

R.T. NAHAS COMPANY *Since 1947*
REAL ESTATE DEVELOPERS AND INVESTORS

20630 PATIO DRIVE
CASTRO VALLEY, CALIFORNIA 94546
TELEPHONE (510) 538-9600
FAX (510) 881-7618

November 5, 2002

Mr. Scott Seery
Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Bay Pkwy., Room 250
Oakland, CA 94502

Dear Scott:

Enclosed is the Sixth Semi-Annual Groundwater Monitoring report. As stated in my previous letter to you of April 17, 2002, we are in the process of designing a two-story commercial/office building that will sit on the old Unocal station site as well as the car wash. In order to build this, we are going to have to encumber the property with a loan and would like to get from you some input on what kind of closure we could obtain at this juncture. The current plan places the building north of Well 101, so were it necessary to do further excavation we could conceivably do it without disturbing the new structure.

A more pressing problem is the fact that we are running out of time with the State Underground Tank Fund. If further excavation is going to be needed, we must do it immediately so that we can get reimbursed by the State.

Would you or someone from your office please contact me to let me know how long this is going to have to go on?

Sincerely,


Randall E. Nahas

Enclosure
REN/tar

Alameda County
NOV 12 2002
Environmental Health

Alameda County
NOV 12 2002
Environmental Health

**Report – Sixth Semi-Annual
Groundwater Monitoring
(Third Quarter of 2002)
Former Unocal 76 Service Station
20405 and 20629 Redwood Road
Castro Valley, California**

BSK ASSOCIATES

BSK JOB NO. P92057.3

**Submitted to:
R.T. Nahas Company
Castro Valley, California**

October 30, 2002

© 2002 BSK ASSOCIATES
All rights reserved

BSK



1181 Quarry Lane, Building 300
Pleasanton, CA 94566
(925) 462-4000 • FAX (925) 462-6283

October 30, 2002

BSK JOB NO. P92057.3

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

Attention: Mr. Randy T. Nahas

Subject: **Report**
Sixth Semi-Annual Groundwater Monitoring
(Third Quarter of 2002)
Former Unocal 76 Service Station
20405 and 20629 Redwood Road
Castro Valley, California

Dear Mr. Nahas:

As requested and authorized, we have performed groundwater monitoring well sampling at the above-referenced site. This report presents the groundwater data obtained during this and previous sampling events, conclusions based on the data collected during this event, and recommendations for further action. The site location is shown on Figure 1, Vicinity Map. The well locations are shown on Figure 2, Site Plan.

GROUNDWATER MONITORING ACTIVITIES – OCTOBER 2002

General

The Sixth semi-annual monitoring of groundwater monitoring wells MW-2, MW-3, MW-6 and MW-101 (Figure 2, Site Plan) was performed on October 9, 2002. Groundwater monitoring well MW-107 could not be sampled during this sampling event because a construction trailer was parked over the well location. Groundwater monitoring well MW-4 was abandoned during the remediation activities carried out in 1999 by others at the Site. The semi-annual sampling schedule—with monitoring activities in the first and third quarter of each year—was requested by Mr. Scott Seery, case officer for the ACDEH, in a letter, dated November 2, 1999, addressed to the R. T. Nahas Company. Further, in accordance with Mr. Seery's letter of April 24, 2001, sampling of well MW-5 was discontinued as of the Fourth sampling round. Field procedures and observations are provided in the following text.

Field Work

All wells were purged using an electric submersible pump. Three to four well casing volumes of water were removed from each well. Purge effluent was field monitored for pH, temperature and conductivity during purging to assess the influx of fresh formation water into the well. Purged water was transferred to 55-gallon, DOT-approved steel drums for holding. Each drum was labeled according to its contents, content source, and date of accumulation.

Prior to purging, the depth to water in each well was measured using a Solinst Electric Well Sounder, marked in twentieths of a foot. The water depth was then interpolated to the 0.01 foot increment from the tape. Each well was subsequently examined for floating and sinking immiscible product layers and sheen, using a clear bailer having dual check valves for point-source sampling. The piezometric contour and elevation, and well water elevations, are presented in Figure 3, Groundwater Elevation Contour Map.

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 disposable bailer. Sampling for contaminants was performed in the order of decreasing contaminant volatility. Each water sample was decanted into the appropriate container with preservative (as necessary), 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, pH, water temperature, conductivity and other data. The Well Field Logs are presented as Figures 4.1 through 4.6.

Site Hydrology

The groundwater level in all five wells was measured on October 9, 2002, in order to assess the flow direction and gradient. On that date, groundwater flow was generally in a south to southeasterly direction, with a gradient of 0.018 ft/ft (Figure 3).

Chemical Analyses

Water samples obtained from each of the wells were analyzed for constituents related to gasoline, Total Petroleum Hydrocarbons as Gasoline (TPHg), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and Methyl-t-Butyl Ether (MTBE).

The contaminants tested for are those specified by ACDEH in their letter dated November 2, 1999. Current and former analyses results are presented for comparison in Table 1. Records of current and past concentrations of BTEX and MTBE in the groundwater samples from MW-2 and MW-3 are graphically presented on Figures 5 and 6, respectively. The Chemical Test Data Sheets are presented in Appendix A along with the Project Chain-of-Custody record and QA/QC Summary Report.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Trace contaminant concentrations associated with gasoline (BTEX compounds) are generally at lower concentrations compared to the previous results from the March 2002 sampling event in all the wells sampled. Total Petroleum Hydrocarbons as Gasoline and BTEX were not detected in well MW-3. The Total Petroleum Hydrocarbons as Gasoline detected in previous events in well MW-7 probably represents Perchloroethane.

MTBE was detected in wells MW-2, MW-3, MW-6 and MW-101. The MTBE detected in well W-101 (highest reading) was confirmed using EPA Method 8260 as requested by ACDEH.

Recommendations

The five groundwater monitoring wells located at the Site should be sampled on a semi-annual basis as requested by ACDEH (letter dated April 24, 2001). The next semi-annual sampling event is scheduled for March 2003.

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 ACDEH to the Regional Water Quality Control Board in Oakland for their review.

Alameda County Department of Environmental Health
1181 Harbor Bay Parkway
Alameda, CA 94502

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.

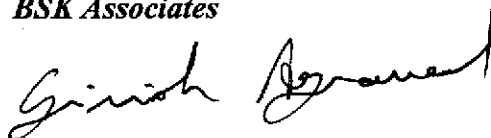
* * *

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

The following are attached and complete this report:

TABLE	1	Summary of Groundwater Analysis
FIGURE	1	Vicinity Map
FIGURE	2	Site Plan
FIGURE	3	Groundwater Elevation Contour Map
FIGURES	4.1-4.6	Well Field Logs
FIGURE	5	BTEX/MTBE Concentrations in Groundwater - MW-2
FIGURE	6	BTEX/MTBE Concentrations in Groundwater - MW-3
Appendix "A"		Laboratory Chemical Test Data Sheets and Project Chain-of-Custody Record (6 pages), and Level II QA/QC Summary Report (2 pages)

Respectfully submitted,
BSK Associates



Girish Agrawal, Ph.D., P.E., G.E.
Senior Project Engineer
C 53867, G.E. 2478



Y. Alex Eskandari, P.E.
Project Manager
C 38101

YAE/GA:ga

(G:\Environmental\Projects\NAHAS\2002-q3\P92057(Oct2002Rpt).wpd)

Distribution:

