R0258 4

January 27, 2005
RRM Project# IA220

Mr. Jerry Wickham
Hazardous Materials Specialist
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-5577

Re: Groundwater Monitoring Results – Fourth Quarter 2005
649 Pacific Avenue
Alameda, California

Dear Mr. Wickham:

This report, prepared by RRM, Inc. (RRM) on behalf of Timber Del Properties, LLC, presents the results of the fourth quarter 2005 groundwater monitoring conducted at the referenced site (Figure 1) on December 27, 2005. A discussion of the groundwater monitoring results is presented below, followed by conclusions and recommendations.

GROUNDWATER MONITORING RESULTS

Depth-to-groundwater was measured and groundwater samples were collected from on-site monitoring wells MW-1 through MW-5. All groundwater samples were analyzed for the presence of stoddard solvent range total petroleum hydrocarbons (TPHss) by Environmental Protection Agency (EPA) Method 8015M, gasoline range TPH (TPHg), benzene, toluene, ethyl benzene, and xylenes (collectively BTEX), by EPA Method 8260B. Field and analytical procedures are presented as Attachment A.

Groundwater Elevation, Flow Direction and Gradient

Groundwater elevations were calculated from depth-to-groundwater data; groundwater elevations ranged from 7.29 feet above mean sea level (msl) in Well MW-1 to 9.44 feet above msl in Well MW-5. The apparent groundwater flow direction ranged southeast to northwest; however the overall flow direction was to the northeast, as in previous monitoring events. The hydraulic gradient was varied, with a maximum value of approximately 0.07 foot per foot. Depth-to-groundwater and elevation data are summarized in Table 1, field data sheets are included in Attachment B, and the groundwater elevation contour prepared for the December 27, 2005 monitoring event is shown on Figure 2.

Groundwater Analytical Data

The laboratory detected TPHss above the reporting limit only in the groundwater sample collected from well MW-2 at 110 parts per billion (ppb). TPHg was detected in wells MW-1 through MW-3 at concentrations ranging from 320 ppb at well MW-2 to 26 ppb at well MW-1; the laboratory noted the chromatogram pattern for the TPHg result for well MW-2 as atypical. Toluene was detected in all samples at concentrations ranging from 2.5 ppb to 3.4 ppb; however, toluene was also detected in the laboratory method blank at a similar concentration, thus the toluene detections in the well samples are considered laboratory contamination. No other analyzed compounds were detected in any of the groundwater samples. Groundwater analytical data is summarized in Table 1 and shown on Figure 2; certified analytical reports and chain-of-custody documentation are included in Attachment B.

CONCLUSIONS

Based on the information presented above and previous monitoring activities, RRM concludes the following:

- Groundwater flow at the site is variable, and may be tidally influenced due to the proximity to the San Francisco Bay; however, generally groundwater has flowed toward the northeast.
- Only relatively low levels of TPHss, TPHg, and toluene have been detected in groundwater.
- The dissolved plume appears stable.

RECOMMENDATIONS

- Evaluate site for low-risk case closure

Should you have any questions regarding the contents of this document, please do not hesitate to call RRM at (831) 475-8141.

Sincerely,

RRM, Inc.,

FOR: Julie Avanto
Project Engineer

Steven D. Clark
Senior Hydrogeologist, CHG 167

PROFESSIONAL GEOLOGIST
STEVEN D. CLARK
No. 167
CERTIFIED
HYDROGEOLOGIST
EXP 4/06
STATE OF CALIFORNIA

Attachments: Table 1 – Groundwater Elevation and Analytical Data
Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour and Analytical Results Map, June 30, 2005
Attachment A – Field and Analytical Procedures
Attachment B – Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets

cc: Mr, Don Lindsey
Timber Del Properties, LLC
2424 Central Avenue
Alameda, California 94501

Mr. Mark Russel
The Mechanics Bank
343 Sansome Street, Suite 100
San Francisco, California 94101

