

R.T. NAHAS COMPANY *San Jose*

REAL ESTATE DEVELOPERS AND INVESTORS

28630 PATIO DRIVE
CASTRO VALLEY, CALIFORNIA 94546
TELEPHONE (415) 532-9600

February 3, 1992

Mr. Scott Seery
Hazardous Materials Specialist
Alameda County Health Care Services
80 Swan Way, Room 220
Oakland, CA 94621

Dear Scott:

Enclosed is the 6th Quarterly Groundwater Monitoring Report. I guess the contaminants weren't disappearing after all. It seems that, as the groundwater increases, so do the contaminants in the wells.

We are presently trying to secure an agreement with the neighboring property owners to go ahead with the drilling on their land. I will keep you informed of our progress.

Sincerely,


Randall E. Nahas

REN/hrs

Enclosure

LEARNER COUNTY 86

Revised 11/16/92

SOS

BSK & ASSOCIATES
JOB No. P90165

**SIXTH QUARTERLY GROUNDWATER
MONITORING REPORT
UNOCAL 76 SERVICE STATION
20405 REDWOOD ROAD
CASTRO VALLEY, CALIFORNIA
JANUARY 1992**



& Associates

1181 Quarry Lane
Building 300
Pleasanton, CA 94566
(510) 462-4000
(510) 462-6283 FAX

January 30, 1992

BSK JOB P90165

R. T. Nahas Company/Eden Managements
20630 Patio Drive
Castro Valley, CA 94546

Attention: Mr. Randy T. Nahas

Subject: Sixth Quarterly Groundwater Monitoring Report
Unocal 76 Service Station
20405 Redwood Road
Castro Valley, California

Gentlemen:

As requested and authorized, we have performed groundwater monitoring well quarterly sampling on January 8, 1992 at the above-referenced facility. This quarterly report presents the project background, groundwater data obtained during this sampling event, conclusions based on this quarter's data, and recommendations for further action.

BACKGROUND

BSK & Associates installed three groundwater monitoring wells in December 1989, at the Unocal 76 Service Station located at 20405 Redwood Road, Castro Valley, California. The service station location is shown on Figure 1, Vicinity Map. The monitoring facilities were installed in order to comply with the California UST Monitoring requirements of Alternative 6, Subchapter 16, Title 23, California Code of Regulations. Initially, the plan included four monitoring wells with at least one well (MW-1) to be located down-gradient of the existing tank cluster. However, due to the encounter of fuel contamination of soil from approximately 10 to 13 feet below grade, during boring for monitoring well installation, the down-gradient borings (MW-1 and MW-1A) were backfilled with 11-sack cement-sand grout following soil sampling in order to avoid further groundwater

contamination. The results of well installations, soil sampling and chemical testing of the soil and water samples were summarized in Our Report P89134, dated February 5, 1990. The installed and attempted groundwater monitoring well locations are shown in Figure 2, Site Plan.

Following a subsequent meeting with Eden Managements and Mr. Scott Seery on April 24, 1990, and receipt of the Alameda County Environmental Health letter dated April 24, 1990, we prepared and submitted our Proposal PR90066 to provide quarterly monitoring services for one year, and to assess the extent of soil contamination at the subject site. A Soil Contamination Assessment Work Plan was also prepared in accordance with Appendix "A" of the Regional Board Staff Recommendations.

The first quarterly groundwater monitoring report was submitted on August 30, 1990. The first quarterly report concluded that an apparent unauthorized petroleum release had occurred at the site, based on groundwater data adjacent to, but up-gradient from the UST group. This report also reiterated that a down-gradient well does not exist at the site.

BSK & Associates submitted the second quarterly groundwater monitoring report in January 1991. The second quarterly report verified that motor fuel hydrocarbons were present in groundwater at the site. Benzene and TVH concentrations remained above primary drinking water and informal action levels, respectively.

BSK performed an assessment of the lateral extent of shallow soil contamination in April 1991 (see our Report P90165, dated April 1991). During this investigation, shallow soil contamination was observed to occur from the pump islands to the south property boundary, and within the east and west property boundaries.

The third quarterly monitoring report was submitted contemporaneously with the soil contamination assessment. A large increase in contaminant concentrations in Wells MW-2 and MW-3 was reported in conjunction with water level increase due to March

precipitation. Toluene levels were observed to exceed recommended limits, in addition to Benzene and Total Petroleum Hydrocarbons.

A fourth quarterly groundwater monitoring report was submitted on July 30, 1991. In this report, contaminant levels are shown to be sharply reduced to below previously recorded levels. Benzene, however, remained above recommended allowable levels.

The fifth quarterly groundwater monitoring report showed continued decrease in contaminant concentration, likely resultant of a further decrease of groundwater levels. No contaminants were detected in Well MW-3.

Review of Subsurface Conditions

The site subsurface soil conditions, as exposed by Borings MW-1A, MW-2, MW-3, and MW-4 of our previous investigation (P89134), consist primarily of silty and sandy clays. Four to five feet of black organic-rich silty clay fill are found immediately below the ground surface, followed by three to five feet of greenish-gray sandy/silty clay native material. In the western portion of the study area, the greenish clay is underlain by seven to eleven feet of yellow-brown sandy clay, grading to a clayey sand with depth. In the eastern portion of the tank area, the sandy clay and clayey sand are split by a six foot layer of silty clay. Light brown silty clay was encountered in each boring between 17 and 24 feet, and continued to the final depth explored. It is apparent from the boring logs that this lowermost clay layer slopes to the northeast. For additional subsurface detail, see Subsurface Profile, Figure 3.