R. T. Nahas Company (4 copies)

TABLE 1, SUMMARY OF GROUNDWATER ANALYSIS, Results in ug/L

Sample Date	Well Number	Benzene	Toluene	Ethyl-Benzene	Xylenes	Methyl-t-Butyl Ether	TPH Gasoline	TPH Diesel	Total Oil & Grease	EPA 601
October 2002	MW-2	ND	ND	ND	ND	280	92	—	—	—
	MW-3	ND	ND	ND	ND	15	ND	—	—	—
	MW-5 *	—	—	—	—	—	—	—	—	—
	MW-6	ND	ND	ND	ND	260	83	—	—	—
	MW-7 **	—	—	—	—	—	—	—	—	—
	MW-101	240	0.74	230	76	1500 ² /1400 ³	5200	—	—	—
March 2002	MW-2	2.6	0.31	2	1.7	420	140	—	—	—
	MW-3	ND	ND	ND	ND	26	ND	—	—	—
	MW-5 *	—	—	—	—	—	—	—	—	—
	MW-6	ND	ND	ND	ND	370	91	—	—	—
	MW-7	0.35	ND	0.91	2.2	7.7	280	—	—	—
	MW-101	600	25	1600	3100	1600 ² /870 ³	19000	—	—	—
August 2001	MW-2	ND	ND	ND	ND	690 ² /820 ³	160	—	—	—
	MW-3	ND	ND	ND	ND	26	ND	—	—	—
	MW-5 *	—	—	—	—	—	—	—	—	—
	MW-6	ND	ND	ND	ND	280 ² /350 ³	79	—	—	—
	MW-7	ND	ND	ND	ND	7.3 ² /ND ³	800	—	—	—
	MW-101	630	ND	1500	480	1400	12000	—	—	—
March 2001	MW-2	22	1.5	17	27	1300 ² /1200 ³	1000	—	—	—
	MW-3	ND	ND	ND	ND	190	ND	—	—	—
	MW-5	ND	ND	ND	ND	ND	ND	—	—	—
	MW-6	ND	ND	ND	ND	440	130	—	—	—
	MW-7	ND	ND	ND	ND	ND	630	—	—	—
	MW-101	1400	62	3400	7700	970	34000	—	—	—
September 2000	MW-2	0.89	ND	1	0.65	620	180	—	—	—
	MW-3	ND	ND	ND	ND	98	ND	—	—	—
	MW-5	ND	ND	ND	ND	ND	ND	—	—	—
	MW-6	ND	ND	ND	ND	170	54	—	—	—
	MW-7	3	0.32	13	27	ND	770	—	—	—
	MW-101	1100	35	2900	400	1600 ² /1800 ³	12000	—	—	—
September 1995	MW-101	170	94	150	710	—	9400	—	—	—
March 2000	MW-2	14	0.92	16	24	1400	560	--	--	--
	MW-3	0.61	ND	ND	ND	240	96	--	--	--
	MW-5	ND	ND	ND	ND	ND	ND	--	--	--
	MW-6	ND	0.49	ND	ND	260	78	--	--	--
	MW-7	890	ND	ND	ND	ND	ND	--	--	--
	MW-101	2500	490	4300	10000	2400 ² /1400 ³	40000	--	--	--

TABLE 1, SUMMARY OF GROUNDWATER ANALYSIS, Results in ug/L

Sample Date	Well Number	Benzene	Toluene	Ethyl-Benzene	Xylenes	Methyl-t-Butyl Ether	TPH Gasoline	TPH Diesel	Total Oil & Grease	EPA 601
November 1997	MW-2	6.8	0.64	4.7	8.2	1200	360	--	--	--
	MW-3	1.7	1.4	2.3	8.3	65	62	--	--	--
	MW-4	ND	ND	ND	ND	ND	ND	ND	--	--
	MW-5	ND	ND	ND	ND	ND	ND	ND	--	--
	MW-6	ND	ND	ND	ND	9	ND	ND	--	--
	MW-7	--	--	--	--	--	--	--	--	--
	April 1997	MW-2	23	1.6	21	31.4	1800	470	--	--
MW-3		7.3	ND	3.3	5.4	230	120	--	--	--
MW-4		ND	ND	ND	ND	ND	ND	ND	--	--
MW-5		ND	ND	ND	ND	ND	ND	--	--	--
MW-6		ND	ND	ND	ND	ND	ND	--	--	--
MW-7		--	--	--	--	--	--	--	--	--
October 1996		MW-2	9.4	0.5	7.2	9.4	1400	180	--	--
	MW-3	3.8	1.5	2.1	6.8	55	79	--	--	--
	MW-4	ND	ND	ND	ND	ND	ND	ND	--	--
	MW-5	ND	ND	ND	ND	ND	ND	--	--	--
	MW-6	ND	ND	ND	ND	17	ND	--	--	--
	MW-7	--	--	--	--	--	--	--	--	--
	April 1996	MW-2	41	2.8	27	50	--	690	--	--
MW-3		8.4	1.6	4.7	14	--	170	--	--	--
MW-4		ND	ND	ND	ND	--	ND	ND	--	--
MW-5		ND	ND	ND	ND	--	ND	--	--	--
MW-6		2.9	2.9	ND	ND	--	ND	--	--	--
MW-7		ND	ND	ND	ND	--	--	--	--	--
October 1995		MW-2	7.4	ND	5.1	5.5	--	450	--	--
	MW-3	9	3.9	8.5	34	--	340	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	--	--
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	--	--	--	--
	April 1995	MW-2	72	2.8	47	22	--	480	--	--
MW-3		26	0.6	40	19	--	450	--	--	--
MW-4		ND	ND	ND	ND	--	ND	ND	ND	--
MW-5		ND	ND	ND	ND	--	ND	--	--	--
MW-6		ND	ND	ND	ND	--	ND	--	--	--
MW-7		ND	ND	ND	ND	--	--	--	--	--

TABLE 1, SUMMARY OF GROUNDWATER ANALYSIS, Results in ug/L

Sample Date	Well Number	Benzene	Toluene	Ethyl-Benzene	Xylenes	Methyl-t-Butyl Ether	TPH Gasoline	TPH Diesel	Total Oil & Grease	EPA 601
January 1995	MW-2	48	2.8	15	27	--	440	--	--	--
	MW-3	26	0.6	14	45	--	250	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	2000	--
October 1994	MW-2	2.8	ND	2.9	1.8	--	97	--	--	--
	MW-3	0.9	ND	ND	ND	--	ND	--	--	--
	MW-4	ND	36	ND	1.3	--	70	ND	ND	--
	MW-5	ND	71	0.4	1.7	--	87	--	--	--
	MW-6	0.4	140	0.5	2.3	--	160	--	--	--
July 1994	MW-2	14	0.7	5.8	12	--	180	--	--	--
	MW-3	7.2	0.4	1.6	4.6	--	52	--	--	--
	MW-4	ND	0.6	ND	ND	--	ND	86	ND	--
April 1994	MW-2	23	1.1	8.2	17	--	270	--	--	--
	MW-3	17	1	4.9	24	--	62	--	--	--
	MW-4	ND	ND	ND	0.4	--	ND	ND	ND	--
	MW-5	ND	0.4	ND	1	--	ND	--	--	--
	MW-6	ND	0.3	ND	0.4	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	360 (1)	--	--	--
January 1994	MW-2	13	3.4	4.9	9.2	--	130	--	--	--
	MW-3	5.5	2.1	2.6	14	--	69	--	--	--
	MW-7	ND	ND	ND	ND	--	330 (1)	--	--	--
October 1993	MW-2	4	ND	2.3	3.1	--	98	--	--	--
	MW-3	5	ND	0.6	1.2	--	ND	--	--	--
	MW-4	0.4	ND	ND	0.4	--	ND	ND	ND	Tetrachloroethene 0.7 Trichloroethene 0.9
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	0.7	--	360 (1)	--	--	--
	MW-7	ND	ND	ND	0.7	--	360 (1)	--	--	--
July 1993	MW-2	17	1.1	6	12	--	220	--	--	--
	MW-3	24	11	14	82	--	330	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	1000	--
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	680 (1)	--	--	--

