1ec

**Ultramar** 

93 AUG 12 PM 2: 22

Ultramar Inc.

P.O. Box 466 525 W. Third Street Hanford, CA 93232-0466 (209) 582-0241 Telecopy: 209-584-6113 Credit & Wholesale 209-583-3330 Administrative 209-583-3302 Information Services 209-583-3358 Accounting

August 10, 1993

Ms. Eva Chu Department of Environmental Health Alameda County Health Care Services 80 Swan Way, Room 200 Oakland, CA 94612

SUBJECT: BEACON STATION NO. 604, 1619 FIRST STREET, LIVERMORE,

**CALIFORNIA** 

Dear Ms. Chu:

Enclosed is a copy of the report on the assessment at the above-referenced Ultramar facility.

A workplan detailing further assessment will be sent to your office when it has been completed.

Please call if you have any questions regarding this site.

Sincerely,

ULTRAMAR INC.

Terrence A. Fox

Senior Project Manager

Marketing Environmental Department

cc:

Alameda County Local Coordinator, San Francisco Bay Region,

RWQCB



BEAC®N
#1 Quality and Service

# ACTON • MICKELSON • van DAM, INC. Consulting Scientists, Engineers, and Geologists

5090 Robert J. Mathews Parkway, #4 El Dorado Hills, California 95762 (916) 939-7550 Fax (916) 939-7570

August 6, 1993

Mr. Terrence A. Fox Ultramar, Inc. 525 West Third Street Hanford, California 93232

19024.01

Subject:

Soil and Ground Water Investigation--Beacon Station No. 604

1619 West First Street, Livermore, California

Dear Mr. Fox:

Acton • Mickelson • van Dam, Inc. (AMV), has been authorized to conduct an investigation of soil and ground water conditions at Beacon Station No. 604 located at 1619 West First Street, Livermore, Alameda County, California (Figure 1). This letter summarizes the results of soil boring, ground water monitoring well and vapor extraction well installation, and soil and ground water sampling performed at the site on May 27, 28, June 1, and June 22, 1993.

#### Scope of Work

The work included advancing three 10-inch-diameter soil borings to a depth of approximately 54 feet below grade and completing each of these borings as monitoring wells (MW-1, MW-2, and MW-3) and advancing four 8-inch-diameter soil borings to approximate depths of 50, 37, 36, and 35 feet below grade (VW-1, VW-2, VW-3, and B-4, respectively). Soil borings VW-1, VW-2, and VW-3 were completed as vapor extraction wells. Soil boring B-4 was grouted to the surface shortly after drilling. Monitoring and vapor extraction well and soil boring locations are illustrated on Figure 2. Methods used to drill and sample the soil borings are described in Enclosure A. Soil boring logs containing detailed descriptions of soil characteristics are included in Enclosure B.

Mr. Terrence A. Fox August 6, 1993 Page 2

Selected soil samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons as gasoline (TPHg). Analytical procedures conformed to U.S. Environmental Protection Agency (EPA) and California Environmental Protection Agency (CAL-EPA) approved methods.

Ground water monitoring wells MW-1, MW-2, and MW-3 were constructed of 4-inch-diameter, Schedule 40 PVC casing. Vapor extraction wells VW-1, VW-2, and VW-3 were constructed of 2-inch-diameter Schedule 40 PVC casing. Details of monitoring well and vapor extraction well construction are contained in Enclosure C. The monitoring wells were developed, purged, and sampled in accordance with methods outlined in Enclosure A. A ground water sample from each monitoring well was submitted for laboratory analysis of BTEX and TPHg in accordance with the requirements of the Department of Environmental Health, County of Alameda.

#### **Soil Borings**

Soil samples collected from the borings consisted of silty clay and clayey gravel. For example, samples collected from the boring of monitoring well MW-3 indicated the following vertical soil sequence: from below the concrete to 18.5 feet below grade, the soil encountered consisted of clayey gravel; from 18.5 to 35 feet, a silty clay unit was encountered; from 35 feet to a total depth of 53 feet below grade, a clayey gravel unit was present. Contacts between the soil types were gradational. Soil boring logs containing detailed descriptions of soil conditions encountered in each boring are included in Enclosure B.

#### Soil Sample Analytical Results

A portion of each soil sample collected from the soil borings was sealed in a plastic bag and allowed to reach ambient air temperature. The headspace of the bag was then screened in the field for the presence of organic vapors with a photoionization detector (PID). The highest PID reading for each sample was recorded on the right-hand side of the boring logs (Enclosure B.)

Soil samples were selected for chemical analysis on the basis of PID screening results and the location of the soil samples in relation to the most likely source of petroleum constituents. Twenty-four soil samples were submitted for analysis of concentrations of BTEX and TPHg. Analytical results of soil samples submitted by AMV are summarized in Table 1. Copies of certified analytical reports are contained in Enclosure D.

Mr. Terrence A. Fox August 6, 1993 Page 3

#### **Ground Water Level Measurements**

Ground water level measurements were collected from each monitoring well on June 1 and June 22, 1993 (Table 2). Ground water was present at depths ranging from 37.11 to 39.07 feet below the top of the monitoring well casings on June 22, 1993. Water level measurements from the June 22, 1993, indicate an inferred direction of ground water flow toward the northwest as illustrated on Figure 3. On June 22, 1993, the ground water gradient was approximately 0.03 foot per foot.

#### **Ground Water Analytical Results**

On June 1 and June 22, 1993, ground water samples were collected from the three on-site monitoring wells (MW-1, MW-2, and MW-3). Samples were collected as described in Enclosure A. Copies of field notes for sampling activities conducted on June 22, 1993, are contained in Enclosure E. Each ground water sample was analyzed for BTEX and TPHg by state and federal EPA approved methods. Analytical results are compiled in Table 3. Copies of certified analytical reports are contained in Enclosure F.

#### Discussion

Soil samples containing TPHg concentrations exceeding 100 parts per million (ppm) were collected from 40 feet below grade in soil boring VW-1 and 20 feet below grade in soil boring VW-2. The area of soil containing TPHg at concentrations exceeding 100 ppm has been defined. A soil sample collected at 40 feet below grade from soil boring VW-1 contained benzene at a concentration of 1.8 ppm.

The most recent ground water samples collected on June 22, 1993, contained TPHg concentrations ranging from 160,000 micrograms per Liter ( $\mu$ g/L) in monitoring well MW-2, to 160  $\mu$ g/L monitoring well MW-3. The ground water sample collected from monitoring well MW-2 on June 22, 1993, contained the highest concentration of benzene at 19,000  $\mu$ g/L.

It is recommended that a copy of this report be forwarded to the following agencies:

Ms. Eva Chu
Department of Environmental Health
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, California 94612

Mr. Terrence A. Fox August 6, 1993 Page 4

Mr. Cecil Felix
California Regional Water Quality Control Board,
San Francisco Bay Region
2101 Webster Street, Room 500
Oakland, California 94612

If you have any questions, please contact either of the undersigned at (916) 939-7550. Sincerely,

ACTON ● MICKELSON ● van DAM, INC.

Steven A. Liaty

Hal Haron for

Geologist

SAL:DAvD:ecd Enclosures Dale A. van Dam, R.G.

Dale a. va Dam

California Registered Geologist #4632

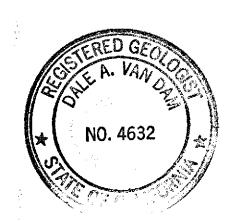


TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Concentrations in milligrams per kilogram (mg/kg)

Boring No.	Sample No.	Depth (feet below grade)	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg*
VW-1	6 7 8	30 35 40	05-27-93 05-27-93 05-27-93	<0.50 0.20	4.3 0.45 16	2.6 0.11 5.3	17 0.56 32	280 11 340
VW-2	4	20	05-28-93	<0.50	4.0	4.0	25	200
	6	30	05-28-93	0.018	0.15	0.044	0.23	3.5
	7	35	05-28-93	0.021	0.024	0.0086	0.056	<1.0
VW-3	4	20	06-01-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
	5	25	06-01-93	0.017	<0.0050	<0.0050	<0.0050	<1.0
	6	30	06-01-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
	7	35	06-01-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
MW-1	5	25	05-27-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
	6	30	05-27-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
	7	35	05-27-93	0.029	0.015	0.0051	0.031	<1.0
MW-2	4	20	05-27-93	<0.0050	<0.0050	<0.0050	0.037	6.4
	5	25	05-27-93	0.057	0.099	0.026	0.22	1.5
	6	30	05-27-93	0.040	0.065	0.0070	0.051	<1.0
	7	35	05-27-93	<0.0050	<0.0050	<0.0050	< 0.0050	<1.0
MW-3	5	25	05-28-93	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
	6	30	05-28-93	<0.0050	<0.0050	<0.005	<0.0050	<1.0
	7	35	05-28-93	<0.0050	<0.0050	<0.005	<0.0050	<1.0
B-4	4 5 6 7	20 25 30 35	06-01-93 06-01-93 06-01-93 06-01-93	<0.0050 <0.050 0.17 0.073	<0.0050 0.27 0.044 0.11	<0.0050 0.18 0.013 0.30	0.020 1.7 0.057 0.65	<1.0 16 <1.0

TABLE 2
WATER ELEVATION DATA

Monitoring Well	Date	Top of Riser	Depth to Water (feet)	Ground Water Elevation (feet)	Physical Observation
MW-1	06-01-93 06-22-93	100.00	37.50 38.46	62.50 61.54	No Product
MW-2	06-01-93 06-22-93	98.68	38.02 39.07	60.66 59.61	No Product No Product
MW-3	06-01-93 06-22-93	97.08	36.18 37.11	61.90 61.97	No Product No Product

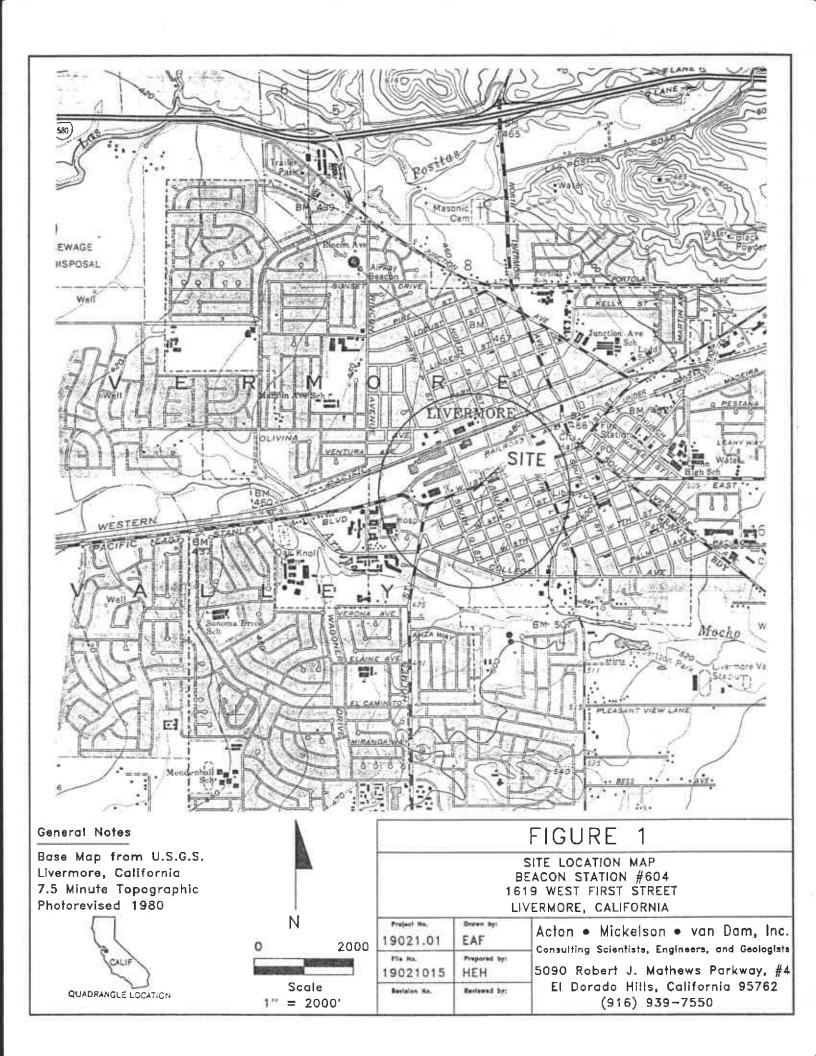
NOTE: Monitoring well elevations were surveyed relative to an arbitrary bench mark at the top of the casing of monitoring well MW-1 with an assumed elevation of 100.00 feet.

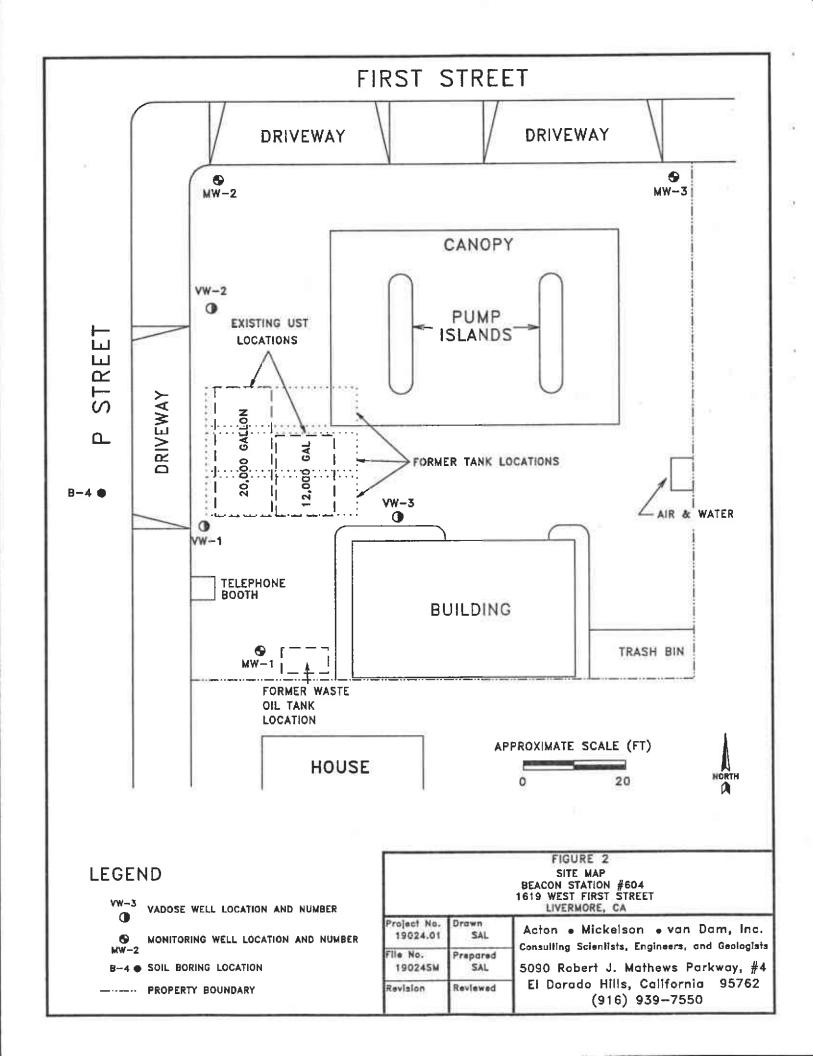
TABLE 3

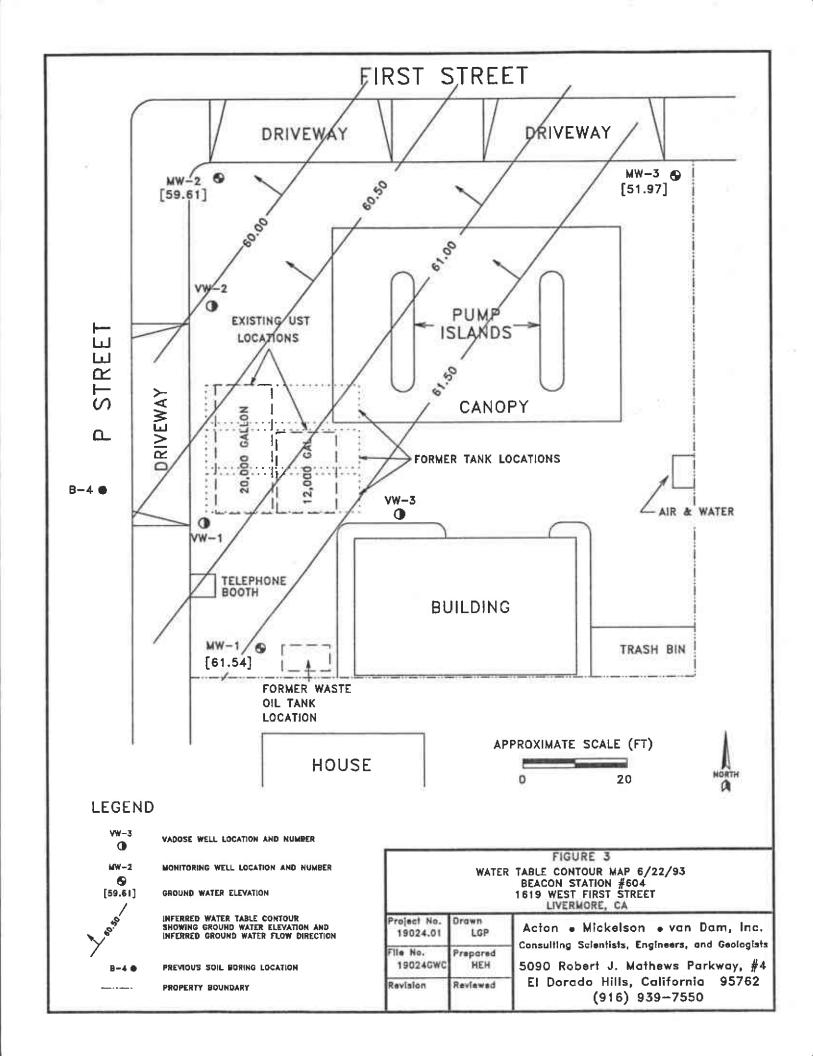
GROUND WATER SAMPLE ANALYTICAL RESULTS
Concentrations in micrograms per Liter (µg/L)

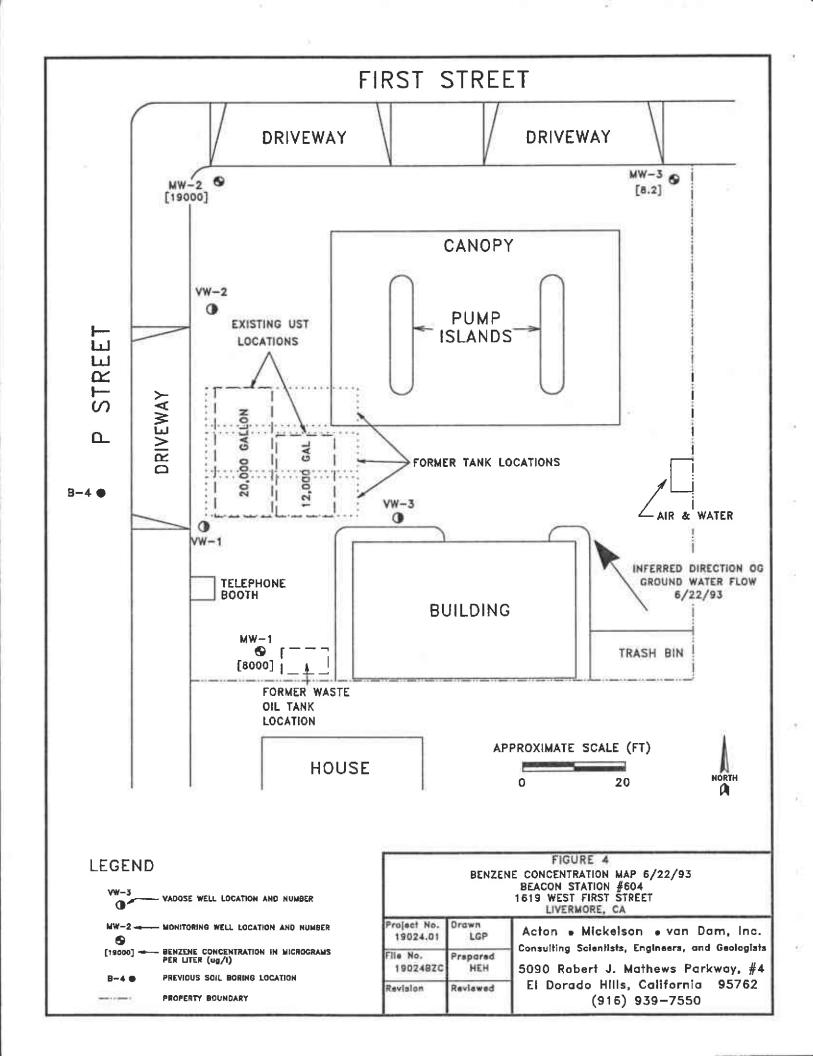
Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg*
MW-1	06-01-93	2,200	400	<50	4,900	27,000
	06-22-93	8,000	10,000	260	10,000	87,000
MW-2	06-01-93	20,000	21,000	3,300	18,000	170,000
	06-22-93	19,000	22,000	3,500	18,000	160,000
MW-3	06-01-93	4.6	<0.50	<0.50	1.9	270
	06-22-93	8.2	<0.50	<0.50	0.72	160

\*Total Petroleum Hydrocarbons as gasoline.









# ENCLOSURE A SOIL AND GROUND WATER SAMPLING TECHNIQUES

#### **ENCLOSURE A**

### SOIL AND GROUND WATER SAMPLING TECHNIQUES

Proper sampling techniques were followed to assure that samples represented actual field conditions and that samples were labeled, preserved, and transported properly to retain sample integrity. This exhibit describes procedures followed by Acton • Mickelson • van Dam, Inc. (AMV), during collection of samples of subsurface soil and ground water. Sampling guidance documents from the American Society of Testing and Materials (ASTM), U.S. Environmental Protection Agency (EPA), and California Department of Health Services (DHS) were followed for all sampling procedures. Actual sampling procedures employed were based on field conditions and may differ from those described here.

#### 1.0 EXPLORATION BORING/SOIL SAMPLING PROCEDURES

Soil borings and soil sampling were performed under the direction of an AMV geologist. The soil borings were advanced using a truck-mounted, hollow-stem auger drill rig.

Soil samples were collected at 5-foot vertical intervals. Soil sampling was done in accordance with ASTM 1586-84. Using this procedure, three 2-inch-diameter, 6-inch-length, brass tubes were placed in a California-type split-barrel sampler. The sampler was driven into the soil by a 140-pound weight falling 30 inches. After an initial set of 6 inches, the number of blows required to drive the sampler an additional 12 inches is known as penetration resistance, or the "N" value. The "N" value was used as an empirical measure of the relative density of cohensionless soils and the consistency of cohesive soils.

Upon recovery of the split-barrel sampler, the brass tubes containing the soil were removed. The ends of one of the three brass tubes were sealed with Teflon tape and plastic end caps. The sample was labeled with an identification number, time, date, location, and requested laboratory analysis. The sample was placed in a plastic bag and stored at approximately 4° Celsius (C) in an ice chest for transport to the laboratory. Sample custody procedures outlined in Section 5.0 of this exhibit were followed. This was performed for each sample collection.

Soil in one of the brass tubes was extracted upon recovery, placed in a plastic bag, and sealed for later screening for organic vapors using a photoionization detector (PID) or a flame ionization detector (FID). The remaining portion of the soil sample was examined and a complete log of soil conditions was recorded on a soil boring log (Enclosure A) using the Unified Soil Classification System (Enclosure B). The soil was examined for grain size, color, and moisture content.

The split-barrel sampler was cleaned to prevent cross-contamination for each sampling interval using procedures described in Section 3.0.

Soil borings were normally advanced with 8- or 10-inch-diameter, hollow-stem augers. The soil generated from the soil borings was stored on visqueen.

# 2.0 WATER LEVEL AND LIQUID-PHASE HYDROCARBON (LPH) THICKNESS MEASUREMENTS AND GROUND WATER SAMPLING

#### 2.1 Water Level and LPH Thickness Measurements

The static water level and/or LPH thickness in each well was measured prior to purging or sampling.

The depth to water/product was measured using an electronic interface probe. The wire of the interface probe is marked at 0.01 foot intervals. One tone is emitted from the interface probe if LPH is encountered; another tone for water. The wire of the interface probe was lowered slowly until LPH or water was encountered. At this point, the mark on the interface wire opposite the permanent reference point on the top of the well casing was read to the nearest 0.01 foot and recorded. If the first encountered substance was LPH, the probe was lowered until the tone corresponding to water was emitted. This depth was also recorded. The difference between the two depths corresponds to the LPH thickness. The interface probe was rinsed in deionized water between measurements in different wells.

A permanent reference point was marked on the well casings. The permanent reference point on the well casings was surveyed to a common reference point. All well casing riser elevations are known to within 0.01 foot.

Prior to well development, a disposable bailer was used to collect a sample of LPH, if present in a well, for subjective analysis. The sample was collected by gently lowering the bailer approximately one-half the bailer length past the air/LPH interface. The appearance (color, opacity, "freshness") was described and noted on field notes.

## 2.2 Well Evacuation and Development

After the static water level in a well was determined and prior to collection of a ground water sample, stagnant water was removed from the well casing and the surrounding gravel pack by bailing, pumping, or with a vacuum truck. At least three casing volumes of water were removed from each well from which a sample was collected. The volume of water in the casing was determined from the known elevation of the water surface, the well bottom elevation (as measured when the well is installed), and the well diameter.

If the well was bailed or pumped during purging, samples were collected and field analyzed for pH, temperature, and specific conductance. The well was considered stabilized when repeated readings of the following parameters were within the ranges indicated as follows:

• Specific conductance  $\pm 10$  percent of the reading range

• pH  $\pm 0.1$  pH unit • Temperature  $\pm 0.5$ ° C.

After stabilization, and after at least three well volumes were evacuated, a sample was collected for analysis. The field container used for well stabilization measurements, and the pH, temperature, and conductivity probes were rinsed between wells with deionized water.

All purge water was containerized and properly handled and documented for disposal. If the containers was stored on site, a label specifying the date of purging, source, and the known or suspected nature of the contents was affixed to each container.

# 2.3 Sample Collection, Preservation, and Handling

After purging, a new polyethylene disposable bailer was used to collect samples for analysis. The bailer was attached to a new disposable rope and lowered slowly into the water to avoid agitation of the collected sample. Containers for volatile organics analyses were filled completely so no airspace remained in the vial after sealing.

All sample containers were prewashed and prepared at the analyzing laboratory in accordance with quality assurance/quality control protocols of the laboratory. Only sample containers appropriate for the intended analyses were used.

#### 3.0 DECONTAMINATION AND DISPOSAL PROCEDURES

### 3.1 Equipment Decontamination

All equipment that came in contact with potentially contaminated soil, drilling fluid, air, or water was decontaminated before each use. Decontamination consisted of steam-cleaning, a high-pressure, hot-water rinse, or trisodium phosphate (TSP) wash and freshwater rinse, as appropriate.

Drilling and sampling equipment were decontaminated as follows:

- 1. Drill rig augers, drill rods, and drill bits were steam-cleaned prior to use and between borings. Visible soil, grease, and other impurities were removed.
- 2. Soil sampling equipment was steam-cleaned prior to use and between each boring. Prior to individual sample collection, any sampling device was cleaned in a TSP solution and rinsed twice in clean water. Any visible soil residue was removed.
- 3. Water sampling containers were cleaned and prepared by the respective analytical laboratories.

- 4. Stainless steel or brass soil sampling tubes were steam-cleaned or washed in TSP solution and rinsed with clean water.
- 5. Field monitoring equipment (pH, conductivity, or temperature probes) was rinsed with clean water prior to use and between samples.

#### 4.0 FIELD MEASUREMENTS

Field data were collected during various sampling and monitoring activities; this section describes routine procedures followed by personnel performing field measurements. The methods presented below are intended to ensure that field measurements are consistent and reproducible when performed by various individuals.

#### 4.1 Buried Utility Locations

Prior to commencement of work on site, AMV contacted appropriate utility companies to have underground utility lines located. AMV also researched the location of all underground utilities using past site construction and surveying plans and by conducting a ground reconnaissance of the area. All work associated with the borings was preceded by hand augering to a minimum depth of 5 feet below grade to avoid contact with underground utilities.

#### 4.2 Lithologic Logging

A log of soil conditions encountered during the drilling and sample collection (Enclosure A) was maintained using the Unified Soil Classification System (Enclosure B) by an AMV geologist. All boring logs were reviewed by a California registered geologist.

The collected soil samples were examined and the following information recorded: boring location, sample interval and depth, blow counts, color, soil type, moisture content (qualitative), and depth at which ground water (if present) is first encountered. Also recorded on the soil boring logs were the field screening results derived from the use of a portable PID or FID.

#### 4.3 Disposal Procedures

Soils and fluids that were produced and/or used during the installation and sampling of borings, and that are known or suspected to contain potentially hazardous materials, were contained during the above operations. These substances were retained on site until chemical testing had been completed to determine the proper means of disposal. Handling and disposal of substances known or suspected to contain potentially hazardous materials complied with the applicable regulations of DHS, the California Department of Water Resources, and any other applicable regulations. Soils and fluids produced and/or used during the above-described operations that appeared to contain potentially hazardous materials were disposed of appropriately.

Residual substances generated during cleaning procedures that are known or suspected to pose a threat to human health or the environment were placed in appropriate containers until chemical testing had been completed to determine the proper means for their disposal.

### 4.4 Conductivity, Temperature, and pH

Specific conductance, water temperature, and pH measurements were made when a water sample was collected. Regardless of the sample collection method, a representative water sample was placed in a transfer bottle used solely for field parameter determinations. A conventional pH meter with a combination electrode or equivalent was used for field-specific conductance measurements. Temperature measurements were performed using standard thermometers or equivalent temperature meters. Combination instruments capable of measuring two or all three of the parameters may have also been used.

All instruments were calibrated in accordance with manufacturer methods. The values for conductivity standards and pH buffers used in calibration were recorded daily in a field notebook. All probes were thoroughly cleaned and rinsed with fresh water prior to any measurements, in accordance with Section 3.1.

#### 5.0 SAMPLE CUSTODY

This section describes standard operating procedures for sample custody and custody documentation. Sample custody procedures were followed through sample collection, transfer, analysis, and ultimate disposal. The purpose of these procedures is to assure that (1) the integrity of samples was maintained during their collection, transportation, and storage prior to analysis and (2) post-analysis sample material was properly disposed of. Sample custody is divided into field procedures and laboratory procedures, as described below.

#### **5.1 Field Custody Procedures**

Sample quantities, types, and locations were determined before the actual fieldwork commenced. As few people as possible handled samples. The field sampler was personally responsible for the care and custody of the collected samples until they were properly transferred.

#### 5.1.1 Field Documentation

Each sample was labeled and sealed properly immediately after collection. Sample identification documents was carefully prepared so that identification and chain-of-custody records could be maintained and sample disposition could be controlled. Forms were filled out with waterproof ink. The following sample identification documents were utilized.

- Sample labels
- Field notebook
- Chain-of-custody forms

### 5.1.2 Sample Labels

Sample labels provide identification of samples. Preprinted sample labels were provided. Where necessary, the label was protected from water and solvents with clean label-protection tape. Each label contained the following information:

- Name of collector
- Date and time of collection
- Place of collection
- AMV project number
- Sample number
- Preservative (if any)

#### 5.1.3 Field Notebook

Information pertinent to a field survey, measurements, and/or sampling were recorded in a bound notebook. Entries in the notebook may have included the following:

- Name and title of author, date and time of entry, and physical/environmental conditions during field activity.
- Location of sampling or measurement activity.
- Name(s) and title(s) of field crew.
- Type of sampled or measured media (e.g., soil, ground water, air, etc.)
- Sample collection or measurement method(s).
- Number and volume of sample(s) taken.
- Description of sampling point(s).
- · Description of measuring reference points.
- Date and time of collection or measurement.
- Sample identification number(s).
- Sample preservative (if any).
- Sample distribution (e.g., laboratory).
- Field observations/comments.
- Field measurements data (pH, etc.).

# 5.1.4 Chain-of-Custody Record

A chain-of-custody record was filled out for and accompanied every sample and every shipment of samples to the analytical laboratories in order to establish the documentation necessary to trace sample possession from the time of collection. The record contained the following information:

- Sample or station number or sample I.D.
- Signature of collector, sampler, or recorder.
- Date and time of collection.
- Place of collection.
- Sample type.
- Signatures of persons involved in the chain of possession.
- Inclusive dates of possession.

The laboratory portion of the form was completed by laboratory personnel and contains the following information:

- Name of person receiving the sample.
- Laboratory sample number.
- Date and time of sample receipt.
- Analyses requested.
- Sample condition and temperature.

### 5.1.5 Sample Transfer and Shipment

Samples were always accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving the samples signed, dated, and noted the time on the chain-of-custody record. Samples were packaged properly for shipment and dispatched to the appropriate laboratory for analysis. The chain-of-custody record accompanied each shipment. The method of shipment, courier name(s), and other pertinent information was entered in the chain-of-custody record.

#### 5.2 Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample label matched that on the chain-of-custody record. Information regarding method of delivery and sample conditions was also checked on the chain-of-custody record. The custodian then entered the appropriate data into the laboratory sample tracking system. The laboratory custodian may have used the sample number on the sample label or may have assigned a unique laboratory number to each sample. The custodian then transferred the sample(s) to the proper analyst(s) or stored the sample(s) in the appropriate secure area.

Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Once at the laboratory, the samples are handled in accordance with <u>U.S. Environmental Protection Agency SW-846</u>, Test Methods for Evaluating <u>Solid Waste Physical/Chemical Methods</u>, Third Edition, for the intended analyses. All data sheets, chromatographs, and laboratory records were filed as part of the permanent documentation.

#### 5.3 Corrections to Documentation

Original data recorded in field notebooks, chain-of-custody records, and other forms were written in ink. These documents were not altered, destroyed, or discarded, even if they were illegible or contained inaccuracies that required a replacement document.

If an error was made or found on a document, the individual making the corrections did so by crossing a single line through the error, entering the correct information, and initialing and dating the change. The erroneous information was obliterated. Any subsequent error(s) discovered on a document were corrected. All corrections were initialed and dated.

# 5.4 Sample Storage and Disposal

Samples and extracts were retained by the analytical laboratory for 60 days after a written report was issued by the laboratory. Unless notified by the program manager, excess or unused samples were disposed of by the laboratory in an appropriate manner consistent with applicable government regulations.

# ENCLOSURE B SOIL BORING LOGS

	_		_	_	_			_	_
Acton - Mickelson - van Dam, Inc.	Project No. Location: Beacon 604 1819 W. Fire Livermore, CA								Street
Consulting Scientists, Engineers, and Geologists									
_	Jorni			ממיר	الط	ina l	vethods		- 1
Log of Soil Boring MW-1		BK-81 H: split-spoor	SA Co	illfo	•	_		•	
Casing Elevation: 100.00 feet	ОУМ	/OVA	HI	Nu P	ID w	rith 10.2	2 eV probe		
	Dri	lling		Ti	m	е	Dat	е	
	St	art		05-	27-	93	13:10		
	Fir	nish		05-	27-	93	15:15		
Completion Depth: 54 feet		Depth	Init	ial			Completio 38.4	n 16 fe	ef
ي ي Logged by: H. Hansen	<u>.0</u>	_	Ë.	E	p,vc			#	Υ Y G E
Checked by: DAD	4	A L	9	Pr.	Recov'd			<u>P</u>	NA.
Logged by: H. Hansen  Checked by: D.D.  Description	Gra	BORING/ WELL DETAIL	Blows/6	Inches Driven	Inches	Con	nments	Sample	Field OVM/OVA Reading (ppm)
7 - 1									
0 12 Inch bore concrete		accept Book							
1 CLAYEY GRAVEL Olive brown, 1/2 to 2 inch gravel,	000	₩ ₩							
2 fine to course-grained sand, common plastic fines, dry (GC)	000	₩ ₩							
3 🕂	000	₩ ₩							
I 4 <del>∏</del>	000	₩ ₩							
5 -	000	₩ ₩	17 12	18	14			1-1%	0
6 -	000	₩ ₩	35					_	
7	000	₩ ₩							
l e H	000	₩ ₩							
<sup>8</sup>	000	₩ ₩							
9 🕁	000	₩ ₩	40					n i	
10	CGC	₩ ₩	45 50/4	18	12			MW1-2	0
11 🖶	000	₩ ₩							
12 🕂	000	₩ ₩							
13 🕂	000	₩ ₩							
14 🕂	000	₩ ₩							
15 -	0000								
16	000	₩ ₩	35	9	9			HW1-3	0
17 🕂	000	₩ ₩	50/3						
<del>     </del>	000		8						
18 #	000								
19	000	₩ ₩	18						
20 maist at 20.5 feet	0000		27 28	18	18			MW1-4	0
<del>     </del>	000	▓							
	-		_	_	_			_	$\overline{}$

	Duelest No.	Location:	Beggon 604						
Acton - Mickelson - van Dam, Inc.	Project No. 19024.01	Localion.	1619 W. First Street Livermore, CA.						
,	Drilling Compa	ny: <sub>Turner Exploi</sub>							
Consulting Scientists, Engineers, and Geologists	Driller: Mike Barr								
Log of Soil Boring MW-1		Sampling							
(cont)	BK-81 H split-spoo	SA California Modif n sampler	iled						
Casing Elevation: 100.00 feet	OVM/OVA	HNu PID with 10.	2 eV probe						
	Drilling	Time	Date						
	Start	05-27-93							
	Finish	05-27-93	15:15						
Completion Depth: 54 feet	Water Depth		Completion 38.46 feet						
Logged by: H. Hansen	o ic	Driven Recov'd	# YA00						
Checked by: D.D.	구 B N 기본	S G	oval,						
Checked by: D.D.  Description	Graphic Log BORING/ WELL DETAIL	Blows/6 i Inches Driven Inches Recov'	Sample #						
(continued from above) CLAYEY GRAVEL, olive brown,									
20 1/2 to 3 Inch gravel, fine- to									
plastic fines, moist (GC)	GC 6								
22		1							
23 SILTY CLAY brown, slighty plastic,									
24 moist, (CL)			رم ا						
25	CL	27 18 18 28	W 1 0						
26		20							
27 🕂									
28 CLAYEY GRAVEL		1							
29 Olive brown, 1/2 to 2 inch gravel									
30 - common plastic fines, moist (GC)		14 17 18 18	9-138						
31 📕	0 0	33	2						
32 🕂									
33 🕂									
34 🕂									
35		18 27 18 18	L-IM						
36		27 18 18 33	[ 5 ]						
37 🕂									
38 🕂									
39 🕂									
40 saturated at 40 feet		19	8° 40						
41 -		27 18 16 37	<u>\$</u> 40						
17	0,0								

	Proje	ct No.	L	000	a t	ion:	Beggon 604		
Acton - Mickelson - van Dam, Inc.	1902						1619 W. Fit Livermore, C	Lai 9	irest
Consulting Scientists, Engineers, and Geologists	Drilling	Compa		Turr	ner !	Explora	ion		
Log of Soil Boring MW-1	Driller: Mike Barr Drilling and Sampling Methods:								
(cont)		BK-81 HS aplit-spoon	A Cal	lfor	*	_			
Casing Elevation: 100.00 feet	ОУМ	/OVA	Hnu	PID	) wi	th 10.2	2 eV Probe		
	Dri	lling		Tir	n	е	Dat	е	
	Sto	art	0	5-27	7-93	5	13:10	)	
	Fir	nish	_	5-27	7-93	5	15:15		_
Completion Depth: 54 feet		Depth	Init	IoI	_		Completion 38.46	n S fee	$\square$
Logged by: H. Hansen	ic	6/	i.	N87	Recov'd			# 0	Field OVM/OVA Reading (ppm)
Checked by: DyD  Description	구 다 B	RIN TAIL	Blows/6	inches Driven	88			Sample	N OF
Checked by: OvD	Gre	BORING/ WELL DETAIL	Blov	Inche	Inches	Con	nments	Sar	Field
(continued from above) CLAYEY GRAVEL, olive brown,	000								
40 1/2 to 2 Inch gravel, fine— to	000								
4   fines, saturated (GC)	000								
42	000								
43 +	000								
44 + 45 + 45 + 45	000	H	28 29	18				6-176	15
46	000		42	'*	16			5	
47 +	GC								Ш
48 =	000								
49	000								
50	000		16 14	181	15			MW1-10	150
51	000		33	"				1	
52 +	000								
53 +	0,0								
54	000	$\Box$	16					11-11A	60
55 Boring terminated at 55 feet	0,0		17 24	18	9			<u></u>	"
56									
57 -									
58									
59 -									
60 -									
61									

Acton - Mickelson - van Dam, Inc.	Proje	ct No. 4.01	-	Lo	С	at	ion:	Beacon 604 1619 W. Fli Livermore, 6	131 3	treet
Consulting Scientists, Engineers, and Geologists  Log of Soil Boring MW-2										
Log of Soil Builting WW 2		BK-81 H aplH-spoo	HSA	Cal	lfor	•	_			
Casing Elevation: 98.68 feet	OVM	/01/	Δ	HN	PII	D wi	th 10.2	eV probe		
	Dri	lling			Τi	m	е	Dat	е	
	St	art		0	5-2	7-9	3	07:00		
	Fir	nish		0	5-2	7-9	3	09:00		
Completion Depth: 54 feet	Water	Dept	h	Init	lal			Completion 39.07		t
Logged by: H. Hansen	.0		٦	Ξ.	4	Recov'd			*	AVQ
Checked by: DD	뒽	N L	∦	9/8	Dri	Rec			ple	OVM/OVA Ing (ppm)
Checked by: DD  Description	Gra	BORING/ WELL	DEI	Blows/6	Inches Driven	Inches	Con	nments	Sample	Field OVN Reading (
0 Concrete	550000000		_			Ш				Ш
CLAYEY GRAVEL Olive brown, 1/2 to 2 Inch gravel, fine to coarse-grained sand, common plastic fines, slighty meist, (GC)  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  SILTY CLAY				2 3 - 9 7 10	12	14			MW2-3 MW2-2 MW2-1	0
brown, moderately plastic, moist, (CL)	[CL]			14 22 24	18	16			MW2-4	12

			_	_	_	_				_
Acton - Mickelson - van Dam, Inc.									31 31	reet
Consulting Scientists, Engineers, and Geologists					Tur	ner	Explorat	lon		
Log of Soil Boring MW-2	Driller: Mike Barr Drilling and Sampling Methods:									
(cont)		BK-8		Cal	ifor	•	Modifle		•	
Casing Elevation: 98.68 feet	оум	/0	VA	HNL	PIC	) wif	h 10.2	eV probe		
	Dri	llin	ng		<u>Ti</u>	m	е	Dat	е	
	Sto	art		0	5-27	7-93		07:00		
	Fir	nish				7-93		09:00		
Completion Depth: 54 feet	Water	De	pth	Init	lal	_		Completio 39.07		
Logged by: H. Hansen	ic	>		<u>:</u>	6	Recov'd			#=	OVM/OVA Ing (ppm)
Checked by: DD	7 6	Ĭ.	<u> </u>	9/s	Drly	Rec			ple	MVC S
Checked by: DD	Graphi Log	BOF	VET	Blows/6	Inches Driven	Inches	Con	nments	7	Field OVIN
(continued from above)  SILTY CLAY, brown, moderately plastic,				0						
20 SILTY CLAY, brown, moderately plastic, moist (CL)		▩								
I H	CL									
22	UL)	▓								
23 + 24 + -		▓								
	0,0	▩		7		15			WW2-5	30
olive brown, 1/2 to 1 inch gravel	000	▓		19 24	16	13			3	
common plastic fines,	000	▓	₩							
27	200	▓								
28	000	▩								
29	000	<b>**</b>		28 32	18	18			MW2-6	150
30 -	000			41					3	
I H	000									
32 + 33 + -	000			- N. W.						
34	900	‱_		8						
35 -		₩.E		26 78	12	12			MW2-7	4
36	000	₩E							3	
37	000	∭E	∄∭							
38	000	∭E	30					1		
39 - acturated at 39.5 feet	000	∭E								
Soldrated at 35.3 1961	000	∭E		24 38	18	14			MW2-8	400
40 41 41	000			32	1.0	"			*	
*1	000	<b></b> =								Ш

	<u> </u>	1 11	1.	_	٠.١	ioni	Reacon 604	_	$\neg$
Acton - Mickelson - van Dam, Inc.	1902	ct No. 4.01	L	) C	a i	ion:	Beacon 604 1619 W. Fi Livermore, (	LBI 2	treet
Consulting Scientists, Engineers, and Geologists	Drilling Company: Turner Exploration								
Log of Soil Boring MW-2	Driller: Mike Barr Drilling and Sampling Methods:								- 1
(conf)		BK-B1 HSA apiti-apoon	Call	for	•	_			
Casing Elevation: 98.68 feet	ОУМ	/OVA	HN	ı Pil	D wi	th 10.2	eV probe		
	Dri	lling		Ti	m	е	Dat	е	_
	Ste	art	0	5-2	7-9:	5	07:00		
	Fir	nish		5-2	7-9:	5	09:00		_
Completion Depth: 54 feet	Water	Depth	Init	lal			Completion 39.07		
Logged by: H. Hansen	i.	>	ے.	le)	Recov'd			**	AVO E
	후	A L	s/6	Pr	Rec			ple	<b>₩</b> 51
Checked by: O.O.  Description	Gra	BORING/ WELL DETAIL	Blows/6	Inches Driven	Inches	Con	nments	Sample	Field OVM/OVA Reading (ppm)
(continued from above) CLAYEY GRAVEL, olive brown, 1/2 to 1	000								
40 Inch gravel, fine— to coarse—grained sand,	000								
41	GC								
42 +	0.00								
43 +	000								
44 - SILTY CLAY	Sadia Balla		18 17	,,	18			1W2-9	300
45 brown, moderately plastic			22	18	10			3	
46									
47 🛨									
48	CL								
49								٥	
50 -			19 24	18	17			MW2-10	250
51			22		Н				
52		I 🗏							
53			8					=	
54			9	18	12			MW2-11	15
55 Total depth 55 feet.									
56 🕂									
57 🕂									
58 🕂									
59 🕂									
60 +									
61 🕂									
	-							_	

Astro Makalaan uun Dana Ina	Proje	ct No.	1012 4. 11(3) 21(							
Acton - Mickelson - van Dam, Inc.	1902						Livermore, C	CA.	_	
Consulting Scientists, Engineers, and Geologists	Orilling	j Compo er: Mike		Tur	ner	Explore	tion		- 1	
Log of Soil Boring MW-3		ng and BK-B1 HS	d So	ifor	•	-	Methods d	:		
		split-spoon	samp	ier						
Casing Elevation: 99.08 feet	OVM	/OVA	HN	u Pli	D wl	th 10.2	eV probe			
	Dri	lling		Ti	m	е	Dat	е	_	
	Ste	art	(	5-2	8-9	5	12:30			
	Fir	nish	(	5-2	B-9.	3	15:30			
Completion Depth: 54 feet		Depth		ial			Completion 37.11			
Logged by: H. Hansen	<u>.0</u>	_	ء.	E	p,v			#	¥£	
Checked by: DVD	占	ING PIL	9	F	Recov'd			p e	NA NA NA NA NA NA NA NA NA NA NA NA NA N	
Checked by: H. Hansen  Checked by: DvD  Description	Gra	BORING/ WELL DETAIL	Blows/6	Inches	Inches Recov'd	Con	nments	Sample	Fleid OVM/OVA Reading (ppm)	
O Concrete/roadbase	100000	000 lbs	5							
CLAYEY GRAVEL Olive brown, 1/2 to 2 Inch gravel,	0.0									
2 fine to coarse-grained sand, common plastic fines, moist, (GC)	000									
3 +	000	₩ ₩	8							
4 🕂	000	₩ ₩								
5 -	000	₩ ₩	17	18	17			W3-1	0	
6	000	₩ ₩	42							
7 H	0000	₩ ₩								
I a H	000	₩ ₩								
187	2 GC	₩ ₩								
9 🖶	000	₩ ₩	9					ė.		
10	000	₩ ₩	24 32	18	18			MW3-2	0	
11 🖶	0,0	₩ ₩								
12 —	000	₩ ₩								
13 🕂	000	₩ ₩	8							
114 🛱	000	₩ ₩	8						ᇎ	
15	000	₩ ₩	10	١.,				MW3-3	O.	
	000	₩ ₩	5 12	18	0			1 €	NO RECOVERY	
16	000	<b>         </b>	8							
17 🛨	000	₩ ₩	8							
18	000									
19 SILTY CLAY brown, moderately plastic,			8							
20 moist, (CL)	CL		18 24	18	9			WW3-4	0	
<del>   </del>		₩ ₩	22					1		
		58881 BSS	X .	_					-	

ACTON MICKE SON VON DIM, INC. Consulting Scientists, Engineers, and Geologists  Log of Soil Boring MW-3 (cont)  Casing Elevation: 99.08 feet  Casing Elevation: 99.08 feet  OVM/OVA HIND PID with 10.2 eV probe  Drilling Time Date  Start 05-28-93 12:30  Completion Depth: 54 feet  OVM/OVA HIND PID with 10.2 eV probe  Drilling Time Date  Start 05-28-93 15:30  Completion Depth: 54 feet  OVM/OVA HIND PID with 10.2 eV probe  Drilling Time Date  Start 05-28-93 15:30  Checked by: D.D.  Checked by: D.D.  Checked by: D.D.  ON SILTY CLAY, brown, moderately plastic, moist (CL)  Start 05-28-93 15:30  Completion Depth: 54 feet  OVM/OVA HIND PID with 10.2 eV probe  Drilling Time Date  Start 05-28-93 15:30  OS-28-93 16:30  OS-		D 1	-4 6	1.	L		a t	ion	Regron 804		$\neg$
Consulting Scientists, Engineers, and Geologists Log of Soil Boring MW—3  Casing Elevation: 99.08 feet  Casing Elevation: 99.08 feet  OVM/OVA MNo PID with 10.2 eV probe  Drilling Time  Start 05-28-93 12:30  Finish 05-28-93 12:30  Finish 05-28-93 15:30  Water Depth 15-11 Completion Start 05-28-93 15:30  Completion Depth: 54 feet  Checked by: D-D- Checked by: D-D- Checked by: D-D- SILTY CLAY, brown, moderately pleatic, moist (CL)  Casing Elevation: 99.08 feet  OVM/OVA MNo PID with 10.2 eV probe  Description  Output  Description  Completion Depth: 54 feet  Output  Description  Completion  Completion  Output  Description  Output  Description  Completion  Output  Description  Output  Output  Description  Output  O	Acton - Michalson - van Dam Inc			10.	L.	56	uı	1011.	1619 W. FI	rst S	itreet
Casing Elevation: 99.08 feet				mpai	ny:	Tui	rner	Explora			$\neg$
Casing Elevation: 99.08 feet		Driller: wike Barr									
Casing Elevation: 99.08 feet    OVM/OVA   Hall PID with 10.2 eV probe		Drillii	_				•	-		•	- 1
Drilling   Time   Date   Start   05-28-93   12:30   Start   05-28-93   12:30   Start   05-28-93   15:30   Water Depth   Initial   Completion   Start	(com)							mooning	. •		
Start	Casing Elevation: 99.08 feet	оум	/0	VA	ни	ų Pi	D w	ith 10.2	eV probe		
Completion Depth: 54 feet   Finish		Dri	llin	g		Ti	m	е	Dat	е	
Completion Depth: 54 feet  Water Depth Initial Completion 37.1 feet  Logged by: H. Hansen Checked by: DyD  Description Silry Clary, brown, moderately plastic, moist (CL)  Comments by The Depth Initial Completion  Ones of the property of t		Ste	art			05-2	289	3	12:30		_
Completion Depth: 54 feet   Water Depth		_			_		28-9	3		_	_
20   Clayer Gravel   Clayer Gr	Completion Depth: 54 feet			•		Iai	25 - 3				
20   Clayer Gravel   Clayer Gr	도수 i Logged by: H. Hansen	ic	>		i	Ven	cov'd				No de
20   Clayer Gravel   Clayer Gr	Checked by: DVD	<u>g</u> 8	Ž :	<u>₹</u>	18/	s Dr	8. 8.			npl	N P
20   Clayer Gravel   Clayer Gr	Description	2,2	98	ME DE	Blow	Inche	Inche	Con	nments	Sar	Field
21 — plastic, moist (CL)  22 — 23 — 24 — 25 — 26 — 27 — 28 — 29 — 30 — 31 — 31 — 32 — 33 — 34 — 35 — CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, acturated (GC)  38 — 39 — 40 — 26 — 27 — 28 — 29 — 37 — 18 11 — 26 — 37 — 27 — 28 — 29 — 37 — 28 — 29 — 39 — 37 — 20 — 20 — 20 — 20 — 20 — 20 — 20 — 2			▓	₩							
22 23 24 25 26 27 28 29 30 31 32 33 34 35 CLAYEY GRAVEL 1/2 to 2 Into figure 1, fine to course-grained sand, common plustic fines, acturated (0C) 38 39 40 -	plastic, moist (CL)		▩	₩							
23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33 - 34 - 35 - CLAYEY GRAVEL 1/2 to 2 inch grovel, fine to coarse-grained sand, common plastic fines, acturated (GC)  CLAYEY GRAVEL 1/2 to 2 inch grovel, fine to coarse-grained sand, common plastic fines, acturated (GC)  CLAYEY GRAVEL 1/2 to 2 inch grovel, fine to coarse-grained sand, common plastic fines, acturated (GC)	I H		▩								
24 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33 - 34 - 35 - CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, scturated (GC) 38 - 39 - 40 - 20 - 20 - 20 - 20 - 20 - 20 - 20			▩								
25 26 27 28 29 30 31 31 32 33 34 35 CLAYEY GRAVEL 1/2 lo 2 Inch gravel, fine to coarse-grained sand, common plastic fines, acturated (GC) 38 39 40 40 40 40 40 40 40 40 40 40 40 40 40	I 1-1		▩	₩							
26 27 28 29 30 31 32 33 34 35 36 21 21 21 21 21 21 21 21 21 21 21 21 21	I. 1₩		₩	₩		18	11			W3-5	0
27			▩							3	
28	I H	Cr	▩	₩							Ш
29 - 30 - 31 - 32 - 33 - 34 - 35 - CLAYEY GRAVEL 1/2 to 2 Inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC) 38 - 39 - 40 - 40 - 40 - 40 - 40 - 40 - 40 - 4	I <del>  -</del>		▩								
30 - 31 - 32 - 33 - 34 - 35 - CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC) 38 - 39 - 40 - 40 - 40 - 40 - 40 - 40 - 40 - 4	1 =		▩	***							
32 - 33 - 34 - 35 - 37 - 18 11 - 37 - 38 - 37 - 38 - 39 - 40 - 40 - 40 - 40 - 40 - 40 - 40 - 4										ٻ	
32 - 33 - 34 - 35 - CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC) 38 - 39 - 40 - 140 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 150 - 1			***	18888		18	16			MA3	0
33	I — H										
34 35 36 CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC) 38 39 40  14 22 18 18 18 0	I = H		M-	-							
35 36 CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC) 38 39 40  14 22 18 18 18 0	I —			∄							
36  1/2 to 2 inch gravel, fine to coarse-grained sand, common plastic fines, saturated (GC)  38  39  40  14  12  18  18  18  18  18  18  18  18  18	35	,,,,,	E		37	18	11			3-7	
37 — coarse-grained sand, common plastic fines, saturated (GC) 38 — GC	36 CLAYEY GRAVEL 1/2 to 2 inch gravel, fine to	000	F		42					1	
39 -	coarse-grained sand, common	000	E								
40 - 18 18   S   S   S   S   S   S   S   S   S	38	000	₩E	₩							
40 - 41 - 41 - 41 - 41 - 41 - 41 - 41 -	39 -	O O O	F	₩							
41 <del>                                     </del>	40 -	000	III E		22	18	18			¥3-8	0
	41	000		∄	25					3	

