

February 1, 2001

7893.00-000

Mr. Greg Baum
Harsch Investment Corporation
P.O. Box 2708
Portland, Oregon 97208

Ms. Karen Petryna
Equiva Services, LLC
P.O. Box 7869
Burbank, California 91510

ENVIRONMENTAL
PROTECTION
00 FEB -5 AM 8:56

Subject: Final Report of Monitoring Well and Vapor Extraction System Abandonment at South Shore Shopping Center, 2375 Shoreline Drive, Alameda, California

Dear Mr. Baum and Ms. Petryna:

LFR Levine · Fricke (LFR) has prepared this letter report on behalf of Harsch Investment Corporation (Harsch) and Equiva Services, LLC (Equiva) to document monitoring well and vapor extraction system closure at the South Shore Shopping Center located at 2375 Shoreline Drive in Alameda, California ("the Site").

The South Shore Shopping Center is owned by Harsch and consists of approximately 50 acres located northwest of the intersection of Park Street and Shoreline Drive in Alameda, California.

BACKGROUND

Environmental investigation at the Site began in 1990 with the closure of a former Texaco service station, car wash, and adjacent dry cleaner facility. Previous investigation activities included the installation of 23 monitoring wells (Figure 1) to assess the lateral and vertical extent of affected soil and groundwater and identify potential responsible parties.

Affected soil was subsequently excavated and remediated by the responsible parties under the oversight of the Alameda County Health Care Services Agency (ACHCSA) and California Regional Water Quality Control Board (RWQCB). Groundwater monitoring has been conducted on an intermittent basis.

Ecological and Health Risk Assessments, as well as a Risk Management Plan, were prepared for the Site. The groundwater/soil-vapor extraction system was installed; however, the system was never activated.

On June 23, 2000, the ACHCSA requested that monitoring wells be closed before issuance of closure for the Site. This letter documents the closure of monitoring wells and vapor extraction equipment now completed per the requirements in the ACHCSA letter.

MONITORING WELL AND VAPOR EXTRACTION SYSTEM CLOSURE

There were 23 known monitoring wells located at the Site, with responsibility as noted below:

- Harsch: Monitoring Wells MW-7B, MW-8, MW-16, MW-17, MW-18, MW-19, MW-20, and MW-23 (eight total)
- Kamur: Monitoring Wells MW-10, MW-11, MW-12, MW-13, MW-24, MW-25, and RW-1 (seven total)
- Texaco: Monitoring Wells MW-2, MW-3, MW-4, MW-5B, MW-9, MW-14, MW-15, and MW-22 (eight total)

LFR has completed closure of 16 wells at the Site; eight wells under the responsibility of Harsch and eight wells under the responsibility of Equiva (formerly Texaco). These wells were destroyed in accordance with Alameda County Public Works Agency (Water Resources Section ordinances for destruction of groundwater wells).

Monitoring well numbers, respective well casing diameters, and depths of the original boreholes for the wells destroyed by LFR are listed below:

Monitoring Well Number	Casing Diameter (inches)	Total Depth (feet)
MW-2	4	14.6
MW-3	4	13.2
MW-4	4	5.4
MW-5B	4	13.0
MW-7B	4	13.4
MW-8	4	22.2
MW-9	4	15.1
MW-14	4	14.4
MW-15	2	19.6
MW-16	2	13.5
MW-17	2	24.6
MW-18	2	24.9
MW-19	2	24.9
MW-20	2	25.0
MW-22	2	20.0
MW-23	2	18.5

Kamur arranged for the destruction of the remaining seven wells at the Site independently, and submitted a separate report to the ACHCSA.

The scope of work for monitoring well and vapor extraction system closure activities consisted of the following tasks:

- preparing a site-specific health and safety plan
- obtaining utility clearances and required permits
- closing monitoring wells and groundwater/soil-vapor extraction system
- managing waste

A site-specific health and safety plan for site activities was prepared and distributed to all on-site personnel and subcontractors as required by law. Underground Service Alert was notified and an underground utility locator (Subdynamic Locating Services of San Jose, California) performed utility locating on private property before work began.

Monitoring well closure permits were obtained from the Alameda County Department of Public Works before abandoning the wells.

Excavation permits were obtained from the City of Alameda Building Service Department (“the City”) for planned well closure in the city rights-of-way (monitoring wells MW-14, MW-15, and MW-16). The City requested to review our proposed scope of work before initiating the field activities. The City also conducted field inspections during work performance, for which it requires a fee. The City required a published traffic plan for work in the public right-of-way, and additional permits for road closure, sidewalk closure, saw cutting in public right-of-way, and review and oversight of the traffic plan.

LFR provided the East Bay Regional Park District with written notification regarding the abandonment of monitoring well MW-22, which was located on its property, before beginning field activities. The East Bay Regional Park District required a right of way permit and report of potential impacts to public park property. In addition, the East Bay Regional Park District required an on-site inspection after completion of work.

All permits are included as attachments to this letter report.

Spectrum Drilling, of Stockton, California destroyed 16 monitoring wells and closed the vapor extraction system on October 17 through 20, 2000, under the supervision of LFR personnel.

Ten wells were over-drilled to native material beneath the original borehole depth using a 10-inch hollow-stem auger. Debris was removed and the borehole was grouted from the bottom to the surface using a mixture of neat cement and bentonite.

Three wells (MW-2, MW-4, and MW-19) were pressure-grouted through the casing because of utilities that had been installed above or adjacent to the well since completion, preventing overdrilling.

Finally, three wells (MW-5B, MW-9, and MW-22) were grouted from bottom to top because of inadequate access for the drill rig and mud pump required to pressure-grout.

Wiring and surface pipes, manifolds, boxes, and valves associated with the soil vapor extraction system were removed to the extent possible without causing damage to the existing parking lot, planter boxes, and buildings. After surface materials were cut free and removed, the subsurface piping was pressure-grouted with a neat cement-bentonite mixture, to block movement of material through subsurface piping. Two control system boxes were removed and backfilled with clean soil.

Pavement or planter boxes at the well sites were restored to their original condition, including repainting of parking lot markings, replacement of clean fill dirt, replanting, hot patch asphalt, and cement patch where appropriate.

WASTE MANAGEMENT

Soil and debris (including PVC well casing, sand, and cement) were collected in 20 cubic yard capacity, lockable roll-top debris boxes. Soil and debris were segregated according to responsibility for the well (Harsch or Equiva). LFR collected the required samples and submitted them to certified analytical laboratories for analysis of the suspect chemicals of concern. ATL Laboratories of Sacramento, California analyzed samples for Harsch, and Sequoia Analytical Laboratories of Morgan Hill, California analyzed samples for Equiva. Samples were analyzed for the following chemicals:

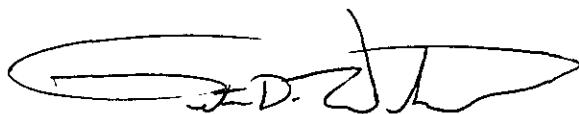
- total petroleum hydrocarbons (TPH) as gasoline, using Environmental Protection Agency (EPA) Method 5030/8015
- TPH as diesel, using EPA Method 3550/8015
- volatile organic compounds, using EPA Method 8260
- total lead, using EPA Method 6010B (ICP)

Analytical reports are included as attachments to this letter report. After profiling, soil from Harsch wells was transported to the Waste Management Altamont Landfill; soil from Equiva wells was transported to Forward Landfill. All soil and debris were transported by Delta Oilfield Services, a licensed hazardous waste hauler.

Well completion reports for the 16 wells destroyed by LFR have been submitted to the Alameda County Department of Public Works as required, and are included as attachments to this letter report. This finalizes requirements for site closure from the ACHCSA.

If you have any questions or comments pertaining to this summary report, please call Peter Weiler at (510) 596-9519 or Alan Gibbs at (916) 786-8129.

Sincerely,



Peter D. Weiler, Ph.D.
Senior Project Hydrogeologist

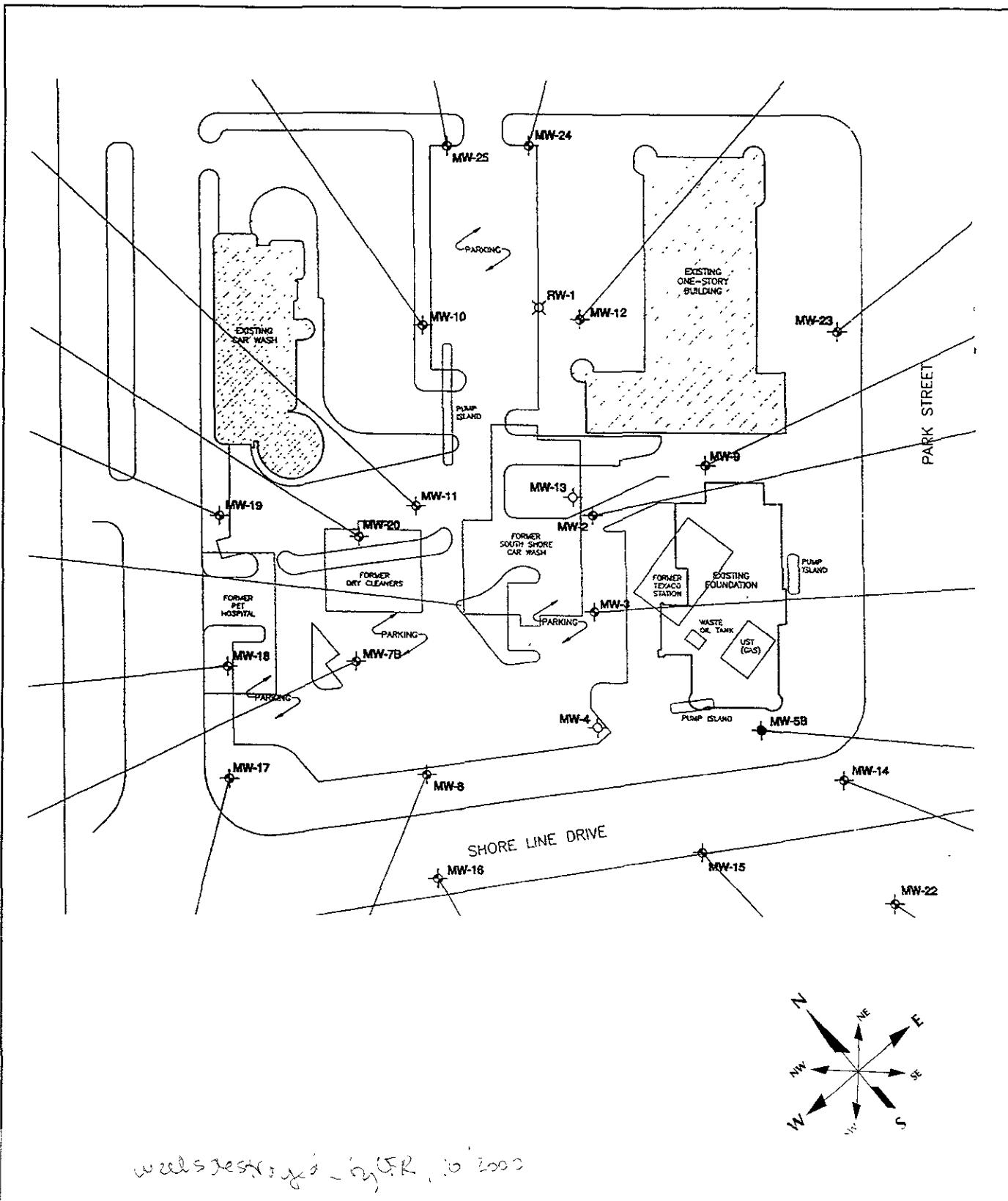

R. Elena Ramirez
for

Alan D. Gibbs, R.G., C.H.G, R.E.A.II
Senior Associate Hydrogeologist

Attachments:

- State of California Well Completion Reports
- Analytical reports from ATL and Sequoia Laboratories
- Driller's daily reports
- Approval of waste profile Altamont Landfill
- Alameda County Public Works Agency drilling permit applications
- East Bay Regional Park District encroachment permit
- LFR traffic plan
- Alameda County Building Services certification of posting
- City of Alameda right-of-way permit
- City of Alameda commercial building permit and inspection report

cc: Eva Chu, Alameda County Health Care Services Agency (with attachments)



Well Location Map

SO. SHORE CENTER MANHATTAN CA

CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

REMOVED

CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

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CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

REMOVED

ELAP No.: 1838

Levine-Fricke-Recon
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

ATTN: Peter Weiler

Client's Project: Harsch, #7893.00-000
Lab No.: 47606-001/008

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (562) 989 - 4045 if I can be of further assistance to your company.

Sincerely,


Cheryl De Los Reyes
Technical Operations Manager

CDR/jh

Date: 12/22/00

Enclosures

This cover letter is an integral part of this analytical report.



Advanced Technology
Laboratories

1510 L Street • Sacramento, CA 95811 • Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No	18.93.00 - 000		Project Location: South Shore Shopping Center		Date:	Serial	
Project Name	Harsch		Field Logbook No:	①	Sample Event Name:	Well destruction	
Sampler (Signature)	R. Elena Ramirez				Samplers: RER		
SAMPLE INFORMATION (Print Clearly)							
SAMPLE NO	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	REMARKS	
FB - 1023	10/23	1000			X	<i>VOCs S260 CAM IT PCP X BTEX DHAZ D20 TPH G05M Gasoline/diesel</i> <i>RER X</i>	
1B 1023	10/23	1003			X		
2B - 1023	10/23	1007					X
HS - 1	10/23	1030					X
HS - 2	10/23	1032					
HS - 3	10/23	1034			X		
HS - 4	10/23	1036			X		
3B - 1024	10/24	9:38			X		
RELINQUISHED BY (Signature)	<i>R. Elena Ramirez</i>		DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY (Signature)			DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY (Signature)			DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT			DATE	TIME	LAB COMMENTS:		
Sample Collector	LEVINE-FRICKE-RECON 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500				Analytical Laboratory:		

Shipping Copy (White)

Lab Copy (Yellow)

File Copy (Pink)

Field Copy (Goldenrod)

9999\COCTEMP.CDR 042998

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon
 Lab Order: 047606
 Project: Harsch - 7893.00-000
 Lab ID: 047606-001A

Client Sample ID: FB-1023

Collection Date: 10/23/00 10:00:00 AM
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS2_001030A	BatchID: Q00VOCW220			EPA 8260B		
				PrepDate:		Analyst: DJK
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/30/00
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/30/00
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/30/00
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/30/00
1,1-Dichloroethane	ND	5.0		µg/L	1	10/30/00
1,1-Dichloroethene	ND	5.0		µg/L	1	10/30/00
1,1-Dichloropropene	ND	5.0		µg/L	1	10/30/00
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	10/30/00
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/30/00
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	10/30/00
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	10/30/00
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/30/00
1,2-Dibromoethane	ND	5.0		µg/L	1	10/30/00
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/30/00
1,2-Dichloroethane	ND	5.0		µg/L	1	10/30/00
1,2-Dichloropropane	ND	5.0		µg/L	1	10/30/00
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	10/30/00
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/30/00
1,3-Dichloropropane	ND	5.0		µg/L	1	10/30/00
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/30/00
2,2-Dichloropropane	ND	5.0		µg/L	1	10/30/00
2-Chlorotoluene	ND	5.0		µg/L	1	10/30/00
4-Chlorotoluene	ND	5.0		µg/L	1	10/30/00
4-Isopropyltoluene	ND	5.0		µg/L	1	10/30/00
Benzene	ND	5.0		µg/L	1	10/30/00
Bromobenzene	ND	5.0		µg/L	1	10/30/00
Bromodichloromethane	ND	5.0		µg/L	1	10/30/00
Bromoform	ND	5.0		µg/L	1	10/30/00
Bromomethane	ND	5.0		µg/L	1	10/30/00
Carbon tetrachloride	ND	5.0		µg/L	1	10/30/00
Chlorobenzene	ND	5.0		µg/L	1	10/30/00
Chloroethane	ND	5.0		µg/L	1	10/30/00
Chloroform	ND	5.0		µg/L	1	10/30/00
Chloromethane	ND	5.0		µg/L	1	10/30/00
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/30/00
D bromochloromethane	ND	5.0		µg/L	1	10/30/00
Dibromomethane	ND	5.0		µg/L	1	10/30/00
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/30/00

Qualifiers: ND = Not Detected at the detection limit
 L = Low - detected between 10% and 100% of the detection limit
 B = An artefact detected in the blank or Method Blank
 S = Value exceeds Maximum Concentration Level

S = Spike Recovery or % Accepted recovery (R%)
 U = QC spike detection recovery limit
 F = No procedure deviation
 M = Not Monitored / Highly Reactive

Initials: RA

1



Advanced Technology
Laboratories

1501 3rd Street, Signal Hill, CA 90755 Tel: 562.989.4040 Fax: 562.989.4040

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon
Lab Order: 047606
Project: Harsch - 7893.00-000
Lab ID: 047606-001A

Client Sample ID: FB-1023**Collection Date:** 10/23/00 10:00:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS2_001030A	BatchID: Q00VOCW220			EPA 8260B		
				PrepDate:		Analyst: DJK
Ethylbenzene	ND	5.0		µg/L	1	10/30/00
Hexachlorobutadiene	ND	5.0		µg/L	1	10/30/00
Isopropylbenzene	ND	5.0		µg/L	1	10/30/00
m,p-Xylene	ND	5.0		µg/L	1	10/30/00
Methylene chloride	ND	5.0		µg/L	1	10/30/00
n-Butylbenzene	ND	5.0		µg/L	1	10/30/00
n-Propylbenzene	ND	5.0		µg/L	1	10/30/00
Naphthalene	ND	5.0		µg/L	1	10/30/00
o-Xylene	ND	5.0		µg/L	1	10/30/00
sec-Butylbenzene	ND	5.0		µg/L	1	10/30/00
Styrene	ND	5.0		µg/L	1	10/30/00
tert-Butylbenzene	ND	5.0		µg/L	1	10/30/00
Tetrachloroethene	ND	5.0		µg/L	1	10/30/00
Toluene	ND	5.0		µg/L	1	10/30/00
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/30/00
Trichloroethene	ND	5.0		µg/L	1	10/30/00
Trichlorofluoromethane	ND	5.0		µg/L	1	10/30/00
Vinyl chloride	ND	5.0		µg/L	1	10/30/00

Qualifiers: ND = Not detected at the Reporting Limit
L = Analyte detected below quantitation limits
B = Analyte detected in the associated Method Blank
* = Value exceeds Maximum Contaminant level

S = Spike Recovery outside accepted recovery limits

R = RPD outside accepted recovery limits

U = Value above quantitation range

M = Not Measured / Highly Reactive

Initials: KJA

2

Advanced Technology
Laboratories

1510 L Street, Suite 300, Sacramento, CA 95804 Tel: 562 989 4045 Fax: 562 989 4040

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon
Lab Order: 047606
Project: Harsch - 7893.00-000
Lab ID: 047606-002A

Client Sample ID: 1B-1023

Collection Date: 10/23/00 10:03:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS8_001027A	BatchID: T00VOCW081			EPA 8260B		
				PrepDate:		Analyst: DJK
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/27/00
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/27/00
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/27/00
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/27/00
1,1-Dichloroethane	ND	5.0		µg/L	1	10/27/00
1,1-Dichloroethene	ND	5.0		µg/L	1	10/27/00
1,1-Dichloropropene	ND	5.0		µg/L	1	10/27/00
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	10/27/00
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/27/00
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	10/27/00
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	10/27/00 *
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/27/00
1,2-Dibromoethane	ND	5.0		µg/L	1	10/27/00
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/27/00
1,2-Dichloroethane	ND	5.0		µg/L	1	10/27/00
1,2-Dichloropropane	ND	5.0		µg/L	1	10/27/00
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	10/27/00
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/27/00
1,3-Dichloropropane	ND	5.0		µg/L	1	10/27/00
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/27/00
2,2-Dichloropropane	ND	5.0		µg/L	1	10/27/00
2-Chlorotoluene	ND	5.0		µg/L	1	10/27/00
4-Chlorotoluene	ND	5.0		µg/L	1	10/27/00
4-Isopropyltoluene	ND	5.0		µg/L	1	10/27/00
Benzene	ND	5.0		µg/L	1	10/27/00
Bromobenzene	ND	5.0		µg/L	1	10/27/00
Bromodichloromethane	ND	5.0		µg/L	1	10/27/00
Bromoform	ND	5.0		µg/L	1	10/27/00
Bromomethane	ND	5.0		µg/L	1	10/27/00
Carbon tetrachloride	ND	5.0		µg/L	1	10/27/00
Chlorobenzene	ND	5.0		µg/L	1	10/27/00
Chloroethane	ND	5.0		µg/L	1	10/27/00
Chloroform	ND	5.0		µg/L	1	10/27/00
Chlormethane	ND	5.0		µg/L	1	10/27/00
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/27/00
Dibromochloromethane	ND	5.0		µg/L	1	10/27/00
Dibromomethane	ND	5.0		µg/L	1	10/27/00
Dichlorod fluoromethane	ND	5.0		µg/L	1	10/27/00

Qualifiers: ND = Not Detected at the Report Level

* = Analyte detected below detection limits

3+ = Analyte detected in the associated Standard Banks

*+ = Value exceeds NIST limit on a 1:1 ratio

8+ = 80% Recovery - Inside accepted recovery limits

<-CPL = Outside accepted recovery limits

3+ = Value above quantitation range

ME = Not Monitored: High/No Recovery

Initials: RA

3

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon**Client Sample ID:** 1B-1023**Lab Order:** 047606**Project:** Harsch - 7893.00-000**Collection Date:** 10/23/00 10:03:00 AM**Lab ID:** 047606-002A**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS8_001027A	BatchID: T00VOCW081			EPA 8260B		
				PrepDate:		Analyst: DJK
Ethylbenzene	ND	5.0		µg/L	1	10/27/00
Hexachlorobutadiene	ND	5.0		µg/L	1	10/27/00
Isopropylbenzene	ND	5.0		µg/L	1	10/27/00
m,p-Xylene	ND	5.0		µg/L	1	10/27/00
Methylene chloride	ND	5.0		µg/L	1	10/27/00
n-Butylbenzene	ND	5.0		µg/L	1	10/27/00
n-Propylbenzene	ND	5.0		µg/L	1	10/27/00
Naphthalene	ND	5.0		µg/L	1	10/27/00
o-Xylene	ND	5.0		µg/L	1	10/27/00
sec-Butylbenzene	ND	5.0		µg/L	1	10/27/00
Styrene	ND	5.0		µg/L	1	10/27/00
tert-Butylbenzene	ND	5.0		µg/L	1	10/27/00
Tetrachloroethene	ND	5.0		µg/L	1	10/27/00
Toluene	ND	5.0		µg/L	1	10/27/00
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/27/00
Trichloroethene	ND	5.0		µg/L	1	10/27/00
Trichlorofluoromethane	ND	5.0		µg/L	1	10/27/00
Vinyl chloride	ND	5.0		µg/L	1	10/27/00