Mr. Carl Searway
3032 Dakota Street
Oakland, California 94602

Table 1

Groundwater Elevation and Analytical Data

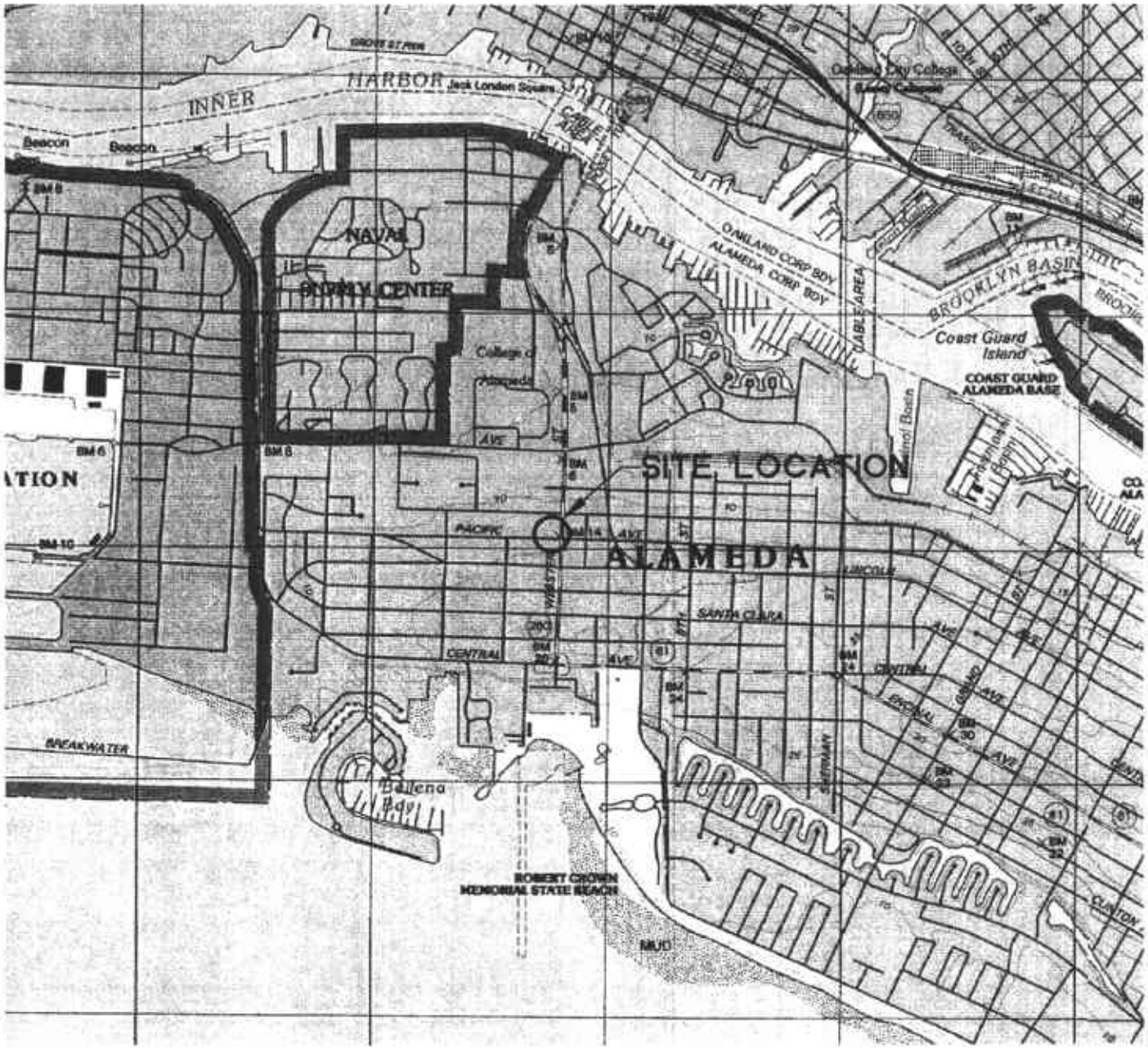
649 Pacific Avenue

Alameda, California

Well Number	Date Sampled	Well Elev (ft, MSL)	Depth to Water (ft)	Groundwater Elev. (ft, MSL)	TPHss EPA 8015 (ppb)	TPHg EPA 8015 (ppb)	Benzene EPA 8020 (ppb)	Toluene EPA 8020 (ppb)	Ethyl-benzene EPA 8020 (ppb)	Xylenes EPA 8020 (ppb)
MW-1	03/01/05	15.18	5.64	9.54	**550**	<50	<0.5	**0.73**	<0.5	<0.5
	06/30/05		5.77	9.41	**210**	<50	<0.50	<0.50	<0.50	<0.50
	09/26/05		6.57	8.61	**190**	**560** [1]	<0.50[1]	<0.50[1]	<0.50[1]	<0.50[1]
	12/27/05		7.89	7.29	<50	**26**[1]	<0.50[1]	**2.5**[2]	<0.50[1]	<0.50[1]
MW-2	03/01/05	15.21	5.60	9.61	<50	<50	<0.5	**0.53**	<0.5	<0.5
	06/30/05		5.84	9.37	<50	<50	<0.50	<0.50	<0.50	<0.50
	09/26/05		6.63	8.58	<50	<25[1]	<0.50[1]	<0.50[1]	<0.50[1]	<0.50[1]
	12/27/05		6.01	9.20	**110**	**320**[1,3]	<0.50[1]	**2.9**[2]	<0.50[1]	<0.50[1]
MW-3	03/01/05	15.11	5.71	9.40	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/30/05		6.11	9.00	<50	<50	<0.50	<0.50	<0.50	<0.50
	09/26/05		6.93	8.18	<50	<25[1]	<0.50[1]	<0.50[1]	<0.50[1]	<0.50[1]
	12/27/05		6.28	8.83	<50	**29**[1]	<0.50[1]	**2.9**[2]	<0.50[1]	<0.50[1]
MW-4	03/01/05	15.02	5.30	9.72	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/30/05		5.56	9.46	<50	<50	<0.50	<0.50	<0.50	<0.50
	09/26/05		6.40	8.62	<50	<25[1]	<0.50[1]	<0.50[1]	<0.50[1]	<0.50[1]
	12/27/05		5.64	9.38	<50	<25[1]	<0.50[1]	**3.1**[2]	<0.50[1]	<0.50[1]
MW-5	03/01/05	14.79	5.06	9.73	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/30/05		5.24	9.55	<50	<50	<0.50	<0.50	<0.50	<0.50
	09/26/05		6.11	8.68	<50	<25[1]	<0.50[1]	<0.50[1]	<0.50[1]	<0.50[1]
	12/27/05		5.35	9.44	<50	<25[1]	<0.50[1]	**3.4**[2]	<0.50[1]	<0.50[1]

Notes:

TPHss = total petroleum hydro total petroleum hydrocarbons as Stoddard solvent
TPHg = total petroleum hydro total petroleum hydrocarbons as gasoline
ppb = parts per billion
EPA 8015 = analysis performed according to EPA Method 8015 modified, unless otherwise noted
EPA 8020 = analyses performed according to EPA Method 8020, unless otherwise noted
< = not detected at or above specified detection limit shown
1 = analyzed according to EPA Method 8260B
2 = compound detected in laboratory method blank; considered laboratory contamination
3 = laboratory noted atypical chromatographic pattern



QUADRANGLE LOCATION

N

SCALE IN FEET

0 2,000

Ref. M810/M810-SLM.DWG
Base Map from TOPO!!! NGH

PREPARED BY

RRM ENVIRONMENTAL ENGINEERING GEOLOGY

SITE LOCATION MAP

649 Pacific Avenue
Alameda, California

FIGURE:
1
PROJECT:
IA220

N

SCALE IN FEET

0 20

CITY OF ALAMEDA FIRE STATION

COURTYARD AND ASSISTED LIVING

DRAIN

1713 WEBSTER
RESTAURANT

1ST FLOOR HALLWAY AND STAIRS TO 2ND FLOOR (647 PACIFIC AVE. SPACE)

MW-3
MW-3
6.83
<50
29
<0.50

PARKING LOT

PROJECT SITE

653 PACIFIC
VACANT

1711 WEBSTER
MARTIAL ARTS
SCHOOL

1707 WEBSTER
TAILORING AND
CLEANING

SIDEWALK

WEBSTER STREET

MW-4
MW-4
9.38
<50
<25
<0.50

MW-1
MW-1
7.29
<50
26
<0.50

7.5
8.0
8.5
9.0

MW-2
MW-2
9.20
110
320*
<0.50

0.05

0.07

651 PACIFIC
AUTOMOTIVE
SERVICE

1701 WEBSTER
VACANT

ELECTRIC TRANSFORMER

STORAGE ROOM

649 PACIFIC

MW-6

MW-5
MW-5
9.44
<50
<25
<0.50

ENTRY DOOR

DRIVEWAY

SIDEWALK

PACIFIC AVENUE

EXPLANATION

MW-6 VICINITY SITE GROUNDWATER WELL

MW-1 GROUNDWATER MONITORING WELL LOCATION (RRM)

MW-1 WELL DESIGNATION
7.29 GROUNDWATER ELEVATION (FT, MSL)
<50 TPHss CONCENTRATION IN GROUNDWATER (ppb)
26 TPHg CONCENTRATION IN GROUNDWATER (ppb)
<0.50 BENZENE CONCENTRATION IN GROUNDWATER (ppb)

9.5 GROUNDWATER ELEVATION CONTOUR (FT, MSL)

0.04 APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT

TPHss STODDARD SOLVENT RANGE TOTAL PETROLEUM HYDROCARBONS

TPHg GASOLINE RANGE TOTAL PETROLEUM HYDROCARBONS

< NOT DETECTED AT/ABOVE LAB REPORTING LIMIT

* LAB NOTED ATYPICAL CHROMATOGRAM PATTERN

Ref. IA220/IA220-CITEMDG.DWG
Basemap from Stellar Environmental Solutions, Inc.

PREPARED BY RRM ENVIRONMENTAL ENGINEERING GEOLOGY

GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL RESULTS MAP
DECEMBER 27, 2005

649 Pacific Avenue
Alameda, California

FIGURE:
2
PROJECT:
IA220

ATTACHMENT A

FIELD AND ANALYTICAL PROCEDURES

ATTACHMENT A
FIELD AND ANALYTICAL PROCEDURES

Field Procedures

Groundwater sampling procedures consisted of initially measuring and documenting the water level in each well and checking each well for the presence of separate-phase hydrocarbon (SPH) using a oil/water interface probe or a clear Teflon bailer. The wells that did not contain SPH were then purged a minimum of three casing volumes or until dry. During purging, well stabilization parameters (temperature, pH, and electrical conductivity) were monitored. After purging and prior to sampling, groundwater in the wells was allowed to recharge to within 80% of the original groundwater level. Groundwater samples were then collected using clean Teflon bailers or disposable bailers and appropriate EPA-approved containers. The samples were then labeled, and transported on ice to the laboratory using appropriate chain-of-custody documentation. Sampling equipment was cleaned with an Alconox soap solution between uses. Purge water generated during groundwater sampling was temporarily stored on site in 55-gallon drums pending disposal. The drums were labeled and profiled prior to disposal.

Laboratory Analytical Procedures

Groundwater samples were analyzed for TPHss by EPA Method 8015 (Modified), and TPHg and BTEX compounds by EPA Method 8260B. Entech Analytical Labs Inc. of Santa Clara, California, a California State-certified laboratory, performed all analyses.

ATTACHMENT B

CERTIFIED ANALYTICAL REPORTS, CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD DATA SHEETS

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matt Paulus
Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062

Lab Certificate Number: 47155
Issued: 01/26/2006

Project Number: IA220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda

Global ID: SL0600150413

Certificate of Analysis - Revision

Note: This is a revision of the original 1/12/2006 issue to include the TPH as Gasoline values.