			_	_	_			_	_
Acton - Mickelson - van Dam, Inc.	Proje	ct No. 24.01	L	ЭС	at	ion:	Beacon 604 1619 W. Fi Livermore,	Lat 3	itraet
Consulting Scientists, Engineers, and Geologists	Drilling	Compa	ny:	Tur	nor	Explora	noit		
1	Driller: Mike Barr Drilling and Sampling Methods:								
Log of Soil Boring VW-1	ווויזטן	ng ana BK-81 HS			•	•		•	- 1
		aplit-spoon			піф	MOGITIE	10		
Casing Elevation:		/OVA		-	-		eV probe		
	Dri	lling		Ti	m	е	Dat	_	_
	St	art	- (	)5-2	7-9	3	08:30	)	
	Fir	nish	_	)52	7-9	3	10:30	_	
Completion Depth: 37 feet		Depth	Inli	ial			Completion N/A	n	
Logged by: H. Hansen	.0	BORING/ WELL DETAIL	ڃ	u	۵,۸			#	Y (E)
Logged by: H. Hansen  Checked by: DvD  Description	4	A L ING	Blows/6 in	nches Driven	Recov'd			를	Field OVM/OVA Reading (ppm)
	<u> </u>	SEL TEL	S A C	thes	Inches	C	. m an ta	Sample	亨퉵
Description	5	@ <b>&gt;</b> Ci	ă	Ĕ	Ē	Con	nments	Ň	58
O Concrete		1888 · · · 1888							
0 to 27 feet; conductor casing,		₩ ₩							
1 2 📅		₩ ₩							
3 🛨		₩ ₩							
4 ++		₩ ₩							
5 —		₩ ₩							
6 🕂		₩ ₩							
<sub>7</sub> ∰		₩ ₩							
I h	1	₩ ₩							
1 8 T	1	₩ ₩							
9 🛨		₩ ₩							
10		₩ ₩							
11 🛨		₩ ₩							
12 —		₩ ₩							
13 🕂		₩ ₩			П				
14 🕂		₩ ₩							
I i H		₩ ₩							
15		▩	8						
16		₩ ₩							
17 🛨									
18 🛨		₩ ₩	8						
19 —		₩ ₩	8						
20 🕂			8						
I - H			8						
L		₩ ₩	8						

Acton - Mickelson - van Dam, Inc.	Proje			L	oc	at	ion:	Beacon 604 1619 W. Fi Livermore, (	L21 2	treet	
Consulting Scientists, Engineers, and Geologists	Drilling Company: Turner Exploration							tion			
	Driller: Mike Barr							dathada		- 1	
Log of Soil Boring VW-1	ווווזטן	Drilling and Sampling Modified BK-81 HSA California Modified applit-spoon sampler							•		
Casing Elevation:	OVM/OVA HNu PID with 10					th 10.2	h 10.2 eV probe				
	Dri	llir	ng		Ti	m	е	Dat	е	_	
	St	art		0	5-2	7-9	3	08:30		_	
	Fir		5-2	7-9	3	10:30					
Completion Depth: 37 feet	Water	De	epth	Init			,	Completion N/A	n	_	
Logged by: H. Hansen	hic	5		ë.	ven	Recov'd			# 6	VOVA (mg	
Checked by: D.D.  Description	호등	ž	IJ.E	s/6	nches Driven	S Rec	Į.		Sample	N N N N	
Checked by: DO Description	Graphic Log	80	WE DE	Blows/6 in	Inche	Inches	Соп	nments	San	Field OVM/OVA Reading (ppm)	
(continued from above)  O to 27 feet; conductor casing,		▓									
20 to 27 feet; conductor casing, no samples collected		▩									
I H		▩									
22 +		▩	8								
23 + 24 + -											
25											
26											
27			_								
olive brown, 1/2 to 1 inch gravel,	000		$\exists $								
fine to coarse-grained sand, common plastic fines, very moist, (GC)	000										
30	000		$\exists$	23 13	18	9			VW1-6	225	
31	000		$\exists$	11	"				5		
32	000		$\exists$								
33 🕂	000										
34 -	GC O		$\exists $	24							
35 -	000		$\exists$	21 31 33	18	16			VW1-7	325	
36	000		$\exists$								
37 -	000		(400)								
38	000										
39 Saturated at 39.5 feet	0,0			37							
40	000			14 13	18	18			VW1-8	500	
41	000										

Project No. 19024.01	Location:	Beacon 604 1619 W. First Street Livermore, CA.				
ologists  Drilling Company: Turner Exploration  Driller: Mike Barr  Drilling and Sampling Methods:						
split-spoon	split-spoon sampler					
Drilling	-	Date				
Start		12:30				
Finish		15:30				
		Completion 37.11 feet				
je   > .		## VO				
	S Dri	ald r				
Gro Lo Bol WE	No se se Cor	Sample #				
	9 37 18 18 42 7 9 18 12 24	MW3-10 MW3-9				
	Drilling Compa Driller: Mike Drilling and BK-81 HS/ split-spoon  OVM/OVA Drilling Start Finish Water Depth VELL DETAIL	Drilling Company: Turner Explored Driller: Mike Barr Drilling and Sampling BK-81 HSA California Modifiespilf-spoon sampler  OVM/OVA HNu PID with 10.2  Drilling Time Start 05-28-93 Finish 05-28-93 Water Depth Initial  OUND No. 18 18 18  42 7 9 18 12				

	-		_				Begon 604	_	$\neg$		
Acton - Mickelson - van Dam, Inc.	Project No. Location: Beacon 604 1519 W. First Street Livermore, CA.										
Consulting Scientists, Engineers, and Geologists		Compa									
Log of Soil Boring VW-1	יוודיטן	Driller: Mike E Drilling and				ing N	Methods	:			
(conf)	BK-81 HSA California Modified spilt-spoon sampler										
Casing Elevation:	ОУМ	/OVA	HNi	ı Pil	D wf	th 10.2	eV probe				
	Dri		Ti	m	е	Dat	е				
	Sto	art	0	5-2	7-93	3	08:30				
	Fir			7-9	3	10:30					
Completion Depth: 37 feet	Water	Init	ial	_		Completion N/A	n				
Logged by: H. Hansen	i	/5	ü	E 0	Recov'd			# 6	<b>₩</b>		
Checked by: Dir	호등	BORING, WELL DETAIL	s/6	- TO				Sample	% S S S S S		
Checked by: Dir	Graph Log	BOI WEI DET	Blows/6	Inches Driven	Inches	Con	nments	San	Field OVM/OVA Reading (ppm)		
(continued from above) CLAYEY GRAVEL, olive brown, 1/2 to 1	000										
do   CLAYEY GRAVEL, office brown, 1/2 to 1   inch gravel, fine— to coarse—grained sand, common plastic fines, saturated (GC)	000										
41 Hadra Common plastic lines, suturated (60)	000										
42 🛨	000										
43 🕂	GC										
44	000		19 22	18	18			PW1-9	300		
45	000		18					5			
46	000								Ш		
47	000								Ш		
48	000										
49	000		26 36					무			
50 Boring ferminated at 50 feet			24	18	18			VW1-10	450		
51 52											
53 +											
54	1										
55 +											
56 +											
57 #											
58 4	1										
59 #											
60 #											
61 #											
	_		1					$\vdash$	$\perp$		

					_				$\overline{}$	
Acton - Mickelson - van Dam, Inc.	Proje 1902	ct No. 1.01	L	ос	at	ion:	Beacon 604 1619 W. Fir Livermore, C		reet	
Consulting Scientists, Engineers, and Geologists	Drilling Company: Turner Exploration Driller: Mike Barr									
Log of Soil Boring VW-2	IDLIIGE: Wike Bott							:		
									_	
Casing Elevation:		/OVA						_	-	
		lling		Ti			Dat	<u>e</u>	-	
		art	-	5-28	_		08:45	_	$\dashv$	
	Fir		5-27	7-93		09:45 Completion		$\dashv$		
Completion Depth: 37 feet		Depth					N/A		140	
£ + E Logged by: H. Hansen	hig Pi	  C   F	5 in	riven	Recov'd			# 0	Field OVM/OVA Reading (ppm)	
Checked by: Don	유명	RIN TAI	Blows/6	Inches Driven	es R			Sample	No pu	
Description	27	BORING/ WELL DETAIL	8 B	inch	Inches	Con	nments	Sa	Field	
0 Concrete								_	$\vdash$	
CLAYEY GRAVEL olive brown, 1/2 to 2 inch gravel, fine to coarse-grained sond common plastic fines, slightlyly moist, (GC)			17	4.5				rw2-1	a	
5 6 7 8 9			19 24 25 35	18	9			VW2-2 VW	0	
11 12 13 14 15 16 17 18			49 38	12	8			VW2-3	o	
19 120			11 9 22	18	10			VW2-4	o	

	_			_	_	_		Person 604			
Acton - Mickelson - van Dam, Inc.	Project No. Location: Beacon 604 19024.01 Location: Beacon 604 1619 W. First Street Livermore, CA.										
Consulting Scientists, Engineers, and Geologists	Scientists, Engineers, and Geologists   Drilling Company: Turner Exploration										
	Driller: Mike Barr										
Log of Soil Boring VW-2	Drilling and Sampling Methods:  BK-B1 HSA California Modified  split-spoon sampler								:		
Casing Elevation:	OVM/OVA HNu PID with 10.2 eV prob									-	
		lling		1	Γir	n	е	Dat	е		
	St	art		05	5-28	3-9:	3	08:45			
	Fir	nish	1	05	5-27	7-9:	3	09:45			
Completion Depth: 37 feet	Water	Dept	h	Initi	al			Completion N/A	ı		
Logged by: H. Honsen	Ö			۳	5	Ö,			*	₹£	
Checked by: DVD	두_	9 L	╡	9	Drive	Recov'd			9	/M/	
Checked by: N.A.  Checked by: N.A.  Description	Grap	BORING/ WELL	DEL	Blows/6	Inches Driven	Inches	Com	nments	Sample	Field OVM/OVA Reading (ppm)	
(continued from above) CLAYEY GRAVEL, olive brown, 1/2 to 2 inch	0 0			T	П					П	
gravel, fine- to course-grained sand,	GC				1						
21common plastic fines, slightly moist (GC)	, n,										
22 SILTY CLAY											
brown, moderately plastic moist. (CL)	[cr]										
24											
25	000			15					VW2-5		
CLAYEY GRAVEL  1/2 to 2 inch gravel,  time to converge orgined sond	000				18	2			₹	225	
ecomon placife flace (CC)	000										
27 + common plastic times, (60)	000										
28 🛨	000										
29 🕁	000							4.6	؈		
30 -	GC O		2003	12 19	18	6	Retaine chemic	a tor al analysis.	VW2-6		
31	000		0.000	27					>		
32 🕂	000										
33 🕂	000										
34 🕂	000										
35 🖶	000	H		42					VW2-7		
36	000			50/0					₹	475	
37 boring terminated at 37 feet	0 0		200								
38											
39 🕂											
40 🕂											
41 🕂											
			_		_	_			_	-	

Acton - Mickelson - van Dam, Inc.	Project 1902	t No.	Lo	o c	at	ion:	Beacon 60 1619 W. I Livermore,	irsi	Stree
Consulting Scientists, Engineers, and Geologists  Log of Soil Boring VW-3	Drilling Drille Drillin	Compar or: Wike I og and BK-B1 HS, split-spoon	Barr Sc A Ca	ım	pli		Methods	:	
Casina Elevation	0.474	/OV/A	ш	dıı F	ND #	vith 10	2 eV probe		$\dashv$
Casing Elevation:		/OVA	_	_	m		Dat	_	$\dashv$
		ling	-	_	01-9		08:4		_
	Sta Fin		-	06-	01-9	3	09:3	10	$\dashv$
Completion Depth: 36 feet		Depth	Init	ial			Completion N/A		
logged by: H. Hansen	U		ڃ	_	र		11/2	#	\$2
도구트·····	[등 _	N N		Drive	Recov'd			声	NA NA
Checked by: DA Description	Graph	BORING, WELL DETAIL	Blows/6	Inches Driven	Inches	Con	nments	Sample	Field OVM/OVA Reading (ppm)
Concrete  CLAYEY GRAVEL olive brown, 1/2 to 2 Inch gravel, fine to coarse-grained sand, common plastic fines, moist, (GC)  10 11 12 13 14 15 16 17 18 SILTY CLAY olive brown, moderately plostic, (CL)			12 12 14 15 17 22 26 50/6	18 16 12				VW3-4 VW3-3 VW3-2 VW3-1	0

Acton - Wiekeleen - van Dam Inc	Proje	ct No.	L	o c	at	ion:	Beacon 604 1619 W. Fir Livermore, C		reet
Acton - Mickelson - van Dam, Inc.		Compo	Inv.	Tues	205	Evolorat			$\dashv$
Consulting Scientists, Engineers, and Geologists		er: Mike		Iuri	101	EXPIOI GI	1011		- 1
Log of Soil Boring VW-3		ng and split-spoon	A Call	forn	•	-	Methods 1	:	
Casing Elevation:	ОУМ	/OVA	HN	ı Pic	) wil	h 10.2	eV probe		
	Dri	lling		Τi	m	е	Dat	е	
	St	art	0	6-01	-93		08:40		
	Fir	nish	_	6-01	-93		09:30		_
Completion Depth: 36 feet	Water	Depth	-				Completion N/A	n	$\perp$
Logged by: H. Hansen	ic	5	.E	e v	p,vo:			# 6	VO/
Checked by: DA	ا ق و	BORING, WELL DETAIL	s/6	Inches Driven	Inches Recov'd			Sample	MVO PI
Checked by: DAD  Checked by: DAD  Description	Graphic Log	BOI WE	Blows/6 in	Inche	Inche	Con	nments	San	Fleid OVM/OVA Reading (ppm)
(continued from above)				П					
20 +									
21 +									
22 +									Н
23	CL								
24			19					VW3-5	
25			24 32	18	17			₹	2
26									
27 CLAYEY GRAVEL	000								
brown, fine to coarse-grained,	000								
29	000		27					W3-6	
30	000		25 42		18			₹	
31	GC								
32	000	H							
33 + 34 - 4	000		20					VW3-7	١. ا
35	000		25 31	18	18			>	1
36	000	H							П
boring terminated at 36.0 feet									
38 +									
39 🕂									
40 #	1								
41 🕂	1								
								_	$\perp$

Acton - Mickelson - van Dam, Inc.	Proje 19024	ct No. 1.01	L	oc	at	ion:	Beacon 604 1619 W. Fir Livermore, C		reet
Consulting Scientists, Engineers, and Geologists									
	:	9K-81 HSA split-spoon s	ampli	er					
Casing Elevation:	ОУМ	/OVA	HNu	PIC	wli	h 10.2	eV probe		_
	Dri	lling		Ti	m	е	Dat	е	_
	Sto	ort	04	5-01	-93		11:20		$\perp$
	Fir	nish			-93		12:20		
Completion Depth: 35.0 feet		Depth	Init	ial			Completio N/A		
Logged by: H. Hansen	<u>:</u>	>	ü	/e/	Recov'd			#	A (mg
Checked by: D.D.	후	AL SINC	9/s	D.	R.			ple	9 5 2 5
Checked by: DD  Checked by: DD  Description	Gra	BORING/ WELL DETAIL	Blows/6	Inches Driven	Inches	Con	nments	Sample	Field OVM/OVA Reading (ppm)
0 Asphalt					Щ			_	$\vdash$
1 CLAYEY GRAVEL olive brown, 1/2 to 2 inch gravel, fine to coarse—grained sand, common plastic fines, (GC)  4 5 6 7 8 9 10 11 12 13 14 15 16 17			16 18 22 10 28 23	18	17			84-3 84-2 84-1	0
18 — 19 — 20 —			15 43 50/0	18	16			84-4	25

Action Mickelson Van Dam, Inc. Consulting Scientists, Engineers, and Geologists Log of Soil Boring B - 4 (cont)  Casing Elevation:  Casing Elevation:  Completion Depth: 35.0 feet  Completion Section Section Depth: 36.0 feet  Completion Section Section Depth: 36.0 feet  Completion Section Section Section Depth: 36.0 feet  Completion Section Secti	<del></del>				_		•			$\neg$
Consulting Scientists, Engineers, and Geologists Log of Soil Boring B-4 (cont)  Casing Elevation:  Casing Elevation:  DVM/OVA MNu PID with 10.2 at probe Drilling Time Date Start 06-01-93 11:20 Finish 06-01-93 11:20 Finish 06-01-93 11:20 Completion Depth: 35.0 feet  Water Depth Initial Completion Checked by: DA DO	Acton - Mickelson - van Dam. Inc.	Proje 1902		L	o C	at	ion:	1619 W. Fli	rst S	treet
Log of Soil Boring B-4 (cont)  Casing Elevation:  Casing Elevation:  Completion Depth: 35.0 feet  Compl		Drilling			Tur	ner	Explora	llon		
Casing Elevation:    Casing Elevation:   Casing Elevation:   OVM/OVA   NNu PID with 10.2 av probe	•				m	bli	na l	Methods	:	
Completion Depth: 35.0 feet    Completion Depth: 35.0 feet	(cont)		BK-81 HSA	Call	forn	•	_			
Start	Casing Elevation:	OVM	/OVA	HN	ı Pil	) wi	h 10.2	eV probe		
Completion Depth: 35.0 feet    Finish   06-01-33   12:20     Water Depth   Initial   Completion     Completion Depth: 35.0 feet   Completion     Completion Depth: 35.0 feet   Completion     Completion   Completion   Completion     Completion   Completion   Completion     Completion   Completion   Completion   Completion     Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Completion   Com		Dri	lling		Ti	m	е	Dat	е	_
Completion Depth: 35.0 feet    Completion Depth: 35.0 feet		St	art	0	6-0	1-93		11:20		
Completion Depth: 35.0 feet    Completion Depth: 35.0 feet   Value   Completion Depth: 35.0 feet   Completion Depth: 35.0 feet		Fir	nish	0	6-0	1-93				
Description  Continued from above)  CLAYEY GRAVEL, 1/2 to 2 Inch gravel, fine 1 to coarse-grained sand, common plastic fines, (CL)  CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (CC)  CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (CC)  CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (CC)  CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (CC)  Solution 1 to 2 to 2 to 3 to 3 to 3 to 3 to 3 to 3	Completion Depth: 35.0 feet	Water	Depth	Init	lal —				n	
Description  Continued from above)  CLAYEY GRAVEL 1/2 to 2 Inch gravel, fine 1 to coarse-grained sand. common plastic fines (GC)  Solution of the coarse-grained sand. common plastic fines (GC)  CLAYEY GRAVEL alve a sinch gravel, fine 1 to coarse-grained sand, common plastic fines (GC)  CLAYEY GRAVEL alve a sinch gravel, fine 1 to coarse-grained sand, common plastic fines, (GC)  CLAYEY GRAVEL alve brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  CLAYEY GRAVEL alve brown, 1/2 to 3 inch gravel, fine 1 to coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coarse-grained sand, common plastic fines, (GC)  Solution of the coars	Logged by: H. Hansen	<u>.</u>	>	ء.	ue,	p,Ao		15		ĕ ĕ
Continued from above   CLAYEY GRAVEL   1/2 to 2 inch gravel, fine to coarse-grained aand, common plastic fines (GC)   CLAYEY GRAVEL   CLAY	古 o Checked by: Oル	문	N H	9/s	Dr.J.	Rec			e d	No si
20	Description	Gra	BOF WEL	Blows	Inches	Inches	Con	nments	Sam	Field (
21		000								
22   SILTY CLAY brown, moderately plastic, very molest, some gravel, (CL)   15   43   18   18   18   18   18   18   19   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	gravel, fine- to coarse-grained sand,	GC								
23   SILTY CLAY brown, moderately plastic, very moist, some gravel, (CL)   15   43   18   16   50/6   27   28   29   30   31   Olive brown, 1/2 to 3 inch gravel, (fine to coarse-grained sand, common plastic fines, (GC)   4   40   40   41   42   42   43   44   45   45   45   45   46   46   47   47   48   49   40   40   40   40   40   40   40	I H	000								
24 very moist, some gravel, (CL)  25  26  27  28  29  30  31  CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  32  33  34  saturated at 35.0 feet  boring terminated at 35.0 feet  15  15  18  18  18  23  18  18  18  27  18  18  35  boring terminated at 35.0 feet		20.								
25 26 27 28 29 30 31 CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  33 34 saturated at 35.0 feet boring terminated at 35.0 feet  36 37 38 39 40	prown, moderdraly pidstic,									
26 27 28 29 30 31 CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  32 33 34 saturated at 35.0 feet  bering terminated of 35.0 feet  19 27 18 18 18 35 40  19 27 18 18 18 35 40  40	24			15 43	18	16			6-1	100
27 28 29 30 31 CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  33 34 saturated at 35.0 fest boring terminated at 35.0 fest  55  65  77  78  80  80  80  80  80  80  80  80									<u> </u>	
28 29 30 31 CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  33 34 saturated at 35.0 feet  boring terminated at 35.0 feet  55 56 57 58 59 40	I H									
29 30 31 CLAYEY GRAVEL olive brown, 1/2 to 3 inch gravel, fine to coarse-grained sand, common plastic fines, (GC)  32 saturated at 35.0 feet boring terminated at 35.0 feet  35 36 37 38 39 40	I H									
30	1 -									
31	l =			23 28	18	18			4-6	40
32	CLAVEY CRAVEL	000							•	
33 - 34 - 35 - 35 - 35 - 35 - 35 - 35 -	fine to coorse-ordined sand.	000								
34		GC		d						
35   Saturated at 35.0 feet   27   18   18   35   35   39   40   40   55   55   55   55   55   55	I H	000		9						
35 boring terminated at 35.0 feet 36	saturated at 35.0 feet	000		27	18	18			4-7	65
37 38 39 40	I H			42						
38 — 39 — 40 —	I H									
39	I H									
40 -	38 🛨									
	39 🛨	1								
41 +	I H	1								
	41 🕂									