Groundwater within the site has been encountered at both 13 to 15 feet and 19 to 23 feet. The lower water levels occur in clayey sands along the east and west boundaries of the site, and likely in its northern one-third. This water horizon is considered the first primary aquifer. A shallow "perched" water is found in clayey sand at 13 to 15 feet, occurring throughout the south-central portion of the site.

Hydrostatic pressure in both units results in a piezometric surface at 10 to 12 feet below ground surface. The similar piezometric surface suggests that the "perched" water is connected to the underlying aquifer. Additional evidence for this connection is the lack of a confining layer below the upper clayey sand in several borings in the south-central portion of the site.

Groundwater flow direction at the site has been towards the southwest since December 1989. Gradient has varied at the site from 2.0% to 0.4%. Electrical conductivity is a relatively low 500 to 1,000 micromhos, and pH has generally been slightly acidic. Seasonal precipitation appears to result in more southerly flow, a flatter gradient, and 1 to 2 feet higher water levels in early spring. This data is derived from measurements made of the lower groundwater unit.

Soil contamination by petroleum hydrocarbons was observed olfactorily and by Photo-Ionization Detector (PID) in 11 borings in the south-central portion of the site. Hydrocarbons were detected at depths ranging from just below the asphalt pavement to 16 feet (the greatest depth of several borings in the area of greatest contamination). PID values reached 3,600 ppm total ionizable hydrocarbons in soil (the PID was calibrated daily to a 100 ppm isobutylene standard with a 10.6 eV lamp). The greatest concentrations were observed between 10 feet in depth and first encountered groundwater (where encountered). It was noted that contamination was not always accompanied by soil staining, and volatilization was rapid upon exposure to air.

Groundwater contamination has been encountered at the site in samples obtained quarterly from Wells MW-2 and MW-3 in the lower water horizon. These wells are considered to be up and cross-gradient to what is believed to be the contaminant source area. Sheen and possible free product were observed on "perched" water in the exploratory soil borings, and on auger and soil removed from the borehole.

SIXTH QUARTERLY MONITORING ACTIVITIES

General

Quarterly monitoring and/or observation of Underground Storage Tank (UST) groundwater monitoring wells (MW-2, MW-3 and MW-4) was performed on January 8, 1992. Field procedures and observations are provided in the following text and figures.

Field Work

Three groundwater monitoring wells (MW-2, MW-3 and MW-4) are located adjacent to two 10,000-gallon gasoline USTs and one waste oil UST as shown on Figure 2, Site Plan. The wells were installed and developed in December 1989 (see BSK & Associates Report P89134, dated 2/5/90).

Wells MW-2 and MW-3 were purged using a PVC bailer or teflon-bladder pump. Four to five well volumes were removed from each well. Purge effluent was field monitored for pH, Conductivity and Temperature during purging, to assess the influx of fresh formational water into the well. Purged water was then transferred to a 55-gallon DOT-approved steel drum for holding. The drum was labeled according to its contents, suspected contaminants, content source, date, etc. Monitoring Well MW-4 was not sampled this quarter, but was inspected for product, sheen and odor.

Prior to purging, the depth to water in each well was measured using a Solinst electric sounding tape, marked in twentieths of a foot. The water depth was then interpolated to a hundredth of a foot increment from the tape. Each well was subsequently examined for floating and sinking immiscible product layers, sheen and odor, using a clean PVC bailer having dual check valves for point source sampling. Groundwater flow direction and gradient data were determined from the depth measurements, and are presented in Figure 4, Groundwater Flow Direction and Gradient.

Upon purge completion, each well was again measured to confirm a minimum of 80% well recovery prior to sampling. Water sampling was then performed with a teflon bailer. Sampling for contaminants was done in the order of their volatility, with the most volatile constituents sampled first. Sampling for contaminants known to have densities greater than water were sampled at the bottom of the well. Each water sample obtained for a specific contaminant, or contaminants, was placed into the appropriate receptacle, sealed, labeled and refrigerated for delivery to our State-certified laboratory.

A Well Field Log was prepared for each well sampled, recording the water depth, well volume, water temperature and other data. The Well Field Logs are shown as Figures 5.1 through 5.3.

Site Hydrology

At the time of this sampling, flow direction has returned to a more southerly direction, S28°W. Gradient has increased from 0.7 percent to 1.0 percent, and groundwater levels have risen 1.86 to 1.97 feet since October 1991. Groundwater flow direction and gradient are shown on Figure 4.

Conductivity, pH and temperature data are presented in the Well Field Logs, Figures 5.1 through 5.3. Little significant change has occurred in these parameters; though conductivity and pH changes indicate an influx of fresher water, likely due to winter precipitation.

The changes in flow direction and water level since October 1991 are likely the result of a rising water table due to winter precipitation.

Chemical Analyses

The water samples obtained from Wells MW-2 and MW-3 were analyzed for constituents related to gasoline, since the wells are located adjacent to two 10,000 gallon underground gasoline tanks. The samples were tested for the following contaminants: Total Volatile

Hydrocarbons (TVH) and Benzene, Toluene, Xylene and Ethylbenzene (BTXE).

The contaminants tested are those specified by the Tri-Regional Water Quality Control Board Recommendations of August 10, 1990 and listed in the Alameda County Department of Environmental Health letter, dated April 26, 1990 to R.T. Nahas Co. Current and former analyses results are presented for comparison in the following tables. The Chemical Test Data Sheets are presented in Appendix A, Figures A-1 and A-2. Project Chain-of-Custody record is shown as Figure A-3.

