

95 MAY 22 PM 2:49

May 5, 1995

Mr. Terrence A. Fox  
Ultramar Inc.  
525 West Third Street  
Hanford, California 93230

19024.04/7

Subject: Ground Water Monitoring Report, First Quarter 1995  
Beacon Station #604, 1619 West First Street, Livermore, California

Dear Mr. Fox:

Acton • Mickelson • Environmental, Inc. (AME), has been authorized by Ultramar Inc. (Ultramar), to continue a hydrogeologic investigation of ground water conditions at Beacon Station #604, located at 1619 West First Street, Livermore, California (Figures 1 and 2). The investigation is intended to assess the distribution of petroleum hydrocarbon constituents in the ground water beneath the site. This letter report summarizes the results of monitoring activities performed on February 10, 1995, including water level measurements, subjective analysis for the presence of liquid-phase hydrocarbon (LPH), and ground water sampling. The procedures used to purge and sample monitoring wells and measure water levels are described in Enclosure A.

### **Ground Water Level Measurements, Hydraulic Gradient, and Flow Direction**

Depth to ground water was measured in monitoring wells MW-1 through MW-7 on February 10, 1995. Depth to ground water ranged from 29.96 (MW-3) to 33.34 (MW-6) feet below the top of respective well casings. Ground water level measurements from this sampling event, as well as previous ground water depth measurements, are presented in Table 1. Ground water elevations increased an average of approximately 7.61 feet between December 14, 1994 and February 10, 1995. The inferred direction of ground water flow was generally toward the west-northwest (Figure 3), which is consistent with previous monitoring events. Ground water gradient at the site on February 10, 1995, was calculated to be approximately 0.02 foot per foot. Measurable layers of LPH have not been detected in any monitoring well during this or previous quarters at the site.

Mr. Terrence A. Fox  
May 5, 1995  
Page 2

### Ground Water Sample Analytical Results

Ground water samples were collected from monitoring wells MW-1 through MW-7 on February 10, 1995, using the procedures outlined in Enclosure A. Field observations and ground water sampling documentation are presented in Enclosure B. Ground water samples were submitted to a state-certified laboratory for analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), and total petroleum hydrocarbons as gasoline (TPHg). Ground water sample analytical results from this sampling event and previous sampling events are compiled in Table 2. Copies of the certified laboratory analytical reports from this sampling event are presented in Enclosure C.

### Discussion

Benzene concentrations in ground water ranged from 21,000 micrograms per liter ( $\mu\text{g/l}$ ) in the sample collected from monitoring well MW-6 to less than the method detection limit of  $0.50 \mu\text{g/l}$  in a sample collected from monitoring well MW-4. Compared to the previous monitoring event, benzene concentrations in water samples collected on February 10, 1995, decreased in monitoring wells MW-2 and MW-5, and increased in MW-1, MW-3, MW-6, and MW-7. Concentrations of BTEX and TPHg remained below the method detection limits in the ground water sample collected from monitoring well MW-4. Benzene concentrations reported from the February 10, 1995, ground water sample analytical results are illustrated on Figure 4.

### Remarks

The opinions and conclusions contained in this letter report represent our professional opinions. These opinions are based on currently available information and were developed in accordance with currently accepted hydrogeologic and engineering practices at this time. Other than this, no warranty is implied or intended.

AME recommends that a copy of this quarterly monitoring report be forwarded to the following:

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

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

ACTON •  
MICKELSON •  
ENVIRONMENTAL, INC.

lrpt051.dmc

---

Consulting Scientists, Engineers, and Geologists

Mr. Terrence A. Fox  
May 5, 1995  
Page 3

If you have any questions, please call the undersigned at (916) 939-7550.

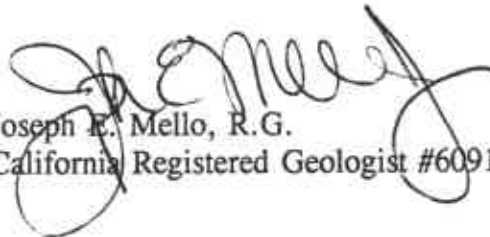
Sincerely,

**ACTON • MICKELSON • ENVIRONMENTAL, INC.**



Todd J. Brown  
Staff Geologist

TJB:JEM:dmc  
Enclosures



Joseph E. Mello, R.G.  
California Registered Geologist #6091



**ACTON •  
MICKELSON •  
ENVIRONMENTAL, INC.**

lrpt051.dmc

---

Consulting Scientists, Engineers, and Geologists

TABLE 1

**GROUND WATER ELEVATION DATA**  
**Beacon Station #604**  
**1619 West First Street, Livermore, California**

Monitoring Well	Date	Top of Riser (feet)	Depth to Top/Bottom of Screened Interval (feet)	Depth of Water (feet)	Ground Water Elevation (feet)	Physical Observation
MW-1	06-01-93	100.00	34/54	37.50	62.50	No Product
	06-22-93			38.46	61.54	No Product
	10-06-93			42.22	57.78	No Product
	01-13-94			34.52	65.48	No Product
	03-30-94			31.93	68.07	No Product
	04-25-94			33.49	66.51	No Product
	08-12-94			41.03	58.97	No Product
	12-14-94			38.63	61.37	No Product
02-10-95	30.80	69.20	No Product			
MW-2	06-01-93	98.68	34/54	38.02	60.66	No Product
	06-22-93			39.07	59.61	No Product
	10-06-93			43.72	54.96	No Product
	01-13-94			35.85	62.83	No Product
	03-30-94			32.82	65.86	No Product
	04-25-94			34.76	63.92	No Product
	08-12-94			44.33	54.35	No Product
	12-14-94			40.00	58.68	No Product
02-10-95	32.16	66.52	No Product			
MW-3	06-01-93	97.08	33/53	36.18	61.90	No Product
	06-22-93			37.11	61.97	No Product
	10-06-93			41.15	55.93	No Product
	01-13-94			33.95	63.13	No Product
	03-30-94			30.97	66.11	No Product
	04-25-94			32.46	64.62	No Product
	08-12-94			41.72	55.36	No Product
	12-14-94			37.62	59.46	No Product
02-10-95	29.96	67.12	No Product			
MW-4	03-30-94	99.35	27/47	31.56	67.79	No Product
	04-25-94			32.73	66.62	No Product
	08-12-94			41.61	57.74	No Product
	12-14-94			38.11	61.24	No Product
	02-10-95			30.50	68.85	No Product
MW-5	03-30-94	98.37	27/47	32.07	66.30	No Product
	04-25-94			33.65	64.72	No Product
	08-12-94			42.73	55.64	No Product
	12-14-94			38.89	59.48	No Product
	02-10-95			31.44	66.93	No Product
MW-6	03-30-94	97.62	28/48	33.38	64.24	No Product
	04-25-94			35.49	62.13	No Product
	08-12-94			45.14	52.48	No Product
	12-14-94			40.99	56.63	No Product
	02-10-95			33.34	64.28	No Product
MW-7	03-30-94	98.03	27/47	31.98	66.05	No Product
	04-25-94			33.56	64.47	No Product
	08-12-94			43.35	54.68	No Product
	12-14-94			39.34	58.69	No Product
	02-10-95			32.11	65.92	No Product

Note: Monitoring well casing 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 2  
 GROUND WATER SAMPLE ANALYTICAL RESULTS  
 Beacon Station #604  
 1619 West First Street, Livermore, CA  
 Concentrations in micrograms per liter ( $\mu\text{g/l}$ )