### **ENCLOSURE C**

## MONITORING WELL AND VAPOR EXTRACTION WELL CONSTRUCTION SPECIFICATIONS

#### — MONITORING WELL — CONSTRUCTION DETAILS

PROJECT:

Beacon #604

1619 W. First Street Livermore, CA MONITORING WELL NO. WW-1

**ELEVATION:** 

100.00

	Protective Casing  Locking Water Tight Cap  Flush Grade Welt Construction Diameter and Mat'l Total length Length Above Ground	12-inch steel 12 inches 1/4 inch
	Thickness and Type of Seal Diameter, Mat'l and Joint Type of Riser Pipe	2 feet, concrete 4 inch, SCH 40 PVC flush thread
7	Type of Backfill Around Riser	cement/ 5% bentonite grout
	Thickness and Type of Seal Distance of Filter Sand Above Top of Screen	2 feet bentonite chips 2 feet
	Type of Filter Around Screen	#3 Lonestor
	Monitoring Well Mat'l	SCH 40 PVC
ы —	_ Screen Gauge/Slot Size	0.020 Inch
	Diameter and Length of Screen	4 Inch, 20 feet
	Depth to Bottom of Manitoring Well	54 feet
Borehole 10 in -	Depth to the Bottom of Filter Sand	55 feet
1 = 0.25	MONITORING WELL WATER L	EVEL MEASUREMENTS
2 = 33.75	DATE THE	WATER LEVEL®
.4 = 54	DATE TIME 06-22-93 13:26	
	• MEASURING POINTTOP_	DE CARINO

#### — MONITORING WELL — CONSTRUCTION DETAILS

PROJECT:

Beacon #604

1619 W. First Street Livermore, CA MONITORING WELL NO. MW-2

**ELEVATION:** 

98.68

1			Protective Casing	
1-1	85	7-	Locking Water Tight Cap	
			Flush Grade Well Construction	
			Diameter and Mat'l Total length Length Above Ground	12-inch steel 12 inches 1/4 inch
		-	Thickness and Type of Sea Diameter, Mat'l and Joint Type of Riser Pipe	l 2 feet, concrete 4 Inch, SCH 40 PV flush thread
2		-	Type of Bookfill Around Riser	cement/ 5% benienite grout
			Thickness and Type of Seal Distance of Filter Sand Above Top of Screen	2 feet bentonite chips 2 feet
	-	<b> </b>	Type of Filter Around Screen	#3 Lonestar
			Monitoring Well Mat*i	SCH 40 PVC
10		<b>-</b>	Screen Gauge/Slot Size	0.020 Inch
Ī			Diameter and Length of Screen	4 Inch, 20 feel
<u>1</u>		-	Depth to Bottom of Manitoring Well	54 feet
Boreho			Depth to the Bottom of Filter Sand	54 feet
Dlame	ı	ın —		
.2 =	0.25 33.75		MONITORING WELL WATE	R LEVEL MEASUREMENTS
.3 =	20		DATE T	ME WATER LEVEL*
4 =	54			3:30 39.07 ft
			* MEASURING POINT	OP OF CASING

#### MONITORING WELL CONSTRUCTION DETAILS

PROJECT:

MONITORING WELL NO. MW-3

Beacon #604

1619 W. First Street Livermore, CA

ELEVATION:

99.08

	85			Protective Casing  Locking Water Tight Cap  Flush Grade Well Construct		
			-	Diameter and Mar Total lengt Length Above Grou Thickness and Type of Diameter, Mat'l and	h nd Seal	12-inch steel 12 Inches 1/4 inch 2 feet, concrete 4 inch, SCH 40 PV
		+		Joint Type of Riser Pij  Type of Backfill  Around Riser	79	flush thread cement/ 5% bentonite grout
<del> </del>				<ul> <li>Thickness and Type</li> <li>of Seal</li> <li>Distance of Filter Sa</li> <li>Above Top of Screen</li> </ul>	nd	2 feet bentonite chips 2 feet
	7	▋┡		Type of Filter Around Screen		#3 Lonestar
		<b>∄-</b>		Monitoring Well Mat'l		SCH 40 PVC
ю				Screen Gauge/Slot S	ize	0.020 Inch
		-		Diameter and Length of Screen		4 Inch, 20 feet
		■		Depth to Bottom of Monitoring Well		53 feet
Boreho		) In —		Depth to the Bottom of Filter Sand		53 feet
L1 =	0.25	1		MONITORING WELL 1	WATER LEV	EL MEASUREMENTS
L3 =	20			DATE	TIME	WATER LEVEL*
L4 =	53			06-22-93	13:22	37.11 ft
				. MEASURING POINT	TOP OF	CASING

#### VADOSE WELL — CONSTRUCTION DETAILS

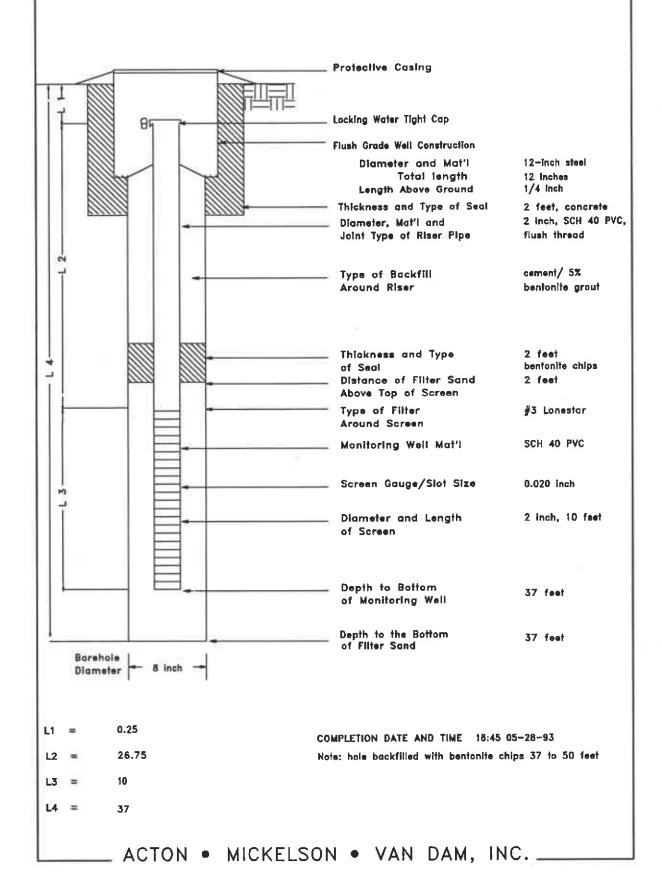
VADOSE WELL NO.

**VW-1** 

PROJECT:

Beacon #604

1619 W. First Street Livermore, CA



#### VADOSE WELL — CONSTRUCTION DETAILS

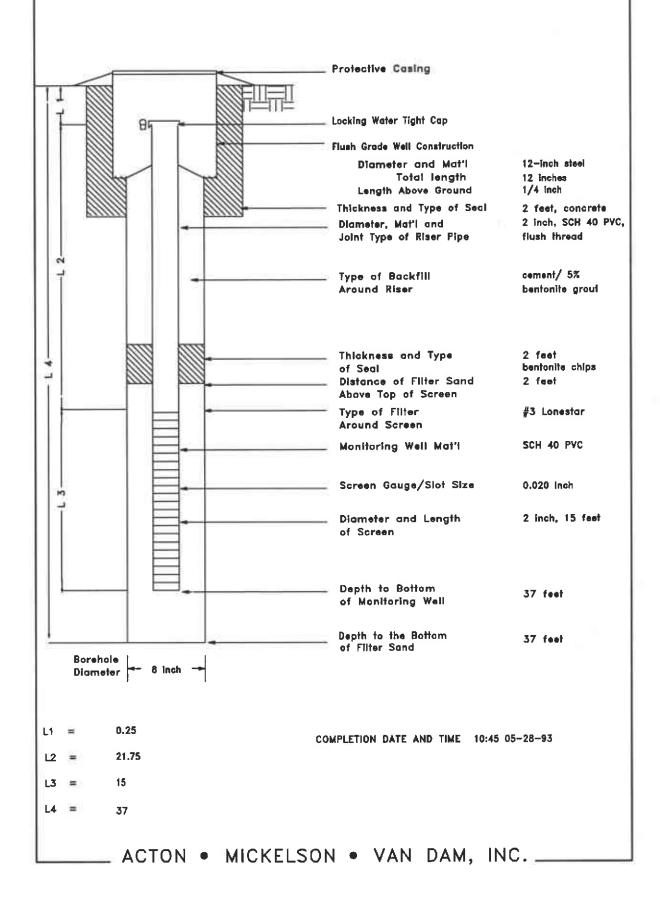
VADOSE WELL NO.

VW-2

PROJECT:

Beacon #504

1619 W. First Street Livermore, CA



#### VADOSE WELL — CONSTRUCTION DETAILS

VADOSE WELL NO.

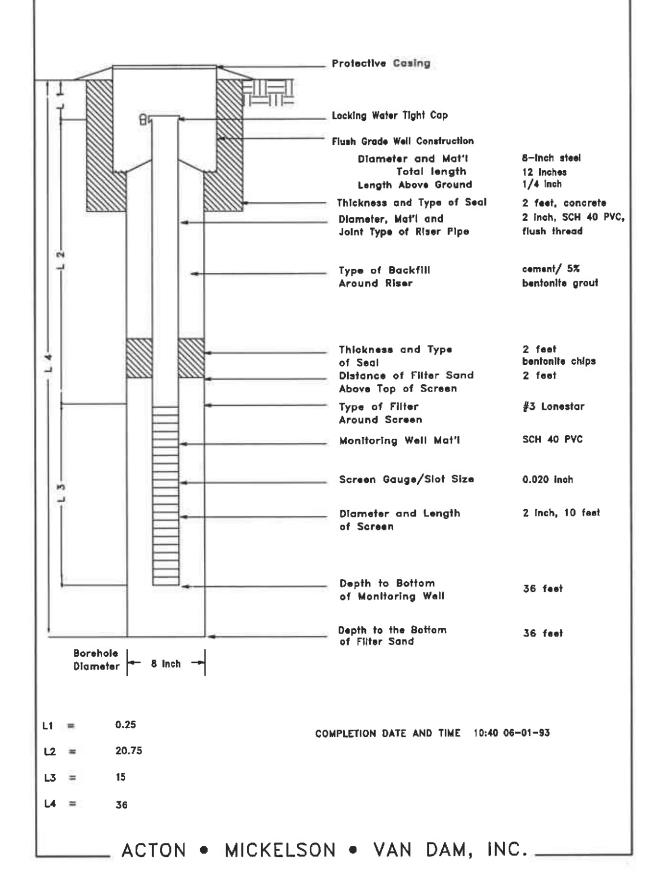
VW-3

PROJECT:

Beacon #604

1619 W. First Street

Livermore, CA



# ENCLOSURE D SOIL SAMPLE ANALYTICAL RESULTS



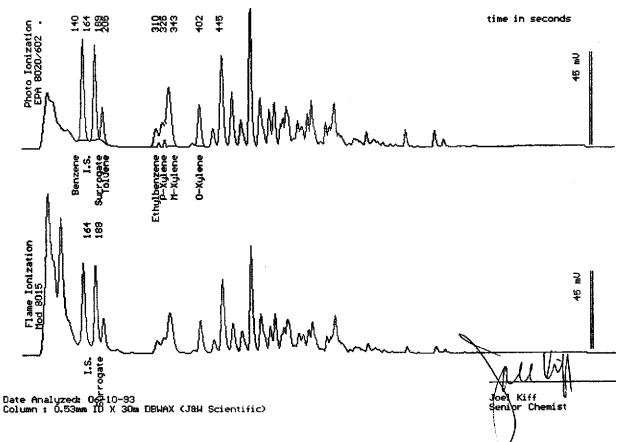
Sample: VW-1-6 30'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93 Dilution: 1:100

Dilution: 1:100 QC Batch: 4011m

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.50)	<.50
Toluene	(.50)	4.3
Ethylbenzene	(.50)	2.6
Total Xylenes	(.50)	17
TPH as Gasoline	(100)	280
Surrogate Recovery	7	92 %



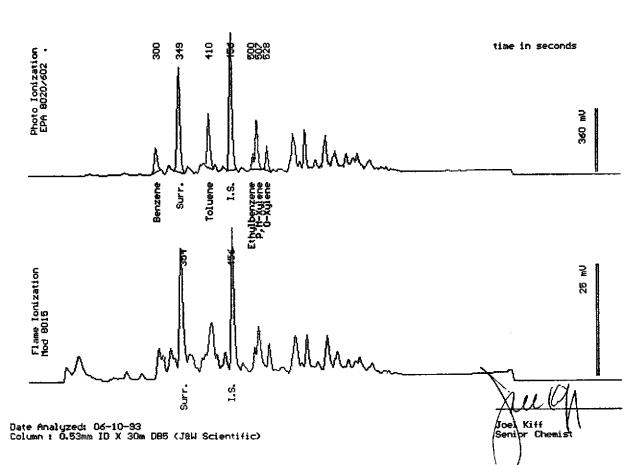


Sample: VW-1-7 35'

From : Project # 19024.01 (Beacon 604) Sampled : 05/27/93

Dilution: 1:10 QC Batch: 6026b

Parameter	(MDL) mg/kg	Measured Value =g/kg
Benzene Toluene Ethylbenzene	(.050) (.050) (.050)	.20 .45 .11
Total Xylenes TPH as Gasoline Surrogate Recovery	(.050) (10)	.56 11 89 %



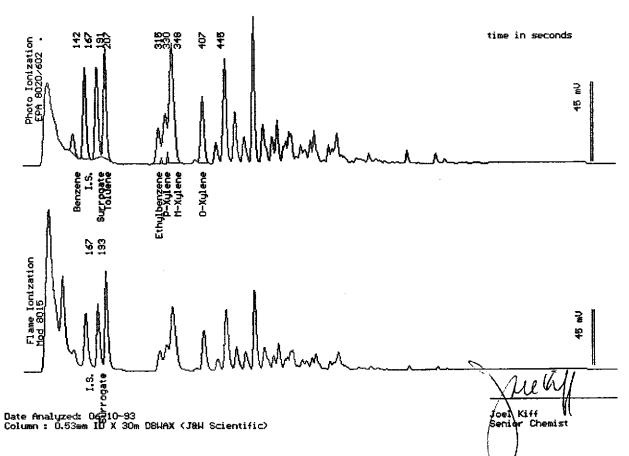


Sample: VW-1-8 40'

From : Project # 19024.01 (Beacon 604) Sampled : 05/27/93

QC Batch: 4012d Dilution: 1:100

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.50) (.50) (.50) (.50) (100)	1.8 16 5.3 32 340
Surrogate Recovery	ý.	98 %





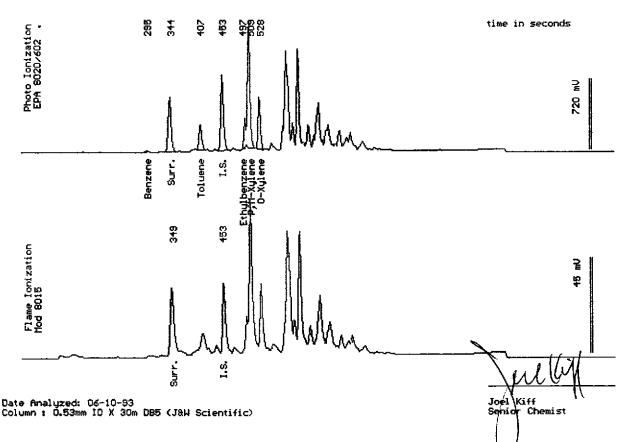
Sample: VW-2-4 20

From : Project # 19024.01 (Beacon 604)

Sampled: 05/28/93 Dilution: 1:100

Dilution: 1:100 QC Batch: 6026c

Parameter	(MDL) mg/kg	Measured Value hmg/kg
_		
Benzene	(.50)	<.50
Toluene	(.50)	4.0
Ethylbenzene	(.50)	4.0
Total Xylenes	(.50)	25
TPH as Gasoline	(100)	200
Surrogate Recovery	7	88 %



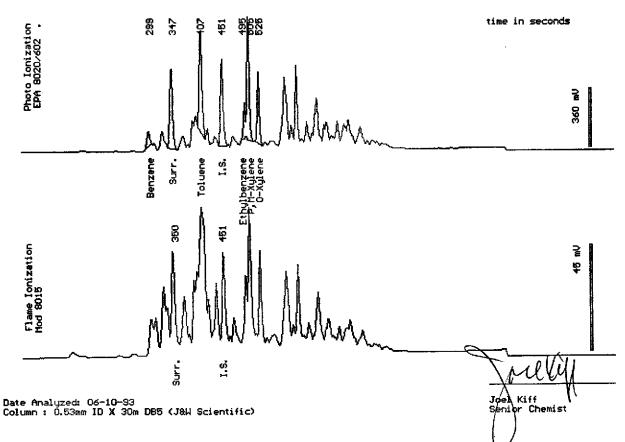


Sample: VW-2-6 30'

From : Project # 19024.01 (Beacon 604) Sampled : 05/28/93

Dilution: 1:1 QC Batch: 6026c

Parameter	(MDL) mg/kg	Measured Value ag/kg
		<b></b>
Benzene	(.0050)	.018
Toluene	(.0050)	.15
Ethylbenzene	(.0050)	.044
Total Xylenes	(.0050)	.23
TPH as Gasoline	(1.0)	3.5
Surrogate Recovery	<b>7</b>	111 %





