**URS** 

SHC 6436

October 31, 2000 Project No. 5109967060.07

Ms. Susan Hugo Alameda County Environmental Health Services 1131 Harbor Bay Parkway Alameda, CA 94502-6577 DO NON -6 BN 2: 1

Subject:

Post-Excavation Closure Report for Parcel T9 located at 555 12th Street

(formerly referred to as 1155 Clay St.) in Oakland, California

Dear Ms Hugo:

URS Corporation (URS) is pleased to provide this letter report describing the results of post-excavation soil sampling at the subject property in Oakland, California. The work was performed in accordance with the Construction Risk Management Plan submitted to the County (URSGWC, 2000). The primary objective of the soil sampling was to document any remaining concentrations of petroleum hydrocarbons following the completion of the building foundation excavation.

### BACKGROUND

At Parcel T9, URS (as Woodward-Clyde) observed the excavation of contaminated fill material and documented these activities in a technical report (WCC, 1991). Contaminated fill was removed from the site. One area of diesel-impacted native soil was excavated to a maximum depth of approximately 34 feet below street level. This area was then backfilled with approximately 8 feet of lean cement overlain by approximately 4 feet of compacted soil. Confirmation soil samples were collected on a regular grid across the site to confirm that the contaminated fill had been removed from the site.

Native soils were characterized in September 1999 and an excavation work plan was prepared by URS and submitted to the County (URSGWC, 1999). The County requested that a Construction Risk Management Plan (RMP) be prepared and submitted prior to any excavation work.

The Construction RMP prepared by URS outlined the post-excavation soil sampling plan. The plan included sampling at locations where chemicals of concern are suspected based on field screening. In general, an average of one sample for every 5,000 square feet of excavation surface (or about one sample per 70 linear feet) was planned for the effort. Soil samples were planned for analysis of total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene, toluene, ethylbenzene and xylenes (BTEX), and MTBE.



Based on available data (primarily the URSGWC report dated October 19, 1999), the Regional Water Quality Control Board (RWQCB) stated in a letter dated June 22, 2000 (Appendix A) that native soil below the fill material can be classified as an inert waste pursuant to California Code of Regulations, Chapter 15, Title 27, Section 20230. As such, the RWQCB stated that the materials do not need to be disposed of at a classified landfill and the material does not warrant regulatory oversight. Furthermore, the RWQCB explicitly placed no restrictions on its reuse. The possible exception to this was noted as the soil located in the southwest corner (40 feet by 25 feet) where gasoline was believed to be present from a depth of +6 to +11 feet relative to a City of Oakland Datum (C.O.O.D.). The measured groundwater elevation in August 1999 was about +8 feet C.O.O.D.

Prior to beginning any building construction activities, the site appeared as shown in Figure 1. Photographic documentation is provided at the end of this letter report.

### ABANDONED WELLS

Prior to beginning construction activities at the site, groundwater monitoring wells W3, W4 and W5 were abandoned by pressure grouting with cement grout in accordance with Alameda County Public Works Agency policies and guidelines. The work was completed in May 2000. The approved permit application and Well Completion Reports are included in Appendix B.

### SCOPE OF EXCAVATION WORK

To accommodate the construction of two levels of underground parking and a mat foundation for a high-rise building, native soils were excavated from the site by Pacific States Environmental Contractors, Inc. on behalf of the owner Shorenstein Company. The excavation work commenced in June 2000 and was completed in October 2000. A soil dewatering system was installed in July 2000. The dewatering wells were sampled and the results documented in two reports (URS, 2000a,b). Water from the dewatering system was treated and discharged in accordance with an NPDES general permit including self-monitoring reports prepared by URS and submitted to the RWQCB.

The vertical walls of the excavation were stabilized using a combination of soil nailing and shotcreting. During the excavation, URS performed periodic visits to monitor for visual and olfactory signs of petroleum hydrocarbon contamination. A photoionization detector (PID) was used to monitor areas most likely to have hydrocarbon-impacted soil. Soil was excavated to various depths across the site to account for variations in the required depth of the mat foundation. The minimum and maximum depths of the excavation were +16.5 and +9 feet, respectively (relative to the C.O.O.D). A total of approximately 35,700 cubic yards of soil were removed from the site for beneficial reuse. Discussion of field observations and documentation regarding hydrocarbon-impacted soils are provided below.



### DESCRIPTION OF SOIL SAMPLING AND FIELD OBSERVATIONS

Per the Construction RMP (URSGWC, 2000), samples were collected at representative locations along the walls of the excavation and on the bottom of the excavation. The soil samples were intended to be representative of soil that will remain on site after the excavation is finished and the building is constructed. In general an average of one sample for every 5,000 square feet of excavation surface was collected or about one sample per 70 linear feet. Grab soil samples were collected of undisturbed soils using a clean trowel and placed in laboratory-provided 4-ounce glass jars. The soil samples were analyzed for TPHg, TPHd, BTEX, and MTBE at Chromalab in Pleasanton, California. The approximate locations of the soil samples are shown on Figure 2.

Seventeen (17) soil samples were collected on August 2, 2000 from the recently exposed walls of the excavation at approximate depths of 10 to 16 feet below street level. On August 10, 2000, URS collected one sample from the hydrocarbon-impacted soil in the northeast corner of the bottom of the excavation. On September 13, 2000, eleven (11) samples were collected from the bottom of the excavation.

During excavation in the southwest corner of the parcel, there was a distinct hydrocarbon odor and greenish-grayish discoloration to the soil. In this area, a PID was used to measure organic vapor concentrations in the headspace of soil samples placed in plastic bags. PID readings in this area ranged from 20 to 140 parts per million (ppm). The hydrocarbon-impacted soil was segregated and covered with plastic pending receipt of analytical results. A four-point composite soil sample (sample No. T-9) was collected on July 19, 2000 and analyzed for TPHg, TPHd, BTEX and lead. The sample results indicated lead at 4.4 mg/kg; TPHg at 530 mg/kg; TPHd at 280 mg/kg; benzene and toluene at <1.2 mg/kg; ethylbenzene at 3.9 mg/kg; and xylenes at 9.0 mg/kg. The TPHg and TPHd results did not match the laboratory standards which suggests that this is an old spill that has been altered considerably. The analytical results were submitted to the Republic Services Vasco Road Landfill in Livermore for profiling and acceptance as a non-hazardous waste. The results were consistent with historical data used to profile potentially impacted soils at the site, thus the material was accepted by Republic Services for disposal as a non-hazardous waste.

During excavation on August 10, 2000, workers discovered an area with hydrocarbon-impacted soil near the northeast corner of the parcel. The area was about 48 feet from 12<sup>th</sup> Street and 65 feet from Clay Street. The impacted area had lateral dimensions of about five feet by three feet. According to on-site workers, the depth of the impacted soil apparently started at about three feet above the final depth of the excavation. The impacted soil was segregated pending laboratory analysis. A composite sample was collected from the impacted area near the bottom of the excavation and analyzed for TPHg, TPHd, BTEX and MTBE. Headspace testing revealed vapor concentrations ranging from 60 to 220 ppm. The sample results (bottom of excavation sample No. 1) are



shown in Table 1 (TPHg at 1.6 mg/kg and TPHd at 180 mg/kg). The TPHg result did not match the laboratory standard. The results were of the same general magnitude as those for the impacted soils in the southwest corner, thus the material was accepted by Republic Services for disposal as a non-hazardous waste. Approximately 20 tons of impacted soil were removed from this area for disposal at the Republic Services landfill.

A total of 260 tons of hydrocarbon-impacted soils from the southwest and northeast corners of the parcel were taken to the Republic Services Vasco Road Landfill in Livermore for disposal as a non-hazardous waste. Copies of the bills of lading for disposal of hydrocarbon-impacted soil are included in Appendix C.

### SOIL SAMPLE RESULTS

Table 1 summarizes the results for side wall soil samples (sample Nos. 1 through 18) and bottom of excavation soil samples (sample Nos. 1 and T9-SS-19 through T9-SS-29). The complete laboratory reports are provided as an attachment (Appendix D).

### Side Wall Sample Results

The laboratory reported no detection about the reporting limit (i.e., non-detectable concentrations) for TPHg, TPHd, BTEX and MTBE in the side wall samples. The non-detectable concentrations reported for sample Nos. 7, 8, 9 and 10 collected in the southwest corner of the site suggest that the lateral extent of hydrocarbon-impacted soils may not extend beyond the property boundary at the depth of the soil sampling.

### **Bottom of Excavation Sample Results**

Three of the twelve bottom of excavation samples had detectable concentrations of hydrocarbons. These samples were:

- Bottom of excavation sample No. 1 (TPHg at 1.6 mg/kg and TPHd at 180 mg/kg);
- T9-SS-21 (TPHd at 1.9 mg/kg); and
- T9-SS-26 (TPHd at 1.5 mg/kg).

The laboratory reported no detection about the reporting limit for TPHg, TPHd, BTEX and MTBE in the other bottom of excavation samples. The TPHg result for sample No. 1 and the TPHd results for sample Nos. T9-SS-21 and T9-SS-26 did not match the laboratory standards.

### Summary of Results

There are no risk-based standards by which to evaluate these TPHg and TPHd concentrations, since risk is assessed based on the concentrations of individual constituents (e.g., BTEX and MTBE) of the detected petroleum hydrocarbons. Generally,

## **URS**

Ms. Susan Hugo October 31, 2000 Page 5

a TPHd concentration of 180 mg/kg would be considered to be a residual concentration that would not be cause for environmental concern in this setting. This is further supported by the fact that any hydrocarbons remaining in soil at the site will be covered by the subgrade concrete of the building foundation and underground parking structure such that there will not be any direct exposure via dermal contact for future occupants of the site. Finally, the absence of volatile hydrocarbon constituents like BTEX indicates no threat to groundwater or human health.

Thus, in conclusion, the results of the side wall and bottom of excavation samples suggest that residual hydrocarbon concentrations at the site would not pose a significant risk to groundwater quality or human health.

### QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) REVIEW

A QA/QC review of the soil analytical data provided by Chromalab was undertaken to evaluate the accuracy and precision of the laboratory results for use in this report. Upon receipt of laboratory reports, the following steps were taken in accordance with the U.S. EPA guidance for data validation. Sample custody documents were cross-checked with laboratory reports for sampling dates and required analyses. Holding times were calculated using analysis date, preparation date, and/or test date in relation to sampling date. The results were reviewed for QA/QC elements of precision, accuracy, reporting limits, and contamination. Also noted were any deviations from plans, protocols, or data quality objectives. Problems and irregularities were discussed with the laboratory, which printed revised reports as necessary. The following QA/QC parameters were reviewed during data evaluation:

- Chains of Custody Verify that requested analyses were performed and that sampling dates are accurately noted in lab reports.
- Holding Times Check for holding times in excess of EPA guidelines.
- Method Blanks Review blank analyses for evidence of potential contamination.
- Matrix Spikes Review matrix spike and spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs) as a check for analytical precision and accuracy.
- Laboratory Control Samples Review control and control duplicate recoveries and relative percent differences (RPDs) as a check for analytical accuracy and precision.
- Surrogates Review surrogate recoveries as a check for sample specific accuracy.

### Chains of Custody

All analyses were performed as requested and samples were adequately accounted for throughout the transfer from field to lab.

**Holding Times** 

The analytical methods used for this study have established holding times which are the maximum amount of time after collection that a sample may be held prior to sample



preparation and/or analysis without qualification. Holding time was not exceeded in any case.

### Method Blanks

Method blanks consist of deionized water which is carried through each step of the analysis with the environmental samples for each parameter. No laboratory contamination was observed in the method blanks.

Matrix Spikes

MS/MSD samples are analyzed to evaluate matrix interference for an analytical batch and to assess accuracy and precision. No qualification of the data was necessary based on this review.

Laboratory Control Samples (LCS)

LCS are well-characterized, laboratory-generated samples used to monitor the laboratory's day-to-day performance for analyses and assess the accuracy of the analytical process independent of matrix effects. All LCS recoveries were within control limits.

Surrogates

Surrogates are spiked into blanks, samples, quality control samples, and standards for organic analyses to evaluate accuracy on a sample-specific basis. Surrogates were added to every sample analyzed for TPH-diesel (o-terphenyl) and TPH-gasoline, BTEX, and MTBE (trifluorotoluene and 4-bromofluorobenzene-FID or trifluorotoluene-FID). All diesel surrogate recoveries were within control limits. Surrogate recoveries were outside of the control limits for sample T9-SS-20 for TPHg, BTEX and MTBE. Therefore, the TPHg, BTEX and MTBE results for sample T9-SS-20 are qualified as estimated non-detect.