On December 28, 2005, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix	Test	Comments
Liquid	Electronic Deliverables	
	EPA 8260B - GC/MS	
	TPH as Gasoline by GC/MS	
	TPH-Extractable	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062
Attn: Matt Paulus

Samples Received: 12/28/2005

Project Number: IA220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda
GlobalID: SL0600150413

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab # : 47155-001 **Sample ID: MW-1** **Matrix:** Liquid **Sample Date:** 12/27/2005 1:55 PM

EPA 8015 MOD. (Extractable) **TPH-Extractable**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Mineral Spirits (Stoddard)	ND		1.0	50	µg/L	1/3/2006	WD060103	1/6/2006	WD060103

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	93.3	22 - 133

Analyzed by: EricKum
Reviewed by: ECunniffe

EPA 8260B for Groundwater and Water EPA 624 for Wastewater **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Toluene	2.5	B L	1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	111	60 - 130
Dibromofluoromethane	104	60 - 130
Toluene-d8	110	60 - 130

Analyzed by: TFulton
Reviewed by: MaiChiTu

L = Laboratory contamination.
B = This analyte was found in the associated Method Blank.

GC-MS **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	26		1.0	25	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	102	60 - 130
Dibromofluoromethane	106	60 - 130
Toluene-d8	103	60 - 130

Analyzed by: TAF
Reviewed by: xbian

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062
Attn: Matt Paulus

Samples Received: 12/28/2005

Project Number: IA220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda
GlobalID: SL0600150413

Sample Collected by: Client

Certificate of Analysis - Data Report

Lab # : 47155-002 **Sample ID:** MW-2 **Matrix:** Liquid **Sample Date:** 12/27/2005 1:10 PM

EPA 8015 MOD. (Extractable) — **TPH-Extractable**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Mineral Spirits (Stoddard)	110		1.0	50	µg/L	1/3/2006	WD060103	1/6/2006	WD060103
Aged/weathered Stoddard pattern (C10-C14).									

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	87.4	22 - 133

Analyzed by: EricKum
Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater — **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Toluene	2.9	B L	1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110	60 - 130
Dibromofluoromethane	104	60 - 130
Toluene-d8	111	60 - 130

Analyzed by: TFulton
Reviewed by: MaiChiTu

L = Laboratory contamination.
B = This analyte was found in the associated Method Blank.

GC-MS — **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	320		1.0	25	µg/L	N/A	N/A	1/9/2006	WM2060109
Atypical pattern.									

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101	60 - 130
Dibromofluoromethane	106	60 - 130
Toluene-d8	104	60 - 130

Analyzed by: TAF
Reviewed by: xbian

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062
Attn: Matt Paulus

Samples Received: 12/28/2005

Project Number: IA220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda
GlobalID: SL0600150413

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab # : 47155-003 **Sample ID: MW-3** **Matrix:** Liquid **Sample Date:** 12/27/2005 10:20 AM

EPA 8015 MOD. (Extractable) **TPH-Extractable**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Mineral Spirits (Stoddard)	ND		1.0	50	µg/L	1/3/2006	WD060103	1/6/2006	WD060103

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	87.8	22 - 133

Analyzed by: EricKum
Reviewed by: ECunniffe

EPA 8260B for Groundwater and Water EPA 624 for Wastewater **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Toluene	2.9	B L	1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	109	60 - 130
Dibromofluoromethane	105	60 - 130
Toluene-d8	109	60 - 130

Analyzed by: TFulton
Reviewed by: MaiChiTu

L = Laboratory contamination.
B = This analyte was found in the associated Method Blank.

GC-MS **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	29		1.0	25	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	100	60 - 130
Dibromofluoromethane	108	60 - 130
Toluene-d8	102	60 - 130

Analyzed by: TAF
Reviewed by: xbian

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062
Attn: Matt Paulus

Samples Received: 12/28/2005

Project Number: 1A220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda
GlobalID: SL0600150413

Sample Collected by: Client

Certificate of Analysis - Data Report

Lab # : 47155-004 **Sample ID: MW-4** **Matrix:** Liquid **Sample Date:** 12/27/2005 10:55 AM

EPA 8015 MOD. (Extractable) **TPH-Extractable**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Mineral Spirits (Stoddard)	ND		1.0	50	µg/L	1/3/2006	WD060103	1/6/2006	WD060103

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	89.5	22 - 133

Analyzed by: EricKum
Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Toluene	3.1	B L	1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110	60 - 130
Dibromofluoromethane	103	60 - 130
Toluene-d8	112	60 - 130

Analyzed by: TFulton
Reviewed by: MaiChiTu

L = Laboratory contamination.
B = This analyte was found in the associated Method Blank.

GC-MS **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	25	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101	60 - 130
Dibromofluoromethane	105	60 - 130
Toluene-d8	105	60 - 130

Analyzed by: TAF
Reviewed by: xbian

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Remediation Risk Management-SC
2560 Soquel Ave., Suite 202
Santa Cruz, CA 95062
Attn: Matt Paulus

Samples Received: 12/28/2005

Project Number: IA220
Project Name: Don Lindsay
Project Location: 649 Pacific Ave./Alameda
GlobalID: SL0600150413

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab # : 47155-005 **Sample ID: MW-5** **Matrix:** Liquid **Sample Date:** 12/27/2005 11:30 AM

EPA 8015 MOD. (Extractable) — TPH-Extractable

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Mineral Spirits (Stoddard)	ND		1.0	50	µg/L	1/3/2006	WD060103	1/6/2006	WD060103

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	68.8	22 - 133

Analyzed by: EricKum
Reviewed by: ECunniffe

EPA 8260B for Groundwater and Water EPA 624 for Wastewater — 8260Petroleum

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Toluene	3.4	B L	1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	108	60 - 130
Dibromofluoromethane	105	60 - 130
Toluene-d8	112	60 - 130

Analyzed by: TFulton
Reviewed by: MaiChiTu

L = Laboratory contamination.
B = This analyte was found in the associated Method Blank.