WATER ANALYSES

TABLE 1

(Results in ppb)

<u>Sampling Date</u>	<u>Sample Location</u>	<u>Benzene (1)*</u>	<u>Toluene (100)+</u>	<u>Xylene (1750)*</u>	<u>Ethylbenzene (680)*</u>
October 1990	Well MW-2	64	30	160	35
	Well MW-3	18	ND	5.6	3.8
	Well MW-4	ND	ND	ND	ND
December 1990	Well MW-2	17	10	59	13
	Well MW-3	7	2	5	2
January 1991	Well MW-2	50	33	110	22
	Well MW-3	29	3.3	34	9.7
April 1991	Well MW-2	640	520	790	170
	Well MW-3	450	270	760	150
	Well MW-4	ND	ND	ND	ND
July 1991	Well MW-2	14	1	17	8
	Well MW-3	14	14	33	8
October 1991	Well MW-2	2.9	ND	6	2.5
	Well MW-3	ND	ND	ND	ND
	Well MW-4	ND	ND	ND	ND

January 1992	Well MW-2	480	870	860	160
	Well MW-3	4	10	8	2

ND = None Detected
 *DHS: Primary Drinking Water Standard (3/89)
 +DHS: Action Level

TABLE 2
(Results in ppb)

<u>Sampling Date</u>	<u>Sample Location</u>	<u>TPH (100)*</u>	<u>TVH (100)*</u>	<u>Oil and Grease (100)*</u>
October 1990	Well MW-2	--	740	--
	Well MW-3	--	87	--
	Well MW-4	ND	ND	ND
December 1990	Well MW-2	--	370	--
	Well MW-3	--	76	--
January 1990	Well MW-2	--	430	--
	Well MW-3	--	110	--
April 1991	Well MW-2	--	4800	--
	Well MW-3	--	3600	--
	Well MW-4	ND	ND	ND
July 1991	Well MW-2	--	220	--
	Well MW-3	--	220	--
October 1991	Well MW-2	--	170	--
	Well MW-3	--	ND	ND
	Well MW-4	ND	ND	ND
January 1992	Well MW-2	--	5200	--
	Well MW-3	--	60	--

-- = Not Tested
ND = None Detected

*Quantified Action Levels are not provided for these parameters. The amount given is often informally used by regulatory agencies as a threshold value.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

On the basis of our findings to date, an unauthorized fuel release to soil and groundwater has occurred at the site, in the vicinity of the two 10,000-gallon underground gasoline storage tanks.

Contaminants associated with gasoline have increased in Monitoring Wells MW-2 and MW-3 since the last quarterly sampling event

(October 1991). At this time, Benzene concentration exceeds State and Federal Standards in Wells MW-2 and MW-3. The Toluene concentration in Well MW-2 also exceeds Standards. Although no Standard has been devised for Total Volatile Hydrocarbon concentration, the quantity observed in Well MW-2 exceeds general informal regulatory action levels.

The increase in contaminant concentrations is likely related to rising groundwater levels.

There is no groundwater monitoring well located down-gradient from the contaminated area.

Recommendations

With respect to the obtained field data, and conclusions presented, the recommendations provided in our recently completed soil contaminant assessment report, P90165, dated July 1991, are considered appropriate at this time. Our most recent proposal, PR92001, dated January 14, 1992, presents a work plan for next phase soil and groundwater lateral contamination extent assessment.

REPORT DISTRIBUTION

Copies of this report should be submitted to the Alameda County Department of Environmental Health for their review. We are providing you with extra copies for this purpose. We understand that copies of the report may be forwarded by ACEH to the Regional Water Quality Control Board in Oakland for their review.

LIMITATIONS

The findings and conclusions presented in this report are based on field review and observations, and from the limited testing program described in this report. This report has been prepared in accordance with generally accepted methodologies and standards of practice in the area. No other warranties, expressed or implied, are made as to the findings, conclusions and recommendations included in the report.

The findings of this report are valid as of the present. The passage of time, natural processes or human intervention on the property or adjacent property can cause changed conditions which can invalidate the findings and conclusions presented in this report.

BSK & Associates is pleased to have been of service to you during this project. If you have questions concerning the contents of this report, please do not hesitate to contact us.

The following are attached and complete this report:

FIGURE 1	Vicinity Map
FIGURE 2	Site Plan
FIGURE 3	Subsurface Profile
FIGURE 4	Groundwater Flow Direction & Gradient
FIGURES 5.1 through 5.3	Well Field Logs

APPENDIX A

FIGURES A-1 and A-2	Sixth Quarterly Laboratory Chemical Test Data Sheets
FIGURE A-3	Project Chain-of-Custody Record

Respectfully submitted,
BSK & Associates

Alex Y. Eskandari
Alex Y. Eskandari, P.E.
Manager - Geotechnical Services
C.E. #038101, R.E.A. #01528