Qualifiers: ND = Not Detected or the reporting limit
- analyte detected below detection limits
B = Analyte detected in the associated Method Blank
* = Value exceeds Maximum Contaminant Level

S = Spike Recovery outside accepted recovery - PLS
R = RPD outside accepted recovery limits
U = Value above quantitation range
M = Not Measured - Highly Reactive

Initials: KPAAdvanced Technology
Laboratories

1500 L 33rd Street • Suite 100 • Lakewood, CO 80401 • Tel: 303.989.4045 • Fax: 303.989.4040

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon Client Sample ID: 2B-1023

Lab Order: 047606

Project: Harsch - 7893.00-000

Collection Date: 10/23/00 10:07:00 AM

Lab ID: 047606-003A

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID		EPA 8015B(M)				
RunID: GC6_001026A	BatchID: I008G20W194	PrepDate:		Analyst: JPC		
GRO	ND	0.20	mg/L	1	10/26/00	

Qualifiers: N = N - Detected above Reporting Limit
* = Analyte detected below reporting limits
B = Analyte detected in the associated Method Block
* = Value exceeds Maximum Contaminant Level

S = Spike Rec. Actv. - outside accepted recovery limits
R = RD - Outside accepted recovery limits

Initials: RP

M = No M - Interfered, Highly Reactive

/

Advanced Technology
Laboratories

1501 3rd Street, Steger, IL 60471 Tel: 708.989.4078 Fax: 708.989.4040

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon
Lab Order: 047606
Project: Harsch - 7893.00-000
Lab ID: 047606-004A

Client Sample ID: HS-1

Collection Date: 10/23/00 10:30:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID	EPA 8015B(M)					
RunID: GC2_001026A	BatchID: E008G20S275			PrepDate:		Analyst: JK
GRO	ND	1.0		mg/Kg	1	10/26/00

Qualifiers N = Not detected in the Report; P = Present
 P+ = Valve detected below specification limits
 B = Valve detected in the associated Method Block
 S = Valve exceeds Maximum Cetane limit [e.g. 10%]

Advanced Technologies for Education

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon

Client Sample ID: HS-1

Lab Order: 047606

Project: Harsch - 7893.00-000

Collection Date: 10/23/00 10:30:00 AM

Lab ID: 047606-004A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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DIESEL RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC7_001030B

BatchID: 1807

PrepDate: 10/26/00

Analyst: AP

Diesel

ND

10

mg/Kg

1

10/30/00

Qualifiers: ND = Not Detected at the Reporting Limit
L = Value detected below quantitation limits
B = Analyte detected in the associated Method Blank
S = Value exceeds Maximum Quantitation Level

N = Sample Recovery outside acceptable recovery limits

P = QPD requires accepted recovery limits

U = Value above quantitation range

Initials: RFH

M = Not Monitored - Inert/Reactive

1

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon

Client Sample ID: HS-3

Lab Order: 047606

Project: Harsch - 7893.00-000

Collection Date: 10/23/00 10:34:00 AM

Lab ID: 047606-006A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS						
RunID: ICP2_001030B	BatchID: 1833			EPA 6010B	PrepDate: 10/30/00	Analyst: EFR
Antimony	0.50	0.25	mg/Kg	1	10/30/00	
Arsenic	7.0	0.25	mg/Kg	1	10/30/00	
Barium	94	0.050	mg/Kg	1	10/30/00	
Beryllium	ND	0.050	mg/Kg	1	10/30/00	
Cadmium	ND	0.15	mg/Kg	1	10/30/00	
Chromium	74	0.15	mg/Kg	1	10/30/00	
Cobalt	7.5	0.15	mg/Kg	1	10/30/00	
Copper	16	0.15	mg/Kg	1	10/30/00	
Lead	2.5	0.25	mg/Kg	1	10/30/00	
Molybdenum	2.5	0.25	mg/Kg	1	10/30/00	
Nickel	81	0.15	mg/Kg	1	10/30/00	
Selenium	ND	0.25	mg/Kg	1	10/30/00	
Silver	ND	0.050	mg/Kg	1	10/30/00	
Thallium	0.30	0.25	mg/Kg	1	10/30/00	
Vanadium	33	0.15	mg/Kg	1	10/30/00	
Zinc	38	0.50	mg/Kg	1	10/30/00	

Qualifiers:

- ND = Not Detected at the Reporting Limit
- + = Analyte detected below quantitation limits
- < = Analyte detected in the associated Method Blank
- * = Value exceeds Maximum Calibration Level

S = Spike Recovery (not accepted/recovery < 70%)

R = RPD (not accepted/recovery > 120%)

U = Value above quant. concentrations

M = Not Monitored (Highly Reactive)

Initials: RA

1

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon

Client Sample ID: HS-4

Lab Order: 047606

Project: Harsch - 7893.00-000

Collection Date: 10/23/00 10:36:00 AM

Lab ID: 047606-007A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS1_001026A	BatchID: P00VOCS290			EPA 8260B		
				PrepDate:		Analyst: JPC
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	10/26/00
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	10/26/00
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	10/26/00
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	10/26/00
1,1-Dichloroethane	ND	5.0		µg/Kg	1	10/26/00
1,1-Dichloroethene	ND	5.0		µg/Kg	1	10/26/00
1,1-Dichloropropene	ND	5.0		µg/Kg	1	10/26/00
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	10/26/00
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	10/26/00
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	10/26/00
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	10/26/00
1,2-Dibromo-3-chloropropane	ND	5.0		µg/Kg	1	10/26/00
1,2-Dibromoethane	ND	5.0		µg/Kg	1	10/26/00
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	10/26/00
1,2-Dichloroethane	ND	5.0		µg/Kg	1	10/26/00
1,2-Dichloropropane	ND	5.0		µg/Kg	1	10/26/00
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	10/26/00
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	10/26/00
1,3-Dichloropropane	ND	5.0		µg/Kg	1	10/26/00
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	10/26/00
2,2-Dichloropropane	ND	5.0		µg/Kg	1	10/26/00
2-Chlorotoluene	ND	5.0		µg/Kg	1	10/26/00
4-Chlorotoluene	ND	5.0		µg/Kg	1	10/26/00
4-Isopropyltoluene	ND	5.0		µg/Kg	1	10/26/00
Benzene	ND	5.0		µg/Kg	1	10/26/00
Bromobenzene	ND	5.0		µg/Kg	1	10/26/00
Bromodichloromethane	ND	5.0		µg/Kg	1	10/26/00
Bromoform	ND	5.0		µg/Kg	1	10/26/00
Bromomethane	ND	5.0		µg/Kg	1	10/26/00
Carbon tetrachloride	ND	5.0		µg/Kg	1	10/26/00
Chlorobenzene	ND	5.0		µg/Kg	1	10/26/00
Chloroethane	ND	5.0		µg/Kg	1	10/26/00
Chloroform	ND	5.0		µg/Kg	1	10/26/00
Chloromethane	ND	5.0		µg/Kg	1	10/26/00
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	10/26/00
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	10/26/00
Dichromochloromethane	ND	5.0		µg/Kg	1	10/26/00
Dibromomethane	ND	5.0		µg/Kg	1	10/26/00

Qualifiers: ND = Not Detected at the Reporting Limit
 1 = Analyte detected below quantitation limits
 3 = Analyte detected in the associated Method blank
 * = Value exceeds Maximum Concentration Level

S = Spike Recovery + Is de accepted recovery up to 100%
 P = R90.3 was de accepted recovery limits
 U = Value outside acceptable range
 M = Non Monitored Highly Recovered

Initials: RA



Advanced Technology
Laboratories

1500 I Street, Suite 200 • Sacramento, CA 95804 • Tel: 916.989.4045 • Fax: 916.989.4040

Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon

Client Sample ID: HS-4

Lab Order: 047606

Project: Harsch - 7893.00-000

Collection Date: 10/23/00 10:36:00 AM

Lab ID: 047606-007A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
RunID: MS1_001026A	BatchID: P00VOCS290			EPA 8260B		
				PrepDate:		Analyst: JPC
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	10/26/00
Ethylbenzene	ND	5.0		µg/Kg	1	10/26/00
Hexachlorobutadiene	ND	5.0		µg/Kg	1	10/26/00
Isopropylbenzene	ND	5.0		µg/Kg	1	10/26/00
m,p-Xylene	ND	5.0		µg/Kg	1	10/26/00
Methylene chloride	ND	5.0		µg/Kg	1	10/26/00
n-Butylbenzene	ND	5.0		µg/Kg	1	10/26/00
n-Propylbenzene	ND	5.0		µg/Kg	1	10/26/00
Naphthalene	ND	5.0		µg/Kg	1	10/26/00
o-Xylene	ND	5.0		µg/Kg	1	10/26/00
sec-Butylbenzene	ND	5.0		µg/Kg	1	10/26/00
Styrene	ND	5.0		µg/Kg	1	10/26/00
tert-Butylbenzene	ND	5.0		µg/Kg	1	10/26/00
Tetrachloroethene	ND	5.0		µg/Kg	1	10/26/00
Toluene	ND	5.0		µg/Kg	1	10/26/00
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	10/26/00
Trichloroethene	ND	5.0		µg/Kg	1	10/26/00
Trichlorofluoromethane	ND	5.0		µg/Kg	1	10/26/00
Vinyl chloride	ND	5.0		µg/Kg	1	10/26/00

Qualifiers: ND = Not Detected or no Reporting Limit
L = Analyte detected below quantitation limit
B = Analyte detected in the less selected Method blank
* = Value exceeds Maximum Contaminant level

S = Sample recovered outside detection recover range
R = RP = ratio of corrected recovery limits
U = Value above quantitation range
M = Not Measured - Highly Reactive

Initials: JPCAdvanced Technology
Laboratories

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Advanced Technology Laboratories

Print Date: 11/6/00

CLIENT: Levine-Fricke-Recon
Lab Order: 047606
Project: Harsch - 7893.00-000
Lab ID: 047606-008A

Client Sample ID: 3B-1024

Collection Date: 10/24/00 9:38:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS						
RunID: ICP2_001102E	BatchID: 1909			EPA 6010B		
				PrepDate: 11/2/00		
						Analyst: EFR
Antimony	ND	0.0050		mg/L	1	11/3/00
Arsenic	ND	0.0050		mg/L	1	11/3/00
Barium	0.050	0.0010		mg/L	1	11/3/00
Beryllium	ND	0.0010		mg/L	1	11/3/00
Cadmium	ND	0.0030		mg/L	1	11/3/00
Chromium	0.0034	0.0030		mg/L	1	11/3/00
Cobalt	ND	0.0030		mg/L	1	11/3/00
Copper	0.0033	0.0030	B	mg/L	1	11/3/00
Lead	0.010	0.0050		mg/L	1	11/3/00
Molybdenum	ND	0.0050		mg/L	1	11/3/00
Nickel	ND	0.0030		mg/L	1	11/3/00
Selenium	ND	0.0050		mg/L	1	11/3/00
Silver	ND	0.0010		mg/L	1	11/3/00
Thallium	ND	0.0050		mg/L	1	11/3/00
Vanadium	0.010	0.0030		mg/L	1	11/3/00
Zinc	ND	0.010		mg/L	1	11/3/00

Qualifiers: ND = Not Detected; L = Low Level;
 * = Value detected below detection limit;
 B = Analyst detected by Reference Method;
 S = value exceeds Maximum Concentration Level

N = Sample received as delivered/received blank;

R = CTD = received/received blank;

L = Value above maximum range;

H = Not Monitored-Highly Reactive;

Initials: RFT



Advanced Technology Laboratories 1200 E. 3rd Street • Suite 100 • Toledo, OH 43604 • Tel: 862.480.2025 • Fax: 862.480.2026

Client: Levine-Fricke-Recon
Attn: Peter Weiler

Client's Project: Marsin, #7623.00-000

Date Received: 10/25/00
Date Sampled: 10/23&24/00
Date Digested: 10/30/00

MDL = Method Detection Limit

ND = Not Detected (Below DLR)

ND = Not Detected (Below DMR)
 DF = Dilution Factor (DLR/MPL)

Reviewed/Approved By:

Eddie Rodriguez
Inorganics Supervisor

Date: 11/6/00

Figure 2 was obtained from the same data set as Figure 1, but it shows the



Spike Recovery and RPD Summary Report

Method: EPA 7471A
Analyst: NS
Data File: 001030S-1
QA File: 0304-1S

ANALYTE MERCURY
Date Digested: 10/30/00
Date Analyzed: 10/30/00
Matrix: SOIL
QC Batch No: HG001030S-1

Approved by:

Eddie F Rodriguez
INORGANICS SUPERVISOR

Date: 11/6/00

Spike Recovery and RPD Summary Report

Method: EPA 7470/245.1
Analyst: NS
Data File: 001030W-1
QA File: 0304-1W

ANALYTE: MERCURY
Date Analyzed: 10/30/00
Date Digested: 10/30/00
Matrix: WATER/TCLP EXTRACT
QC Batch No: HG001030W-1

Approved by:

Eddie F Rodriguez
Inorganics Supervisor

Date:

11/6/00



Advanced Technology
Laboratories

Advanced Technology Laboratories

Date: 06 Nov 00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID	MB-1833	Batch ID:	1833	Test Name ICP METALS			Units	mg/Kg	Analysis Date:	10/30/00	Prep Date	10/30/00	
MBLK				SeqNo:	65204								
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony		ND		0.25									
Arsenic		0.121		0.25									J
Barium		ND		0.050									
Beryllium		ND		0.050									
Cadmium		ND		0.15									
Chromium		ND		0.15									
Cobalt		ND		0.15									
Copper		ND		0.15									
Lead		0.046		0.25									J
Molybdenum		ND		0.25									
Nickel		ND		0.15									
Selenium		ND		0.25									
Silver		0.022		0.050									J
Thallium		ND		0.25									
Vanadium		0.034		0.15									J
Zinc		0.002		0.50									J

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

M - Not Monitored. Highly Reactive

Initials:

RJ

1

Advanced Technology
Laboratories

1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID	MB-1909	Batch ID.	1909	Test Name	ICP METALS	Units	mg/L	Analysis Date:	11/2/00	Prep Date	11/2/00
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MBLK		SeqNo: 66895									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
Antimony	ND	0.0050									
Arsenic	0.0044	0.0050									J
Barium	0.00038	0.0010									J
Beryllium	0.00053	0.0010									J
Cadmium	0.00119	0.0030									J
Chromium	0.00071	0.0030									J
Cobalt	ND	0.0030									
Copper	0.00319	0.0030									
Lead	0.00204	0.0050									J
Molybdenum	0.01	0.0050									
Nickel	ND	0.0030									
Selenium	0.02	0.0050									
Silver	ND	0.0010									
Thallium	0.00771	0.0050									
Vanadium	0.00072	0.0030									J
Zinc	0.00511	0.010									J

Sample ID	MB-1807	Batch ID:	1807	Test Name	DIESEL RANGE ORGANICS BY GC/FID	Units	mg/Kg	Analysis Date:	10/30/00	Prep Date	10/26/00
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MBLK		SeqNo: 65490									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
Diesel	ND	10									

Sample ID	001026BLKS1	Batch ID:	E008G20S275	Test Name	GASOLINE RANGE ORGANICS BY GC/FID	Units	mg/Kg	Analysis Date:	10/26/00	Prep Date
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MBLK		SeqNo: 64015									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
GRO	ND	1.0									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials:

RA

Advanced Technology
Laboratories

1510 E. 33rd Street

Signal Hill, CA 90807

Tel: 562 989-4045

Fax: 562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID	001026BLKS1	Batch ID:	P00VOCS290	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/MS	Units	µg/Kg	Analysis Date:	10/26/00	Prep Date
Analyte								SeqNo:	64021	
1,1,1,2-Tetrachloroethane				ND	5.0					
1,1,1-Trichloroethane				ND	5.0					
1,1,2,2-Tetrachloroethane				ND	5.0					
1,1,2-Trichloroethane				ND	5.0					
1,1-Dichloroethane				ND	5.0					
1,1-Dichloroethene				ND	5.0					
1,1-Dichloropropene				ND	5.0					
1,2,3-Trichlorobenzene				ND	5.0					
1,2,3-Trichloropropane				ND	5.0					
1,2,4-Trichlorobenzene				ND	5.0					
1,2,4-Trimethylbenzene				ND	5.0					
1,2-Dibromo-3-chloropropane				ND	5.0					
1,2-Dibromoethane				ND	5.0					
1,2-Dichlorobenzene				ND	5.0					
1,2-Dichloroethane				ND	5.0					
1,2-Dichloropropane				ND	5.0					
1,3,5-Trimethylbenzene				ND	5.0					
1,3-Dichlorobenzene				ND	5.0					
1,3-Dichloropropane				ND	5.0					
1,4-Dichlorobenzene				ND	5.0					
2,2-Dichloropropane				ND	5.0					
2-Chlorotoluene				ND	5.0					
4-Chlorotoluene				ND	5.0					
4-Isopropyltoluene				ND	5.0					
Benzene				ND	5.0					
Bromobenzene				ND	5.0					
Bromodichloromethane				ND	5.0					
Bromoform				ND	5.0					

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

Initials
RA

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

3

B - Analyte detected in the associated Method Blank

M - Not Monitored. Highly Reactive



Advanced Technology
Laboratories

1510 E. 33rd Street

Signal Hill, CA 90807

Tel.: 562 989-4045

Fax: 562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Bromomethane	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
m,p-Xylene	ND	5.0
Methylene chloride	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
Naphthalene	ND	5.0
o-Xylene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl chloride	ND	5.0

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials:

RJ



Advanced Technology
Laboratories

1510 E. 33rd Street
Signal Hill, CA 90807

Tel: 562 989-4045

Fax:

562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID	001030BLKW1	Batch ID:	Q00VOCW220	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/MS	Units	µg/L	Analysis Date:	10/30/00	Prep Date	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichlormethane	ND	5.0									
Bromoform	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

Initials: KFA

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

M - Not Monitored Highly Reactive



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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Bromomethane	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
m,p-Xylene	ND	5.0
Methylene chloride	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
Naphthalene	ND	5.0
o-Xylene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl chloride	ND	5.0

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: *J.P.*



Advanced Technology Laboratories

Date: 06-Nov-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT
 Sample Matrix Spike

Sample ID	047516-008A	Batch ID	1833	Test Name ICP METALS		Units	mg/Kg	Analysis Date:	10/30/00	Prep Date	10/30/00
MS						SeqNo:	65202				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	126	0.25	125	0.2275	101	32	110	0			
Arsenic	134.5	0.25	125	2.5	106	68	105	0		S	
Barium	143.5	0.050	125	22.5	97	22	170	0			
Beryllium	126.5	0.050	125	0	101	47	134	0			
Cadmium	122.5	0.15	125	0.0165	98	65	106	0			
Chromium	145.5	0.15	125	7	111	61	128	0			
Cobalt	139.5	0.15	125	3.5	109	68	112	0			
Copper	169	0.15	125	35.5	107	60	133	0			
Lead	135.5	0.25	125	1.5	107	68	106	0		S	
Molybdenum	140	0.25	125	0.5	112	67	107	0		S	
Nickel	133.5	0.15	125	3.5	104	29	155	0			
Selenium	122	0.25	125	0	98	51	114	0			
Silver	145	0.050	125	0	116	45	111	0		S	
Thallium	140	0.25	125	0.422	112	60	111	0		S	
Vanadium	155	0.15	125	13.5	113	71	116	0			
Zinc	162	0.50	125	35	102	47	128	0			

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 M - Not Monitored. Highly Reactive

Initials

KA

J



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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT
 Sample Matrix Spike Duplicate

Sample ID	047516-008A	Batch ID	1833	Test Name ICP METALS		Units	mg/Kg	Analysis Date	10/30/00	Prep Date	10/30/00	
				SeqNo: 65203								
MSD	Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
	Antimony	120	0.25	125	0.2275	96	32	110	126	5	23	
	Arsenic	128	0.25	125	2.5	100	68	105	134.5	5	7	
	Barium	133.5	0.050	125	22.5	89	22	170	143.5	7	30	
	Beryllium	120.5	0.050	125	0	96	47	134	126.5	5	7	
	Cadmium	116.5	0.15	125	0.0165	93	65	106	122.5	5	7	
	Chromium	138	0.15	125	7	105	61	128	145.5	5	10	
	Cobalt	132.5	0.15	125	3.5	103	68	112	139.5	5	7	
	Copper	158.5	0.15	125	35.5	98	60	133	169	6	18	
	Lead	129	0.25	125	1.5	102	68	106	135.5	5	10	
	Molybdenum	134	0.25	125	0.5	107	67	107	140	4	14	
	Nickel	127.5	0.15	125	3.5	99	29	155	133.5	5	24	
	Selenium	118.5	0.25	125	0	95	51	114	122	3	13	
	Silver	120	0.050	125	0	96	45	111	145	19	14	R
	Thallium	133.5	0.25	125	0.422	106	60	111	140	5	6	
	Vanadium	147	0.15	125	13.5	107	71	116	155	5	12	
	Zinc	151.5	0.50	125	35	93	47	128	162	7	30	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

Initials:

KJ

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

M - Not Monitored. Highly Reactive

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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	047528-002A	Batch ID:	1909	Test Name ICP METALS		Units	mg/L	Analysis Date:	11/2/00	Prep Date	11/2/00	
MS						SeqNo.	66901					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		4.83	0.0050	5	0	97	67	116	0			
Arsenic		4.65	0.0050	5	0	93	68	112	0			
Barium		5.61	0.0010	5	0.02	112	68	115	0			
Beryllium		4.64	0.0010	5	0	93	71	128	0			
Cadmium		5.01	0.0030	5	0.00064	100	64	107	0			
Chromium		4.82	0.0030	5	0	96	66	111	0			
Cobalt		4.71	0.0030	5	0	94	65	113	0			
Copper		5.54	0.0030	5	0	111	64	121	0			B
Lead		4.91	0.0050	5	0.0019	98	65	110	0			
Molybdenum		4.9	0.0050	5	0.00521	98	67	120	0			B
Nickel		4.97	0.0030	5	0	99	62	108	0			
Selenium		4.37	0.0050	5	0.00292	87	54	115	0			B
Silver		4.97	0.0010	5	0	99	43	113	0			
Thallium		5.08	0.0050	5	0	102	68	109	0			B
Vanadium		4.96	0.0030	5	0.00361	99	72	111	0			
Zinc		4.67	0.010	5	0.0078	93	60	112	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

Initials R.P.