GC-MS — TPH as Gasoline - GC-MS

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	25	µg/L	N/A	N/A	1/9/2006	WM2060109

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	98.7	60 - 130
Dibromofluoromethane	108	60 - 130
Toluene-d8	104	60 - 130

Analyzed by: TAF
Reviewed by: xbian

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8015 MOD. (Extractable) - TPH-Extractable

QC/Prep Batch ID: WD060103 Validated by: ECunniffe - 01/05/06

QC/Prep Date: 1/3/2006

Parameter	Result	DF	PQLR	Units
TPH as Mineral Spirits (Stoddard)	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
o-Terphenyl	82.0	22 - 133

Laboratory Control Sample / Duplicate - Liquid - EPA 8015 MOD. (Extractable) - TPH-Extractable

QC/Prep Batch ID: WD060103 Reviewed by: Ecunniffe - 01/05/06

QC/Prep Date: 1/3/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<50	1000	649	µg/L	64.9	40 - 138
TPH as Motor Oil	<200	1000	692	µg/L	69.2	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	77.9	22 - 133

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<50	1000	581	µg/L	58.1	11	25.0	40 - 138
TPH as Motor Oil	<200	1000	735	µg/L	73.5	6.1	25.0	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	78.0	22 - 133

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060109

Validated by: xbian - 01/09/06

QC Batch Analysis Date: 1/9/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Toluene	2.0	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	109	60 - 130
Dibromofluoromethane	96.6	60 - 130
Toluene-d8	110	60 - 130

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060109

Validated by: xbian - 01/09/06

QC Batch Analysis Date: 1/9/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	25	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	100	60 - 130
Dibromofluoromethane	98.6	60 - 130
Toluene-d8	103	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060109 Reviewed by: xbian - 01/09/06

QC Batch ID Analysis Date: 1/9/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	20.3	µg/L	101	70 - 130
Benzene	<0.50	20	21.5	µg/L	107	70 - 130
Chlorobenzene	<0.50	20	22.5	µg/L	112	70 - 130
Methyl-t-butyl Ether	<1.0	20	21.2	µg/L	106	70 - 130
Toluene	2.0	20	21.0	µg/L	105	70 - 130
Trichloroethene	<0.50	20	23.1	µg/L	115	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**112.0**	60 - 130
Dibromofluoromethane	**95.6**	60 - 130
Toluene-d8	**108.0**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	<0.50	20	20.1	µg/L	100	**1.0**	25.0	70 - 130
Benzene	<0.50	20	21.0	µg/L	105	**2.4**	25.0	70 - 130
Chlorobenzene	<0.50	20	21.7	µg/L	108	**3.5**	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	20.7	µg/L	104	**2.5**	25.0	70 - 130
Toluene	2.0	20	20.3	µg/L	102	**2.9**	25.0	70 - 130
Trichloroethene	<0.50	20	23.0	µg/L	115	**0.38**	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**111.0**	60 - 130
Dibromofluoromethane	**96.4**	60 - 130
Toluene-d8	**107.0**	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060109 Reviewed by: xbian - 01/09/06

QC Batch ID Analysis Date: 1/9/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	250	281	µg/L	113	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**103.0**	60 - 130
Dibromofluoromethane	**96.7**	60 - 130
Toluene-d8	**103.0**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	250	291	µg/L	117	**3.5**	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**102.0**	60 - 130
Dibromofluoromethane	**97.2**	60 - 130
Toluene-d8	**102.0**	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060109

QC Batch ID Analysis Date: 1/9/2006

MS Sample Spiked: 47155-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	22.5	µg/L	1/9/2006	112	70 - 130
Toluene	3.40	20	24.8	µg/L	1/9/2006	107	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	115.0	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	110.0	60 - 130

MSD Sample Spiked: 47155-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	22.1	µg/L	1/9/2006	110	1.8	25.0	70 - 130
Toluene	3.40	20	24.0	µg/L	1/9/2006	103	3.8	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	113.0	60 - 130
Dibromofluoromethane	109.0	60 - 130
Toluene-d8	109.0	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: Matt Paulus	Phone No.: 831-475-8141	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: RRM, Inc.	Fax No.: 831-475-8249	Project No.: 1A220	Company:	Quote No.:	
Mailing Address: 2560 Soquel Ave Ste. 202	Email Address:	Project Name: Don Lindsey	Billing Address: (If Different)		
City: Santa Cruz	State: CA	Zip Code: 95060	Project Location: 649 Pacific Ave.	City: Alameda	State: CA / Zip:

Sampler: NO
Field Org. Code:
Global ID:

Turn Around Time: ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day ☐ 5 Day ☒ 10 Day

Order ID: 47155

GC/MS Methods: EPA 8260B; BTEX ☒ MTBE ☐ TPH Gas ☒ by 8260B; 5 Oxygenates (MTBE, TBA, ETBA, DIPE, TAME) ☐; Lead Scavengers (1,2-DCA & EDB) ☐ Ethanol ☐; Base/Neutral/Acid Organics 8270C ☐ PAH - 8270C ☐ PAH - 8270C SIM ☐