Summary

The data reviewed are of acceptable precision and accuracy with the following qualification:

• T9-SS-20 TPHg, BTEX, and MTBE results are qualified as estimated non-detect ("UJ" qualifier).

All other results are acceptable without qualification for the purposes of this study.

### **CONCLUSIONS**

The results of the post-excavation soil sampling at the site indicate non-detectable concentrations of petroleum hydrocarbons with the exception of low concentrations of hydrocarbons in soils in the southwest and northeast corners of the property. The impacted soils are limited in extent, and the detected concentrations suggest that residual



hydrocarbon concentrations under the high-rise building development scenario would not pose a significant risk to groundwater quality or human health.

### **LIMITATIONS**

This report was prepared by URS for the use of Shorenstein Company, L.P. The scope of work was agreed upon by Shorenstein Company, L.P. Any reliance on this report by third parties shall be at such party's sole risk.

The work was conducted in general accordance with the accepted standard of practice that exists in northern California at the time. No other warranty is either expressed or implied. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. More extensive studies including additional subsurface investigation can tend to reduce the inherent uncertainties associated with inferring subsurface conditions.

Please feel free to call either of the undersigned if you have any questions regarding this letter report.

Jay B. Clare, P.E.

Project Manager

Albert Ridley, C.E.G.

AN P. RISS

Senior Consultant

Attachments:

List of References

Table 1 - Summary of Laboratory Analysis Results for Soil Samples

Figure 1 – Site Map Showing Pre-Construction Conditions

Figure 2 – Site Map and Location of Post-Excavation Soil Samples

Photographic Documentation

Appendix A - Regional Water Quality Control Board Letter dated June 22, 2000

Appendix B - Approved Well Abandonment Permit Application and Well Completion Reports

Appendix C - Bills of Lading for Non-Hazardous Soil Disposed of at the Republic Services Vasco Road Landfill

Appendix D - Analytical Laboratory Reports

cc: Nicholas Loukianoff, Shorenstein Company, L.P.

Alex Greenwood, City of Oakland

Philip Pogledich, Pillsbury, Madison & Sutro



### LIST OF REFERENCES

URS Corporation (URS). 2000a. Recent Groundwater Analytical Results and NPDES Permit No. CAG912002, Order No. 96-078, Shorenstein Realty Services, Parcel T9, 555 12<sup>th</sup> Street, Oakland. July 28, 2000.

URS. 2000b. Addendum to URS Letter Report on Recent Groundwater Analytical Results, Shorenstein Realty Services, Parcel T9, 555 12<sup>th</sup> Street, Oakland. July 31, 2000.

URS Greiner Woodward Clyde (URSGWC). 1999. Soil Characterization Study and Excavation Work Plan for Parcel T9 in Oakland, California. October 19, 1999.

URSGWC. 2000. Construction Risk Management Plan, 1155 Clay Street (Parcel T-9), City of Oakland, California. March 23, 2000.

Woodward-Clyde Consultants (WCC). 1991. Soil Remediation Report, 1155 Clay Street, Oakland, California. November 27, 1991.

Table 1.
Post Excavation Soil Sample Results

		SOIL FOR DISPOSAL			· · · · · · · · · · · · · · · · · · ·		SIDE	WALL SAM	IPLES				
Sample II)	Units	Т-9	1	2	3	4	5	6	7	8	9	10	12
Sampling Date		07/19/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00
Depth	feet bgs	-	10	10	14	14	14	16	13	13	13	13	13
TPH by EPA Method	8015M	1.1											
TPH-Gasoline	mg/kg	530 (q)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH-Diesel	mg/kg	280 (q)	<1.0	<1.0	0.1>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BTEX by EPA Metho	d 8020		. !: '										
Benzene	mg/kg	<1.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0,005	<0.005	<0.005
Toluene	ing/kg	<1.2	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	<0.005	< 0.005	<0.005	< 0.005	< 0.005
Ethyl benzene	mg/kg	3.9	<0.005	<0.005	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.005
Xylene(s)	mg/kg	9,0	<0.005	< 0.005	<0,005	<0.005	<0.005	<0.005	<0.005	<0,005	< 0.005	<0.005	<0.005
MTBE by EPA Metho	d 8020	<u> </u>		· .						1 41%			
MTBE	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
											·		

#### Notes:

feet bgs = feet below ground surface.

(q) = hydrocarbon reported in given range does not match laboratory standard Sample No. 11 was indicated as pending approval on the chain of custody form since it was deemed to be redundant in the overall sampling scheme, thus it was not chemically analyzed.

Table 1.
Post Excavation Soil Sample Results

				SIDEWALI	L SAMPLES				ВС	оттом оғ	EXCAVATI	ON	
Sample ID	Units	13	14	15	16	17	18	1	T9SS-19	T9-SS-20	T9-SS-21	T9-SS-22	T9-SS-23
Sampling Date		08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/02/00	08/10/00	09/13/00	09/13/00	09/13/00	09/13/00	09/13/00
Depth	feet bgs	13	13	11	8	13	14	18	18	26	26	18	26
TPH by EPA Metho	d 8015M										•	•	•
·			• • • • • • • • • • • • • • • • • • • •										
TPH-Gasoline	mg/kg	<1.0	<1.0	<1,0	<1.0	<1.0	<1.0	1.6 (q)	<1.0	<1.0	<1.0	<1.0	<1.0
TPH-Diesel	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1,0	180	<1.0	<1.0	1.9 (q)	<1.0	<1.0
					•	•	•	1					
BTEX by EPA Meth	od 8020												
Benzene	mg/kg	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	< 0.005
Toluene	mg/kg	< 0.005	< 0.005	<0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	<0.005
Ethyl benzene	mg/kg	<0,005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	< 0.005	< 0.005	<0.005
Xylene(s)	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
			•		•				-,				
MTBE by EPA Met	10d 8020						•						
											r		
MTBE	mg/kg	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	<0.005	<0,005

#### Notes:

feet bgs = feet below ground surface.

(q) = hydrocarbon reported in given range does not match laboratory standard

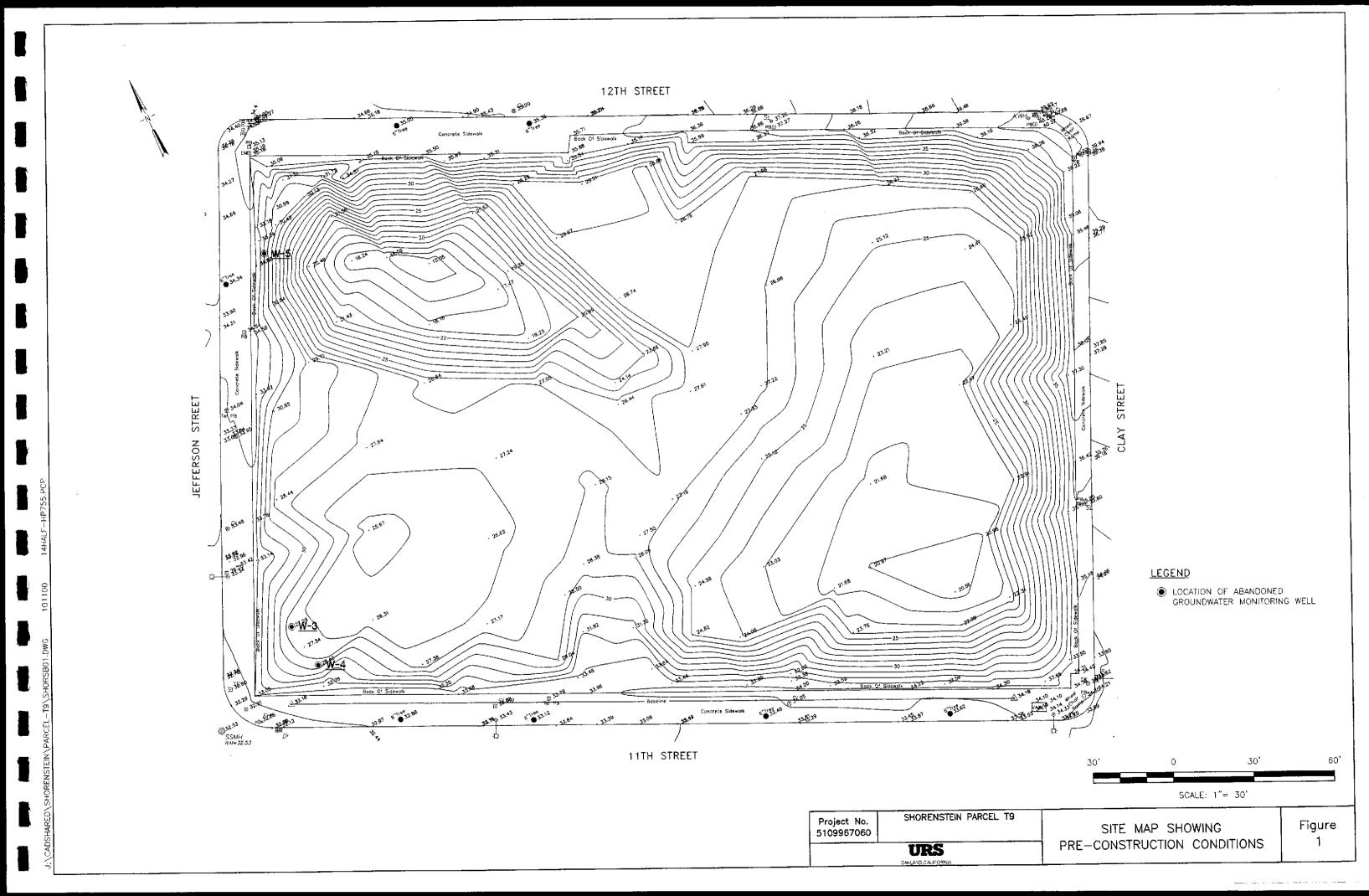
Table 1.
Post Excavation Soil Sample Results

		BOTTOM OF EXCAVATION							
Sample ID	Units	T9-SS-24	T9-SS-25	T9-\$S-26	T9-SS-27	T9-SS-28	T9-SS-29		
Sampling Date		09/13/00	09/13/00	09/13/00	09/13/00	09/13/00	09/13/00		
Depth	feet bgs	26	18	21	18	21	21		
TPH by EPA Method									
TPH-Gasoline	mg/kg	<1.0	<1.0	<1.0_	<1.0	<1,0	<1.0		
TPH-Diesel	mg/kg	<1.0	<1.0	1.5 (q) L	<1.0	<1.0	<1.0		
BTEX by EPA Metho	od 8020								
Benzene	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Tolucne	mg/kg	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	<0.005		
Ethyl benzene	mg/kg	< 0.005	< 0.005	<0.005	<0.005	<0,005	<0.005		
Xylene(s)	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
MTBE by EPA Meth	od 8020								
MTBE	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		

#### Notes:

feet bgs = feet below ground surface.