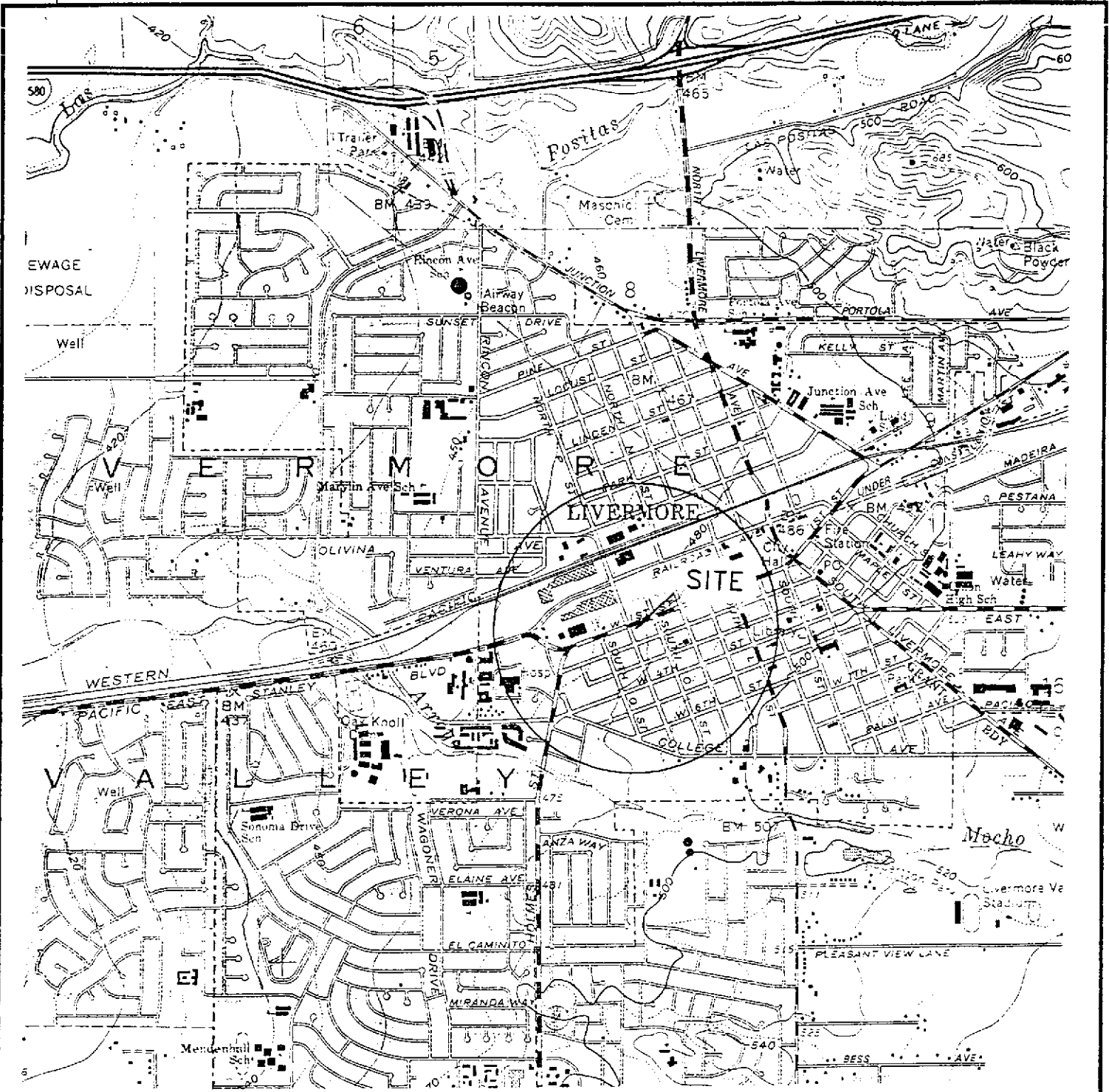
Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg*
MW-1	06-01-93	2,200	400	<50	4,900	27,000
	06-22-93	8,000	10,000	260	10,000	87,000
	10-06-93	4,700	6,500	740	5,300	40,000
	01-13-94	1,300	950	110	850	9,400
	04-25-94	1,500	1,800	290	1,700	11,000
	08-12-94	550	330	260	1,400	11,000
	12-14-94	1,000	1,200	320	1,500	11,000
	02-10-95	1,200	1,500	280	1,500	9,300
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
	10-06-93	17,000	17,000	3,000	15,000	110,000
	01-13-94	20,000	19,000	2,300	14,000	93,000
	04-25-94	9,600	7,300	840	7,800	41,000
	08-12-94	11,000	11,000	2,300	11,000	59,000
	12-14-94	13,000	13,000	2,200	12,000	63,000
	02-10-95	12,000	12,000	2,200	11,000	63,000
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
	10-06-93	57	110	24	120	740
	01-13-94	2.6	0.67	0.78	4.2	83
	04-25-94	0.75	3.2	0.50	3.6	60
	08-12-94	7.3	14	2.6	13	310
	12-14-94	<0.50	<0.50	<0.50	<0.50	75
	02-10-95	1.4	<0.50	<0.50	1.8	96
MW-4	03-30-94	4.2	15	2.5	26	120
	04-25-94	<0.50	1.8	<0.50	2.1	65
	08-12-94	<0.50	<0.50	<0.50	<0.50	<50
	12-14-94	<0.50	<0.50	<0.50	<0.50	<50
	02-10-95	<0.50	<0.50	<0.50	<0.50	<50
MW-5	03-30-94	1,300	20	<13	160	7,500
	04-25-94	1,100	41	130	740	6,500
	08-12-94	420	2.9	41	98	4,000
	12-14-94	660	<2.5	33	13	4,800
	02-10-95	490	<13	23	19	5,200
MW-6	03-30-94	21,000	8,600	1,700	12,000	63,000
	04-25-94	22,000	12,000	2,300	16,000	77,000
	08-12-94	12,000	8,100	2,200	16,000	65,000
	12-14-94	18,000	9,500	2,200	14,000	65,000
	02-10-95	21,000	8,400	2,000	14,000	63,000
MW-7	03-30-94	7,200	2,400	1,600	11,000	43,000
	04-25-94	3,900	1,000	940	6,900	30,000
	08-12-94	3,800	1,400	1,300	7,500	30,000
	12-14-94	3,600	1,200	900	6,400	31,000
	02-10-95	4,000	900	890	5,100	27,000

- above screened interval

- above screen

- above screen

\*TPHg = Total petroleum hydrocarbons as gasoline.



General Notes

Base Map from U.S.G.S.  
 Livermore, California  
 7.5 Minute Topographic  
 Quadrangle  
 Photorevised 1980



Approximate Scale  
 (in feet)

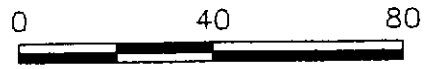
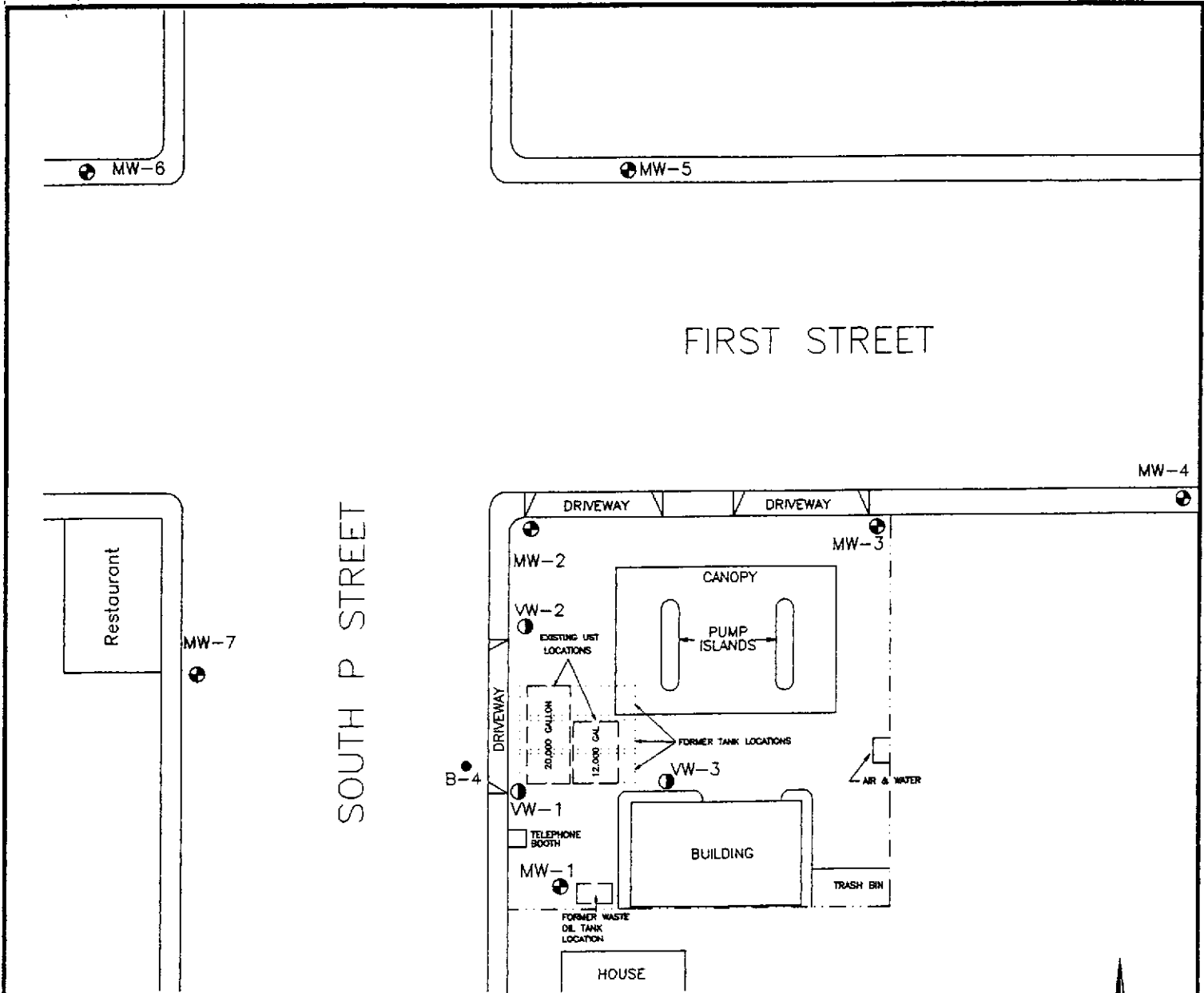


QUADRANGLE LOCATION

FIGURE 1





SITE LOCATION MAP  
 BEACON STATION #604  
 1619 WEST FIRST STREET  
 LIVERMORE, CALIFORNIA

Project No. 19024	Drawn CCB	Acton • Mickelson • Environmental, Inc. Consulting Scientists, Engineers, and Geologists 4511 Golden Foothill Parkway, #1 El Dorado Hills, California 95762 (916) 939-7550
File No. QM01SLM	Prepared SAL	
Revision 0	Reviewed <i>[Signature]</i>	