GC Methods: TPH Extractable: Diesel ☐ Motor Oil ☐ Other ☐ w/ Si-Gel Cleanup ☐; Pesticides-8081 ☐ PCBs - 8082 ☐; TPH as Gas/BTEX ☐ MTBE ☐ by 8015M/8020; Methanol by 8015M; TPH Stoddard Solvent

General Chemistry: Anions: F ☐ Cl ☐ Br ☐ SO4 ☐ NO3 ☐ NO2 ☐ PO4 ☐; pH ☐ TSS ☐ SC ☐ TOC ☐ TRPH ☐ O&G ☐; Metals - Circle Below Total ☐ Dissolved ☐ STLC ☐ TCLP ☐

Client ID / Field Point	Lab. No.	Date	Time	Matrix	No. of Containers	BTEX / TPH Gas by 8260B	TPH Stoddard Solvent	Remarks
MW-1	-001	122705	1355	L	6	X	X	
MW-2	-002	↓	1310	↓	↓	↓	↓	
MW-3	-003	↓	1020	↓	↓	↓	↓	
MW-4	-004	↓	1055	↓	↓	↓	↓	
MW-5	-005	↓	1130	↓	↓	↓	↓	

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	12/28/05	1355
[signature]	Diane [signature]	12/28/05	1600

Special Instructions or Comments
2 Liter amber
4 voas each
Temp 7.8

☐ EDD Report
☒ EDF Report

Metals:
Al, As, Sb, Ba, Be, Bi, B, Cd, Ce, Ca, Cr, Co, Cs, Cu, Fe, Pb, Mg, Mn, Ga, Ge, Hg, In, Li, Mo, Ni, P, K, Si, Ag, Na, S, Se, Sr, Ta, Te, Tl, Sn, Ti, Zn, V, W, Zr

☐ Plating ☐ LUFT-5 ☐ RCRA-8 ☐ PPM-13 ☐ CAM-17

Field Data Sheet

Depth to Water Data Form

Site Information

649 Pacific Ave.	122705	IA220
Project Address	Date	Project Number
Alameda	Alameda	California
City	County	State

Water Level Equipment

- [x] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) _____

Measured By: NC (name)

Notes: _____

DTW Order	Well ID	Time (24:00)	Total Depth	First DTW (toc or tob)	Second DTW (toc or tob)	Depth to SPH (toc or tob)	SPH Thickness (toc or tob)	Notes (describe SPH):
2	MW-1	917	20	7.89				
1	MW-2	914	20	6.01				
5	MW-3	926	20	6.28				
4	MW-4	923	20	5.64				
3	MW-5	921	20	5.35				

Signature: _____

Field Data Sheet

Groundwater Sampling Form

Site Information

649 Pacific Av. (Project Address) | MW-1 (Well/Sample Point ID) | IA220 (Project Number)

Alameda (City) | Alameda (County) | California (State)

Purge Information

Water Level Equipment
- [X] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) _____

Purge Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Other (specify) _____

Purge Calculation

total depth	20
depth to water -	7.89
linear feet of water =	12.11
gallons per linear foot x	0.17
gallons per casing =	2.06
number of casings x	3
calculated purge =	6.18

casing diameter		gallons per linear foot
0.75 in.	[ ]	0.023
1 in.	[ ]	0.04
2 in.	[X]	0.17
4 in.	[ ]	0.67
6 in.	[ ]	1.5
other	[ ]	calculate

1 cubic foot = 7.48 gallons

Purged By: NC (name)

Purge Notes:

Purged Dry?: N circle Y Sampling Delay?: N circle Y

	time (24:00)	gallons (purged)	pH (units)	EC (µs @ 25° C)	temp (°F circle °C)	color (see below)	turbity (NTU or see below)	odor (see below)
start	1321	0						
volume 1	1332	2.25	7.48	413	19.9	brown	heavy	slight
volume 2	1337	4.50	7.43	380	20.2	"	"	"
volume 3	1341	6.75	7.40	378	20.2	"	"	"
volume 4								
complete								

brown, yellow cloudy, clear | heavy, moderate light, trace | strong, moderate slight, none

Groundwater Sampling Information

Sample Type
- [X] Monitoring Well
- [ ] Extraction Well
- [ ] Domestic Well
- [ ] Other (specify) _____

Sampling Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Sampling Port
- [ ] Other (specify) _____

Sample ID	Date	Time (24:00)
MW-1	122705	1355
Dupe # ___		12:00

Sampled By: NC (name)

# of Cont.	Analyses (check and circle)	Container/Size	Preservative
4	[ ] TPH gas (8015M)	40 ml	HCl
	[ ] BTEX (8020 or 8260B)		
	[ ] MtBE (8020 or 8260B)		
	[ ] Fuel Oxy (8260B)	VOA	
	[ ] Other (specify) _____		
	[ ] VOCs (8010 or 8240 or 8260B)	40 ml VOA	HCl
2	[X] TPH as Stoddard Solvent (8015M)	1 liter amber	none
	[ ] Metals (8010)	500 ml plastic	HNO_3
	[ ] Other (specify) _____		

Sampling Notes:

Signature: _____

Field Data Sheet

Groundwater Sampling Form

Site Information

649 Pacific Av. (Project Address) | MW-2 (Well/Sample Point ID) | IA220 (Project Number)

Alameda (City) | Alameda (County) | California (State)

Purge Information

Water Level Equipment
- [X] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) _____