(q) = hydrocarbon reported in given range does not match laboratory standard



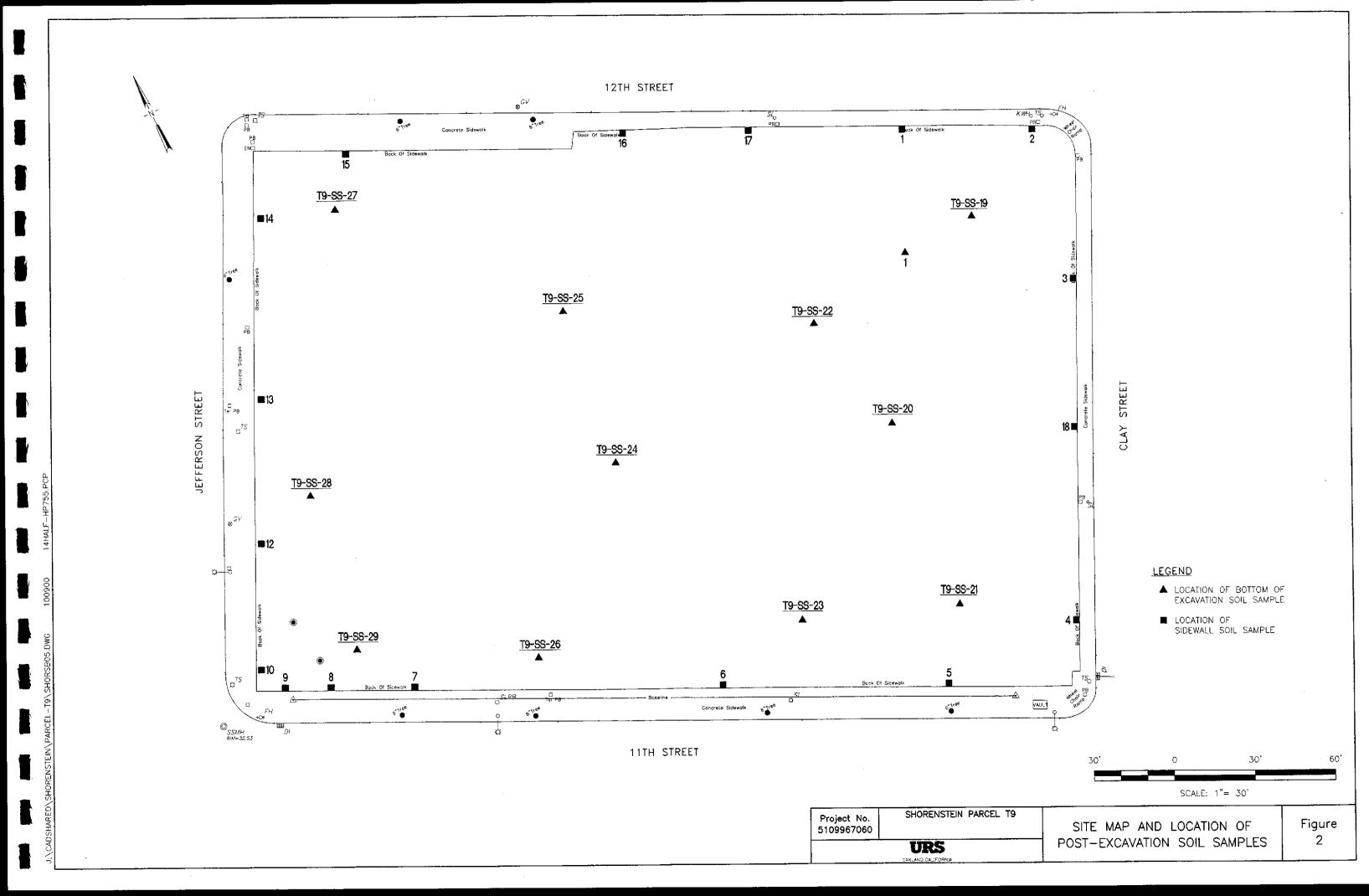




Photo 1 - Parcel T9 Prior to Construction Activities (view to southeast)



Photo 2 – Excavation Work in Progress (Hydrocarbon Impacted Soil Located Underneath Plastic Sheeting)



Photo 3 - Completion of Excavation with Groundwater Dewatering Well in Foreground (view to southeast)



Photo 4 - Final Excavation Depth With Initial Foundation Work (southwest corner)



Protection

## California Regional Water Quality Control Board

San Francisco Bay Region



Internet Address: http://www.swrcb.ca.gov 1515 Clay Street, Suite 1400, Oakland, California 94612 Phone (510) 622-2300 • FAX (510) 622-2460

> June 22, 2000 File No. 2223.08 (CTH)

Mr. Paul Dumond Director of Development Shorenstein Asset Services 555 California Street San Francisco, California 94104

Subject:

Rouse of Soil, Parcel T-9 at 555 12th Street, Oakland City Center, Alameda

County

Dear Mr. Dumond:

I have reviewed your report dated May 4, 2000, regarding soil that will be excavated from Parcel T-9 at the Oakland City Center Project. The report documents analytical results for in-place native soil at the site. Analytical results of soil profiling of the in-place native soils indicates that no petroleum hydrocarbons, VOCs, and SVOCs are present in the materials to be excavated. Background concentrations of metals are present at the site but are below regulatory thresholds.

### Background

Woodward-Clyde states in a report dated November 27, 1991, that lead and petroleum-impacted fill material was excavated and removed from the site in 1990/1991. One area of diesel-impacted native soil was excavated to a maximum depth of approximately 34 feet below street level. This area was then backfilled with approximately 8 feet of lean cement overlain by approximately 4 feet of compacted soil. Confirmation soil samples were collected on a regular grid across the site to confirm that the contaminated fill had been removed from the site.

The nature and extent of possible contamination of the native soil was investigated by URS Greiner Woodward Clyde in September 1999. Based on the results of the September 1999 soil sampling and analysis, it was concluded that:

- Petroleum hydrocarbon impacted soils appear to be limited in extent to the southwest corner of the property, in a hydrocarbon "smear zone" above the water table.
- The soluble threshold limits concentration (STLC) results for lead indicate that the soil would not be considered a California hazardous waste if excavated.

Post-It* Fax Note	7671	Date	pages 2
	re	From	ux leadle
Co./Dept.		Co.	
Phone #		Phone #	
Fax # 510 874	1-3268	Fex#	

Mr. Dumond

2

June 22, 2000

### Scope of Excavation

The construction plan for the site involves excavation of soil down to a maximum depth of +10 feet City of Oakland Datum for the construction of two levels of underground parking and a high-rise building. This will not intercept the possible petroleum smear zone present at the water table. The total estimated volume of native soil to be excavated is about 31,000 cubic yards. The Owner/Contractor intends to reuse the soil as fill at another construction site within the San Francisco Bay Region.

Based on the data provided, it appears that the soil to be excavated can be classified as an inert waste pursuant to California Code of Regulations, Chapter 15, Title 27, Section 20230. As such the materials do not need to be disposed of at a classified landfill. Additionally, this material does not warrant regulatory oversight and the San Francisco Bay Regional Water Quality Control Board places no restrictions on its reuse.

If you have any questions, please contact Chuck Headlee of my staff at (510) 622-2433, e-mail cth@rb2.swrcb.cz.gov.

Sincerely,

Lawrence P. Kolb
Acting Executive Officer

Stephen A. Hill

Chief, Toxics Cleanup Division

cc: Susan Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502

### Appendix B Approved Well Abandonment Permit Application and Well Completion Reports

, FEB-14-2000 15:25

URSGWC

P.03/05 510 874 3268



## ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 388, NAYWARD, CA 94945-3651

PHONE (BIT SEA 544 MIRE DON MAGALLE MICE COMPANY AUG COMPANY (STO) 670-5554

PAX 4444-45444 786-11737 Fax

DRILL	ing permit app	LICATION		J ,
LOCATION OF PROJECT Shorenstein Parcel To	 <u>[</u>	PERMIT NUMBER	WOO . OSO	
le-ferson Between 11th/12th Street	<b>.</b> -		PERMIT CONDITIONS I Permit Requirements App	y .
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# CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

**REMOVED** 

# CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

**REMOVED** 

# CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

### Appendix C Bills of Lading for Non-Hazardous Soil Disposed of at the Republic Services Vasco Road Landfill

No:0034093

000X T20 RECEIVED JUDITH VOSS

TICKET: 56142

CUSTOKER: PAC ST / PACIFIC STATES ENVIR

TRUCK: 1140

ACCT#: 5014976 PROFILE #: 02538

DATE: 68/10/2008

TIME: 15:50 - 15:50

GENERATOR: SHOR / SHORENSTEIN REALT

DRIGIN: 6020 / ALAMEDA

LICENSE: COMMENT:

GROSS: - E9560 LBS Manual TARE: 30200 LBS Weight

NET: 39460 LBS

SANDA / SAND ADC

QUANTITY UNIT

I certify that I have not disposed of any liquid or hazardous waste

Total:



## REPUBLIC SERVICES VASCO ROAD, LLC 4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

TICKET: / 55994

CUSTOMER: PAG ST / PACIFIC STATES ENVIR

TRUCK: 1146

ACCT#: 5014975 PROFILE #: 02638 DATE: 08/10/2000

No:0033944

TIME: 12:51 - 12:51

GENERATOR: SHOR / SHORENSTEIN REALT

ORIGIN: 0020 / ALAMEDA

LICENSE: COMMENT:

72900 LBS Menual TARE: 30300 LBS Weight

42680 LBS

QUANTITY

SANDA / SAND ADC

I certify that I have not disposed of any liquid or hazardous waste

### REPUBLIC SERVIC VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

TICKET: 62786

CUSTOMER: PAC ST / PACIFIC STATES ENVIR

TRUCK: 1010

ACCT#: 5014976

PROFILE #: 02539

DATE: 08/30/2000

TIME: 08:48 - 09:06

GENERATOR: SHOR / SHORENGTEIN REALT

DRIGIN: 6020 / ALAMEDA

LICENSE:

GROSS: 59060 LBS

TARE: 31340 LBS

NET: 27720 LBS

COMMENT:

SANDA / SAND ADC

UNIT **DUANTITY** 13.85

Ivcertify that I have not disposed of any liquid or hazardous waste

Total:

ŘIVER :

CUSTOMER

### REPUBLIC SERVICES VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 . (925) 447-0491

TICKET: 57541

CUSTOMER, PAC ST / PACIFIC STATES ENVIR

TRUCK: JR4

ACCTO: 5014976

PROFILE #: 02538

DATE: 08/15/2000

No:0022987

TIME: 14:00 - 14:00

GENERATOR: SHOR / SHORENSTEIN REALT

ORIGIN: GOZO / ALAMEDA

LICENSET

COMMENT:

**CHICKTITY** 

GROSS: 87100 LBS Manual

IARE: 33680 LBS Weight

Tetal:

MET: 53420 LBS

SANDA / SAND ADC

I certify that I have not disposed of any liquid or hezardous waste

TICKETS

50329

CUSTOMER: PAC ST / PACIFIC STATES ENVIR

ACCTA: 5014975

PREFILE #: 92538A

DATE: 97/25/2900

TIME: 19:25 - 11:12

CENERATOR: SHOR / CHORENSTEIN REALT

DRIGIN: 9929 / ALAMEDA

SANDD / SAND DISPOSAL

LICENSE: COMMENT: SAUSS: 91100 LES Manual

TARE 34440 LBS Weight

NET: 56860 LBS

I cartify that I have not disposed of any liquid or hazardoffs waste

Total: \$

IVER

REPUBLIC SERVICES VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

TICKET FOR S0495

DUSTOMER: FAC ST V PACIFIC STATES ENVIR

ACCTA: 5014976

PREFILE #: 02638A

No:0041055

DATE: 07/25/2000

TIME: 14:30 - 14:31

GENERATOR: SHOR / SHORENSTEIN REALT

ORIGIN: 0020 / ALAMEDA

LICENSE:

COMPLEXIT!

GROSS: 112300 LBS Manual TARE: 34440 LBS Weight

NET: 77850 LBS

CUPATITY "UNIT

SANDO / SAND DISPOSAL

38.93

I certify that I have not disposed

of any liquid or hazardous waste

Totals

### REPUBLIC SERVIC VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

TIESE IN THE

CLESCHER: PAG ST / PACIFIC STATES EWIR

Fig. D. D. 