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

;

B - Analyte detected in the associated Method Blank

M - Not Monitored. Highly Reactive



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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID	047528-002A	Batch ID:	1909	Test Name ICP METALS				Units	mg/L	Analysis Date:	11/2/00	Prep Date	11/2/00
MSD							SeqNo:	66902					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual	
Antimony		4.7	0.0050	5	0	94	67	116	4.83	3	11		
Arsenic		4.52	0.0050	5	0	90	68	112	4.65	3	9		
Barium		5.48	0.0010	5	0.02	109	68	115	5.61	2	12		
Beryllium		4.52	0.0010	5	0	90	71	128	4.64	3	11		
Cadmium		4.9	0.0030	5	0.00064	98	64	107	5.01	2	10		
Chromium		4.7	0.0030	5	0	94	66	111	4.82	3	9		
Cobalt		4.6	0.0030	5	0	92	65	113	4.71	2	8		
Copper		5.41	0.0030	5	0	108	64	121	5.54	2	11	B	
Lead		4.8	0.0050	5	0.0019	96	65	110	4.91	2	9		
Molybdenum		4.81	0.0050	5	0.00521	96	67	120	4.9	2	17	B	
Nickel		4.85	0.0030	5	0	97	62	108	4.97	2	10		
Selenium		4.24	0.0050	5	0.00292	85	54	115	4.37	3	10	B	
Silver		4.85	0.0010	5	0	97	43	113	4.97	2	13		
Thallium		4.94	0.0050	5	0	99	68	109	5.08	3	9	B	
Vanadium		4.84	0.0030	5	0.00361	97	72	111	4.96	2	10		
Zinc		4.57	0.010	5	0.0078	91	60	112	4.67	2	16		

Sample ID 047615-001A Batch ID: 1807 Test Name DIESEL RANGE ORGANICS BY GC/FID Units mg/Kg Analysis Date. 10/30/00 Prep Date 10/26/00
 MS SeqNo: 65494
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPD Limit Qual
 Diesel 1088 10 1000 0 109 50 150 0

Sample ID	047615-001A	Batch ID:	1807	Test Name	DIESEL RANGE ORGANICS BY GC/FID	Units	mg/Kg	Analysis Date:	10/30/00	Prep Date	10/26/00
MSD						SeqNo:	65495				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit
Diesel		1121	10	1000	0	112	50	150	1088	3	40

Identifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- M - Not Monitored, Highly Reactive

Initials:

1



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Date: 20 Nov 00

QC SUMMARY REPORT

Sample Matrix Spike

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

Sample ID	Batch ID:	Test Name	Units	Analysis Date:	Prep Date
001026BLKW1	I008G20W194	GASOLINE RANGE ORGANICS BY GC/FID	mg/L	10/26/2000	
MS			SeqNo:	63929	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
GRO	1.02	0.20	1	0	102
			LowLimit	HighLimit	RPD Ref Val
			50	119	0
Sample ID: 001026BLKW1	Batch ID: I008G20W194	Test Name GASOLINE RANGE ORGANICS BY GC/FID	Units mg/L	Analysis Date: 10/26/2000	Prep Date
MSD			SeqNo:	63930	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
GRO	1.03	0.20	1	0	103
			LowLimit	HighLimit	RPD Ref Val
			50	119	1.02
					1
					20

Qualifiers:
ND - Not Detected at the Reporting Limit
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B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: J.A.L.

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Date: 10 Nov 00

QC SUMMARY REPORT

Sample Matrix Spike

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

Sample ID: 047606-004A Batch ID: E008G20S275		Test Name GASOLINE RANGE ORGANICS BY GC/FID		Units mg/Kg		Analysis Date: 10/26/2000		Prep Date			
MS				SeqNo:		64018					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.382	1.0	5	0	88	31	113	0			
Sample ID: 047606-004A Batch ID: E008G20S275		Test Name GASOLINE RANGE ORGANICS BY GC/FID		Units mg/Kg		Analysis Date: 10/26/2000		Prep Date			
MSD				SeqNo:		64019					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0	5	0	0	31	113	4.382	0	26	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: *JES*



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Date: 10 Nov 00

QC SUMMARY REPORT

Sample Matrix Spike

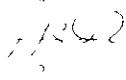
CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

Sample ID: 047606-007A Batch ID: P00VOCS290		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/Kg Analysis Date: 10/26/2000 Prep Date									
MS		SeqNo: 64038									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPD	RPDLimit	Qual
1,1-Dichloroethene	123.2	5.0	100	0	123	51	156	0			
Benzene	95.52	5.0	100	0	96	64	146	0			
Chlorobenzene	90.18	5.0	100	0	90	51	142	0			
Toluene	97.87	5.0	100	0	98	68	145	0			
Trichloroethene	174	5.0	100	0	174	54	141	0			S

Sample ID: 047606-007A Batch ID: P00VOCS290		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/Kg Analysis Date: 10/26/2000 Prep Date									
MSD		SeqNo: 64039									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimil	HighLimit	RPD Ref Val	RPD	RPDLimit	Qual
1,1-Dichloroethene	133.7	5.0	100	0	134	51	156	123.2	8	24	
Benzene	105.6	5.0	100	0	106	64	146	95.52	10	21	
Chlorobenzene	101.1	5.0	100	0	101	51	142	90.18	14	23	
Toluene	106.1	5.0	100	0	106	68	145	97.87	8	23	
Trichloroethene	189.4	5.0	100	0	189	54	141	174	8	24	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: 

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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 001030BLKW1 Batch ID: Q00VOCW220 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 10/30/00 Prep Date

MS		SeqNo: 65629									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	108.5	5.0	100	0	108	71	120	0			
Benzene	107	5.0	100	0	107	82	122	0			
Chlorobenzene	95.56	5.0	100	0	96	81	121	0			
Toluene	104.3	5.0	100	0	104	81	125	0			
Trichloroethene	103.6	5.0	100	0	104	80	123	0			

Sample ID 001030BLKW1 Batch ID: Q00VOCW220 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 10/30/00 Prep Date

MSD		SeqNo: 65630									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	104.4	5.0	100	0	104	71	120	108.5	4	21	
Benzene	100	5.0	100	0	100	82	122	107	7	19	
Chlorobenzene	91.78	5.0	100	0	92	81	121	95.56	4	18	
Toluene	98.33	5.0	100	0	98	81	125	104.3	6	20	
Trichloroethene	99.85	5.0	100	0	100	80	123	103.6	4	20	

Sample ID 001027BLKW1 Batch ID: T00VOCW081 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 10/27/00 Prep Date

MS		SeqNo: 65109									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	105.9	5.0	100	0	106	71	120	0			
Benzene	110.5	5.0	100	0	111	82	122	0			
Chlorobenzene	100.5	5.0	100	0	101	81	121	0			
Toluene	115.4	5.0	100	0	115	81	125	0			
Trichloroethene	109.3	5.0	100	0	109	80	123	0			

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 M - Not Monitored. Highly Reactive

Initials: *rf*

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	001027BLKW1	Batch ID:	T00VOCW081	Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L				Analysis Date	10/27/00	Prep Date	
MS				SeqNo: 65110							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	VarPD	RPD Limit	Qual
1,1-Dichloroethene	102.9	5.0	100	0	103	71	120	0			
Benzene	112.2	5.0	100	0	112	82	122	0			
Chlorobenzene	101.2	5.0	100	0	101	81	121	0			
Toluene	116.1	5.0	100	0	116	81	125	0			
Trichloroethene	111.6	5.0	100	0	112	80	123	0			

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 M - Not Monitored. Highly Reactive

Initials:



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Date: 10/26/00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: 001026LCSS1 Batch ID: P00VOCS290		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/Kg Analysis Date: 10/26/2000 Prep Date									
LCS		SeqNo: 64020									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPD	RPDLimit	Qual
1,1,1-Trichloroethane	111.4	5.0	100	0	111	30	150	0			
1,1,2,2-Tetrachloroethane	96.96	5.0	100	0	97	30	150	0			
1,1,2-Trichloroethane	108.4	5.0	100	0	108	30	150	0			
1,1-Dichloroethane	104.8	5.0	100	0	105	30	150	0			
1,1-Dichloroethene	106	5.0	100	0	106	30	150	0			
1,2-Dichlorobenzene	104.2	5.0	100	0	104	30	150	0			
1,2-Dichloroethane	111.6	5.0	100	0	112	30	150	0			
1,2-Dichloropropane	108	5.0	100	0	108	30	150	0			
1,3-Dichlorobenzene	105	5.0	100	0	105	30	150	0			
1,4-Dichlorobenzene	106.2	5.0	100	0	106	30	150	0			
Benzene	108.6	5.0	100	0	109	30	150	0			
Bromodichloromethane	107.6	5.0	100	0	108	30	150	0			
Bromoform	118.4	5.0	100	0	118	30	150	0			
Bromomethane	96.54	5.0	100	0	97	30	150	0			
Carbon tetrachloride	119.9	5.0	100	0	120	30	150	0			
Chlorobenzene	109.6	5.0	100	0	110	30	150	0			
Chloroethane	102.2	5.0	100	0	102	30	150	0			
Chloroform	102.8	5.0	100	0	103	30	150	0			
Chloromethane	99.7	5.0	100	0	100	30	150	0			
cis-1,3-Dichloropropene	102.3	5.0	100	0	102	30	150	0			
Ethylbenzene	105.2	5.0	100	0	105	30	150	0			
m,p-Xylene	214.9	5.0	200	0	107	30	150	0			
Methylene chloride	99.48	5.0	100	0	99	30	150	0			
o-Xylene	105.4	5.0	100	0	105	30	150	0			
Tetrachloroethene	116	5.0	100	0	116	30	150	0			
Toluene	110.2	5.0	100	0	110	30	150	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: *[Signature]*



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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

trans-1,2-Dichloroethene	106.5	5.0	100	0	107	30	150	0
Trichloroethene	113.4	5.0	100	0	113	30	150	0
Trichlorofluoromethane	112.4	5.0	100	0	112	30	150	0
Vinyl chloride	100.2	5.0	100	0	100	30	150	0

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
M - Not Monitored. Highly Reactive

Initials: *JFJ*

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Date: 08 Dec-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID: 001027BLKW1 Batch ID: T00VOCW081		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L						Analysis Date	10/27/2000	Prep Date	
MBLK								SeqNo:	65111		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropene	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	50									
2-Chloroethyl vinyl ether	ND	5.0									
2-Chlorotoluene	ND	5.0									
2-Hexanone	ND	50									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

Initials: 

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Tel: 562 989-4045

Fax: 562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

4-Methyl-2-pentanone	ND	50
Acetone	ND	50
Acrolein	ND	50
Acrylonitrile	ND	50
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	5.0
Bromodichloromethane	ND	5.0
Bromoform	ND	5.0
Bromomethane	ND	5.0
Carbon disulfide	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Cyclohexanone	ND	5.0
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
Ethyl Acetate	ND	50
Ethyl Ether	ND	50
Ethylbenzene	ND	5.0
Freon-113	ND	5.0
Hexachlorobutadiene	ND	5.0
Iodomethane	ND	5.0
Isopropylbenzene	ND	5.0
m,p-Xylene	ND	5.0
Methylene chloride	ND	5.0
MTBE	ND	5.0
n-Butylbenzene	ND	5.0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

DO - Surrogate Diluted Out

M - Not Monitored. Highly Reactive

S - Spike/Surrogate outside of limits due to matrix interference

Initials: *JRF*



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CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

n-Propylbenzene	ND	5.0
Naphthalene	ND	5.0
o-Xylene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	5.0
Vinyl chloride	ND	5.0
Xylenes, Total	ND	5.0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored. Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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Date: 08-Dec-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

Sample ID: 001026BLKS1	Batch ID: E008G20S275	Test Name: GASOLINE RANGE ORGANICS BY GC/FID	Units: mg/Kg	Analysis Date: 10/26/2000	Prep Date
MBLK			SeqNo:	64015	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
GRO	ND		1.0		

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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B - Analyte detected in the associated Method Blank
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S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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Advanced Technology Laboratories

Date: 08 Dec 00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Method Blank

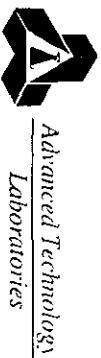
Sample ID: 001026BLKW1 Batch ID: I008G20W194		Test Name GASOLINE RANGE ORGANICS BY GC/FID				Units mg/L	Analysis Date	10/26/2000	Prep Date			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
GRO		ND	0.20									
Sample ID: 001026BLKW1 Batch ID: I008G20W194		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/PID				Units µg/L	Analysis Date	10/26/2000	Prep Date			
MBLK						SeqNo:	63914					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
Benzene		ND	0.50									
Ethylbenzene		ND	0.50									
m,p-Xylene		ND	0.50									
MTBE		ND	0.50									
o-Xylene		ND	0.50									
Toluene		ND	0.50									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored. Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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Tel: 562 989-4045

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Advanced Technology Laboratories

Date: 08-Dec-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT
Method Blank

Sample ID: MBLK	Batch ID: 1807	Test Name DIESEL RANGE ORGANICS BY GC/FID			Units mg/Kg	Analysis Date 10/30/2000	Prep Date 10/26/2000				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND		10								

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: 

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Advanced Technology Laboratories

Date: 08 Dec 00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 047615-001A Batch ID: 1807		Test Name DIESEL RANGE ORGANICS BY GC/FID				Units mg/Kg		Analysis Date	10/30/2000	Prep Date	10/26/2000
MS						SeqNo:		65494			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1088	10	1000	0	109	50	150	0			
Sample ID: 047615-001A Batch ID: 1807		Test Name DIESEL RANGE ORGANICS BY GC/FID				Units mg/Kg		Analysis Date	10/30/2000	Prep Date	10/26/2000
MSD						SeqNo:		65495			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1121	10	1000	0	112	50	150	1088	3	40	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials.

Advanced Technology Laboratories

Date: 08-Dec-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: 001027LCSW1 Batch ID: T00VOCW081		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L						Analysis Date	10/27/2000	Prep Date	
LCS		SeqNo: 65107									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
1,1,1-Trichloroethane	108.1	5.0	100	0	108	30	150	0	0		
1,1,2,2-Tetrachloroethane	79.42	5.0	100	0	79	30	150	0	0		
1,1,2-Trichloroethane	108	5.0	100	0	108	30	150	0	0		
1,1-Dichloroethane	104.1	5.0	100	0	104	30	150	0	0		
1,1-Dichloroethene	102.7	5.0	100	0	103	30	150	0	0		
1,2-Dichlorobenzene	93.49	5.0	100	0	93	30	150	0	0		
1,2-Dichloroethane	104.3	5.0	100	0	104	30	150	0	0		
1,2-Dichloropropane	111.3	5.0	100	0	111	30	150	0	0		
1,3-Dichlorobenzene	91.2	5.0	100	0	91	30	150	0	0		
1,3-Dichloropropane	99.48	5.0	100	0	99	30	150	0	0		
1,4-Dichlorobenzene	89.2	5.0	100	0	89	30	150	0	0		
2-Chloroethyl vinyl ether	377	5.0	100	0	377	30	150	0	0		S
2-Chlorotoluene	86.45	5.0	100	0	86	30	150	0	0		
Benzene	109.8	5.0	100	0	110	30	150	0	0		
Bromodichloromethane	111.2	5.0	100	0	111	30	150	0	0		
Bromoform	115.2	5.0	100	0	115	30	150	0	0		
Bromomethane	96.69	5.0	100	0	97	30	150	0	0		
Carbon tetrachloride	114	5.0	100	0	114	30	150	0	0		
Chlorobenzene	100.1	5.0	100	0	100	30	150	0	0		
Chloroethane	103.9	5.0	100	0	104	30	150	0	0		
Chloroform	103.9	5.0	100	0	104	30	150	0	0		
Chloromethane	96.2	5.0	100	0	96	30	150	0	0		
cis-1,3-Dichloropropene	112.3	5.0	100	0	112	30	150	0	0		
Dibromomethane	110.9	5.0	100	0	111	30	150	0	0		
Dichlorodifluoromethane	106.7	5.0	100	0	107	30	150	0	0		
Ethylbenzene	106.8	5.0	100	0	107	30	150	0	0		
m,p-Xylene	221.1	5.0	200	0	111	30	150	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: 

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Methylene chloride	102.7	5.0	100	0	103	30	150	0
MTBE	104.5	5.0	100	0	104	30	150	0
o-Xylene	113	5.0	100	0	113	30	150	0
Tetrachloroethene	101.1	5.0	100	0	101	30	150	0
Toluene	115	5.0	100	0	115	30	150	0
trans-1,2-Dichloroethene	104.6	5.0	100	0	105	30	150	0
trans-1,3-Dichloropropene	115	5.0	100	0	115	30	150	0
Trichloroethene	108.3	5.0	100	0	108	30	150	0
Trichlorofluoromethane	98.78	5.0	100	0	99	30	150	0
Vinyl chloride	101	5.0	100	0	101	30	150	0
Xylenes, Total	ND	5.0	300	0	0	30	150	0

S

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored. Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: 



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Advanced Technology Laboratories

Date: 10/26/00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: 001026LCSW1 Batch ID: I008G20W194		Test Name GASOLINE RANGE ORGANICS BY GC/FID				Units mg/L	Analysis Date	10/26/2000	Prep Date		
LCS						SeqNo.	63931				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
GRO	0.97	0.20	1	0	97	64	107	0	0		
Sample ID: 001026LCSW1 Batch ID: I008G20W194		Test Name VOLATILE ORGANIC COMPOUNDS BY GC/PID				Units µg/L	Analysis Date	10/26/2000	Prep Date		
LCS						SeqNo:	63922				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDI limit	Qual
Benzene	5.872	0.50	5.5	0	107	58	131	0	0		
Ethylbenzene	9.614	0.50	8.6	0	112	58	131	0	0		
m,p-Xylene	37.5	0.50	35	0	107	58	131	0	0		
MTBE	101.6	0.50	101	0	101	58	131	0	0		
o-Xylene	13.43	0.50	12	0	112	58	131	0	0		
Toluene	31.56	0.50	30	0	105	58	131	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored. Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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Advanced Technology Laboratories

Date: 08-Dec-00

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: 001030LCSW1 Batch ID: Q00VOCW220

Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date 10/30/2000 Prep Date

LCS

SeqNo: 65628

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	103.1	5.0	100	0	103	30	150	0	0	0	
1,1,2,2-Tetrachloroethane	73.6	5.0	100	0	74	30	150	0	0	0	
1,1,2-Trichloroethane	96.45	5.0	100	0	96	30	150	0	0	0	
1,1-Dichloroethane	98.51	5.0	100	0	99	30	150	0	0	0	
1,1-Dichloroethene	101.3	5.0	100	0	101	30	150	0	0	0	
1,2-Dichlorobenzene	71.55	5.0	100	0	72	30	150	0	0	0	
1,2-Dichloroethane	98.03	5.0	100	0	98	30	150	0	0	0	
1,2-Dichloropropane	100.2	5.0	100	0	100	30	150	0	0	0	
1,3-Dichlorobenzene	73.67	5.0	100	0	74	30	150	0	0	0	
1,3-Dichloropropane	87.82	5.0	100	0	88	30	150	0	0	0	
1,4-Dichlorobenzene	73.19	5.0	100	0	73	30	150	0	0	0	
2-Chlorotoluene	72.19	5.0	100	0	72	30	150	0	0	0	
Benzene	96.58	5.0	100	0	97	30	150	0	0	0	
Bromodichloromethane	106.1	5.0	100	0	106	30	150	0	0	0	
Bromoform	97.99	5.0	100	0	98	30	150	0	0	0	
Bromomethane	122	5.0	100	0	122	30	150	0	0	0	
Carbon tetrachloride	105	5.0	100	0	105	30	150	0	0	0	
Chlorobenzene	87.46	5.0	100	0	87	30	150	0	0	0	
Chloroethane	106.3	5.0	100	0	106	30	150	0	0	0	
Chloroform	101.8	5.0	100	0	102	30	150	0	0	0	
Chloromethane	112.6	5.0	100	0	113	30	150	0	0	0	
Dibromomethane	85.07	5.0	100	0	85	30	150	0	0	0	
Dichlorodifluoromethane	106.7	5.0	100	0	107	30	150	0	0	0	
Ethylbenzene	86.88	5.0	100	0	87	30	150	0	0	0	
m,p-Xylene	176.4	5.0	200	0	88	30	150	0	0	0	
Methylene chloride	98.03	5.0	100	0	98	30	150	0	0	0	
o-Xylene	88.32	5.0	100	0	88	30	150	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored, Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: 



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1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4040 Fax: 562 989-4040

CLIENT: Levine-Fricke-Recon
Work Order: 047606
Project: Harsch - 7893.00-000

QC SUMMARY REPORT

Laboratory Control Spike - generic

Tetrachloroethene	84.55	5.0	100	0	85	30	150	0
Toluene	94.75	5.0	100	0	95	30	150	0
trans-1,2-Dichloroethene	90.82	5.0	100	0	91	30	150	0
Trichloroethene	93.49	5.0	100	0	93	30	150	0
Trichlorofluoromethane	104.7	5.0	100	0	105	30	150	0
Vinyl chloride	103.9	5.0	100	0	104	30	150	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
M - Not Monitored Highly Reactive
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: *JF* *SL*



Sequoia Analytical

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November 29, 2000

Peter Weiler

LFR Levine-Fricke - Emeryville (Shell)
1900 Powell St, 12th Floor
Emeryville, CA 94608

RE: - EQUIVA - 7893.01.000

Dear LFR Levine-Fricke - Emeryville (Shell)

Enclosed are the results of analyses for sample(s) received by the laboratory on October 25, 2000.
If you have any questions concerning this report, please feel free to contact me.