Tim W. Berger
Tim W. Berger, R.E.A. 02336
Project Geologist

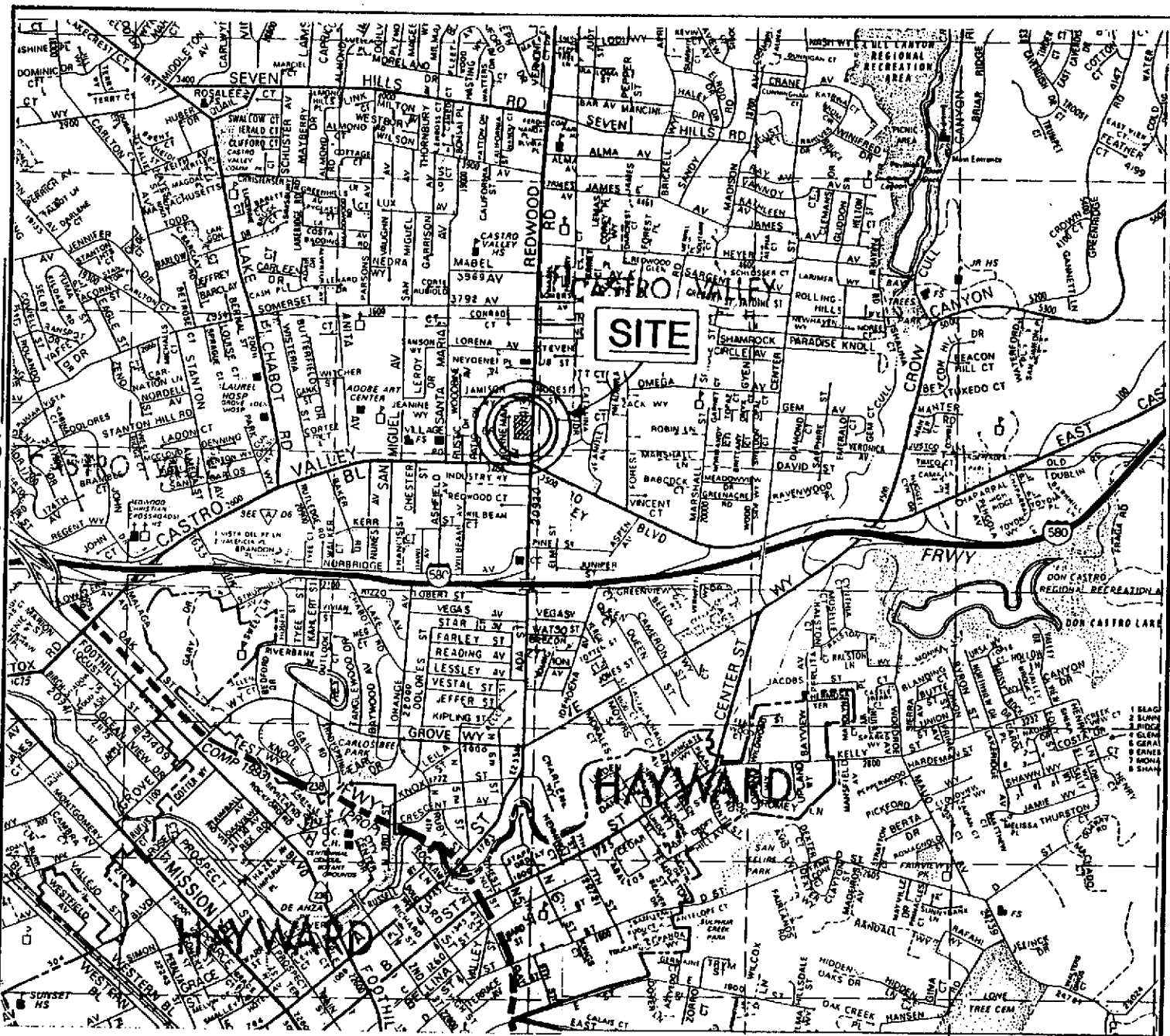
AYE/TWB:hhc
(RPTS\ENV\J30)

Distribution: R.T. Nahas Co. (5 copies)