SCCT 31 5014978 PACFILE #1 925329 DATE: 97/28/2220

TIME: 07:25 - 07:25

EENERATOR: SHOR / SHORENSTEIN REALT

CRISIN: 0020 / ALAMEDA

SANDD / SAND DISPOSAL

LICENEE:

COMMENT:

6705S: 101280 LBS Manual TARE: 34400 LBS Walcht

NET: E5280 LBS

UNIT

I cartify that I have not disposed of any liquid or hazardous waste

Total: 3

CUSTOMER



### REPUBLIC SERVICES VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

51412 FICKET:

The second second and second second second second

CUSTOMER: PAC ST / PACIFIC STATES ENVIR

TRIEKT IN THE STATE OF THE STAT

ACCT#1 5914978

PROFILE #: 92538A

DATE: 07/28/2000

No:0029378

TIME: 07:38 - 08:10

**全国企业** 

BENERATOR: SHOR / SHORENSTEIN REALT

ORIGIN: 0029 / ALAMEDA

LICENSE:

COMENT:

BROSS: 81380 LBS Manual TARE: 34580 LBS Weight

45800 LBS

QUANTITY UNIT

SANDD / SAND DISPOSAL

Total: 3

I certify that I have not disposed of any liquid or hazardous waste

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

TICKETY 51455

CUSTOMER: PAC ST / PACIFIC STATES ENVIR

TALCX 1.31

SCCT0: 3014975

PACFILE #1 92538A

DATE: 07/22/2000

TIME: 98:31 - 89:22

BENERATOR: SHOR / SHOREMETEIN REALT

DRIGIN: 2020 / ALAMEDA

LICENSE:

COMMENT:

GRCSS: 83800 LBS Manual

TARE: 31400 LBS Weight

NET: 51200 LBS

SANDD / SAND DISPOSAL

I certify that I have not disposed of any liquid or hazardous wasta

Total:



### REPUBLIC SERVICES VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94550 • (925) 447-0491

No:0029458

TICKET: " DIAPE

CLISTCHER: PAC ST / PACIFIC STATES ENVIR

TAUCK: 23

ACCT#1 5014976

PROFILE #: 02538A

DATE: 07/28/2900

TIME: 08:24 - 10:17

CENERATOR: SHOR / SHORENSTEIN REALT

ORIGIN: 0020 / ALAMEDA

LICENSE:

GROSS: 91129 LBS Manual

32060 LBS Weight TARE:

NET: 59969 LBS

COMMENT:

SANDO / SAND DISPOSAL

I certify that I have not disposed

of any liquid or hazardous waste

Total: \$

### Appendix D Analytical Laboratory Reports

Submission #: 2000-08-0080

Date: August 10, 2000

**URS Greiner Woodward Clyde- Oakland** 

500 12th Street, Suite 200 Oakland, CA 94607-4014

Attn.: Mr. Jay Clare

Dear Jay,

Attached is our report for your samples received on Thursday August 3, 2000 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after September 2, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

Abanch. Salinpoe

## CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-08-0080

Date: August 10, 2000

To:

**URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

### **CASE NARRATIVE**

### **General and Sample Comments**

We (ChromaLab, Inc.) received 18 Soil samples, on Aug 3 2000 3:40PM.

### Analysis Comments and Flags by QC Batch

G/BTEX with MTBI		Soil	QC Batch#: 2000/08/07.01-01
#9 >> MS			Lab#: 2000/08/07.01-01-004
Compound I	Flag(s)		
mso	MS/MSD spike recoveries were Accuracy were verified by LCS	e out of QC limits due	to matrix interference. Precision and
#9 >> MSD			Lab#: 2000/08/07.01-01-005
mso	MS/MSD spike recoveries were Accuracy were verified by LCS	e out of QC limits due	to matrix interference. Precision and
Gas BTEX		Soil	QC Batch#: 2000/08/04.01-01
SP-2 >> MS			Lab#: 2000/08/04.01-01-004
mso	MS/MSD spike recoveries were Accuracy were verified by LCS	e out of QC limits due /LCSD.	to matrix interference. Precision and
SP-2 >> MSD			Lab#: 2000/08/04.01-01-005
mso	MS/MSD spike recoveries were Accuracy were verified by LCS	e out of QC limits due /LCSD.	to matrix interference. Precision and

Diesel

**URS Greiner Woodward Clyde- Oakland** 

Oakland, CA 94607-4014

Attn: Jay Clare

Phone: (510) 874-3027 Fax: (510) 874-3268

Project #: 51099670607

Project:

### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
#1	Soil	08/02/2000 17:45	1
#2	Soil	08/02/2000 14:48	2
#3	Soil	08/02/2000 14:55	3
#4	Soil	08/02/2000 14:56	4
#5	Soil	08/02/2000 14:59	5
#6	Soil	08/02/2000 15:10	6
#7	Soil	08/02/2000 15:13	7
#8	Soil	08/02/2000 15:16	8
#9	Soil	08/02/2000 15:20	9
#10	Soil	08/02/2000 15:23	10
#12	Soil	08/02/2000 15:28	12
#13	Soil	08/02/2000 15:31	13
#14	Soil	08/02/2000 15:35	14
#15	Soil	08/02/2000 15:39	15
#16	Soil	08/02/2000 15:45	16
#17	Soil	08/02/2000 15:50	17
#18	Soil	08/02/2000 16:00	18

## CHROMALAB, INC.

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

#1

51099670607

Lab Sample ID: 2000-08-0080-001

Received:

08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 17:45

Extracted: QC-Batch:

2000/08/04-01.10

Matrix:

Project:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 15:29	
Surrogate(s) o-Terphenyl	81.3	60-130	%	1.00	08/04/2000 15:29	

## CHROMALAB, INC. Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

Test Method:

8015M

Submission #: 2000-08-0080

Prep Method:

3550/8015M

Diesel

Sample ID:

Project:

#2

51099670607

Lab Sample ID: 2000-08-0080-002

Received:

08/03/2000 15:40

Extracted:

08/04/2000 10:19

Sampled:

08/02/2000 14:48

QC-Batch:

2000/08/04-01.10

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 16:08	
Surrogate(s) o-Terphenyl	82.2	60-130	%	1.00	08/04/2000 16:08	

## CHROMALAB, INC.

Submission #: 2000-08-0080

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Attn.: Jay Clare

Test Method: 8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

Project:

#3

51099670607

·

Lab Sample ID: 2000-08-0080-003

Received:

08/03/2000 15:40

Extracted:

08/04/2000 10:19

08/02/2000 14:55

QC-Batch:

2000/08/04-01.10

Matrix:

Sampled:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 16:47	
Surrogate(s) o-Terphenyl	72.5	60-130	%	1.00	08/04/2000 16:47	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

Attn.: Jay Clare

#4

Lab Sample ID: 2000-08-0080-004

Received:

08/03/2000 15:40

Extracted:

08/04/2000 10:19

Sampled:

Project:

08/02/2000 14:56

51099670607

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 21:15	
Surrogate(s) o-Terphenyl	78.1	60-130	%	1.00	08/04/2000 21:15	•

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#5

Lab Sample ID: 2000-08-0080-005

Project:

51099670607

Received:

08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 14:59

Extracted:

Matrix:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 17:25	
Surrogate(s) o-Terphenyl	75.4	60-130	%	1.00	08/04/2000 17:25	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#6

Lab Sample ID: 2000-08-0080-006

Project:

51099670607

Received:

08/03/2000 15:40

08/02/2000 15:10

Extracted:

08/04/2000 10:19

Sampled:

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 18:03	
Surrogate(s) o-Terphenyl	81.4	60-130	%	1.00	08/04/2000 18:03	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#7

Lab Sample ID: 2000-08-0080-007

Project:

51099670607

Received:

08/03/2000 15:40

Sampled:

08/02/2000 15:13

Extracted:

08/04/2000 10:19

Matrix:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 18:41	
Surrogate(s) o-Terphenyl	74.6	60-130	%	1.00	08/04/2000 18:41	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#8

Lab Sample ID: 2000-08-0080-008

Project:

51099670607

Received:

08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 15:16

Extracted:

Matrix:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 19:20	
Surrogate(s) o-Terphenyl	61.1	60-130	%	1.00	08/04/2000 19:20	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

Attn.: Jay Clare

#9

Lab Sample ID: 2000-08-0080-009

Project:

51099670607

Received:

08/03/2000 15:40

08/02/2000 15:20

Extracted:

08/04/2000 10:19

Matrix:

Sampled:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 19:58	
Surrogate(s) o-Terphenyl	80.2	60-130	%	1,00	08/04/2000 19:58	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#10

Lab Sample ID: 2000-08-0080-010

Project:

51099670607

Received: Extracted: 08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 15:23

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 20:37	
Surrogate(s) o-Terphenyl	79.3	60-130	%	1.00	08/04/2000 20:37	

Submission #: 2000-08-0080

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Attn.: Jay Clare

8015M Test Method:

Prep Method:

3550/8015M

Diesel

Sample ID: #12

51099670607

Received:

Lab Sample ID: 2000-08-0080-012

08/03/2000 15:40

Extracted:

08/04/2000 10:19

Sampled:

Project:

08/02/2000 15:28

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 16:08	
Surrogate(s) o-Terphenyl	86.0	60-130	%	1.00	08/04/2000 16:08	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: URS Greiner Woodward Clyde- Oakland

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#13

Lab Jai

Lab Sample ID: 2000-08-0080-013

Project:

51099670607

Received:

08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 15:31

Extracted:

2000/08/04-01.10

Matrix:

Soil

QC-Batch: 2000

1000.00.0.0

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 16:47	
Surrogate(s) o-Terphenyl	75.0	60-130	%	1.00	08/04/2000 16:47	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

8015M Test Method:

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#14

Lab Sample ID: 2000-08-0080-014

Project:

51099670607

Received:

08/03/2000 15:40

Sampled:

08/02/2000 15:35

Extracted:

08/04/2000 10:19

Matrix:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 17:25	
Surrogate(s) o-Terphenyl	86.3	60-130	%	1.00	08/04/2000 17:25	

## CHROMALAB, INC. Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

8015M Test Method:

Prep Method:

3550/8015M

Submission #: 2000-08-0080

Diesel

Sample ID:

Project:

Attn.: Jay Clare

#15

51099670607

Lab Sample ID: 2000-08-0080-015

Received:

08/03/2000 15:40

Extracted:

08/04/2000 10:19

Sampled:

08/02/2000 15:39

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 18:03	
Surrogate(s)						
o-Terphenyl	84.5	60-130	%	1.00	08/04/2000 18:03	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

#16

Lab Sample ID: 2000-08-0080-016

Project:

51099670607

Received:

08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 15:45

Extracted:

Matrix:

Soil

QC-Batch:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 18:41	
Surrogate(s) o-Terphenyl	84.4	60-130	%	1.00	08/04/2000 18:41	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

Prep Method:

8015M

3550/8015M

Diesel

Sample ID:

Attn.: Jay Clare

#17

Lab Sample ID: 2000-08-0080-017

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 10:19

Sampled:

08/02/2000 15:50

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 19:20	,
Surrogate(s) o-Terphenyl	81.2	60-130	%	1.00	08/04/2000 19:20	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

#18

Lab Sample ID: 2000-08-0080-018

Project:

51099670607

Received: Extracted: 08/03/2000 15:40 08/04/2000 10:19

Sampled:

08/02/2000 16:00

QC-Batch:

2000/08/04-01.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/04/2000 19:58	
Surrogate(s) o-Terphenyl	83.3	60-130	%	1.00	08/04/2000 19:58	

## CHROMALAB, INC. Environmental Services (SDB)

Submission #: 2000-08-0080

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

#### **Batch QC Report**

Diesel

Method Blank

Soil

QC Batch # 2000/08/04-01.10

MB:

2000/08/04-01.10-001

Date Extracted: 08/04/2000 10:19

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	08/04/2000 15:29	
Surrogate(s)					
o-Terphenyl	74.5	60-130	%	08/04/2000 15:29	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Attn: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

#### **Batch QC Report**

Diesel

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/04-01.10

LCS:

Diesel

Surrogate(s) o-Terphenyl

2000/08/04-01.10-002

Extracted: 08/04/2000 10:19

20.0

Analyzed

60-130

08/04/2000 21:15

LCSD:

2000/08/04-01.10-003

Extracted: 08/04/2000 10:19

20.0

Analyzed

08/04/2000 21:53

-			_
Compound	Conc.	[ mg/Kg ]	

LCS

29.7

20.0

23.0

[ mg/Kg ]	Exp.Conc.	[mg/Kg]	Recov	ery [%]	RPD	Ctrl. Limi	its [%]	Flag	s
 LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
34.7	41.7	41.7	71.2	83.2	15.5	60-130	25		

100.0 115.0

## CHROMALAB, INC. Environmental Services (SDB)

#### Gas/BTEX and MTBE

**URS Greiner Woodward Clyde- Oakland** 

500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jay Clare

Phone: (510) 874-3027 Fax: (510) 874-3268

Project #: 51099670607

Project:

#### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
#1	Soil	08/02/2000 17:45	1
#2	Soil	08/02/2000 14:48	2
#3	Soil	08/02/2000 14:55	3
#4	Soil	08/02/2000 14:56	4
#5	Soil	08/02/2000 14:59	5
#6	Soil	08/02/2000 15:10	6
#7	Soil	08/02/2000 15:13	7
#8	Soil	08/02/2000 15:16	8
#9	Soil	08/02/2000 15:20	9
#10	Soil	08/02/2000 15:23	10
#12	Soil	08/02/2000 15:28	12
#13	Soil	08/02/2000 15:31	13
#14	Soil	08/02/2000 15:35	14
#15	Soil	08/02/2000 15:39	15
#16	Soil	08/02/2000 15:45	16
#17	Soil	08/02/2000 15:50	17
#18	Soil	08/02/2000 16:00	18