TABLE 1, SUMMARY OF GROUNDWATER ANALYSIS, Results in ug/L

Sample Date	Well Number	Benzene	Toluene	Ethyl-Benzene	Xylenes	Methyl-t-Butyl Ether	TPH Gasoline	TPH Diesel	Total Oil & Grease	EPA 601
March 1993	MW-2	110	32	67	28	--	720	--	--	1,2-Dichloroethane 0.6
	MW-3	32	0.9	64	13	--	330	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	--	ND	--	--	Tetrachloroethane 0.8
	MW-6	ND	ND	ND	ND	--	ND	--	--	Tetrachloroethane 3.5
	MW-7	ND	ND	ND	ND	--	830 (1)	--	--	Tetrachloroethene 3,700
January 1993	MW-2	11	5.1	1.4	6.3	--	170	--	--	--
	MW-3	1.2	1	0.6	4.1	--	ND	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	--
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	1900 (1)	--	--	--
November 1992	MW-7	--	--	--	--	--	2700 (1)	ND	--	Chlorobenzene 2.0 Chloroform 2.0 cis-1,2-Dichloroethene 180 trans-1,2-Dichloroethene 1.5 Tetrachloroethene 14,000 Trichloroethene 660
October 1992	MW-2	2.3	ND	2.3	3	--	ND	--	--	--
	MW-3	2.1	ND	ND	0.3	--	ND	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	120	ND	--
	MW-5	ND	0.4	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	3900 (1)	--	--	--
July 1992	MW-2	10	ND	0.6	2.3	--	84	--	--	--
	MW-3	1.3	0.4	ND	1.3	--	ND	--	--	--
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	ND	ND	ND	--	ND	--	--	--
	MW-7	ND	ND	ND	ND	--	830 (1)	--	--	--
April 1992	MW-2	70	0.3	15	7	--	300	--	--	--
	MW-3	1	0.4	ND	0.9	--	ND	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	--
	MW-5	ND	ND	ND	ND	--	ND	--	--	--
	MW-6	ND	0.3	ND	ND	--	ND	--	--	--
	MW-7	0.4	0.3	0.3	0.9	--	1300 (1)	--	--	--

TABLE 1, SUMMARY OF GROUNDWATER ANALYSIS, Results in ug/L

Sample Date	Well Number	Benzene	Toluene	Ethyl-Benzene	Xylenes	Methyl-t-Butyl Ether	TPH Gasoline	TPH Diesel	Total Oil & Grease	EPA 601
January 1992	MW-2	480	870	160	860	--	5200	--	--	--
	MW-3	4	10	2	8	--	60	--	--	--
October 1991	MW-2	2.9	ND	2.5	6	--	170	--	--	--
	MW-3	ND	ND	ND	ND	--	ND	ND	ND	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	--
July 1991	MW-2	14	1	17	8	--	220	--	--	--
	MW-3	14	14	33	8	--	220	--	--	--
April 1991	MW-2	640	520	170	790	--	4800	--	--	--
	MW-3	450	270	150	760	--	3600	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	--
January 1991	MW-2	50	33	22	110	--	430	--	--	--
	MW-3	29	3.3	9.7	34	--	110	--	--	--
August 1990	MW-2	21	3.9	7.2	28	--	180	--	--	--
	MW-3	55	3.8	20	59	--	290	--	--	--
	MW-4	ND	ND	ND	ND	--	ND	ND	ND	--
Maximum Contaminant Level (MCL)		1	150	700	1750	NA	NA	NA	NA	Chlorobenzene - NA Chloroform - NA cis-1,2-Dichloroethene 6.0 trans-1,2-Dichloroethene 10.0 1,2-Dichloroethane 0.5 Tetrachloroethene 5.0 Trichloroethene 5.0

ND = None Detected

-- = Not Analyzed

* = Water level sounding only. No sampling.