CHECKED BY

DATE 7-30-92

BY HYE

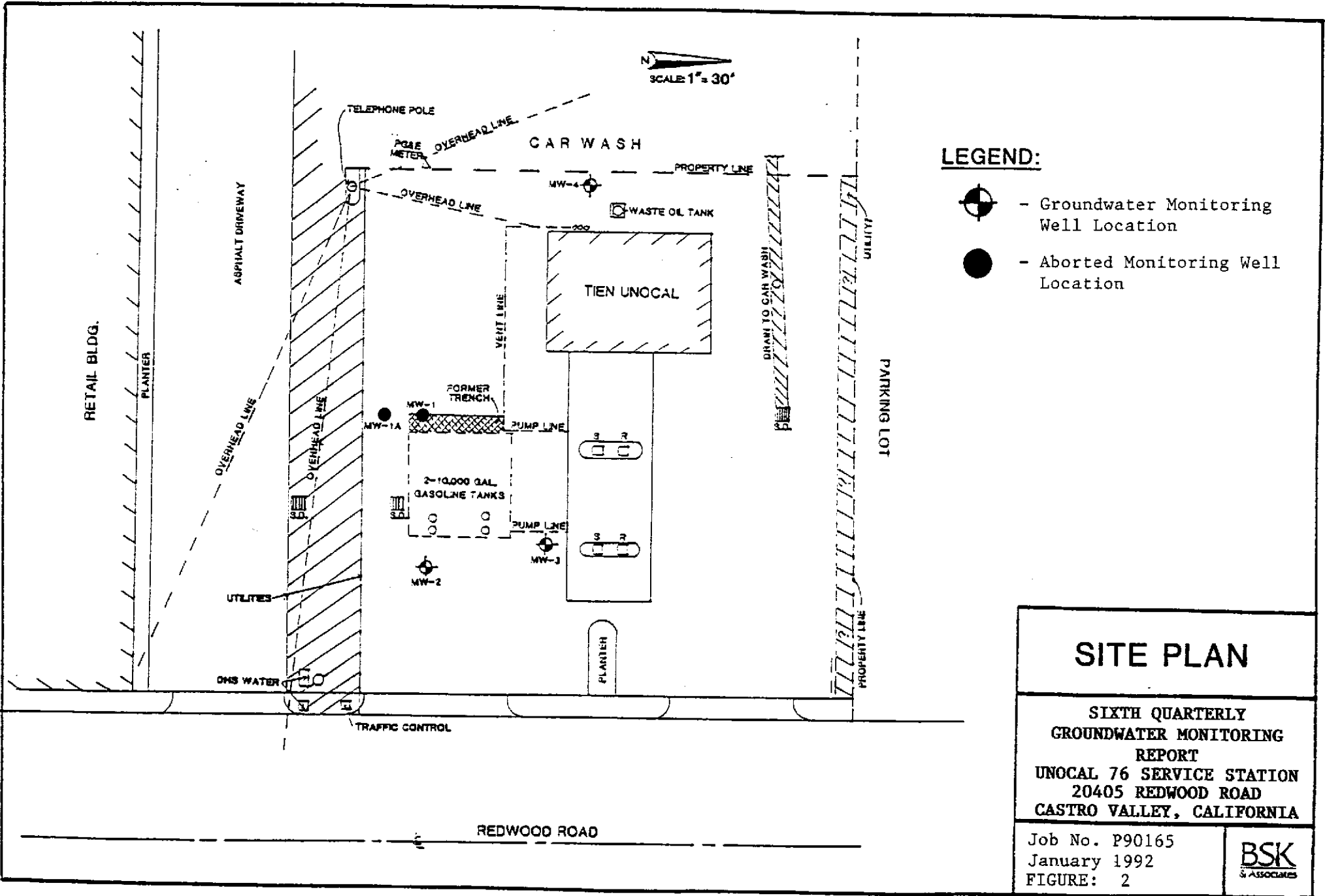


VICINITY MAP

SIXTH QUARTERLY
 GROUNDWATER MONITORING REPORT
 UNOCAL 76 SERVICE STATION
 20405 REDWOOD ROAD
 CASTRO VALLEY, CALIFORNIA

BSK Job No. P90165
 January 1992
 FIGURE: 1

BSK
 & Associates



RETAIL BLDG.