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#1

Lab Sample ID: 2000-08-0080-001

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 14:39

Sampled:

08/02/2000 17:45

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 14:39	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:39	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:39	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:39	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 14:39	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 14:39	
Surrogate(s)						
Trifluorotoluene	79.2	53-125	%	1.00	08/04/2000 14:39	
4-Bromofluorobenzene-FID	66.5	58-124	%	1.00	08/04/2000 14:39	

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020

8015M

Submission #: 2000-08-0080

Attn.: Jay Clare

To:

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#2

Lab Sample ID: 2000-08-0080-002

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 15:14

Sampled:

08/02/2000 14:48

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 15:14	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:14	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:14	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:14	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 15:14	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 15:14	
Surrogate(s)						
Trifluorotoluene	75.2	53-125	%	1.00	08/04/2000 15:14	
4-Bromofluorobenzene-FID	63.2	58-124	%	1.00	08/04/2000 15:14	

Submission #: 2000-08-0080

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#3

Lab Sample ID: 2000-08-0080-003

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 15:50

Sampled:

08/02/2000 14:55

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 15:50	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:50	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:50	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:50	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 15:50	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 15:50	
Surrogate(s)						
Trifluorotoluene	76.0	53-125	%	1.00	08/04/2000 15:50	
4-Bromofluorobenzene-FID	68.7	58-124	%	1.00	08/04/2000 15:50	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020

8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#4

Lab Sample ID: 2000-08-0080-004

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 16:25

Sampled:

08/02/2000 14:56

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 16:25	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:25	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:25	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:25	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 16:25	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 16:25	
Surrogate(s)						
Trifluorotoluene	72.0	53-125	%	1.00	08/04/2000 16:25	
4-Bromofluorobenzene-FID	58.9	58-124	%	1.00	08/04/2000 16:25	

Submission #: 2000-08-0080

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#5

Lab Sample ID: 2000-08-0080-005

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 17:01

Sampled:

08/02/2000 14:59

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 17:01	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:01	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:01	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:01	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 17:01	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 17:01	
Surrogate(s)						
Trifluorotoluene	74.9	53-125	%	1.00	08/04/2000 17:01	
4-Bromofluorobenzene-FID	62.0	58-124	%	1.00	08/04/2000 17:01	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#6

Lab Sample ID: 2000-08-0080-006

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 17:36

Sampled:

08/02/2000 15:10

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 17:36	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:36	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:36	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:36	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 17:36	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 17:36	
Surrogate(s)					!	
Trifluorotoluene	77.3	53-125	%	1.00	08/04/2000 17:36	
4-Bromofluorobenzene-FID	68.1	58-124	%	1.00	08/04/2000 17:36	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#7

Lab Sample ID: 2000-08-0080-007

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 18:12

Sampled:

08/02/2000 15:13

QC-Batch:

2000/08/04-01.01

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 18:12	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 18:12	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 18:12	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 18:12	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 18:12	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 18:12	
Surrogate(s)						
Trifluorotoluene	68.8	53-125	%	1.00	08/04/2000 18:12	
Trifluorotoluene-FID	71.0	53-125	%	1.00	08/04/2000 18:12	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#8

Lab Sample ID: 2000-08-0080-008

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 15:56

Sampled:

08/02/2000 15:16

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 15:56	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:56	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:56	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:56	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 15:56	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 15:56	
Surrogate(s)						
Trifluorotoluene	75.7	53-125	%	1.00	08/04/2000 15:56	
Trifluorotoluene-FID	58.4	53-125	%	1.00	08/04/2000 15:56	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020

8015M 5030

Attn.: Jay Clare

Prep Method:

Gas/BTEX and MTBE

Sample ID:

#9

Lab Sample ID: 2000-08-0080-009

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/07/2000 11:26

Sampled:

08/02/2000 15:20

Matrix:

Soil

QC-Batch:

2000/08/07-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/07/2000 11:26	
Benzene	ND	0.0050	mg/Kg	1.00	08/07/2000 11:26	
Toluene	ND	0.0050	mg/Kg	1.00	08/07/2000 11:26	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/07/2000 11:26	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/07/2000 11:26	
MTBE	ND	0.0050	mg/Kg	1.00	08/07/2000 11:26	
Surrogate(s)						
Triffuorotoluene	66.9	53-125	%	1.00	08/07/2000 11:26	
Trifluorotoluene-FID	68.1	53-125	%	1.00	08/07/2000 11:26	

## CHROMALAB, INC. Environmental Services (SDB)

Submission #: 2000-08-0080

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#10

Lab Sample ID: 2000-08-0080-010

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 16:53

Sampled:

08/02/2000 15:23

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 16:53	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:53	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:53	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 16:53	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 16:53	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 16:53	
Surrogate(s)						
Trifluorotoluene	77.4	53-125	%	1.00	08/04/2000 16:53	
Trifluorotoluene-FID	59.6	53-125	%	1.00	08/04/2000 16:53	

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** 

Test Method: 8020

8015M

Submission #: 2000-08-0080

Attn.: Jay Clare

To:

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#12

Lab Sample ID: 2000-08-0080-012

Project:

51099670607

Received:

08/03/2000 15:40

Sampled:

08/02/2000 15:28

Extracted: QC-Batch: 08/04/2000 17:21 2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 17:21	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:21	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:21	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:21	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 17:21	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 17:21	
Surrogate(s)						
Trifluorotoluene	80.0	53-125	%	1.00	08/04/2000 17:21	
Trifluorotoluene-FID	60.3	53-125	%	1.00	08/04/2000 17:21	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#13

Lab Sample ID: 2000-08-0080-013

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 17:49

Sampled:

08/02/2000 15:31

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 17:49	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:49	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:49	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 17:49	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 17:49	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 17:49	
Surrogate(s)						
Trifluorotoluene	82.2	53-125	%	1.00	08/04/2000 17:49	
Trifluorotoluene-FID	62.4	53-125	%	1.00	08/04/2000 17:49	

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020

Submission #: 2000-08-0080

8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#14

Lab Sample ID: 2000-08-0080-014

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 13:36

Sampled:

08/02/2000 15:35

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 13:36	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 13:36	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 13:36	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 13:36	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 13:36	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 13:36	
Surrogate(s)						
Trifluorotoluene	75.1	53-125	%	1.00	08/04/2000 13:36	
Trifluorotoluene-FID	73.9	53-125	%	1.00	08/04/2000 13:36	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#15

Lab Sample ID: 2000-08-0080-015

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 14:04

Sampled:

08/02/2000 15:39

QC-Batch:

2000/08/04-01.04

Matrix:

						_
Compound	Result	Rep.Limit	Units	Dilution	Analyzed	FI
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 14:04	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:04	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:04	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:04	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 14:04	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 14:04	
Surrogate(s)						
Trifluorotoluene	67.6	53-125	%	1.00	08/04/2000 14:04	
Trifluorotoluene-FID	54.9	53-125	%	1.00	08/04/2000 14:04	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#16

Lab Sample ID: 2000-08-0080-016

Project:

51099670607

Received:

08/03/2000 15:40

Sampled:

Extracted:

08/04/2000 19:13

08/02/2000 15:45

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 19:13	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:32	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:32	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 14:32	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 14:32	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 14:32	
Surrogate(s)						
Trifluorotoluene	53.4	53-125	%	1.00	08/04/2000 14:32	
Trifluorotoluene-FID	57.8	53-125	%	1.00	08/04/2000 19:13	

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Rep.Limit

1.0

0.0050

0.0050

0.0050

0.0050

0.0050

53-125

53-125

Sample ID:

#17

Lab Sample ID: 2000-08-0080-017

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 15:00

Sampled:

08/02/2000 15:50

Result

ND

ND

ND

ND

ND

ND

84.2

67.3

QC-Batch:

1.00

1.00

1.00

mg/Kg

%

%

2000/08/04-01.04

Matrix:

Compound

Gasoline

Benzene

Toluene Ethyl benzene

Xylene(s)

Surrogate(s) Trifluorotoluene

Trifluorotoluene-FID

MTBE

Soil

Units	Dilution	Analyzed	Flag
mg/Kg	1.00	08/04/2000 15:00	
mg/Kg	1.00	08/04/2000 15:00	
mg/Kg	1.00	08/04/2000 15:00	
mg/Kg	1.00	08/04/2000 15:00	
mg/Kg	1.00	08/04/2000 15:00	

08/04/2000 15:00

08/04/2000 15:00

08/04/2000 15:00

# CHROMALAB, INC. Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020

Submission #: 2000-08-0080

8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#18

Lab Sample ID: 2000-08-0080-018

Project:

51099670607

Received:

08/03/2000 15:40

Extracted:

08/04/2000 15:28

Sampled:

08/02/2000 16:00

QC-Batch:

2000/08/04-01.04

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	08/04/2000 15:28	
Benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:28	
Toluene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:28	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/04/2000 15:28	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/04/2000 15:28	
MTBE	ND	0.0050	mg/Kg	1.00	08/04/2000 15:28	
Surrogate(s)						
Trifluorotoluene	67.3	53-125	%	1.00	08/04/2000 15:28	
Trifluorotoluene-FID	56.3	53-125	%	1.00	08/04/2000 15:28	

Submission #: 2000-08-0080

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

**Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Soil

QC Batch # 2000/08/04-01.01

MB:

2000/08/04-01.01-001

Date Extracted: 08/04/2000 07:20

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	08/04/2000 07:20	
Benzene	ND	0.0050	mg/Kg	08/04/2000 07:20	
Toluene	ND	0.0050	mg/Kg	08/04/2000 07:20	
Ethyl benzene	ND	0.0050	mg/Kg	08/04/2000 07:20	
Xylene(s)	ND	0.0050	mg/Kg	08/04/2000 07:20	
MTBE	ND	0.0050	mg/Kg	08/04/2000 07:20	
Surrogate(s)					
Trifluorotoluene	93.4	53-125	%	08/04/2000 07:20	
4-Bromofluorobenzene-FID	76.6	58-124	%	08/04/2000 07:20	

# CHROMALAB, INC. Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020

Attn.: Jay Clare

Prep Method:

8015M 5030

#### **Batch QC Report** Gas/BTEX and MTBE

Method Blank

Soil

QC Batch # 2000/08/04-01.04

Submission #: 2000-08-0080

MB:

2000/08/04-01.04-001

Date Extracted: 08/04/2000 05:52

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline Benzene Toluene Ethyl benzene Xylene(s) MTBE	ND ND ND ND ND	1.0 0.0050 0.0050 0.0050 0.0050	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	08/04/2000 05:52 08/04/2000 05:52 08/04/2000 05:52 08/04/2000 05:52 08/04/2000 05:52	i iag
Surrogate(s) Trifluorotoluene Trifluorotoluene-FID	73.8 63.0	53-125 53-125	mg/Kg % %	08/04/2000 05:52 08/04/2000 05:52 08/04/2000 05:52	

Submission #: 2000-08-0080

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020

Attn.: Jay Clare

Prep Method:

8015M 5030

**Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Soil

QC Batch # 2000/08/07-01.01

MB:

2000/08/07-01.01-001

Date Extracted: 08/07/2000 06:41

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	08/07/2000 06:41	
Benzene	ND	0.0050	mg/Kg	08/07/2000 06:41	
Toluene	ND	0.0050	mg/Kg	08/07/2000 06:41	
Ethyl benzene	ND	0.0050	mg/Kg	08/07/2000 06:41	
Xylene(s)	ND	0.0050	mg/Kg	08/07/2000 06:41	
MTBE	ND	0.0050	mg/Kg	08/07/2000 06:41	
Surrogate(s)					
Trifluorotoluene	99.0	53-125	% .	08/07/2000 06:41	
4-Bromofluorobenzene-FID	81.8	58-124	%	08/07/2000 06:41	

Submission #: 2000-08-0080

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Test Method:

8020

Prep Method:

8015M 5030

Attn: Jay Clare

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/04-01.01

LCS:

