



Chevron U.S.A. Products Company

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June 23, 1993

Mr. Scott Seery
Alameda County Environmental Health Department
80 Swan Way, Room 200
Oakland, CA 94621

Re: Tank / Line Removal and Over-Excavation Report
Former Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, CA 94546

Dear Mr. Seery :

Enclosed is Touchstone Development's June 5, 1993 Tank / Line Removal and Over-excavation Report.

The station's underground storage tanks and product lines were removed on March 10, 1993. The removal was witnessed by Edward Laudani, Deputy Fire Marshal of Eden Consolidated Fire Protection District; yourself; Gordon Johnson, Chevron U.S.A. Products Co., and myself.

Following the tank removal, the waste water reclaim tanks were removed as well as additional debris such as a staircase, concrete sump, slab, footing, etc.

Samples were collected according to the Tri-Regional Guidelines and the direction of Alameda County Environmental Health. Samples collected just above groundwater from the underground storage tank area were below the detection limit (ND) for total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylene (BTEX). Only three samples (NW, NE, EN) detected relatively minor levels of TPH-G and BTEX.

620, 430, 240 ppm TPH-G! fine product also noted

Over-excavation of suspected areas containing hydrocarbon impacted soil commenced after additional debris was removed and verbal approval was obtained from Alameda County. Excavation continued until all hydrocarbon impacted soil was removed including soil 2-3 feet below groundwater. During the over-excavation, confirmation samples were collected in areas that were not over-excavated to determine if any hydrocarbon impacted soil was present. When the excavation was completed approximately 7500 cu. yds. of soil was removed and disposed off-site at Redwood Landfill in Novato, California. An additional 800 cu. yds. of soil was used as backfill material after analysis showed no signs of contamination. Another 500 cu. yds. of soil was used as fill material at another site with the approval of Tom Peacock of Alameda County Environmental Health. The site was backfilled with 3/4 Class II aggregate base fill which was imported from a quarry and compacted to acceptable standards. Drain rock was also added as well as a layer filter fabric.

where?

Based on analytical results, it is in Chevron's opinion that the site requires no further soil remediation and the site is developable. This is based on analytical results of sixteen confirmation (OX-28 through OX-29) and three required samples (SW, SE, ES) on the south side of the site. Sixteen samples were ND for TPH-G and BTEX. Of the three samples that detected hydrocarbons, two had 8 and 18 ppm TPH-G while the other had only 89 ppm. All three samples were ND for

This is only 2 samples!?

although 13 samples ranged from 10 - 5100 ppm TPH-G!

sidewall samples representing contamination left in place range from ND - 770 ppm, highest in the north of the site

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Former Chevron Service Station 9-4930
June 23, 1993

benzene. For the other three constituents (toluene, ethylbenzene, and xylene), the highest concentrations was 3.1 ppm. Many were less than 1 ppm for the other constituents. The other sidewall confirmation samples (OX-3, OX-5, OX-6, OX-8 through OX-12, OX-16, OX-17, OX-19, OX-20, and OX-22 through OX-24) including the required samples (WN, WS) were ND or less than 1 ppm benzene. The highest value of benzene in these samples was 0.5 ppm. Many of these samples were taken at two different depths to fully characterized the condition of the site.

Currently, the site is fenced and leveled.

At this time Chevron plans no further remediation of the site. Chevron at this time proposes to install groundwater monitoring wells after future plans of site has been determined.

For additional information, please refer to the enclosed report. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.



Kenneth Kan
Engineer

LKAN/MacFile 9-4930R4

Enclosure

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TANK/LINE REMOVAL AND OVER-EXCAVATION REPORT

for

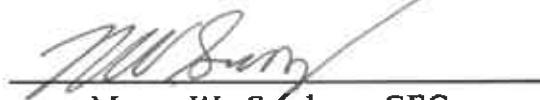
Former Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

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Figure 4: Sidewall Sample Location Map

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Appendix B: Proposed Soil Excavation/Remediation Workplan

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TANK/LINE REMOVAL AND OVER-EXCAVATION REPORT
Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

INTRODUCTION:

A *Proposed Soil Excavation/Remediation Work Plan* dated March 15, 1993 was prepared by Touchstone Developments, and submitted to Kenneth Kan, Chevron U.S.A. (Appendix B). Excavation started on March 18, 1993. This report summarizes the field activities performed at the above referenced site (Figure 1) during the recent removal of the underground storage tanks (UGST's), associated piping, and over-excavation. Removal and excavation activities were performed by Gettler-Ryan Inc. of Hayward, California. Trucking and disposal of the tanks was performed by Erickson Inc. of Richmond, California. Touchstone Developments was present on-site to observe the UGST and product line removal, piping trenches, over-excavation and soil stockpiles. The soil sampling and analysis described in this report were performed to comply with the current Tri-Regional Water Quality Control Board Guidelines.

SITE DESCRIPTION

The site was occupied by a Chevron Service Station/ Car Wash. The former UGST complex was located west of the service station building (Figure 1) consisting of three 10,000 gallon single walled fiberglass UGST's. The tanks contained regular unleaded gasoline, unleaded plus and supreme unleaded gasoline. Underground Waste Water Reclaim Tanks were located north of the service station building. An older set of tanks were previously removed from the east side of the property (Figure 1). This older set of UGST's were associated with pump islands located at the north-east end of the property.

UGST REMOVAL ACTIVITIES

The three fiberglass UGST's and associated lines were removed on March 10, 1993. UGST removal was witnessed by Edward Laudani, Deputy Fire Marshal of the Eden Consolidated Fire Protection District. Also Present was Scott Seery, Senior Hazardous Materials Specialist from Alameda County Department of Environmental Health, Kenneth Kan and Gordon Johnson from Chevron.

The product lines had no visible holes or leaks. Additional product lines traveling north and then east were discovered and removed during the UGST removal. Upon the approval of Scott Serry, approximately 20 feet of this piping was temporarily left in place beneath the high voltage electric box located on the northern boundary

of the site (Figure 2). The piping was removed following the removal of the high voltage box on March 24, 1993 and the surrounding soil was also removed during over-excavation.

SOIL AND WATER SAMPLING

Soil samples were collected from the excavator bucket by removing the top few inches of soil and pushing a clean, six-inch-long (two inches in diameter) brass sample tube into the soil until completely full. The ends of the tubes were covered with teflon tape and sealed with plastic end caps. Water samples were collected from the excavation with a teflon bailer which was used to fill three laboratory supplied 40ml VOA's and one liter amber glass bottle. The samples were then labeled, placed in a cooler with frozen blue ice, entered on a Chain-of Custody form and transported to Superior Precision Analytical in San Francisco, a State-certified laboratory.

UGST Excavation Sampling

Soil samples SW, WN, ES, NE, were collected from the sidewalls of the excavation at 6 feet below grade, SE, EN, WS at 9 feet below grade and NW at 8 feet below grade. Water sample H2O-Pit was collected at 10 feet below grade, static water level in the excavation. Sample locations are shown in Figure 2 and laboratory analytical results are summarized in Table A.

Pipe Trench Sampling

Trenches were excavated to expose and remove the underground product piping extending from the UGST complex to the service islands (Figure 2). Pipeline samples were collected from the soil beneath the piping runs at the following depths: P-1, P-2, P-3, P-4 at 2.5 feet below grade, P-5, P-6, P-7, P-8 at 3 feet below grade, P-9, P-11 at 5 feet below grade, P-10 at 4.5 feet below grade, P-12 at 6 feet below grade, and V-1 at 2 feet below grade. Samples were collected by pushing a clean 2" x 6" brass tube into the bottom of the trench until completely filled, and then covering the ends with teflon tape, and sealing the tubes with plastic end caps. Laboratory analytical results are summarized in Table A.

Stockpile Sampling

Soil stockpiles generated from the UGST's and product line removal were sampled prior to covering with visqueen. Four soil samples were collected for approximately every 100 cubic yards of excavated soil. These four samples were composited in the laboratory and analyzed as one sample. These samples were collected by removing the top 6 to 12 inches of soil, then pushing a sample tube into the soil until completely full. The samples were sealed, labeled and handled as described above. The soil stockpiles were covered with plastic sheeting pending the laboratory analytical results. Composite soil sample designations are SP-1 A-D through SP-4 A-D from stockpiles resulting from activities around the fuel UGST complex and piping (Table C).

Underground Waste Water Reclaim Tank Removal Activities

The underground waste water reclaim tanks (WWRT's) associated with the former car wash were removed on March 15, 1993. WWRT removal was witnessed by Scott Seery, Senior Hazardous Materials Specialist from Alameda County Department of Environmental Health.

Samples collected next to the bottom of the WWRT's and their depths were: WWR-1-9' and WWR-2-9', and samples collected from under the bottom of the tanks were, WWR-3-12' and WWR-4-12' (Figure 2). The laboratory analytical results are summarized in Table A. Stockpile samples were also collected from the excavated material (SP-WWR-1A-D AND SP-WWR-2A-D).

EXCAVATION/REMEDIATION ACTIVITIES

Excavation limits of the final over-excavation and sample locations are illustrated in Figure 3. During excavation, Touchstone Developments collected soil samples from the bottom as well as various depths from the side walls to determine the effectiveness of the excavation and to characterize the soils left in place, these samples can be distinguished by the letters "OX" which precedes the sample number and the depth. Final excavation limits and sidewall samples are illustrated in Figure 4. The north and west sides of the excavation were limited by property boundaries and the south and east sides were determined by acceptable hydrocarbon levels and/or property boundaries. Sample analysis results for samples collected during over-excavation are provided in Table B. Final depth of the excavation ranged from 11 to 15 feet.

Throughout the excavation; electrical conduits, concrete slabs, debris, and various piping was discovered at various depths. These items, many of which were associated with previous development, were removed during the over-excavation process.

Groundwater

Groundwater at the subject site was static at approximately 9 to 12 feet below grade, depending where on the site the measurement is taken. There is an elevation change of approximately +3 feet from the west to the east property line. (See Figure 3) The final depth of excavation, as noted previously, extended below static groundwater depth to remove contaminated soils in this area.

Stockpile Sampling and Disposition

Soil removed and stockpiled was sampled at a frequency of four samples composited into one per 100 cubic yards (See Table C). The stockpiled soil was transported and disposed of at Redwood Landfill, Inc. in Novato, California. Transportation was performed by STAMCO Trucking of San Martine. A total of approximately 7500 cubic yards was excavated and disposed.

TABLE A: UGST/Piping and Waste Water Reclaim Tank Sampling Results

Analytical Results in Parts Per Million (ppm) Unless Noted

UGST SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Lead
H2O-Pit	3-10-93	Superior	3900*	180*	110*	170*	380*	ND
SE-9'	3-10-93	Superior	ND	ND	ND	ND	ND	NA
SW-6'	3-10-93	Superior	ND	ND	ND	ND	ND	NA
WS-9'	3-10-93	Superior	ND	ND	ND	ND	ND	NA
ES-6'	3-10-93	Superior	ND	ND	ND	ND	ND	NA
EN-9'	3-10-93	Superior	ND	ND	ND	.014	.024	NA
NE-6'	3-10-93	Superior	430	.055	.64	7.7	33	NA
NW-8'	3-10-93	Superior	620	.15	.75	11	53	NA
WN-6'	3-10-93	Superior	240	ND	.57	4.9	4.0	NA

*left
in
place*

PIPE TRENCH SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Lead
V-1	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-1	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-2	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-3	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-4	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-5	3-10-93	Superior	ND	ND	ND	ND	ND	NA
P-6	3-10-93	Superior	ND	.020	.020	ND	ND	NA
P-7	3-10-93	Superior	ND	ND	.018	ND	.019	NA
P-8	3-10-93	Superior	14	.39	2.3	.32	1.8	ND
P-9-5'	3-10-93	Superior	1.5	.074	.007	.007	.011	7
P-10-4.5'	3-10-93	Superior	720	2.3	17	9	49	6
P-11-5'	3-10-93	Superior	3.0	.079	.01	.025	.03	6
P-12-6'	3-10-93	Superior	1.6	ND	.011	.036	.007	6

P-10-6-12

WASTE WATER RECLAIM TANK SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Oil and Grease
WWR-1-9'	3-15-93	Superior	8	ND	.019	.078	.36	ND
WWR-2-9'	3-15-93	Superior	230	ND	.17	2.2	4.5	ND
WWR-3-12'	3-15-93	Superior	ND	ND	ND	ND	ND	ND
WWR-4-12'	3-15-93	Superior	ND	ND	ND	ND	ND	ND
SP-WWR-1A-D	3-15-93	Superior	28	ND	ND	.17	.96	ND
SP-WWR-2A-D	3-15-93	Superior	17	ND	.023	.057	.38	ND

Sample ID	Date Sampled	Laboratory	8010	TPH as Diesel	Cadmium	Chromium	Lead	Zinc	Nickel
WWR-1-9'	3-15-93	Superior	ND	ND	ND	28	10	48	29
WWR-2-9'	3-15-93	Superior	ND	ND	ND	31	5	100	31
WWR-3-12'	3-15-93	Superior	ND	ND	ND	26	5	41	32
WWR-4-12'	3-15-93	Superior	ND	ND	ND	33	6	46	28
SP-WWR-1A-D	3-15-93	Superior	ND	ND	ND	31	12	49	30
SP-WWR-2A-D	3-15-93	Superior	ND	ND	ND	29	10	61	32

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	TPH as Diesel
SP-WWR-1A-D	3-15-93	Superior	770*	3.3*	1.5*	27*	150*	ND
SP-WWR-2A-D	3-15-93	Superior	200*	2.9*	.8*	1.6*	13*	ND

TPH as Gasoline = Total petroleum Hydrocarbons calculated as gasoline
 TPH as Diesel = Total petroleum Hydrocarbons calculated as diesel
 ND = Not Detected at or above the laboratory detection limit
 NA = Not Analyzed
 * = Results shown in parts per billion (ppb)

Upon approval of Scott Seery, Senior Hazardous Materials Specialist from Alameda County Department of Environmental Health, excavated that were suspected to be free of contamination were segregated and sampled at a frequency of four samples composited into one per 100 cubic yards. After analysis showed no signs of contamination (Table D), approximately 800 cubic yards was used as backfill material and upon the approval of Tom Peacock of Alameda County Department of Environmental Health approximately 500 cubic yards was transported off-site and used as fill material. Additional backfill material used consisted of 2" drain rock in the lower elevations where water was present. Geotextile fabric was placed on the drain rock and class II aggregate was used to bring the excavation to grade. Compaction tests were performed at -3 feet to a minimum of 90% and at final grade to a minimum of 95%. The entire site was left graded with class II aggregate.

TABLE B: Over-excavation Sampling Results

Analytical Results in Parts Per Million (ppm) Unless Noted

UGST SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Oil & Grease	TPH/D
OX-1-6'	3-19-93	Superior	340	ND	.33	4.4	15	NA	NA
OX-2-9'	3-19-93	Superior	97	ND	ND	1.8	9	NA	NA
OX-3-11'	3-22-93	Superior	ND	.026	ND	.006	ND	NA	NA
OX-4-11'	3-22-93	Superior	11	.38	.30	.31	1	NA	NA
OX-5-5'	3-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-6-10.5'	3-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-7-7'	3-22-93	Superior	11	ND	.045	ND	.083	NA	NA
OX-8-2'	3-25-93	Superior	4	.010	.006	.031	.36	NA	NA
OX-9-7'	3-25-93	Superior	990	ND	2.1	8	43	ND	NA
OX-10-8'	3-26-93	Superior	110	ND	.14	.39	1.3	NA	NA
OX-11-13'	3-26-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-12-9'	3-26-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-13-13'	3-30-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-14-9'	4-02-93	Superior	340	ND	.18	5.8	28	NA	NA
OX-15-5'	4-02-93	Superior	ND	ND	.008	ND	ND	ND	2
OX-16-5'	4-07-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-17-10'	4-07-93	Superior	290	ND	.65	4.6	21	NA	NA
OX-18-15'	4-09-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-19-8'	4-09-93	Superior	760	.5	4	17	76	NA	NA
OX-20-10'	4-09-93	Superior	74	.032	.18	2.2	1.8	NA	NA
OX-21-12'	4-09-93	Superior	850	2.6	14	17	80	NA	NA
OX-22-15'	4-19-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-23-8'	4-19-93	Superior	160	ND	.29	2.2	4.2	NA	NA
OX-24-13'	4-19-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-25-10'	4-19-93	Superior	5100	3.9	6.6	77	360	NA	NA
OX-26-11'	4-20-93	Superior	510	.59	3.6	9.7	51	NA	NA
OX-27-11'	4-20-93	Superior	310	.3	.98	4.9	18	NA	NA
OX-28-14'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-29-13'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-30-10'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-31-13'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-32-10'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-33-13'	4-22-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-34-8'	4-28-93	Superior	89	ND	.15	1.5	3.1	NA	NA
OX-35-11'	4-28-93	Superior	8	ND	.011	.15	.31	NA	NA
OX-36-8'	4-28-93	Superior	18	ND	.065	.34	.86	NA	NA
OX-37-11'	4-28-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-38-6'	4-28-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-39-4'	4-30-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-40-8'	4-30-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-41-11'	4-30-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-42-14'	4-30-93	Superior	ND	ND	ND	ND	ND	NA	NA
OX-44-8'	5-03-93	Superior	ND	ND	ND	ND	ND	NA	NA
T-1-13'	4-20-93	Superior	1600	.98	18	34	140	NA	NA
OX-15-5'	4-02-93	Superior	8010	Cd	Cr	Pb	Zn	Ni	8270(2-Methylnapthalene)
			ND	ND	22	6	39	21	280

TPH as Gasoline = Total petroleum Hydrocarbons calculated as gasoline

TPH as Diesel = Total petroleum Hydrocarbons calculated as diesel

ND = Not Detected at or above the laboratory detection limit

NA = Not Analyzed

* = Results shown in parts per billion (ppb)

TABLE C: Summary of Stockpile Sample Results

Analytic Results in Parts Per Million (ppm) Unless Noted

STOCKPILE SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Organic Lead
SP-1A-D	3-10-93	Superior	86	.051	.2	1.4	4	ND
SP-2A-D	3-10-93	Superior	27	ND	.14	.14	.43	NA
SP-3A-D	3-10-93	Superior	ND	ND	ND	ND	ND	NA
SP-4A-D	3-10-93	Superior	4	.024	.21	.06	.47	NA
SP-5A-D	3-15-93	Superior	ND	ND	ND	ND	ND	NA
SP-6A-D	3-19-93	Superior	8.6	ND	.17	.19	2.1	NA
SP-7A-D	3-19-93	Superior	39	ND	.21	.38	2.1	NA
SP-8A-D	3-19-93	Superior	42	ND	.19	.4	2.4	NA
SP-9A-D	3-19-93	Superior	47	ND	.42	.58	3.3	NA
SP-10A-D	3-19-93	Superior	66	ND	.18	.67	3.1	NA
SP-11A-D	3-26-93	Superior	ND	ND	ND	ND	ND	NA
SP-12A-D	3-26-93	Superior	4	ND	ND	.033	.23	NA
SP-13A-D	3-26-93	Superior	32	ND	.061	.11	.83	NA
SP-14A-D	3-26-93	Superior	21	ND	.39	.070	.49	NA
SP-15A-D	3-26-93	Superior	43	ND	.13	.35	2	NA
SP-16A-D	3-26-93	Superior	100	ND	.66	1.4	6.6	NA
SP-17A-D	3-26-93	Superior	42	.091	.087	.48	2.5	NA
SP-18(A-D)	3-30-93	Superior	12	ND	ND	.025	.2	NA
SP19(A-D)	3-30-93	Superior	31	ND	.05	.09	.61	NA
SP-20(A-D)	3-30-93	Superior	93	ND	.17	.21	2.3	NA
SP-21(A-D)	3-30-93	Superior	44	ND	.13	.36	2.3	NA
SP-22(A-D)	3-30-93	Superior	34	ND	.05	.12	1	NA
SP-23(A-D)	3-30-93	Superior	120	ND	.48	2	9.9	NA
SP-24(A-D)	3-30-93	Superior	24	ND	.009	.16	1.5	NA
SP-25(A-D)	3-30-93	Superior	33	ND	.056	.17	1.3	NA
SP-18A-D	4-02-93	Superior	24	ND	ND	.089	.37	NA
SP19A-D	4-02-93	Superior	200	ND	.17	.33	5.4	NA
SP-20A-D	4-02-93	Superior	45	ND	.14	.095	1.2	NA
SP-21A-D	4-02-93	Superior	190	ND	.13	.36	11	NA
SP-22A-D	4-02-93	Superior	94	ND	.54	.23	2.7	NA
SP-23A-D	4-02-93	Superior	120	ND	.28	.2	3.4	NA
SP-24A-D	4-05-93	Superior	30	ND	.064	.74	.53	NA
SP-25A-D	4-05-93	Superior	22	ND	.065	.011	.095	NA
SP-26A-D	4-06-93	Superior	89	.12	.032	.92	5.5	NA
SP-27A-D	4-06-93	Superior	38	.058	.044	ND	2.2	NA
SP-28A-D	4-06-93	Superior	120	.084	.68	1.5	8.4	NA
SP-29A-D	4-06-93	Superior	51	.054	.072	.16	1.7	NA
SP-30A-D	4-06-93	Superior	56	.058	.038	.39	1.2	NA
SP-31A-D	4-07-93	Superior	120	ND	.54	1.1	6.1	NA
SP-32A-D	4-07-93	Superior	81	ND	.3	.74	4	NA
SP-33A-D	4-07-93	Superior	30	ND	.14	.29	1.5	NA
SP-34A-D	4-07-93	Superior	130	ND	.64	1.5	7.6	NA
SP-35A-D	4-07-93	Superior	150	.035	.96	1.5	7.9	NA
SP-36A-D	4-23-93	Superior	13	.029	.08	.07	.52	NA
SP-37A-D	4-23-93	Superior	39	.086	.062	.14	1.5	NA
SP-38A-D	4-23-93	Superior	15	.018	.052	.061	.98	NA
SP-39A-D	4-23-93	Superior	18	.032	.099	.12	1.1	NA
SP-40A-D	4-23-93	Superior	30	.062	.062	.064	1.1	NA
SP-41A-D	4-23-93	Superior	72	.15	.18	.5	3	NA
SP-42A-D	4-23-93	Superior	56	.13	.12	.23	2	NA
SP-43A-D	4-23-93	Superior	49	.11	.19	.33	2.7	NA
SP-44A-D	4-23-93	Superior	14	.042	.053	.031	.22	NA
SP-45A-D	4-23-93	Superior	53	ND	.096	.19	1.3	NA
SP-46A-D	4-29-93	Superior	2	ND	.008	.008	.045	NA
SP-47A-D	4-29-93	Superior	1	ND	.006	ND	.024	NA
SP-48A-D	4-29-93	Superior	2	ND	.007	.007	.064	NA
SP-49A-D	4-29-93	Superior	5	ND	.018	.012	.069	NA
SP-50A-D	4-29-93	Superior	4	ND	.012	.007	.046	NA
SP-51A-D	4-29-93	Superior	6	ND	.052	.062	.36	NA
SP-52A-D	4-29-93	Superior	10	ND	.031	.02	.18	NA
SP-53A-D	4-30-93	Superior	1	ND	.01	ND	ND	NA
SP-54A-D	4-30-93	Superior	ND	ND	ND	ND	.016	NA
SP-55A-D	4-30-93	Superior	1	ND	ND	.011	.063	NA
WOSP-1A-D	4-01-93	Superior	ND	ND	ND	ND	ND	NA
			TPH@D	TOG	8010	8270	Ca Cr Pb Zn Ni	
WOSP-1A-D	4-01-93	Superior	ND	ND	ND	ND	ND 33 8 50 27	

TABLE C: Summary of Stockpile Sample Results (continued)
Analytic Results in Parts Per Million (ppm) Unless Noted

STOCKPILE SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	Organic Lead
SP-56A-D	5-03-93	Superior	3	ND	.027	ND	ND	NA
SP-57A-D	5-04-93	Superior	1	ND	ND	ND	ND	NA
SP-58A-D	5-04-93	Superior	ND	ND	ND	ND	ND	NA
BSP-1A-D	4-09-93	Superior	14	ND	ND	ND	ND	NA
BSP-2A-D	4-09-93	Superior	70	ND	.025	.067	.36	NA
BSP-3A-D	4-09-93	Superior	80	ND	.67	.96	5	NA
R-1A-D	4-09-93	Superior	13	ND	ND	ND	.23	NA
R-2A-D	4-09-93	Superior	10	ND	.026	.009	.12	NA
R-3A-D	4-09-93	Superior	12	ND	ND	ND	ND	NA
R-4A-D	4-09-93	Superior	24	ND	.039	.074	.77	NA
RSP-4A-D	3-26-93	Superior	14	ND	.049	.05	.41	NA
RSP-5A-D	3-26-93	Superior	22	ND	.049	.05	.41	NA
RSP-6A-D	3-26-93	Superior	20	ND	.066	.056	.39	NA
RSP-7A-D	3-26-93	Superior	5	ND	ND	.024	.19	NA
RSP-8A-D	3-26-93	Superior	4.1	ND	.01	.006	.053	NA
RSP-9A-D	3-26-93	Superior	7.3	ND	.011	.036	.25	NA

R-1A-D thru R-4A-D represent resampling of soil that were not accepted by Redwood Landfill because of high TPH as Gasoline levels

TOG = Total Oil and Grease

TPH-gas = Total petroleum Hydrocarbons calculated as gasoline

ND = Not Detected at or above the laboratory detection limit

NA = Not Analyzed

ppb = parts per billion

* = Diesel range concentration reported. The pattern of peaks observed in the chromatogram shows hydrocarbons heavier than diesel.

TABLE D: Summary of Stockpile Sample Results
 Analytic Results in Parts Per Million (ppm) Unless Noted

STOCKPILE SAMPLE RESULTS

Sample ID	Date Sampled	Laboratory	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes
CSP-1A-D	3-24-93	Superior	ND	ND	ND	.006	ND
CSP-2A-D	3-24-93	Superior	ND	ND	ND	ND	ND
CSP-3A-D	3-24-93	Superior	ND	ND	ND	ND	ND
CSP-4A-D	4-13-93	Superior	ND	ND	ND	ND	ND
CSP-5A-D	4-13-93	Superior	ND	ND	ND	ND	ND
CSP-6A-D	4-13-93	Superior	ND	ND	ND	ND	ND
CSP-7A-D	5-03-93	Superior	ND	ND	ND	ND	ND
CSP-8A-D	5-03-93	Superior	ND	ND	ND	ND	ND
CSP-9A-D	5-03-93	Superior	ND	ND	ND	ND	ND
CSP-10A-D	5-03-93	Superior	ND	ND	ND	ND	ND
CSP-11A-D	5-04-93	Superior	ND	ND	ND	ND	ND
CSP-12A-D	5-04-93	Superior	ND	ND	ND	ND	ND

TOG = Total Oil and Grease

TPH-gas = Total petroleum Hydrocarbons calculated as gasoline

ND = Not Detected at or above the laboratory detection limit

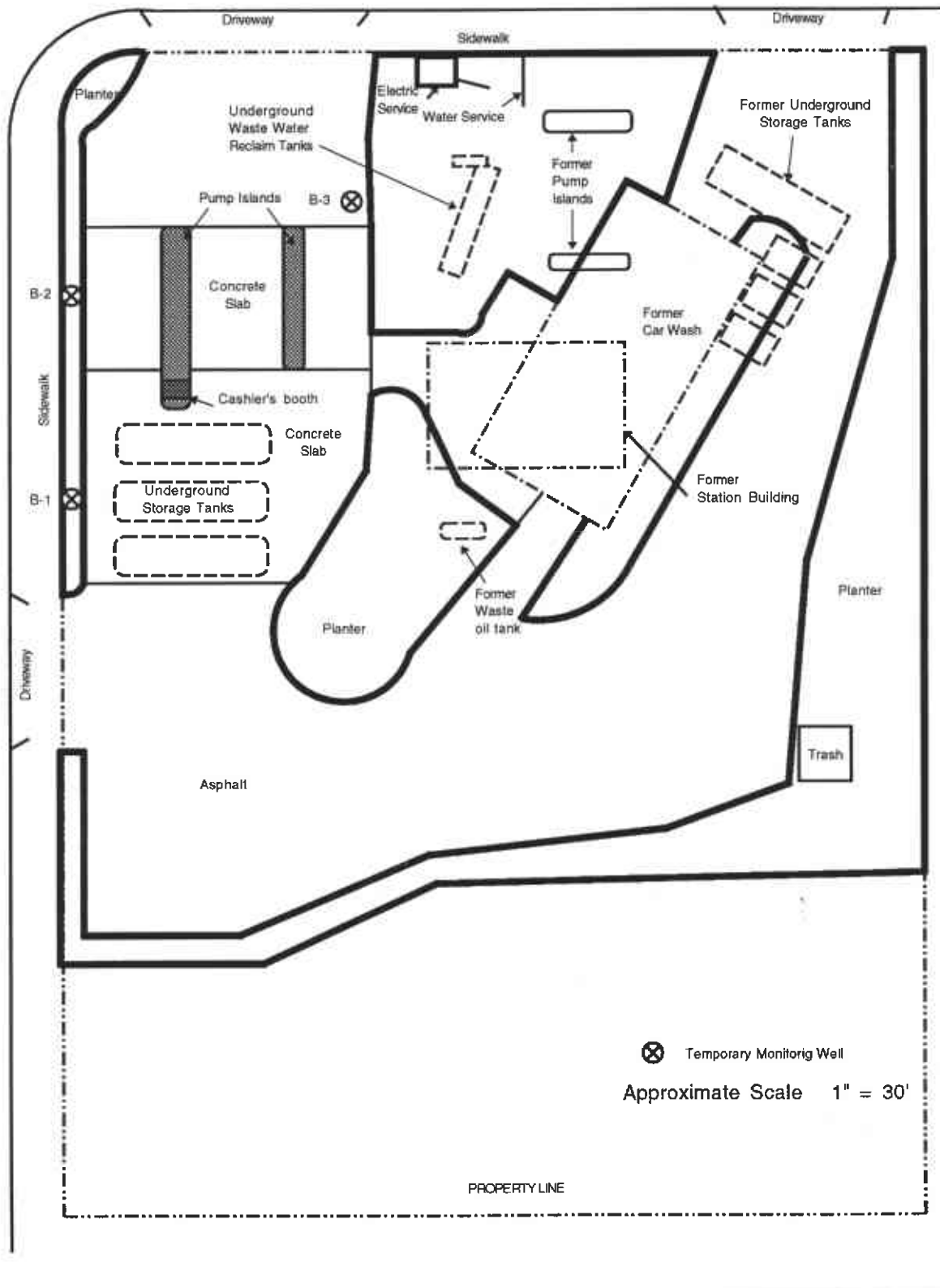
NA = Not Analyzed

ppb = parts per billion

* = Diesel range concentration reported. The pattern of peaks observed in the chromatogram shows hydrocarbons heavier than diesel.

CASTRO VALLEY BOULEVARD

WILBEAM AVENUE



⊗ Temporary Monitoring Well

Approximate Scale 1" = 30'

PROPERTY LINE



**Touchstone
Developments**
Environmental Management

Site Map

Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

Figure 1

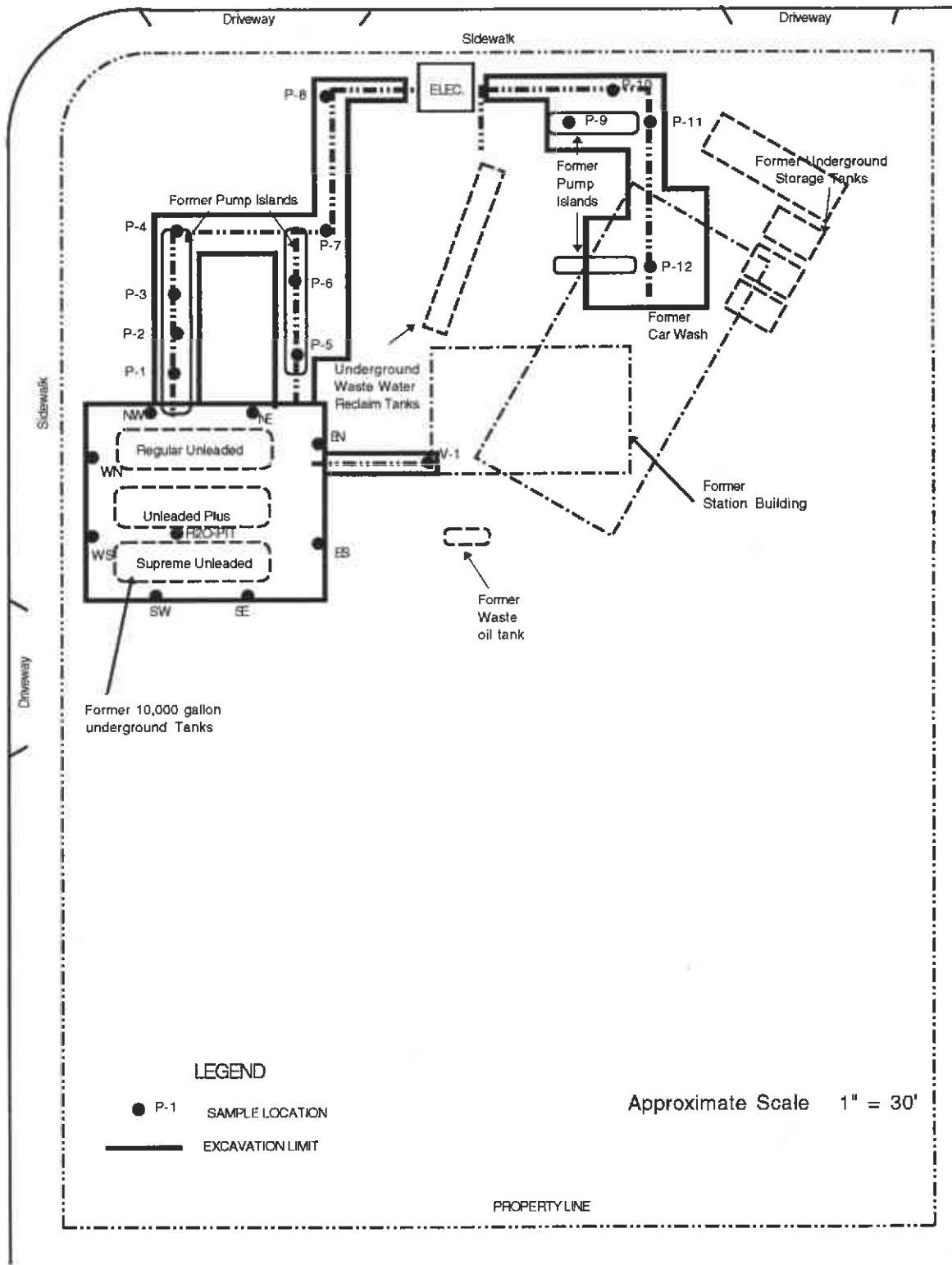
02-18-93

mjt

Project # 4930-1

CASTRO VALLEY BOULEVARD

WILBEAM AVENUE



LEGEND

- P-1 SAMPLE LOCATION
- EXCAVATION LIMIT

Approximate Scale 1" = 30'

PROPERTY LINE



**Touchstone
Developments**
Environmental Management

UGST & Pipeline Sample Location Map
Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

Figure 2

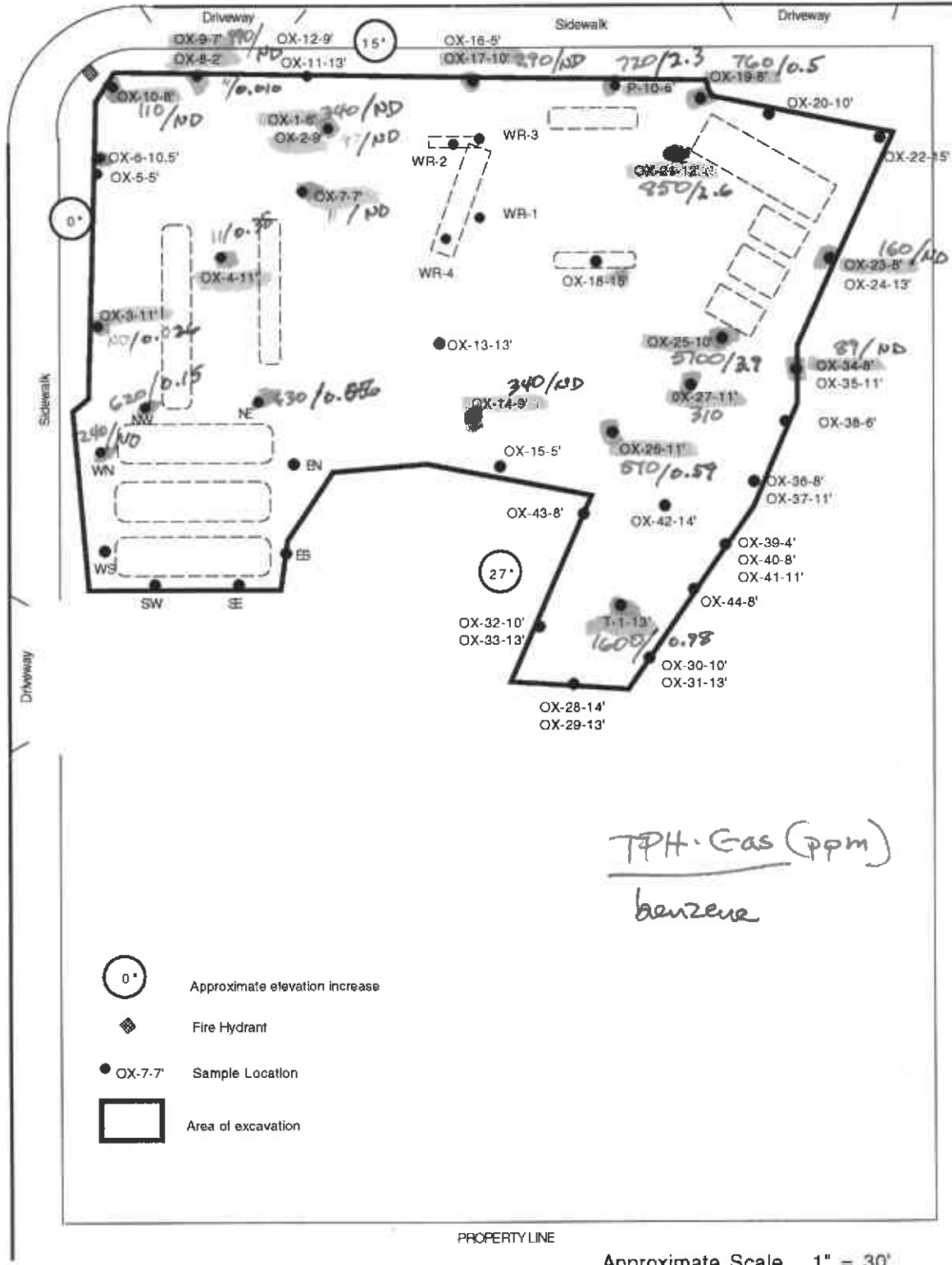
03-11-93

mjt

Project # 4930-1

CASTRO VALLEY BOULEVARD

WILBEAM AVENUE



TPH - Gas (ppm)
benzene

- 0" Approximate elevation increase
- ◆ Fire Hydrant
- OX-7-7' Sample Location
- Area of excavation



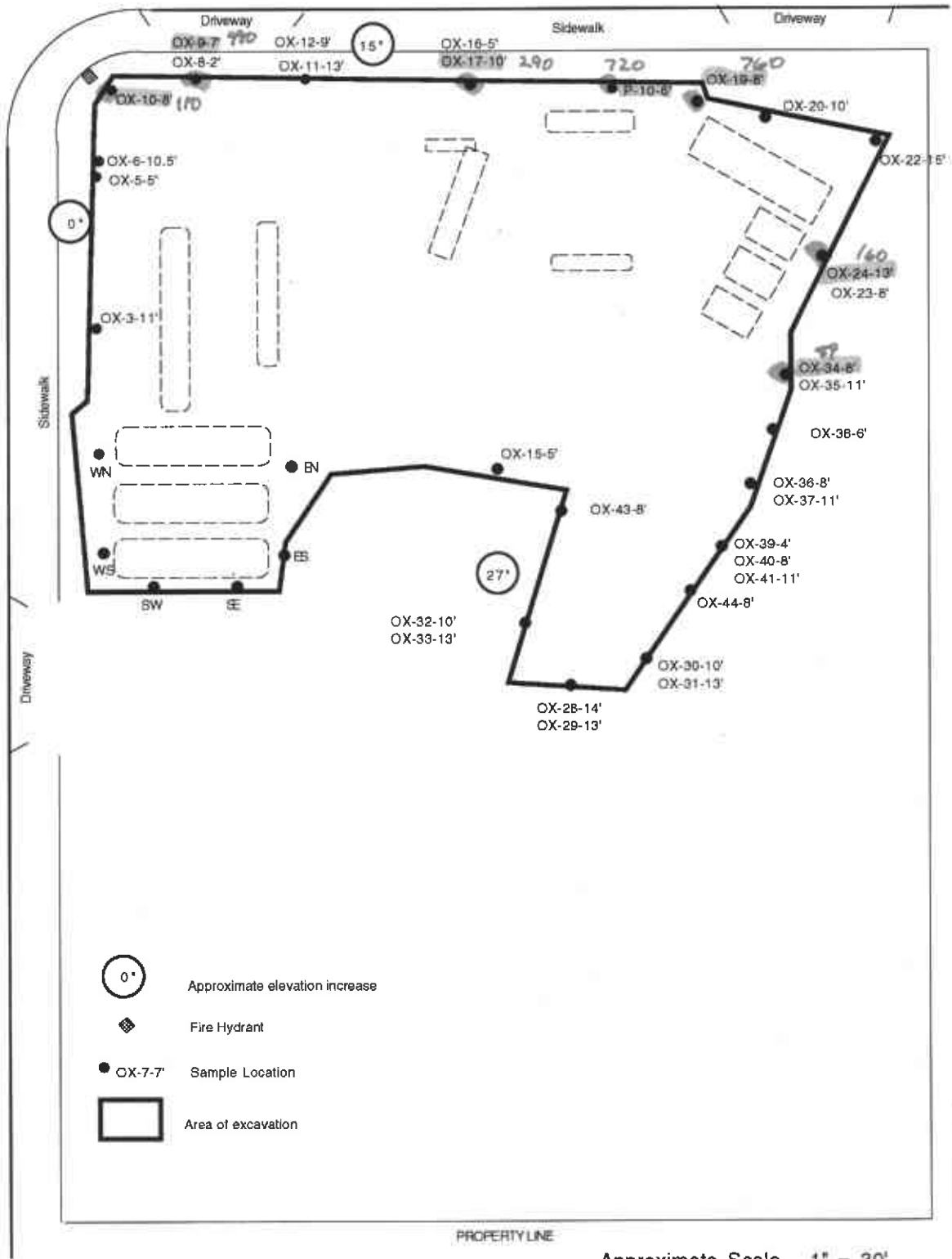
Over-excavation
Sample Location Map
 Chevron Service Station No. 9-4930
 3369 Castro Valley Boulevard
 Castro Valley, California

Figure 3	
05-10-93	mjt
Project # 4930-2	



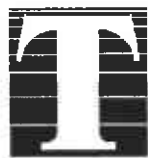
CASTRO VALLEY BOULEVARD

WILBEAM AVENUE



- Approximate elevation increase
- Fire Hydrant
- Sample Location
- Area of excavation

Approximate Scale 1" = 30'



**Touchstone
Developments**
Environmental Management

Sidewalk
Sample Location Map
 Chevron Service Station No. 9-4930
 3369 Castro Valley Boulevard
 Castro Valley, California

Figure 4

05-12-93 | mjt

Project # 4930-2

Appendix A













Appendix B



PROPOSED SOIL EXCAVATION AND REMEDIATION
WORK PLAN

Former Chevron Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

March 15, 1993



**Touchstone
Developments**
Environmental Management

March 15, 1993

Chevron U.S.A.
2410 Camino Ramon
San Ramon, California 94583

Attention: Kenneth Kan

Reference: Proposed Soil Excavation/Remediation Work Plan
Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

Gentlemen:

INTRODUCTION

This proposed work plan has been prepared by Touchstone Developments (TD) at the request of Chevron U.S.A. for the former Chevron station at the above referenced location (figure 1). The purpose of this work plan is to describe sampling activities associated with excavation and remediation of hydrocarbon contaminated soil. Soil sampling activities performed during recent underground storage tank (UST) removal activities indicate that hydrocarbon contamination is present in the vicinity of the former UST and product line area.

PROPOSED SCOPE OF WORK

Soils will be excavated from the hydrocarbon-impacted areas identified in the vicinity of the former north east pump island and the former underground fuel tank complex that were removed on March 10, 1993 (figure 2). Excavation will continue vertically and laterally until at least one of the following is/are encountered:

- * First occurrence of groundwater
- * Practical limits of the excavation equipment
- * Structural integrity of nearby buildings, utilities, or sidewalk would be jeopardized
- * Chemical analysis indicates that only acceptable concentrations of petroleum hydrocarbons remain
- * Property Boundaries
- * Contamination is not limited in extent

Soil samples will be collected from the bottom and sidewalls of the excavation for approximately every 15 feet by 15 feet area of sidewall and in areas of suspected contamination to verify the effectiveness of the excavation activities. If

excavation continues to groundwater then sidewall samples at the water interface will be collected, and a water sample collected.

Soil Sampling and Analysis

Soil samples will be collected in clean 6-inch-long brass tubes (2 inch diameter), covered at both ends with aluminum foil or teflon tape and sealed with plastic end caps. The soil samples will be labeled, entered on a Chain-of-Custody form, put in a cooler with frozen blue ice and transported to a State-certified analytical laboratory. The samples will be analyzed for Total Petroleum Hydrocarbons calculated as Gasoline according to EPA Method 8015 (Modified) and Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX) according to EPA Method 8020.

Excavated soils will be stockpiled on site and a soil stockpile sample will be collected for approximately every 25 cubic yards of excavated soil prior to covering with plastic. Four samples will then be composited in the laboratory for an analysis representative of approximately each 100 cubic yards of soil. Stockpile sampling will be for the purpose of waste characterization to determine the best off-site disposal and/or treatment option.

Soil Remediation and Disposal

Soil stockpiles generated from excavation activities will be disposed at the appropriate facility pending analytical results. Depending on the contaminants and their concentrations, on-site or off-site treatment of soils may be recommended, prior to disposal.

At the completion of this scope of activities, a summary report will be prepared, including field and laboratory data.

Page 3

If you have any questions, please call me at (707) 538-8818.

Touchstone Developments by,

Jeff L. Monroe
Project Manager

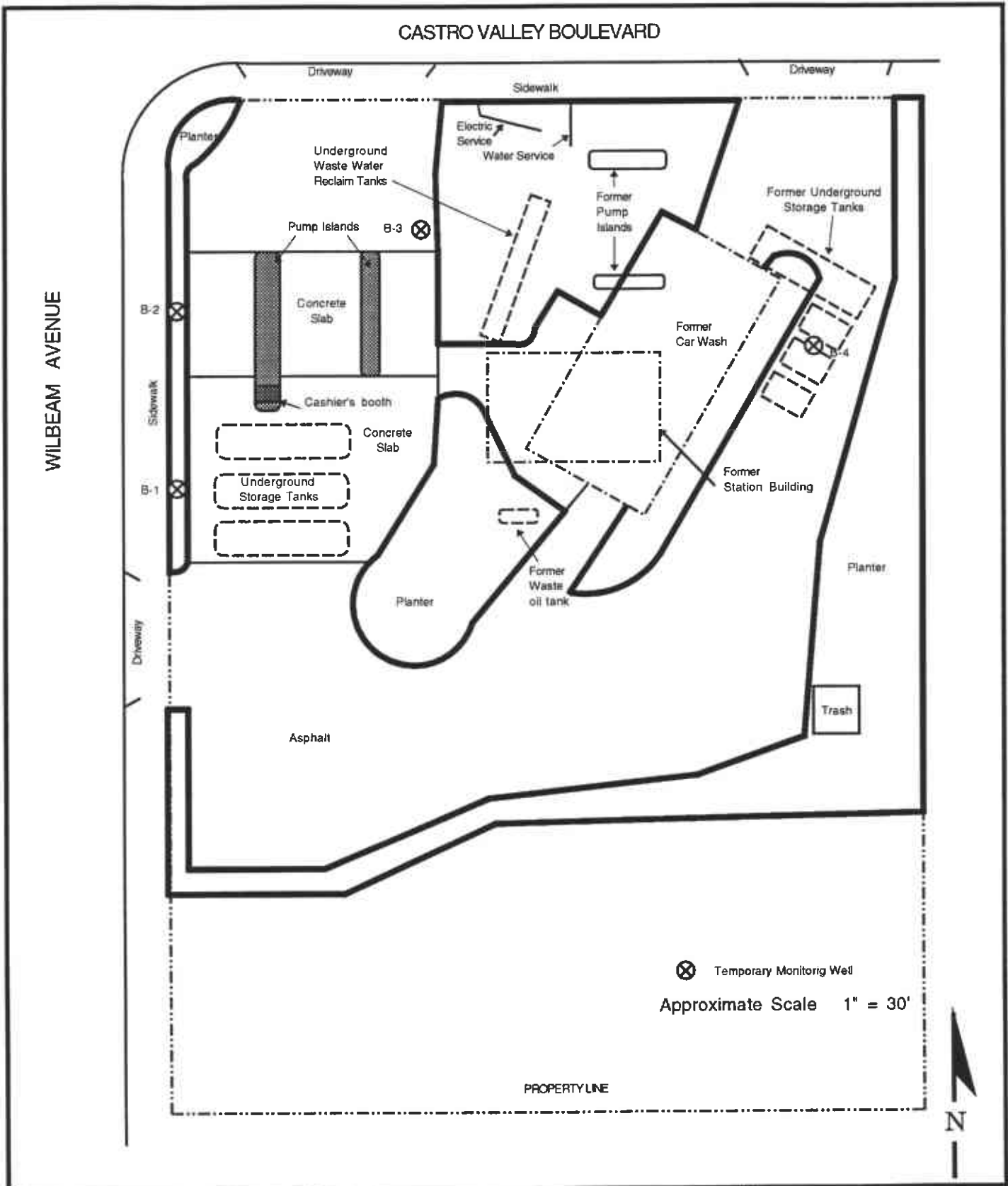
Reviewed by,

Mark Seeley
Engineering Geologist - 1014

MWS/JLM/jlm

Figure 1: Site Plan

Figure 2: Site Plan with Anticipated Excavation Limits



**Touchstone
Developments**
Environmental Management

Site Map

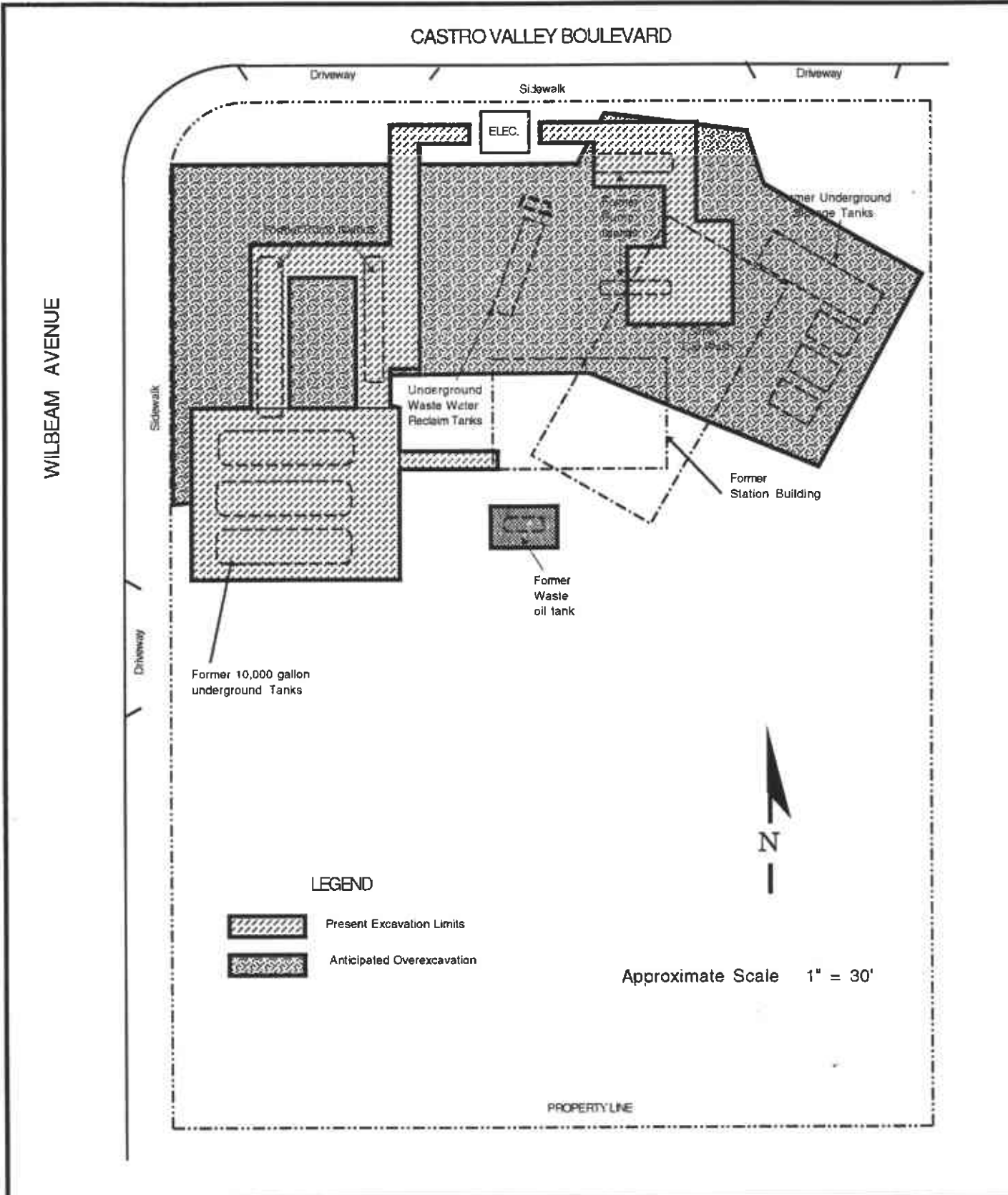
**Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California**

Figure 1

02-18-93

mit

Project # 4930-1



Anticipated Over-excavation Map
Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

Figure 2	
03-15-93	mjt
Project # 4930-1	

Appendix C



Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 03/12/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14241- 1	H2O-PIT	03/10/93	03/11/93 Water
14241- 2	V-1	03/10/93	03/11/93 Soil
14241- 3	SE-9'	03/10/93	03/11/93 Soil
14241- 4	SW-6'	03/10/93	03/11/93 Soil
14241- 5	WS-9'	03/10/93	03/11/93 Soil
14241- 6	ES-6'	03/10/93	03/11/93 Soil
14241- 7	EN-9'	03/10/93	03/11/93 Soil
14241- 8	NE-6'	03/10/93	03/11/93 Soil
14241- 9	NW-8'	03/10/93	03/11/93 Soil
14241-10	WN-6'	03/10/93	03/11/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14241- 1 14241- 2 14241- 3 14241- 4 14241- 5

Gasoline:	3900	ND<1	ND<1	ND<1	ND<1
Benzene:	180	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	110	ND<.005	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	170	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	380	ND<.005	ND<.005	ND<.005	ND<.005

Concentration: ug/L mg/kg mg/kg mg/kg mg/kg

Laboratory Number: 14241- 6 14241- 7 14241- 8 14241- 9 14241-10

Gasoline:	ND<1	ND<1	430	620	240
Benzene:	ND<.005	ND<.005	0.056	0.15	ND<.05
Toluene:	ND<.005	ND<.005	0.64	0.75	0.57
Ethyl Benzene:	ND<.005	0.014	7.7	11	4.9
Xylenes:	ND<.005	0.024	33	53	4.0

Concentration: mg/kg mg/kg mg/kg mg/kg mg/kg



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 03/12/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14241-11	P-1	03/10/93	03/11/93 Soil
14241-12	P-2	03/10/93	03/11/93 Soil
14241-13	P-3	03/10/93	03/11/93 Soil
14241-14	P-4	03/10/93	03/11/93 Soil
14241-15	P-5	03/10/93	03/11/93 Soil
14241-16	P-6	03/10/93	03/11/93 Soil
14241-17	P-7	03/10/93	03/11/93 Soil
14241-18	P-8	03/10/93	03/11/93 Soil
14241-19	P-9-5'	03/10/93	03/11/93 Soil
14241-20	P-10-4.5'	03/10/93	03/11/93 Soil

RESULTS OF ANALYSIS

Laboratory Number:	14241-11	14241-12	14241-13	14241-14	14241-15
--------------------	----------	----------	----------	----------	----------

Gasoline:	ND<1	ND<1	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	ND<.005	ND<.005	ND<.005	ND<.005	0.014

Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
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Laboratory Number:	14241-16	14241-17	14241-18	14241-19	14241-20
--------------------	----------	----------	----------	----------	----------

Gasoline:	ND<1	ND<1	14	1.5	720
Benzene:	0.020	ND<.005	0.39	0.074	2.3
Toluene:	0.020	0.018	2.3	0.007	17
Ethyl Benzene:	ND<.005	ND<.005	0.32	0.007	9.0
Xylenes:	ND<.005	0.019	1.8	0.011	49

Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
----------------	-------	-------	-------	-------	-------



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88040
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-1

DATE RECEIVED: 03/10/93
DATE REPORTED: 03/12/93
DATE SAMPLED: 03/10/93

ANALYSIS FOR TOTAL LEAD by SW-846 Method 6010

LAB #	Sample Identification	Concentration (mg/Kg) Total Lead
2	NW-8'	ND
3	P-9-5'	7
4	P-10-4.5	6
5	P-11-5'	6
6	P-12-6'	6

mg/kg - parts per million (ppm)
Limit for Lead in Soil: 5 mg/kg

QAQC Summary: MS/MSD Average Recovery : 98%
Duplicate RPD : 1%

For Richard Srna, Ph.D.


Laboratory Manager



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 03/12/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14241-21	P-11-5'	03/10/93	03/11/93 Soil
14241-22	P-12-6'	03/10/93	03/11/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14241-21 14241-22

Gasoline:	3.0	1.6
Benzene:	0.079	ND<.005
Toluene:	0.010	0.011
Ethyl Benzene:	0.025	0.036
Xylenes:	0.030	0.007
Concentration:	mg/kg	mg/kg



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88040
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-1

DATE RECEIVED: 03/10/93
DATE REPORTED: 03/12/93
DATE SAMPLED: 03/10/93

ANALYSIS FOR TOTAL LEAD by SW-846 Method 6010

LAB #	Sample Identification	Concentration (mg/L) Total Lead
1	H2O-PIT mg/L	ND

mg/L - parts per million (ppm)
Limit for Lead in Water: 0.1 mg/L

QAQC Summary: MS/MSD Average Recovery : 102%
 Duplicate RPD : 2%

For Richard Srna, Ph.D.


Laboratory Manager



CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 4 of 4
QA/QC INFORMATION
SET: 14241

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 10mg/kg
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg
Minimum Quantitation Limit in Water: 0.5ug/L

Table with 4 columns: ANALYTE, MS/MSD RECOVERY, RPD, CONTROL LIMIT. Rows include Gasoline, Benzene, Toluene, Ethyl Benzene, and Xylenes.

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

14241

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRON ALLEY BLVD
Consultant Project Number 4930-1
Consultant Name Touchstone Developments
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415 387-8796 Fax Number 415-386-8741

Chevron Contact (Name) KENNETH KUAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR ANALYTICAL
Laboratory Release Number 9028720
Samples Collected by (Name) MICHAEL TAMBRONI / Self
Collection Date 3-10-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks					
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	TOTAL LEAD	RUSH							
P-5		1	S	D	1431		YES	X																
P-6		1	S	D	1433			X																
P-7		1	S	D	1434			X																
P-8		1	S	D	1441			X																
P-9-5'		1	S	D	1650			X									X							
P-10-4.5'		1	S	D	1652			X									X							
P-11-5'		1	S	D	1655			X									X							
P-12-6'		1	S	D	1703			X									X							

RUSH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-10-93 (185)</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) 24 Hrs. <u>48 Hrs.</u> 5 Days 10 Days As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>3/10/93 (185)</u>	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 03/11/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14240- 1	SP1-A-D	03/10/93	03/10/93 Soil
14240- 2	SP2-A-D	03/10/93	03/10/93 Soil
14240- 3	SP3-A-D	03/10/93	03/10/93 Soil
14240- 4	SP4-A-D	03/10/93	03/10/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14240- 1 14240- 2 14240- 3 14240- 4

Gasoline:	86	27	ND<1	4
Benzene:	0.051	ND<0.050	ND<0.005	0.024
Toluene:	0.20	0.14	ND<0.005	0.21
Ethyl Benzene:	1.4	0.14	ND<0.005	0.060
Xylenes:	4.0	0.43	ND<0.005	0.47
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



Superior Precision Analytical, Inc.

P.O. Box 1545 ▪ Martinez, California 94553 ▪ (510) 229-1590 / fax (510) 229-0916

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88033
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-1

DATE RECEIVED: 03/10/93
DATE REPORTED: 03/11/93
DATE SAMPLED : 03/10/93


ANALYSIS FOR TOTAL ORGANIC LEAD by DHS METHOD (LUFT MANUAL)

LAB #	Sample Identification	Concentration (mg/Kg)
1	SP1-A-D	ND

mg/kg - parts per million (ppm)
Method Detection Limit for Organic Lead in SOIL : 2 mg/Kg

QAQC Summary: MS/MSD Average Recovery : 94%
Duplicate RPD : 18%

Richard Srna, Ph.D.


Laboratory Director



C E R T I F I C A T E O F A N A L Y S I S

A N A L Y S I S F O R T O T A L P E T R O L E U M H Y D R O C A R B O N S

Page 2 of 2
QA/QC INFORMATION
SET: 14240

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/98	3%	75-111
Benzene:	94/91	3%	75-114
Toluene:	100/98	2%	78-114
Ethyl Benzene:	102/102	0%	76-120
Xylenes:	92/92	0%	71-117

Richard Srna, Ph.D.

Cecilia J. Joaquin (for)
Laboratory Director



Superior Precision Analytical, Inc.

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Touchstone Developments
Attn: Jeff Monroe

Project 4930-1
Reported 03/16/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
14252- 1	SP-5A-D	03/15/93	03/16/93	Soil
14252- 2	WWR-1-9'	03/15/93	03/16/93	Soil
14252- 3	WWR-2-9'	03/15/93	03/16/93	Soil
14252- 4	WWR-3-12'	03/15/93	03/16/93	Soil
14252- 5	WWR-4-12'	03/15/93	03/16/93	Soil
14252- 6	SP-WWR-1A-D	03/15/93	03/16/93	Soil
14252- 7	SP-WWR-2A-D	03/15/93	03/16/93	Soil

RESULTS OF ANALYSIS

Laboratory Number: 14252- 1 14252- 2 14252- 3 14252- 4 14252- 5

Gasoline:	ND<1	8	230	ND<1	ND<1
Benzene:	ND<.005	ND<.003	ND<.050	ND<.005	ND<.005
Toluene:	ND<.005	0.019	0.17	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	0.078	2.2	ND<.005	ND<.005
Xylenes:	ND<.005	0.36	4.5	ND<.009	ND<.009
Diesel:	NA	ND<10	ND<10	ND<10	ND<10
Oil and Grease:	NA	ND<50	ND<50	ND<50	ND<50
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14252- 6 14252- 7

Gasoline:	28	17
Benzene:	ND<.050	ND<.005
Toluene:	ND<.050	0.023
Ethyl Benzene:	0.17	0.057
Xylenes:	0.96	0.38
Diesel:	ND<10	ND<10
Oil and Grease:	ND<50	ND<50
Concentration:	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14252

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	100/95	5%	75-111
Benzene:	84/83	1%	75-114
Toluene:	97/96	1%	78-114
Ethyl Benzene:	100/100	0%	76-120
Xylenes:	90/90	0%	71-117
Diesel:	86/81	6%	69-127
Oil and Grease:	70/74	6%	75-125

Richard Srna, Ph.D.

Greg A. Niverson (for)
Laboratory Director



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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-2
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: WWR-1-9'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

James A. Wozniak
Laboratory Director



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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-3
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: WWR-2-9'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

Richard Srna
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-4
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: WWR-3-12'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

Quynh A. Nwogwu
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-5
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: WWR-4-12'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit
ug/kg = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD =<15%
MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

Richard Srna
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-6
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: SP-WWR-1A-D

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

Richard Srna
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14252-7
CLIENT: TOUCHSTONE DEVELOPMENTS
JOB NO.: 4930-1

DATE SAMPLED: 03/15/93
DATE RECEIVED: 03/15/93
DATE ANALYZED: 03/16/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: SP-WWR-2A-D

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	20	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 92 % :MS/MSD RPD = 12 %

Richard Srna, Ph.D.

Richard A. Srna
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88087

DATE RECEIVED: 03/15/93

CLIENT: TOUCHSTONE DEVELOPMENTS

DATE REPORTED: 03/18/93

CLIENT JOB NO.: 4930-1

DATE SAMPLED : 03/15/93

ANALYSIS FOR TOTAL NICKEL by SW-846 METHOD 6010

LAB #	Sample Identification	Concentration (mg/Kg) Total Nickel
1	WWR-1-9'	29
2	WWR-2-9'	31
3	WWR-3-12'	32
4	WWR-4-12'	28
5	SP-WWR-1A-D	30
6	SP-WWR-2A-D	32

mg/kg - parts per million (ppm)

Method Detection Limit for Nickel in Soil: 10 mg/kg

QAQC Summary: MS/MSD Average Recovery : 88%
Duplicate RPD : 6%

Richard Srna, Ph.D.

Salmina Janguly (for)
Laboratory Manager



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE DEVELOPMENTS
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 03/18/93

TOTAL PETROLEUM HYDROCARBONS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Lab #	Sample Identification	Sampled	Analyzed Matrix
88087- 5	SP-WWR-1A-D	03/15/93	03/18/93 EXTRACT
88087- 6	SP-WWR-2A-D	03/15/93	03/18/93 EXTRACT

RESULTS OF ANALYSIS

Laboratory Number: 88087- 5 88087- 6

Gasoline:	770	200
Benzene:	3.3	2.9
Toluene:	1.5	0.8
Ethyl Benzene:	27	1.6
Xylenes:	150	13
Diesel:	ND<1000	ND<1000
Concentration:	ug/L	ug/L



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 88087

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per million (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Extract: 1000ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Extract: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Extract: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	100/95	5	70-130
Benzene:	88/94	6	70-130
Toluene:	91/99	8	70-130
Ethyl Benzene:	95/103	8	70-130
Xylenes:	101/101	0	70-130
Diesel:	103/102	2	75-125

Richard Srna, Ph.D.

Adomina V. Janguly (for)
Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88087
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-1

DATE RECEIVED: 03/15/93
DATE REPORTED: 03/18/93
DATE SAMPLED: 03/15/93

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD & ZINC by EPA SW-846 Method 6010

LAB #	Sample Identification	Concentration (mg/kg)			
		Cadmium	Chromium	Lead	Zinc
1	WWR-1-9'	ND	28	10	48
2	WWR-2-9'	ND	31	5	100
3	WWR-3-12'	ND	26	5	41
4	WWR-4-12'	ND	33	6	46
5	SP-WWR-1A-D	ND	31	12	49
6	SP-WWR-2A-D	ND	29	10	61

mg/kg - parts per million (ppm)

Method Detection Limit for Cadmium in Soil: 1 mg/kg
Method Detection Limit for Chromium in Soil: 5 mg/kg
Method Detection Limit for Lead in Soil: 5 mg/kg
Method Detection Limit for Zinc in Soil: 20 mg/kg

QAQC Summary: MS/MSD Average Recovery : 85%
Duplicate RPD : 6%

Richard Srna, Ph.D.

Delmina V. Sanguily (for)
Laboratory Manager

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Yes No

14252

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-1
Consultant Name TOUCHSTONE DEVELOPMENTS
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415-386-8791 (Fax Number) 415 386-8791

Chevron Contact (Name) KENNETH KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9028720
Samples Collected by (Name) MICHAEL TAMBRONI
Collection Date 3-15-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks				
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	TCUP-TPH/G	TCUP-TPH/D	TCUP-DIXE		USH			
1	SP-5A-D	4	S	C	900		YES	X														Composite in Lab	
2	WWR-1-9	1	S	D	1015		YES	X	X	X	X					X							
3	WWR-2-9	1	S	D	1056		YES	X	X	X	X					X							
4	WWR-3-12	1	S	D	1140		YES	X	X	X	X					X							
5	WWR-4-12	1	S	D	1449		YES	X	X	X	X					X							
6	SP-WWR-1A-D	4	S	C	1620		YES	X	X	X	X				X	X	X	X					Composite in Lab
7	SP-WWR-2A-D	4	S	C	1625		YES	X	X	X	X				X	X	X	X					Composite in Lab

RUSH

Please Initial: VTX
 Samples Stored in ice: ✓
 Appropriate containers: ✓
 Sample preserved: NA
 VOA's listed in headspace: NA
 Comments:

COC-3.DWG/03 01/1/93

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-15-93 1830</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>Nancy Pittott</u>	Organization _____	Date/Time <u>3/15/93 1830</u>	



Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 03/22/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14263- 1	OX-1-6'	03/19/93	03/19/93 Soil
14263- 2	OX-2-9'	03/19/93	03/19/93 Soil
14263- 3	SP-6A-D	03/19/93	03/19/93 Soil
14263- 4	SP-7A-D	03/19/93	03/19/93 Soil
14263- 5	SP-8A-D	03/19/93	03/19/93 Soil
14263- 6	SP-9A-D	03/19/93	03/19/93 Soil
14263- 7	SP-10A-D	03/19/93	03/19/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14263- 1 14263- 2 14263- 3 14263- 4 14263- 5

Gasoline:	340	97	8.6	39	42
Benzene:	ND<0.25	ND<0.10	ND<.005	ND<0.05	ND<0.05
Toluene:	0.33	ND<0.10	0.17	0.21	0.19
Ethyl Benzene:	4.4	1.8	0.19	0.38	0.40
Xylenes:	15	9.0	0.92	2.1	2.4

Concentration: mg/kg mg/kg mg/kg mg/kg mg/kg

Laboratory Number: 14263- 6 14263- 7

Gasoline:	47	66
Benzene:	ND<0.05	ND<0.05
Toluene:	0.42	0.18
Ethyl Benzene:	0.58	0.67
Xylenes:	3.3	3.1

Concentration: mg/kg mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14263

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/92	3%	75-111
Benzene:	88/89	1%	75-114
Toluene:	107/107	0%	78-114
Ethyl Benzene:	114/113	1%	76-120
Xylenes:	103/103	0%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No 10763

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE DEVELOPMENTS
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415-386-8791 (Fax Number) 415-386-8791

Chevron Contact (Name) KENNETH KAN
(Phone) 510-892-8752
Laboratory Name SUPERIOR ANALYTICAL
Laboratory Release Number 9050931
Samples Collected by (Name) MICHAEL TAMBRONI
Collection Date 3-19-93
Signature Michael J. [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks				
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (CAP or AA)								
OX-1-6'		1	S	D	1045		YES	X															
OX-2-8'		1	S	D	1051		YES	X															
SP-6A-D		4	S	C	327		YES	X															
SP-7A-D		4	S	C	340		YES	X															
SP-8A-D		4	S	C	347		YES	X															
SP-9A-D		4	S	C	353		YES	X															
SP-10A-D		4	S	C	400		YES	X															

RUSH

RUSH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-19-93 1703</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) <u>24 Hrs.</u> 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>3/19/93 1703</u>	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 03/24/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14275- 1	OX-3-11'	03/22/93	03/23/93 Soil
14275- 2	OX-4-11'	03/22/93	03/23/93 Soil
14275- 3	OX-5-5'	03/22/93	03/23/93 Soil
14275- 4	OX-6-10.5'	03/22/93	03/23/93 Soil
14275- 5	OX-7-7'	03/22/93	03/22/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14275- 1 14275- 2 14275- 3 14275- 4 14275- 5

Gasoline:	ND<1	11	ND<1	ND<1	11
Benzene:	0.026	0.38	ND<.005	ND<.005	ND<.025
Toluene:	ND<.005	0.30	ND<.005	ND<.005	0.045
Ethyl Benzene:	0.006	0.31	ND<.005	ND<.005	ND<.025
Xylenes:	ND<.015	1.0	ND<.015	ND<.015	0.083
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14275-5
CLIENT: TOUCHSTONE DEVELOPMENT
JOB NO.: 4930-2


DATE SAMPLED: 03/22/93
DATE RECEIVED: 03/22/93
DATE ANALYZED: 03/23/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: OX-7-7'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	5	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit
ug/kg = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD =<15%
MS/MSD average recovery = 90 % :MS/MSD RPD = 5 %

Richard Srna, Ph.D.

 (102) 3/24/93
Laboratory Director



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14275

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/96	1%	75-111
Benzene:	76/79	4%	75-114
Toluene:	97/100	3%	78-114
Ethyl Benzene:	106/110	4%	76-120
Xylenes:	96/100	4%	71-117

Richard Srna, Ph.D.
[Signature] 3/24/93
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No 1421

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOULSTONE DEVELOPMENTS
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415-386-8791 (Fax Number) 415-386-8791

Chevron Contact (Name) KENNETH KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) MICHAEL TAMBRONI
Collection Date 3-22-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
OX-3-11'		1	S	D	944		YES	X														
OX-4-11'		1	S	D	1000		YES	X														
OX-5-5'		1	S	D	1027		YES	X														
OX-6-105'		1	S	D	1150		YES	X														
OX-7-7'		1	S	D	1326		YES	X				X										

Please initial:
 Samples Stored in ice
 Appropriate containers
 Samples preserved
 VOA's without headspace
 Comments:

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-22-93/64</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. <input checked="" type="radio"/> 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Nancy Patton</u>		Date/Time <u>3/22/93 1A43</u>	

COC-3.DWG/03 81/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 03/26/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14293- 1	CSP-1A-D	03/24/93	03/25/93 Soil
14293- 2	CSP-2A-D	03/24/93	03/25/93 Soil
14293- 3	CSP-3A-D	03/24/93	03/25/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14293- 1 14293- 2 14293- 3

Gasoline:	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	0.006	ND<.005	ND<.005
Xylenes:	ND<.015	ND<.015	ND<.015
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14293

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

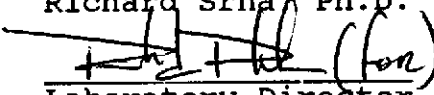
Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	82/85	4%	75-111
Benzene:	83/79	5%	75-114
Toluene:	87/84	4%	78-114
Ethyl Benzene:	90/86	5%	76-120
Xylenes:	85/82	4%	71-117

Richard Srna Ph.D.

 (for)
Laboratory Director

5/26/93



Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 03/26/93
Revised 03/29/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix		
14294- 1	SP-11A-D	03/25/93	03/26/93	Soil	
14294- 2	SP-12A-D	03/25/93	03/26/93	Soil	
14294- 3	SP-13A-D	03/25/93	03/26/93	Soil	
14294- 4	SP-14A-D	03/25/93	03/26/93	Soil	
14294- 5	SP-15A-D	03/25/93	03/26/93	Soil	
14294- 6	SP-16A-D	03/25/93	03/26/93	Soil	
14294- 7	SP-17A-D	03/25/93	03/26/93	Soil	
14294- 8	OX-8-2'	03/25/93	03/26/93	Soil	
14294- 9	OX-9-7'	03/25/93	03/26/93	Soil	

RESULTS OF ANALYSIS

Laboratory Number: 14294- 1 14294- 2 14294- 3 14294- 4 14294- 5

Gasoline:	ND<1	4	32	21	43
Benzene:	ND<.005	ND<.005	ND<.025	ND<.025	ND<.025
Toluene:	ND<.005	ND<.005	0.061	0.039	0.13
Ethyl Benzene:	ND<.005	0.033	0.11	0.070	0.35
Xylenes:	ND<.015	0.23	0.83	0.49	2.0
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14294- 6 14294- 7 14294- 8 14294- 9

Gasoline:	100	42	4	990
Benzene:	ND<.025	0.091	0.010	ND<.100
Toluene:	0.66	0.087	0.006	2.1
Ethyl Benzene:	1.4	0.48	0.031	8.0
Xylenes:	6.6	2.5	0.36	43
Oil & Grease:	NA	NA	NA	ND<50
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14294

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/94%	1	75-111
Benzene:	99/99%	0	75-114
Toluene:	104/104%	0	78-114
Ethyl Benzene:	108/109%	1	76-120
Xylenes:	98/98%	0	71-117
Oil & Grease:	82/70%	16	56-132

Richard Srna, Ph.D.

Richard Srna
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/01/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14300- 1	OX-10-8'	03/26/93	03/31/93 Soil
14300- 2	OX-11-13'	03/26/93	03/31/93 Soil
14300- 3	OX-12-9'	03/26/93	03/31/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14300- 1 14300- 2 14300- 3

Gasoline:	110	ND<1	ND<1
Benzene:	ND<.025	ND<.005	ND<.005
Toluene:	0.14	ND<.005	ND<.005
Ethyl Benzene:	0.39	ND<.005	ND<.005
Xylenes:	1.3	ND<.015	ND<.015
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14300

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	96/96	0%	75-111
Benzene:	103/100	3%	75-114
Toluene:	107/104	3%	78-114
Ethyl Benzene:	112/109	3%	76-120
Xylenes:	102/99	3%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number SS# 9-4930
 Facility Address 3369 CASTRO VALLEY BLVD
 Consultant Project Number 4930-2
 Consultant Name TOUGHSTONE DEVELOPMENTS
 Address POBOX 2554 SANTA ROSA
 Project Contact (Name) MICHAEL TAMBRONI
 (Phone) 415 386-8741 (Fax Number) 415 386-8741

Chevron Contact (Name) KENNETH KIANG
 (Phone) 510-842-8752
 Laboratory Name SUPERIOR
 Laboratory Release Number 90500931
 Samples Collected by (Name) MICHAEL TAMBRONI
 Collection Date 3-26-93
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks		
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)					
OX-10-8'		1	S	D	1045		YES	X												
OX-11-13'		1	S	D	1115		YES	X												
OX-12-9'		1	S	D	1120		YES	X												

Preserved in Vial
 Sample preserved in original container
 Sample preserved in original container
 Sample without holding
 Comments:

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-26-93 1553</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <u>5 Days</u> 10 Days As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Date/Time <u>3/26/93 4:10 P</u>	Date/Time _____	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/02/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14308- 1	OX-13-13'	03/30/93	03/31/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14308- 1

Gasoline:	ND<1
Benzene:	ND<.005
Toluene:	ND<.005
Ethyl Benzene:	ND<.005
Xylenes:	ND<.015

Concentration: mg/kg



Superior Precision Analytical, Inc.

1555 Burke, Unit I ▪ San Francisco, California 94124 ▪ (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14308

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	96/96%	0	75-111
Benzene:	103/100%	3	75-114
Toluene:	107/104%	2	78-114
Ethyl Benzene:	112/109%	2	76-120
Xylenes:	102/99%	2	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

14503

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>SS# 9-4930</u>	Chevron Contact (Name) <u>KENNETH KAN</u>
	Facility Address <u>3369 CASTRO VALLEY BLVD</u>	(Phone) <u>510-842-8752</u>
Consultant Project Number <u>4930-2</u>	Consultant Name <u>TOUCHSTONE DRVEL.</u>	Laboratory Name <u>SUPERIOR</u>
Address <u>PO BOX 2554 SANTA REEA</u>	Project Contact (Name) <u>MICHAEL TAUBRONI</u>	Laboratory Release Number <u>9050931</u>
(Phone) <u>415-386-8791</u> (Fax Number) <u>415-386-8791</u>		Samples Collected by (Name) <u>MICHAEL TAUBRONI</u>
		Collection Date <u>3-30-93</u>
		Signature <u>[Signature]</u>

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
OX-13-131		1	S	D	1205		YES	X													

Please Initial
 Samples Received
 Approved Samples
 VOA's V
 Comments

[Signature]

COC-3.DWG/05-91/WCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-30-93/722</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <input checked="" type="radio"/> 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received/For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>3/30/93</u>	

1722



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 03/31/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14307- 1	SP-18-(A-D)	03/30/93	03/30/93 Soil
14307- 2	SP-19-(A-D)	03/30/93	03/30/93 Soil
14307- 3	SP-20-(A-D)	03/30/93	03/31/93 Soil
14307- 4	SP-21-(A-D)	03/30/93	03/30/93 Soil
14307- 5	SP-22-(A-D)	03/30/93	03/30/93 Soil
14307- 6	SP-23-(A-D)	03/30/93	03/30/93 Soil
14307- 7	SP-24-(A-D)	03/30/93	03/30/93 Soil
14307- 8	SP-25-(A-D)	03/30/93	03/30/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14307- 1 14307- 2 14307- 3 14307- 4 14307- 5

Gasoline:	12	31	93	44	34
Benzene:	ND<.025	ND<.025	ND<.025 ✓	ND<.025	ND<.025
Toluene:	ND<.025	0.050	0.17	0.13	0.050
Ethyl Benzene:	0.025	0.090	0.21	0.36	0.12
Xylenes:	0.20	0.61	2.3	2.3	1.0
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14307- 6 14307- 7 14307- 8

Gasoline:	120	24	33
Benzene:	ND<.025	ND<.005	ND<.025
Toluene:	0.48	0.009	0.056
Ethyl Benzene:	2.0	0.16	0.17
Xylenes:	9.9	1.5	1.3
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14307

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	98/98%	0	75-111
Benzene:	100/98%	2	75-114
Toluene:	105/103%	2	78-114
Ethyl Benzene:	108/107%	1	76-120
Xylenes:	98/97%	1	71-117

Richard Srna, Ph.D.

Cecilia G. Joergensen
Laboratory Director



C E R T I F I C A T E O F A N A L Y S I S

A N A L Y S I S F O R T O T A L P E T R O L E U M H Y D R O C A R B O N S

Page 2 of 2
QA/QC INFORMATION
SET: 14307

NA = ANALYSIS NOT REQUESTED
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OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
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Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	98/98%	0	75-111
Benzene:	100/98%	2	75-114
Toluene:	105/103%	2	78-114
Ethyl Benzene:	108/107%	1	76-120
Xylenes:	98/97%	1	71-117

Richard Srna, Ph.D.

[Signature]
Laboratory Director

3/31/93

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number SS# 9-4930
Facility Address 3369 CASTRO VALLEY BLVD.
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE DEVEL.
Address POBOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415 386-8741 (Fax Number) 415-386-8741

Chevron Contact (Name) KENNETH KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) MICHAEL
Collection Date 3-30-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks				
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
SP-18A-D	1	4	S	C	1325		YES	X															
SP-19A-D	2	4	S	C	1337			X															
SP-20A-D	3	4	S	C	1347			X															
SP-21A-D	4	4	S	C	1402			X															
SP-22A-D	5	4	S	C	1513			X															
SP-23A-D	6	4	S	C	1534			X															
SP-24A-D	7	4	S	C	1547			X															
SP-25A-D	8	4	S	C	1555			X															

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>3-30-93/1722</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) <u>24 Hrs</u> 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>3/30/93</u>	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/08/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14317- 1	WOSP-1A-D	04/01/93	04/06/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14317- 1

Diesel:	ND<1
Oil and Grease:	ND<50
Gasoline:	ND<1
Benzene:	ND<.005
Toluene:	ND<.005
Ethyl Benzene:	ND<.005
Xylenes:	ND<.015

Concentration: mg/kg



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88232
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-2

DATE RECEIVED: 04/01/93
DATE REPORTED: 04/06/93
DATE SAMPLED: 04/01/93

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD, ZINC & NICKEL
by EPA SW-846 Method 6010

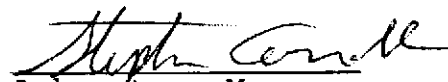
LAB #	Sample Identification	Concentration (mg/kg)				
		Cadmium	Chromium	Lead	Zinc	Nickel
1	WOSP-1A-D	ND	33	8	50	27

mg/kg - parts per million (ppm)

Method Detection Limit for Cadmium in Soil: 1 mg/kg
Method Detection Limit for Chromium in Soil: 5 mg/kg
Method Detection Limit for Lead in Soil: 5 mg/kg
Method Detection Limit for Zinc in Soil: 20 mg/kg
Method Detection Limit for Nickel in Soil: 10 mg/kg

QAQC Summary: MS/MSD Recovery Range : 98/104%
Duplicate RPD : <= 2%

Richard Srna, Ph.D.


Laboratory Manager



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2

QA/QC INFORMATION

SET: 14317

NA = ANALYSIS NOT REQUESTED

ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:

Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:

Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:

Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE

Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Diesel:	62/67	8%	75-125
Oil and Grease:	72/74	3%	63-100
Gasoline:	102/97	5%	75-111
Benzene:	94/87	8%	75-114
Toluene:	92/89	3%	78-114
Ethyl Benzene:	98/95	3%	76-120
Xylenes:	94/90	4%	71-117

Richard Srna, Ph.D.

Greg A. Newze
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14317-1
CLIENT: TOUCHSTONE DEVELOPMENT
JOB NO.: 4930-2

DATE SAMPLED: 04/01/93
DATE RECEIVED: 04/01/93
DATE ANALYZED: 04/06/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: WOSP-1A-D

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	50	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 99 % :MS/MSD RPD = 4 %

Richard Srna, Ph.D.

Oliver A. Nivogin
Laboratory Director



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory
1555 Burke St., Unit 1
San Francisco, CA 92124
Attention: Rene B.

Client Project ID: 14317, Chevron
Sample Descript: Soil, 14317-1 WOSP-1A-D
Analysis Method: EPA 8270
Lab Number: 3D16301

Sampled: Apr 1, 1993
Received: Apr 5, 1993
Extracted: Apr 8, 1993
Analyzed: Apr 9, 1993
Reported: Apr 9, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	N.D.
Fluorene.....	100	N.D.
Hexachlorobenzene.....	100	N.D.
Hexachlorobutadiene.....	100	N.D.
Hexachlorocyclopentadiene.....	100	N.D.
Hexachloroethane.....	100	N.D.
Indeno(1,2,3-cd)pyrene.....	100	N.D.
Isophorone.....	100	N.D.
2-Methylnaphthalene.....	100	N.D.
2-Methylphenol.....	100	N.D.
4-Methylphenol.....	100	N.D.
Naphthalene.....	100	N.D.
2-Nitroaniline.....	500	N.D.
3-Nitroaniline.....	500	N.D.
4-Nitroaniline.....	500	N.D.
Nitrobenzene.....	100	N.D.
2-Nitrophenol.....	100	N.D.
4-Nitrophenol.....	500	N.D.
N-Nitrosodiphenylamine.....	100	N.D.
N-Nitroso-di-N-propylamine.....	100	N.D.
Pentachlorophenol.....	500	N.D.
Phenanthrene.....	100	N.D.
Phenol.....	100	N.D.
Pyrene.....	100	N.D.
1,2,4-Trichlorobenzene.....	100	N.D.
2,4,5-Trichlorophenol.....	500	N.D.
2,4,6-Trichlorophenol.....	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Noella C. Markovich
Noella C. Markovich
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
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Superior Analytical Laboratory
1555 Burke St., Unit 1
San Francisco, CA 92124
Attention: Rene B.

Client Project ID: 14317, Chevron
Sample Descript: Soil, 14317-1 WOSP-1A-D
Analysis Method: EPA 8270
Lab Number: 3D16301

Sampled: Apr 1, 1993
Received: Apr 5, 1993
Extracted: Apr 8, 1993
Analyzed: Apr 9, 1993
Reported: Apr 9, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene.....	100	N.D.
Acenaphthylene.....	100	N.D.
Aniline.....	100	N.D.
Anthracene.....	100	N.D.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	500	N.D.
Benzo(a)anthracene.....	100	N.D.
Benzo(b)fluoranthene.....	100	N.D.
Benzo(k)fluoranthene.....	100	N.D.
Benzo(g,h,i)perylene.....	100	N.D.
Benzo(a)pyrene.....	100	N.D.
Benzyl alcohol.....	100	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.
Bis(2-ethylhexyl)phthalate.....	500	N.D.
4-Bromophenyl phenyl ether.....	100	N.D.
Butyl benzyl phthalate.....	100	N.D.
4-Chloroaniline.....	100	N.D.
2-Chloronaphthalene.....	100	N.D.
4-Chloro-3-methylphenol.....	100	N.D.
2-Chlorophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.
Chrysene.....	100	N.D.
Dibenz(a,h)anthracene.....	100	N.D.
Dibenzofuran.....	100	N.D.
Di-N-butyl phthalate.....	500	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.
2,4-Dichlorophenol.....	100	N.D.
Diethyl phthalate.....	100	N.D.
2,4-Dimethylphenol.....	100	N.D.
Dimethyl phthalate.....	100	N.D.
4,6-Dinitro-2-methylphenol.....	500	N.D.
2,4-Dinitrophenol.....	500	N.D.



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory
1555 Burke St., Unit 1
San Francisco, CA 92124
Attention: Rene B.

Client Project ID: 14317, Chevron
Matrix: Soil

QC Sample Group: 3D16301

Reported: Apr 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E.Manuel	E.Manuel	E.Manuel	E.Manuel	E.Manuel
Conc. Spiked:	50-100	50-100	50-100	50-100	50-100
Units:	ng	ng	ng	ng	ng
LCS Batch#:	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007
Date Prepared:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Date Analyzed	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93
Instrument I.D.#:	H5	H5	H5	H5	H5
LCS % Recovery:	88	73	90	81	108
Control Limits:	31-137	1114	28-89	17-109	35-142

MS/MSD					
Batch #:	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007
Date Prepared:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Date Analyzed	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93
Instrument I.D.#:	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	84	85	84	63	86
Matrix Spike Duplicate % Recovery:	82	82	82	69	112
Relative % Difference:	2.4	3.6	2.4	9.1	26

SEQUOIA ANALYTICAL

Noella C. Markovich
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory
1555 Burke St., Unit 1
San Francisco, CA 92124
Attention: Rene B.

Client Project ID: 14317, Chevron
Matrix: Soil

QC Sample Group 3D16301

Reported: Apr 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenyl
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E.Manuel	E.Manuel	E.Manuel	E.Manuel	E.Manuel	E.Manuel
Conc. Spiked:	50-100	50-100	50-100	50-100	50-100	50-100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007
Date Prepared:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Date Analyzed	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93
Instrument I.D.#:	H5	H5	H5	H5	H5	H5
LCS % Recovery:	103	97	88	98	90	104
Control Limits:	26-90	25-120	28-104	41-126	38-107	26-103

MS/MSD	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenyl
Batch #:	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007	3CE4007
Date Prepared:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Date Analyzed	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93	4/12/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	82	95	82	90	92	92
Matrix Spike Duplicate % Recovery:	105	104	92	104	86	91
Relative % Difference:	25	9.0	11	14	6.7	1.1

SEQUOIA ANALYTICAL

Noella G. Markovich
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

Fax copy of Lab Report and COC to Chevron Contact: Yes No

4/31/93

Chain-of-Custody-Record

Chevron Facility Number SEA 9-4930
 Facility Address 3369 CASTRO VALLEY BLVD
 Consultant Project Number 4930-2
 Consultant Name TOUCHSTONE DEVEL.
 Address PO BOX 2554 SANTA ROSA
 Project Contact (Name) MICHAEL TAMBRONI
 (Phone) 415-386-8791 (Fax Number) 415-386-8791

Chevron Contact (Name) KEN KAN
 (Phone) 510-842-8752
 Laboratory Name SUPERIOR SEQUOIA
 Laboratory Release Number 9050931 9159300
 Samples Collected by (Name) M. TAMBRONI
 Collection Date 4-1-93
 Signature Michael J. [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)				
WOSP-1A-D		4	S	C	130		YES	X	X	X	X					X	X		
<div style="border: 2px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>Please Initial:</p> <p>Samples stored in ice <u>Y</u></p> <p>Appropriate container <u>Y</u></p> <p>Samples analyzed <u>Y</u></p> <p>VOC's Analyzed <u>NO</u></p> <p>Comments _____</p> </div>																			

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-1-93 335</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <input checked="" type="radio"/> 5 Days 10 Days As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>4/1/93</u>	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/05/93
Reported 04/09/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14322- 1	OX-14-9'	04/02/93	04/05/93 Soil
14322- 2	OX-15-5'	04/02/93	04/05/93 Soil
14322- 3	SP-18A-D	04/02/93	04/02/93 Soil
14322- 4	SP-19A-D	04/02/93	04/02/93 Soil
14322- 5	SP-20A-D	04/02/93	04/02/93 Soil
14322- 6	SP-21A-D	04/02/93	04/02/93 Soil
14322- 7	SP-22A-D	04/02/93	04/02/93 Soil
14322- 8	SP-23A-D	04/02/93	04/02/93 Soil

RESULTS OF ANALYSIS

Laboratory Number:	14322- 1	14322- 2	14322- 3	14322- 4	14322- 5
	OX-14-9	OX-15-5			

Gasoline:	340	ND<1	24	200	45
Benzene:	ND<0.05	ND<.005	ND<.05	ND<.05	ND<.05
Toluene:	0.18	0.008	ND<.05	0.17	0.14
Ethyl Benzene:	5.8	ND<.005	0.089	0.33	0.095
Xylenes:	28	ND<.015	0.37	5.4	1.2
Diesel:	NA	2	NA	NA	NA
Oil and Grease:	NA	ND<50	NA	NA	NA
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number:	14322- 6	14322- 7	14322- 8
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Gasoline:	190	94	120
Benzene:	ND<.050	ND<.050	ND<.050
Toluene:	0.13	0.54	0.28
Ethyl Benzene:	0.36	0.23	0.20
Xylenes:	11	2.7	3.4
Diesel:	NA	NA	NA
Oil and Grease:	NA	NA	NA
Concentration:	mg/kg	mg/kg	mg/kg



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 14322-2
CLIENT: Touchstone Developments
JOB NO.: 4930-2

DATE SAMPLED: 04/02/93
DATE RECEIVED: 04/02/93
DATE ANALYZED: 04/06/93

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: OX-15-5'

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	50	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
cis-1,2-Dichloroethene	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD =<15%

MS/MSD average recovery = 99 % :MS/MSD RPD = 4 %

Richard Srna, Ph.D.

Cecilia G. Jorgensen (to)
Laboratory Director



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 88247
CLIENT: TOUCHSTONE DEVELOPMENTS
CLIENT JOB NO.: 4930-2
OX-15-5

DATE RECEIVED: 04/02/93
DATE REPORTED: 04/08/93
DATE SAMPLED: 04/02/93

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD, ZINC & NICKEL
by EPA SW-846 Method 6010

LAB #	Sample Identification	Concentration (mg/kg)				
		Cadmium	Chromium	Lead	Zinc	Nickel
1	OX-15-5	ND	22	6	39	21

mg/kg - parts per million (ppm)

Method Detection Limit for Cadmium in Soil: 1 mg/kg
Method Detection Limit for Chromium in Soil: 5 mg/kg
Method Detection Limit for Lead in Soil: 5 mg/kg
Method Detection Limit for Zinc in Soil: 20 mg/kg
Method Detection Limit for Nickel in Soil: 10 mg/kg

QAQC Summary: MS/MSD Recovery Range: 84/92%
Duplicate RPD : <= 5%

Richard Srna, Ph.D.

Steph Carroll
Laboratory Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory 1555 Burke St. Unit 1 San Francisco, CA 92124 Attention: Nancy	Client Project ID: Chapman 1488-2 Sample Descript: Red Oak-18-8 Analysis Method: EPA 8270 Lab Number: 3D16201	Sampled: Received: Apr 5, 1993 Extracted: Apr 7, 1993 Analyzed: Apr 8, 1993 Reported: Apr 8, 1993
--	--	---

SEMI-VOLATILE ORGANICS by GC/MS^E (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene.....	100	N.D.
Acenaphthylene.....	100	N.D.
Aniline.....	100	N.D.
Anthracene.....	100	N.D.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	500	N.D.
Benzo(a)anthracene.....	100	N.D.
Benzo(b)fluoranthene.....	100	N.D.
Benzo(k)fluoranthene.....	100	N.D.
Benzo(g,h,i)perylene.....	100	N.D.
Benzo(a)pyrene.....	100	N.D.
Benzyl alcohol.....	100	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.
Bis(2-ethylhexyl)phthalate.....	500	N.D.
4-Bromophenyl phenyl ether.....	100	N.D.
Butyl benzyl phthalate.....	100	N.D.
4-Chloroaniline.....	100	N.D.
2-Chloronaphthalene.....	100	N.D.
4-Chloro-3-methylphenol.....	100	N.D.
2-Chlorophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.
Chrysene.....	100	N.D.
Dibenz(a,h)anthracene.....	100	N.D.
Dibenzofuran.....	100	N.D.
Di-N-butyl phthalate.....	500	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.
2,4-Dichlorophenol.....	100	N.D.
Diethyl phthalate.....	100	N.D.
2,4-Dimethylphenol.....	100	N.D.
Dimethyl phthalate.....	100	N.D.
4,6-Dinitro-2-methylphenol.....	500	N.D.
2,4-Dinitrophenol.....	500	N.D.



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory 1555 Burke St. Unit 1 San Francisco, CA 92124 Attention: Nancy	Client Project ID: Chevron 14322-2 Sample Descript: Soil, OX-15-5' Analysis Method: EPA 8270 Lab Number: 3D16201	Sampled: Received: Apr 5, 1993 Extracted: Apr 7, 1993 Analyzed: Apr 8, 1993 Reported: Apr 8, 1993
--	---	---

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	N.D.
Fluorene.....	100	N.D.
Hexachlorobenzene.....	100	N.D.
Hexachlorobutadiene.....	100	N.D.
Hexachlorocyclopentadiene.....	100	N.D.
Hexachloroethane.....	100	N.D.
Indeno(1,2,3-cd)pyrene.....	100	N.D.
Isophorone.....	100	N.D.
2-Methylnaphthalene.....	100	N.D.
2-Methylphenol.....	100	N.D.
4-Methylphenol.....	100	N.D.
Naphthalene.....	100	N.D.
2-Nitroaniline.....	500	N.D.
3-Nitroaniline.....	500	N.D.
4-Nitroaniline.....	500	N.D.
Nitrobenzene.....	100	N.D.
2-Nitrophenol.....	100	N.D.
4-Nitrophenol.....	500	N.D.
N-Nitrosodiphenylamine.....	100	N.D.
N-Nitroso-di-N-propylamine.....	100	N.D.
Pentachlorophenol.....	500	N.D.
Phenanthrene.....	100	N.D.
Phenol.....	100	N.D.
Pyrene.....	100	N.D.
1,2,4-Trichlorobenzene.....	100	N.D.
2,4,5-Trichlorophenol.....	500	N.D.
2,4,6-Trichlorophenol.....	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory
 1555 Burke St. Unit 1
 San Francisco, CA 92124
 Attention: Nancy

Client Project ID: Chevron 14322-2
 Matrix: Soil

QC Sample Group: 3C16201

Reported: Mar 3, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50-100	50-100	50-100	50-100	50-100
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK040793	BLK040793	BLK040793	BLK040793	BLK040793
Date Prepared:	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93
Date Analyzed	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Instrument I.D.#:	H5	H5	H5	H5	H5
LCS % Recovery:	72	72	76	59	84
Control Limits:	31-137	11-114	28-89	17-109	35-142

MS/MSD Batch #:	930407901	930407901	930407901	930407901	930407901
Date Prepared:	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93
Date Analyzed	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Instrument I.D.#:	H5	H5	H5	H5	H5
Matrix Spike % Recovery:	72	70	70	54	80
Matrix Spike Duplicate % Recovery:	74	83	78	55	86
Relative % Difference:	2.7	17	11	1.8	7.2

SEQUOIA ANALYTICAL

Please Note:
 The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9600 • FAX (415) 364-9233

Superior Analytical Laboratory
 1555 Burke St. Unit 1
 San Francisco, CA 92124
 Attention: Nancy

Client Project ID: Chevron 14322-2
 Matrix: Soil

QC Sample Group 3C16201

Reported: Mar 3, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenyl
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50-100	50-100	50-100	50-100	50-100	50-100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK040793	BLK040793	BLK040793	BLK040793	BLK040793	BLK040793
Date Prepared:	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93
Date Analyzed:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Instrument I.D.#:	H5	H5	H5	H5	H5	H5
LCS % Recovery:	86	83	72	82	76	84
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103

MS/MSD Batch #:	930407901	930407901	930407901	930407901	930407901	930407901
Date Prepared:	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93
Date Analyzed:	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93	4/8/93
Instrument I.D.#:	H5	H5	H5	H5	H5	H5
Matrix Spike % Recovery:	81	82	70	82	74	81
Matrix Spike Duplicate % Recovery:	98	85	70	90	72	87
Relative % Difference:	14	3.6	0.0	9.3	2.7	7.1

SEQUOIA ANALYTICAL

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14322

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	97/99	2%	75-111
Benzene:	88/92	4%	75-114
Toluene:	89/93	4%	78-114
Ethyl Benzene:	97/102	5%	76-120
Xylenes:	92/97	5%	71-117
Diesel:	82/84	2%	69-127
Oil and Grease:	62/70	12%	75-125

Richard Srna, Ph.D.

Cecilia Y. Jorgensen (for)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTLE VALLE BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) MIKE TAMBROW
(Phone) 415 386 8791 (Fax Number) 415 386 8791

Chevron Contact (Name) KEN KAN
(Phone) 510 842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931 9159300
Samples Collected by (Name) M. TAMBROW
Collection Date 4-2-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type C = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks
								BTX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)			
OK-14-9		1	S	D	1111		yes	X										5-DAY T.A.
OK-15-5		1	S	D	1121			X	X	X	X			X	X			5-DAY T.A.
SP-18A-D		4	S	C	1362			X										
SP-19A-D		4	S	C	1312			X										
SP-20A-D		4	S	C	1327			X										
SP-21A-D		4	S	C	1350			X										
SP-22A-D		4	S	C	1402			X										
SP-23A-D		4	S	C	1413			X										

Samples analyzed.
 Appropriate preservatives.
 Samples preserved.
 VOA's without headspace.
 Comments: [Signature]

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-2-93 6:45</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>Nancy F...</u>	Organization _____	Date/Time <u>4/2/93 10:50</u>	

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/06/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14327- 1	SP-24A-D	04/05/93	04/05/93 Soil
14327- 2	SP-25A-D	04/05/93	04/05/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14327- 1 14327- 2

Gasoline:	30	22
Benzene:	ND<.025	ND<0.010
Toluene:	0.064	0.065
Ethyl Benzene:	0.074	0.011
Xylenes:	0.53	0.095
Concentration:	mg/kg	mg/kg



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14327

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	100/96	4%	75-111
Benzene:	86/89	3%	75-114
Toluene:	87/90	3%	78-114
Ethyl Benzene:	94/98	4%	76-120
Xylenes:	90/93	3%	71-117

Richard Srna, Ph.D.

[Signature] 4/6/93
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

4327

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-4930</u>	Chevron Contact (Name) <u>Ken Kan</u>
	Facility Address <u>3369 CASTRO VALLEY BLVD</u>	(Phone) <u>510-842-8752</u>
Consultant Project Number <u>4930-2</u>	Consultant Name <u>TOUCHSTONE DEVEL</u>	Laboratory Name <u>SUPERIOR</u>
Address <u>PO BOX 2554 - SANTA ROSA</u>	Project Contact (Name) <u>MICHAEL TAMBRON</u>	Laboratory Release Number <u>9050931</u>
(Phone) <u>415-386-8791</u> (Fax Number) <u>415-386-8791</u>		Samples Collected by (Name) <u>M. TAMBRON</u>
		Collection Date <u>4-5-93</u>
		Signature <u>[Signature]</u>

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
SP-24A-D		4	S	C	1145		Yes	X													
SP-25A-D		4	S	C	1200		Yes	X													
RUSH								Please initial: Samples stored in ice <u>yes</u> Appropriately sealed <u>yes</u> Contaminated <u>NA</u> <u>NA</u> <u>NA</u>													

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-5-93/1316</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>4/5/93/1316</u>	

COC-3.DWG/03 91/MCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/07/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14329- 1	SP-26A-D	04/06/93	04/06/93 Soil
14329- 2	SP-27A-D	04/06/93	04/06/93 Soil
14329- 3	SP-28A-D	04/06/93	04/06/93 Soil
14329- 4	SP-29A-D	04/06/93	04/06/93 Soil
14329- 5	SP-30A-D	04/06/93	04/06/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14329- 1 14329- 2 14329- 3 14329- 4 14329- 5

Gasoline:	89	38	120	51	56
Benzene:	0.12	0.058	0.084	0.054	0.058
Toluene:	0.032	0.044	0.68	0.072	0.038
Ethyl Benzene:	0.92	ND<.025	1.5	0.16	0.39
Xylenes:	5.5	2.2	8.4	1.7	1.2
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14329

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	102/97	5%	75-111
Benzene:	94/87	8%	75-114
Toluene:	92/89	3%	78-114
Ethyl Benzene:	98/95	3%	76-120
Xylenes:	94/90	4%	71-117

Richard Srna, Ph.D.

[Handwritten Signature] (for) 4/7/93
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

14329

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-4930</u> Facility Address <u>3369 CASTRO VALLEY BLVD</u> Consultant Project Number <u>4930-2</u> Consultant Name <u>TOUCHSTONE DEVEL.</u> Address <u>PO BOX 2554 SANTA ROSA</u> Project Contact (Name) <u>M. TAMBRONI</u> (Phone) <u>415 386-8791</u> (Fax Number) <u>415-386-8791</u>	Chevron Contact (Name) <u>KEN KAN</u> (Phone) <u>510-842-8752</u> Laboratory Name <u>SUPERIOR</u> Laboratory Release Number <u>9050931</u> Samples Collected by (Name) <u>M. TAMBRONI</u> Collection Date <u>4-6-93</u> Signature <u>[Signature]</u>
--	---	--

Sample Number	Lab Sample Number	Number of Containers	Matrix		Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks
			S = Soil	A = Air				Type	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8820)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)		
SP-26A-D			S	C	1420		Yes	X										
SP-27A-D			S	C	1425		↓	X										
SP-28A-D			S	C	1435		↓	X										
SP-29A-D			S	C	1445		↓	X										
SP-30A-D			S	C	1450		↓	X										

Please initial: [Signature]
 Samples Stored in Ice: yes
 Appropriate containers: yes
 Samples preserved: NA
 VOA's without headspace: NA
 Comments: _____

COC-3.DWG/DS 01/7/93

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-6-93 1702</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>4/6/93 1702</u>	



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/08/93
Reported 04/09/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14333- 1	OX-16-5'	04/07/93	04/07/93 Soil
14333- 2	OX-17-10'	04/07/93	04/08/93 Soil
14333- 3	SP-31A-D	04/07/93	04/07/93 Soil
14333- 4	SP-32A-D	04/07/93	04/07/93 Soil
14333- 5	SP-33A-D	04/07/93	04/08/93 Soil
14333- 6	SP-34A-D	04/07/93	04/07/93 Soil
14333- 7	SP-35A-D	04/07/93	04/07/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14333- 1 14333- 2 14333- 3 14333- 4 14333- 5

Gasoline:	ND<1	290	120	81	30
Benzene:	ND<.005	ND<.10	ND<.025	ND<.025	ND<.025
Toluene:	ND<.005	0.65	0.53	0.30	0.14
Ethyl Benzene:	ND<.005	4.6	1.1	0.74	0.29
Xylenes:	ND<.015	21	6.1	4.0	1.5
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14333- 6 14333- 7

Gasoline:	130	150
Benzene:	ND<.025	0.035
Toluene:	0.64	0.96
Ethyl Benzene:	1.5	1.5
Xylenes:	7.6	7.9
Concentration:	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

A N A L Y S I S F O R T O T A L P E T R O L E U M H Y D R O C A R B O N S

Page 2 of 2
QA/QC INFORMATION
SET: 14333

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	93/97	4%	75-111
Benzene:	100/98	2%	75-114
Toluene:	104/103	1%	76-120
Ethyl Benzene:	107/107	0%	78-114
Xylenes:	96/96	0%	71-117

Richard Srna, Ph.D.

(Signature)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

14 333

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4920
Facility Address 3369 CASTRO VALLE BLVD
Consultant Project Number 4930-2
Consultant Name TOURKSTONE
Address PO BOX 2445 SANTA ROSA
Project Contact (Name) M. TAMBRONI
(Phone) 415 386 8791 (Fax Number) 415 386 8791

Chevron Contact (Name) Ken Kan
(Phone) 510-942-5752
Laboratory Name QUERIDO
Laboratory Release Number 9150A31
Samples Collected by (Name) M. TAMBRONI
Collection Date 4-7-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iod (Yes or No)	Analytes To Be Performed										Remarks	
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Greases (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)				
DA-16-5'		1	S	D	1255		Yes	X											5 DAY TAT
DA-17-10'		1	S	D	1300			X											5 DAY TAT
SP-31A-D		4	S	C	1415			X											
SP-32A-D		4	S	C	1415			X											
SP-33A-D		4	S	C	1435			X											
SP-34A-D		4	S	C	1445			X											
SP-35A-D		4	S	C	1450		✓	X											

Please Initial _____
 Samples Stored in Ice _____
 Appropriate monitoring _____
 Sample _____
 VOA's _____
 Comments: _____

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-7-93 1727</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <u>4^{1/2}</u> <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>4/7/93 1127</u>	

COC-3.DWG/93 91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/15/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14343- 1	OX-19-8'	04/09/93	04/14/93 Soil
14343- 2	OX-20-10'	04/09/93	04/14/93 Soil
14343- 3	OX-21-12'	04/09/93	04/14/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14343- 1 14343- 2 14343- 3

Gasoline:	760	74	850
Benzene:	0.50	0.032	2.6
Toluene:	4.0	0.18	14
Ethyl Benzene:	17	2.2	17
Xylenes:	76	1.8	80
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

A N A L Y S I S F O R T O T A L P E T R O L E U M H Y D R O C A R B O N S

Page 2 of 2
QA/QC INFORMATION
SET: 14343

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	93/95	2%	75-111
Benzene:	88/87	1%	75-114
Toluene:	95/94	1%	78-114
Ethyl Benzene:	101/101	0%	76-120
Xylenes:	91/91	0%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

14343

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 55# 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE
Address POBOX 2554 SANTA ROSA
Project Contact (Name) MICHAEL TAMBRONI
(Phone) 415 386-8791 (Fax Number) 415 386-8791

Chevron Contact (Name) PER KAH
(Phone) 510-842-4752
Laboratory Name SUPERIOR
Laboratory Release Number 9050431
Samples Collected by (Name) MICHAEL TAMBRONI
Collection Date 4-9-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks	
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					
OX-19-8			S	D				X												
OX-20-10			S	D				X												
OX-21-12			S	D				X												

Please initial:
 Samples stored in ice YW
 Appropriate initials NA
 Samples preserved NA
 Vials without headspace NA
 Comments: _____

RUSH

W. Klein

COC-3.DWG/03 91/HCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-14-93/1500</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>4/14/93 1500</u>	



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/13/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14336- 1	OX-18-15'	04/09/93	04/12/93 Soil
14336- 2	BSP-1A-D	04/09/93	04/12/93 Soil
14336- 3	BSP-2A-D	04/09/93	04/12/93 Soil
14336- 4	BSP-3A-D	04/09/93	04/12/93 Soil
14336- 5	R1A-D	04/09/93	04/12/93 Soil
14336- 6	R2A-D	04/09/93	04/12/93 Soil
14336- 7	R3A-D	04/09/93	04/12/93 Soil
14336- 8	R4A-D	04/09/93	04/12/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14336- 1 14336- 2 14336- 3 14336- 4 14336- 5

Gasoline:	ND<1	14	70	80	13
Benzene:	ND<.005	ND<.025	ND<.025	ND<.025	ND<.025
Toluene:	ND<.005	0.025	0.55	0.67	ND<.025
Ethyl Benzene:	ND<.005	0.067	0.84	0.96	ND<.025
Xylenes:	ND<.015	0.36	4.3	5.0	0.23
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14336- 6 14336- 7 14336- 8

Gasoline:	10	12	24
Benzene:	ND<.005	ND<.025	ND<.025
Toluene:	0.026	ND<.025	0.039
Ethyl Benzene:	0.009	ND<.025	0.074
Xylenes:	0.12	0.10	0.77
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14336

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	92/93	1%	75-111
Benzene:	100/98	2%	75-114
Toluene:	105/104	1%	78-114
Ethyl Benzene:	110/109	1%	76-120
Xylenes:	98/98	0%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

14332

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) M. TAMBROW
(Phone) 415 386-8791 (Fax Number) 415 386-8791

Chevron Contact (Name) KEN KIAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) M. TAMBROW
Collection Date 4-9-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks
								BTX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)				
DX-18-15		1	S	D	1352		YES	X											5 DAY TAT
BSP-1A-D		4	S	L	1400		YES	X											
BSP-2A-D		4	S	C	1410		YES	X											
BSP-3A-D		4	S	L	1420		YES	X											
R1A-D		4	S	L	1430		YES	X											
R2A-D		4	S	C	1440		YES	X											
R3A-D		4	S	C	1450		YES	X											
R4A-D		4	S	C	1500		YES	X											

RUSH

Please return samples in original containers with appropriate labels. For samples received for analysis, please return to the lab contact.

PF 400

N/A

N/A

RUSH

COC-3.DWG/03 81/HGH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-9-93 1610</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. <u>48 Hrs.</u> 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>4/9/93 1610</u>	



Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/14/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
14340- 1	CSP-4A-D	04/13/93	04/14/93	Soil
14340- 2	CSP-5A-D	04/13/93	04/13/93	Soil
14340- 3	CSP-6A-D	04/13/93	04/14/93	Soil
14340- 5	RSP-4A-D	04/13/93	04/13/93	Soil
14340- 6	RSP-5A-D	04/13/93	04/13/93	Soil
14340- 7	RSP-6A-D	04/13/93	04/13/93	Soil
14340- 8	RSP-7A-D	04/13/93	04/13/93	Soil
14340- 9	RSP-8A-D	04/13/93	04/13/93	Soil
14340-10	RSP-9A-D	04/13/93	04/13/93	Soil

RESULTS OF ANALYSIS

Laboratory Number: 14340- 1 14340- 2 14340- 3 14340- 5 14340- 6

Gasoline:	ND<1	ND<1	ND<1	14	22
Benzene:	ND<.005	ND<.005	ND<.005	ND<.025	ND<.025
Toluene:	ND<.005	ND<.005	ND<.005	0.026	0.049
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	0.036	0.050
Xylenes:	ND<.015	ND<.015	ND<.015	0.31	0.41
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14340- 7 14340- 8 14340- 9 14340-10

Gasoline:	20	5.0	4.1	7.3
Benzene:	ND<.025	ND<.005	ND<.005	ND<.005
Toluene:	0.066	ND<.005	0.010	0.011
Ethyl Benzene:	0.056	0.024	0.006	0.036
Xylenes:	0.39	0.19	0.053	0.25
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14340

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

Table with 4 columns: ANALYTE, MS/MSD RECOVERY, RPD, CONTROL LIMIT. Rows include Gasoline, Benzene, Toluene, Ethyl Benzene, and Xylenes.

Richard Srna, Ph.D.

Signature of Doug A. Nwogu for Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/20/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14359- 1	OX-22-15'	04/19/93	04/19/93 Soil
14359- 2	OX-23-8'	04/19/93	04/19/93 Soil
14359- 3	OX-24-13'	04/19/93	04/20/93 Soil
14359- 4	OX-25-10'	04/19/93	04/19/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14359- 1 14359- 2 14359- 3 14359- 4

Gasoline:	ND<1	160	ND<1	5100
Benzene:	ND<.005	ND<.025	ND<.005	3.9
Toluene:	ND<.005	0.29	ND<.005	6.6
Ethyl Benzene:	ND<.005	2.2	ND<.005	77
Xylenes:	ND<.015	4.2	ND<.015	360
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14359

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

<u>ANALYTE</u>	<u>MS/MSD RECOVERY</u>	<u>RPD</u>	<u>CONTROL LIMIT</u>
Gasoline:	92/95	3%	75-111
Benzene:	93/93	0%	75-114
Toluene:	95/96	1%	76-120
Ethyl Benzene:	98/100	2%	78-114
Xylenes:	89/90	1%	71-117

Richard Srna, Ph.D.

Richard G. Srna (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/21/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14363- 1	OX-26-11'	04/20/93	04/20/93 Soil
14363- 2	OX-27-11'	04/20/93	04/20/93 Soil
14363- 3	T-1-13'	04/20/93	04/20/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14363- 1 14363- 2 14363- 3

Gasoline:	510	310	1600
Benzene:	0.59	0.30	0.98
Toluene:	3.6	0.98	18
Ethyl Benzene:	9.7	4.9	34
Xylenes:	51	18	140
Concentration:	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14363

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	98/101	3%	75-111
Benzene:	97/96	1%	75-114
Toluene:	100/109	9%	76-120
Ethyl Benzene:	104/101	3%	78-114
Xylenes:	94/96	2%	71-117

Richard Srna, Ph.D.

Cecilia G. Joaquin (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/26/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14378- 1	OX-28-14'	04/22/93	04/23/93 Soil
14378- 2	OX-29-13'	04/22/93	04/23/93 Soil
14378- 3	OX-30-10'	04/22/93	04/23/93 Soil
14378- 4	OX-31-13'	04/22/93	04/23/93 Soil
14378- 5	OX-32-10'	04/22/93	04/23/93 Soil
14378- 6	OX-33-13'	04/22/93	04/23/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14378- 1 14378- 2 14378- 3 14378- 4 14378- 5

Gasoline:	ND<1	ND<1	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	ND<.015	ND<.015	ND<.015	ND<.015	ND<.015

Concentration: mg/kg mg/kg mg/kg mg/kg mg/kg

Laboratory Number: 14378- 6

Gasoline:	ND<1
Benzene:	ND<.005
Toluene:	ND<.005
Ethyl Benzene:	ND<.005
Xylenes:	ND<.015

Concentration: mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14378

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	94/93	1%	75-111
Benzene:	91/91	0%	75-114
Toluene:	95/94	1%	76-120
Ethyl Benzene:	98/98	0%	78-114
Xylenes:	89/88	1%	71-117

Richard Srna, Ph.D.

Cecilia G. Joaquin (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

MOCK INVOICE

Chevron USA
P.O. Box 5004
San Ramon, CA 94583

Date: 04/26/93
Date Rcvd: 04/22/93
Date Rptd: 04/26/93
Our Job #: 14378
Invoice #: 14378

Touchstone Developments Job # 4930-2
Chevron USA Release # 9050931 Facility #: 9-4930

QTY/MATRIX	ANALYSIS	EXT. PRICE
6 Soil sample(s) for VPHBTXE @	\$0.00 (48-HR RUSH)	0.00
TOTAL INVOICE		0.00

Please Send Payment To:
Superior Precision Analytical
P.O. Box 1545
Martinez, CA 94553

TERMS: NET 30
A charge of 1.5% per month may be applied to unpaid balances.

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Yes No

143 7P

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4130-2
Consultant Name TOUCHSTONE
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) M. TAMBRONI
(Phone) 415 386-8791 (Fax Number) 415 386-8791

Chevron Contact (Name) KENNETH KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) M. TAMBRONI
Collection Date 4-22-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks		
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
OX-28-14'		1	S	D	225		yes	X													
OX-29-13'		1	S	D	230			X													
OX-30-10'		1	S	D	235			X													
OX-31-13'		1	S	D	238			X													
OX-32-10'		1	S	D	240			X													
OX-33-13'		1	S	D	243		✓	X													

COC-3.DWG/03 91/HCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TS</u>	Date/Time <u>4-22-93/630</u>	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs <u>48 Hrs</u> 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>4/22/93 1630</u>	



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE DEVELOPMENTS
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/24/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
88410- 1	SP-36A-D	04/23/93	04/23/93 Soil
88410- 2	SP-37A-D	04/23/93	04/23/93 Soil
88410- 3	SP-38A-D	04/23/93	04/24/93 Soil
88410- 4	SP-39A-D	04/23/93	04/23/93 Soil
88410- 5	SP-40A-D	04/23/93	04/23/93 Soil
88410- 6	SP-41A-D	04/23/93	04/23/93 Soil
88410- 7	SP-42A-D	04/23/93	04/23/93 Soil
88410- 8	SP-43A-D	04/23/93	04/23/93 Soil
88410- 9	SP-44A-D	04/23/93	04/23/93 Soil
88410-10	SP-45A-D	04/23/93	04/24/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 88410- 1 88410- 2 88410- 3 88410- 4 88410- 5

Gasoline:	13	39	15	18	30
Benzene:	0.029	0.086	0.018	0.032	0.062
Toluene:	0.080	0.062	0.052	0.099	0.062
Ethyl Benzene:	0.070	0.14	0.061	0.12	0.064
Xylenes:	0.52	1.5	0.98	1.1	1.1

Concentration: mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg

Laboratory Number: 88410- 6 88410- 7 88410- 8 88410- 9 88410-10

Gasoline:	72	56	49	14	53
Benzene:	0.15	0.13	0.11	0.042	ND<.025
Toluene:	0.18	0.12	0.19	0.053	0.096
Ethyl Benzene:	0.50	0.23	0.33	0.031	0.19
Xylenes:	3.0	2.0	2.7	0.22	1.3

Concentration: mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg



C E R T I F I C A T E O F A N A L Y S I S

A N A L Y S I S F O R T O T A L P E T R O L E U M H Y D R O C A R B O N S

Page 2 of 2
QA/QC INFORMATION
SET: 88410

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	86/84	2%	70-130
Benzene:	82/95	15%	70-130
Toluene:	90/95	5%	70-130
Ethyl Benzene:	92/96	4%	70-130
Xylenes:	94/98	4%	70-130

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

88410

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>G-4930</u>	Chevron Contact (Name) <u>KEN KARS</u>
	Facility Address <u>3309 CASTRO VALLEY BLVD</u>	(Phone) <u>510 872-9752</u>
	Consultant Project Number <u>4930-2</u>	Laboratory Name <u>SUPREX</u>
	Consultant Name <u>TOUCHSTONE</u>	Laboratory Release Number <u>9050931</u>
	Address <u>PO BOX 2554 SANTA ROSA</u>	Samples Collected by (Name) <u>M. TAMBRONI</u>
Project Contact (Name) <u>M. TAMBRONI</u>	Collection Date <u>4-23-93</u>	Signature <u>[Signature]</u>
	(Phone) <u>415 386-8791</u> (Fax Number) <u>415 386 8791</u>	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
SP-36A-D			S	C	902		Yes	X														
SP-37A-D					909																	
SP-38A-D					915																	
SP-39A-D					921																	
SP-40A-D					926																	
SP-41A-D					1004																	
SP-42A-D					1008																	
SP-43A-D					1014																	
SP-44A-D					1018																	
SP-45A-D					1025																	
SP-46A-D																						
SP-47A-D																						
SP-48A-D																						
SP-49A-D																						

Appropriate containers
 Sample preserved
 Vials without headspace
 Other

Val
 yes 5°C
 yes
 None
 N/A

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-23-93 1140</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Aero 629</u>	Date/Time <u>4/23/93 11:40</u>	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 4 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Aero 629</u>	Date/Time <u>4/23/93</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Valentine Dyanbo</u>		Date/Time <u>4/23/93 109pm</u>	

COC-3.DWG/05 01/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 04/29/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14390- 1	OX-34-8'	04/28/92	04/28/93 Soil
14390- 2	OX-35-11'	04/28/92	04/28/93 Soil
14390- 3	OX-36-8'	04/28/92	04/28/93 Soil
14390- 4	OX-37-11'	04/28/92	04/28/93 Soil
14390- 5	OX-38-6'	04/28/92	04/28/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14390- 1 14390- 2 14390- 3 14390- 4 14390- 5

Gasoline:	89	8	18	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	0.15	.011	0.065	ND<.005	ND<.005
Ethyl Benzene:	1.5	0.15	0.34	ND<.005	ND<.005
Xylenes:	3.1	0.31	0.86	ND<.015	ND<.015
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14390

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/91	4%	75-111
Benzene:	94/88	7%	75-114
Toluene:	94/91	3%	78-114
Ethyl Benzene:	96/92	4%	76-120
Xylenes:	95/93	2%	71-117

Richard Srna, Ph.D.

[Signature]
Laboratory Director



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14390

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/91	4%	75-111
Benzene:	94/88	7%	75-114
Toluene:	94/91	3%	78-114
Ethyl Benzene:	96/92	4%	76-120
Xylenes:	95/93	2%	71-117

Richard Srna, Ph.D.


Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No ¹⁴³⁹⁰

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-4930</u>	Chevron Contact (Name) <u>KEW KANL</u>
	Facility Address <u>3369 CASTRO VALLEY TOLUD</u>	(Phone) <u>510 842-8752</u>
Consultant Project Number <u>4930-2</u>	Consultant Name <u>TOUCHSTONE</u>	Laboratory Name <u>SUPERIOR</u>
Address <u>PO BOX 2554 SANTA ROSA</u>	Project Contact (Name) <u>M. TAMBROWI</u>	Laboratory Release Number <u>9050931</u>
(Phone) <u>415 386 8791</u> (Fax Number) <u>415 386-8791</u>		Samples Collected by (Name) <u>M. TAMBROWI</u>
		Collection Date <u>4-28-93</u>
		Signature <u>[Signature]</u>

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analysis To Be Performed											Remarks		
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
OK-34-8'		1	S	D	901		Yes	X													
OK-35-11'		1	S	D	906			X													
OK-36-8'		1	S	D	910			X													
OK-37-11'		1	S	D	915			X													
OK-38-6'		1	S	D	920			X													

Please initial: [Signature]
 Samples stored in ice: Yes *hand delivered*
 Appropriate containers: Yes
 Samples preserved: NA
 VOAs will not be analyzed: NA
 Comments: _____

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-28-93 1458</u>	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>4/28/93</u>	

COC-3.DWG/03 01/MCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-1
Reported 04/30/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14391- 1	SP-46A-D	04/29/93	04/29/93 Soil
14391- 2	SP-47A-D	04/29/93	04/29/93 Soil
14391- 3	SP-48A-D	04/29/93	04/29/93 Soil
14391- 4	SP-49A-D	04/29/93	04/29/93 Soil
14391- 5	SP-50A-D	04/29/93	04/29/93 Soil
14391- 6	SP-51A-D	04/29/93	04/29/93 Soil
14391- 7	SP-52A-D	04/29/93	04/29/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14391- 1 14391- 2 14391- 3 14391- 4 14391- 5

Gasoline:	2	1	2	5	4
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	0.008	0.006	0.007	0.018	0.012
Ethyl Benzene:	0.008	ND<.005	0.007	0.012	0.007
Xylenes:	0.045	0.024	0.064	0.069	0.046

Concentration: mg/kg mg/kg mg/kg mg/kg mg/kg

Laboratory Number: 14391- 6 14391- 7

Gasoline:	6	10
Benzene:	ND<.005	ND<.005
Toluene:	0.052	0.031
Ethyl Benzene:	0.062	0.020
Xylenes:	0.36	0.18

Concentration: mg/kg mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14391

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

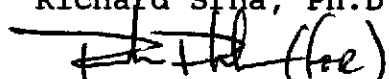
Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	90/96	6%	75-111
Benzene:	89/96	8%	75-114
Toluene:	90/96	6%	78-114
Ethyl Benzene:	90/96	6%	76-120
Xylenes:	90/97	7%	71-117

Richard Srna, Ph.D.

 (for) 4/30/93
Laboratory Director

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-4930</u> Facility Address <u>3369 CASTRO VALLEY BLVD</u> Consultant Project Number <u>480-1</u> Consultant Name <u>TOUCHSTONE</u> Address <u>PO BOX 2554 SANTA ROSA</u> Project Contact (Name) <u>M. TAMBRANI</u> (Phone) <u>415-386-8791</u> (Fax Number) <u>415-386-8791</u>	Chevron Contact (Name) <u>Ken Kan</u> (Phone) <u>510-842-8752</u> Laboratory Name <u>Superior</u> Laboratory Release Number <u>9050931</u> Samples Collected by (Name) <u>M. TAMBRANI</u> Collection Date <u>4-29-93</u> Signature <u>[Signature]</u>
--	---	---

Sample Number	Lab Sample Number	Number of Containers	Matrix		Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed										Remarks					
			S = Soil	A = Air				W = Water	C = Charcoal	Type	G = Grab	Com = Composite	D = Discrete	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)		Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	
SP-46A-D		4	S	C	154		Yes	X															
SP-47A-D		4	S	C	201			X															
SP-48A-D		4	S	C	206			X															
SP-49A-D		4	S	C	211			X															
SP-50A-D		4	S	C	219			X															
SP-51A-D		4	S	C	225			X															
SP-52A-D		4	S	C	232			X															

RUSH

Please Print

Sample # _____

App. # _____

Sample # _____

VO # _____

Comments _____

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	

COC-3LDWG/03 91/HCH



Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 05/03/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14393- 1	OX-39-4'	04/30/93	04/30/93 Soil
14393- 2	OX-40-8'	04/30/93	04/30/93 Soil
14393- 3	OX-41-14'	04/30/93	04/30/93 Soil
14393- 4	OX-42-14'	04/30/93	04/30/93 Soil
14393- 5	SP-53-(A-D)	04/30/93	04/30/93 Soil
14393- 6	SP-54-(A-D)	04/30/93	04/30/93 Soil
14393- 7	SP-55-(A-D)	04/30/93	04/30/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14393- 1 14393- 2 14393- 3 14393- 4 14393- 5

Gasoline:	ND<1	ND<1	ND<1	ND<1	1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005	ND<.005	0.010
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	ND<.015	ND<.015	ND<.015	ND<.015	ND<.015

Concentration: mg/kg mg/kg mg/kg mg/kg mg/kg

Laboratory Number: 14393- 6 14393- 7

Gasoline:	ND<1	1
Benzene:	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	0.011
Xylenes:	0.016	0.063

Concentration: mg/kg mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14393

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	94/93	1%	75-111
Benzene:	92/88	4%	75-114
Toluene:	93/91	2%	78-114
Ethyl Benzene:	94/93	1%	76-120
Xylenes:	94/94	0%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

14393

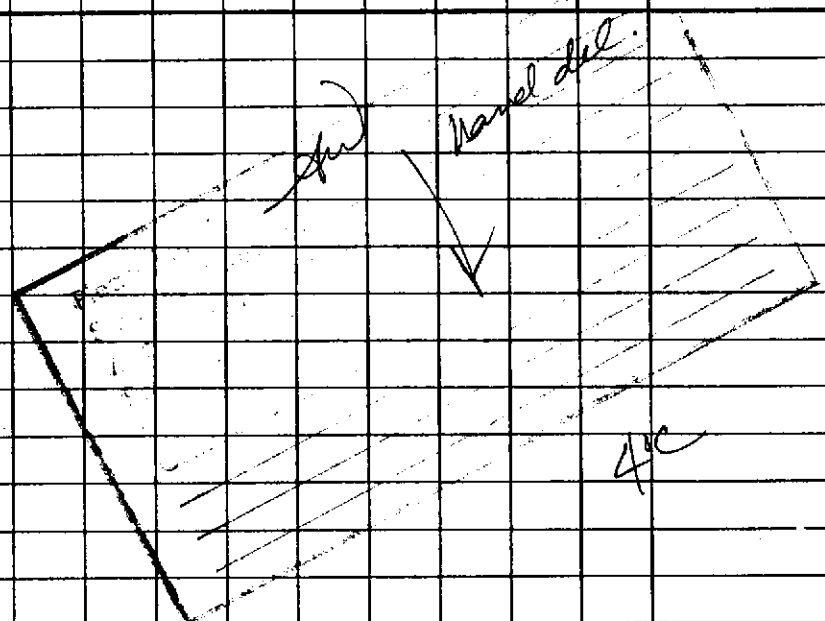
Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3369 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) M. TAMBROW
(Phone) 415-386-8791 Fax Number 415-386-8791

Chevron Contact (Name) KEN KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) M. TAMBROW
Collection Date 4-30-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks		
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (CAP or AA)						
OK-39-4'		1	S	D	820		Yes	X													
OK-40-8'		1	S	D	825			X													
OK-41-14'		1	S	D	827			X													
OK-42-14'		1	S	D	830			X													
SP-53A-D		4	S	C	1337			X													
SP-54A-D		4	S	C	1342			X													
SP-55A-D		4	S	C	1350			X													



Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>4-30-93/600</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) <input checked="" type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>4/30/93 4:00</u>	

COC-3.DWG/03.91/HCH



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 05/04/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14395- 1	OX-44-8'	05/03/93	05/03/93 Soil
14395- 2	CSP-7A-D	05/03/93	05/03/93 Soil
14395- 3	CSP-8A-D	05/03/93	05/03/93 Soil
14395- 4	CSP-9A-D	05/03/93	05/03/93 Soil
14395- 5	CSP-10A-D	05/03/93	05/03/93 Soil
14395- 6	SP-56A-D	05/03/93	05/03/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14395- 1 14395- 2 14395- 3 14395- 4 14395- 5

Gasoline:	ND<1	ND<1	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	ND<.015	ND<.015	ND<.015	ND<.015	ND<.015
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Laboratory Number: 14395- 6

Gasoline:	3
Benzene:	ND<.005
Toluene:	0.027
Ethyl Benzene:	ND<.005
Xylenes:	ND<.015
Concentration:	mg/kg



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14395

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	95/91	4%	75-111
Benzene:	87/88	1%	75-114
Toluene:	90/91	1%	78-114
Ethyl Benzene:	92/94	2%	76-120
Xylenes:	92/95	3%	71-117

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

14013

Yes
 No

Fax copy of Lab Report and COC to Chevron Contact:

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 33641 CASTRO VALLEY BLVD
Consultant Project Number 4130-2
Consultant Name TULCHSTONE
Address PO BOX 2554 SANTA ROSA
Project Contact (Name) M. TAUBROW
(Phone) 415 386-8791 (Fax Number) 415-386-8791

Chevron Contact (Name) KEN HAN
(Phone) 510 842-8752
Laboratory Name SLP/LLCA
Laboratory Release Number 9050931
Samples Collected by (Name) M. TAUBROW
Collection Date 5-3-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type C = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks				
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
CK-44-8		1	S	D	927		Yes	X															
CSP-7A-D		4	S	C	955			X															
CSP-8A-D		4	S	C	1005			X															
CSP-9A-D		4	S	C	1013			X															
CSP-10A-D		4	S	C	1055			X															
SP-56A-D		4	S	C	1105			X															

Pieces Initialled SS
Samples Analyzed ✓
Appropriate ✓
Samples Analyzed N/A
VOC ✓
COC OK

COC-3.DWG/03-91/HCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>5/3/93 1410</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>5/3/2/90</u>	Turn Around Time (Circle Choice) <u>24 Hrs.</u> 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Touchstone Developments
Attn: MICHAEL TAMBRONI

Project 4930-2
Reported 05/05/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14399- 1	CSP-11 (A-D)	05/04/93	05/04/93 Soil
14399- 2	CSP-12 (A-D)	05/04/93	05/04/93 Soil
14399- 3	SP-57 (A-D)	05/04/93	05/04/93 Soil
14399- 4	SP-58 (A-D)	05/04/93	05/04/93 Soil

RESULTS OF ANALYSIS

Laboratory Number: 14399- 1 14399- 2 14399- 3 14399- 4

Gasoline:	ND<1	ND<1	1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	ND<.020	ND<.020	ND<.020	ND<.020
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005
Xylenes:	ND<.015	ND<.015	ND<.015	ND<.015
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14399

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

Table with 4 columns: ANALYTE, MS/MSD RECOVERY, RPD, CONTROL LIMIT. Rows include Gasoline, Benzene, Toluene, Ethyl Benzene, and Xylenes.

Richard Srna, Ph.D.

Cecilia G. Joaquin (for)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No

14599

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-4930
Facility Address 3244 CASTRO VALLEY BLVD
Consultant Project Number 4930-2
Consultant Name TOUCHSTONE
Address FOREX 3554 SANTA ROSA
Project Contact (Name) M. TRAMPIONI
(Phone) 415-386-8791 (Fax Number) 415-386-8791

Chevron Contact (Name) Karin KAN
(Phone) 510-842-8752
Laboratory Name SUPERIOR
Laboratory Release Number 9050931
Samples Collected by (Name) M. TRAMPIONI
Collection Date 5-4-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks				
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
CSP-11A-D		4	S	C	935		YES	X															
CSP-12A-D		4	S	C	1030		↓	↓															
SP-57A-D		4	S	C	1025		↓	↓															
SP-53A-D		4	S	C	1045		↓	↓															

Please initial:
 Samples Stored in ice. M
 Appropriate containers NR
 Samples preserved NR
 VOC's analyzed NR
 Comments: (Signature)

COC-3.DWG/03 01/HCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>TD</u>	Date/Time <u>5-4-93/1730</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>1730 5/4/93</u>

Turn Around Time (Circle Choice)
 24 Hrs.
 48 Hrs.
 5 Days
 10 Days
 As Contracted

Appendix D

Quality Assurance Services
Materials Consulting



Testing Engineers, Inc.

PROJECT NO: 32955	TYPE OF INSPECTION	PLACE OF INSPECTION
PROJECT NAME: Chevron/Castro Valley Job# 1255-01	Nuclear Density	Jobsite
	WORK REQUEST: H1112	ZONE:

DATE: 3-30-93					
HOURS: 2.0					
INSPECTOR: Ram					

Reported to: Phil Company: Gettler & Ryan
 Feature: Former Pump Island
 Field Test Procedure: ASTM D2922 & D3017 Lab Test Procedure: ASTM D1557

MATERIAL-DESCRIPTION	OPT. MOIST.	MAX. DENSITY	LAB-REF.
1. Greenish Brown Silty Gravel	7.7%	141.7	H1075

Location	Elev.	FIELD TEST RESULTS				
		Curve No.	Field Dens.. pcf	Field Moist. %	Rel. Comp. %	Proj. Spec. %
Former Pump Island						
See Attached Sketch	-3'FG	1	133.3	4.9	93	90
" "	-3'FG	1	135.7	4.5	95	90

FG = Finished Grade

NOTE: Test results constitute the reporting of factual information derived from test(s) made by our laboratory following prescribed procedures. These test results should not be considered as an engineering opinion with respect thereto.

Reviewed by Terry R. Chicino
 Terry R. Chicino, Soils/Asphalt
 Field Operations Manager

2 cc: Gettler & Ryan

Proj# 32955 Proj. Chevron/Castro Valley Date 3-30-93

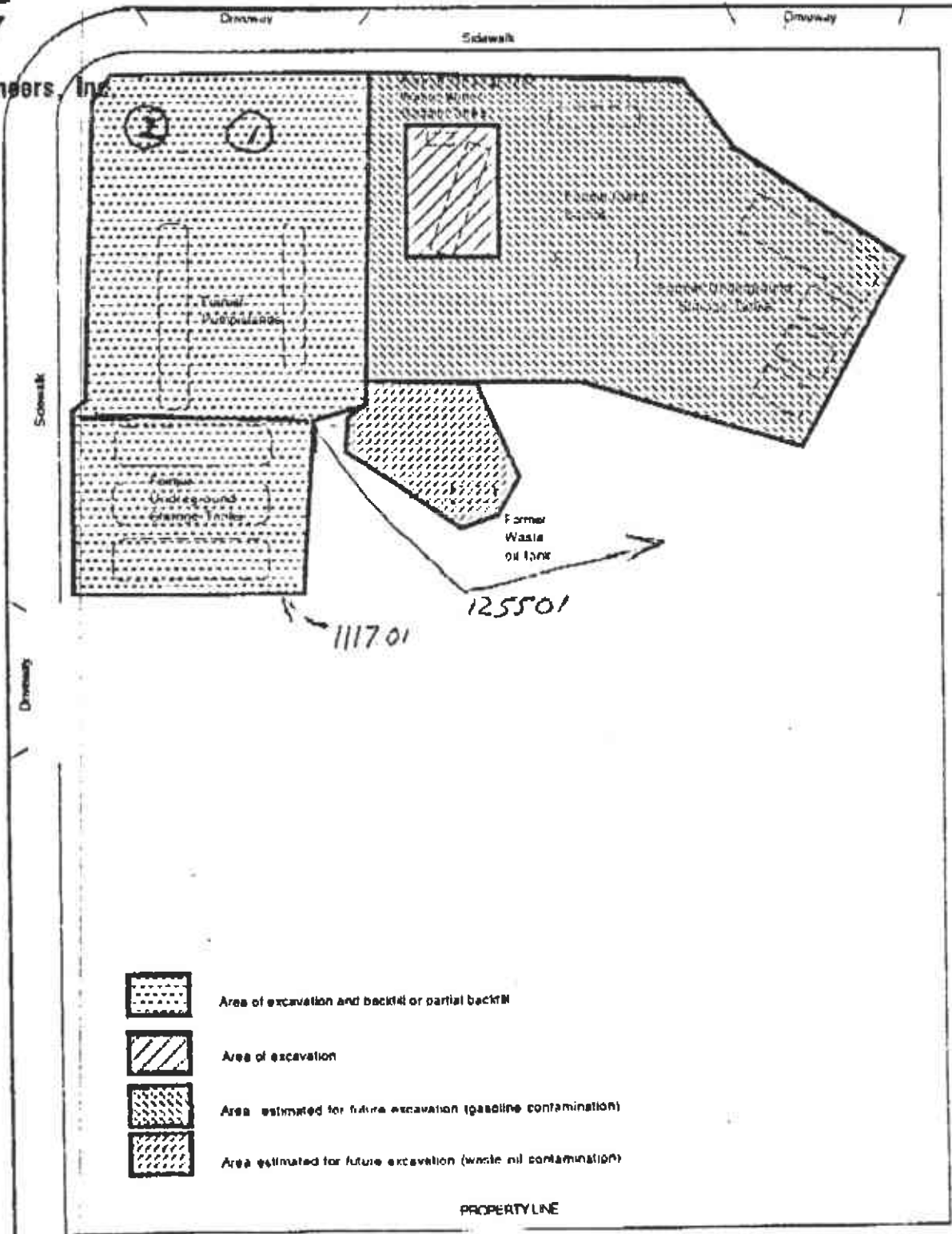
Quality Assurance Services
Materials Consulting





CASTRO VALLEY BOULEVARD



Testing Engineers Inc.

WILBEAM AVENUE



-  Area of excavation and backfill or partial backfill
-  Area of excavation
-  Area estimated for future excavation (gasoline contamination)
-  Area estimated for future excavation (waste oil contamination)

PROPERTY LINE

Approximate Scale 1" = 30'



3-29-93 Updated Site Map
and Proposed Excavation
Chevron Service Station No. 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

Figure 1

03-26-93	mit
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Project # 4930-2



Testing Engineers, Inc.

LABORATORY NO. H1075

REPORT OF SOIL TESTS

DATE: 3-24-93

JOB DATA: Project# 32889
Chevron/Castro Valley

SAMPLE DATA: AB 2

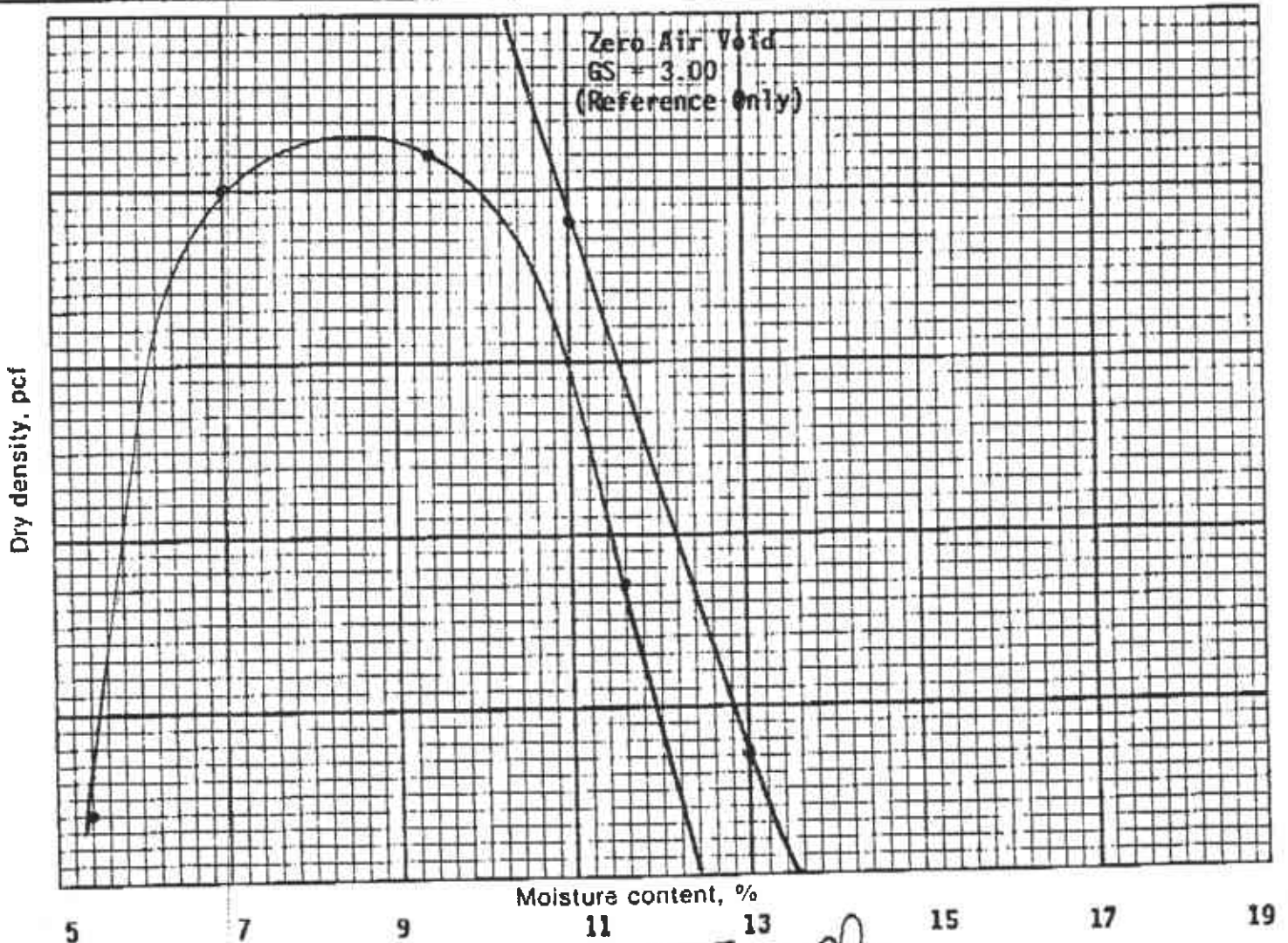
VISUAL CLASSIFICATION:
Greenish Brown Silty Gravel

PLASTIC CHARACTERISTICS:

MAXIMUM DENSITY DETERMINATION:
Method ASTM D1557
Optimum Moisture, % 7.7%
Maximum Dry Density
(lbs. cu. ft.) 141.7

Liquid Limit, %
Plastic Limit, %
Plasticity Index

SAND EQUIVALENT TEST: S.E. =



Reviewed by

Terry R. Chiccino, Soils/Asphalt



Testing Engineers, Inc.

PROJECT NO: 32889		TYPE OF INSPECTION		PLACE OF INSPECTION	
PROJECT NAME: Chevron/Castro Valley Job# 1117-01		Nuclear Density		Jobsite	
		WORK REQUEST: H1099		ZONE:	
DATE:	3-30-93				
HOURS:	2.0				
INSPECTOR:	Ram				

Reported to: Phil
Feature: Former Tank Hole Backfill
Field Test Procedure: ASTM D2922 & D3017 Company: Gettler & Ryan
Lab Test Procedure: ASTM D1557

MATERIAL-DESCRIPTION	OPT.-MOIST.	MAX.-DENSITY	LAB-REF.-#
Greenish brown silty gravel		142.8pcf	

Location	Elev.	FIELD TEST RESULTS				
		Curve No.	Field Dens.. pcf	Field Moist. %	Rel. Comp. %	Proj. Spec. %
Former Underground 10,000 Gal. Storage Tank						
1. See Attached Sketch	FSG	1	137.6	6.8	96	95
" "	FSG	1	136.7	7.2	96	95

#1117.01

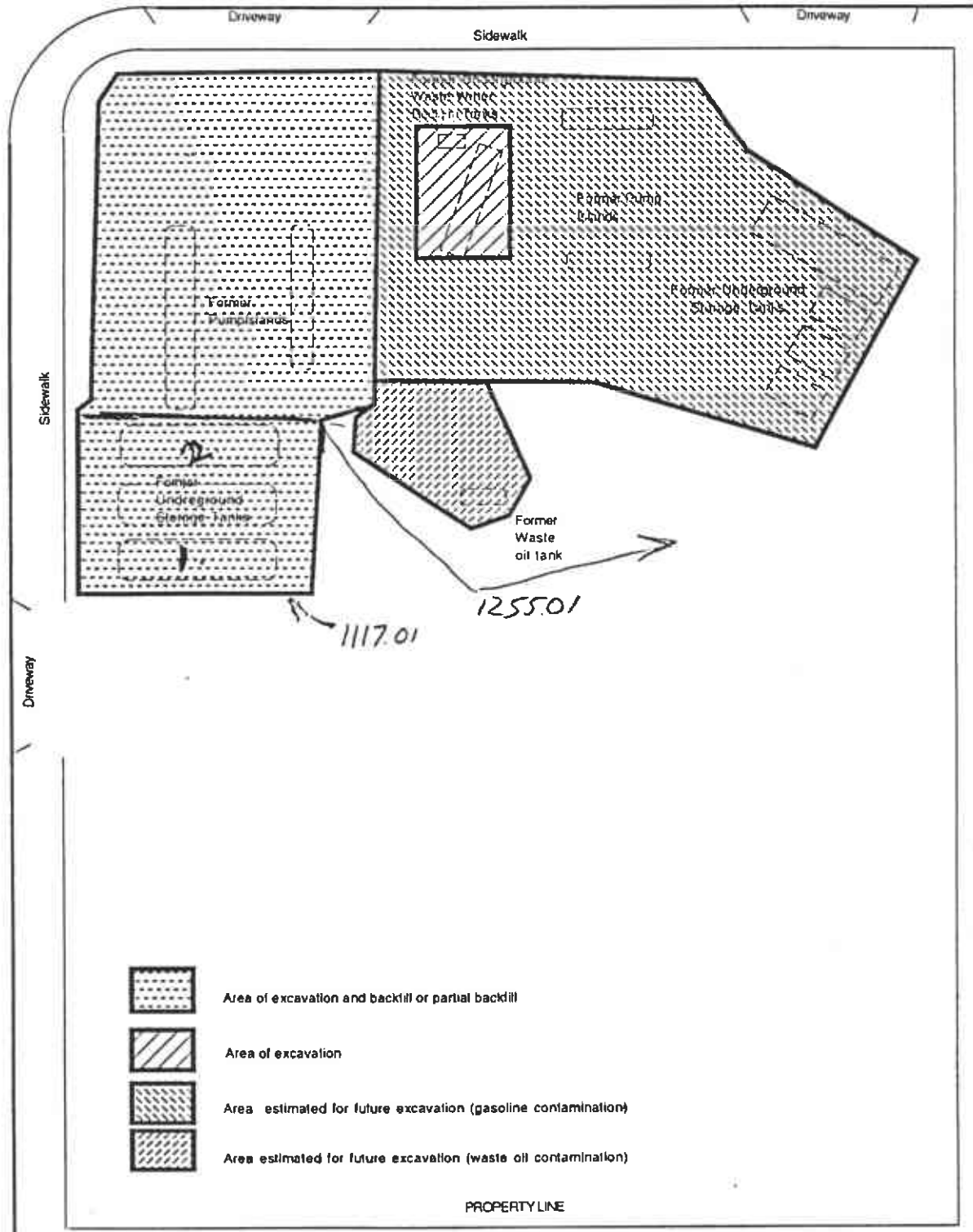
NOTE: Test results constitute the reporting of factual information derived from test(s) made by our laboratory following prescribed procedures. These test results should not be considered as an engineering opinion with respect thereto.





Reviewed by Terry R. Chiccino
Terry R. Chiccino, Soils/Asphalt
Field Operations Manager

cc: Gettler & Ryan
401 Aldo Avenue, Santa Clara, California 95054-2032 • (408) 988-8888 • FAX (408) 727-0731
DIABLO VALLEY • MONTEREY/SALINAS • OAKLAND • SACRAMENTO • SANTA CLARA

CASTRO VALLEY BOULEVARD

WILBEAM AVENUE



-  Area of excavation and backfill or partial backfill
-  Area of excavation
-  Area estimated for future excavation (gasoline contamination)
-  Area estimated for future excavation (waste oil contamination)

PROPERTY LINE

Approximate Scale 1" = 30'



3-29-93 Updated Site Map and Proposed Excavation

Chevron Service Station No. 9-4930
 3369 Castro Valley Boulevard
 Castro Valley, California

Figure 1

03-26-93 mjt

Project # 4930-2