PLANTER

ASPHALT DRIVEWAY

TELEPHONE POLE

PG&E METER

CAR WASH

PROPERTY LINE

TIEN UNOCAL

PLANTER

PARKING LOT

PROPERTY LINE

OVERHEAD LINE

OVERHEAD LINE

OVERHEAD LINE

OVERHEAD LINE

VENT LINE

FORMER TRENCH

PUMP LINE

2 10,000 GAL. GASOLINE TANKS

PUMP LINE

PLANTER

DRAIN TO CAR WASH

MW-4

WASTE OIL TANK

MW-1

MW-1A

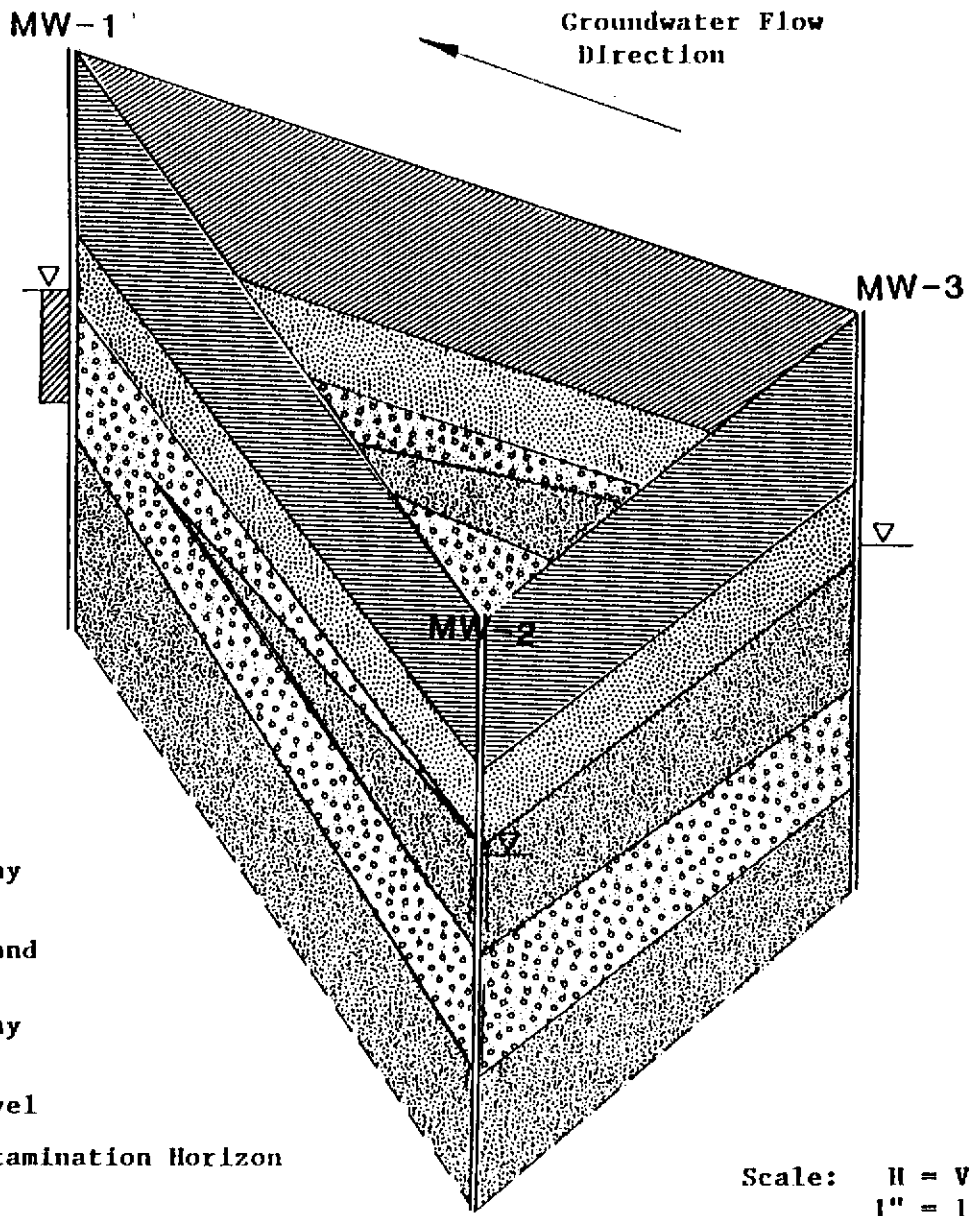
MW-2

MW-3







CHS WATER

TRAFFIC CONTROL

REDWOOD ROAD



LEGEND:

-  Clay
-  Sandy Clay
-  Clayey Sand
-  Silty Clay
-  Water Level
-  Soil Contamination Horizon

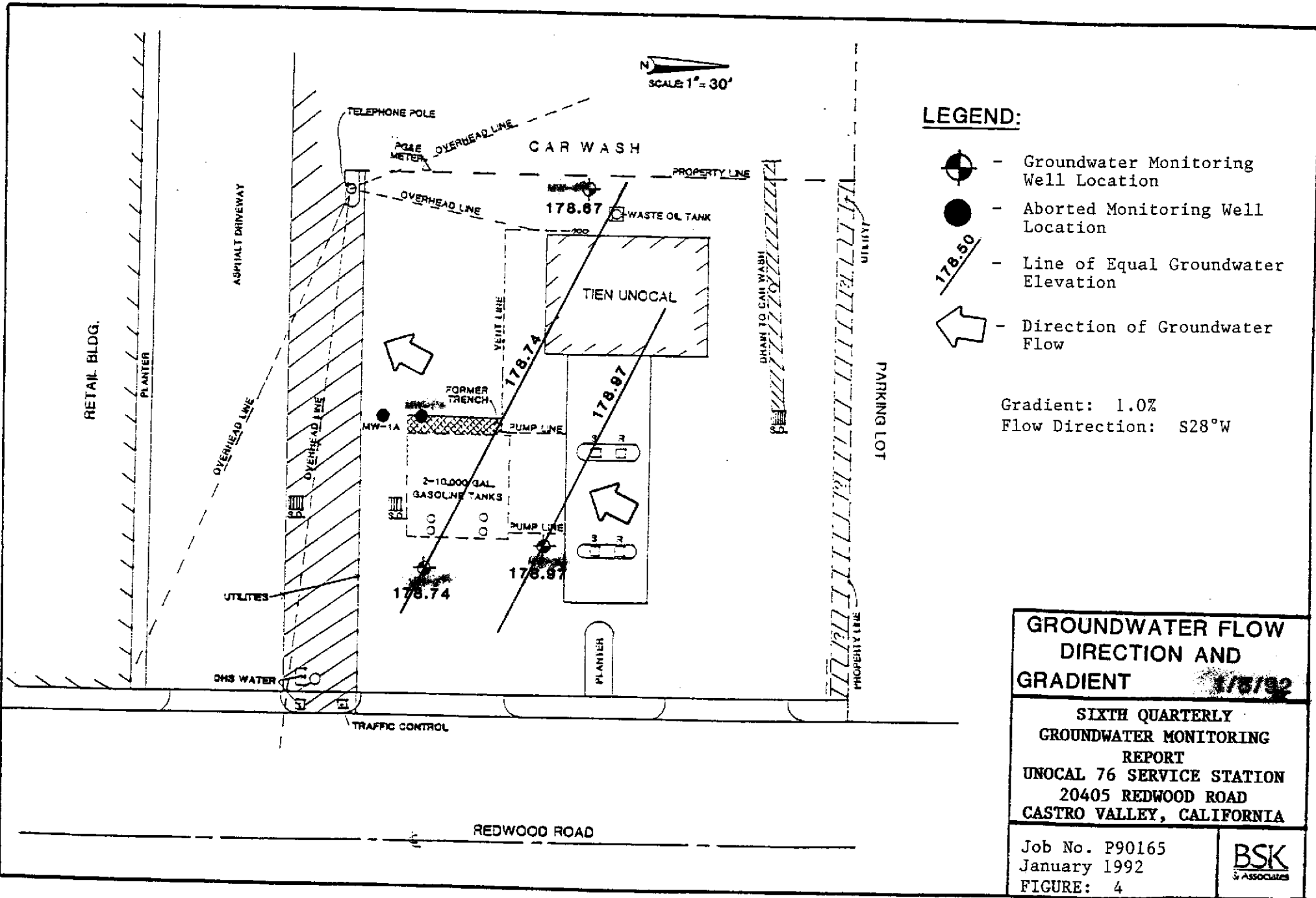
Scale: H = V
1" = 10'

SUBSURFACE PROFILE

BSK Job No. P90165
January 1992
FIGURE: 3

BSK
& Associates

BY TWP
 DATE 1-30-92
 CHECKED BY AYR



SCALE: 1" = 30'

RETAIL BLDG.

PLANTER

ASPHALT DRIVEWAY

TELEPHONE POLE

PG&E METER

CAR WASH

PROPERTY LINE

178.67

WASTE OIL TANK

TIEN UNOCAL

VENT LINE

178.74

FORMER TRENCH

MW-1A

PUMP LINE

178.97

2-10,000 GAL GASOLINE TANKS

PUMP LINE

178.74

178.97

UTILITIES

DMS WATER

TRAFFIC CONTROL

PLANTER

DRAIN TO CAR WASH

PARKING LOT

REDWOOD ROAD

WELL FIELD LOG

PROJECT NAME AND LOCATION: Unocal 76, Service Station

20405 Redwood Road, Castro Valley, CA, 94546

PERSONNEL: M. Cline

WEATHER: Cloudy, Cool

WELL INFORMATION:

Well No.: MW-2

Depth to Water: 9.86 feet

Water Volume: 3.4 gallons

Reference Elevation: 188.60' (MSL)

Groundwater Elevation: 178.74' (MSL)

Measurement Technique: Electric Well Sounder

92
Date Purged: 1/8/91

Purge Method: PVC Bailer

Purge Rate: 0.8 gpm

IMMISCIBLE LAYERS:

Top: None Observed, Slight Odor

Bottom: White Particles, Slight Indistinct Odor

Detection Method: Visual, Olfactory

Collection Method: Clear PVC Bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	Volume Removed (gallons)	Electrical Conductivity (uS/cm)	pH	Temperature (degrees F)	Remarks
13:46	3.5	755	6.0	68	Slight Odor
13:50	7.0	762	6.1	70	
13:57	10.5	725	6.2	69	↓
14:04	14.0	716	6.2	71	Slight Odor

SAMPLE COLLECTION DATA

Sampling Equipment: Teflon Point Source Bailer

TIME	ANALYSIS	CONTAINER USED	SAMPLE INTERVAL
14:08	TVH & BTXE	2-40 ml vials with HCL	12 feet

UNOCAL 76, SERVICE STATION
SIXTH QUARTERLY GROUNDWATER
SAMPLING AND ANALYSIS

BSK Job No. P90165
FIGURE 5.1
JANUARY 1991

BSK
& ASSOCIATES

WELL FIELD LOG

PROJECT NAME AND LOCATION: Unocal 76, Service Station
20405 Redwood Road, Castro Valley, CA. 94546

PERSONNEL: M. Cline
 WEATHER: Cloudy, Cool

WELL INFORMATION:

Well No.: MW-3
 Depth to Water: 10.05 feet
 Water Volume: 3.2 gallons
 Reference Elevation: 189.02' (MSL)
 Groundwater Elevation: 178.97' (MSL)
 Measurement Technique: Electric Well Sounder

Date Purged: 1/8/91⁹²
 Purge Method: Bladder pump
 Purge Rate: 1.0 gpm

IMMISCIBLE LAYERS:

Top: None Observed, No Odor
 Detection Method: Visual, Olfactory
 Collection Method: Clear PVC Bailer

Bottom: None Observed, No Odor

WELL DEVELOPMENT/PURGE DATA:

TIME	Volume Removed (gallons)	Electrical Conductivity (uS/cm)	pH	Temperature (degrees F)	Remarks
14:30	--	--	--	--	
14:33	3.5	606	6.1	67	
14:36	7.0	617	6.1	69	
14:40	10.5	617	6.1	70	
14:44	14.0	614	6.2	69	

SAMPLE COLLECTION DATA

Sampling Equipment: Teflon Point Source Bailer

TIME	ANALYSIS	CONTAINER USED	SAMPLE INTERVAL
14:48	TVH & BTXE	2-40 ml vials with HCL	12 feet

UNOCAL 76, SERVICE STATION
 SIXTH QUARTERLY GROUNDWATER
 SAMPLING AND ANALYSIS

BSK Job No. P90165
 FIGURE 5.2
 JANUARY 1991

BSK
 & ASSOCIATES

WELL FIELD LOG

PROJECT NAME AND LOCATION: Unocal 76, Service Station
20405 Redwood Road, Castro Valley, CA. 94546

PERSONNEL: M. Cline

WEATHER: Cloudy, Cool

WELL INFORMATION:

Well No.: <u>MW-4</u>	Date Purged: <u>NA</u>
Depth to Water: <u>11.03 feet</u>	Purge Method: <u>NA</u>
Water Volume: <u>2.1 gallons</u>	Purge Rate: <u>NA</u>
Reference Elevation: <u>189.70' (MSL)</u>	
Groundwater Elevation: <u>178.67' (MSL)</u>	
Measurement Technique: <u>Electric Well Sounder</u>	

IMMISCIBLE LAYERS:

Top: <u>None Observed, No Odor</u>	Bottom: <u>1 ft. Clay/Colloids, No Odor</u>
Detection Method: <u>Visual, Olfactory</u>	
Collection Method: <u>Clear PVC Bailer</u>	

WELL DEVELOPMENT/PURGE DATA:

TIME	Volume Removed (gallons)	Electrical Conductivity (uS/cm)	pH	Temperature (degrees F)	Remarks
NA	NA	NA	NA	NA	