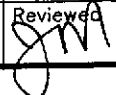


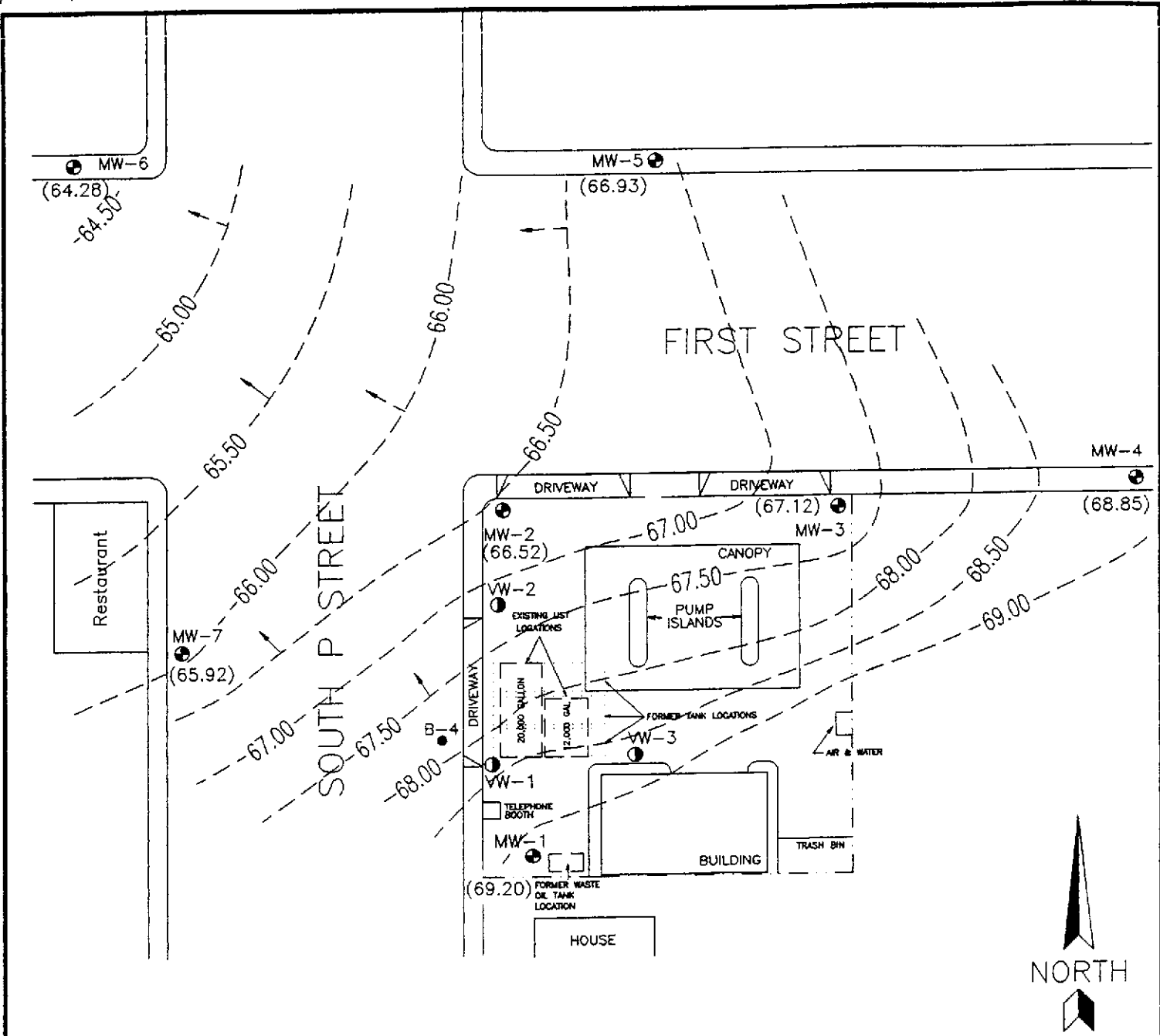
Approximate Scale  
(in feet)

LEGEND

- 
 VW-3 VADOSE WELL LOCATION AND NUMBER
- 
 MW-3 MONITORING WELL LOCATION AND NUMBER
- 
 B-4 SOIL BORING LOCATION AND NUMBER
- 
 PROPERTY BOUNDARY

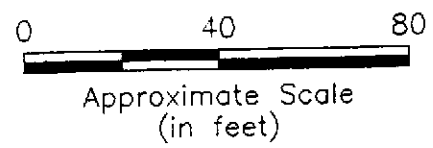
**FIGURE 2**  
**SITE MAP**  
BEACON STATION #604  
1619 WEST FIRST STREET  
LIVERMORE, CALIFORNIA

Project No. 19024.04	Drawn CCB	Acton • Mickelson • Environmental, Inc. Consulting Scientists, Engineers, and Geologists 4511 Golden Foothill Parkway, #1 El Dorado Hills, California 95762 (916) 939-7550
File No. IR04SM	Prepared TAD	
Revision	Reviewed 	



LEGEND

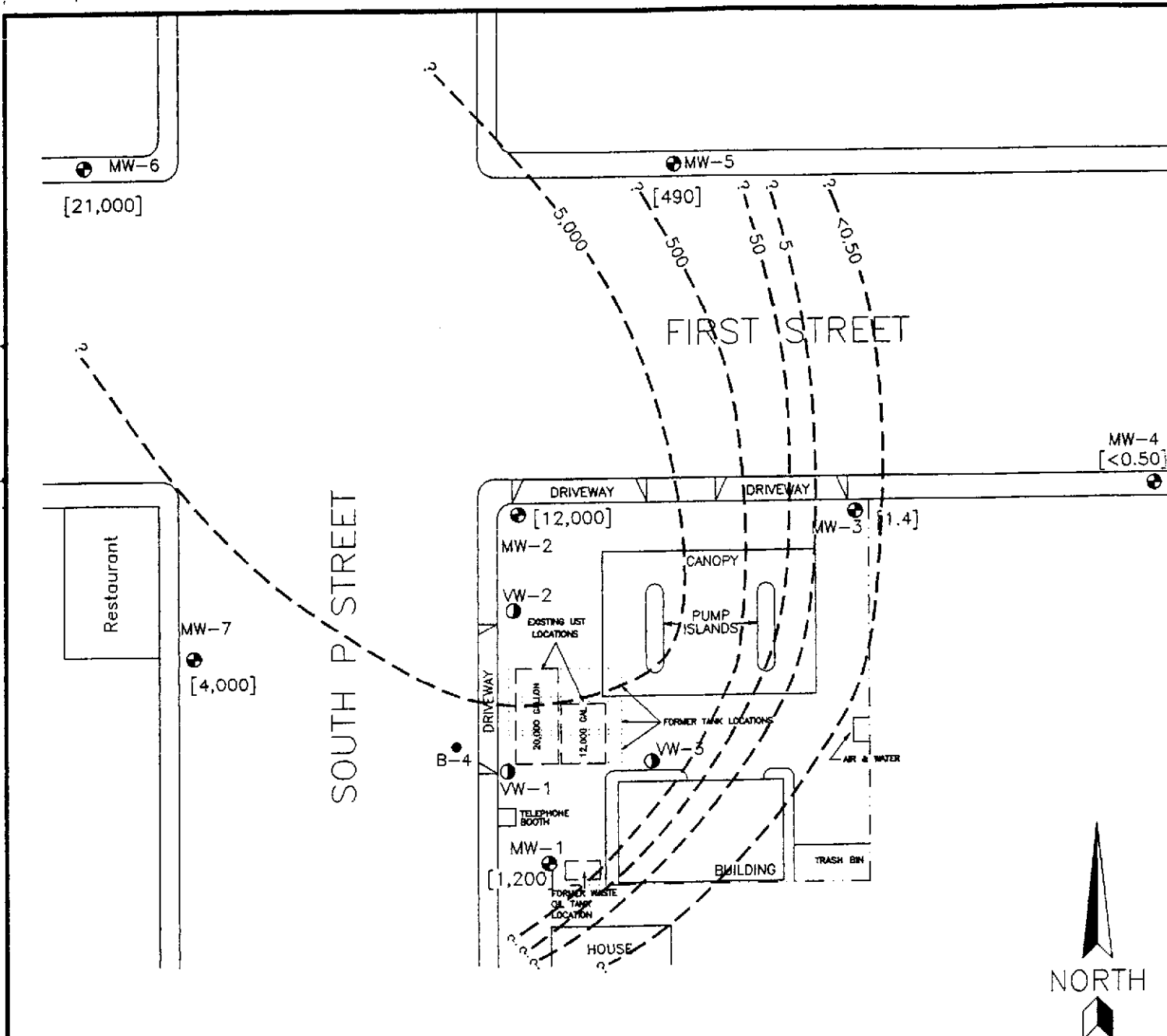
- VW-3 VADOSE WELL LOCATION AND NUMBER
- MW-3 MONITORING WELL LOCATION AND NUMBER
- B-4 SOIL BORING LOCATION AND NUMBER
- - - PROPERTY BOUNDARY
- (69.20) GROUND WATER ELEVATION (FEET)
- - - 68.00 GROUND WATER ELEVATION CONTOUR WITH INFERRED DIRECTION OF FLOW



**FIGURE 3**  
**GROUND WATER TABLE CONTOUR MAP (2/10/95)**  
 BEACON STATION #604  
 1619 WEST FIRST STREET  
 LIVERMORE, CALIFORNIA

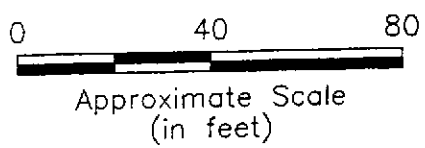
Project No. 19024.04	Drawn LMC	Acton • Mickelson • Environmental, Inc. Consulting Scientists, Engineers, and Geologists 4511 Golden Foothill Parkway, #1 El Dorado Hills, California 95762 (916) 939-7550
File No. QM25WTC3	Prepared TJB	
Revision	Reviewed 	





**LEGEND**

- VW-3 VADOSE WELL LOCATION AND NUMBER
- MW-3 MONITORING WELL LOCATION AND NUMBER
- B-4 SOIL BORING LOCATION AND NUMBER
- - - PROPERTY BOUNDARY
- [1.4] BENZENE CONCENTRATION IN MICROGRAMS PER LITER
- - - 5 BENZENE ISOCONCENTRATION CONTOUR IN MICROGRAMS PER LITER



**FIGURE 4**  
**INFERRED DISTRIBUTION OF BENZENE**  
**IN GROUND WATER (2/10/95)**  
 BEACON STATION #604  
 1619 WEST FIRST STREET  
 LIVERMORE, CALIFORNIA

Project No. 19024.04	Drawn CCB	Acton • Mickelson • Environmental, Inc. Consulting Scientists, Engineers, and Geologists 4511 Golden Foothill Parkway, #1 El Dorado Hills, California 95762 (916) 939-7550
File No. QM25ICD4	Prepared TJB	
Revision	Reviewed <i>JMM</i>	

**ENCLOSURE A**  
**SAMPLING TECHNIQUES**

## ENCLOSURE A

### SAMPLING TECHNIQUES

Proper sampling techniques must be followed to assure that samples represent actual field conditions and that samples are labeled, preserved, and transported properly to retain sample integrity. This exhibit describes procedures to be 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 Environmental Protection Agency (Cal-EPA) will be followed for all sampling procedures. Actual sampling procedures to be employed will be based on field conditions and may differ from those described here.