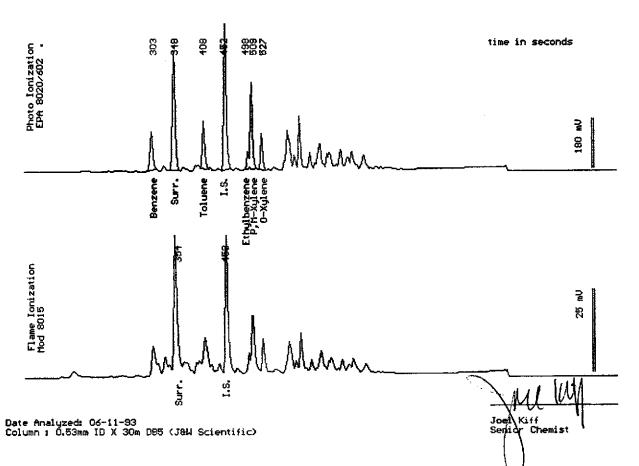
Sample: VW-2-7 35'

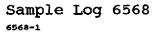
From : Project # 19024.01 (Beacon 604)

Sampled: 05/28/93

Dilution: 1:1 QC Batch: 6026d

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.0050) (.0050) (.0050) (.0050) (1.0)	.021 .024 .0086 .056 <1.0
Surrogate Recovery	7	100 %





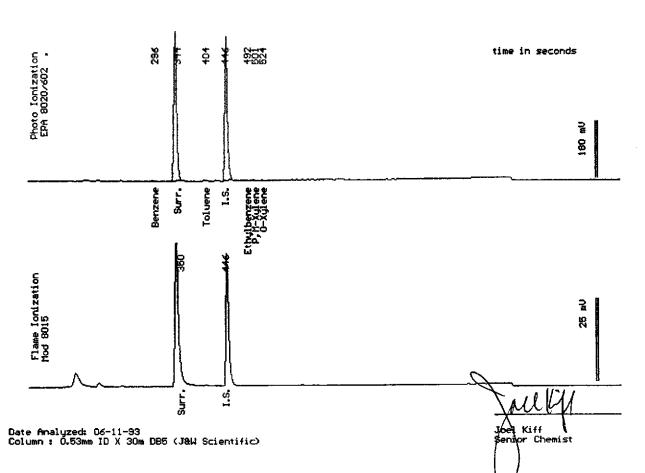


From : Project # 19024.01

Sampled: 06/01/93 Dilution: 1:1

Dilution: 1:1 QC Batch: 6026d

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recover	<b>y</b>	122 %

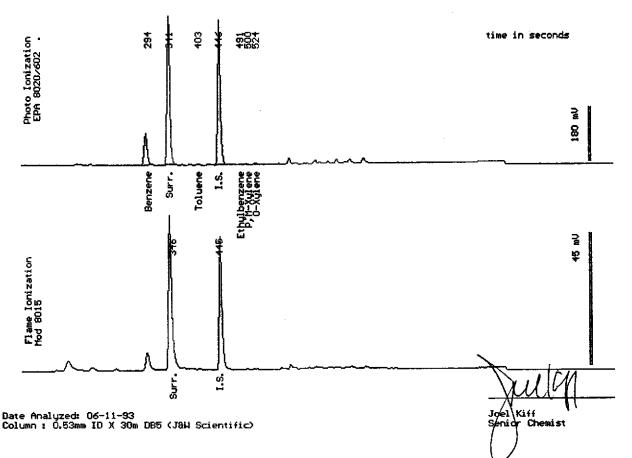




From: Project # 19024.01 Sampled: 06/01/93 Dilution: 1:1

QC Batch: 6026d

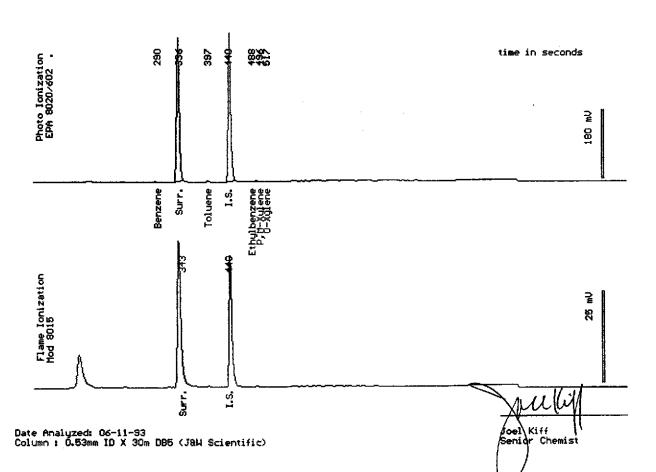
Parameter	(MDL) mg/kg	Measured Value 199/kg
Benzene	(.0050)	.017
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery		127 %





From: Project # 19024.01 Sampled: 06/01/93 Dilution: 1:1 QC Batch: 6026d

Parameter	(MDL) mg/kg	Measured Value =g/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery	7	115 %



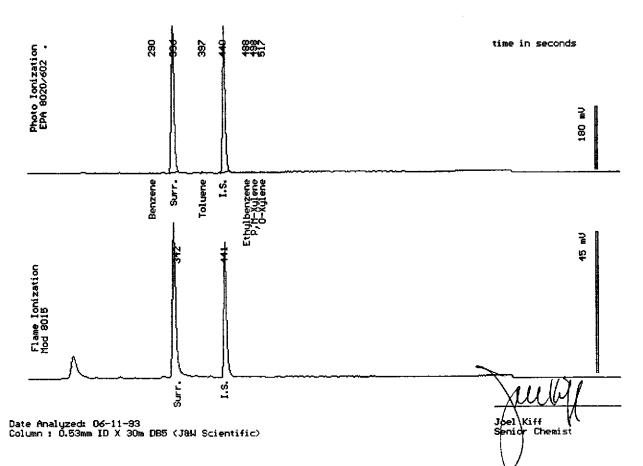


From : Project # 19024.01

Sampled: 06/01/93 Dilution: 1:1

Dilution: 1:1 QC Batch: 6026d

Parameter	(MDL) mg/kg	Measured Value 29/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery	7	124 %





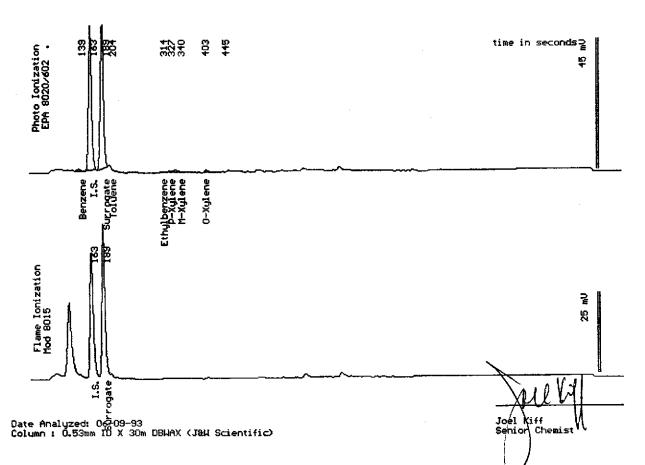
Sample: MW-1-5 25'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93

Dilution: 1:1 QC Batch: 4011m

Parameter	(MDL) mg/kg	· · · · · · · · · · · · · · · · · · ·	Measured
Benzene	(.0050)		<.0050
Toluene	(.0050)		<.0050
Ethylbenzene	(.0050)		<.0050
Total Xylenes	(.0050)		<.0050
TPH as Gasoline	(1.0)		<1.0
Surrogate Recovery	4		108 %



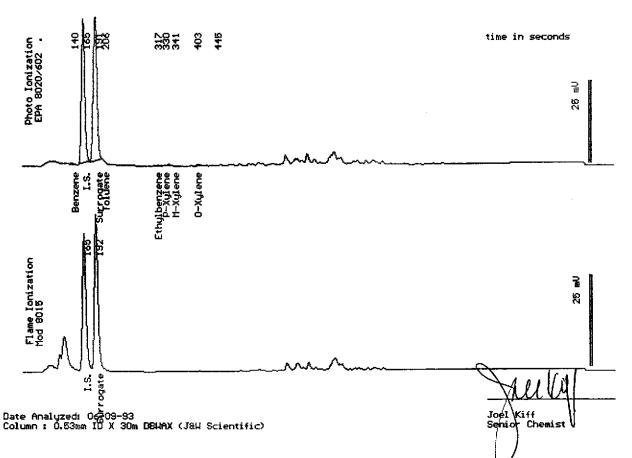


Sample: MW-1-6 30'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93 Dilution: 1:1 QC Batch: 4011m

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes TPH as Gasoline	(.0050) (1.0)	<.0050 <1.0
	(210)	<u>-</u>
Surrogate Recovery	7	117 %





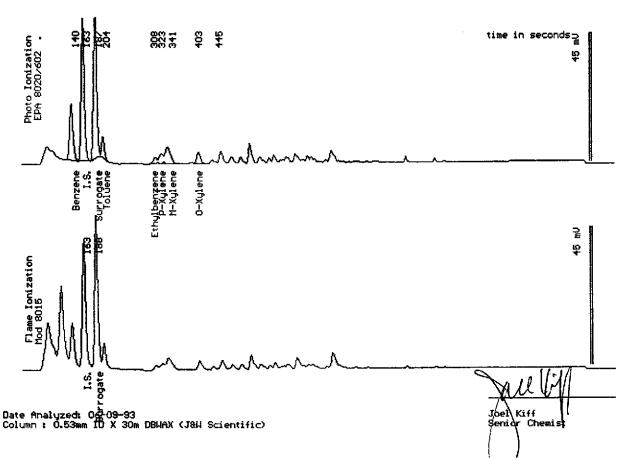
Sample: MW-1-7 35'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93

Dilution: 1:1 QC Batch: 4011m

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.0050) (.0050) (.0050) (.0050) (1.0)	.029 .015 .0051 .031 <1.0
Surrogate Recovery	!	107 %





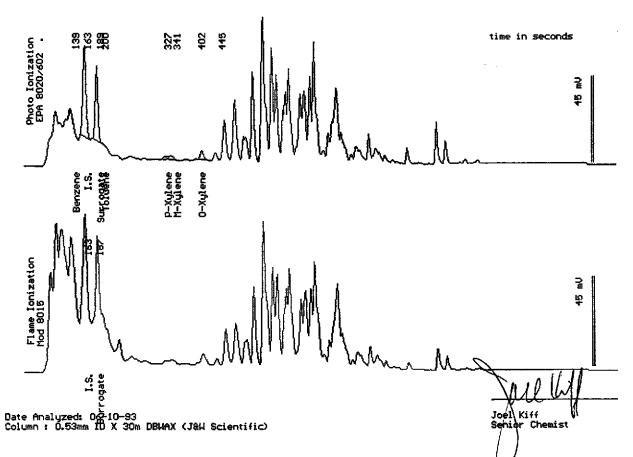
Sample: MW-2-4 20'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93 Dilution: 1:1

Dilution: 1:1 QC Batch: 4011m

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.037
TPH as Gasoline	(1.0)	6.4
Surrogate Recovery	7	70 %



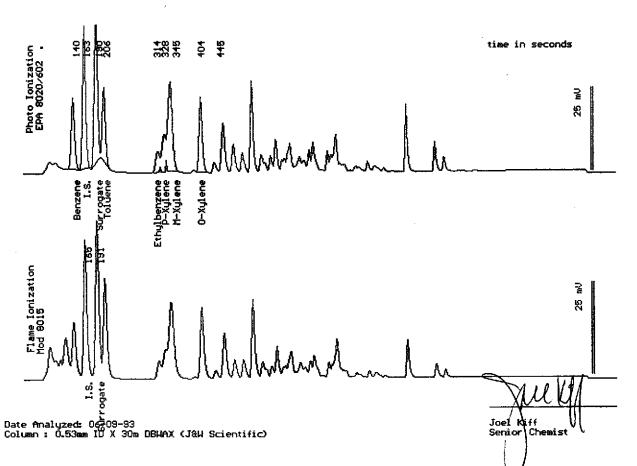


Sample: MW-2-5 25'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93 Dilution: 1:1 QC Batch : 4011m

Parameter	(MDL) mg/kg	Measured Value ≥g/kg
Benzene	(.0050)	.057
Toluene	(.0050)	.099
Ethylbenzene	(.0050)	.026
Total Xylenes	(.0050)	.22
TPH as Gasoline	(1.0)	1.5
Surrogate Recovery	У	114 %





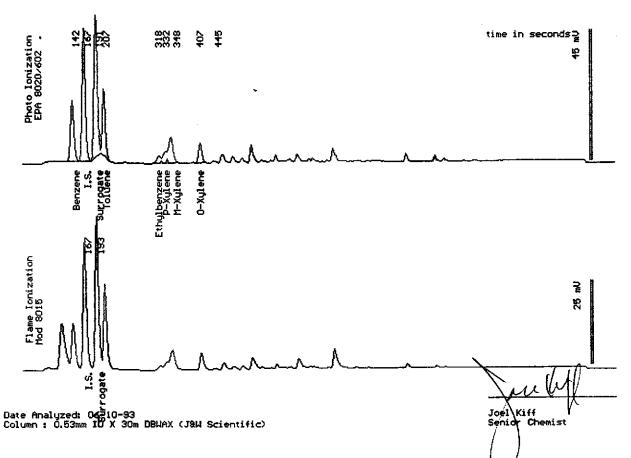
Sample: MW-2-6 30'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/27/93

Dilution: 1:1 QC Batch: 4012d

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.0050) (.0050) (.0050) (.0050) (1.0)	.040 .065 .0070 .051 <1.0
Surrogate Recovery	7	112 %



Western Environmental Science & Technology • 45133 County Road 32B • Davis, CA 95616 • 916 753-9500 • FAX: 916 757-4652

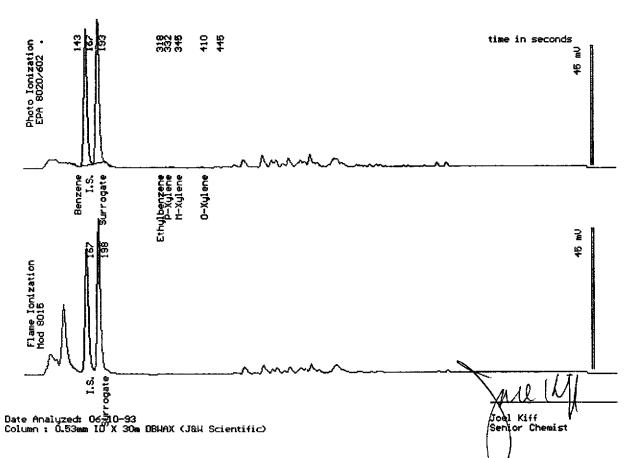


Sample: MW-2-7 35'

From : Project # 19024.01 (Beacon 604) Sampled : 05/27/93

Dilution: 1:1 QC Batch: 4012c

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery	<b>Y</b>	110 %



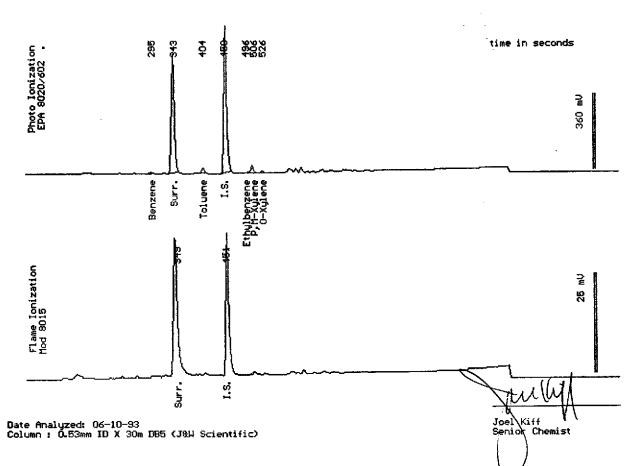


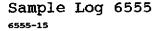
Sample: MW-3-5 25'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/28/93 Dilution: 1:1 QC Batch: 6026c

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery	7	95 %







Sample: MW-3-6 30'

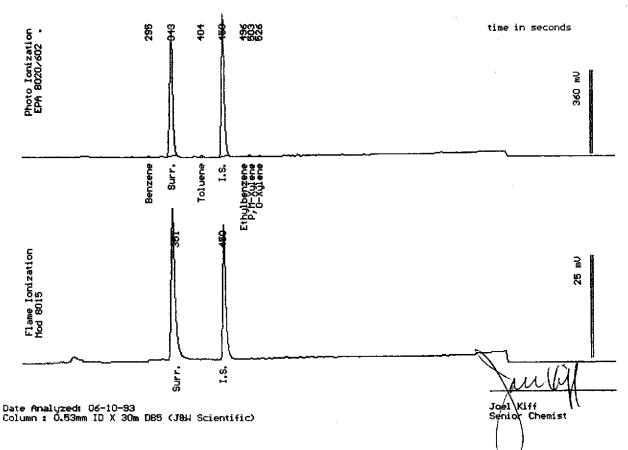
From : Project # 19024.01 (Beacon 604)

Sampled: 05/28/93

Dilution: 1:1 QC Batch: 6026c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured						
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~								
Benzene	(.0050)	<.0050						
Toluene	(.0050)	<.0050						
Ethylbenzene	(.0050)	<.0050						
Total Xylenes	(.0050)	<.0050						
TPH as Gasoline	(1.0)	<1.0						
Surrogate Recovery	7	102 %						



Western Environmental Science & Technology • 45133 County Road 32B • Davis, CA 95616 • 916,753-9500 • FAX: 916 757-4652



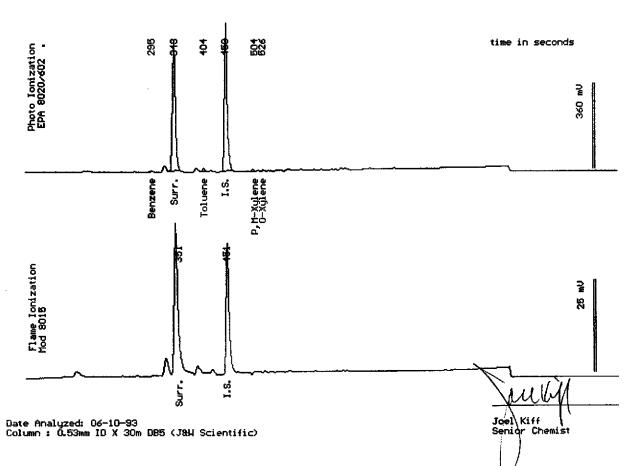
Sample: MW-3-7 35'

From : Project # 19024.01 (Beacon 604)

Sampled: 05/28/93

Dilution: 1:1 QC Batch: 6026c

Parameter	(MDL) mg/kg	Measured Value =g/kg						
Pongono	( 0050)	<.0050						
Benzene Toluene	(.0050) (.0050)	<.0050						
Ethylbenzene	(.0050)	<.0050						
Total Xylenes TPH as Gasoline	(.0050) (1.0)	<.0050 <1.0						
Surrogate Recovery	<b>y</b>	103 %						





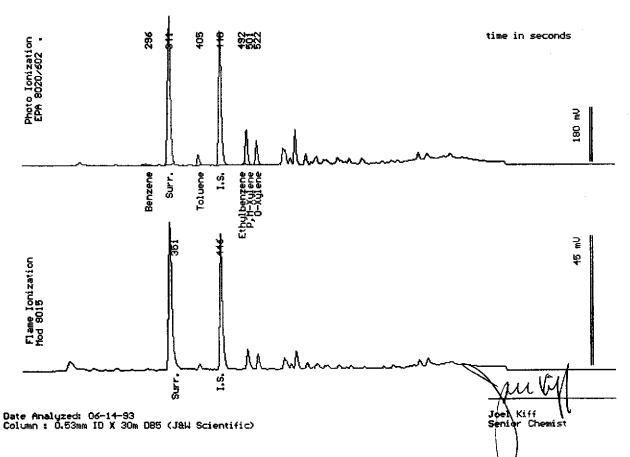
Sample: B-4-4 20'

From : Project # 19024.01

Sampled: 06/01/93 Dilution: 1:1

Dilution: 1:1 QC Batch: 6027a

Parameter	(MDL) mg/kg	Measured Value 199/kg						
Benzene	(.0050)	<.0050						
Toluene	(.0050)	<.0050						
Ethylbenzene	(.0050)	<.0050						
Total Xylenes	(.0050)	.020						
TPH as Gasoline	(1.0)	<1.0						
Surrogate Recovery	7	122 %						



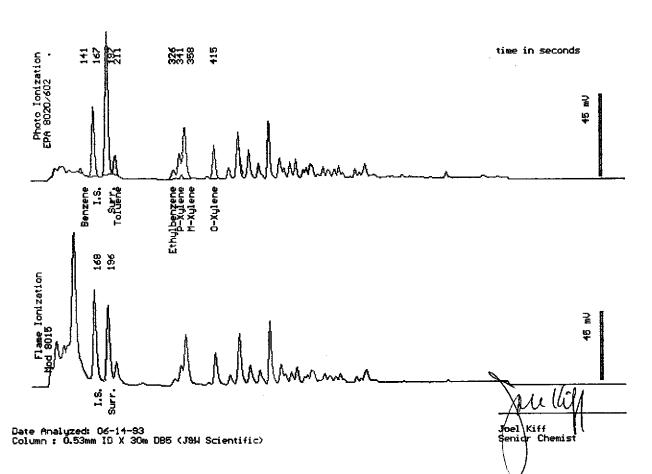


Sample: B-4-5 25'

From : Project # 19024.01 Sampled : 06/01/93

Dilution: 1:10 Matrix: Soil QC Batch: 2001b

Parameter	(MDL) mg/kg	Measured Value mg/kg						
Benzene (.050) Toluene (.050) Ethylbenzene (.050) Total Xylenes (.050) TPH as Gasoline (10)		<.050 .27 .18 1.7 16						
Surrogate Recovery	· /	86 %						



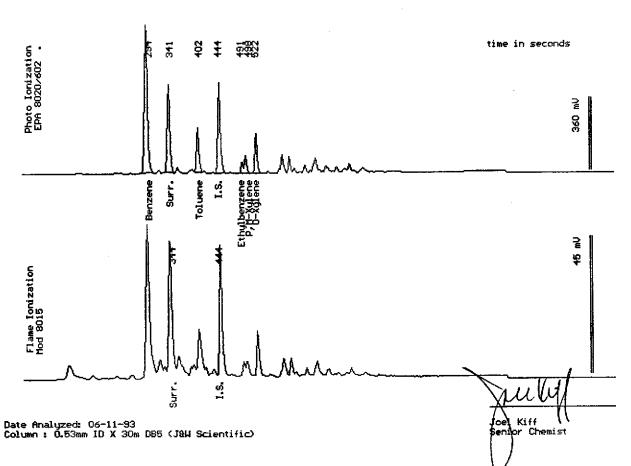


Sample: B-4-6 30'

From: Project # 19024.01 Sampled: 06/01/93 Dilution: 1:1

QC Batch: 6026d

Parameter	(MDL) mg/kg	Measured Value mg/kg					
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.0050) (.0050) (.0050) (.0050) (1.0)	.17 .044 .013 .057 <1.0					
Surrogate Recovery	Y	118 %					





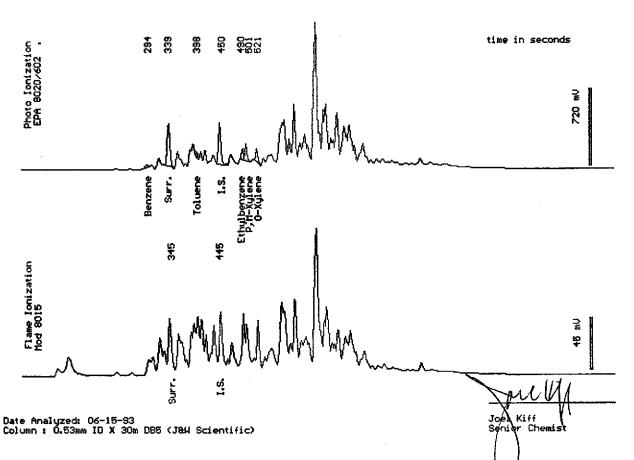
Sample: B-4-7 35'

From : Project # 19024.01

Sampled: 06/01/93 Dilution: 1:10

Dilution: 1:10 QC Batch: 6027e

Parameter	(MDL) mg/kg	Measured Value =g/kg					
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	(.050) (.050) (.050) (.050) (10)	.073 .11 .30 .65 55					
Surrogate Recovery	y	123 %					





## **Ultramar Inc.**CHAIN OF CUSTODY REPORT

Beacon Station No.	Sampler (Print	Name)			4.5.4	AL MOT				Form No	71
604	Hal	Hans	(P)	$\Box$	AN	ALYSES	<u> </u>	-	5-28-93	7 01	7
Project No.	Sampler (Signa	iture)	-						g water - Salah	on the state of the	
19024,01	Affiliation	moe	<u> </u>	_	(e)			of Containers		CEN	
Project Location 16 19 W. F: not 84								Ta		W.E.S	<del>''</del>
Sivermore Ca	AM)			_ <u></u> ×	i (gas			S S	l da	ite 0°c/	
Sample No./Identification	Date	Tir	ne Lab No.	BTE	TPH (gasoline) TPH (diesel)			<u>Š</u>	REMARI	KS	
VW-1-6 30'	5-27-93			*	7			1			
VW-1-7 35				X	X						
VW-1-8 40				x	X					·	
MW-1-1 5									bold		
MW-1-2 10								$\prod$	hold		
MW1-3 15'								1	hold	······································	
MW1-4 20								$\parallel$	hold		
MW-1-5 25	<u> </u>				X			1		<del></del>	1
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	re/A	ffiliatio	n)				Date	Time
Del Haron AMV	5-28/G	907									
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	re/A	ffiliatio	oʻu)	-•			Date	Time
			, , , , , , , , , , , , , , , , , , ,	1 A	H: USE CO	+				Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	rere	Hilland	10/1			2		15%
Report To:		<u> </u>	Bill to: ULTRAMA			MAN (	<u>,                                     </u>		<del></del>	110011	·
Hal Harsen AM	hV		525 West T			t					
,	-		Hanford, C. Attention:			, D	2-11				
	YELLOW: Lab										003 1/90



Froject No. 1902Lino)  Sampler (Signature)  Affiliation  Lab No. 24 Lab No. 25 Lab N		Form No	Date らえをめる		VOEO	KIAI S					Name)	oler (Print	Samp	Beacon Station No.
Project Location   6 19 W. Fust 47 Affiliation  Sample No Adentification  Date Time Lab No. 2 H	1	<u> </u>	<u> </u>		1565	INALY				nsen	Ha	Hal		604
Project Location   6/9 W. Front 47 Affiliation  Sample No Adentification  Date Time Lab No. 2 REMARKS  MW-1-6 30 5-27-93 XX  MW-1-7 35  MW-1-8 40  MW-2-1 5  MW-2-2 10  MW-2-3 15  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	İ										ature)	oler (Signa	Samp	Project No.
Sample No/Identification  Date  Time  Lab No.  MW-1-6 30  S-27-93  MW-1-7 35  MW-1-8 40  MW-2-1 5  MW-2-2 1D  MW-2-3 15  Relinquished by: (Signature/Affiliation)  Date  Time  Received by: (Signature/Affiliation)  Date  Time  Received by: (Signature/Affiliation)  Date  Relinquished by: (Signature/Affiliation)  Date  Relinquished by: (Signature/Affiliation)  Date  Time  Received by: (Signature/Affiliation)  Date  Time  Received by: (Signature/Affiliation)  Date  Signature/Affiliation)  Date				ners			e e		~	woe	900	Idal	,	19024.0)
Sample No /Identification  Date  Time  Lab No.  REMARKS			!	ontai		(100)	Solin						I	Project Location 1619 W. Just 47
Sample No /Identification  Date  Time  Lab No.  REMARKS				Ŭ		5	×					4 MV		Livermore to
MW-1-7 35  MW-1-8 40  MW-2-1 5  MW-2-2 1D  MW-2-3 15  MW-2-3 15  Relinquished by: (Signature/Affiliation)  Pate Time Received by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	<u> </u>	RKS	REMAF				BIE TPH		Lab No	me	Ti	Date		Sample No./Identification
MN-1-8 40  MN-1-8 40  MN-2-1 5'  MN-2-2 1D'  MN-2-3 15'  Relinquished by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date  Time Received by: (Signature/Affiliation)		<u> </u>							8-3					
MW-2-1 5  MW-2-2 1D  MW-2-3 15  Relinquished by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date  Time Received by: (Signature/Affiliation)  Date							XX							
MW-2-1 1D'  MW-2-2 1D'  MW-2-2 1D'  MW-2-3 15  Date Time Received by: (Signature/Affiliation)			hold											MW-1-8 40
MW-2-3 15  MW-2-5 2-5  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)			hald											MW-2-1 5
MW-2-1/20  Relinquished by: (Signature/Affiliation)  Relinquished by: (Signature/Affiliation)  Date  Time Received by: (Signature/Affiliation)  Date			hold											MW-2-2 10
Relinquished by: (Signature/Affiliation)  Date  Date  Time  Received by: (Signature/Affiliation)  Date  Time  Date  Time  Date  Time  Date  Time  Received by: (Signature/Affiliation)  Date			hold											
Relinquished by: (Signature/Affiliation)  Date  Date  Time  Received by: (Signature/Affiliation)  Date  Time  Date  Time  Date  Time  Date  Time  Received by: (Signature/Affiliation)  Date			A STATE OF THE PARTY OF THE PAR				γ -γ							MW-2-4 20
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	<del> </del>		/				ווי							MW-2-5 25
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	Time	Date				tion)	/Affilia	ature	ved by: (Sig	Recei	1		,	Relinquished by: (Signature/Affiliation)
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)											307	326g	/	Huldense AM 1/
Helliquished by: (Signature: Animation)  506-3	Time	Date			/	tion)	/Affilia	ature	ved by: (Sig	Recei	Time	Date		Relinquished by: (Signature/Affiliation)
54631	Time	Date				top)	/Affilis	ature	ved by: Sig	Recei	Time	Date		Relinguished by: (Signature/Affiliation)
Report To: BIF to: ULTRAMARING	15:1	D8423			sheet \	] 210k				ا الرا			and the second s	
	į						NC.	MAR-	ULTRA	Bill to:				Report To:
Report To:  Hu) Hmnsen  AMV  Bill to: 1 Util RAMARTING:  525 West Third Street  Hanford, CA 93230													nV	Hul Hunsen AMI
Attention: Jerry Fox					East_								-	• ,,,,,
WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy 32-8003	003 1/90	32-80		,		DV	tor C	rigina	PINK- (	Copy	oratory i	OW-Lah	VELL	WILITE: Botum to Client with Bened



Forest No.    102-U-0    Project Location 16 19 Sammer Signature)   AM Vinc   Sample No./Identification   Date   Time   Lab No.   Lab No.   REMARK	Form No 3 of	
Sample No/Identification   Date   Time   Lab No.	<u>(S</u>	
Sample No./Identification   Date   Time   Lab No.	(S	
Sample No/Identification   Date   Time   Lab No.	<u>(S</u>	
Sample No / Identification	(S	
Sample No / Identification	<u>(S</u>	
Sample No/Identification   Date   Time   Lab No.	<u>(S</u>	
MW2-7 25  MW2-8 40  WW2-1 5 5-28-93  Loold  VW-2-2 10  WW-2-3 15  VW2-6 30  Relinquished by: (Signature/Affiliation)  Mul Ansolv AMV  S-28-93  Date Time Received by: (Signature/Affiliation)  Mul Ansolv AMV  S-28-93  Part Time Received by: (Signature/Affiliation)		
MW2-7 25  MW2-8 40  WW-2-1 5 5-28-93  Lold  VW-2-2 10  VW-2-3 15  VW-2-3 15  VW-2-6 30  Relinquished by: (Signature/Affiliation)  Aul Lawary AMV  5-28-93  Page 7 Time Received by: (Signature/Affiliation)  Mul Lawary AMV  5-28-93  Received by: (Signature/Affiliation)		
MW-2-8 40		
NW-2-1 5   5-28-93   Inold   Rold   NW-2-2 10   Rold   NW-2-3 15   Nold   NW-2-4 20   NW-2-6 30   NW		
NW-2-2 10  NW-2-3 15  Nold  NW-2-4 20  NW-2-6 30  Relinquished by: (Signature/Affiliation)  Aul Hawan AMV  Date Time Received by: (Signature/Affiliation)  5-28-3-57		
VW2-420  VW2-630  Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  Solution AMV  Solution AMV		
NW2-630  Relinquished by: (Signature/Affiliation)  Aul Haway AMV  Date Time Received by: (Signature/Affiliation)  5-28-307		
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)  5-28-307		
Hul Harray AMV 5-28-307	Date	Time
	Date	111116
Belinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)		
Relinquished by: (Signature/Affiliation)  Date Time Received by: (Signature/Affiliation)	Date	Time
The Carl Call St.	1893	15:1
Report To: Bill to: / ULTRAMAR INC. /		
Hall Hansen AMV 525 West Third Street Hanford, CA 93230		
Attention:	<del></del>	
WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy		9003 1/90



Beacon Station No.	Sampler (Print	Name)						Date	Form No	
604	Hal	Hoss	sen	$\vdash$	ANAL	YSES	-	5-18-93	4 of i	<del>/</del>
Project No.	Sampler (Sign	ature)		1						
1902401	Red	Her	بمعمر	] ြ			ners			
19024.01 Project Location 1619 W. Zinster	Affiliation			틀	(je)		ntai	İ		
Swemore Cu	Affiliation AMV	no		EX H (gas	TPH (diesei)		of Containers			
Sample No./Identification	Date	1	me Lab No.	BTE TPH	ᇤ		ġ Ż	REMAI	RKS	
VW-2-7 35	5-28-43			77			1			
- MW-3-1 5							1	hold		· · · · · · · · · · · · · · · · · · ·
MW-3-2 10								hold		
MW-3-24 15'								hold		
MW3-3 25				17-				<b>3</b> -		
MM13-6 30				44						
MW-3-7 35				44						
MW-8-8 40"	/						V	hald		
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatur	e/Affil	iation)				Date	Time
all Men BAV	5-20	307	1							
Ald Mund MV Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatur	e/Affil	iation)			2	Date	Time
			<u></u>				3/2	7		
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: /Signatur	e/Affi)	lation)	<b></b>	1		Date	Time
			At End		[ _h;	Jul .	<b>√</b>		5/20/5-	15%
Report To:			Bill to: / ULTRAMAP			-				
Hal Honsen A	Mi		525 West TI Hanford, CA							
	riv		Attention:			1. Fo	ν			
		ran-							<u> </u>	
WHITE: Return to Client with Report	YELLOW: Lab	oratory (	Copy PINK: Origin	ator C	ору				32-8	003 1/90



Beacon Station No.	Sampler (Print	Name)		ANALYSES 6 1 93					Form No	)	
604	Sampler (Signa	-1-7 C /-		-			ĬT			7 01	
604 Project No. 19024 (1)	Sampler (Signal Affiliation			a				ners			; ·
Project Location 16 Jd W. First 24		<del></del>		BTEX TPH (nasoline)	(sel			of Containers			
Symmetri	AMV	<u> </u>		_X							
Sample No./Identification	Date	Tir	ne Lab No.	BII				<u> </u>	REMARK	(S	
VW-3-1	6-1-73			X \				1	hald		
V IN-3-2	·							1	Meld		
VW3-3									hold		v ·
V 1913 4								,			
VW-3-5						╽╢-		<u></u>			· 
VW-3 6								1			
yw3-7				//				1		<del></del>	-
	$\downarrow$		·								
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	ıre/Affi	liation	)	-			Date	Time
Relinquished by: (Signature/Affiliation)		Lit; ;						<u></u>		Data	7:
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	ire/Aff	liation	) /				Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	re/Aff	Hation	<del>/</del>  ) · /	<del>-</del> -		· ·	Date	Time
·			THE MALL	11	BA	1/	/		C	153	11/15
Report To: Hall Hanses		٠.	Bill to: ULTRAMA 525 West						* :		
* AMV			Hanford, C Attention:	A 932	30 // <u>/1///</u>	Do	1.				1
WHITE: Return to Client with Report	YELLOW: Lab	oratory C	opy PINK: Origi	inator	Сору					32-8	003 1/90



Beacon Station No.	Sampler (Print	Name)			4514	LVOES.		Date	Form No	).
604	Hall Ha	4524		-	ANA	LYSES	$\vdash$	6-1.93	2 of 3	
Project No.	Sampler (Signa	ature)								
	Holla	Larsen					Containers			
Project Location 16 19 W = 1	Affiliation				<u>ම</u>		ntair		V	
Sweiner Ca	AMV		4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	dies		ο o o			
Sample No./Identification	Date	Time	Lab No.	BTEX TPH (gasoline)	표		No.	REMAR	KS	
B-4-1 5	6-1-93			X			1	hald		
B-4-2 10							1	rold		
B-4-3 15							1	held		
B 4-4 20 -							ļ!			
B-4-5 25							1	·		
B-4-6 -30							1			
B-4-7 35				/			!			
Relinquished by: (Signature/Affiliation)	Date		ed by: (Signati	re/Aff	liation	)			Date	Time
Relinquished by: (Signature/Affiliation)	6.1.93	147								
Relinquished by: (Signature/Affiliation)	Date	Time Receiv	ved by: (Signati	ıre/Aff	iliatior 	)			Date	Time
D. C. L. Char (Disposary) Affiliation)	Date	Time Receiv	ved by: (Signatu	urest AH	liafior	N'	<u>,                                     </u>		Date	Time
Relinquished by: (Signature/Affiliation)	Date		11/1		-7	4	<i>}</i>		1/1/2	1415
Report To: Lig / Hanson		Bill to:	ULTRAMA 525 West	R (NC	AAN Street	N			, a la # /	4. <del>6 </del>
AMY			Hanford, C	A 932	30	•				
$A^{A+V}$			Attention:	201	<u>.,, •</u>	Tay				
WHITE: Return to Client with Report	YELLOW: Lab	oratory Copy	PINK: Orig	inator	Сору				32-8	003 1/90

# ENCLOSURE E FIELD NOTES

#### ACTON • MICKELSON • van DAM, INC.

#### GROUND WATER LEVEL DATA

Project Na	une B	vion	604:				Project Number 19024.01
Date 6	22~9	3	Field Crew	1 Han	sen + 8	tero sis	Project Number 1902 U.01  Ty Measuring Device W. and Number
Well No.	Time	Depth to Product (feet)	Depth to Ground Water (feet)	Product Thickness (feet)	Reference Elevation (feet)	Ground Water Elevation (feet)	Physical Observations/Comments
EWM			37,//		99.09	61.97	TO 54
MW-1	1,26		38,46		100m	61.54	053
WM-7	1:3 0		39.07		98,64	59,61	TO 54
					·	· · · · · · · · · · · · · · · · · · ·	
						<del></del>	
					·		
				·	·		
Signature							i

#### ACTON • MICKELSON • van DAM, INC.

#### GROUND WATER LEVEL DATA

Duningt N	Ro	n m man H/	11. 5 inc m	a_ 1		. •	711111111111111111111111111111111111111
Date_6	-/-43	e Beacon 604 Sivemble Project Number 19024.01  -93 Field Crew Hal Hansen Measuring Device Interface problem and Number					
Well No.	Time	Depth to Product (feet)	Depth to Ground Water (feet)	Product Thickness (feet)	Reference Elevation (feet)	Ground Water Elevation (feet)	Physical Observations/Comments
MW-1	436		37.50		100.00	62.50	TAS4
MW-2	627		38.02	·	98.68	6066	TD54
MW-3	618		36.18		9908	61.90	TD53
						·	
			<u> </u>				
						****	
				-			
			4	3.1			
						- "	
						,	
Signature		•			·	<del> </del>	

DAILY FIE	LD REPORT
ACTON • MICKELS	ON • van DAM, INC.
Project No. 19624.01	Date: 6-24-93 work partornal 6-22-73
Project Name: Former Beacon 604	Project Location: 1619 First St.
	hireman, CA
Weather: Clear, warn	Field Crew: HEH SAL
Today's Work Activities:	
- Arrived at site approxi	1
- Took water (evel maar)	rements
- Collected Samples from a	odung from Mus, Muz, + Mu-3
- left site @ approximate	( 5:30 pm
	7
· ·	
	·
	:
Signature Steve book	Date 6/272/93

		ACTON •	MICKELSON •	van DAM, IN	с.					
SAMPLING/DEVELOPMENT INFORMATION										
Sampling/Develor Sample I.D. Describe Sampli		nt Point SW	Project No Work Order #	Beacon 604 19024 6/22/93 HEH /6AL						
Well Depth	(below MP) nole volumes ore sampling:_	3 g. us		Time	ter 4 3:11 duct observed	inches				
Sampling/Develor 			Bailer Other		_ Centrifugal Pump					
Pump intake or t	oailer set at	53 feet be	elow MP.		•					
Sample Appearance:  Note any Sampling Problems:  Note any Equipment Washing:  Samples Collected/Time: 350 Classes 300A's										
EVACUATION/STABILIZATION TEST DATA										
Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate` (gpm)				
Bailing Start Tim	3:00									
Bailing Start Time	e 3:45 p	<b>L</b>		WL <u>40</u>	.48°					
Comments:	····									
Signature	re his	<del></del>		Date 6/2	2/93					
		<u> </u>		0/6						

		ACTON •	MICKELSON •	van DAM, IN	c.				
		SAMPLING/	DEVELOPMEN	T INFORMAT	ION				
Sample I.D Describe Samplin	ng/Developme	MW-Z ent Point NU C	Project Name Beacon 604  Project No. 19024  Work Order #  Date 6.22-93  Field Crew 5AL						
Well Depth Depth to Water ( Discharge Rate Number of boreh evacuated before	1 .	et below MP 39.07	feet gpm	Casing Diame	ter <u>4</u>	inches			
Sampling/Develo Taj		i: _ <u>X</u>	Bailer Other		_ Centrifugal Pump				
Pump intake or bailer set at 50.00 feet below MP.									
Sample Appearar Note any Sampli	nce:	450 fm							
EVACUATION/STABILIZATION TEST DATA									
Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate` (gpm)			
				<u> </u>					
						· · · · · · · · · · · · · · · · · · ·			
				,					
Bailing Start Time Bailing Stop Time		~		WL 35	1,07				
Comments:									
Signature Stu	re heat		Date 6/24/93						

ACTON • MICKELSON • van DAM, INC.									
		SAMPLING/	DEVELOPMEN	T INFORMAT	ION				
Sampling/Develo		MW-3		Project Name Beac 604					
Sample I.D Describe Samplin	ng/Developme	nt Point NE a	Project No Work Order #	19024					
ria			Date 6-11-93						
	54 '		Field Crew HH 6L						
Well Depth	febelow MP)ole volumes	et below MP 3	Casing Diame	100 H	inches				
Sampling/Develo		l:		Centrifugal Pump					
Pump intake or b									
Sample Appearance:									
EVACUATION/STABILIZATION TEST DATA									
Time	pH (units)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)					
	***************************************				34				
Bailing Start Time Bailing Stop Time		· <i>U</i> I							
Bailing Stop Time_Z:40 WL_\(\mu\)5.50									
G: .									
Signature Stav	e Lut			Date 6-22	-93				

#### ACTON • MICKELSON • van DAM, INC.

#### SURVEY FIELD NOTES

Project Name	Project No. 19024,01	Date 6-1-93
	Bench Mark MW	Bench Mark Description
Surveyor Hall Hone	Rod Man	

Station	(+) B.S.	H.I.	(-) F.S.	Elevation	Stadia Readings	Distance	Horizontal Angle	Remarks
MW1	5.07	105.07		100.00		**		
MWZ			6.39	98,68				
WM.3			5 99	99.08		-		
							·	
MWI	{.3}	105.31		100.00			<sup>A</sup> v	
MW-2	-		6.67	98.68				
KWM			6 23	99.08				
	·							
	<del></del>							
			<u>-</u> .			<u> </u>		
							`	
							· · · · · · · · · · · · · · · · · · ·	
		·						

SITE SKETCH

Signature			

# ENCLOSURE F GROUND WATER SAMPLE ANALYTICAL RESULTS

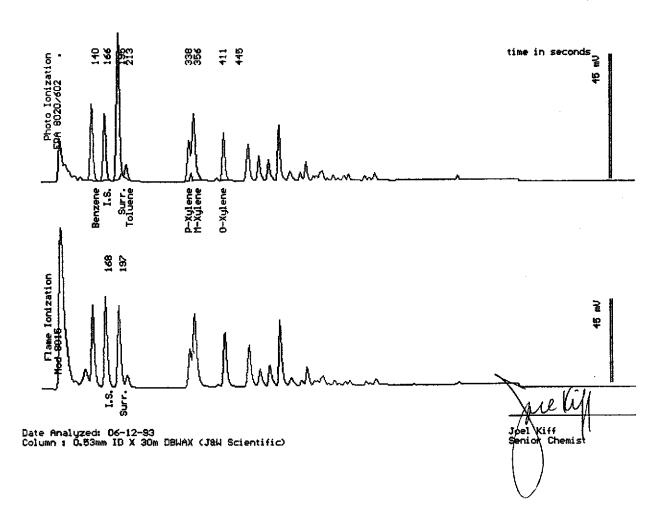


Sample: MW-1

From : Project # 19024.01 Sampled : 06/01/93

Dilution: 1:100 QC Batch : 2000h

Parameter	(MDL) ug/L	Measured Value ug/L						
Benzene	(50)	2200						
Toluene	(50)	400						
Ethylbenzene	(50)	<50						
Total Xylenes	(50)	4900						
TPH as Gasoline	(5000)	27000						
Surrogate Recovery	7	89 %						



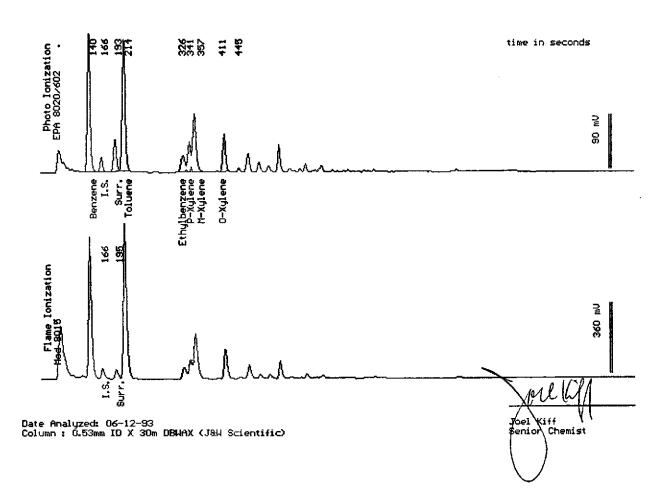


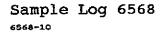
Sample: MW-2

From : Project # 19024.01 Sampled : 06/01/93

Dilution: 1:100 QC Batch : 2000h

Parameter	(MDL) ug/L	Measured Value wg/L							
Benzene	(50)	20000							
Toluene	(50)	21000							
Ethylbenzene	(50)	3300							
Total Xylenes	(50)	18000							
TPH as Gasoline	(5000)	170000							
Surrogate Recovery	7	90 %							







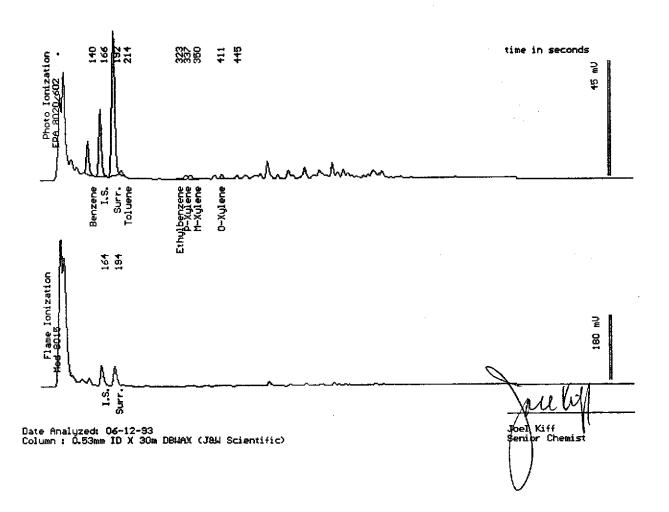
Sample: MW-3

From : Project # 19024.01

Sampled: 06/01/93

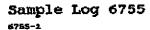
Dilution: 1:1 QC Batch: 2000h

Parameter	(MDL) ug/L	Measured Value rug/L						
_								
Benzene	(.50)	4.6						
Toluene	(.50)	<.50						
Ethylbenzene	(.50)	<.50						
Total Xylenes	(.50)	1.9						
TPH as Gasoline	(50)	270						
Surrogate Recovery	7	92 %						





Beacon Station No.	Sampler (Print						-0		Dat 6-1		Form No	
604	Hall	Har	rech	$\vdash$		IALYSI	<u>=\$</u> 	+	(5-)	- V3	3 01 3	
Project No.	Sampler (Sign			7								
•	Affiliation A	Jew	voor		وَ			of Containers				
Project Location, 6 MW. First &	Affiliation							atri				
Project Location, 6 MW. Final De Evermone Co	A	MV	une	$ \mathbf{x} ^{\frac{2}{5}}$	(diesel)			ŏ				
Sample No./Identification	Date	Tin	ne Lab No.	BTEX	T E			S O		REMAR	RKS	
MW-)	6-1-93			14				3				
MW-2								3				
MW3					V			3				
									ſ	REC	EIVE	ה
										by V	V.E.S.T.	
										date	303	
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	re/Af	iliatio	on)	_!!		1		Date	Time
Hul Henron AMV	249	6-19)										
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signatu	re/Afi	iliatio	on)					Date	Time
:		<u> </u>				1					Data	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by (Signatu	se/Att	hliavo	007	** .			(	Date ON 193	145
Report To: Hal Honses		1 .	Bill to: ULTRAMAI 525 West T			et						
AMV			Hanford, Ca Attention: _	<del></del>	Ţ«	21/	y 9	) 6	W_		<del></del>	
WHITE: Return to Client with Report	YELLOW: Lab	oratory C	opy PINK: Origi	nator	Сор	у					32-8	1/90





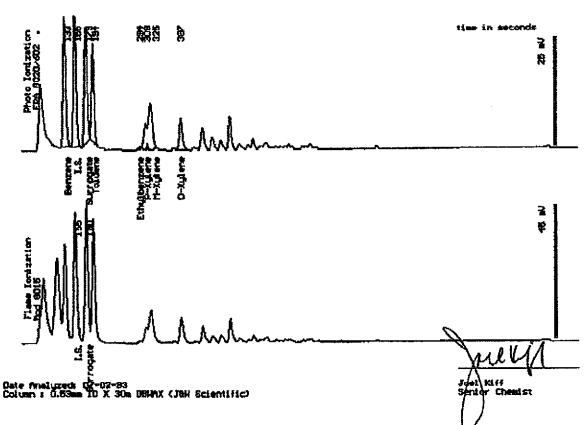
Sample: MW1

From : Project # 19024.01 (Beacon 604)

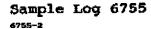
Sampled: 06/22/93 Dilution: 1:500

QC Batch : 4017A

Parameter	(MRL) wg/2	Measured Value w/L
Benzene	(250)	8000
Toluene	(250)	10000
Ethylbenzene	(250)	260
Total Xylenes	(250)	10000
TPH as Gasoline	(25000)	87000
Surrogate Recovery	ř	94 %



Western Environmental Science & Technology • 45133 County Road 32B • Davis, CA 95616 • 916/755-9500 • FAX: 916 757-4652





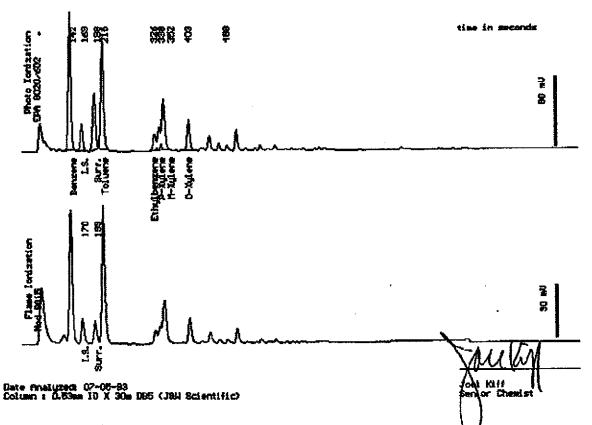
Sample: HW2

From : Project # 19024.01 (Beacon 604)

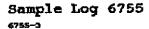
Sampled: 06/22/93 Dilution: 1:250

QC Batch : 2004C

Parameter	(MRL) wg/L	Measured Value wy/2
	4.00	19000
Benzene Toluene	(130) (130)	22000
Ethylbenzene	(130)	3500
Total Xylenes	(130)	18000
TPH as Gasoline	(13000)	160000
Surrogate Recovery	¥	102 %



Western Environmental Science & Technology • 45133 County Road 328 • Davis, CA 95516 • 816.753-9500 • FAX: 916.757-4652





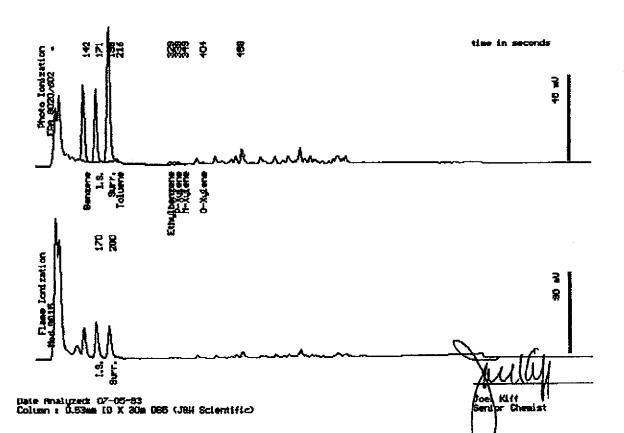
Sample: MW3

From : Project # 19024.01 (Beacon 604)

Sampled: 06/22/93 Dilution: 1:1 QC Batch : 2004C

Matrix : Water

Parameter	(MRL) wa/e	Measured Value wy/L						
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	— — — — — — — — — — — — — — — —						
Benzene	(.50)	8.2						
Toluene	(.50)	<.50						
Ethylbenzene	(.50)	<.50						
Total Xylenes	(.50)	.72						
TPH as Gasoline	(50)	160						
Surrogate Recovery	¥	106 %						



Western Environmental Science & Technology • 45193 County Road 32B • Davis, CA 95616 • 916 #53-9500 • FAX: 916 757-4652



Beacon Station No.	Sample	er (Print l	Name)				ANALY	CEC	1	Date 6-24-93	Form		
604	Ste	Steve Liaty				厂	MANE		+-	3 ml vc			
Project No.	Sample	er (Signa	ture)	, ì							,	Preserv	
190 24.01		stere	1	ca (	· · · · · · · · · · · · · · · · · · ·	]   <sub>©</sub>			of Containers				
190 24.01 Project Location 1619 Fivet 36	Affiliation	οn			Mes		8	1	nta				
Livermore CA	Acto	n Mi	ckel	50M \	an Dam	×	8	111	Š				
Sample No./Identification		ite	Tìr		Lab No.	BTEX TPH (gasoline)	剧		Š	REMA	ARKS		_
MWI	6.22	-93	35	Dρ		XX			3			···	_
MWZ	1		45			ĬΫ			3				
MW3		/		う <u>か</u>		V.			3				_
									7				
						11	111			I IA	ECE	IVED	1
<u></u>						$\dagger \dagger$	111		_	1	by W.	EST.	15%
		, <del>, , , , , , , , , , , , , , , , , , </del>				+	1++		_	1 /11	date	14175	
Relinquished by: (Signature/Affiliation)		Date	Time	Receiv	ed by: (Signatu	re/Atfi	liation)				Dati	e Time	-
Stee has		6-24-9	9100		_						-		_
Relinquished by: (Signature/Affiliation)		Date	Time		red by: (Signatu	re/Affi	liation)		/	<del>()</del>	Dat	e Time	
					$\overline{\Delta I}$			=		/			-i
Relinquished by: (Signature/Affiliation)		Date	Time	Recei	ed of (Signatu	re(A#	liation)	1		¥	Date	l l	
			<u> </u>	12	The Lord		<u> </u>		_		19541	3 9/	
Report To: Dale van Dam				BUL (o:	ULTRAMAI 525 West T		,	7			•		
Acton Mickelson		<b>N</b> .		Ì	Hanford, Ci	A 932	30	E	•				
Heton Michelson	van.	ستنا	)		Attention:		rry	F	2K	<u></u>		<del></del>	_
WHITE: Return to Client with Report	YELL(	)W: Lab	oratory (	Гору	PINK: Origin	nator	Сору		,			32-4003 1/90	_