SAMPLE COLLECTION DATA

Sampling Equipment: NA

TIME	ANALYSIS	CONTAINER USED	SAMPLE INTERVAL
NA	NA	NA	NA

UNOCAL 76, SERVICE STATION
 SIXTH QUARTERLY GROUNDWATER
 SAMPLING AND ANALYSIS

BSK Job No. P90165
 FIGURE 5.3
 JANUARY 1991

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 & ASSOCIATES

APPENDIX A

CHEMICAL TEST DATA SHEETS
AND
PROJECT-CHAIN-OF-CUSTODY RECORD



Environmental Services

1414 Stanislaus Street
Fresno, California 93706
Telephone (209) 485-8310
FAX (209) 485-6935
1-800-877-8310

FIGURE: A-1

BSK-Pleasanton
Union 76

Date Sampled : 01/08/92
Time Sampled : 1408
Date Received : 01/08/92
Date of Analysis : 01/10/92
Report Issue Date: 01/16/92

Case Number : Ch920060
Lab ID Number : 0060-1
Project Number : P90165
Sample Description: MW-2 #1

Sample Type: LIQUID


Analyses for BTEX by EPA Method 8020
and TPH(G) by EPA Method 8015
Prepared by Method 5030

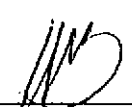
Results Reported in Micrograms per Liter (ug/L)

Compound	Results	DLR
Benzene	480	0.3
Toluene	870	0.3
Ethylbenzene	160	0.3
Total Xylene Isomers	860	0.3
Total Petroleum Hydrocarbons (G)	5200	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 50

DLR: Detection Limit for the Purposes of Reporting.
Exceptional sample conditions or matrix interferences
may result in higher detection limits.
ND: None Detected


Cynthia Pigman, QA/QC Supervisor


Michael Brechmann, Organics Supervisor



1414 Stanislaus Street
 Fresno, California 93706
 Telephone (209) 485-8310
 FAX (209) 485-6935
 1-800-877-8310

Environmental Services

FIGURE: A-2

BSK-Pleasanton
 Union 76

Date Sampled : 01/08/92
 Time Sampled : 1448
 Date Received : 01/08/92
 Date of Analysis : 01/09/92
 Report Issue Date: 01/16/92

Case Number : Ch920060
 Lab ID Number : 0060-2
 Project Number : P90165
 Sample Description: MW-3 #1

Sample Type: LIQUID

Analyses for BTEX by EPA Method 8020
and TPH(G) by EPA Method 8015
Prepared by Method 5030

Results Reported in Micrograms per Liter (ug/L)

Compound	Results	DLR
Benzene	4	0.3
Toluene	10	0.3
Ethylbenzene	2	0.3
Total Xylene Isomers	8	0.3
Total Petroleum Hydrocarbons (G)	60	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

DLR: Detection Limit for the Purposes of Reporting.
 Exceptional sample conditions or matrix interferences
 may result in higher detection limits.
 ND: None Detected

Cynthia Pigman, QA/QC Supervisor

Michael Brechmann, Organics Supervisor

0060

Client Name <i>Union 26 (BSK Pleasanton)</i>			Project or PO.# <i>P90165</i>			Analysis required <i>TPH-G/BTEX</i>											
Address <i>1181 Quarry Ln,</i>			Phone # <i>(510) 467-4000</i>									Lab Use Only in this section					
City, State, Zip <i>Pleasanton CA</i>		Report, attention <i>Alex Eskandari</i>															
Date sampled	Time sampled	Type (See key below)	Sampled by <i>M. Cline</i>	Number of containers	Lab Sample number	Sample Seals (See key below)	Hazardous sample Special handling required										
Sample description													Remarks				
<i>1/8/92</i>	<i>14:08</i>	<i>L</i>	<i>MW-2 #1</i>	<i>2</i>	<i>1</i>	<i>P</i>	<i>2x40mp</i> <i>↓</i>										
<i>↓</i>	<i>14:48</i>		<i>MW-3 #1</i>	<i>2</i>	<i>2</i>	<i>↓</i>											

IMPORTANT NOTICE: No samples will be analyzed without an authorized signature in this section.

I am hereby requesting BSK's Normal Chain-of-Custody Procedures for the above samples. I understand that these procedures are generally consistent with those outlined in the U.S. E.P.A. SW 846 and that there is no extra charge for this service.

By: *Marty Cline*
Authorized Signature

I am hereby requesting BSK's Formal Chain-of-Custody Procedures for the above samples. I understand that these procedures are generally consistent with those outlined in U.S. EPA Contract Laboratory Program Statement of Work, Section F, and that there is a charge of \$50.00 per work order or \$5.00 a bottle, whichever is greater.

By: _____
Authorized Signature

Signature	Print Name	Company	Date	Time
Relinquished by <i>Marty Cline</i>	<i>Martin Cline</i>	<i>BSK P</i>	<i>1/8/92</i>	<i>8:43</i>
Received by <i>Dino Aiello</i>	<i>D. Aiello</i>	<i>BSK</i>	<i>1-8-92</i>	<i>1545</i>
Relinquished by				
Received by				
Relinquished by				
Received by				

BSK & Associates Chemical Laboratories

1414 Stanislaus Street Fresno, California 93706

Telephone (209) 485-8310 • Fax (209) 485-7427

KEY: Type: AQ-Aqueous SL-Sludge SO-Soil PE-Petroleum OT-Other
Seals: P-Present A-Absent B-Broken
DISTRIBUTION: WHITE, CANARY - LABORATORY PINK - ORIGINATOR

Note:
Samples are discarded 14 days after results are reported unless other arrangements are made.
Hazardous samples will be returned to client or disposed of at client expense.