#### 1.0 EXPLORATION BORING/SOIL SAMPLING PROCEDURES

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

Soil samples will be collected at vertical intervals of not more than 5 feet. Soil sampling will be done in general accordance with ASTM D1586-84 (reapproved 1992), modified to allow the use of a 2-inch-diameter split-barrel sampler. Using this procedure, three 2-inch-diameter, 6-inch-length, brass tubes are placed in a California-type split-barrel sampler. The sampler is driven into the soil by a 140-pound weight falling 30 inches. After driving the sampler an initial set of 6 inches (seating drive), the number of blows required to drive the sampler an additional 12 inches is known as standard penetration resistance, or the "N" value. The "N" value is used as an empirical measure of the relative density of cohesionless soils and the consistency of cohesive soils.

Upon recovery of the split-barrel sampler, the brass tubes containing the soil will be removed. One of the three brass tubes will be sealed at the ends with Teflon tape and plastic end caps. The percent recovery of the sample will be recorded. The sample will be labeled with an identification number, time, date, location, and requested laboratory analysis. The sample will then be 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 will be followed. This will be performed for each sample collection.

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

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

Soil borings will normally be advanced with 8- or 10-inch-diameter, hollow-stem augers. The soil generated from the soil borings will be stored in 55-gallon drums and labeled with the corresponding boring number, date, and address of the facility. Alternatively, the soil generated from the soil borings may be wrapped in plastic and stored on site until characterized for disposal.

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

### **2.1 Water Level and LPH Thickness Measurements**

Ground water sampling will be done in general accordance with ASTM D4448 (reapproved 1992). For sites where LPH may be present, the static water level and LPH thickness in each well will be measured with an electronic interface probe prior to purging or sampling. 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 will be lowered slowly until LPH or water is encountered. At this point, the mark on the interface wire opposite the permanent reference point on the top of the well casing will be read to the nearest 0.01 foot and recorded. If the first encountered substance is LPH, the probe will be lowered until the tone corresponding to water is emitted. This depth will also be recorded. The difference between the two depths corresponds to the LPH thickness. The interface probe will be rinsed in a cleaning solution and deionized water between measurements in different wells.

For sites where LPH is not present, either a conductance probe level meter or an electronic interface probe will be used to measure static water level. The conductance probe level meter emits a steady tone upon encountering any conductive fluid (i.e., water). Like the interface probe, the wire of the conductance probe level meter has markings at 0.01 foot intervals, and the procedure for obtaining static water levels with the conductance probe level meter is basically the same as for an interface probe when LPH is not encountered.

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

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

## 2.2 Well Evacuation

After the static water level in a well is determined and prior to collection of a ground water sample, stagnant water will be 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 will be removed from each well from which a sample is to be collected. The volume of water in the casing will be 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 is bailed or pumped during purging, samples will be collected and field analyzed for pH, temperature, and specific conductance. The well will be considered stabilized when repeated readings of the following parameters are within the ranges indicated as follows:

- Specific conductance             $\pm 10$  percent of the reading range
- pH                                     $\pm 0.1$  pH unit
- Temperature                       $\pm 0.5^\circ$  C.

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

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

## 2.3 Hydropunch® Sampling

Undisturbed ground water samples may be obtained with a Hydropunch® sampling apparatus. When the termination depth of a boring is reached (i.e., when soil is observed to be wet, but not saturated, a Hydropunch® sampling apparatus will be driven approximately 5 feet into the saturated zone. The tool will then be withdrawn approximately 18 inches to expose the inlet screen and allow ground water to flow into the interior of the sampling device. The Hydropunch® will be withdrawn from the subsurface after allowing ample time for the sampling device to fill with ground water.

After the Hydropunch® is retrieved, a stop cock will be attached to the device for sample retrieval. The sample will then be placed in laboratory-supplied containers.

## 2.4 Sample Collection, Preservation, and Handling

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

All sample containers will be 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 will be used.

After sample collection, the samples will be placed into coolers with ice packs. Internal temperature of the cooler will be maintained at approximately 4 degrees Celsius. Samples will be kept in coolers during transport to the analyzing laboratory.

### **3.0 DECONTAMINATION AND DISPOSAL PROCEDURES**

#### **3.1 Equipment Decontamination**

All equipment that comes in contact with potentially contaminated soil, drilling fluid, air, or water will be decontaminated before each use. Decontamination will consist of steam-cleaning, a high-pressure, hot-water rinse, or trisodium phosphate (TSP) or Alconox®/Liquinox® wash and freshwater rinse, as appropriate.

Drilling and sampling equipment will be decontaminated as follows:

1. Drill rig augers, drill rods, and drill bits will be steam-cleaned prior to use and between borings. Visible soil, grease, and other impurities will be removed.
2. Soil sampling equipment will be steam-cleaned prior to use and between each boring. Prior to individual sample collection, any sampling device will also be cleaned in a TSP or Alconox®/Liquinox® solution and rinsed twice in clean water. Any visible soil residue will be removed.
3. It is anticipated that disposable equipment will be used to collect water samples. If disposable equipment is not used, water sampling equipment will be decontaminated using methods described in Item 2 above for soil sampling equipment.
4. Water sampling containers will be cleaned and prepared by the respective analytical laboratories.
5. Stainless steel or brass soil sampling tubes will be steam-cleaned or washed in TSP or Alconox®/Liquinox® solution and rinsed with clean water.
6. Field monitoring equipment (pH, conductivity, or temperature probes) will be rinsed with clean water prior to use and between samples.

## **4.0 FIELD MEASUREMENTS**

Field data will be collected during various sampling and monitoring activities; this section describes routine procedures to be 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 will contact appropriate utility companies to have underground utility lines located. All work associated with the borings will be 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) will be maintained using the Unified Soil Classification System (Enclosure B) by an AMV geologist. All boring logs will be reviewed by a California registered geologist.

The collected soil samples will be 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 will be the field screening results obtained using a portable PID or FID.

### **4.3 Disposal Procedures**

Soils and fluids that are produced and/or used during the installation and sampling of borings, and that are known or suspected to contain potentially hazardous materials, will be contained during the above operations. These substances will be retained on site until chemical testing has been completed to determine the proper means of disposal. Handling and disposal of substances known or suspected to contain potentially hazardous materials will comply with the applicable regulations of the California Environmental Protection Agency (Cal-EPA), the California Department of Water Resources, and any other applicable regulations. Soils and fluids produced and/or used during the above-described operations that appear to contain potentially hazardous materials will be disposed of appropriately.

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

#### **4.4 Conductivity, Temperature, and pH**

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

All instruments will be calibrated in accordance with manufacturer methods. The values for conductivity standards and pH buffers used in calibration will be recorded daily in a field notebook. All probes will be 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 will be followed through sample collection, transfer, analysis, and ultimate disposal. The purpose of these procedures is to assure that (1) the integrity of samples is maintained during their collection, transportation, and storage prior to analysis and (2) post-analysis sample material is 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 will be determined before the actual fieldwork commences. As few people as possible will handle samples. The field sampler is personally responsible for the care and custody of the collected samples until they are properly transferred.

###### **5.1.1 Field Documentation**

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

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



### 5.1.2 Sample Labels

Sample labels provide identification of samples. Preprinted sample labels will be provided. Where necessary, the label will be protected from water and solvents with clean label-protection tape. Each label will contain 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 will be recorded in a bound notebook or on the daily field log. Entries in the notebook should include 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 will be filled out for and will accompany 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 will contain 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 should be completed by laboratory personnel and will contain 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 will always be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving the samples will sign, date, and note the time on the chain-of-custody record. Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis. The chain-of-custody record will accompany each shipment. The method of shipment, courier name(s), and other pertinent information will be entered in the chain-of-custody record.

### **5.2 Laboratory Custody Procedures**

A designated sample custodian will accept custody of the shipped samples and verify that the information on the sample label matches that on the chain-of-custody record. Information regarding method of delivery and sample conditions will also be checked on the chain-of-custody record. The custodian will then enter the appropriate data into the laboratory sample tracking system. The laboratory custodian may use the sample number on the sample label or may assign a unique laboratory number to each sample. The custodian will then transfer the sample(s) to the proper analyst(s) or store 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.S. Environmental Protection Agency SW-846, Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition, for the intended analyses. All data sheets, chromatographs, and laboratory records will be 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 should be written in ink. These documents should not be altered, destroyed, or discarded, even if they are illegible or contain inaccuracies that require a replacement document.