Purge Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Other (specify) _____

Purge Calculation

total depth	20
depth to water -	6.01
linear feet of water =	13.99
gallons per linear foot X	0.17
gallons per casing =	2.38
number of casings X	3
calculated purge =	7.13

casing diameter		gallons per linear foot
0.75 in.	[ ]	0.023
1 in.	[ ]	0.04
2 in.	[X]	0.17
4 in.	[ ]	0.67
6 in.	[ ]	1.5
other	[ ]	calculate

1 cubic foot = 7.48 gallons

Purged By: NC (name)

Purge Notes:

Purged Dry?: N circle Y Sampling Delay?: N circle Y

	time (24:00)	gallons (purged)	pH (units)	EC (us @ 25° C)	temp (°F circle °C)	color (see below)	turbity (NTU or see below)	odor (see below)
start	1232	0						
volume 1	1249	2.50	7.75	340	19.0	cloudy	mod.	none
volume 2	1254	5.00	7.73	358	19.8	"	heavy	"
volume 3	1258	7.50	7.64	332	19.9	"	"	"
volume 4								
complete								

brown, yellow cloudy, clear | heavy, moderate light, trace | strong, moderate slight, none

Groundwater Sampling Information

Sample Type
- [X] Monitoring Well
- [ ] Extraction Well
- [ ] Domestic Well
- [ ] Other (specify) _____

Sampling Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Sampling Port
- [ ] Other (specify) _____

Sample ID	Date	Time (24:00)
MW-2	122705	1310
Dupe # ___		12:00

Sampled By: NC (name)

# of Cont.	Analyses (check and circle)	Container/Size	Preservative
4	[ ] TPH gas (8015M); [ ] BTEX (8020 or 8260B); [ ] MtBE (8020 or 8260B); [ ] Fuel Oxy (8260B); [ ] Other (specify) _____	40 ml VOA	HCl
	[ ] VOCs (8010 or 8240 or 8260B)	40 ml VOA	HCl
2	[X] TPH as Stoddard Solvent (8015M)	1 liter amber	none
	[ ] Metals (8010)	500 ml plastic	HNO_3
	[ ] Other (specify) _____		

Sampling Notes:

Signature:

Field Data Sheet

Groundwater Sampling Form

Site Information

649 Pacific Av. (Project Address) | MW-3 (Well/Sample Point ID) | IA220 (Project Number)

Alameda (City) | Alameda (County) | California (State)

Purge Information

Water Level Equipment
- [X] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) _____

Purge Equipment
- [X] Bailer [X] Disposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Other (specify) _____

Purged By: NC (name)

Purge Notes:

Purge Calculation

total depth	20
depth to water -	6.28
linear feet of water =	13.72
gallons per linear foot X	0.17
gallons per casing =	2.33
number of casings X	3
calculated purge =	6.99

casing diameter		gallons per linear foot
0.75 in.	[ ]	0.023
1 in.	[ ]	0.04
2 in.	[X]	0.17
4 in.	[ ]	0.67
6 in.	[ ]	1.5
other	[ ]	calculate

1 cubic foot = 7.48 gallons

Purged Dry?: N circle Y Sampling Delay?: N circle Y

	time (24:00)	gallons (purged)	pH (units)	EC (µs @ 25° C)	temp (°F circle °C)	color (see below)	turbity (NTU or see below)	odor (see below)
start	949	0						
volume 1	1003	2.50	8.72	657	18.3	cloudy/brown	heavy	slight
volume 2	1008	5.00	8.39	642	19.2	"	"	"
volume 3	1012	7.50	8.21	636	19.2	"	"	"
volume 4								
complete								

color: brown, yellow, cloudy, clear | turbity: heavy, moderate, light, trace | odor: strong, moderate, slight, none

Groundwater Sampling Information

Sample Type
- [X] Monitoring Well
- [ ] Extraction Well
- [ ] Domestic Well
- [ ] Other (specify) _____

Sampling Equipment
- [X] Bailer [X] Disposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Sampling Port
- [ ] Other (specify) _____

Sample ID	Date	Time (24:00)
MW-3	122705	1020
Dupe # ___		12:00

Sampled By: NC (name)

# of Cont.	Analyses (check and circle)	Container/Size	Preservative
4	[ ] TPH gas (8015M); [ ] BTEX (8020 or 8260B); [ ] MtBE (8020 or 8260B); [ ] Fuel Oxy (8260B); [ ] Other (specify) _____	40 ml VOA	HCl
2	[ ] VOCs (8010 or 8240 or 8260B)	40 ml VOA	HCl
2	[X] TPH as Stoddard Solvent (8015M)	1 liter amber	none
	[ ] Metals (8010)	500 ml plastic	HNO_3
	[ ] Other (specify) _____		

Sampling Notes:

Signature: _____

Field Data Sheet

Groundwater Sampling Form

Site Information

649 Pacific Av. (Project Address) | MW-4 (Well/Sample Point ID) | IA220 (Project Number)

Alameda (City) | Alameda (County) | California (State)

Purge Information

Water Level Equipment
- [X] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) _____

Purge Equipment
- [X] Bailer [X] Disposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Other (specify) _____

Purge Calculation

total depth	20
depth to water -	5.64
linear feet of water =	14.36
gallons per linear foot x	0.17
gallons per casing =	2.44
number of casings x	3
calculated purge =	7.32

casing diameter		gallons per linear foot
0.75 in.	[ ]	0.023
1 In.	[ ]	.0.04
2 in.	[X]	0.17
4 in.	[ ]	0.67
6 in.	[ ]	1.5
other	[ ]	calculate