Sincerely,



for Wayne Stevenson
Client Services Manager



**Sequoia
Analytical**

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LFR Levine-Fricke - Emeryville (Shell)
1900 Powell St, 12th Floor
Emeryville CA, 94608

Project: -
Project Number: 7893.01-000
Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ES-1	MJJ0767-01	Soil	10/23/00 00:00	10/25/00 16:40
ES-2	MJJ0767-02	Soil	10/23/00 00:00	10/25/00 16:40
ES-3	MJJ0767-03	Soil	10/23/00 00:00	10/25/00 16:40
ES-4	MJJ0767-04	Soil	10/23/00 00:00	10/25/00 16:40

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

 for
Wayne Stevenson, Client Services Manager



**Sequoia
Analytical**

885 Jarvis Drive
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LFR Levine-Fricke - Emeryville (Shell)
1900 Powell St, 12th Floor
Emeryville CA, 94608

Project: -
Project Number: 7893.01-000
Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-1 (MJJ0767-01) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Diesel Range Hydrocarbons	ND	1.00	mg/kg	1	OK02007	11/02/00	11/02/00	DHS LUFT	
Surrogate: n-Pentacosane		95.8 %		50-150	"	"	"	"	



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Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ES-2 (MJJ0767-02) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Mercury	0.00580	0.00343	mg/kg	1	OK01015	11/01/00	11/02/00	EPA 7471A	
Antimony	ND	5.20	"	"	OK03009	11/03/00	11/07/00	EPA 6010A	"
Arsenic	6.60	5.20	"	"	"	"	"	"	"
Barium	40.3	5.20	"	"	"	"	"	"	"
Beryllium	ND	0.520	"	"	"	"	"	"	"
Cadmium	ND	0.520	"	"	"	"	"	"	"
Chromium	13.7	0.520	"	"	"	"	"	"	"
Cobalt	ND	2.60	"	"	"	"	"	"	"
Copper	2.90	0.520	"	"	"	"	"	"	"
Lead	ND	5.20	"	"	"	"	"	"	"
Molybdenum	ND	2.60	"	"	"	"	"	"	"
Nickel	9.75	2.60	"	"	"	"	"	"	"
Selenium	ND	5.20	"	"	"	"	"	"	"
Silver	ND	0.520	"	"	"	"	"	"	"
Thallium	ND	5.20	"	"	"	"	"	"	"
Vanadium	13.4	2.60	"	"	"	"	"	"	"
Zinc	49.8	0.520	"	"	"	"	"	"	"



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Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

Total Purgeable Hydrocarbons by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ES-1 (MJJ0767-01) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Purgeable Hydrocarbons as Gasoline	ND	1.00	mg/kg	1	0100160	11/02/00	11/02/00	DHS LUFT	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		109 %	60.0-140		"	"	"	"	



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Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

BTEX by DHS LUFT
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ES-4 (MJJ0767-04) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Benzene	ND	0.00500	mg/kg	1	0100160	11/02/00	11/02/00	DHS LUFT	"
Toluene	ND	0.00500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	"
Surrogate: <i>a,a,a</i> -Trifluorotoluene		92.5 %	60 0-140		"	"	"	"	"



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Reported:
11/18/00 13:17

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ES-3 (MJJ0767-03) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Benzene	ND	100	ug/kg	1	0110009	11/01/00	11/02/00	EPA 8260B	"
Bromobenzene	ND	100	"	"	"	"	"	"	"
Bromochloromethane	ND	100	"	"	"	"	"	"	"
Bromodichloromethane	ND	100	"	"	"	"	"	"	"
Bromoform	ND	100	"	"	"	"	"	"	"
Bromomethane	ND	500	"	"	"	"	"	"	"
1-Butylbenzene	ND	100	"	"	"	"	"	"	"
sec-Butylbenzene	ND	100	"	"	"	"	"	"	"
tert-Butylbenzene	ND	100	"	"	"	"	"	"	"
Carbon tetrachloride	ND	100	"	"	"	"	"	"	"
Chlorobenzene	ND	100	"	"	"	"	"	"	"
Chloroethane	ND	500	"	"	"	"	"	"	"
Chloroform	ND	100	"	"	"	"	"	"	"
Chloromethane	ND	500	"	"	"	"	"	"	"
2-Chlorotoluene	ND	100	"	"	"	"	"	"	"
4-Chlorotoluene	ND	100	"	"	"	"	"	"	"
Dibromochloromethane	ND	100	"	"	"	"	"	"	"
1,2-Dibromoethane	ND	100	"	"	"	"	"	"	"
Dibromomethane	ND	100	"	"	"	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	500	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	100	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	100	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	"
Dichlorodifluoromethane	ND	500	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	100	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	100	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	100	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	100	"	"	"	"	"	"	"
1,3-Dichloropropane	ND	100	"	"	"	"	"	"	"
2,2-Dichloropropane	ND	100	"	"	"	"	"	"	"
1,1-Dichloropropene	ND	100	"	"	"	"	"	"	"
Ethylbenzene	ND	100	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	100	"	"	"	"	"	"	"
Isopropylbenzene	ND	100	"	"	"	"	"	"	"
p-Isopropyltoluene	ND	100	"	"	"	"	"	"	"
Methylene chloride	ND	500	"	"	"	"	"	"	"



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Reported:
11/18/00 13:17

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ES-3 (MJJ0767-03) Soil Sampled: 10/23/00 00:00 Received: 10/25/00 16:40									
Naphthalene	ND	.500	ug/kg	1	0110009	11/01/00	11/02/00	EPA 8260B	"
n-Propylbenzene	ND	100	"	"	"	"	"	"	"
Styrene	ND	100	"	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	"
Tetrachloroethene	ND	100	"	"	"	"	"	"	"
Toluene	ND	100	"	"	"	"	"	"	"
1,2,3-Trichlorobenzene	ND	100	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	100	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	100	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	100	"	"	"	"	"	"	"
Trichloroethene	ND	100	"	"	"	"	"	"	"
Trichlorofluoromethane	ND	500	"	"	"	"	"	"	"
1,2,3-Trichloropropane	ND	100	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	100	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	100	"	"	"	"	"	"	"
Vinyl chloride	ND	500	"	"	"	"	"	"	"
Total Xylenes	ND	100	"	"	"	"	"	"	"
Surrogate 1,2-Dichloroethane-d4	94.8 %	70.0-121	"	"	"	"	"	"	"
Surrogate: Toluene-d8	82.4 %	81.0-117	"	"	"	"	"	"	"
Surrogate 4-BFB	81.6 %	74.0-121	"	"	"	"	"	"	"



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Reported:
11/18/00 13:17

Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K02007 - EPA 3550A										
Blank (0K02007-BLK1)										
Prepared & Analyzed: 11/02/00										
Diesel Range Hydrocarbons	ND	1.00	mg/kg							
Surrogate: n-Pentacosane	1.70	"	"	1.67		102	50-150			
LCS (0K02007-BS1)										
Prepared & Analyzed: 11/02/00										
Diesel Range Hydrocarbons	15.1	1.00	mg/kg	16.7		90.4	60-140			
Surrogate: n-Pentacosane	1.50	"	"	1.67		89.8	50-150			
Matrix Spike (0K02007-MS1)										
Source: MJJ0732-01 Prepared & Analyzed: 11/02/00										
Diesel Range Hydrocarbons	21.8	1.00	mg/kg	16.7	10.2	69.5	50-150			
Surrogate: n-Pentacosane	2.00	"	"	1.67		120	50-150			
Matrix Spike Dup (0K02007-MSD1)										
Source: MJJ0732-01 Prepared & Analyzed: 11/02/00										
Diesel Range Hydrocarbons	17.5	1.00	mg/kg	16.7	10.2	43.7	50-150	21.9	50	Q-01
Surrogate: n-Pentacosane	1.50	"	"	1.67		89.8	50-150			



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Project: -
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Reported:
 11/18/00 13:17

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K01015 - EPA 7471A										
Blank (0K01015-BLK1)										
Mercury	ND	0.00400	mg/kg							
LCS (0K01015-BS1)	0.669	0.00400	mg/kg	0.667	100	80-120				
Matrix Spike (0K01015-MS1)		Source: MJJ0767-02								
Mercury	0.632	0.00400	mg/kg	0.625	0.00580	100	75-125			
Matrix Spike Dup (0K01015-MSD1)		Source: MJJ0767-02								
Mercury	0.747	0.00400	mg/kg	0.741	0.00580	100	75-125	16.7	20	

Batch 0K03009 - EPA 3050B

Blank (0K03009-BLK1)										
Antimony	ND	5.00	mg/kg							
Arsenic	ND	5.00	"							
Barium	ND	5.00	"							
Beryllium	ND	0.500	"							
Cadmium	ND	0.500	"							
Chromium	ND	0.500	"							
Cobalt	ND	2.50	"							
Copper	ND	0.500	"							
Lead	ND	5.00	"							
Molybdenum	ND	2.50	"							
Nickel	ND	2.50	"							
Selenium	ND	5.00	"							
Silver	ND	0.500	"							
Thallium	ND	5.00	"							
Vanadium	ND	2.50	"							
Zinc	0.575	0.500	"							

Q-18

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K03009 - EPA 3050B										
QCS (0K03009-BS1)										
Prepared: 11/03/00 Analyzed: 11/07/00										
Antimony	53.0	5.00	mg/kg	50.0	106	80-120				
Arsenic	51.8	5.00	"	50.0	104	80-120				
Barium	52.5	5.00	"	50.0	105	80-120				
Beryllium	54.7	0.500	"	50.0	109	80-120				
Cadmium	51.8	0.500	"	50.0	104	80-120				
Chromium	53.3	0.500	"	50.0	107	80-120				
Cobalt	54.4	2.50	"	50.0	109	80-120				
Copper	53.0	0.500	"	50.0	106	80-120				
Lead	52.7	5.00	"	50.0	105	80-120				
Molybdenum	53.9	2.50	"	50.0	108	80-120				
Nickel	52.4	2.50	"	50.0	105	80-120				
Selenium	51.5	5.00	"	50.0	103	80-120				
Silver	53.0	0.500	"	50.0	106	80-120				
Thallium	53.0	5.00	"	50.0	106	80-120				
Vanadium	53.8	2.50	"	50.0	108	80-120				
Zinc	51.8	0.500	"	50.0	104	80-120				
Matrix Spike (0K03009-MS1)										
Source: MJK0073-01 Prepared: 11/03/00 Analyzed: 11/07/00										
Antimony	13.7	4.68	mg/kg	46.7	ND	29.3	80-120			Q-02
Arsenic	95.5	4.68	"	46.7	38.3	122	80-120			Q-02
Barium	208	4.68	"	46.7	113	203	80-120			Q-02
Beryllium	51.3	0.468	"	46.7	ND	110	80-120			
Cadmium	46.8	0.468	"	46.7	ND	100	80-120			
Chromium	104	0.468	"	46.7	95.3	18.6	80-120			Q-02
Cobalt	63.5	2.34	"	46.7	16.1	101	80-120			
Copper	94.8	0.468	"	46.7	42.5	112	80-120			
Lead	56.4	4.68	"	46.7	10.5	98.3	80-120			
Molybdenum	44.0	2.34	"	46.7	ND	94.2	80-120			
Nickel	130	2.34	"	46.7	131	214	80-120			
Selenium	44.5	4.68	"	46.7	ND	95.3	80-120			
Silver	17.3	0.468	"	46.7	ND	1	80-120			
Thallium	89.6	4.68	"	46.7	37.4	112	80-120			
Vanadium	138	2.34	"	46.7	56.0	1	80-120			
Zinc	126	0.468	"	46.7	70.0	21	80-120			



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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 0K03009 - EPA 3050B										
Matrix Spike Dup (0K03009-MSD1)		Source: MJK0073-01		Prepared: 11/03/00	Analyzed: 11/07/00					
Antimony	14.6	5.20	mg/kg	52.1	ND	28.0	80-120	6.36	20	Q-02
Arsenic	86.4	5.20	"	52.1	38.3	92.3	80-120	10.0	20	
Barium	175	5.20	"	52.1	113	119	80-120	17.2	20	
Beryllium	53.7	0.520	"	52.1	ND	103	80-120	4.57	20	
Cadmium	49.4	0.520	"	52.1	ND	94.8	80-120	5.41	20	
Chromium	132	0.520	"	52.1	95.3	70.4	80-120	23.7	20	Q-02
Cobalt	66.4	2.60	"	52.1	16.1	96.5	80-120	4.46	20	
Copper	96.0	0.520	"	52.1	42.5	103	80-120	1.26	20	
Lead	58.4	5.20	"	52.1	10.5	91.9	80-120	3.48	20	
Molybdenum	47.7	2.60	"	52.1	ND	91.6	80-120	8.07	20	
Nickel	160	2.60	"	52.1	131	55.7	80-120	20.7	20	Q-02
Selenium	49.9	5.20	"	52.1	ND	95.8	80-120	11.4	20	
Silver	50.0	0.520	"	52.1	ND	96.0	80-120	5.55	20	
Thallium	84.7	5.20	"	52.1	37.4	90.8	80-120	5.62	20	
Vanadium	106	2.60	"	52.1	56.0	96.0	80-120	1.87	20	
Zinc	143	0.520	"	52.1	70.0	140	80-120	12.6	20	Q-02



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Total Purgeable Hydrocarbons by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100160 - EPA 5030B [P/T]										
Blank (0100160-BLK1)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.195 1.00 mg/kg										
Prepared & Analyzed: 10/31/00										
Blank (0100160-BLK2)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.169 1.00 mg/kg										
Prepared: 11/01/00 Analyzed: 11/02/00										
Blank (0100160-BLK3)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.199 1.00 mg/kg										
Prepared: 11/02/00 Analyzed: 11/03/00										
Blank (0100160-BLK4)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.242 1.00 mg/kg										
Prepared: 11/03/00 Analyzed: 11/04/00										
LCS (0100160-BS1)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.191 mg/kg										
Prepared & Analyzed: 10/31/00										
0.200 95.5 60.0-140										
LCS (0100160-BS3)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
4.82 0.210 1.00 mg/kg										
Prepared: 10/31/00 Analyzed: 11/01/00										
0.200 96.4 70.0-130										
LCS (0100160-BS4)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
ND 0.155 mg/kg										
Prepared: 11/01/00 Analyzed: 11/02/00										
0.200 77.5 60.0-140										
LCS (0100160-BS5)										
Purgeable Hydrocarbons as Gasoline										
Surrogate: <i>a,a,a-Trifluorotoluene</i>										
5.53 0.214 1.00 mg/kg										
Prepared: 11/01/00 Analyzed: 11/02/00										
5.00 111 70.0-130										
0.200 107 60.0-140										



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Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

BTEX by DHS LUFT - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100160 - EPA 5030B [P/T]										
Blank (0100160-BLK1)										
Prepared & Analyzed: 10/31/00										
Benzene	ND	0.00500	mg/kg							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.195		"	0.200		97.5	60.0-140			
Blank (0100160-BLK2)										
Prepared: 11/01/00 Analyzed: 11/02/00										
Benzene	ND	0.00500	mg/kg							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.169		"	0.200		84.5	60.0-140			
Blank (0100160-BLK3)										
Prepared: 11/02/00 Analyzed: 11/03/00										
Benzene	ND	0.00500	mg/kg							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.199		"	0.200		99.5	60.0-140			
Blank (0100160-BLK4)										
Prepared: 11/03/00 Analyzed: 11/04/00										
Benzene	ND	0.00500	mg/kg							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.242		"	0.200		121	60.0-140			
LCS (0100160-BS1)										
Prepared & Analyzed: 10/31/00										
Benzene	0.230	0.00500	mg/kg	0.200		115	70.0-130			
Toluene	0.211	0.00500	"	0.200		105	70.0-130			
Ethylbenzene	0.211	0.00500	"	0.200		169	70.0-130			
Xylenes (total)	0.633	0.00500	"	0.600		195	70.0-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.9		"	0.200		95.5	60.0-140			

Sequoia Analytical

LFR Levine-Fricke - Emeryville (Shell)
 1900 Powell St, 12th Floor
 Emeryville CA, 94608

Project: -
 Project Number: 7893.01-000
 Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
 11/18/00 13:17

BTEX by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100160 - EPA 5030B [P/T]										
LCS (0100160-BS3)					Prepared: 10/31/00	Analyzed: 11/01/00				
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.210		mg/kg		0.200		105	60.0-140		
LCS (0100160-BS4)					Prepared: 11/01/00	Analyzed: 11/02/00				
Benzene	0.192	0.00500	mg/kg	0.200		96.0	70.0-130			
Toluene	0.177	0.00500	"	0.200		88.5	70.0-130			
Ethylbenzene	0.181	0.00500	"	0.200		90.5	70.0-130			
Xylenes (total)	0.524	0.00500	"	0.600		87.3	70.0-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.155		"	0.200		77.5	60.0-140			
LCS (0100160-BS5)					Prepared: 11/01/00	Analyzed: 11/04/00				
Benzene	ND	0.00500	mg/kg				70.0-130			
Toluene	ND	0.00500	"				70.0-130			
Ethylbenzene	ND	0.00500	"				70.0-130			
Xylenes (total)	ND	0.00500	"				70.0-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.214		"	0.200		107	60.0-140			
LCS (0100160-BS6)					Prepared: 11/02/00	Analyzed: 11/03/00				
Benzene	0.186	0.00500	mg/kg	0.200		93.0	70.0-130			
Toluene	0.184	0.00500	"	0.200		92.0	70.0-130			
Ethylbenzene	0.189	0.00500	"	0.200		94.5	70.0-130			
Xylenes (total)	0.549	0.00500	"	0.600		91.5	70.0-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.191		"	0.200		95.5	60.0-140			
LCS (0100160-BST7)					Prepared: 11/02/00	Analyzed: 11/03/00				
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.206		mg/kg	0.200		103	60.0-140			
LCS (0100160-BS8)					Prepared: 11/03/00	Analyzed: 11/04/00				
Benzene	0.234	0.00500	mg/kg	0.200		117	70.0-130			
Toluene	0.215	0.00500	"	0.200		108	70.0-130			
Ethylbenzene	0.221	0.00500	"	0.200		110	70.0-130			
Xylenes (total)	0.635	0.00500	"	0.600		115	70.0-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.225		"	0.200		117	60.0-140			



Sequoia Analytical

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LFR Levine-Fricke - Emeryville (Shell)
1900 Powell St, 12th Floor
Emeryville CA, 94608

Project: -
Project Number: 7893 01-000
Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

BTEX by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100160 - EPA 5030B [P/T]										
<i>LCS (0100160-BS9)</i>										
<i>Surrogate: a,a,a-Trifluorotoluene</i>										
	0.230		mg/kg	0.200		115	60.0-140			
<i>Matrix Spike (0100160-MS1)</i>										
<i>Benzene</i>	0.217	0.00500	mg/kg	0.200	ND	108	60.0-140			
<i>Toluene</i>	0.201	0.00500	"	0.200	ND	101	60.0-140			
<i>Ethylbenzene</i>	0.222	0.00500	"	0.200	ND	111	60.0-140			
<i>Xylenes (total)</i>	0.604	0.00500	"	0.600	ND	101	60.0-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.178		"	0.200		89.0	60.0-140			
<i>Matrix Spike Dup (0100160-MSD1)</i>										
<i>Benzene</i>	0.196	0.00500	mg/kg	0.200	ND	98.0	60.0-140	9.71	25.0	
<i>Toluene</i>	0.181	0.00500	"	0.200	ND	90.5	60.0-140	11.0	25.0	
<i>Ethylbenzene</i>	0.211	0.00500	"	0.200	ND	105	60.0-140	5.56	25.0	
<i>Xylenes (total)</i>	0.557	0.00500	"	0.600	ND	92.8	60.0-140	8.46	25.0	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.170		"	0.200		85.0	60.0-140			



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Emeryville CA, 94608

Project: -
Project Number: 7893.01-000
Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
11/18/00 13:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
Prepared: 11/01/00 Analyzed: 11/02/00										
Blank (0110009-BLK1)										
Benzene	ND	100	ug/kg							
Bromobenzene	ND	100	"							
Bromochloromethane	ND	100	"							
Bromodichloromethane	ND	100	"							
Bromoform	ND	100	"							
Bromomethane	ND	500	"							
2-Butylbenzene	ND	100	"							
sec-Butylbenzene	ND	100	"							
tert-Butylbenzene	ND	100	"							
Carbon tetrachloride	ND	100	"							
Chlorobenzene	ND	100	"							
Chloroethane	ND	500	"							
Chloroform	ND	100	"							
Chloromethane	ND	500	"							
2-Chlorotoluene	ND	100	"							
4-Chlorotoluene	ND	100	"							
Dibromochloromethane	ND	100	"							
1,2-Dibromoethane	ND	100	"							
Dibromomethane	ND	100	"							
1,2-Dibromo-3-chloropropane	ND	500	"							
1,2-Dichlorobenzene	ND	100	"							
1,3-Dichlorobenzene	ND	100	"							
1,4-Dichlorobenzene	ND	100	"							
Dichlorodifluoromethane	ND	500	"							
1,1-Dichloroethane	ND	100	"							
1,2-Dichloroethane	ND	100	"							
1,1-Dichloroethene	ND	100	"							
cis-1,2-Dichloroethene	ND	100	"							
trans-1,2-Dichloroethene	ND	100	"							
1,2-Dichloroethane, pure	ND	100	"							
1,3-Dichloropropane	ND	100	"							
2,2-Dichloropropane	ND	100	"							
1,1-Dichloropropene	ND	100	"							
Ethylbenzene	ND	100	"							



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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
Blank (0110009-BLK1)										
Prepared: 11/01/00 Analyzed: 11/02/00										
Hexachlorobutadiene	ND	100	ug/kg							
Isopropylbenzene	ND	100	"							
p-Isopropyltoluene	ND	100	"							
Methylene chloride	ND	500	"							
Naphthalene	ND	500	"							
n-Propylbenzene	ND	100	"							
Styrene	ND	100	"							
1,1,1,2-Tetrachloroethane	ND	100	"							
1,1,2,2-Tetrachloroethane	ND	100	"							
Tetrachloroethene	ND	100	"							
Toluene	ND	100	"							
1,2,3-Trichlorobenzene	ND	100	"							
1,2,4-Trichlorobenzene	ND	100	"							
1,1,1-Trichloroethane	ND	100	"							
1,1,2-Trichloroethane	ND	100	"							
Trichloroethene	ND	100	"							
Trichlorofluoromethane	ND	500	"							
1,2,3-Trichloropropane	ND	100	"							
1,2,4-Trimethylbenzene	ND	100	"							
1,3,5-Trimethylbenzene	ND	100	"							
Vinyl chloride	ND	500	"							
Total Xylenes	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	2670		"	2500	107	70.0-121				
Surrogate: Toluene-d8	2310		"	2500	92.4	81.0-117				
Surrogate: 4-BFB	2320		"	2500	92.8	74.0-121				
Blank (0110009-BLK2)										
Prepared & Analyzed: 11/02/00										
Benzene	ND	100	ug/kg							
Bromobenzene	ND	100	"							
Bromochloromethane	ND	100	"							
Bromodichloromethane	ND	100	"							
Bromoform	ND	100	"							
Bromomethane	ND	500	"							
n-Butylbenzene	ND	100	"							
sec-Butylbenzene	ND	100	"							