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

#### **5.4 Sample Storage and Disposal**

Samples and extracts should be retained by the analytical laboratory for 30 days after receipt. Unless notified by the program manager, excess or unused samples should be disposed of by the laboratory in an appropriate manner consistent with applicable government regulations.

ACTON • MICKELSON • van DAM, INC.

GROUND WATER LEVEL DATA

Project Name Beacon Station #604, 1619 West First Street, Livermore, CA Project Number 19024.04

Date 2-10-95 Field Crew TJB

Measuring Device Interface Probe  
and Number

Well No.	Time	Depth to Product (feet)	Depth to Ground Water (feet)	Product Thickness (feet)	Reference Elevation (feet)	Ground Water Elevation (feet)	Hand bail well bot	Physical Observations/Comments
MW-1	12:53		30.80		100.00	69.20	yes	
MW-2	12:44		32.16		98.68	66.52	yes	
MW-3	12:24		29.96		97.08	67.12	yes	
MW-4	12:01		30.50		99.35	68.85	yes	
MW-5	12:09		31.44		98.37	66.93	yes	
MW-6	12:19		33.34		97.62	64.28	yes	
MW-7	12:14		32.11		98.03	65.92	No	locking well cap needs replacing

Signature Todd J. Brown

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point MW # Project Name Beacon #604  
 Sample I.D. MW1 Project No. 19024.04  
 Describe Sampling/Development Point Monitoring Well Work Order # \_\_\_\_\_  
 Date 2-10-95 Field Crew TJB

Well Depth 53.5 feet below MP Casing Diameter 4" inches  
 Depth to Water (below MP) 30.80 feet  
 Discharge Rate \_\_\_\_\_ gpm Time 12:53 PM  
 Number of borehole volumes evacuated before sampling: 74

Sampling/Development Method: Disposable (Sampling)  
 Tap  Bailer  Centrifugal Pump  
 Submersible (Purge)  Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: Clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Decon. probe, hose Used disposable bailer to sample  
 Samples Collected/Time: 3 40 ml. VOA's @ 7:42 P.M. for TPHs + BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C) °F	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
4:32	8.85	1.40	68.4		10	
4:36	8.56	1.41	68.1		20	
4:41	8.33	1.41	67.7		30	
4:47	8.17	1.29	67.8		40	
4:51	8.12	1.28	67.1		50	
4:55	8.24	1.30	67.6		60	

Bailing Start Time 4:30 WL 30.80  
 Bailing Stop Time 4:55 WL 37.12

Comments: \_\_\_\_\_

Signature Todd J. Brown Date 2-10-95

ACTON • MICKELSON • van DAM, INC.

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point <u>MW-2</u>	Project Name <u>Beacon #604</u>
Sample I.D. <u>MW-2</u>	Project No. <u>19024.04</u>
Describe Sampling/Development Point <u>Monitoring well</u>	Work Order # _____
	Date <u>2-10-95</u>
	Field Crew <u>TJB</u>

Well Depth 54 feet below MP      Casing Diameter 4 inches  
 Depth to Water (below MP) 32.16 feet  
 Discharge Rate \_\_\_\_\_ gpm      Time 12:44 AM/PM  
 Number of borehole volumes evacuated before sampling: > 4

Sampling/Development Method:  
 Tap       Disposable (sample) Bailer      \_\_\_\_\_ Centrifugal Pump  
 Submersible (Purge)      \_\_\_\_\_ Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: Clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Beacon probe, hose Used disposable bailer to sample  
 Samples Collected/Time: 3 40ml VOA5 @ 7:31 P.M. for TPH<sub>9</sub> & BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C) °F	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
5:15	8.62	1.32	65.4		10	
5:19	8.35	1.35	65.7		20	
5:24	8.09	1.35	66.6		30	
5:29	8.20	1.35	65.9		40	
5:32	8.11	1.34	65.8		50	
5:35	8.11	1.35	65.8		60	

Bailing Start Time 5:15      WL 32.16  
 Bailing Stop Time 5:35      WL 38.34

Comments: \_\_\_\_\_  
 \_\_\_\_\_

Signature Todd J. Brown      Date 2-10-95

ACTON • MICKELSON • van DAM, INC.

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point <u>MW-3</u>	Project Name <u>Beacon # 604</u>
Sample I.D. <u>MW-3</u>	Project No. <u>19024.04</u>
Describe Sampling/Development Point <u>Monitoring Well</u>	Work Order # _____
	Date <u>2-10-95</u>
	Field Crew <u>TJB</u>

Well Depth 52' feet below MP      Casing Diameter 4 inches  
 Depth to Water (below MP) 29.96 feet  
 Discharge Rate \_\_\_\_\_ gpm      Time 12:24 AM/PM  
 Number of borehole volumes evacuated before sampling: 74

Sampling/Development Method:  
 Tap       Disposable (Sample)       Centrifugal Pump  
 Submersible (Purging)       Bailer       Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Decon Probe, hose      Used disposable bailer to sample  
 Samples Collected/Time: 3 40 ml VOA's @ 7:19 P.M.      for TPHg & BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
<u>4:30</u>	<u>8.78</u>	<u>1.24</u>	<u>65.8</u>		<u>10</u>	
<u>4:36</u>	<u>8.45</u>	<u>1.25</u>	<u>67.2</u>		<u>20</u>	
<u>4:44</u>	<u>8.33</u>	<u>1.27</u>	<u>67.0</u>		<u>30</u>	
<u>4:51</u>	<u>8.38</u>	<u>1.25</u>	<u>66.3</u>		<u>40</u>	
<u>4:56</u>	<u>8.33</u>	<u>1.25</u>	<u>66.2</u>		<u>50</u>	
<u>5:00</u>	<u>8.32</u>	<u>1.25</u>	<u>66.2</u>		<u>60</u>	

Bailing Start Time 3:55 4:30 P.M.      WL 29.96  
 Bailing Stop Time 5:00      WL 35.17

Comments: \_\_\_\_\_

Signature Todd J. Brown      Date 2-10-95

ACTON • MICKELSON • van DAM, INC.

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point <u>MW-4</u>	Project Name <u>Bacon #604</u>
Sample I.D. <u>MW-4</u>	Project No. <u>19024.04</u>
Describe Sampling/Development Point <u>Monitoring Well</u>	Work Order # _____
	Date <u>2-10-95</u>
	Field Crew <u>TJB</u>

Well Depth 47 feet below MP      Casing Diameter 2" inches  
 Depth to Water (below MP) 30.50 feet  
 Discharge Rate \_\_\_\_\_ gpm      Time 12:01 AM/PM  
 Number of borehole volumes evacuated before sampling: 74

Sampling/Development Method:  
 \_\_\_\_\_ Tap       Disposable Bailer      \_\_\_\_\_ Centrifugal Pump  
 \_\_\_\_\_ Submersible      \_\_\_\_\_ Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Used disposable bailer  
 Samples Collected/Time: 3 40ml VOA's @ 3.36 for TPH<sub>9</sub> & BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1:20	7.83	1.40	66.6		2.5	
1:25	7.52	1.43	66.2		5	
1:33	7.54	1.42	66.1		10	

Bailing Start Time 1:15      WL 30.50  
 Bailing Stop Time 1:35      WL 24.2

Comments: \_\_\_\_\_

Signature Todd J. Brown      Date 2-10-95



ACTON • MICKELSON • van DAM, INC.

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point <u>MW 5</u>	Project Name <u>Beacon #604</u>
Sample I.D. <u>MW 5</u>	Project No. <u>19024.04</u>
Describe Sampling/Development Point <u>Monitoring well</u>	Work Order # _____
	Date <u>2-10-95</u>
	Field Crew <u>TJB</u>

Well Depth 47 feet below MP      Casing Diameter 2 inches  
 Depth to Water (below MP) 31.44 feet  
 Discharge Rate \_\_\_\_\_ gpm      Time 12:09 AM/PM  
 Number of borehole volumes evacuated before sampling: 74

Sampling/Development Method:  
 Tap       Bailer      \_\_\_\_\_ Centrifugal Pump  
 Submersible (purge)      \_\_\_\_\_ Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Decon pump hose & probe      Used disposable bailer to sample  
 Samples Collected/Time: 3 40 ml VOA's @ 3:43 for TPH & BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (C) F	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
2:04	8.87	1.59	71.3		2.5	
2:08	8.58	1.61	71.1		5	
2:10	8.58	1.63	70.9		7.5	
2:15	8.52	1.68	70.3		10	

Bailing Start Time 2:00      WL 31.44  
 Bailing Stop Time 2:15      WL 34.67

Comments: \_\_\_\_\_  
 \_\_\_\_\_

Signature Todd J. Brown      Date 2-10-95



ACTON • MICKELSON • van DAM, INC.

SAMPLING/DEVELOPMENT INFORMATION

Sampling/Development Point <u>MW-7</u>	Project Name <u>Beacon #604</u>
Sample I.D. <u>MW-7</u>	Project No. <u>19024.04</u>
Describe Sampling/Development Point <u>Monitoring Well</u>	Work Order # _____
	Date <u>2-10-95</u>
	Field Crew <u>TSB</u>

Well Depth 47 feet below MP      Casing Diameter 2 inches  
 Depth to Water (below MP) 32.11 feet  
 Discharge Rate \_\_\_\_\_ gpm      Time 12:14 AM/PM  
 Number of borehole volumes evacuated before sampling: 74

Sampling/Development Method:  
 Tap       Disposable (Sample) Bailer       Centrifugal Pump  
 Submersible (Purge)       Other

Pump intake or bailer set at \_\_\_\_\_ feet below MP.