** = Unable to sample. Construction trailer parked on top of well.

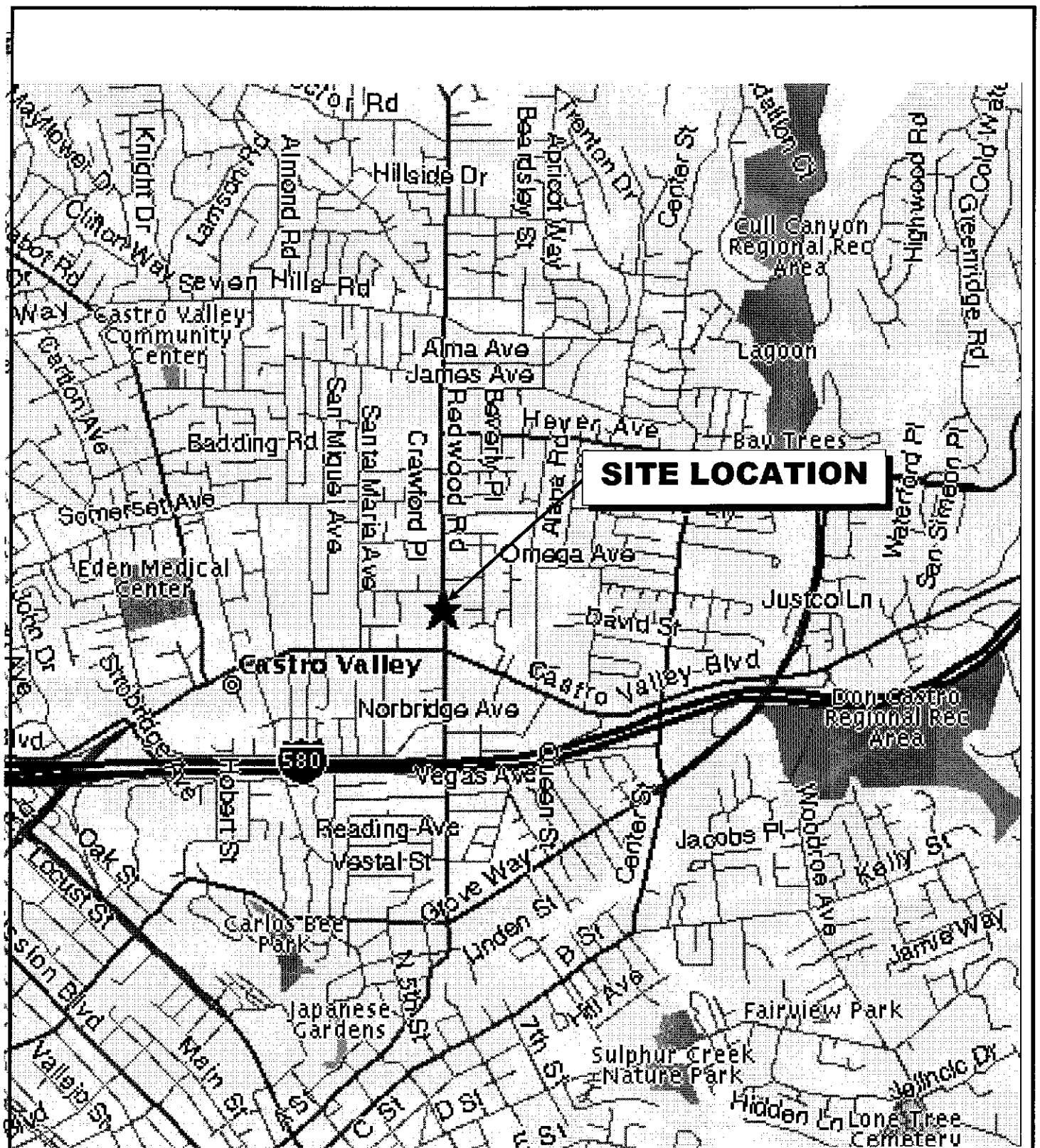
NA = Not Available

1 = TPHg values have demonstrated to represent Perchloroethane presence

2 = MTBE by EPA 8015/8020

3 = MTBE by EPA 8260

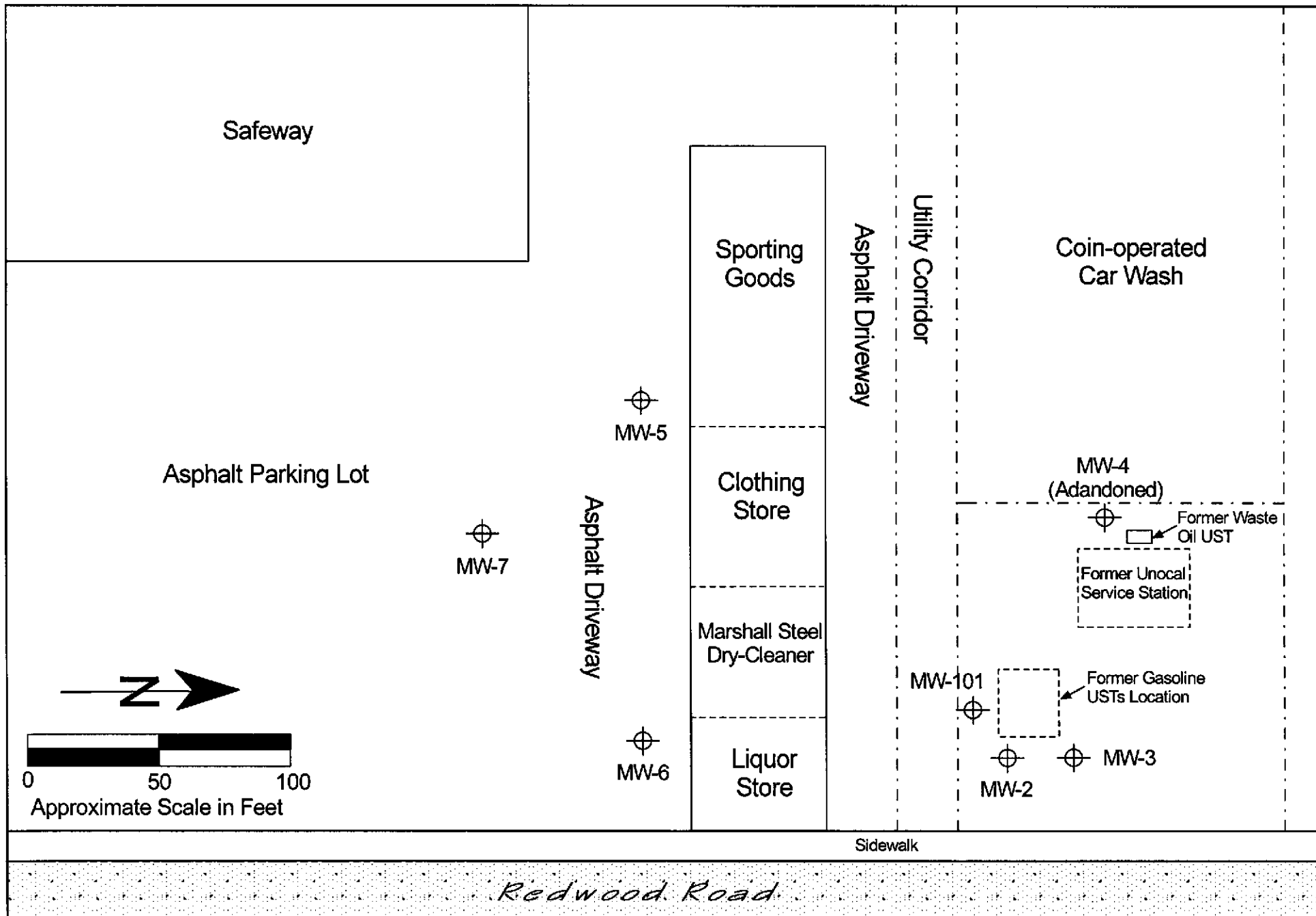
MCLs from California Code of Regulations Title 22, Article 5.5




Semi-Annual Groundwater Monitoring Report
 Former Unocal 76 Service Station
 20405 and 20629 Redwood Road
 Castro Valley, California

VICINITY MAP
 FIGURE 1
 BSK Job No. P92057.3



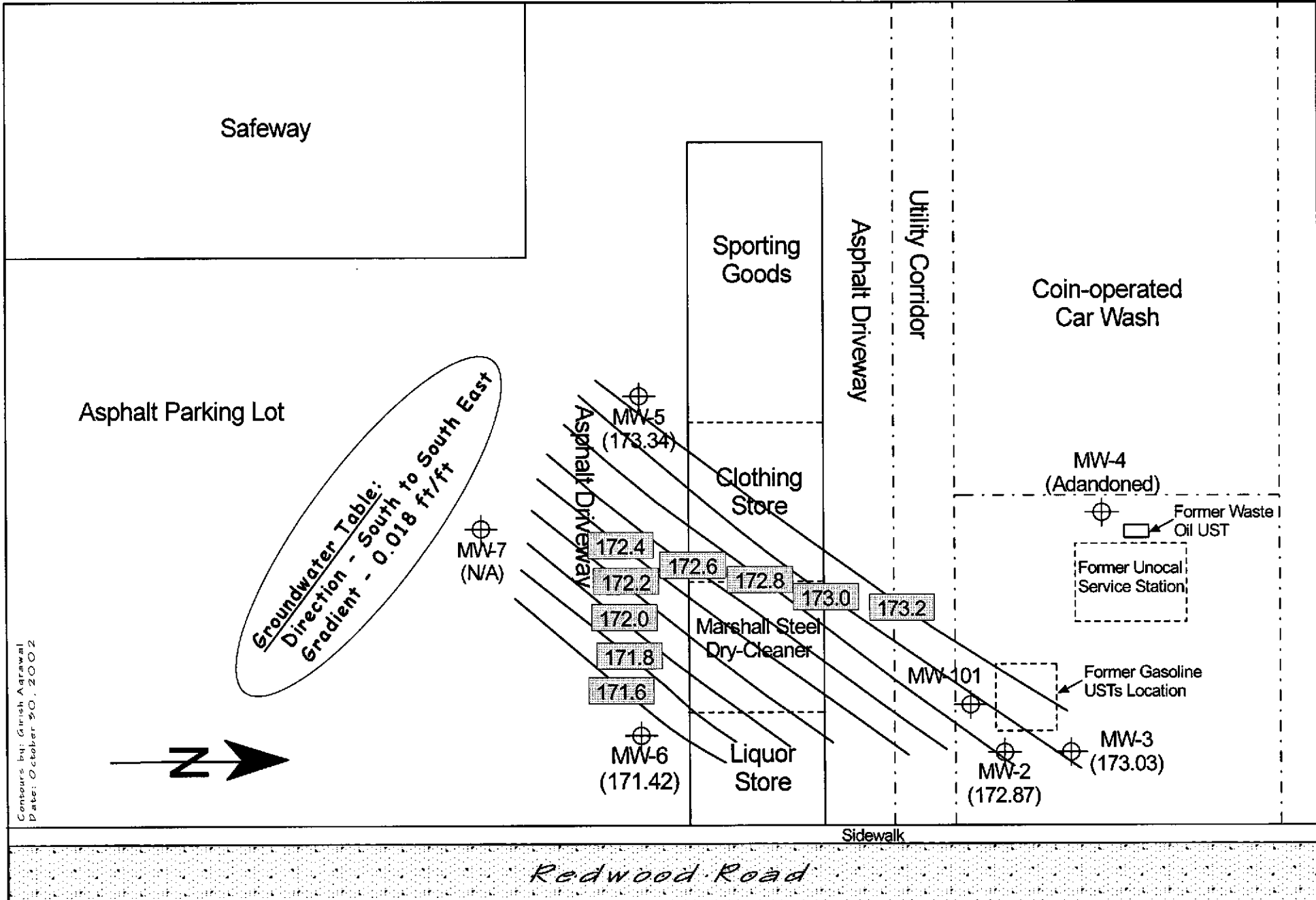


LEGEND
 Groundwater Monitoring Well Location & Designation

Semi-Annual Groundwater Monitoring Report
 Former Unocal 76 Service Station
 20405 and 20629 Redwood Road
 Castro Valley, California

BSK Job No. P92057.3
 SITE PLAN
 FIGURE 2





Contours by: Girish Agrawal
 Date: October 30, 2002

LEGEND

Groundwater Monitoring Well (Groundwater Elevation)
 Groundwater Elevation Contour in feet above MSL
 172.4

0 50 100
 Approximate Scale in Feet

BSK Job No. P92057.3
GROUNDWATER ELEVATION CONTOUR MAP
 October 2002
 FIGURE 3



WELL FIELD LOG

Well Observation: Date: 10/09/2002
Sample Collection: Date: 10/09/2002

Project Name: Groundwater Monitoring
Location: Nahas/Former Union 76
Personnel: Mark D. Brock
Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-2	Date Purged	10/09/2002
Depth to Water - feet (TOC)	10.60	Purge Method	Electric Submersible Pump
Well Depth (feet)	28.85		
Water Volume (gallons)	3.00	Purge Begin	11:19
Reference Elevation - feet (TOC)	+183.47	Purge End	11:28
Groundwater Elevation (feet)	172.87	Purge Rate	1.3 gpm
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: None Observed
Bottom: None Observed
Detection Method: Visual
Collection Method: Bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°F)	COLOR/COMMENTS
11:22	3	615	7.64	74.5	Clear
11:24	6	631	7.32	72.7	Clear
11:26	9	665	7.17	71.5	Clear
11:28	12	670	6.74	70.5	Clear

SAMPLE COLLECTION DATA

Sampling Equipment: Disposable Bailer

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
11:30	BTEX/MTBE & TPHg	4-40 ml glass VOA's with HCl	11.00'

Field Notes:

WELL FIELD LOG

Well Observation: **Date:** 10/09/2002
Sample Collection: **Date:** 10/09/2002

Project Name: Groundwater Monitoring
Location: Nahas/Former Union 76
Personnel: Mark D. Brock
Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-3	Date Purged	10/09/2002
Depth to Water - feet(TOC)	11.00	Purge Method	Electric Submersible Pump
Well Depth (feet)	28.85		
Water Volume (gallons)	3.00	Purge Begin	12:12
Reference Elevation - feet(TOC)	+184.03	Purge End	12:20
Groundwater Elevation (feet)	173.03	Purge Rate	1.5 gpm
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: Slight Yellow Tint, No Odor
Bottom: None Observed
Detection Method: Visual
Collection Method: Bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°F)	COLOR/COMMENTS
12:14	3	6.93	7.36	72.0	Clear
12:16	6	6.91	6.87	70.3	Clear
12:18	9	728	6.86	69.3	Clear
12:20	12	726	6.88	68.9	Clear

SAMPLE COLLECTION DATA

Sampling Equipment: Disposable Bailer

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
12:25	BTEX/MTBE & TPHg	4-40 ml glass VOA's with HCl	12.00'

Field Notes:

WELL FIELD LOG

Well Observation: Date: 10/09/2002
 Sample Collection: Date: 10/09/2002

Project Name: Groundwater Monitoring
 Location: Nahas/Former Union 76
 Personnel: Mark D. Brock
 Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-101	Date Purged	10/09/2002
Depth to Water - feet(FOC)	10.75	Purge Method	Electric Submersible Pump
Well Depth (feet)	29.50		
Water Volume (gallons)	12.24	Purge Begin	12:50
Reference Elevation - feet(FOC)	—	Purge End	13:16
Groundwater Elevation (feet)	—	Purge Rate	2.0 gpm
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: Odor, No Sheen Observed
 Bottom: None Observed
 Detection Method: Visual
 Collection Method: Bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°F)	COLOR/COMMENTS
12:57	13	643	6.97	71.6	Clear with odor
13:03	26	643	6.97	70.0	Clear with odor
13:09	39	656	6.93	70.2	Clear with odor
13:16	52	676	6.95	70.2	Clear with odor

SAMPLE COLLECTION DATA

Sampling Equipment: Bailer

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
13:24	BTEX/MTBE & TPHg	4-40 ml glass VOA's with HCl	18.75'

Field Notes:

WELL FIELD LOG

Well Observation: Date: 10/09/2002
 Sample Collection: Date:

Project Name: Groundwater Monitoring
 Location: Nahas/Former Union 76
 Personnel: Mark D. Brock
 Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-5	Date Purged	N/A
Depth to Water - feet(TOC)	10.58	Purge Method	--
Well Depth (feet)	34.5		
Water Volume (gallons)	3.92	Purge Begin	--
Reference Elevation - feet(TOC)	+183.92	Purge End	--
Groundwater Elevation (feet)	173.34	Purge Rate	--
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top:
 Bottom:
 Detection Method:
 Collection Method:

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°F)	COLOR/COMMENTS

SAMPLE COLLECTION DATA

Sampling Equipment:

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
--	--	--	

Field Notes: Groundwater Level Reading Only

WELL FIELD LOG

Well Observation: Date: 10/09/2002
 Sample Collection: Date: 10/09/2002

Project Name: Groundwater Monitoring
 Location: Nahas/Former Union 76
 Personnel: Mark D. Brock
 Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-6	Date Purged	03/13/2002
Depth to Water - feet(IOC)	12.18	Purge Method	Electric Submersible Pump
Well Depth (feet)	26.78		
Water Volume (gallons)	2.70	Purge Begin	10:26
Reference Elevation - feet(IOC)	+183.60	Purge End	10:36
Groundwater Elevation (feet)	171.42	Purge Rate	1.0 gpm
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: None Observed
 Bottom: None Observed
 Detection Method: Visual
 Collection Method: Bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°F)	COLOR/COMMENTS
10:29	3	704	6.97	76.8	Clear
10:32	6	726	6.92	73.2	Clear
10:35	9	767	7.00	70.7	Clear
10:36	10	770	6.94	70.7	Clear

SAMPLE COLLECTION DATA

Sampling Equipment: Disposable Bailer

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
10:45	BTEX/MTBE & TPHg	4-40 ml glass VOA,s with HCl	13.00'

Field Notes:

WELL FIELD LOG

Well Observation: Date: 10/09/2002
 Sample Collection: Date:

Project Name: Groundwater Monitoring
 Location: Nahas/Former Union 76
 Personnel: Mark D. Brock
 Weather: Cloudy, Warm

WELL INFORMATION:

Well Number	MW-7	Date Purged	N/A
Depth to Water - feet (TOC)		Purge Method	--
Well Depth (feet)	28.0	Purge Begin	
Water Volume (gallons)		Purge End	
Reference Elevation - feet (TOC)	+182.42	Purge Rate	
Groundwater Elevation (feet)			
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top:
 Bottom:
 Detection Method:
 Collection Method:

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (micromhos)	pH	TEMP (°C)	COLOR/COMMENTS

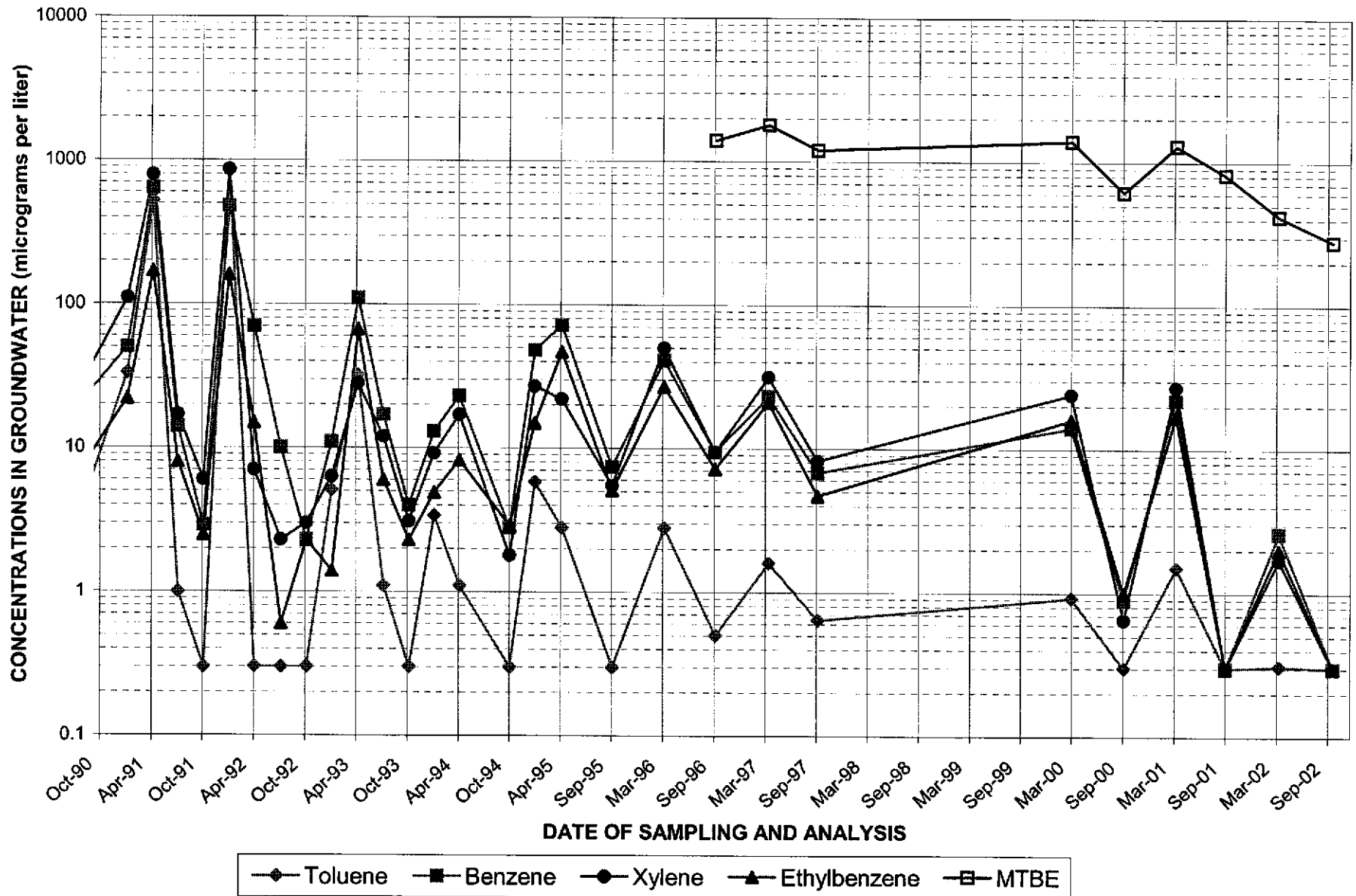
SAMPLE COLLECTION DATA

Sampling Equipment:

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL

Field Notes: Unable to sample - construction trailer parked on top of well.

BTEX/MTBE CONCENTRATIONS IN GROUNDWATER (MW-2)

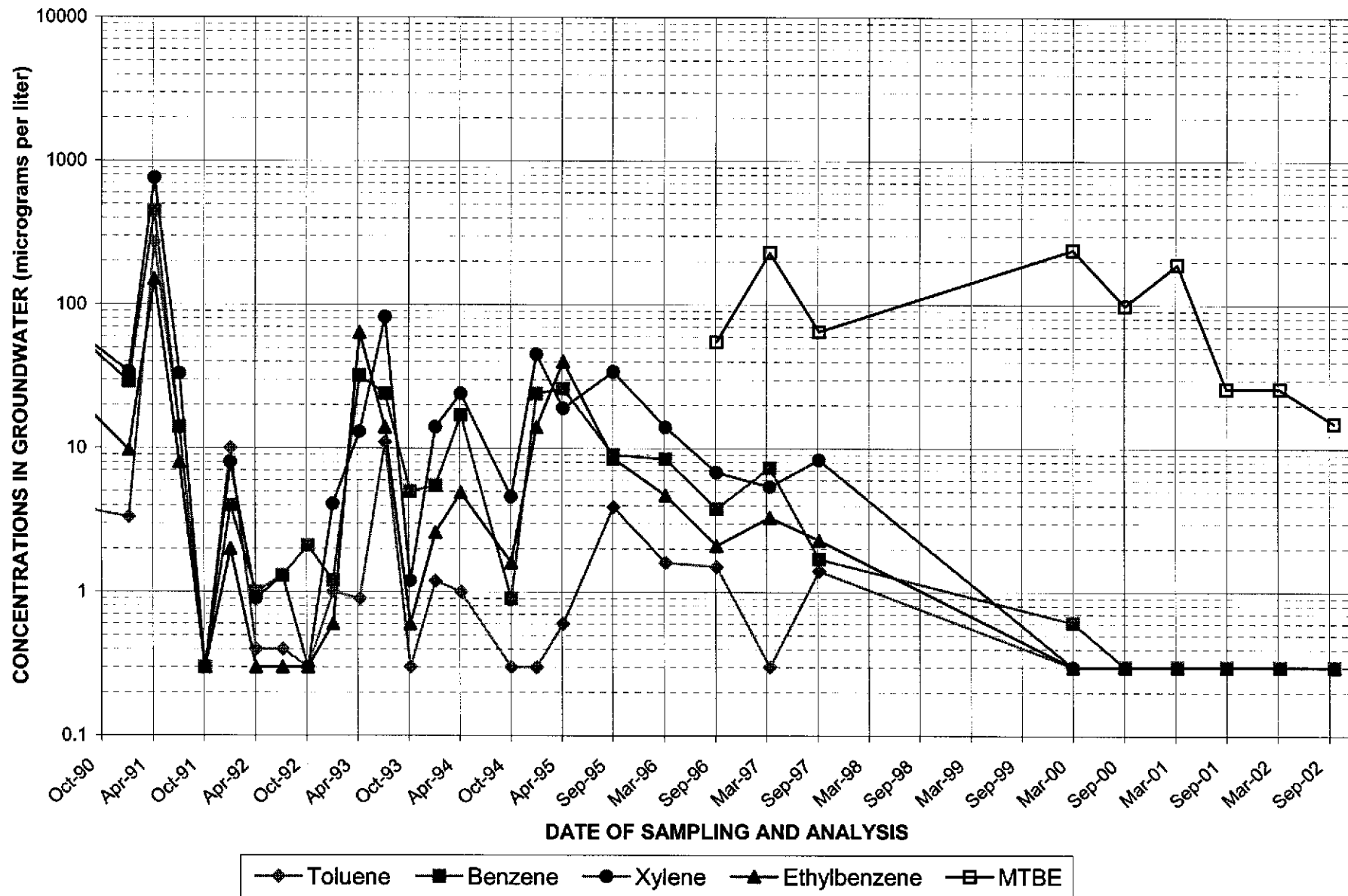


Semi-Annual Groundwater Monitoring Report
Former Unocal 76 Service Station
20405 and 20629 Redwood Road
Castro Valley, California

OCTOBER 2002
FIGURE 5
BSK Job No. P92057.3

BSK

BTEX/MTBE CONCENTRATIONS IN GROUNDWATER (MW-3)



Semi-Annual Groundwater Monitoring Report
Former Unocal 76 Service Station
20405 and 20629 Redwood Road
Castro Valley, California

OCTOBER 2002
FIGURE 6
BSK Job No. P92057.3

BSK

APPENDIX "A"

**CHEMICAL TEST DATA SHEETS
AND
PROJECT CHAIN-OF-CUSTODY RECORD
(6 PAGES)
AND
LEVEL II QA/QC SUMMARY REPORT
(2 PAGES)**

BSK ANALYTICAL LABORATORIES

BSK-2002-2002
NOV 01 2002
RECEIVED

Cover Letter

10/28/2002

Alex Y. Eskandari
BSK and Associates - Pleasanton
1181 Quarry Lane Suite 300
Pleasanton, CA 94566

BSK Submission Number: 2002100631

Dear Alex Y. Eskandari:

BSK Analytical Laboratories adheres to a quality assurance plan that has been approved by the State of California Department of Health Services. Our Environmental Laboratory Accreditation Program (ELAP) certification number is 1180.

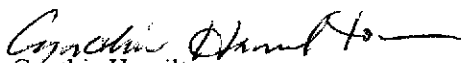
BSK Analytical Laboratories has prepared this certificate of analysis in response to your request for analytical services. All information was taken from your Chain of Custody or related correspondence. BSK completed all sample handling and analytical procedures within the Laboratory's standard acceptability criteria with any exceptions noted below.

If additional clarification of any information is required, please contact your Client Services Representative, Amber Shirey at (800)877-8310 or (559)497-2888.

Sincerely,

BSK Analytical Laboratories

Authorizing Signature(s)


Cynthia Hamilton
QA/QC Supervisor

Addendum: Laboratory QC Report

Page 1 of 1



BSK ANALYTICAL LABORATORIES

Alex Y. Eskandari
 BSK and Associates - Pleasanton
 1181 Quarry Lane Suite 300
 Pleasanton, CA 94566

Certificate of Analysis ELAP Certificate #1180

Report Issue Date: 10/28/2002

BSK Submission #: 2002100631

BSK Sample ID #: 257143

Project ID: P92057.3

Project Desc: NAHAS\Union 76

Submission Comments:

Sample Type: Liquid

Date Sampled: 10/09/2002

Sample Description: MW-6

Time Sampled: 1045

Sample Comments:

Date Received: 10/10/2002

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Gasoline	EPA 8015(M)	83	µg/L	50	1	50	10/12/2002	10/12/2002
Methyl-t-Butyl Ether	EPA 8015/8020	260	µg/L	5	1	5	10/12/2002	10/12/2002
Benzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Ethylbenzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Toluene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Total Xylenes	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002

Surrogate

Fluorobenzene	EPA 8020	83.3	% Rec	-	1	N/A	10/12/2002	10/12/2002
---------------	----------	------	-------	---	---	-----	------------	------------

LUFT Comments

TPH as Gasoline Individual peaks inconsistent with fuel fingerprint

mg/L: Milligrams/Liter (ppm)
 mg/Kg: Milligrams/Kilogram (ppm)
 µg/L: Micrograms/Liter (ppb)
 µg/Kg: Micrograms/Kilogram (ppb)
 %Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
 DLR: Detection Limit for Reporting
 : PQL x Dilution
 ND: None Detected at DLR

H: Analyzed outside of hold time
 P: Preliminary result
 S: Suspect result. See Cover Letter for comments.
 E: Analysis performed by External laboratory.
 See External Laboratory Report attachments.

Report Authentication Code:



BSK ANALYTICAL LABORATORIES

Alex Y. Eskandari
 BSK and Associates - Pleasanton
 1181 Quarry Lane Suite 300
 Pleasanton, CA 94566

Certificate of Analysis

ELAP Certificate #1180

Report Issue Date: 10/28/2002

BSK Submission #: 2002100631

BSK Sample ID #: 257144

Project ID: P92057.3

Project Desc: NAHAS\Union 76

Submission Comments:

Sample Type: Liquid

Date Sampled: 10/09/2002

Sample Description: MW-2

Time Sampled: 1130

Sample Comments:

Date Received: 10/10/2002

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Gasoline	EPA 8015(M)	92	µg/L	50	1	50	10/13/2002	10/13/2002
Methyl-t-Butyl Ether	EPA 8015/8020	280	µg/L	5	1	5	10/13/2002	10/13/2002
Benzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/13/2002	10/13/2002
Ethylbenzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/13/2002	10/13/2002
Toluene	EPA 8020	ND	µg/L	0.3	1	0.3	10/13/2002	10/13/2002
Total Xylenes	EPA 8020	ND	µg/L	0.3	1	0.3	10/13/2002	10/13/2002

Surrogate

Fluorobenzene	EPA 8020	79.6	% Rec	-	1	N/A	10/13/2002	10/13/2002
---------------	----------	------	-------	---	---	-----	------------	------------

LUFT Comments

TPH as Gasoline Individual peaks inconsistent with fuel fingerprint

mg/L: Milligrams/Liter (ppm)
 mg/Kg: Milligrams/Kilogram (ppm)
 µg/L: Micrograms/Liter (ppb)
 µg/Kg: Micrograms/Kilogram (ppb)
 %Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
 DLR: Detection Limit for Reporting
 : PQL x Dilution
 ND: None Detected at DLR

H: Analyzed outside of hold time
 P: Preliminary result
 S: Suspect result. See Cover Letter for comments.
 E: Analysis performed by External laboratory.
 See External Laboratory Report attachments.

Report Authentication Code:



BSK ANALYTICAL LABORATORIES

Alex Y. Eskandari
 BSK and Associates - Pleasanton
 1181 Quarry Lane Suite 300
 Pleasanton, CA 94566

Certificate of Analysis ELAP Certificate #1180

Report Issue Date: 10/28/2002

BSK Submission #: 2002100631

BSK Sample ID #: 257145

Project ID: P92057.3

Project Desc: NAHAS\Union 76

Submission Comments:

Sample Type: Liquid

Date Sampled: 10/09/2002

Sample Description: MW-3

Time Sampled: 1225

Sample Comments:

Date Received: 10/10/2002

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Gasoline	EPA 8015(M)	ND	µg/L	50	1	50	10/12/2002	10/12/2002
Methyl-t-Butyl Ether	EPA 8015/8020	15	µg/L	5	1	5	10/12/2002	10/12/2002
Benzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Ethylbenzene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Toluene	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002
Total Xylenes	EPA 8020	ND	µg/L	0.3	1	0.3	10/12/2002	10/12/2002

Surrogate

Fluorobenzene	EPA 8020	83.3	% Rec	-	1	N/A	10/12/2002	10/12/2002
---------------	----------	------	-------	---	---	-----	------------	------------

mg/L: Milligrams/Liter (ppm)
 mg/Kg: Milligrams/Kilogram (ppm)
 µg/L: Micrograms/Liter (ppb)
 µg/Kg: Micrograms/Kilogram (ppb)
 %Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
 DLR: Detection Limit for Reporting
 : PQL x Dilution
 ND: None Detected at DLR

H: Analyzed outside of hold time
 P: Preliminary result
 S: Suspect result. See Cover Letter for comments.
 E: Analysis performed by External laboratory.
 See External Laboratory Report attachments.

Report Authentication Code:



Page 3 of 4

BSK ANALYTICAL LABORATORIES

Alex Y. Eskandari
BSK and Associates - Pleasanton
1181 Quarry Lane Suite 300
Pleasanton, CA 94566

Certificate of Analysis ELAP Certificate #1180

Report Issue Date: 10/28/2002

BSK Submission #: 2002100631

BSK Sample ID #: 257146

Project ID: P92057.3

Project Desc: NAHAS\Union 76

Submission Comments:

Sample Type: Liquid
Sample Description: MW-101
Sample Comments:

Date Sampled: 10/09/2002
Time Sampled: 1324
Date Received: 10/10/2002

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Gasoline	EPA 8015(M)	5200	µg/L	50	40	2000	10/13/2002	10/13/2002
Methyl-t-Butyl Ether	EPA 8015/8020	1500	µg/L	5	40	200	10/12/2002	10/12/2002
Benzene	EPA 8020	240	µg/L	0.3	40	12	10/12/2002	10/12/2002
Ethylbenzene	EPA 8020	230	µg/L	0.3	40	12	10/12/2002	10/12/2002
Toluene	EPA 8020	0.74	µg/L	0.3	1	0.3	10/13/2002	10/13/2002
Total Xylenes	EPA 8020	76	µg/L	0.3	1	0.3	10/13/2002	10/13/2002
Methyl-t-Butyl Ether	EPA 8260	1400	µg/L	5	50	250	10/21/2002	10/21/2002
Surrogate								
Fluorobenzene	EPA 8020	91.3	% Rec	-	1	N/A	10/13/2002	10/13/2002

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting
: PQL x Dilution
ND: None Detected at DLR

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Cover Letter for comments.
E: Analysis performed by External laboratory.
See External Laboratory Report attachments.

Report Authentication Code: 1 00000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000

BSK ANALYTICAL LABORATORIES

1414 Stanislaus Street Fresno, CA 93706
 (209) 497-2888 FAX 485-6935 800 877-8310

Analyses Request / Chain of Custody

2002100631

10/10/2002

BSK_P

TAT: 5 Day

1010014



Shaded areas for LAB use

Client Name Samuel NAHAS/Union 76	Report Attention: ALEX Eskandari	Phone # 925-462-4000
Address C/O BSK - Pleasanton	Project, Quote or PO # P92057.3	FAX # 925-462-6283
City, State, Zip Castro Valley, CA	Copy to:	System #

LAB use only			Date Sampled	Time Sampled	Sampled by: MARK D. Brock	Sample Description/Location	Comment or Station Code	TPH-G	BTX	MTBE *	
Sample #	Type	Count									
1	L	4	10-09-02	1045	MARK D. Brock	MW-6	} 5 day turn-around	X	X	X	257143
2	L	1		1130		MW-2					44
3	L	1		1225		MW-3					45
4	L	1		1324		MW-101				*	46
<p><i>MDB</i></p> <p>*Highest MTBE Mt. as</p> <p>* = THE Highest Hit confirm by EPA 8260</p>											

Matrix Type: L - Liquid S - Solid G - Gas
 Type of Hazards Associated with Samples:

Additional Services:
 Rush Priority: 2 Day 5 Day
 Formal Chain of Custody QC Data package
LEVEL II

Additional Services Authorized by:

Payment Received with Delivery
 Date: _____ Amount: \$ _____
 Check # _____ Initials: _____
 Receipt # _____

Signature	Print Name	Company	Date	Time
<i>Mark D. Brock</i>	MARK D. Brock	BSK	10-09-02	1415
<i>Alex Eskandari</i>	Alex Eskandari	BSK-P	10/9/02	1700
<i>Ruth Chy</i>	Ruth Chy	BSK	10/10/02	0715

BSK ANALYTICAL LABORATORIES

QC Summary Report

10/28/2002



BSK Submission : **2002100631**
 Client : **BSK and Associates - Pleasanto**
 Date Submitted : **10/10/2002**
 Project ID : **P92057.3**
 Project Desc : **NAHAS\Union 76**

BSK StarLims Run #: 44649



Instrument ID: **GC1**

Analyst Initials: **IMTIAZA**

Method Number: **BTEX_LL**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Benzene	LCS	N/A	8.6608	µg/L	86		10	ND	130	70	10/12/02	Acceptable
Ethylbenzene	LCS	N/A	8.7780	µg/L	87		10	ND	130	70	10/12/02	Acceptable
Methyl-t-Butyl Ether	LCS	N/A	33.667	µg/L	84		40	ND	130	70	10/12/02	Acceptable
Toluene	LCS	N/A	8.8709	µg/L	88		10	ND	130	70	10/12/02	Acceptable
Total Xylenes	LCS	N/A	26.4354	µg/L	88		30	ND	130	70	10/12/02	Acceptable
Benzene	LCSD	N/A	8.9249	µg/L	89	3	10	ND	130	70	10/12/02	Acceptable
Ethylbenzene	LCSD	N/A	9.0343	µg/L	90	2.9	10	ND	130	70	10/12/02	Acceptable
Methyl-t-Butyl Ether	LCSD	N/A	35.9883	µg/L	89	6.7	40	ND	130	70	10/12/02	Acceptable
Toluene	LCSD	N/A	9.1270	µg/L	91	2.9	10	ND	130	70	10/12/02	Acceptable
Total Xylenes	LCSD	N/A	27.2588	µg/L	90	3	30	ND	130	70	10/12/02	Acceptable
Benzene	RBLK	N/A	0	µg/L	< 0.3				0.3	N/A	10/12/02	Acceptable
Ethylbenzene	RBLK	N/A	0	µg/L	< 0.3				0.3	N/A	10/12/02	Acceptable
Methyl-t-Butyl Ether	RBLK	N/A	0	µg/L	< 5				5	N/A	10/12/02	Acceptable
Toluene	RBLK	N/A	0	µg/L	< 0.3				0.3	N/A	10/12/02	Acceptable
Total Xylenes	RBLK	N/A	0	µg/L	< 0.3				0.3	N/A	10/12/02	Acceptable
TPH as Gasoline	RBLK	N/A	0	µg/L	< 50				50	N/A	10/12/02	Acceptable

Surrogate Results

Analyte	QC Type	Surr. Result	UCL	LCL	Date		
Fluorobenzene	LCS	N/A 85.2 % Rec	92.0	130	70	10/12/02	Acceptable
Fluorobenzene	LCSD	N/A 87.1 % Rec	92.0	130	70	10/12/02	Acceptable
Fluorobenzene	RBLK	N/A 92.0 % Rec	130	70	10/12/02	Acceptable	

BSK StarLims Run #: 45183



Instrument ID: **VGCMS2**

Analyst Initials: **RAJP**

Method Number: **8260OX**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Di-isopropyl Ether	LCS	N/A	12.57	µg/L	100		12.5	ND	124	87	10/21/02	Acceptable
Ethyl t-Butyl Ether	LCS	N/A	12.31	µg/L	98		12.5	ND	120	79	10/21/02	Acceptable
Methyl-t-Butyl Ether	LCS	N/A	12.44	µg/L	99		12.5	ND	124	89	10/21/02	Acceptable
t-Amyl Methyl Ether	LCS	N/A	12.69	µg/L	101		12.5	ND	141	68	10/21/02	Acceptable
tert-Butyl Alcohol	LCS	N/A	135.28	µg/L	108		125	ND	110	72	10/21/02	Acceptable
Di-isopropyl Ether	LCSD	N/A	12.64	µg/L	101	0.56	12.5	ND	124	87	10/21/02	Acceptable
Ethyl t-Butyl Ether	LCSD	N/A	12.05	µg/L	96	2.1	12.5	ND	120	79	10/21/02	Acceptable
Methyl-t-Butyl Ether	LCSD	N/A	12.52	µg/L	100	0.65	12.5	ND	124	89	10/21/02	Acceptable
t-Amyl Methyl Ether	LCSD	N/A	12.20	µg/L	97	4	12.5	ND	141	68	10/21/02	Acceptable

%Rec: Percent Recovered
 RPD: Relative Percent Difference
 UCL: Upper Control Limit
 LCL: Lower Control Limit

Parent Sample: Sample used as background matrix for MS/MSD
 OOS-High: QC Result Above UCL
 OOS-Low: QC Result Below LCL

BSK ANALYTICAL LABORATORIES

QC Summary Report

10/28/2002



BSK Submission : 2002100631
 Client : BSK and Associates - Pleasanto
 Date Submitted : 10/10/2002
 Project ID : P92057.3
 Project Desc : NAHAS\Union 76

BSK StarLims Run #: 45183



Instrument ID: VGCMS2

Analyst Initials: RAJP

Method Number: 8260OX

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
tert-Butyl Alcohol	LCSD	N/A	137.58	µg/L	110	1.7	125	ND	110	72	10/21/02	Acceptable
Di-isopropyl Ether	RBLK	N/A	0	µg/L	<1				1	N/A	10/21/02	Acceptable
Ethyl t-Butyl Ether	RBLK	N/A	0	µg/L	<1				1	N/A	10/21/02	Acceptable
Methyl-t-Butyl Ether	RBLK	N/A	0	µg/L	<1				1	N/A	10/21/02	Acceptable
t-Amyl Methyl Ether	RBLK	N/A	0	µg/L	<1				1	N/A	10/21/02	Acceptable
tert-Butyl Alcohol	RBLK	N/A	0	µg/L	<10				10	N/A	10/21/02	Acceptable

Surrogate Results

Analyte	QC Type		Surr. Result		UCL	LCL	Date	
Toluene-d8	LCS	N/A	111.4 % Rec		111.3	130	70	10/21/02 Acceptable
Toluene-d8	LCSD	N/A	106.3 % Rec		111.3	130	70	10/21/02 Acceptable
Toluene-d8	RBLK	N/A	111.3 % Rec		130	70	10/21/02 Acceptable	

Approved by: *Cynthia Hamilton*

%Rec: Percent Recovered
 RPD: Relative Percent Difference
 UCL: Upper Control Limit
 LCL: Lower Control Limit

Parent Sample: Sample used as background matrix for MS/MSD
 OOS-High: QC Result Above UCL
 OOS-Low: QC Result Below LCL