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Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
Blank (0110009-BLK2)					Prepared & Analyzed: 11/02/00					
m-Butylbenzene	ND	100	ug/kg							
Carbon tetrachloride	ND	100	"							
Chlorobenzene	ND	100	"							
Chloroethane	ND	500	"							
Chloroform	ND	100	"							
Chloromethane	ND	500	"							
<i>m</i> -Chlorotoluene	ND	100	"							
<i>p</i> -Chlorotoluene	ND	100	"							
Dibromochloromethane	ND	100	"							
1,2-Dibromoethane	ND	100	"							
Dibromomethane	ND	100	"							
1,2-Dibromo-3-chloropropane	ND	500	"							
1,2-Dichlorobenzene	ND	100	"							
1,3-Dichlorobenzene	ND	100	"							
1,4-Dichlorobenzene	ND	100	"							
Dichlorodifluoromethane	ND	500	"							
1,1-Dichloroethane	ND	100	"							
1,2-Dichloroethane	ND	100	"							
1,1-Dichloroethene	ND	100	"							
trans-1,2-Dichloroethene	ND	100	"							
1,2-Dichloropropene	ND	100	"							
1,3-Dichloropropene	ND	100	"							
2,2-Dichloropropene	ND	100	"							
1,1-Dichloropropene	ND	100	"							
Ethylbenzene	ND	100	"							
Hexachlorobutadiene	ND	100	"							
Isopropylbenzene	ND	100	"							
n-Isopropylbenzene	ND	100	"							
Methylene chloride	ND	5	"							
Naphthalene	ND	5	"							
n-Propylbenzene	ND	5	"							
Styrene	ND	100	"							
1,1,1,2-Tetrachloroethane	ND	100	"							

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Sequoia Analytical

LFR Levine-Fricke - Emeryville (Shell)
 1900 Powell St, 12th Floor
 Emeryville CA, 94608

Project: -
 Project Number: 7893.01-000
 Project Manager: LFR Levine-Fricke - Emeryville (Shell)

Reported:
 11/18/00 13:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B {P/T}										
Blank (0110009-BLK2) Prepared & Analyzed: 11/02/00										
1,1,2,2-Tetrachloroethane	ND	100	ug/kg							
Tetrachloroethene	ND	100	"							
Toluene	ND	100	"							
1,2,3-Trichlorobenzene	ND	100	"							
1,2,4-Trichlorobenzene	ND	100	"							
1,1,1-Trichloroethane	ND	100	"							
1,1,2-Trichloroethane	ND	100	"							
Trichloroethene	ND	100	"							
Trichlorofluoromethane	ND	500	"							
1,2,3-Trichloropropane	ND	100	"							
1,2,4-Trimethylbenzene	ND	100	"							
1,3,5-Trimethylbenzene	ND	100	"							
Vinyl chloride	ND	500	"							
Total Xylenes	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	2910		"	2500		116	70.0-121			
Surrogate: Toluene-d8	2460		"	2500		98.4	81.0-117			
Surrogate: 4-FBA	2330		"	2500		93.2	74.0-121			
Blank (0110009-BLK3) Prepared & Analyzed: 11/06/00										
Benzene	ND	100	ug/kg							
Bromobenzene	ND	100	"							
Bromoform	ND	100	"							
Bromochloromethane	ND	100	"							
Bromodichloromethane	ND	100	"							
Bromoform	ND	100	"							
Bromomethane	ND	500	"							
n-Butylbenzene	ND	100	"							
sec-Butylbenzene	ND	100	"							
tert-Butylbenzene	ND	100	"							
Carbon tetrachloride	ND	100	"							
Chlorobenzene	ND	100	"							
Chloroethane	ND	500	"							
Chloroform	ND	100	"							
Chloromethane	ND	500	"							
2-Chlorotoluene	ND	100	"							
4-Chlorotoluene	ND	100	"							



Sequoia Analytical

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
Blank (0110009-BLK3)										
Prepared & Analyzed: 11/06/00										
Dibromochloromethane	ND	100	ug/kg							
1,2-Dibromoethane	ND	100	"							
Dibromomethane	ND	100	"							
1,2-Dibromo-3-chloropropane	ND	500	"							
1,2-Dichlorobenzene	ND	100	"							
1,3-Dichlorobenzene	ND	100	"							
1,4-Dichlorobenzene	ND	100	"							
Dichlorodifluoromethane	ND	500	"							
1,1-Dichloroethane	ND	100	"							
1,2-Dichloroethane	ND	100	"							
1,1-Dichloroethene	ND	100	"							
cis-1,2-Dichloroethene	ND	100	"							
trans-1,2-Dichloroethene	ND	100	"							
1,2-Dichloropropane	ND	100	"							
1,3-Dichloropropane	ND	100	"							
2,2-Dichloropropane	ND	100	"							
1,1-Dichloropropene	ND	100	"							
Ethylbenzene	ND	100	"							
Hexachlorobutadiene	ND	100	"							
Isopropylbenzene	ND	100	"							
p-Isopropyltoluene	ND	100	"							
Methylene chloride	ND	500	"							
Naphthalene	ND	500	"							
n-Propylbenzene	ND	100	"							
Styrene	ND	100	"							
1,1,1,2-Tetrachloroethane	ND	100	"							
1,1,2,2-Tetrachloroethane	ND	100	"							
Tetrachloroethene	ND	100	"							
Toluene	ND	100	"							
1,2,3-Trichlorobenzene	ND	100	"							
1,2,4-Trichlorobenzene	ND	100	"							
1,1,1-Trichloroethane	ND	100	"							
1,1,2-Trichloroethane	ND	100	"							
Trichloroethene	ND	100	"							



Sequoia Analytical

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
Blank (0110009-BLK3)										
Prepared & Analyzed: 11/06/00										
Trichlorofluoromethane	ND	500	ug/kg							
1,2,3-Trichloropropane	ND	100	"							
1,2,4-Trimethylbenzene	ND	100	"							
1,3,5-Trimethylbenzene	ND	100	"							
Vinyl chloride	ND	500	"							
Total Xylenes	ND	100	"							
Surrogate 1,2-Dichloroethane-d4	2460		"	2500		98.4	70.0-121			
Surrogate: Toluene-d8	2360		"	2500		94.4	81.0-117			
Surrogate: 4-BFB	2490		"	2500		99.6	74.0-121			
LCS (0110009-BS1)										
Prepared: 11/01/00 Analyzed: 11/02/00										
Benzene	3070	100	ug/kg	2500		123	70.0-130			
Chlorobenzene	3040	100	"	2500		122	70.0-130			
1,1-Dichloroethene	2920	100	"	2500		117	70.0-130			
Toluene	2650	100	"	2500		106	70.0-130			
Trichloroethene	3000	100	"	2500		120	70.0-130			
Surrogate: 1,2-Dichloroethane-d4	2550		"	2500		102	70.0-121			
Surrogate: Toluene-d8	2180		"	2500		87.2	81.0-117			
Surrogate: 4-BFB	2130		"	2500		85.2	74.0-121			
LCS (0110009-BS2)										
Prepared & Analyzed: 11/02/00										
Benzene	2700	100	ug/kg	2500		108	70.0-130			
Chlorobenzene	2650	100	"	2500		106	70.0-130			
1,1-Dichloroethene	2730	100	"	2500		109	70.0-130			
Toluene	2370	100	"	2500		94.8	70.0-130			
Trichloroethene	2550	100	"	2500		102	70.0-130			
Surrogate: 1,2-Dichloroethane-d4	2600		"	2500		104	70.0-121			
Surrogate: Toluene-d8	2110		"	2500		84.4	81.0-117			
Surrogate: 4-BFB	2120		"	2500		84.8	74.0-121			

Sequoia Analytical

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Project: -
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Reported:
 11/18/00 13:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 0110009 - EPA 5030B [P/T]										
LCS (0110009-BS3)										
Prepared & Analyzed: 11/06/00										
Benzene	2920	100	ug/kg	2500	117	70.0-130				
Chlorobenzene	3080	100	"	2500	123	70.0-130				
1,1-Dichloroethene	3300	100	"	2500	132	70.0-130				
Toluene	2730	100	"	2500	109	70.0-130				
Trichloroethene	2730	100	"	2500	109	70.0-130				
Surrogate: 1,2-Dichloroethane-d4	2320		"	2500	92.8	70.0-121				
Surrogate: Toluene-d8	2250		"	2500	90.0	81.0-117				
Surrogate: 4-BFB	2430		"	2500	97.2	74.0-121				
Matrix Spike (0110009-MS1)										
Source: MJJ0767-03 Prepared: 11/01/00 Analyzed: 11/02/00										
Benzene	2510	100	ug/kg	2500	ND	100	60.0-140			
Chlorobenzene	2460	100	"	2500	ND	98.4	60.0-140			
1,1-Dichloroethene	2310	100	"	2500	ND	92.4	60.0-140			
Toluene	2200	100	"	2500	ND	88.0	60.0-140			
Trichloroethene	2380	100	"	2500	ND	95.2	60.0-140			
Surrogate: 1,2-Dichloroethane-d4	2550		"	2500		102	70.0-121			
Surrogate: Toluene-d8	2150		"	2500		86.0	81.0-117			
Surrogate: 4-BFB	2110		"	2500		84.4	74.0-121			
Matrix Spike Dup (0110009-MSD1)										
Source: MJJ0767-03 Prepared: 11/01/00 Analyzed: 11/02/00										
Benzene	2830	100	ug/kg	2500	ND	113	60.0-140	12.2	25.0	
Chlorobenzene	2680	100	"	2500	ND	107	60.0-140	8.37	25.0	
1,1-Dichloroethene	2560	100	"	2500	ND	102	60.0-140	9.88	25.0	
Toluene	2510	100	"	2500	ND	100	60.0-140	12.8	25.0	
Trichloroethene	2610	100	"	2500	ND	104	60.0-140	8.84	25.0	
Surrogate: 1,2-Dichloroethane-d4	2610		"	2500		104	70.0-121			
Surrogate: Toluene-d8	2290		"	2500		91.6	81.0-117			
Surrogate: 4-BFB	2020		"	2500		80.8	74.0-121			



Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoiolabs.com

LFR Levine-Fricke - Emeryville (Shell)
1900 Powell St, 12th Floor
Emeryville CA, 94608

Project: -
Project Number: 7893.01-000
Project Manager: LFR Levine-Fricke - Emeryville (Shell) -

Reported:
11/18/00 13:17

Notes and Definitions

Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
Q-02	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
Q-18	The method blank contains analyte at a concentration above the MRL. This concentration is less than 10% of the sample result, which is negligible as stated in the method and our SOP.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.	Project Location:		Date:	Serial								
7893.01 - 000	South Shore Shopping Center Field Logbook No.: ①		10/24/00.									
Project Name:			Sample Event Name:									
Equiva			Well destruction	Nº 7254								
Sampler (Signature): <i>R. Eleon Raniere</i>	Samplers: <i>ReR</i>											
SAMPLE INFORMATION (Print Clearly)												
SAMPLE NO	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES						REMARKS
						TPH 3015 P	TPH 3015 S	CHP 47 metal	VOCs 5260	BTEX 8220	HOLD RUSH	
ES-1	10/23	01			X							+ MJJO 767
ES-2		02				X						
ES-3		03					X					
ES-4	↓	04						X				<i>ReR</i>
RELINQUISHED BY (Signature): <i>R. Eleon Raniere</i>	DATE 1300	TIME 10/24/00	RECEIVED BY: (Signature): <i>John Myle</i>	DATE 10/23/00	TIME 1640							
RELINQUISHED BY (Signature):	DATE	TIME	RECEIVED BY: (Signature):	DATE	TIME							
RELINQUISHED BY (Signature):	DATE	TIME	RECEIVED BY: (Signature):	DATE	TIME							
METHOD OF SHIPMENT	DATE	TIME	LAB COMMENTS:									
Sample Collector	LEVINE-FRICKE-RECON 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500		Analytical Laboratory:									

SPECTRUM

Drillers Daily Report

Page ____ of ____

Rig No. CME55 Chase Vehicle YES
Project Name South Shore Shopping Center
Project Location Alameda
Driller DAVE Hours 11.0 Per Diem Y N
Driller's Helper MARK Hours 11.6 Per Diem X N
Rig Mileage Start _____ Chase Mileage Start _____
Rig Mileage Finish _____ Chase Mileage Finish _____

Drilling Summary

Daily Hours	Hours Worked	Hours Chargeable	Remarks
Load	1.0	1.0	
Travel	2.0	2.0	
Drill	6.5	6.5	Pressure went & Drill out previous wells
Backfill Borings			
Set Wells			
Decon			
Stand-by	1.5	1.5	Get set up Health & Safety meeting waiting for rock list, compressor and role of drivers.
Other (describe)			
TOTAL	11.0	11.0	

Materials Supplied

SPECTRUM

Page ____ of ____

Drillers Daily Report

Rig No. CME 75 Chase Vehicle yes
Project Name South Shore Shopping Center
Project Location Ahmedpr
Driller DAVE Hours 10.0 Perdiem Y N
Driller's Helper Marty Hours 10.0 Perdiem Y N
Rig Mileage Start _____ Chase Mileage Start _____
Rig Mileage Finish _____ Chase Mileage Finish _____

Date 10-18-00
Job No. 80-4447-00
Client L.F.R.
Client No. 1893.00 000

Drilling Summary

Daily Hours	Hours Worked	Hours Chargeable	Remarks
Load			
Travel			
Drill	10.0	10.0	<i>Everything</i>
Backfill Borings			
Set Wells			
Decon			
Stand-by			
Other (describe)			
TOTAL			

Materials Supplied

Additional Services

Clocked In/Out Hours

R. Alan Rainey

SPECTRUM

Page ____ of ____

Drillers Daily Report

Rig No. IME 55 Chase Vehicle VWS
Project Name Sainte-Share Shopping Centre
Project Location Afghanistan
Driller Dale Hours 10.0 Per Diem 0 N
Driller's Helper Mark Hours 10.0 Per Diem 0 N
Rig Mileage Start _____ Chase Mileage Start _____
Rig Mileage Finish _____ Chase Mileage Finish _____

Date 10-19-00
Job No. 40-6447-30
Client L.F.E.
Client No. 7893.00-000

Total Hazardous Premium Hours _____

Drilling Summary

Daily Hours	Hours Worked	Hours Chargeable	Remarks
Load			
Travel			
Drill	7.5	7.5	
Backfill Borings			
Set Wells			
Decon			
Stand-by			
Other (describe)	2.5	2.5	Pick up more cement & other materials & get part welded
TOTAL	10.0	10.0	

Materials Supplied

Additional Services

Clocked In/Out Hours

R. Eric Kenney

SPECTRUM

Page ____ of ____

Drillers Daily Report

Rig No. CME 55 Chase Vehicle yes
Project Name South Shore Shopping Centre
Project Location Alameda
Driller DAVE Hours 10.0 Per Diem N
Driller's Helper MARK Hours 10.0 Per Diem N
Rig Mileage Start _____ Chase Mileage Start _____
Rig Mileage Finish _____ Chase Mileage Finish _____

Date 10-20-00
Job No. 80-6447-00
Client L.F.R.
Client No. 1893.00 - 0000

Total Hazardous Premium Hours _____

Drilling Summary

Daily Hours	Hours Worked	Hours Chargeable	Remarks
Load			
Travel	2.0	2.0	
Drill	6.0	6.0	
Backfill Borings			
Set Wells			
Decon			
Stand-by			
Other (describe)	2.0	2.0	fill in Planter Areas & Clean up site
TOTAL	10.0	10.0	

Materials Supplied

Additional Services

Clocked In/Out Hours

R. Elex Ramirez

**ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY**
A WASTE MANAGEMENT COMPANY

December 12, 2000

Sales Department
10840 Altamont Pass Road
Livermore, CA 94550-9745
(925) 455-7300
(925) 455-7383 Fax

Elena Ramirez
LEVINE & FRICKE
1900 Powell Street, 12th Floor
Emeryville, 94608-1827

Fax: 510/652-2246

Subject: Approval of Profile #54938600

Altamont Landfill & Resource Recovery Facility (Altamont) is pleased to submit this approval for hydrocarbon impacted soil at the following rate:

<u>Waste Description</u>	<u>Rate</u>
Class II Disposal In County	\$ 35.00/Ton

**Late fees will be assessed on balances exceeding 45 days*

The above rate is applicable to profile #54938600 which expires on June 12, 2001. These rates are contingent on the waste being > 50% solid, must not contain free liquids, and be approved through Waste Management's Waste Approval Process. This approval will be attached to your signed service agreement with Altamont Landfill upon commencement of the project. Also attached is a copy of the completed Waste Acceptance Form.

Please provide a copy of the Waste Acceptance Form to each truck driver to submit to our scale house upon arrival at the landfill. Please contact – Peggy at (925)455-7301 or 1-800-449-6349 to schedule delivery at least 24 hours prior to anticipated arrival at Altamont Landfill.

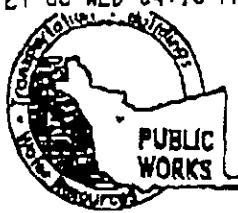
Thank you for the opportunity to provide service for your waste disposal. If you have any questions or need further assistance, please feel free to contact us

Sincerely,

Altamont Landfill and Resource Recovery Facility

Peggy Francione Fricke
Inside Sales Representative

10-10-2000 14:35 5106533754 LEVINE-FRICKE
 SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 02
UV

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 399 ELMHURST ST. HAYWARD CA. 94541-1398
 PHONE (510) 788-3554
 FAX (510) 788-1339

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, Crown Point Shorline Dr.
Intersection of Shoreline Dr. & Park Street

CLIENT
 Name Harsch Investment Corp.
 Address 121 SW Salmon St Phone 503-242-2300
 City Portland OR Zip 97205

APPLICANT
 Name R. Elena Ramirez - FR Levine Fricke
 Address 100 Powell St 12th floor Phone 510-676-5620
 City Emeryville CA Zip 94608

TYPE OF PROJECT

- | | | | |
|---------------------|--------------------------|----------------------------|-------------------------------------|
| Well Construction | <input type="checkbox"/> | Geotechnical Investigation | <input type="checkbox"/> |
| Cathodic Protection | <input type="checkbox"/> | General | <input type="checkbox"/> |
| Water Supply | <input type="checkbox"/> | Contamination | <input type="checkbox"/> |
| Monitoring | <input type="checkbox"/> | Well Destruction | <input checked="" type="checkbox"/> |

PROPOSED WATER SUPPLY WELL USE

- | | | | |
|--------------|--------------------------|----------------------|--------------------------|
| New Domestic | <input type="checkbox"/> | Replacement Domestic | <input type="checkbox"/> |
| Municipal | <input type="checkbox"/> | Irrigation | <input type="checkbox"/> |
| Industrial | <input type="checkbox"/> | Other | <input type="checkbox"/> |

DRILLING METHOD:

- | | | | | | |
|------------|--------------------------|------------|--------------------------|-------|-------------------------------------|
| Mud Rotary | <input type="checkbox"/> | Air rotary | <input type="checkbox"/> | Auger | <input checked="" type="checkbox"/> |
| Cable | <input type="checkbox"/> | Other | <input type="checkbox"/> | | |

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

- | | | | |
|---------------------|---------------|---------------------|---------------|
| Drill Hole Diameter | <u>10</u> in. | Maximum Depth | <u>76</u> ft. |
| Casing Diameter | <u>10</u> in. | Owner's Well Number | <u>MW-22</u> |
| Surface Seal Depth | <u>10</u> ft. | | |

GEOTECHNICAL PROJECTS

- | | | | |
|-------------------|---------------|---------------|---------------|
| Number of Borings | <u>1</u> | Maximum Depth | <u>10</u> ft. |
| Hole Diameter | <u>10</u> in. | Depth | <u>10</u> ft. |

ESTIMATED STARTING DATE Oct 17, 2000ESTIMATED COMPLETION DATE Oct 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-61.

APPLICANT'S SIGNATURE R. Elena RamirezDATE Oct 10, 2000LEASEE PRINT NAME R. Elena Ramirez

REV. 6-3-00

FOR OFFICE USE

PERMIT NUMBER W00-638

WELL NUMBER _____

APN _____

PERMIT CONDITIONS
 Circled Items Requirements Apply

A. GENERAL

- ① A permit application should be submitted to ACWA office five days prior to proposed starting date.
- ② Submit to ACWA within 60 days after completion of permitted original Department of Water Resources - Well Completion Report.
- ③ Permit is valid if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specifically approved.

C. GROUNDWATER MONITORING WELLS
 INCLUDING PIROMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable -- 30 feet.

D. GEOTECHNICAL

Backfill bare hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole inside zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallow wells and a copy of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE

10/10/00

10-10-2000 14:41

5106533754

LEVINE-FRICKE

SEP-27-00 WED 04:18 PM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821838

P. 14
JL

ALAMEDA COUNTY PUBLIC WORKS AGENCY



WATER RESOURCES SECTION
399 ELMNURST ST. HAYWARD CA. 94541-3315
PHONE (510) 782-5554
FAX (510) 782-1829

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda; Corona Beach; Shoreline Dr.;
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Harsch Investment Corp.
Address 1121 S.W. Salmon St. Phone 503-242-2300
City Portland - OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR- Levine Fricke
Address 1300 Powell St. 12th Floor Phone 510-652-4904
City Emeryville - CA Zip 94608

TYPE OF PROJECT

- | | | | |
|---------------------|--------------------------|----------------------------|-------------------------------------|
| Well Construction | <input type="checkbox"/> | Geotechnical Investigation | <input type="checkbox"/> |
| Cathodic Protection | <input type="checkbox"/> | General | <input type="checkbox"/> |
| Water Supply | <input type="checkbox"/> | Contamination | <input type="checkbox"/> |
| Monitoring | <input type="checkbox"/> | Well Driller | <input checked="" type="checkbox"/> |

PROPOSED WATER SUPPLY WELL USE

- | | | | |
|--------------|--------------------------|----------------------|--------------------------|
| New Domestic | <input type="checkbox"/> | Residential Domestic | <input type="checkbox"/> |
| Municipal | <input type="checkbox"/> | Irrigation | <input type="checkbox"/> |
| Industrial | <input type="checkbox"/> | Other | <input type="checkbox"/> |

DRILLING METHOD:

- | | | | | | |
|------------|--------------------------|------------|--------------------------|-------|-------------------------------------|
| Mad Rotary | <input type="checkbox"/> | Air rotary | <input type="checkbox"/> | Auger | <input checked="" type="checkbox"/> |
| Cable | <input type="checkbox"/> | Other | <input type="checkbox"/> | | |

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u> in.	Maximum Depth	<u>14</u> ft.
Casing Diameter	<u>10</u> in.	Owner's Well Number	<u>MW-3</u>
Surface Seal Depth	<u>10</u> ft.		

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	MAXIMUM	
Hole Diameter	<u>10</u> in.	Depth	<u>14</u> ft.

ESTIMATED STARTING DATE Oct 17 2000ESTIMATED COMPLETION DATE Oct 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-48.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10, 2000LEASEE PRINT NAME R. Elena Ramirez

Rev. 8-3-03

FOR OFFICE USE

PERMIT NUMBER WCD-644
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

- 1. A permit application should be submitted to us to arrive at the ACWA office five days prior to proposed starting date.

- 2. Submit to ACWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.

- 3. Permit is void if project has begun within 90 days of approval date.

B. WATER SUPPLY WELLS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
- 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIROMETERS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
- 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 30 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixtures. Upper two-thirds feet replaced in lond or with compacted cuttings.

E. CATHODIC

- F. WELL DESTRUCTION
- Set standard requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

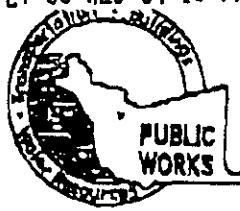
NOTE: One application must be submitted for each well or well destroyed. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE 10/10/00

OCT-12-00 THU 11:03 AM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 03/18

10-10-2000 14:36 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:18 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939P.⁰⁴
W.⁰²

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMWOOD ST. HAYWARD CA. 94541-1939
PHONE (510) 788-5554
FAX (510) 788-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda City, Crown Beach Shoreline Dr.,
Intersection of Shoreline Dr. & Park Street

CLIENT

Name Harsel Investment Corp.
Address 1121 S.W. Salmon St Phone 503-242-7730
City Portland, OR Zip 97205

APPLICANT

Name R. Elena Ramirez - FR Levine Fricke
Address 1900 Powell St 12th floor Phone 510-652-4906
City Emeryville, CA Zip 94603

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Slab Reray	<input type="checkbox"/>	Air Reray	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u> in.	Maximum Depth	<u>70</u> ft.
Casing Diameter	<u>8</u> in.	Owner's Well Number	<u>MW-15</u>
Surface Seal Depth	<u>10</u> ft.		

GEOTECHNICAL PROJECTS

Number of Bores	<u>1</u>	Maximum Depth	<u>10</u> ft.
Hole Diameter	<u>10</u> in.		

ESTIMATED STARTING DATE OCT 17, 2000ESTIMATED COMPLETION DATE OCT 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-89.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000LEASEE PRINT NAME R. Elena Ramirez Rev. 5-99

FOR OFFICE USE

PERMIT NUMBER W00-639
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

- (1) A permit application should be submitted to the AC/PWA office five days prior to proposed starting date.
- (2) Submit to AC/PWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
- (3) Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Pile hole made zone with concrete placed by tremie.

F. WELL DESTRUCTION

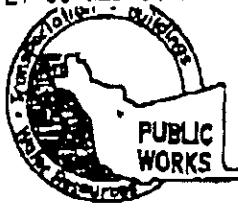
See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE OCT 10, 2000

10-10-2000 14:37 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821938P. 06
F. UC

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELM MURST ST. HAYWARD CA. 94541-1315
PHONE (510) 670-5554
FAX (510) 673-1629

DRILLING PERMIT APPLICATION**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda City Council District Shoreline Dr.
Intersection of Shoreline Dr & Park Street

CLIENT
Name Harcoll Investment Corp.
Address 1121 SW Salmon St Phone 503-242-2900
City Portland OR Zip 97205

APPLICANT
Name Elena Ramirez - LFR Levine Fricke
Fax 510-672-4866
Address 1300 Powell St. 12th Floor Phone 510-599-1620
City Emeryville CA Zip 94605

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Wind Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512268**WELL PROJECTS**

Drill Hole Diameter	<u>10</u>	in.	Maximum Depth	<u>5</u>	ft.
Causing Diameter	<u>10</u>	in.	Owner's Well Number	<u>MW-14</u>	
Surface Seal Depth	<u>12</u>	ft.			

GEOTECHNICAL PROJECTS

Number of Boreholes	<u>1</u>	Maximum Depth	<u>10</u>
Hole Diameter	<u>10</u>	ft.	

ESTIMATED STARTING DATE OCT 17 2000ESTIMATED COMPLETION DATE OCT 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Elena Ramirez DATE Oct 10 2000LEASEE/PRINT NAME Elena Ramirez

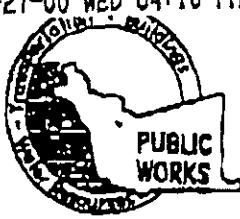
APPROVED

Rev. 1-9-00

DATE 10/10/00

OCT-12-00 THU 11:04 AM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 05/18

10-10-2000 14:38 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:18 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821839P. 08
F. 02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1395
PHONE (510) 782-5354
FAX (510) 782-4198

DRILLING PERMIT APPLICATION**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda's Crown Beach Shoreline Dr. &
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Shoreline Investment Corp.
Address 1121 S.W. Salmon St Phone 503-242-3200
City Portland OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR Levine Fricke
Address 1900 Powell St. 12th floor Phone 510-546-1680
City Emeryville CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Corrosion	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Drilling	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Nud Rotary	<input type="checkbox"/>	Air rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum Drilling**DRILLER'S LICENSE NO.** 5127268**WELL PROJECTS**

Drill Hole Diameter	<u>10</u>	in.	Maximum	
Casing Diameter	<u>10</u>	in.	Depth	<u>15</u> ft.
Surface Seal Depth	<u>10</u>	ft.	Owner's Well Number	<u>MW-9</u>

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	Maximum	
Hole Diameter	<u>10</u>	Depth	<u>15</u> ft.

ESTIMATED STARTING DATE Oct 17 2000**ESTIMATED COMPLETION DATE** Oct 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-48.

APPLICANT'S SIGNATURE R. Elena Ramirez **DATE** Oct 10, 2000**LEASE PRINT NAME** R. Elena Ramirez**FOR OFFICE USE**

PERMIT NUMBER W00-641
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply**A. GENERAL**

- (1) A permit application should be submitted no less than five days prior to proposed starting date.
- (2) Submit to ACPWA within 10 days after completion of permitted original Department of Water Resources-Well Completion Report.
- (3) Permit is void if project has begun within 10 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 10 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS**INCLUDING PIEZOMETERS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-thirds foot replaced in kind or with compacted cuttings.

E. CATHODIC

- (1) Fill hole inside zone with concrete placed by tremie.
- (2) See attached requirements for construction of shallow wells and a map of work area. A different permit application is required for wells deeper than 40 feet.

F. SPECIAL CONDITIONS

NOTE: One applicator may be substituted for each well or well section. Multiple borings on one application are acceptable for geotechnical and corrosion investigations.

APPROVED**DATE** 10/10/00

10-18-2000 14:39

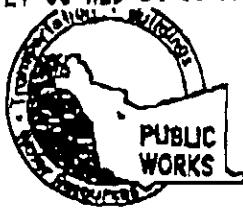
S105533754

LEVINE-FRICKE

SEP-27-00 WED 04:18 PM

ALAMEDA COUNTY PWA RM238

FAX NO. 5107821939

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ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1295
PHONE (510) 678-1554
FAX (510) 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, California Beach Shoreline Dr.
Intersection of Shoreline Dr & Park Street

CLIENT
Name Harsel Investment Corp.
Address 1121 S.W. Solomon St Phone 510-242-2000
City Pleasanton, CA Zip 94566

APPLICANT
Name R. Elena Ramirez - LR Levine Fricke
Phone 510-652-4556
Address 1000 Powell St, 12th floor Phone 510-596-3720
City Emeryville, CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Deactivation	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Residential Domestic	<input checked="" type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Nud Rotary	<input checked="" type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u> in.	Maximum	
Casing Diameter	<u>8</u> in.	Depth	<u>15</u> ft.
Surface Seal Depth	<u>ft.</u>	Owner's Well Number	<u>MW-5B</u>

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	Maximum	
Hole Diameter	<u>10</u> in.	Depth	<u>ft.</u>

ESTIMATED STARTING DATE OCT 17, 2000ESTIMATED COMPLETION DATE OCT 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-48

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000LEASER PRINT NAME R. Elena Ramirez

FOR OFFICE USE

PERMIT NUMBER W00-642

WELL NUMBER _____

APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted to ACWA office five days prior to proposed starting date.
2. Submit to ACWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS
INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole inside zone with concrete placed by tremie.

F. WELL DESTRUCTION

Estimated requirements for destruction of shallower wells and a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well deviation. Multiple borings on one application are acceptable for geotechnical and contamination investigation.

APPROVED

DATE OCT 10, 2000

OCT-12-00 THU 11:05 AM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821939

P. 07/18

10-10-2000 14:40

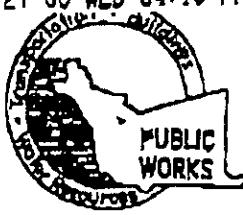
5106533754

LEVINE-FRICKE

SEP-27-00 WED 04:18 PM

ALAMEDA COUNTY PWA RM238

FAX NO. 5107821939

P.¹²
02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 399 ELMHURST ST. HAYWARD CA. 94541-1311
 PHONE (510) 678-3534
 FAX (510) 782-1039

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, California; Shoreline Dr. &
Intersection of Shoreline Dr. & Park Street

CLIENT

Name Harsel Investment Corp.
 Address 1121 S.W. Salmon St. Phone 503-242-2000
 City Portland OR Zip 97205

APPLICANT

Name R. Elena Ramirez - LFR, Levine Fricke
 Address 1300 Powell St. 12th floor Phone 510-584-5620
 City Emeryville CA Zip 94608

TYPE OF PROJECT

- | | | | |
|---------------------|--------------------------|----------------------------|-------------------------------------|
| Well Construction | <input type="checkbox"/> | Geotechnical Investigation | <input type="checkbox"/> |
| Cathodic Protection | <input type="checkbox"/> | General | <input type="checkbox"/> |
| Water Supply | <input type="checkbox"/> | Contamination | <input type="checkbox"/> |
| Monitoring | <input type="checkbox"/> | Well Destruction | <input checked="" type="checkbox"/> |

PROPOSED WATER SUPPLY WELL USE

- | | | | |
|--------------|--------------------------|----------------------|--------------------------|
| New Domestic | <input type="checkbox"/> | Replacement Domestic | <input type="checkbox"/> |
| Municipal | <input type="checkbox"/> | Irrigation | <input type="checkbox"/> |
| Industrial | <input type="checkbox"/> | Other | <input type="checkbox"/> |

DRILLING METHOD:

- | | | | | | |
|------------|--------------------------|------------|--------------------------|-------|-------------------------------------|
| Mud Rotary | <input type="checkbox"/> | Air Rotary | <input type="checkbox"/> | Auger | <input checked="" type="checkbox"/> |
| Cable | <input type="checkbox"/> | Other | <input type="checkbox"/> | | |

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter 10 in. Maximum Depth 13 ft.
 Casing Diameter 10 in. Owner's Well Number MW-4
 Surface Seal Depth ft.

GEOTECHNICAL PROJECTS

Number of Borings: _____ Maximum Depth _____
 Hole Diameter 10 in.

ESTIMATED STARTING DATE Oct 17, 2000
 ESTIMATED COMPLETION DATE Oct 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-40.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10, 2000

LEASE PRINT NAME R. Elena Ramirez

FOR OFFICE USE

PERMIT NUMBER WCD-643

WELL NUMBER _____

APN _____

PERMIT CONDITIONS
 Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted to us to arrive at the AC/PWA office five days prior to proposed drilling date.
2. Submit to AC/PWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS
 INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout sand mixture. Upper two-thirds foot replaced in kind or with compacted cuttings.

E. CATHODIC

Pile hole backfilled with concrete placed by tremie.

F. WELL DESTRUCTION

Established requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE

10-10-00

REV. 6-3-89

10-10-2000 14:42 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:18 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821838P. 16
F. UK

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST, HAYWARD CA. 94541-1396
PHONE (510) 784-5554
FAX (510) 782-1838

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda; Crown Beach Shoreline Dr-1
Intersection of Shoreline Dr & Park Street

CLIENT
Name Harrel Investment Corp.
Address 1121 S.W. Salmon St. Phone 503-242-2300
City Portland OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR Levine Fricke
Fax 510-652-4504
Address 1300 Powell St. 12th floor Phone 510-536-5620
City Emeryville CA Zip 94608

TYPE OF PROJECT

Well Construction	Geotechnical Investigation
Cathodic Protection	<input checked="" type="checkbox"/> General
Water Supply	<input checked="" type="checkbox"/> Contamination
Monitoring	<input checked="" type="checkbox"/> Well Destruction

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input checked="" type="checkbox"/>	Replacement Domestic	<input checked="" type="checkbox"/>
Municipal	<input checked="" type="checkbox"/>	Irrigation	<input checked="" type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	Other	<input checked="" type="checkbox"/>

DRILLING METHOD:

Slab Rotary	<input checked="" type="checkbox"/>	Air Rotary	<input checked="" type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input checked="" type="checkbox"/>	Other	<input checked="" type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512268

WELL PROJECTS

Drill Hole Diameter	<u>10</u>	in.
Casing Diameter	<u>10</u>	in.
Surface Soil Depth	<u>0</u>	ft.

Maximum Depth 15 ft.
Owner's Well Number UW-2

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	in.
Hole Diameter	<u>10</u>	in.

Maximum Depth 15 ft.

ESTIMATED STARTING DATE OCT 17, 2000ESTIMATED COMPLETION DATE OCT 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 75-68.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000LEASSEY PRINT NAME R. Elena Ramirez

APPROVED

Rev. 8-3-00

DATE OCT 10, 2000

OCT-12-00 THU 11:06 AM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 10/18

10-10-2000 14:43

5106533754

LEVINE-FRICKE

SEP-27-00 WED 04:18 PM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821939

P. 18
V2

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMBURST ST. HAYWARD CA. 94541-1396
PHONE (510) 670-1534
FAX (510) 782-1939

DRILLING PERMIT APPLICATION**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT 2379 Shoreline Drive
Alameda, Crown Beach, Shoreline Pr. 1
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Harsch Investment Corp.
Address 1121 SW Salmon St Phone 503-242-3300
City Portland, OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR - Levine Fricke
Address 1900 Powell St 12th floor Phone 510-634-1620
City Emeryville, CA Zip 94608

TYPE OF PROJECT

- | | | | |
|---------------------|--------------------------|----------------------------|-------------------------------------|
| Well Construction | <input type="checkbox"/> | Geotechnical Investigation | <input type="checkbox"/> |
| Cathodic Protection | <input type="checkbox"/> | General | <input type="checkbox"/> |
| Water Supply | <input type="checkbox"/> | Contamination | <input type="checkbox"/> |
| Monitoring | <input type="checkbox"/> | Well Deactivation | <input checked="" type="checkbox"/> |

PROPOSED WATER SUPPLY WELL USE

- | | | | |
|--------------|--------------------------|----------------------|--------------------------|
| New Domestic | <input type="checkbox"/> | Replacement Domestic | <input type="checkbox"/> |
| Municipal | <input type="checkbox"/> | Irrigation | <input type="checkbox"/> |
| Industrial | <input type="checkbox"/> | Other | <input type="checkbox"/> |

DRILLING METHOD:

- | | | | | | |
|------------|--------------------------|--------------|--------------------------|-------|-------------------------------------|
| Mud Rotary | <input type="checkbox"/> | Air Assisted | <input type="checkbox"/> | Auger | <input checked="" type="checkbox"/> |
| Cable | <input type="checkbox"/> | Other | <input type="checkbox"/> | | |

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512268**WELL PROJECTS**

Drill Hole Diameter	<u>10</u>	In.	Maximum Depth	<u>20</u>	In.
Casing Diameter		In.	Owner's Well Number	<u>MW-23</u>	
Surface Seal Depth		In.			

GEOTECHNICAL PROJECTS

Number of Borings		Maximum Depth	
Hole Diameter		In.	In.

ESTIMATED STARTING DATE Oct 17 2000ESTIMATED COMPLETION DATE Oct 27 2000

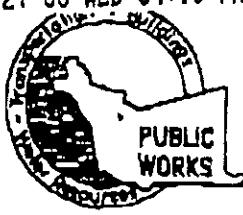
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-60.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10 2000PLEASE PRINT NAME R. Elena Ramirez

APPROVED

REV. 1-3-80

DATE 10-10-00

10-10-2000 14:44 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821938P. 20
F. UC

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1395
PHONE (510) 631-1554
FAX (510) 783-1555

DRILLING PERMIT APPLICATION**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, Cross Beach Shoreline Dr.
Intersection of Shoreline Dr. & Park Street

CLIENT Harsch Investment Corp.
Name Harsch Investment Corp.
Address 1121 S.W. Salmon St Phone 503-242-2800
City Portland OR Zip 97205

APPLICANT R. Elena Ramirez - LFR
Name R. Elena Ramirez - LFR Levine Fricke
Address 1700 Powell St. 12th Floor Phone 510-652-4906
City Emeryville CA Zip 94605

TYPE OF PROJECT

- | | | | |
|---------------------|--------------------------|----------------------------|-------------------------------------|
| Well Construction | <input type="checkbox"/> | Geotechnical Investigation | <input type="checkbox"/> |
| Cathodic Protection | <input type="checkbox"/> | General | <input type="checkbox"/> |
| Water Supply | <input type="checkbox"/> | Contamination | <input type="checkbox"/> |
| Monitoring | <input type="checkbox"/> | Well Destruction | <input checked="" type="checkbox"/> |

PROPOSED WATER SUPPLY WELL USE

- | | | | |
|--------------|--------------------------|----------------------|--------------------------|
| New Domestic | <input type="checkbox"/> | Replacement Domestic | <input type="checkbox"/> |
| Municipal | <input type="checkbox"/> | Irrigation | <input type="checkbox"/> |
| Industrial | <input type="checkbox"/> | Other | <input type="checkbox"/> |

DRILLING METHOD:

- | | | | | | |
|-------------|--------------------------|--------|--------------------------|-------|-------------------------------------|
| Slab Rotary | <input type="checkbox"/> | Air F. | <input type="checkbox"/> | AUGER | <input checked="" type="checkbox"/> |
| Cable | <input type="checkbox"/> | Other | <input type="checkbox"/> | | |

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512268**WELL PROJECTS**

Drill Hole Diameter	<u>10</u>	in.	Maximum Depth	<u>75</u>	ft.
Casing Diameter	<u>10</u>	in.	Owner's Well Number	<u>MW-20</u>	
Surface Seal Depth	<u>0</u>	ft.			

GEOTECHNICAL PROJECTS

Number of Boreings	<u>1</u>	Maximum Depth	<u>100</u>
Hole Diameter	<u>10</u>	ft.	

ESTIMATED STARTING DATE Oct 17 2000ESTIMATED COMPLETION DATE Oct 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-81.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10 2000PLEASE PRINT NAME R. Elena Ramirez**FOR OFFICE USE**

PERMIT NUMBER WT00-647
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply**A. GENERAL**

1. A permit application should be submitted to us to arrive at the AC/PWA office five days prior to proposed starting date.
2. Submit to AC/PWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is valid if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS**INCLUDING PIEZOMETERS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Pill hole grade zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallower wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple drawings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE Oct 10 2000

10-10-2000 14:45

5106533754

LEVINE-FRICKE

P-22
JL

SEP-27-00 WED 04:16 PM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821858



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1338
PHONE (510) 678-3554
FAX (510) 782-1338

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, California Shoreline Dr.
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Harcoll Investment Corp.
Address 1121 S.W. Salmon St. Phone 503-742-2200
City Portland OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR Levine Fricke
Address 1500 Powell St. 12th floor Phone 510-576-1620
City Emeryville CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input checked="" type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input checked="" type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input checked="" type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512268

WELL PROJECTS

Drill Hole Diameter	<u>10</u> in.	Maximum Depth	<u>25</u> ft.
Casing Diameter	<u>10</u> in.	Owner's Well Number	<u>MW-19</u>
Surface Seal Depth	<u>10</u> ft.		

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	Maximum Hole Diameter	<u>10</u> in.
		Depth	<u>25</u> ft.

ESTIMATED STARTING DATE Oct 17 2000
ESTIMATED COMPLETION DATE Oct 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-66.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10 2000LEASEE PRINT NAME R. Elena Ramirez REV. 1-3-00

FOR OFFICE USE
PERMIT NUMBER W00-648
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources - Well Completion Report.
3. Permits valid if project not begun within 10 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specifically approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIROMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole under zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

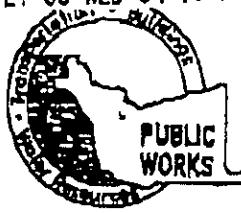
DATE

10/10/00

10-10-2000 14:46 5106533754 LEVINE-FRICKE
 SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 24
1/2

ALAMEDA COUNTY PUBLIC WORKS AGENCY



WATER RESOURCES SECTION
 399 ELMHURST ST. HAYWARD CA. 94541-1939
 PHONE (510) 676-5354
 FAX (510) 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda; Crown Beach; Shoreline Dr.
Intersection of Shoreline Dr. & Park Street

CLIENT
 Name Harsch Investment Corp.
 Address 1121 S.W. Salmon St Phone 503-242-2810
 City Portland OR Zip 97205

APPLICANT
 Name R. Elena Ramirez - LFR-Levine Fricke
 Address 1300 Powell St 12th Floor Phone 510-632-4406
 City Emeryville CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Detection	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u>	in.	Maximum Depth	<u>75</u>	ft.
Boring Diameter		in.	Owner's Well Number	<u>MW-18</u>	
Surface Seal Depth		ft.			