1 cubic foot = 7.48 gallons

Purged By: NC (name)

Purge Notes:

Purged Dry?: N circle Y Sampling Delay?: N circle Y

	time (24:00)	gallons (purged)	pH (units)	EC (us @ 25° C)	temp (°F circle (C))	color (see below)	turbity (NTU or see below)	odor (see below)
start	1025	0						
volume 1	1037	2.50	8.20	399	19.0	cloudy/brown	mod.	slight
volume 2	1042	5.00	8.07	409	19.6	"	heavy	"
volume 3	1045	7.50	7.94	407	19.8	brown	"	"
volume 4								
complete								

brown, yellow cloudy, clear | heavy, moderate light, trace | strong, moderate slight, none

Groundwater Sampling Information

Sample Type
- [X] Monitoring Well
- [ ] Extraction Well
- [ ] Domestic Well
- [ ] Other (specify) _____

Sampling Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: _____
- [ ] Sampling Port
- [ ] Other (specify) _____

Sample ID	Date	Time (24:00)
MW-4	122705	1055
Dupe # ___		12:00

Sampled By: NC (name)

# of Cont.	Analyses (check and circle)	Container/Size	Preservative
4	[ ] TPH gas (8015M) [ ] BTEX (8020 or 8260B) [ ] MtBE (8020 or 8260B) [ ] Fuel Oxy (8260B) [ ] Other (specify) _____	40 ml VOA	HCl
	[ ] VOCs (8010 or 8240 or 8260B)	40 ml VOA	HCl
2	[X] TPH as Stoddard Solvent (8015M)	1 liter amber	none
	[ ] Metals (8010)	500 ml plastic	HNO_3
	[ ] Other (specify) _____	_____	_____

Sampling Notes:

Signature: _____

Field Data Sheet

Groundwater Sampling Form

Site Information

649 Pacific Av. (Project Address) | MW-5 (Well/Sample Point ID) | IA220 (Project Number)

Alameda (City) | Alameda (County) | California (State)

Purge Information

Water Level Equipment
- [X] Electronic Indicator
- [ ] Oil Water Interface Probe
- [ ] Other (specify) ____

Purge Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: ____
- [ ] Other (specify) ____

Purge Calculation

total depth	20
depth to water -	5.35
linear feet of water =	14.65
gallons per linear foot X	0.17
gallons per casing =	2.49
number of casings X	3
calculated purge =	7.47

casing diameter		gallons per linear foot
0.75 in.	[ ]	0.023
1 in.	[ ]	0.04
2 in.	[X]	0.17
4 in.	[ ]	0.67
6 in.	[ ]	1.5
other	[ ]	calculate

1 cubic foot = 7.48 gallons

Purged By: NC (name)

Purge Notes:

Purged Dry?: N circle Y Sampling Delay?: N circle Y

	time (24:00)	gallons (purged)	pH (units)	EC (us @ 25° C)	temp (°F circle °C)	color (see below)	turbity (NTU or see below)	odor (see below)
start	1106	0						
volume 1	1113	2.50	7.62	379	18.4	brown	heavy	slight
volume 2	1117	5.00	7.68	346	19.1	"	"	"
volume 3	1121	7.50	7.70	320	19.7	"	"	"
volume 4								
complete								

color: brown, yellow cloudy, clear | turbity: heavy, moderate light, trace | odor: strong, moderate slight, none

Groundwater Sampling Information

Sample Type
- [X] Monitoring Well
- [ ] Extraction Well
- [ ] Domestic Well
- [ ] Other (specify) ____

Sampling Equipment
- [X] Bailer [X] Diposable [ ] Teflon #: ___
- [ ] Submersible Pump; type: ____
- [ ] Sampling Port
- [ ] Other (specify) ____

Sample ID	Date	Time (24:00)
MW-5	122705	1130
Dupe # ___		12:00

Sampled By: NC (name)

# of Cont.	Analyses (check and circle)	Container/Size	Preservative
4	[ ] TPH gas (8015M)	40 ml VOA	HCl
	[ ] BTEX (8020 or 8260B)		
	[ ] MtBE (8020 or 8260B)		
	[ ] Fuel Oxy (8260B)		
	[ ] Other (specify) ____		
	[ ] VOCs (8010 or 8240 or 8260B)	40 ml VOA	HCl
2	[X] TPH as Stoddard Solvent (8015M)	1 liter amber	none
	[ ] Metals (8010)	500 ml plastic	HNO_3
	[ ] Other (specify) ____		

Sampling Notes:

Signature: [signature]

2560 SOQUEL AVENUE, SUITE E
SANTA CRUZ, CALIFORNIA 95062
TEL: 831.475.8141
FAX: 831.475.8249

FIELD DATA SHEET

Client: Don Lindsey	Project #: 1A220
Job Address: 649 Pacific Ave., Alameda	Date: 122705
Weather Conditions: cloudy; scattered rain	Personnel: NC
Equipment on site:	
Arrival Time: 858	
Departure Time: 1415	

FIELD NOTES:

858 Arrive on site, get bearings, and begin DTW measurements
929 End DTW measurements & begin purge calculations,
NOTE: no drums on site, Will bringing drum from Richmond
948 End purge calculations and start sampling event
1412 End sampling event, clean up, and leave site

Signature: