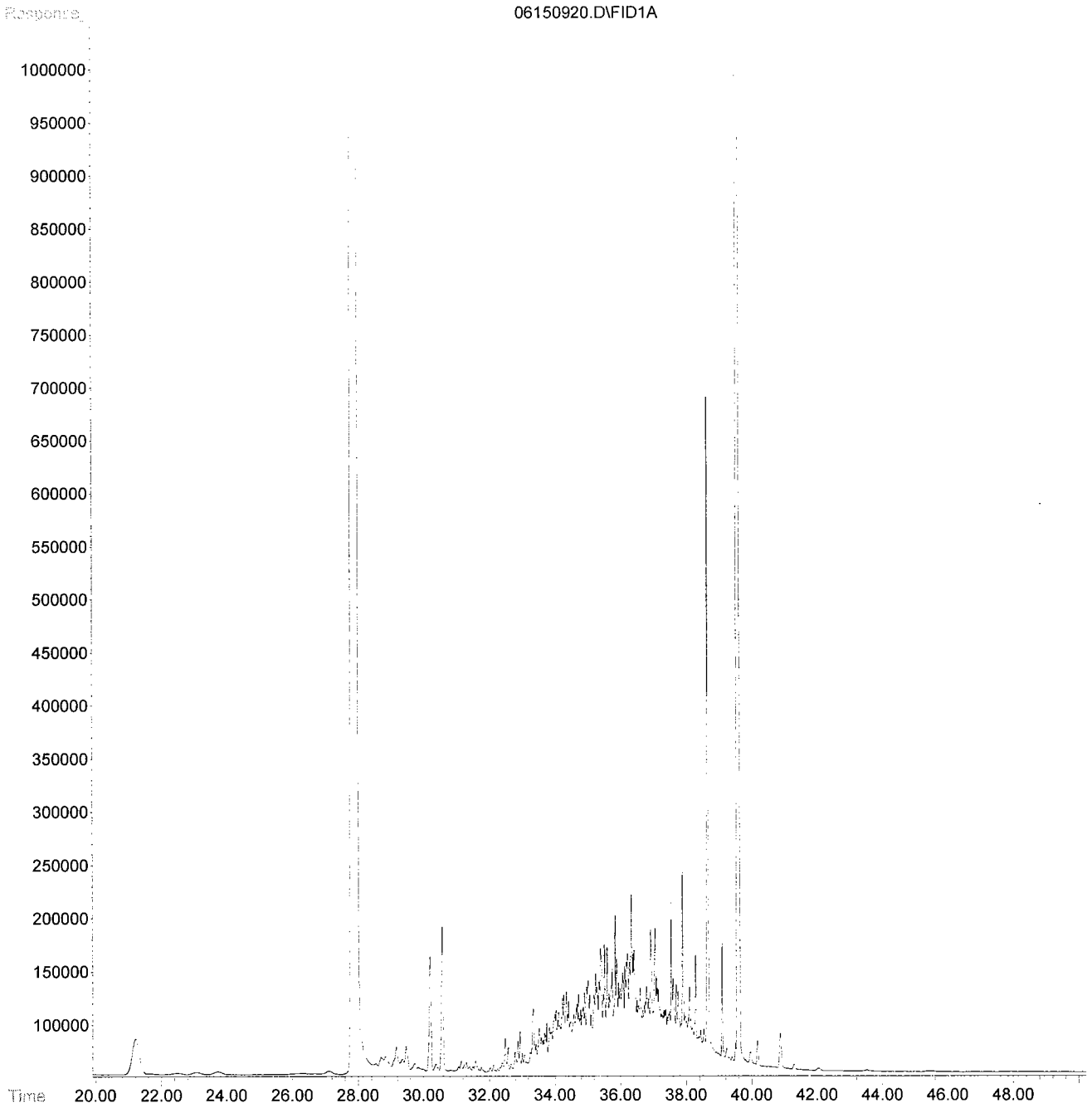
Operator : Thu
Acquired : 15 Jun 2009 7:25 pm using AcqMethod GC11AW.M
Instrument : GC-11
Sample Name: 0906247-003B W
Misc Info : TPH-DZ_W
Vial Number: 9



File : D:\HPCHEM\GC11\DATAA\06150920.D
Operator : Thu
Acquired : 15 Jun 2009 8:33 pm using AcqMethod GC11AW.M
Instrument : GC-11
Sample Name: 0906247-004B W
Misc Info : TPH-DZ_W
Vial Number: 10



McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0906247 **ClientCode: ERMW**

☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
John Moe
Environmental Resources Mngmnt
1777 Botelho, Suite 260
Walnut Creek, CA 94596
(925) 946-0455 FAX 925-946-9968

Email: john.moe@erm.com
cc:
PO:
ProjectNo: #0097888; Lucasey

Bill to:
Accounts Payable
Environmental Resources Mngmnt
1777 Botelho, Suite 260
Walnut Creek, CA 94596

Requested TAT: **5 days**

Date Received: **06/08/2009**
Date Printed: **06/09/2009**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0906247-001	RW-1	Water	6/8/2009 8:14	☐	B	A										
0906247-002	RW-3	Water	6/8/2009 9:31	☐	B	A										
0906247-003	RW-2	Water	6/8/2009 10:43	☐	B	A										
0906247-004	RW-2 Dup	Water	6/8/2009 10:43	☐	B	A										

Test Legend:

1	TPH-DZ_W	2	TPH-DZWSG_W	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **Environmental Resources Mngmnt**
Date and Time Received: **6/8/09 5:15:59 PM**
Project Name: **#0097888; Lucasey**
Checklist completed and reviewed by: Melissa Valles
WorkOrder N°: **0906247** Matrix Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 6.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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Telephone: 877-252-9262 Fax: 925-252-9269

Environmental Resources Mngmnt	Client Project ID: #0097888; Lucasey	Date Sampled: 06/08/09
		Date Received: 06/08/09
1777 Botelho, Suite 260	Client Contact: John Moe	Date Extracted: 06/08/09
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed 06/15/09

Total Extractable Petroleum Hydrocarbons w/Dawn Zemo Separation Technique*

Extraction method SW3510C/Dawn Zemo Separation Analytical methods: SW8015B Work Order: 0906247

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
0906247-001B	RW-1	W	58	1	106	e2
0906247-002B	RW-3	W	210	1	105	e2
0906247-003B	RW-2	W	120	1	106	e2
0906247-004B	RW-2 Dup	W	140	1	107	e2

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Environmental Resources Mngmnt	Client Project ID: #0097888; Lucasey	Date Sampled: 06/08/09
		Date Received: 06/08/09
1777 Botelho, Suite 260	Client Contact: John Moe	Date Extracted: 06/08/09
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed 06/11/09-06/13/09

Total Extractable Petroleum Hydrocarbons with Dawn Zemo Silica Gel Clean-Up*

Extraction method: SW3510C/3630C/Dawn Zemo S.G.Cl Analytical methods: SW8015B Work Order: 0906247

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
0906247-001A	RW-1	W	ND	1	110	
0906247-002A	RW-3	W	88	1	100	e2
0906247-003A	RW-2	W	ND	1	100	
0906247-004A	RW-2 Dup	W	ND	1	98	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 43657 WorkOrder 0906247

EPA Method SW8015B **Extraction SW3510C/3630C/Dawn Zemo S.G.Clean-Up** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	84.7	85.4	0.854	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	80	80	0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 43657 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906247-001A	06/08/09 8:14 AM	06/08/09	06/11/09 4:50 PM	0906247-002A	06/08/09 9:31 AM	06/08/09	06/13/09 5:04 PM
0906247-003A	06/08/09 10:43 AM	06/08/09	06/13/09 6:14 PM	0906247-004A	06/08/09 10:43 AM	06/08/09	06/13/09 7:24 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 43711 WorkOrder 0906247

EPA Method SW8015B **Extraction SW3510C/Dawn Zemo Separation** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	113	102	10.5	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	105	103	1.70	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 43711 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906247-001B	06/08/09 8:14 AM	06/08/09	06/15/09 5:09 PM	0906247-002B	06/08/09 9:31 AM	06/08/09	06/15/09 6:17 PM
0906247-003B	06/08/09 10:43 AM	06/08/09	06/15/09 7:25 PM	0906247-004B	06/08/09 10:43 AM	06/08/09	06/15/09 8:33 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

0906247

Environmental Resources Management

CHAIN OF CUSTODY RECORD

NO: 5778

1777 Botelho Drive, Suite 260 • Walnut Creek, CA • 94596 • (925) 946-0455 • FAX (925) 946-9968

Page 1 of 1

PROJECT #	PROJECT NAME
0097888	LVCASEY

SAMPLER: (PRINT NAME)	(SIGNATURE)
ERIK OEHLSCHLAGER	[signature]

RECEIVING LABORATORY: McCAMBELL

REQUESTED PARAMETERS: TPH (diesel) w/ silica gel cleanup; TPH (diesel); NORMAL TAT

	SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	SOIL	WATER	GAS	TPH (diesel) w/ silica gel cleanup	TPH (diesel)	NORMAL TAT
+	RW-1	6/8/09	0814		X	micro purge	HCl	Y	2 L	2		X		X	X	X
+	RW-3	↓	0931		↓	↓	↓	↓	↓	↓		↓		↓	↓	↓
+	RW-2	↓	1043		↓	↓	↓	↓	↓	↓		↓		↓	↓	↓
+	RW-2 DUP	↓	1043		↓	↓	↓	↓	↓	↓		↓		↓	↓	↓

ICE / t° 6.8°C ✓
GOOD CONDITION ✓ APPROPRIATE CONTAINERS ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
PRESERVATION | VOAS | O & G | METALS | OTHER ✓

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	6/8/09	1350	[signature]	6/8/09	1350
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS: PLEASE FOLLOW PROTOCOL FOR GRAVITY SEPARATION. Per J.M. W/and W/o SG Down 2040. DZ SG.

REMARKS ON SAMPLE RECEIPT: ☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED ☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO: John Moc@erm.com

WHITE – LABORATORY COPY   CANARY – FIELD COPY   PINK – DATABASE   GOLD – PROJECT FILE

Zemo & Associates LLC
986 Wander Way
Incline Village, NV 89451
Tel/Fax: 775-831-6179
dazemo@zemoassociates.com

Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase

Groundwater samples may contain non-dissolved petroleum resulting from entrained sheen and/or entrained petroleum-affected soil particles. The objective of this procedure is to separate the oil phase and the particulate matter solid phase from the water phase prior to extraction and analysis of the sample. In this way, the analysis will better represent the true dissolved-phase of the sample. The success of this procedure depends on many factors, including adequate time for separation, and complete exclusion of the oil and particulate matter phases from the collected water phase.

For groundwater samples to be analyzed for semi-volatiles (e.g., extractable TPH, PAHs):

1. Pour the raw groundwater sample into a glass separatory funnel of adequate volume.
2. Allow the sample to separate and equilibrate for a minimum of 48 hours. Keep the sample refrigerated during the separation period.
3. After the separation period, the analyst will observe the sample to confirm that the water phase is visually clear. If the water is not visually clear, additional separation time may be required.
4. Open the bottom stopcock of the funnel and allow all of the particulate matter that collected at the bottom to run completely through; discard.
5. Collect an adequate sample volume of the water phase from the bottom of the funnel without including any of the oil phase and place into appropriate containers.
6. Add surrogates to water phase sample and extract as per requested method.

For groundwater samples to be analyzed for volatiles (e.g., purgeable TPH, BTEX, etc.):

1. Store the 40-ml VOA vials upside-down in the refrigerator for a minimum of 48 hours.
2. After the separation period, the vials must remain in the upside-down position while the septum is punctured by the hypodermic needle and the water phase is subsampled. The analyst should keep the needle tip within the water phase and must avoid both the solid and oil phases with the needle tip during subsampling.

Memorandum

Environmental
Resources
Management

101 SW Main Street,
Suite 804
Portland, OR 97204
(503) 488-5282
(503) 488-5124 (fax)

To: John Moe

From: Shira DeGrood

Date: 9 July 2009

Subject: Data Review of Lucasey Samples Collected 17 and 18 July 2009

Project Number: 0097222.02

Data Package: Air Toxics LTD. Data Packages 0906524A and 0906524B

The quality of the data was assessed and any necessary qualifiers were applied following the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* October 1999 and ASTM Method D-1946 (*ASTM D6968 - 03 Standard Test Method for Simultaneous Measurement of Sulfur Compounds and Minor Hydrocarbons in Natural Gas and Gaseous Fuels by Gas Chromatography and Atomic Emission Detection,* DOI: 10.1520/D6968-03).

HOLDING TIME AND PRESERVATION EVALUATION

The samples were prepared and analyzed within the method prescribed time period from the date of collection. None of the data were qualified based on holding time or preservation exceedances.

CANISTER VACUUM EVALUATION

The canister vacuums were received at acceptable pressures, therefore none of the data were qualified based on canister vacuum pressure exceedances.

BLANK EVALUATION

The method blank sample results were nondetected for each of the target analytes. The trip blanks contained several compounds at concentrations above the reporting limit. Associated sample data were qualified according to the 5x rule. The data qualified as anomalous (U) are presented in Table 1.

BLANK SPIKE EVALUATION

The laboratory control sample (LCS) recoveries were within the laboratory's limits of acceptance. The LCS recoveries indicate acceptable laboratory accuracy and precision.

FIELD DUPLICATE EVALUATION

One sample was submitted in duplicate. ERM calculated the relative percent difference (RPD) between detected results. The USEPA has not established control criteria for field duplicate samples; therefore, sample data are not qualified on the basis of field duplicate imprecision. The RPDs are presented in Table 2.

MATRIX SPIKE EVALUATION

There were no matrix spike (MS) recoveries presented in the laboratory report.

SURROGATE SPIKE EVALUATION

The surrogate recoveries were within acceptable limits. No qualifications were required based on surrogate recoveries. The surrogate recoveries indicate minimal matrix interference in the samples.

CONTINUING CALIBRATION VERIFICATION EVALUATION

The continuing calibration verification (CCV) recoveries were within the laboratory's limits of acceptance. The CCV recoveries indicate acceptable instrument qualitative and quantitative data.

LAB DUPLICATE EVALUATION

One air sample was analyzed in duplicate. ERM calculated the RPDs between detected results. All RPDs between the primary sample and the duplicate were less than 25 percent, indicating acceptable precision.

OVERALL ASSESSMENT

No data required rejection. All of the data, including qualified data, can be used for decision-making purposes. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Blank and Associated Suspect Sample Detections
Lucasey Project
Oakland, California

Lab Package	Blank ID	Associated Samples	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
0906524A	Trip Blank	--	Benzene	21	1.6	$\mu g/m^3$	--
0906524A	--	ASV-5	Benzene	33	4.7	$\mu g/m^3$	U
0906524A	--	ASV-6	Benzene	14	3.6	$\mu g/m^3$	U
0906524A	--	ASV-7	Benzene	21	3.8	$\mu g/m^3$	U
0906524A	--	ASV-7 DUP	Benzene	22	3.8	$\mu g/m^3$	U
0906524A	--	ASV-8	Benzene	18	3.8	$\mu g/m^3$	U
0906524A	--	ASV-9	Benzene	12	3.7	$\mu g/m^3$	U
0906524A	--	ASV-10	Benzene	12	3.6	$\mu g/m^3$	U
0906524A	--	ASV-11	Benzene	15	3.6	$\mu g/m^3$	U
0906524A	--	Ambient Air	Benzene	3.6	3.4	$\mu g/m^3$	U
0906524A	Trip Blank	--	Toluene	18	1.9	$\mu g/m^3$	--
0906524A	--	Ambient Air	Toluene	6.9	4.1	$\mu g/m^3$	U
0906524B	Trip Blank	--	Oxygen	0.31	0.10	%	--

Lab reports reviewed: 0906524A, 0906524B

Key:
$\mu g/m^3$ = Micrograms per cubic meter
% = Percent
U= Non-detected

Table 2
Field Duplicate Results and Calculated Relative Percent Differences
Lucasey Project
Oakland, California

Lab Package	Sample ID	Compound	Concentration		Report Limit		Units	RPD (%)
			Sample	Duplicate	Sample	Duplicate		
0906524A	ASV-7	Benzene	21	22	3.8	3.8	$\mu g/m^3$	4.7
0906524A	ASV-7	Toluene	700	720	4.5	4.5	$\mu g/m^3$	2.8
0906524A	ASV-7	Ethyl Benzene	70	71	5.2	5.1	$\mu g/m^3$	1.4
0906524A	ASV-7	m,p-Xylene	290	290	5.2	5.1	$\mu g/m^3$	0
0906524A	ASV-7	o-Xylene	90	88	5.2	5.1	$\mu g/m^3$	2.2
0906524B	ASV-7	Oxygen	21	21	0.24	0.24	%	0
0906524B	ASV-7	Methane	0.00024	0.00024	0.00024	0.00024	%	0
0906524B	ASV-7	Carbon Dioxide	0.34	0.34	0.024	0.024	%	0

Lab reports reviewed: 0906524A, 0906524B

Key:
$\mu g/m^3$ = Micrograms per cubic meter
% = Percent
RPD = Relative percent difference

STATE OF CALIFORNIA - THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF WATER RESOURCES

CENTRAL DISTRICT	NORTHERN DISTRICT	SAN JOAQUIN DISTRICT	SOUTHERN DISTRICT
3500 Industrial Blvd.	2440 Main Street	3374 E. Shields Ave Ste A7	770 Fairmont Avenue
West Sacramento, CA 95691	Red Bluff, CA 96080	Fresno, CA 93726	Glendale, CA 91203
(916) 376-9612	(530) 529-7300	(559) 230-3300	(818) 500-1645 ext. 233
(916) 376-9676 (Fax)	(530) 528-7322 (Fax)	(559) 230-3301 (Fax)	(818) 543-4604 (Fax)

WELL COMPLETION REPORT RELEASE AGREEMENT—AGENCY STUDY
(Government Agencies and their Authorized Agents)

Under California Water Code Section 13752, the agency named below requests permission from Department of Water Resources to inspect or copy, or for our authorized agent named below to inspect or copy, Well Completion Reports filed pursuant to Section 13751 to make a study.

In accordance with Section 13752, information obtained from these reports shall be kept confidential and shall not be disseminated, published, or made available for inspection by the public. The information shall be used only for the purpose of conducting the study. Copies obtained shall be stamped **CONFIDENTIAL** and shall be kept in a restricted file accessible only to agency staff or the authorized agent for this study.

Project Name: DEL MONTE CORP. County: ALAMEDA

Street Address: 1100 29th ST. City: OAKLAND

Township, Range, and Section: 2S/3W/7B Radius: INFO ON WELLS: 783, 784, 785

(Include entire study area and a map that shows the area of interest.)

Del Monte Foods	Alameda County Environmental Health
Authorized Agent Company Name	Government Agency Name
1 Market Street @ the Landmark	1131 Harbor Bay Parkway
Address	Address
San Francisco, CA 94590	Alameda, CA 94502
City, State, and Zip Code	City, State, and Zip Code
Scott Rickman	Jerry Wickham
Authorized Agent Name (**please print**)	Agency Contact Name (**please print**)
Signature:	Signature: Jerry Wickham
Title: Assistant Secretary	Title: Sr Haz Mat Specialist
Telephone: 415.247.3265	Telephone: (510) 567-6791
FAX: 412.222.1897	FAX: (510) 337-9335
Date: July 29, 2009	Date: 07/30/09
E-mail: Scott.Rickman@delmonte.com	E-mail: jerry.wickham@acgov.org