GEOTECHNICAL PROJECTS

Number of Boreings		Maximum	
Hole Diameter	<u>10</u>	Depth	<u>ft.</u>

ESTIMATED STARTING DATE Oct 17 2000
 ESTIMATED COMPLETION DATE Oct 27 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-81.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000LEASE PRINT NAME R. Elena Ramirez

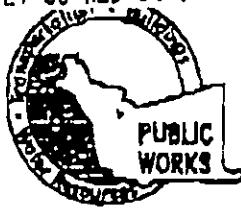
APPROVED

DATE 10/10/00

REV. 1-5-99

OCT-12-00 THU 11:07 AM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939

P. 14/18

10-10-2000 14:47 5106533754 LEVINE-FRICKE
SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939P. 26
JL

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1395
PHONE (510) 778-8584
FAX (510) 778-1533

DRILLING PERMIT APPLICATION**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, California
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Harsch Investment Corp.
Address 1121 S.W. Salmon St Phone 503-242-3200
City Portland, OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR Levine Frickie
Phone 510-652-4506
Address 1001 Fremont St. 12th Floor Phone 510-505-1620
City Emeryville, CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Hand Rotary	<input checked="" type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268**WELL PROJECTS**

Drill Hole Diameter	<u>10</u>	in.	Maximum Depth	<u>25</u>	ft.
Casing Diameter	<u>10</u>	in.	Owner's Well Number	<u>MW-17</u>	
Surface Seal Depth	<u>10</u>	in.			

GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	Maximum Depth	<u>10</u>
Hole Diameter	<u>10</u>	in.	ft.

ESTIMATED STARTING DATE Oct 17 2000ESTIMATED COMPLETION DATE Oct 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE Oct 10, 2000LEAS& PRINT NAME R. Elena Ramirez RAY. \$ 0.00**FOR OFFICE USE**

PERMIT NUMBER W00-650
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Cited Permit Requirements Apply**A. GENERAL**

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of issuance date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS**INCLUDING PIKEOMETERS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole made with concrete placed by tremie.

P. **WELL DESTRUCTION**
See attached requirements for destruction of shallower wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED JLDATE 10-10-00

10-10-2000 14:48

5106533754

LEVINE-FRICKE

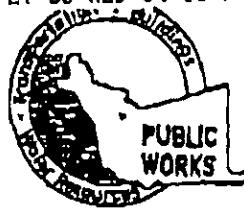
SEP-27-00 WED 04:16 PM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821939

P. 28
P. 02

ALAMEDA COUNTY PUBLIC WORKS AGENCY



WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94541-1995
PHONE (510) 770-2884
FAX (510) 770-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, Crown Point, Shoreline Dr.,
Intersection of Shoreline Dr. & Park Street

CLIENT
Name Harsel Investment Corp.
Address 1121 S.W. Salmon St. Phone 503-242-2500
City Portland OR Zip 97206

APPLICANT
Name R. Elena Ramirez - FR. Levine Fricke
Address 1100 Fremont St. 12th Floor Phone 510-652-4506
City Emeryville CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Slab Rotary	<input type="checkbox"/>	Air Rigs	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u>	in.	Maximum Depth	<u>25</u>	ft.
Casing Diameter	<u></u>	in.	Owner's Well Number	<u>MW-18</u>	
Surface Seal Depth	<u></u>	in.			

Geotechnical Projects
Number of Boreings _____
Hole Diameter _____ in.

Maximum Depth _____ ft.

ESTIMATED STARTING DATE OCT 17 2000
ESTIMATED COMPLETION DATE OCT 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-88.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000

LEASEE PRINT NAME R. Elena Ramirez REG. # 8-3-00

FOR OFFICE USE

PERMIT NUMBER WCO-651
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

- (1) A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
- (2) Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
- (3) Permit is valid if project has begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout sand mixture. Upper two/three feet replaced in kind or with compacted earthfill.

E. CATHODIC

Pile hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and environmental investigations.

APPROVED

DATE OCT 10, 2000

10-10-2000 14:49

5106533754

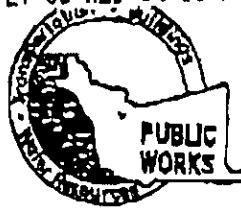
LEVINE-FRICKE

P. 30
P. 82

SEP-27-00 WED 04:18 PM

ALAMEDA COUNTY PWA RM239

FAX NO. 5107821939



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. MAYWOOD CA. 90544-1308
PHONE (310) 676-5554
FAX (310) 676-1339

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, Crown Point, Shoreline Dr.
Intersection of Shoreline Dr & Park Street

CLIENT
Name Harsch Investment Corp.
Address 1121 S.W. Salmon St. Phone 503-242-2500
City Portland - OR Zip 97205

APPLICANT
Name R. Elena Ramirez - LFR Levine Fricke
Address 1700 Powell St. 12th Floor Phone 510-552-4906
City Emeryville - CA Zip 94608

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input checked="" type="checkbox"/>	Consumption	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u>	in.	Maximum	
Casing Diameter	<u>10</u>	in.	Depth	<u>25</u> ft.
Surface Seal Depth		ft.	Owner's Well Number	<u>MW-8</u>

GEOTECHNICAL PROJECTS

Number of Bores	<u>1</u>	Maximum	
Hole Diameter	<u>10</u>	Depth	<u>25</u> ft.

ESTIMATED STARTING DATE OCT 17, 2000ESTIMATED COMPLETION DATE OCT 27, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-48.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 16, 2000LEASE PRINT NAME R. Elena Ramirez

FOR OFFICE USE
PERMIT NUMBER W00-652
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL

- ① A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
- ② Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
- ③ Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
- 2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIEZOMETERS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
- 2. Minimum seal depth for monitoring wells is the maximum depth practicable at 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See standard requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well structure. Multiple borings on one application are acceptable for geotechnical and permeation investigation.

APPROVED

DATE 10/17/00

10-10-2000 14:50 5106533754 LEVINE-FRICKE
 SEP-27-00 WED 04:16 PM ALAMEDA COUNTY PWA RM239 FAX NO. 510/821838

P. 32
1c

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 339 ELMHURST ST, HAYWARD CA 94541-1399
 PHONE (510) 670-5554
 FAX (510) 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2375 Shoreline Drive
Alameda, CA, Green Bay, Shoreline Dr.,
Intersection of Shoreline Dr & Park Street

CLIENT
 Name Hargel Investment Corp.
 Address 1121 S.W. Salmon St Phone 503-247-2200
 City Portland, OR Zip 97205

APPLICANT
 Name R. Elena Ramirez - LFR Levine Fricke
 Address 1100 Powell St, 12th floor Phone 510-523-4920
 City Emeryville, CA Zip 94607

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Desaturation	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air rotary	<input type="checkbox"/>	AUGER	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Spectrum DrillingDRILLER'S LICENSE NO. 512 268

WELL PROJECTS

Drill Hole Diameter	<u>10</u>	In.	Maximum	<u>14</u>	In.
Boring Diameter	<u>10</u>	In.	Depth	<u>14</u>	In.
Surface Seal Depth	<u>10</u>	In.	Owner's Well Number	<u>KWT-B</u>	

GEOTECHNICAL PROJECTS

Number of Borehole	<u>1</u>	Maximum	<u>10</u>
Hole Diameter	<u>10</u>	Depth	<u>10</u>

ESTIMATED STARTING DATE OCT 17, 2000ESTIMATED COMPLETION DATE OCT 29, 2000

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 78-68.

APPLICANT'S SIGNATURE R. Elena Ramirez DATE OCT 10, 2000LEASE PRINT NAME R. Elena Ramirez

FOR OFFICE USE

PERMIT NUMBER W(X)-663

WELL NUMBER _____

APN _____

PERMIT CONDITIONS
 Standard Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted to us at least five days prior to proposed starting date.
2. Submit to ACPPWA within 60 days after completion of required original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS
 INCLUDING PIROMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fillet hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED J. M. J.DATE 10-10-00



EAST BAY REGIONAL PARK DISTRICT

ENCROACHMENT PERMIT

PERMIT NO: 102E-00-409 **PERMIT FEE:** \$200

EBRPD FACILITY AFFECTED: CROWN BEACH

PERMITTEE: LFR LEVINE FRICKE
1900 POWELL STREET, 12TH FLOOR
EMERYVILLE, CA 94608-1827

CONTACT: R. ELENA RAMIREZ

PHONE: 510 652-4500

FAX: 510 652-4906

E-MAIL:

CONDITIONS:

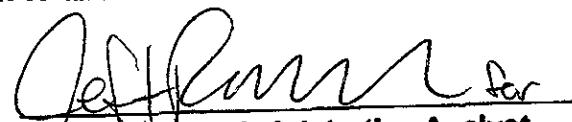
1. No project work shall commence until all necessary permits and environmental clearances have been obtained. It shall be the sole responsibility of the Permittee to obtain all necessary permits.
2. This permit is valid through October 31, 2000.
3. Notify Anne Rockwell, Park Supervisor, at 510 748-8252 to coordinate access.
4. Prior to the commencement of work the Permittee shall supply an Insurance Certificate showing general liability insurance for coverage of at least \$1,000,000.00 and automobile liability coverage in the amount of \$1,000,000.00 per occurrence. East Bay Regional Park District shall be named on the Certificate as additional insured and an "additional insured endorsement" shall be provided.
5. Permittee agrees to indemnify, hold harmless, defend and protect District, its officers, directors, agents, employees, invitees (each of which is an indemnitee) from and against any and all claims, losses, damages, demands, liabilities, suits, costs, expenses (including attorneys' fees), penalties, judgments, or obligations whatsoever for or in connection with injury (including death) or damage to any person or the loss or damage of property to whomsoever belonging or pecuniary or monetary loss resulting from, arising out of, or in any way related to activity conducted by or the omission of Permittee, including but not limited to Permittee's development, construction, occupation, use, operation, maintenance, and/or removal of the property, premises, or any facilities or operations thereon, including events occurring on or off the property, premises, or facilities, regardless of how the injury or damage was caused or suffered, unless the injury or damage resulted from the sole negligence or the intentional and willful misconduct of the District, its officers, directors, agents or employees.

6. The Permittee agrees to restore any damage to pavement, trails, turf and any other District property to its original condition prior to access. The District may elect to make repairs and charge the Permittee the cost thereof.
7. After both entering and exiting East Bay Regional Park District property, all gates must be closed and locked immediately.
8. Monitoring wells to be abandoned according to current industry standards.
9. Permittee is responsible for providing and placing caution signs to alert public trail users of Permittee's vehicle traffic on District property.
10. This Permit may be revoked at any time

.Subject to the above conditions, A PERMIT IS HEREBY ISSUED FOR:

Construction to abandon monitoring well.

ISSUED BY:


Louie Gross, Administrative Analyst

DATE: 10-17-00

CONDITIONS ACCEPTED BY:

R. Elena Ramirez

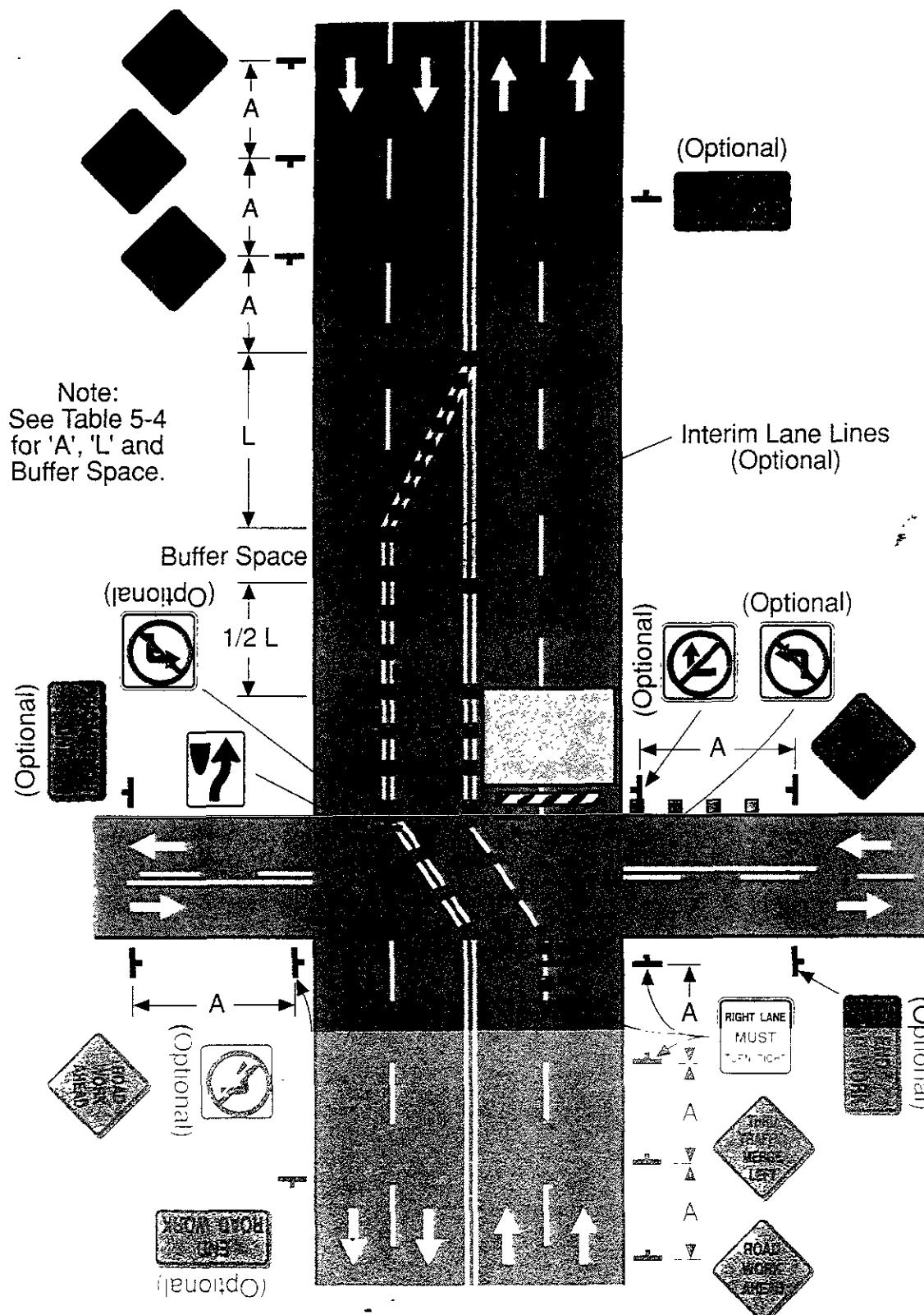
DATE: Oct 12, 2000

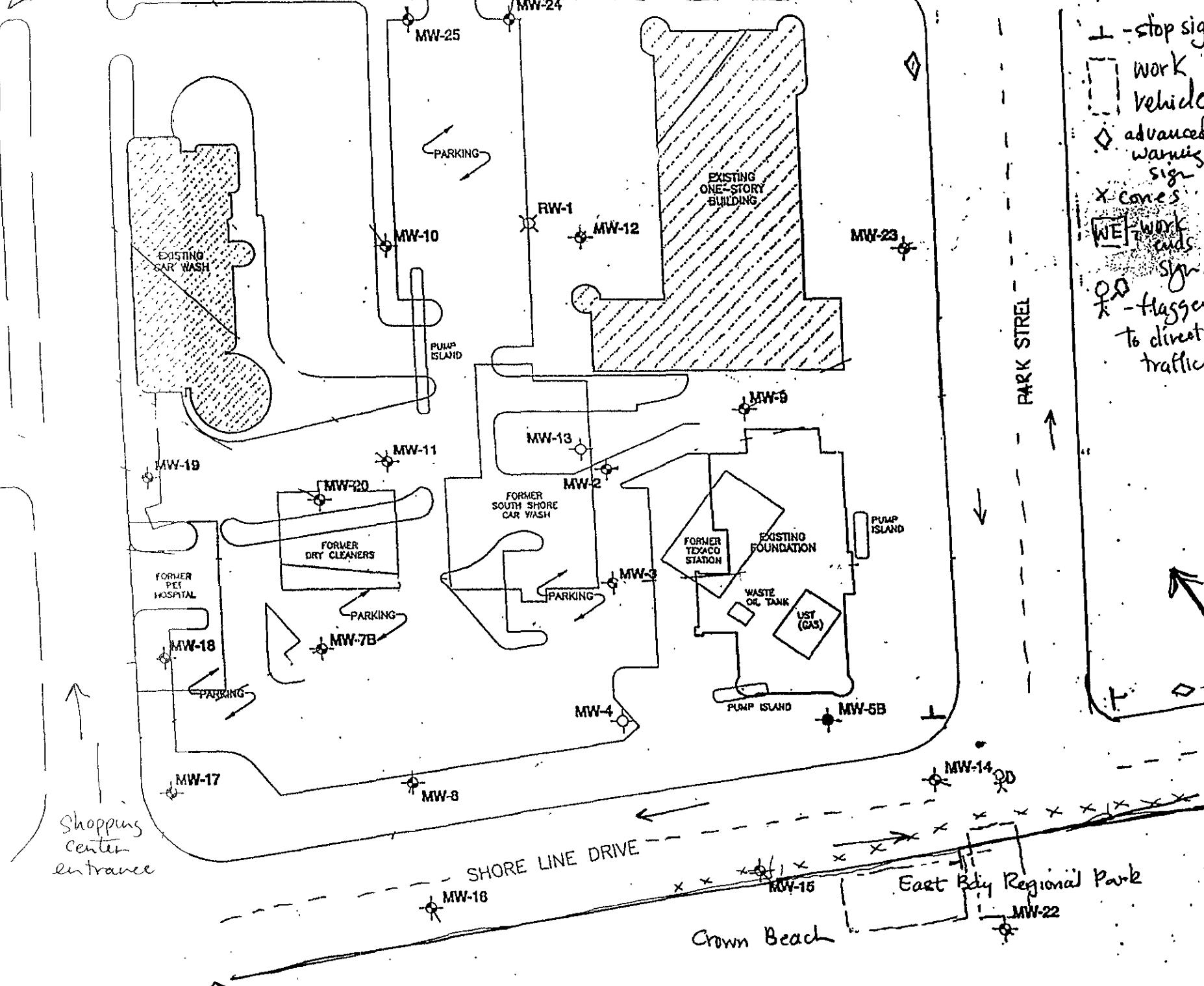
Permittee

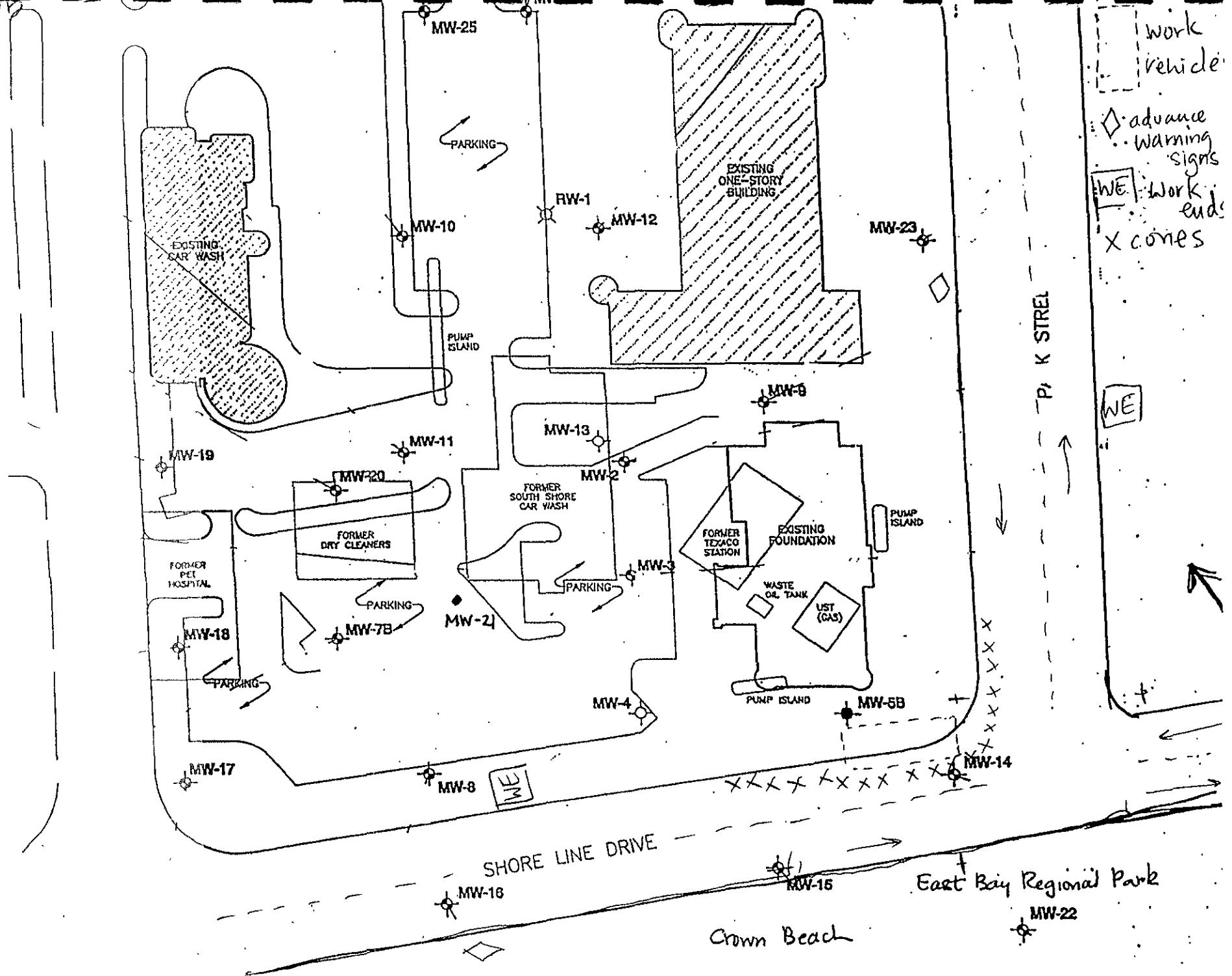
MW-14

Typical Application 5-24

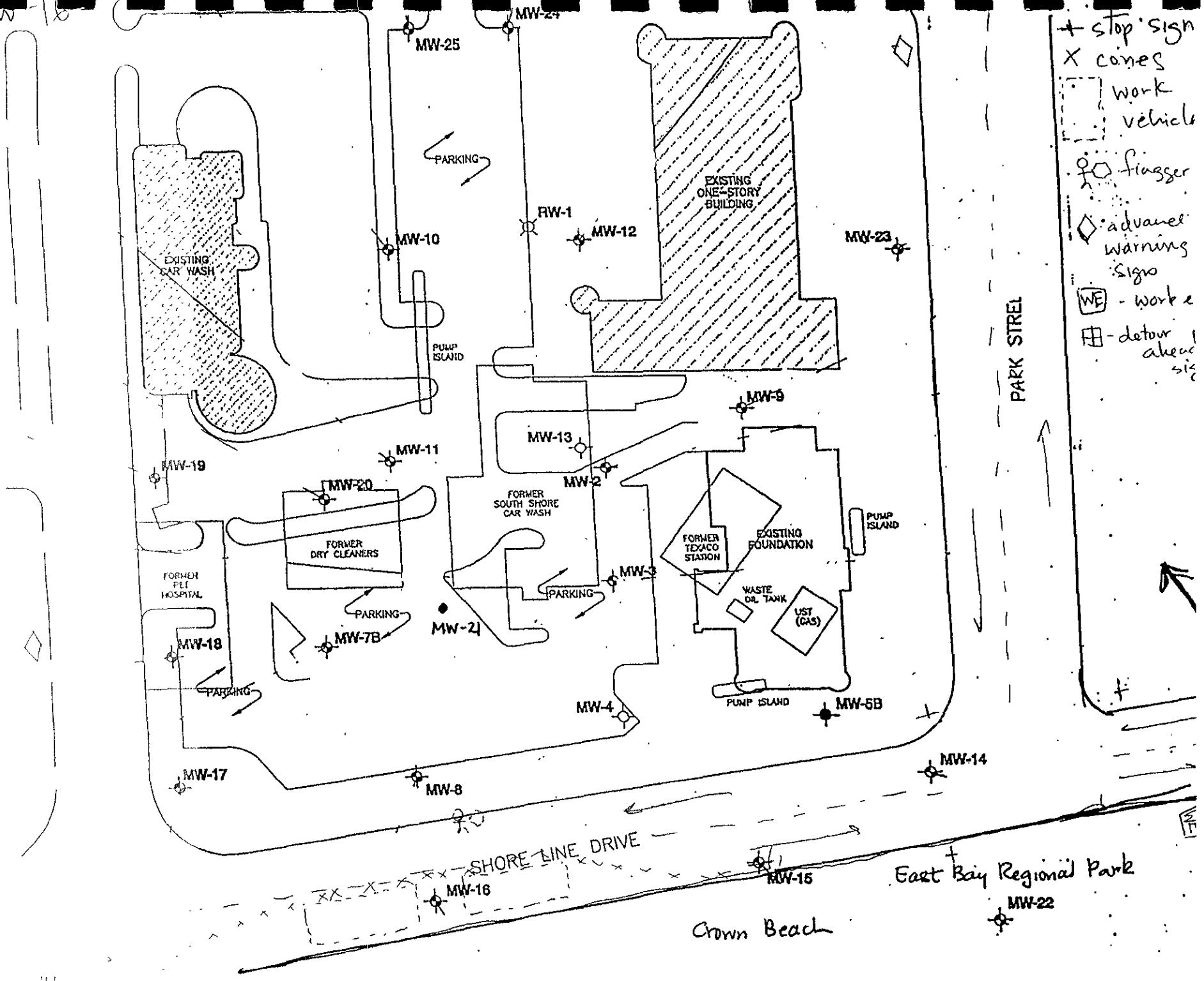
Half Road Closure Far Side of Intersection



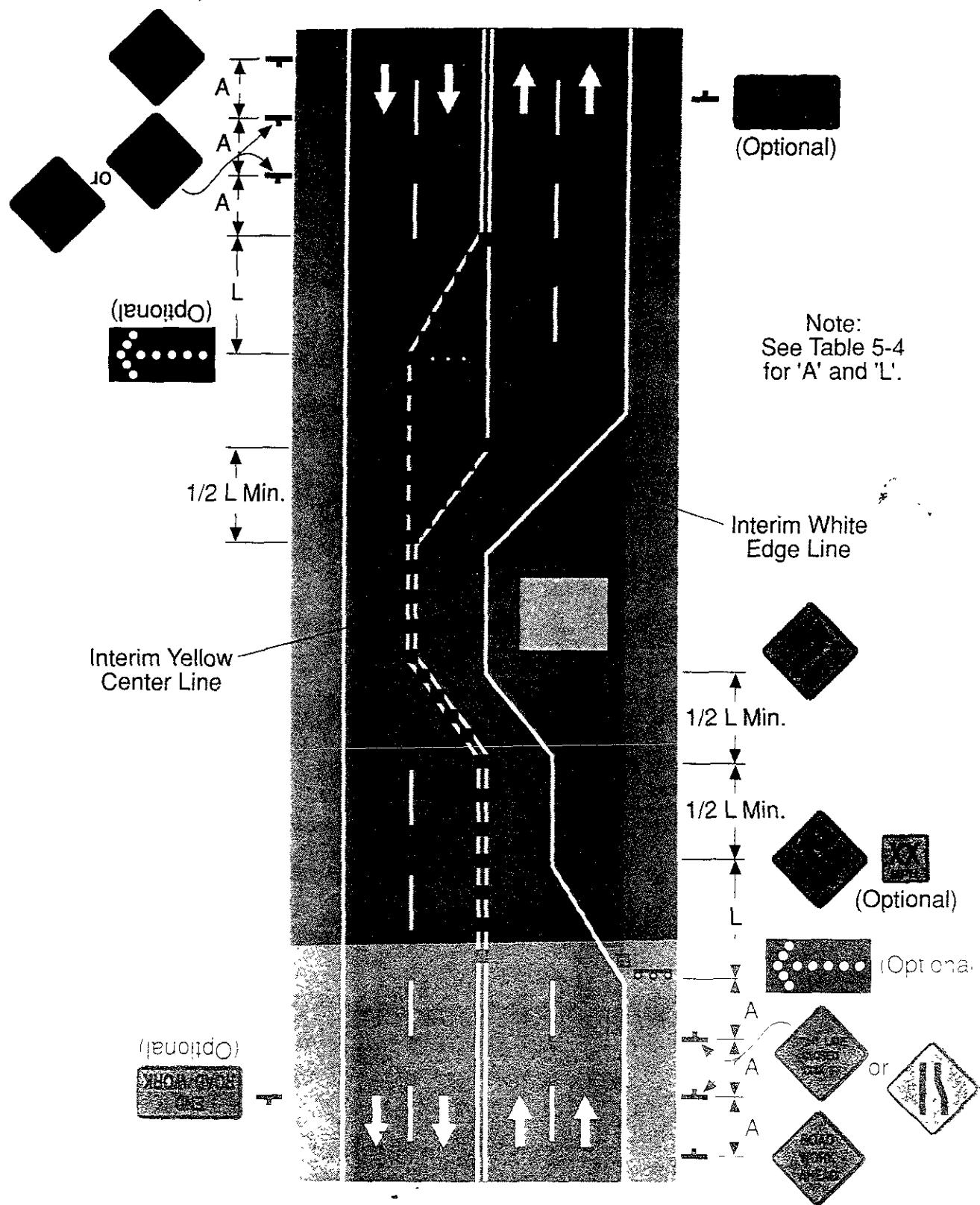




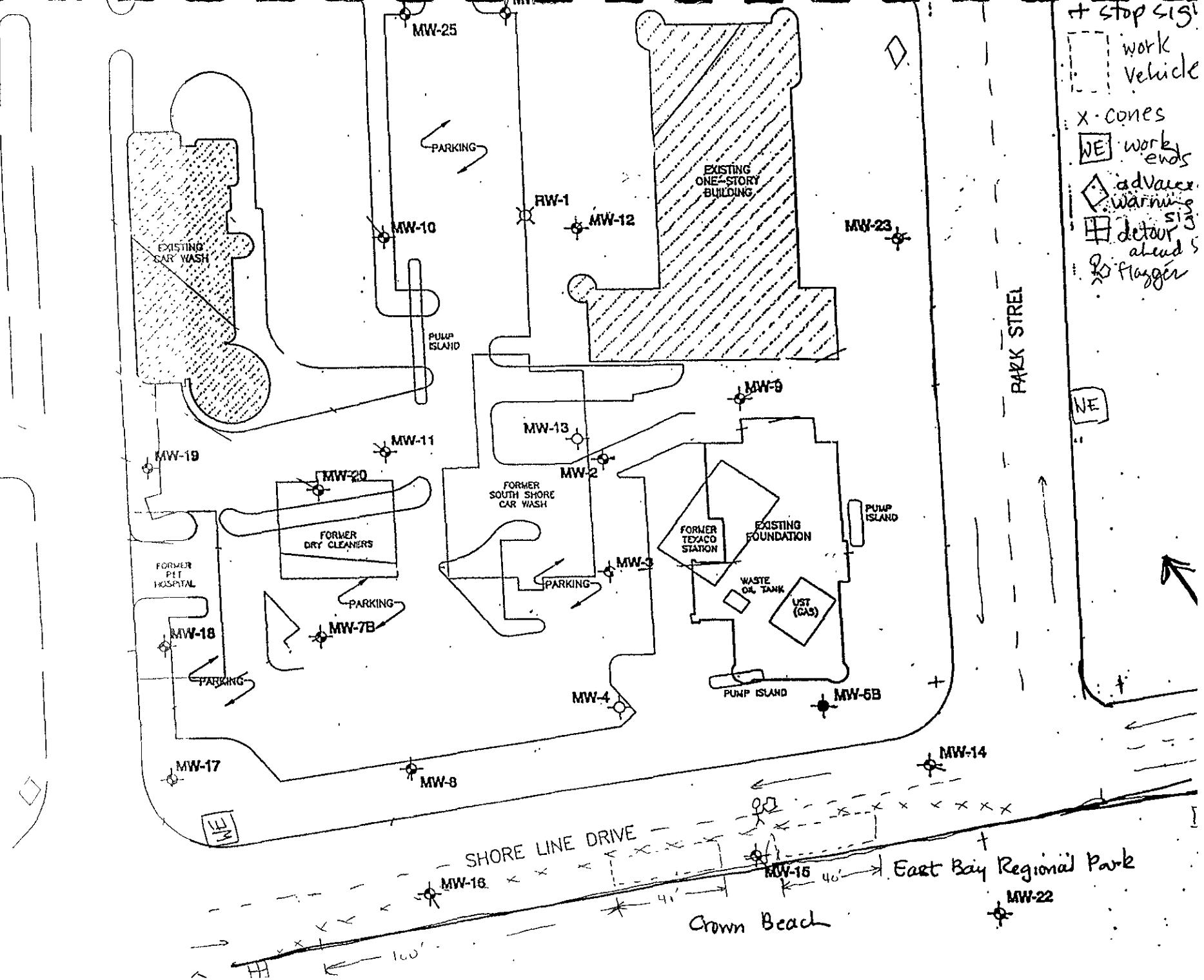
M-18



Typical Application 5-32
Half Road Closure on Multilane High Speed Highways



+ stop sign
 - work vehicle
 X-cones
 NE work ends
 diamond advance warning
 detour ahead SIG
 flagger



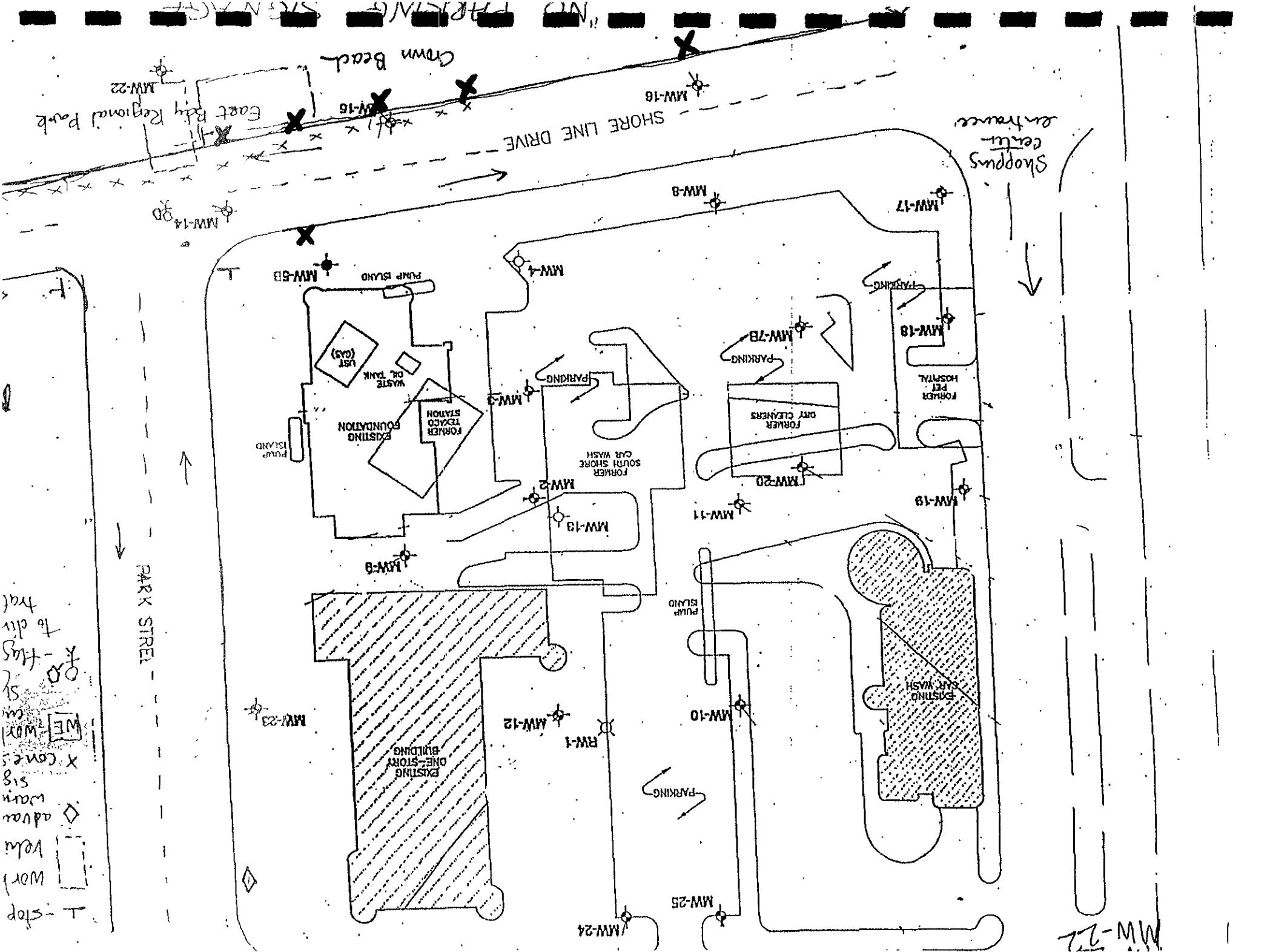


"NO PARKING" SIGN POSTING INSTRUCTIONS

1. Post at least one "No Parking" sign at each parking meter or post at least one "No Parking" sign every twenty-five feet (25').
2. Use twine, masking tape, or cinch tie to attach "No Parking" sign(s). Do not use duct tape, nails or staples to attach "No Parking" sign(s) to any tree, sign pole, power pole, or street light pole.
3. All signs MUST be removed within eight hours (8-hours) of the end of the parking restriction.

"CERTIFICATE OF POSTING" FORM INSTRUCTIONS

1. Complete "CERTIFICATE OF POSTING" and distribute to the Alameda Police Department, Public Works Maintenance Service Center, Public Works Engineering Division and Public Works Central Permits Office PRIOR to the start of the parking restrictions.



950 West Mall Square, #110
Alameda Point
Alameda, CA 94501

CITY OF ALAMEDA

(510) 749-5840

Public Works Department

Fax (510) 749-5867

Printed: 10-04-2000

Right-of-Way Permit

Permit #

EX00-0150

Applicant

R. ELENA RAMIREZ
HARSH INVESTMENT CX
LFR-LEVINE FRICKE
1900 POWELL ST 12 TH FLOOR
EMERYVILLE, CA 94608
510-596-9620

Contractor Information

Owner Information

PO BOX 2708
PORTLAND OR
97208

Project Information

RTOFWAY - Right-of-Way Permit - PENDING
Sub-Type:

Applied: 10/04/2000
Finalized:

Issued:
Expires:
Valuation: \$10,312.00

Job Address: 2375 SHORE LINE DR
074 120000215

Parcel Number:

Suite / Unit:
Work Description: ABANDONING/DESTRUCTION OF GROUNDWATER WELLS & SOIL VAPOR
EXTRACTION SYSTEM

Total Fees:	\$36.00
Total Payments:	\$36.00
BALANCE DUE	\$0.00

Payments Made: 10/04/2000 11:25 AM

RECEIPT

Receipt #: R00-005196

Total Payment: **\$36.00**

Payee: R ELENA RAMIREZ

Current Payment Made to the Following Items:

Account Code	Description	Amount
4520-37450 (1050)	Permit Filing Fees	36.00

Payments Made for this Receipt:

Type	Method	Description	Amount
Payment	Check	3027	36.00

Account Summary for Fees and Payments:

Item#	Description	Account Code	Tot Fee	Paid	Prev. Pmts	Cur. Pmts
250	Permit Filing Fees	4520-37450 (1050)	36.00	36.00	.00	36.00

**** See application for additional requirements ****

INSPECTIONS

510-749-5840

NOTE All construction within the public right of way must have barricades w/in f'ashers for night time protection

This is to certify that the above work has been completed to my satisfaction and approval

Date

Inspector

<- Initials Present ->

Description of Proposed Work

Applicant: R. Elena Ramirez
Consultant Group: LFR-Levine Fricke
Contractor: Spectrum Drilling

Site: 2375 Shoreline Drive, Alameda, California

Monitoring well and groundwater/soil-vapor extraction system closure for the South Shore Shopping Center located at 2375 Shoreline Drive, in the city of Alameda will begin Oct. 17. Work is scheduled to terminate on the 27th of Oct. The monitoring wells will be over-drilled. After over-drilling and removal of well casing materials, each drill hole will be pressure grouted with a neat cement-bentonite mixture from the bottom up using a tremie pipe. Waste materials and soil generated during abandonment activities will be temporarily stored in labeled 55-gallon drum (or other approved method) at the site. The surfaces at each location will be reconditioned to match the surrounding conditions (landscape, soil, asphalt (utilizing a Hot Patch), or concrete).

2263 Santa Clara Ave
Alameda, CA 94501

CITY OF ALAMEDA

Building Division

(510) 748-4530

Fax (510) 748-4548

Printed: 10-04-2000

Commercial Permit

Permit #

B00-1997

Applicant

R ELENA RAMIREZ
LFR LEVING-FRICKE
1900 POWELL ST 12TH FLOOR
EMERYVILLE, CA 94608
510-465-8712

Contractor Information

Owner Information

HARSH INVESTMENT CX
PO BOX 2708
PORTLAND OR
97208

Project Information

COM - Commercial Permit - APPROVED
Sub-Type: Ready: Applied: 10/04/2000 Issued: 10/04/2000
Finaled: Valuation: \$26,812.50 Expires: 10/04/2001

Parcel Number: 074 120000215
Address: 2375 SHORE LINE DR
Suite / Unit:

Work Description: ABANDONING/DESTRUCTION OF GROUNDWATER WELLS AND SOIL VAPOR EXTRACTION SYSTEM (11 WELLS)

INSPECTIONS

Building: 748-4564 (7:30-9:30 A.M.) Electrical: 748-4634 (7:30-9:30 A.M.)
Plumbing & Mechanical: 748-4563 (7:30-9:30 A.M.) Fire: 749-5885
Design Review: 748-4554

<u>PROCESSED BY:</u>	GM	<u>PAYMENT RECEIVED BY:</u>	GM	Total Fees:	\$451.63
<u>ENTERED BY:</u>	GMOORE			Total Payments:	\$451.63
				BALANCE DUE:	\$0.00

Payments Made: 10/04/2000 11:34 AM RECEIPT Receipt #: R00-005197
Total Payment: \$451.63 Payee: R. ELENA RAMIREZ

Current Payment Made to the Following Items:

Account Code	Description	Amount
001-22390 (1040)	SMIP Fee	5.63
4520-33600 (1200)	Building Permits Fees	410.00
4520-37450 (1050)	Permit Filing Fees	36.00

Payments Made for this Receipt:

Type	Method	Description	Amount
Payment	Check	3027	451.63

Account Summary for Fees and Payments:

Item#	Description	Account Code	Tot Fee	Paid	Prev. Pmts	Cur. Pmts

Payments Made to the Following Permits:

Permit #: B00-1997

CITY OF ALAMEDA

Inspection Hard Card

Issued: 10/04/2000 EXPIRES: 10/04/2001

Address: 2375 SHORE LINE DR

OWNER: HARSH INVESTMENT CX

CONTRACTOR:

DESCRIPTION: ABANDONING/DESTRUCTION OF GROUNDWATER WELLS AND SOIL VAPOR EXTRACT SYSTEM (11 WELLS)

Foundations: _____ Sheetrock/ Interior Lath: _____

(Required before taping or plastering)

Ground Plumbing: _____ Exterior Lath: _____

Rough Electric: _____ (Required before Stucco)
DESIGN REVIEW: (YES) (NO) BY _____
Final _____

Rough Plumbing: _____ Gas Test: _____

Rough Heating and Ventilation: _____ Kelly Test: _____

St. Floor: _____ Sewer Repair / Replacement: _____

Frame: _____ Final Electric: _____

Insulation: _____ Final - Plumbing: _____

** Comments ** Certificate _____ Final - Heating & Ventilation: _____

Final - Building: 11-21-w fire alarms

Do not occupy structure until Certification of Occupancy has been issued. For Certificate of Occupancy to be issued a copy of the hard card with all Finals needs to be filed with the Building Services Office, Room 190 City Hall Alameda CA.

** SMOKE DETECTORS REQUIRED --- U B C Section 1210 **

When alterations, repairs or additions are made to an existing residence and the value of the improvements exceed \$100,000.00, the entire building shall be provided with smoke detectors as required for new residences.

INSPECTIONS (SAME DAY) - CALL 7:30-9:30 A.M. ONLY
Building 748-4564
Plumbing & Mechanical 748-4563
Electrical 748-4634

INSPECTIONS (MUST BE SCHEDULED)
Fire 749-5885
Design Review 748-4554