Sample Appearance: Clear  
 Note any Sampling Problems: None  
 Note any Equipment Washing: Decon pump base, probe, Used disposable bailer to sample  
 Samples Collected/Time: 3 40ml VOA's @ 4:22 for TPH<sub>9</sub> & BTEX

EVACUATION/STABILIZATION TEST DATA

Time	pH (units)	Temperature Corrected Conductance (umhos/cm)	Temperature (°C) or (°F)	Water Level (nearest 0.01 foot)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
2:35	8.59	1.71	70.1		2.5	
2:37	8.53	1.71	70.5		5	
2:38	8.47	1.71	70.3		7.5	
2:39	8.26	1.71	70.7		10	
2:42	8.17	1.71	70.9		12	

Bailing Start Time 2:30      WL 32.11  
 Bailing Stop Time 2:42      WL 34.26

Comments: \_\_\_\_\_

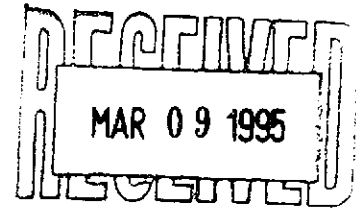
Signature Todd J. Brown      Date 2-10-95

**ENCLOSURE C**

**GROUND WATER SAMPLE ANALYTICAL RESULTS**

February 16, 1995  
Sample Log 11310

Dale van Dam  
Acton, Mickelson, & van Dam  
4511 Golden Foothill Parkway, Suite 1  
El Dorado Hills, CA 95762



Subject: Analytical Results for 8 Water Samples  
Identified as: Project # 19024.04 (Beacon 604)  
Received: 02/10/95

Dear Mr. van Dam:


Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on February 16, 1995 and describes procedures used to analyze the samples.

Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)  
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) for summarized analytical results and contact us at 916-753-9500 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:

  
\_\_\_\_\_  
Mitra Sarkhosh  
Senior Chemist

Sample: MW-1

From : Project # 19024.04 (Beacon 604)

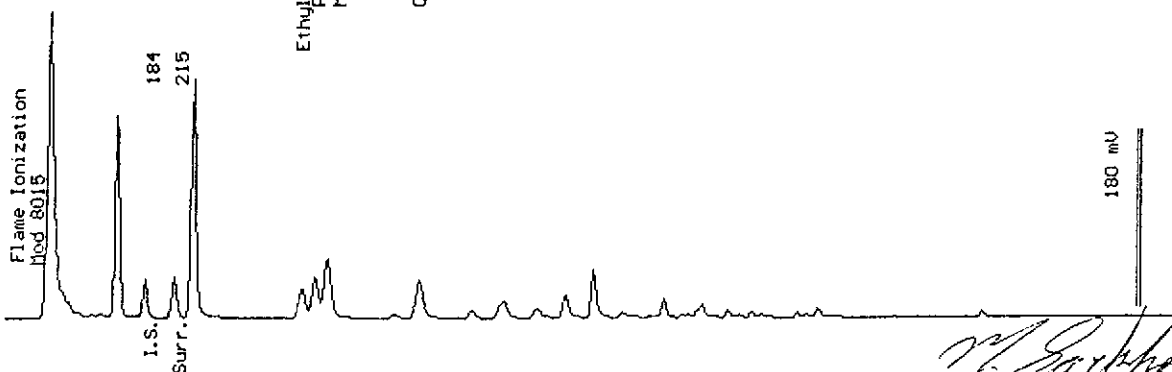
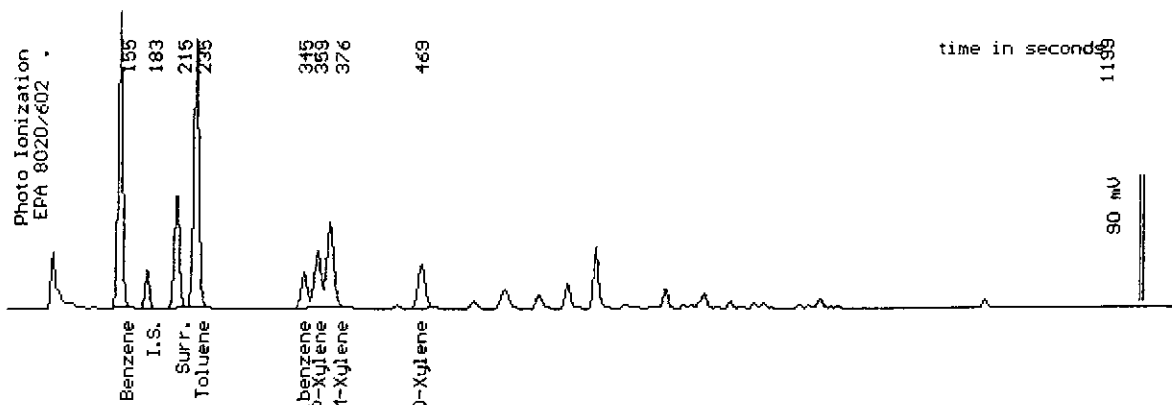
Sampled : 02/10/95

Dilution : 1:10

QC Batch : 4113I

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	1200
Toluene	(5.0)	1500
Ethylbenzene	(5.0)	280
Total Xylenes	(5.0)	1500
TPH as Gasoline	(500)	9300
Surrogate Recovery		99 %



Date Analyzed: 02-14-95  
 Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*Mitra Sarkhosh*  
 Mitra Sarkhosh  
 Senior Chemist

Sample: MW-2

From : Project # 19024.04 (Beacon 604)

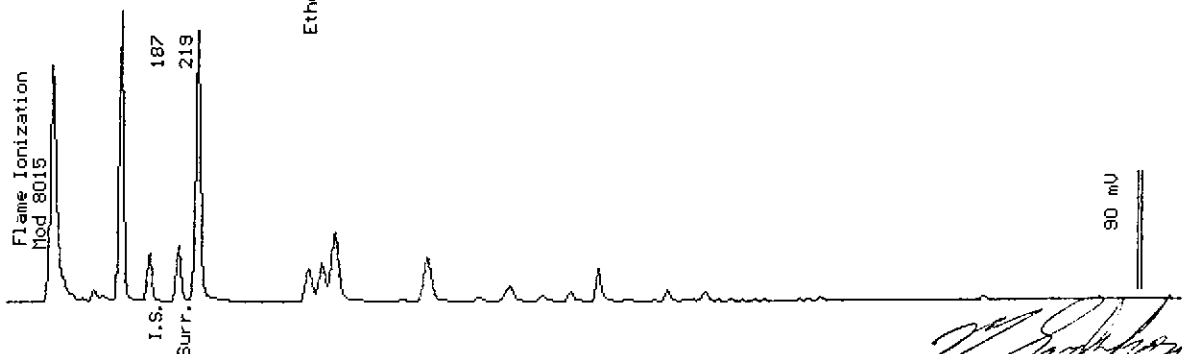
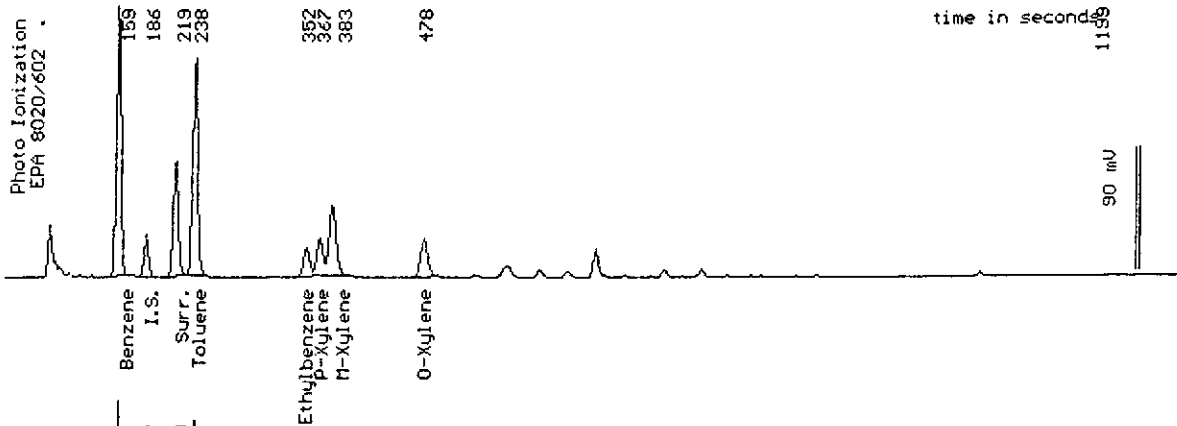
Sampled : 02/10/95

Dilution : 1:100

QC Batch : 4113I

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(50)	12000
Toluene	(50)	12000
Ethylbenzene	(50)	2200
Total Xylenes	(50)	11000
TPH as Gasoline	(5000)	63000
Surrogate Recovery		100 %



Date Analyzed: 02-14-95  
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*Mitra Sarkhosh*  
Mitra Sarkhosh  
Senior Chemist

Sample: MW-3

From : Project # 19024.04 (Beacon 604)

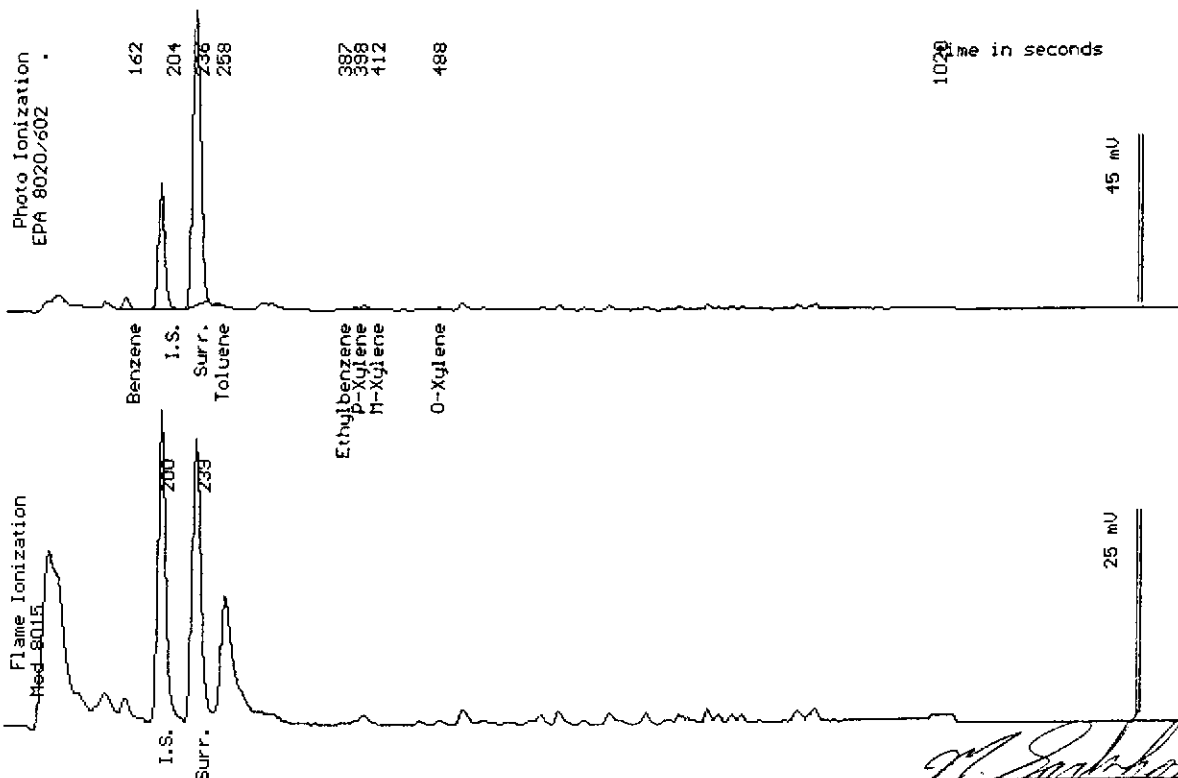
Sampled : 02/10/95

Dilution : 1:1

QC Batch : 2113V

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	1.4
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	1.8
TPH as Gasoline	(50)	96
Surrogate Recovery		113 %



Date Analyzed: 02-14-95  
 Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*Mitra Sarkhosh*  
 Mitra Sarkhosh  
 Senior Chemist



Sample: MW-4

From : Project # 19024.04 (Beacon 604)

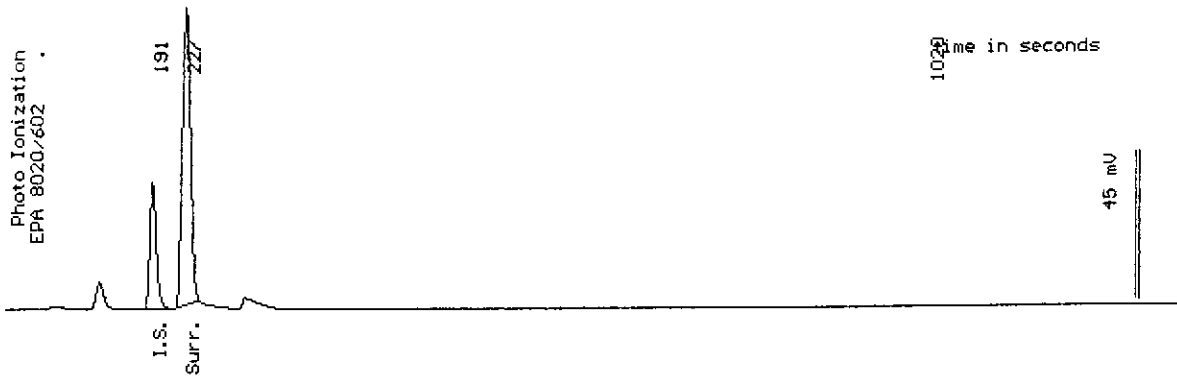
Sampled : 02/10/95

Dilution : 1:1

QC Batch : 2113Y

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		110 %



Date Analyzed: 02-15-95  
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*M. Sarkhosh*  
Mitra Sarkhosh  
Senior Chemist

Sample: MW-5

From : Project # 19024.04 (Beacon 604)

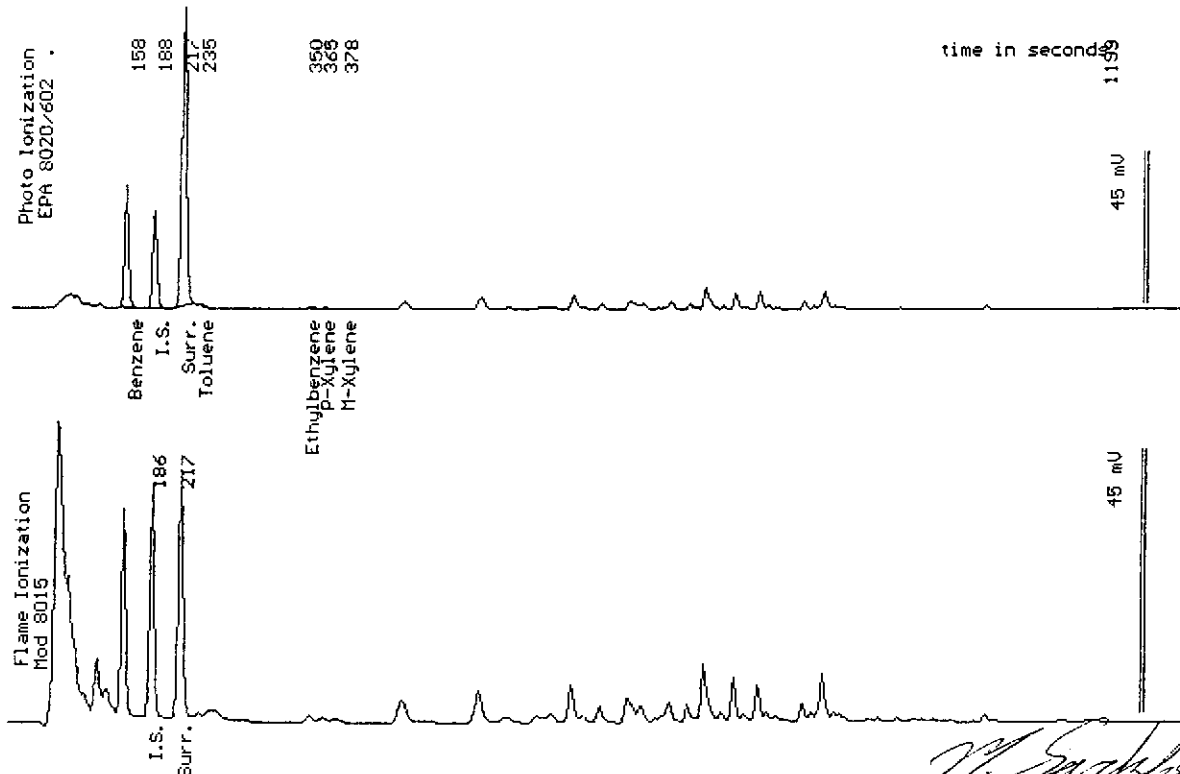
Sampled : 02/10/95

Dilution : 1:25

QC Batch : 4113I

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(13)	490
Toluene	(13)	<13
Ethylbenzene	(13)	23
Total Xylenes	(13)	19
TPH as Gasoline	(1300)	5200
Surrogate Recovery		101 %



Date Analyzed: 02-14-95  
 Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*Mitra Sarkhosh*  
 Mitra Sarkhosh  
 Senior Chemist

Sample: MW-6

From : Project # 19024.04 (Beacon 604)

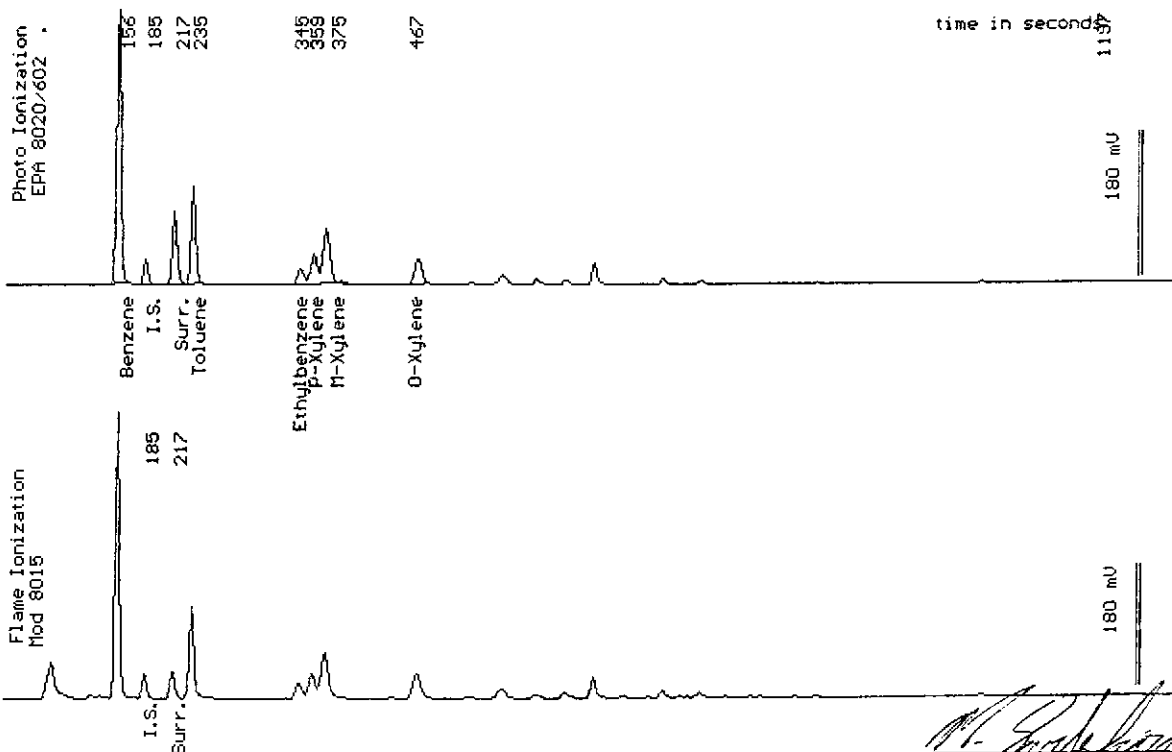
Sampled : 02/10/95

Dilution : 1:100

QC Batch : 4113K

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(50)	21000
Toluene	(50)	8400
Ethylbenzene	(50)	2000
Total Xylenes	(50)	14000
TPH as Gasoline	(5000)	63000
Surrogate Recovery		99 %



Date Analyzed: 02-16-95  
 Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*Mitra Sarkhosh*  
 Mitra Sarkhosh  
 Senior Chemist

Sample: MW-7

From : Project # 19024.04 (Beacon 604)

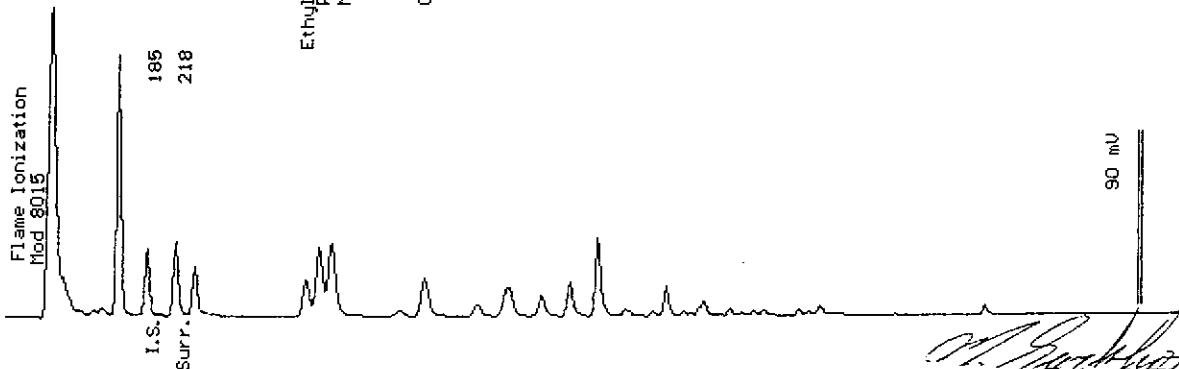
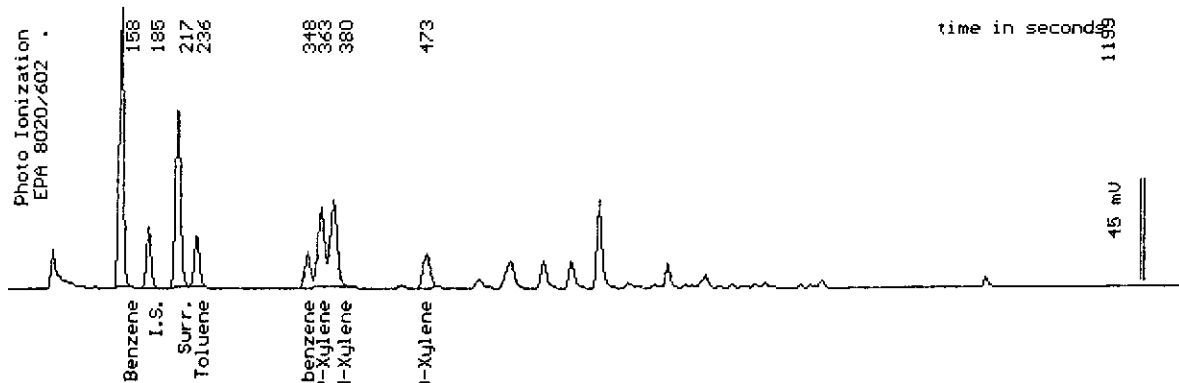
Sampled : 02/10/95

Dilution : 1:50

QC Batch : 4113I

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	4000
Toluene	(25)	900
Ethylbenzene	(25)	890
Total Xylenes	(25)	5100
TPH as Gasoline	(2500)	27000
Surrogate Recovery		102 %



Date Analyzed: 02-14-95  
 Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*M. Sarkhosh*  
 Mitra Sarkhosh  
 Senior Chemist

Sample: Trip Blank

From : Project # 19024.04 (Beacon 604)

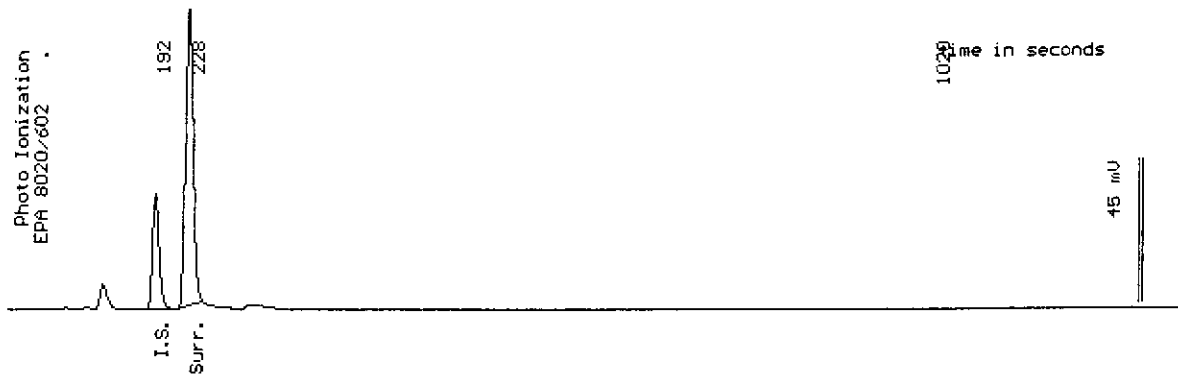
Sampled : 02/10/95

Dilution : 1:1

QC Batch : 2113Y

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		112 %



Date Analyzed: 02-15-95  
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

*M. Sarkhosh*  
Mitra Sarkhosh  
Senior Chemist



Western Environmental  
Science & Technology

1046 Olive Drive, Suite 3  
Davis, CA 95616

916-753-9500  
FAX #: 916-753-6091  
LAB#: 916-757-4650

# CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Dale van Dam Phone #: (916) 939-7550

## ANALYSIS REQUEST

TAT

Company/Address: Acton Mickelson, Van Dam, Inc (AMV, Inc) FAX #: (916) 939-7570

Project Number: 19024.04 P.O.#: Project Name: Beacon #604

Project Location: 1619 West First Street, Livermore Sampler Signature: Todd J. Brown

Sample ID	Sampling		Container				Method Preserved				Matrix		BTEX (602/8020)	BTEX/TPH as Gasoline (602/8020/8015)	TPH as Diesel/Oil (8015)	Total Oil & Grease (5520 B/E,F)	Total Oil & Grease IR (5520 B/E,F,C)	96 - Hour Fish Bioassay	EPA 601/8010	EPA 602/8020	EPA 615/8150	EPA 608/8080 - Pesticides	EPA 608/8080-PCBs	EPA 624/8240	EPA 625/8270	ORGANIC LEAD	Reactivity, Corrosivity, Ignitibility	W.E.T. (✓)		RUSH SERVICE (12 hr) or (24 hr)	EXPEDITED SERVICE (48 hr) or (1 wk)	STANDARD SERVICE (2wk)	
	DATE	TIME	VOA	SLEEVE	1L GLASS	1L PLASTIC	HCl	HNO3	ICE	NONE	WATER	SOIL																TOTAL (✓)					
MW-1	2-10-95	7:42	3				X	X			X			X																			
MW-2		7:31																															
MW-3		7:19																															
MW-4		3:36																															
MW-5		3:43																															
MW-6		3:57																															
MW-7		4:22																															
Trip blank	✓		1				✓	✓			✓			✓																			

Relinquished by: Todd J. Brown Date Time: 2/10/95 9:50

Received by: \_\_\_\_\_

Remarks: Report to Dale van Dam of AMV, Inc. Terry Fox of Ultramar

Relinquished by: \_\_\_\_\_ Date Time: \_\_\_\_\_

Received by: \_\_\_\_\_

\*STD. ULTRAMAR TAT

Relinquished by: \_\_\_\_\_ Date Time: 2/10/95 9:50

Received by Laboratory: *[Signature]*

Bill To: \_\_\_\_\_