2000/08/04-01.01-002

Extracted: 08/04/2000 07:55

Analyzed

08/04/2000 07:55

LCSD: 2

2000/08/04-01.01-003

Extracted: 08/04/2000 08:30

Analyzed

08/04/2000 08:30

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	Recovery [%]		Recovery [%]		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD		
Gasoline	0.493	0.507	0.500	0.500	98.6	101.4	2.8	75-125	35				
Benzene	0.0859	0.0871	0.1000	0.1000	85.9	87.1	1.4	77-123	35				
Toluene	0.0896	0.0907	0.1000	0.1000	89.6	90.7	1.2	78-122	35				
Ethyl benzene	0.0882	0.0878	0.1000	0.1000	88.2	87.8	0.5	70-130	35				
Xylene(s)	0.265	0.266	0.300	0.300	88.3	88.7	0.5	75-125	35				
Surrogate(s)													
Trifluorotoluene	446	448	500	500	89.2	89.6		53-125					
4-Bromofluorobenzene-FI	377	402	500	500	75.4	80.4		58-124					

Submission #: 2000-08-0080

To: **URS Greiner Woodward Clyde- Oakland** 

8020 Test Method:

8015M

Attn: Jay Clare

Prep Method:

5030

#### **Batch QC Report**

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/04-01.04

LCS:

2000/08/04-01.04-002

Extracted: 08/04/2000 06:19

Analyzed

08/04/2000 06:19

LCSD:

2000/08/04-01.04-003

Extracted: 08/04/2000 08:16

Analyzed

08/04/2000 08:16

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recovery [%]		RPD	Ctrl. Limits [%]		Fla	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.510	0.556	0.500	0.500	102.0	111.2	8.6	75-125	35		
Benzene	0.0917	0.0798	0.1000	0.1000	91.7	79.8	13.9	77-123	35		
Toluene	0.0952	0.0808	0.1000	0.1000	95.2	80.8	16.4	78-122	35		
Ethyl benzene	0.0943	0.0794	0.1000	0.1000	94.3	79.4	17.2	70-130	35		
Xylene(s)	0.277	0.229	0.300	0.300	92.3	76.3	19.0	75-125	35		
Surrogate(s)	]										
Trifluorotoluene	494	445	500	500	98.8	89.0		53-125			
4-Bromofluorobenzene-FI	307	333	500	500	61.4	66.6		58-124			

Submission #: 2000-08-0080

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Test Method: 8020

8015M

Attn: Jay Clare

Prep Method:

5030

#### **Batch QC Report**

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/07-01.01

LCS: 2000/08/0

2000/08/07-01.01-002

Extracted: 08/07/2000 07:15

Analyzed

08/07/2000 07:15

LCSD: 2000/08/07-01.01-003

3 Ex

Extracted: 08/07/2000 07:50

Analyzed

08/07/2000 07:50

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recovery [%]		RPD	Ctrl. Limits [%]		Fla	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.500	0.565	0.500	0.500	100.0	113.0	12.2	75-125	35		
Benzene	0.0836	0.0846	0.1000	0.1000	83.6	84.6	1.2	77-123	35		
Toluene	0.0869	0.0883	0.1000	0.1000	86.9	88.3	1.6	78-122	35		
Ethyl benzene	0.0843	0.0857	0.1000	0.1000	84.3	85.7	1.6	70-130	35		
Xylene(s)	0.255	0.258	0.300	0.300	85.0	86.0	1.2	75-125	35		
Surrogate(s)											
Trifluorotoluene	433	444	500	500	86.6	88.8		53-125			
4-Bromofluorobenzene-FI	389	408	500	500	77.8	81.6		58-124			

To: **URS Greiner Woodward Clyde- Oakland**  Test Method: 8020

8015M

Submission #: 2000-08-0080

Attn.: Jay Clare

Prep Method: 5030

**Batch QC Report** 

Gas/BTEX and MTBE

Matrix Spike (MS/MSD)

Soil

QC Batch # 2000/08/04-01.04

Sample ID: #16

Lab Sample ID: 2000-08-0080-016

MS:

2000/08/04-01.04-004 Extracted: 08/04/2000 19:41 Analyzed: 08/04/2000 19:41 Dilution: 1.0

MSD:

2000/08/04-01.04-005 Extracted: 08/04/2000 20:09 Analyzed: 08/04/2000 20:09 Dilution: 1.0

Compound	Conc.	[ n	ng/Kg]	Exp.Conc.	[ mg/Kg ]	Recovery [%]		RPD	Ctrl. Limits [%]		FI	ags
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	0.351	0.313	ND	0.466	0.472	75.3	66.3	12.7	65-135	35		
Benzene	0.0659	0.0625	ND	0.0931	0.0943	70.8	66.3	6.6	65-135	35		
Toluene	0.0652	0.0626	ND	0.0931	0.0943	70.0	66.4	5.3	65-135	35		
Ethyl benzene	0.0650	0.0626	ND	0.0931	0.0943	69.8	66.4	5.0	65-135	35		
Xylene(s)	0.192	0.184	ND	0.279	0.283	68.8	65.0	5.7	65-135	35		
Surrogate(s)												
Trifluorotoluene	363	351		500	500	72.6	70.2		53-125			
Trifluorotoluene-FID	305	277		500	500	61.0	55.4		53-125			

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** 

Test Method: 8020

8015M

Submission #: 2000-08-0080

Attn.: Jay Clare

Prep Method: 5030

**Batch QC Report** 

Gas/BTEX and MTBE

Matrix Spike (MS/MSD)

Soil

QC Batch # 2000/08/04-01.01

Sample ID: SP-2

Lab Sample ID: 2000-08-0083-003

MS:

2000/08/04-01.01-004 Extracted: 08/04/2000 22:17 Analyzed: 08/04/2000 22:17 Dilution: 1.0

MSD:

2000/08/04-01.01-005Extracted: 08/04/2000 22:52 Analyzed: 08/04/2000 22:52 Dilution: 1.0

Compound	Conc.	[ n	ng/Kg ]	J/Kg ] Exp.Conc. [ m		] Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	0.314	0.314	ND	0.465	0.471	67.5	66.7	1.2	65-135	35		-
Benzene	0.0522	0.0580	ND	0.0929	0.0942	56.2	61.6	9.2	65-135	35	mso	mso
Toluene	0.0536	0.0577	ND	0.0929	0.0942	57.7	61.3	6.1	65-135	35	mso	mso
Ethyl benzene	0.0490	0.0528	ND	0.0929	0.0942	52.7	56.1	6.3	65-135	35	mso	mso
Xyleпe(s)	0.152	0.164	ND	0.279	0.282	54.5	58.2	6.6	65-135	35	mso	mso
Surrogate(s)												i
Trifluorotoluene	269	298		500	500	53.8	59.6		53-125			
Trifluorotoluene-FID	312	314		500	500	62.4	62.8		53-125			

Submission #: 2000-08-0080

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** 

Test Method: 8020

8015M

Attn.: Jay Clare

Prep Method: 5030

#### **Batch QC Report**

Gas/BTEX and MTBE

Matrix Spike (MS/MSD)

Soil

QC Batch # 2000/08/07-01.01

Sample ID: #9

Lab Sample ID: 2000-08-0080-009

MS:

2000/08/07-01.01-004 Extracted: 08/07/2000 14:30 Analyzed: 08/07/2000 14:30 Dilution: 1.0

MSD:

2000/08/07-01.01-005Extracted: 08/07/2000 15:04 Analyzed: 08/07/2000 15:04 Dilution: 1.0

Compound	Conc.	[ n	ng/Kg]	Exp.Conc.	Recov	ery [%]	RPD	Ctrl. Limits [%]		Flags		
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	0.290	0.268	ND	0.451	0.448	64.3	59.8	7.3	65-135	35	mso	mso
Benzene	0.0458	0.0470	ND	0.0903	0.0896	50.7	52.5	3.5	65-135	35	mso	mso
Toluene	0.0487	0.0499	ND	0.0903	0.0896	53.9	55.7	3.3	65-135	35	mso	mso
Ethyl benzene	0.0461	0.0474	ND	0.0903	0.0896	51.1	52.9	3.5	65-135	35	mso	mso
Xylene(s)	0.139	0.143	ND	0.271	0.269	51.3	53.2	3.6	65-135	35	mso	mso
Surrogate(s)									İ			
Trifluorotoluene	295	300		500	500	59.0	60.0		53-125		•	
Triffuorotoluene-FID	289	294		500	500	57.8	58.8		53-125			

# 2000-08-0080

# URS Greiner Woodward Clyde 500 12th Street, Suite 200, Oakland, CA 94607-4014

510.893.3600

## **Chain of Custody Record**

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Submission #: 2000-09-0196

Date: September 19, 2000

**URS Greiner Woodward Clyde- Oakland** 

500 12th Street, Suite 200 Oakland, CA 94607-4014

Attn.: Mr. Jay Clare

Dear Jay,

Attached is our report for your samples received on Tuesday September 12, 2000 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after October 27, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

Abanch. Salingoe

Environmental Services (SDB)

Submission #: 2000-09-0196

Date: September 19, 2000

To:

**URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

#### **CASE NARRATIVE**

#### **General and Sample Comments**

We (ChromaLab, Inc.) received 11 Soil samples, on Sep 12 2000 6:30PM.

#### Analysis Comments and Flags by QC Batch

G/BTEX with MTBE Soil QC Batch#: 2000/09/18.01-02 T9-SS-27 >> MS Lab#: 2000/09/18.01-02-004 Compound Flag(s) mso MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD. T9-SS-27 >> MSD Lab#: 2000/09/18.01-02-005 MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and mso Accuracy were verified by LCS/LCSD. Diesel Soil QC Batch#: 2000/09/13.03-10 T9-SS-21 Lab#: 2000-09-0196-003 ndp Hydrocarbon reported does not match the pattern of our Diesel standard T9-SS-26 Lab#: 2000-09-0196-008 ndp Hydrocarbon reported does not match the pattern of our Diesel standard G/BTEX with MTBE QC Batch#: 2000/09/18.01-02 Soil

T9-SS-20

Lab#: 2000-09-0196-002

si

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by

reanalysis.

Diesel

**URS Greiner Woodward Clyde- Oakland** 

⊠ 500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jay Clare

Phone: (510) 874-3027 Fax: (510) 874-3268

Project #: 510996706007

Project:

#### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
T9-SS-19	Soil	09/12/2000 16:18	1
T9-SS-20	Soil	09/12/2000 16:21	2
T9-SS-21	Soil	09/12/2000 16:24	3
T9-SS-22	Soil	09/12/2000 16:29	4
T9-SS-23	Soil	09/12/2000 16:27	5
T9-SS-24	Soil	09/12/2000 16:36	6
T9-SS-25	Soil	09/12/2000 16:33	7
T9-SS-26	Soil	09/12/2000 16:48	8
T9-SS-27	Soil	09/12/2000 16:38	9
T9-SS-28	Soil	09/12/2000 16:43	10
T9-SS-29	Soil	09/12/2000 16:45	11

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

8015M Test Method:

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-19

Lab Sample ID: 2000-09-0196-001

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:18

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 02:38	
Surrogate(s) o-Terphenyl	76.4	60-130	%	1.00	09/15/2000 02:38	

Submission #: 2000-09-0196

**URS Greiner Woodward Clyde- Oakland** To:

Attn.: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

Project:

T9-SS-20

510996706007

Received:

Lab Sample ID: 2000-09-0196-002

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:21

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 03:17	••
Surrogate(s) o-Terphenyl	68.0	60-130	%	1.00	09/15/2000 03:17	

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Submission #: 2000-09-0196

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-21

Lab Sample ID: 2000-09-0196-003

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:24

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1.9	1.0	mg/Kg	1.00	09/15/2000 03:56	ndp
Surrogate(s) o-Terphenyl	78.6	60-130	%	1.00	09/15/2000 03:56	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-22

Lab Sample ID: 2000-09-0196-004

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:29

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 04:34	
Surrogate(s) o-Terphenyl	78.6	60-130	%	1.00	09/15/2000 04:34	

Submission #: 2000-09-0196

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8015M

3550/8015M

Prep Method:

Diesel

Sample ID:

Attn.: Jay Clare

T9-SS-23

Lab Sample ID: 2000-09-0196-005

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:27

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 05:13	
Surrogate(s) o-Terphenyl	77.9	60-130	%	1.00	09/15/2000 05:13	

Submission #: 2000-09-0196

8015M To: **URS Greiner Woodward Clyde- Oakland** Test Method:

3550/8015M Prep Method: Attn.: Jay Clare

Diesel

Lab Sample ID: 2000-09-0196-006 T9-SS-24 Sample ID:

09/12/2000 18:30 Received: Project: 510996706007

Extracted: 09/13/2000 12:59

QC-Batch: 2000/09/13-03.10 Sampled: 09/12/2000 16:36

Soil Matrix:

Flag Units Dilution Analyzed Rep.Limit Compound Result 1.00 09/15/2000 05:51 Diesel ND. 1.0 mg/Kg Surrogate(s) 1.00 09/15/2000 05:51 o-Terphenyl 73.3 60-130 %

Submission #: 2000-09-0196

**URS Greiner Woodward Clyde- Oakland** To:

Attn.: Jay Clare

Test Method: 8015M

Prep Method: 3550/8015M

Diesel

Sample ID: T9-SS-25

Lab Sample ID: 2000-09-0196-007

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

09/12/2000 16:33

QC-Batch:

2000/09/13-03.10

Matrix:

Sampled:

Project:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 06:30	
Surrogate(s) o-Terphenyl	77.1	60-130	%	1.00	09/15/2000 06:30	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** To:

Test Method: 8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-26

Lab Sample ID: 2000-09-0196-008

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/13/2000 12:59

Sampled:

09/12/2000 16:48

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1.5	1.0	mg/Kg	1.00	09/15/2000 09:41	ndp
Surrogate(s) o-Terphenyl	77.4	60-130	%	1.00	09/15/2000 09:41	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-27

Lab Sample ID: 2000-09-0196-009

Project:

510996706007

Received:

09/12/2000 18:30

Sampled:

Extracted:

09/13/2000 12:59

09/12/2000 16:38

QC-Batch:

2000/09/13-03.10

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 10:20	
Surrogate(s) o-Terphenyl	73.6	60-130	%	1.00	09/15/2000 10:20	

Submission #: 2000-09-0196

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Attn.: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-28

Lab Sample ID: 2000-09-0196-010

Project:

510996706007

Received:

09/12/2000 18:30

Sampled:

09/12/2000 16:43

Extracted:

09/13/2000 12:59

Matrix:

Soil

QC-Batch:

2000/09/13-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 10:58	
Surrogate(s) o-Terphenyl	80.6	60-130	%	1.00	09/15/2000 10:58	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

Diesel

Sample ID:

T9-SS-29

Lab Sample ID: 2000-09-0196-011

Project:

510996706007

Received:

09/12/2000 18:30

Sampled:

09/12/2000 16:45

Extracted:

09/13/2000 12:59

Matrix:

Soil

QC-Batch:

2000/09/13-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	09/15/2000 11:36	
Surrogate(s) o-Terphenyl	74.7	60-130	%	1.00	09/15/2000 11:36	

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

Test Method:

8015M

Prep Method:

3550/8015M

**Batch QC Report** 

Diesel

Method Blank

Soil

QC Batch # 2000/09/13-03.10

Submission #: 2000-09-0196

MB:

2000/09/13-03.10-001

Date Extracted: 09/13/2000 12:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	09/14/2000 20:36	
Surrogate(s) o-Terphenyl	82.5	60-130	%	09/14/2000 20:36	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

19.8

Test Method:

8015M

Attn: Jay Clare

Prep Method:

3550/8015M

#### **Batch QC Report**

Diesel

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/09/13-03.10

LCS:

2000/09/13-03.10-002

Extracted: 09/13/2000 12:59

Analyzed

60-130

09/15/2000 00:04

LCSD

LCSD:

o-Terphenyl

2000/09/13-03.10-003

19.5

Extracted: 09/13/2000 12:59

20.0

97.5

Analyzed

09/15/2000 00:43

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	/ery [%]	RPD	Ctrl. Limi	its [%]	Flag	js
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LC
Diesel	31.0	31.6	41.7	41.7	74.3	75.8	2.0	60-130	25		
Surrogate(s)											

20.0

Submission #: 2000-09-0196

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** 

Attn.: Jay Clare

Test Method: 8015M

Prep Method: 3550/8015M

**Batch QC Report** 

Diesel

Matrix Spike (MS / MSD)

Soil

QC Batch # 2000/09/13-03.10

Sample ID: T9-SS-19

Lab Sample ID: 2000-09-0196-001

MS:

2000/09/13-03.10-004 Extracted: 09/13/2000 12:59 Analyzed: 09/14/2000 22:47 Dilution: 1.0

2000/09/13-03.10-005Extracted: 09/13/2000 12:59 Analyzed: 09/14/2000 23:25 Dilution: 1.0 MSD:

Compound	Conc.	[ n	ng/Kg]	Exp.Conc.	[ mg/Kg ]	Recov	ery [%]	RPD	Ctrl. Limi	ts [%]	FI	ags
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Diesel	29.0	31.2	ND	41.6	41.6	69.7	75.0	7.3	60-130	25		
Surrogate(s) o-Terphenyl	18.1	19.7		20.0	20.0	90.5	98.5		60-130			i

Submission #: 2000-09-0196

To: URS Greiner Woodward Clyde- Oakland

Attn: Jay Clare

Test Method: 8015M

Prep Method: 3550/8015M

**Legend & Notes** 

Diesel

**Analyte Flags** 

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

#### Gas/BTEX and MTBE

**URS Greiner Woodward Clyde- Oakland** 

500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jay Clare

Phone: (510) 874-3027 Fax: (510) 874-3268

Project #: 510996706007

Project:

#### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
T9-SS-19	Soil	09/12/2000 16:18	1
T9-SS-20	Soil	09/12/2000 16:21	2
T9-SS-21	Soil	09/12/2000 16:24	3
T9-SS-22	Soil	09/12/2000 16:29	4
T9-SS-23	Soil	09/12/2000 16:27	5
T9-SS-24	Soil	09/12/2000 16:36	6
T9-SS-25	Soil	09/12/2000 16:33	7
T9-SS-26	Soil	09/12/2000 16:48	8
T9-SS-27	Soil	09/12/2000 16:38	9
T9-SS-28	Soil	09/12/2000 16:43	10
T9-SS-29	Soil	09/12/2000 16:45	11

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-19

Lab Sample ID: 2000-09-0196-001

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 16:51

Sampled:

09/12/2000 16:18

QC-Batch:

2000/09/18-01.02

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 16:51	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 16:51	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 16:51	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 16:51	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 16:51	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 16:51	
Surrogate(s)						
Trifluorotoluene	58.9	53-125	%	1.00	09/18/2000 16:51	
Trifluorotoluene-FID	56.7	53-125	%	1.00	09/18/2000 16:51	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-20

Lab Sample ID: 2000-09-0196-002

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 17:24

Sampled:

09/12/2000 16:21

QC-Batch:

2000/09/18-01.02

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 17:24	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 17:24	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 17:24	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 17:24	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 17:24	
MTBE	ND '	0.0050	mg/Kg	1.00	09/18/2000 17:24	
Surrogate(s)						
Trifluorotoluene	50.3	53-125	%	1.00	09/18/2000 17:24	sl
4-Bromofluorobenzene-FID	49.5	58-124	%	1.00	09/18/2000 17:24	sl

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-21

Lab Sample ID: 2000-09-0196-003

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 17:56

Sampled:

09/12/2000 16:24

Matrix:

Soil

QC-Batch:

2000/09/18-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 17:56	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 17:56	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 17:56	
Ethyl benzene	ИD	0.0050	mg/Kg	1.00	09/18/2000 17:56	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 17:56	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 17:56	
Surrogate(s)						
Trifluorotoluene	64.8	53-125	%	1.00	09/18/2000 17:56	
Trifluorotoluene-FID	57.9	53-125	%	1.00	09/18/2000 17:56	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-22

Lab Sample ID: 2000-09-0196-004

Project:

510996706007

Received:

09/12/2000 18:30

09/12/2000 16:29

Extracted:

09/18/2000 18:28

Sampled: Matrix:

Soil

QC-Batch:

2000/09/18-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND .	1.0	mg/Kg	1.00	09/18/2000 18:28	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 18:28	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 18:28	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 18:28	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 18:28	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 18:28	
Surrogate(s)						
Trifluorotoluene	68.6	53-125	%	1.00	09/18/2000 18:28	
Trifluorotoluene-FID	61.0	53-125	%	1.00	09/18/2000 18:28	

Submission #: 2000-09-0196

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** To:

Test Method:

8020

8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-23

Lab Sample ID: 2000-09-0196-005

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/19/2000 11:48

09/12/2000 16:27

QC-Batch:

2000/09/19-01.02

Matrix:

Sampled:

····						
Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/19/2000 11:48	
Benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 11:48	
Toluene	ND	0.0050	mg/Kg	1.00	09/19/2000 11:48	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 11:48	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/19/2000 11:48	
MTBE	ND	0.0050	mg/Kg	1.00	09/19/2000 11:48	
Surrogate(s)						
Trifluorotoluene	63.7	53-125	%	1.00	09/19/2000 11:48	
Trifluorotoluene-FID	65.8	53-125	%	1.00	09/19/2000 11:48	

Submission #: 2000-09-0196

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-24

Lab Sample ID: 2000-09-0196-006

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 19:32

Sampled:

09/12/2000 16:36

QC-Batch:

2000/09/18-01.02

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 19:32	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 19:32	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 19:32	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 19:32	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 19:32	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 19:32	
Surrogate(s)						
Trifluorotoluene	72.1	53-125	%	1.00	09/18/2000 19:32	
4-Bromofluorobenzene-FID	69.1	58-124	%	1.00	09/18/2000 19:32	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-25

Lab Sample ID: 2000-09-0196-007

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 20:03

Sampled:

09/12/2000 16:33

QC-Batch:

2000/09/18-01.02

Matrix:

	***	*				
Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 20:03	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:03	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:03	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:03	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 20:03	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 20:03	
Surrogate(s)						
Trifluorotoluene	57.1	53-125	%	1.00	09/18/2000 20:03	
Trifluorotoluene-FID	53.4	53-125	%	1.00	09/18/2000 20:03	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-\$\$-26

Lab Sample ID: 2000-09-0196-008

Project:

510996706007

Received:

09/12/2000 18:30

Sampled:

Extracted:

09/18/2000 20:35

09/12/2000 16:48

QC-Batch:

2000/09/18-01.02

Matrix:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 20:35	
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:35	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:35	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 20:35	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 20:35	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 20:35	
Surrogate(s)						
Trifluorotoluene	65.6	53-125	%	1.00	09/18/2000 20:35	
Trifluorotoluene-FID	60.5	53-125	%	1.00	09/18/2000 20:35	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020 8015M

5030

Attn.: Jay Clare

Prep Method:

Gas/BTEX and MTBE

Sample ID:

T9-SS-27

Lab Sample ID: 2000-09-0196-009

Project:

510996706007

Received:

09/12/2000 18:30

Extracted:

09/18/2000 22:10

09/12/2000 16:38

QC-Batch:

2000/09/18-01.02

Matrix:

Sampled:

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/18/2000 22:10	-
Benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 22:10	
Toluene	ND	0.0050	mg/Kg	1.00	09/18/2000 22:10	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/18/2000 22:10	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/18/2000 22:10	
MTBE	ND	0.0050	mg/Kg	1.00	09/18/2000 22:10	
Surrogate(s)						
Trifluorotoluene	56.3	53-125	%	1.00	09/18/2000 22:10	
Trifluorotoluene-FID	59.7	53-125	0/2	1.00	09/18/2000 22:10	

Submission #: 2000-09-0196

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020

8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

T9-SS-28

Lab Sample ID: 2000-09-0196-010

Project:

510996706007

Received:

09/12/2000 18:30

Sampled:

Extracted:

09/19/2000 12:20

09/12/2000 16:43

QC-Batch:

2000/09/19-01.02

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/19/2000 12:20	
Benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:20	
Toluene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:20	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:20	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/19/2000 12:20	
MTBE	ND	0.0050	mg/Kg	1.00	09/19/2000 12:20	
Surrogate(s)						
Trifluorotoluene	67.0	53-125	%	1.00	09/19/2000 12:20	
Trifluorotoluene-FID	66.1	53-125	%	1.00	09/19/2000 12:20	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020

Prep Method:

8015M 5030

Gas/BTEX and MTBE

Sample ID:

Attn.: Jay Clare

T9-SS-29

Lab Sample ID: 2000-09-0196-011

Project:

510996706007

Received:

09/12/2000 18:30

09/19/2000 12:51

Sampled:

09/12/2000 16:45

Extracted: QC-Batch:

2000/09/19-01.02

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/19/2000 12:51	
Benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:51	
Toluene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:51	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/19/2000 12:51	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/19/2000 12:51	
MTBE	ND	0.0050	mg/Kg	1.00	09/19/2000 12:51	
Surrogate(s)						
Trifluorotoluene	78.2	53-125	%	1.00	09/19/2000 12:51	
4-Bromofluorobenzene-FID	67.1	58-124	%	1.00	09/19/2000 12:51	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

8020

Attn.: Jay Clare

Prep Method:

5030

**Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Soil

QC Batch # 2000/09/18-01.02

MB:

2000/09/18-01.02-001

Date Extracted: 09/18/2000 08:19

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	09/18/2000 08:19	
Benzene	ND	0.0050	mg/Kg	09/18/2000 08:19	
Toluene	ND	0.0050	mg/Kg	09/18/2000 08:19	
Ethyl benzene	ND	0.0050	mg/Kg	09/18/2000 08:19	
Xylene(s)	ND	0.0050	mg/Kg	09/18/2000 08:19	
MTBE	ND	0.0050	mg/Kg	09/18/2000 08:19	
Surrogate(s)					
Trifluorotoluene	88.4	53-125	%	09/18/2000 08:19	
4-Bromofluorobenzene-FID	79.6	58-124	%	09/18/2000 08:19	

Submission #: 2000-09-0196

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

Prep Method:

8020 5030

**Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Attn.: Jay Clare

Soil

QC Batch # 2000/09/19-01.02

MB:

2000/09/19-01.02-001

Date Extracted: 09/19/2000 06:16

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	09/19/2000 06:16	
Benzene	ND	0.0050	mg/Kg	09/19/2000 06:16	
Toluene	ND	0.0050	mg/Kg	09/19/2000 06:16	
Ethyl benzene	NĐ	0.0050	mg/Kg	09/19/2000 06:16	
Xylene(s)	ND	0.0050	mg/Kg	09/19/2000 06:16	
MTBE	ND	0.0050	mg/Kg	09/19/2000 06:16	
Surrogate(s)					
Trifluorotoluene	88.6	53-125	%	09/19/2000 06:16	
4-Bromofluorobenzene-FID	84.4	58-124	%	09/19/2000 06:16	

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland**  Test Method: 8015M

8020

Attn: Jay Clare

Prep Method:

5030

**Batch QC Report** 

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/09/18-01.02

LCS:

2000/09/18-01.02-002

Extracted: 09/18/2000 09:02

Analyzed

09/18/2000 09:02

Analyzed 09/18/2000 09:34 2000/09/18-01.02-003 Extracted: 09/18/2000 09:34 LCSD:

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recovery [%		/Kg ] Recove		RPD	Ctrl. Limi	its [%]	Flag	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD		
Gasoline	0.616	0.482	0.500	0.500	123.2	96.4	24.4	75-125	35				
Benzene	0.111	0.102	0.1000	0.1000	111.0	102.0	8.5	77-123	35				
Toluene	0.107	0.0993	0.1000	0.1000	107.0	99.3	7.5	78-122	35				
Ethyl benzene	0.101	0.0955	0.1000	0.1000	101.0	95.5	5.6	70-130	35				
Xylene(s)	0.287	0.274	0.300	0.300	95.7	91.3	4.7	75-125	35		1		
Surrogate(s)													
Trifluorotoluene	487	454	500	500	97.4	90.8		53-125		ĺ			
4-Bromofluorobenzene-FI	541	432	500	500	108.2	86.4		58-124					

Submission #: 2000-09-0196

**URS Greiner Woodward Clyde- Oakland** To:

Test Method: 8015M

8020

Attn: Jay Clare

Prep Method: 5030

**Batch QC Report** 

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/09/19-01.02

LCS:

2000/09/19-01.02-002

Extracted: 09/19/2000 06:47

Analyzed

09/19/2000 06:47

LCSD:

2000/09/19-01.02-003

Extracted: 09/19/2000 07:18

Analyzed 09/19/2000 07:18

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[mg/Kg]	Recov	ery [%]	RPD	Ctrl. Limits [%]		Fla	gs
	LCS LCSD	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.496	0.484	0.500	0.500	99.2	96.8	2.4	75-125	35		
Benzene	0.107	0.102	0.1000	0.1000	107.0	102.0	4.8	77-123	35		
Toluene	0.104	0.0988	0.1000	0.1000	104.0	98.8	5.1	78-122	35		
Ethyl benzene	0.0998	0.0955	0.1000	0.1000	99.8	95.5	4.4	70-130	35		
Xylene(s)	0.284	0.272	0.300	0.300	94.7	90.7	4.3	75-125	35		
Surrogate(s)											
Trifluorotoluene	498	460	500	500	99.6	92.0		53-125			
4-Bromofluorobenzene-FI	454	445	500	500	90.8	89.0		58-124			

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** 

Test Method: 8015M

8020

Attn.: Jay Clare

Prep Method: 5030

**Batch QC Report** 

Gas/BTEX and MTBE

Matrix Spike (MS / MSD)

Soil

QC Batch # 2000/09/18-01.02

Sample ID: T9-SS-27

Lab Sample ID: 2000-09-0196-009

MS:

2000/09/18-01.02-004 Extracted: 09/18/2000 22:41 Analyzed: 09/18/2000 22:41 Dilution: 1.0

MSD:

2000/09/18-01.02-005Extracted: 09/18/2000 23:13 Analyzed: 09/18/2000 23:13 Dilution: 1.0

Compound	Conc.	[ m	ng/Kg ]	Exp.Conc.	Recovery [%] RPD			Ctrl. Limi	ts [%]	FI	Flags	
·	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	0.353	0.340	ND	0.478	0.485	73.8	70.1	5.1	65-135	35		
Benzene	0.0662	0.0613	ND	0.0956	0.0971	69.2	63.1	9.2	65-135	35		mso
Toluene	0.0641	0.0592	ND	0.0956	0.0971	67.1	61.0	9.5	65-135	35		mso
Ethyl benzene	0.0629	0.0589	ND	0.0956	0.0971	65.8	60.7	8.1	65-135	35		mso
Xylene(s)	0.179	0.170	ND	0.287	0.291	62.4	58.4	6.6	65-135	35	mso	mso
Surrogate(s)			-			! !						
Trifluorotoluene	323	281		500	500	64.6	56.2		53-125			
4-Bromofluorobenzene-F	308	312		500	500	61.6	62.4		58-124			

Submission #: 2000-09-0196

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** 

Test Method: 8015M

8020

Attn.: Jay Clare

Prep Method: 5030

**Batch QC Report** 

Gas/BTEX and MTBE

Matrix Spike ( MS / MSD )

Soil

QC Batch # 2000/09/19-01.02

Sample ID: DL-8

Lab Sample ID: 2000-09-0342-004

MS:

2000/09/19-01.02-004 Extracted: 09/19/2000 22:27 Analyzed: 09/19/2000 22:27 Dilution: 1.0

MSD:

2000/09/19-01.02-005Extracted: 09/19/2000 22:59 Analyzed: 09/19/2000 22:59 Dilution: 1.0

Compound	Conc	[ n	ng/Kg]	Exp.Conc. [ mg/Kg ]		Recov	ery [%]	RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	0.322	0.404	ND	0.482	0.473	66.8	85.4	24.4	65-135	35		
Benzene	0.0709	0.0876	ND	0.0963	0.0945	73.6	92.7	23.0	65-135	35		
Toluene	0.0691	0.0838	ND	0.0963	0.0945	71.8	88.7	21.1	65-135	35		
Ethyl benzene	0.0679	0.0805	ND	0.0963	0.0945	70.5	85.2	18.9	65-135	35		
Xylene(s)	0.197	0.230	ND	0.289	0.284	68.2	81.0	17.2	65-135	35		
Surrogate(s)			İ									
Trifluorotoluene	649	727		500	500	129.8	145.4		53-125		mso	mso
4-Bromofluorobenzene-P	412	659		500	500	82.4	131.8		58-124			mso

Submission #: 2000-09-0196

**Environmental Services (SDB)** 

To: URS Greiner Woodward Clyde- Oakland

8015M Test Method:

8020

Attn: Jay Clare

Prep Method: 5030

### Legend & Notes

Gas/BTEX and MTBE

**QC Compound Flags** 

mso

MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.

**Analyte Flags** 

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

# 2000-09-0196

### **URS Greiner Woodward Clyde**

500 12th Street, Suite 200, Oakland, CA 94607-4014 510.893.3600

## **Chain of Custody Record**

PROJE 510	ECT NO.	06007			1			Α	NAL	YSE	S			1		irs	
SAMPL	ERS: (S	SAMPLE NUMBER	Sample Matrix (S)oil, (W)ster, (A)ir	EPA Method GARS	EPA Method Dicse	EPA Method 878%	EPA Method MT3 &									Number of Containers	REMARKS (Sample preservation, handling procedures, etc,)
4 (2)00	1624 1624 1629 1629 1627 1636 1633 1648	T9-55-19 T9-55-20 T9-55-21 T9-55-22 T9-55-23 T9-55-24 T9-55-25 T9-55-26 T9-55-27 T9-55-27 T9-55-27	Semple Se		THE EPA MET	EPAMBILL STREET	X X X X X X X X X X X X X X X X X X X									Numbe	PICEASE SEMP RESOLTS PO JAY CLARE
																	4.7°C
									1				NUME	TOTA BER O	F	11	
RELINQ (Signatu	UISHED BY	Y: DATE/TIME	RECEIVED (Signature)	BY:					ELINC		HED	BY:			DAT	E/TIME	RECEIVED BY: (Signature)
METHØ S.	OF SHIP	MENT:	SHIPPED B' (Signature)	<b>r</b> :					OURIE gnatu						<b>(</b> Sj9	nature)	FOR LAB BY DATE TIME 9/10/0000

Submission #: 2000-08-0259

Date: August 22, 2000

**URS Greiner Woodward Clyde- Oakland** 

Abanch. Salimpoe

500 12th Street, Suite 200 Oakland, CA 94607-4014

Attn.: Mr. Jay Clare

Dear Jay,

Attached is our report for your samples received on Friday August 11, 2000 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after September 25, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

Submission #: 2000-08-0259

Diesel

**URS Greiner Woodward Clyde- Oakland** 

 $\bowtie$ 500 12th Street, Suite 200

Oakland, CA 94607-4014

Phone: (510) 874-3027 Fax: (510) 874-3268

Attn: Jay Clare

Project #: 51099670607

Project:

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
#1	Soil	08/10/2000 11:00	1

**Environmental Services (SDB)** 

**URS Greiner Woodward Clyde- Oakland** 

To: Attn.: Jay Clare Test Method:

8015M

Submission #: 2000-08-0259

Prep Method:

3550/8015M

Diesel

Sample ID:

#1

Lab Sample ID: 2000-08-0259-001

Project:

51099670607

Received:

08/11/2000 17:40

Extracted:

08/14/2000 08:59

Sampled:

08/10/2000 11:00

QC-Batch:

2000/08/14-02.10

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	180	1.0	mg/Kg	1.00	08/15/2000 13:38	
Surrogate(s) o-Terphenyl	75.5	60-130	%	1.00	08/15/2000 13:38	

Submission #: 2000-08-0259

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

Attn.: Jay Clare

Prep Method:

3550/8015M

**Batch QC Report** 

Diesel

**Method Blank** 

Soil

QC Batch # 2000/08/14-02.10

MB:

2000/08/14-02.10-001

Date Extracted: 08/14/2000 08:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	08/14/2000 22:53	
Surrogate(s)					
o-Terphenyl	80.0	60-130	%	08/14/2000 22:53	

**URS Greiner Woodward Clyde- Oakland** 

Attn: Jay Clare

To:

Test Method:

8015M

Prep Method:

3550/8015M

Submission #: 2000-08-0259

### **Batch QC Report**

Diesel

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/14-02.10

LCS:

2000/08/14-02.10-002

Extracted: 08/14/2000 08:59

Analyzed

08/14/2000 22:53

LCSD:

2000/08/14-02.10-003

Extracted: 08/14/2000 08:59

Analyzed

08/14/2000 23:31

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recovery [%]		(g ] Recovery [%]		RPD	Ctrl. Lim	its [%]	Flaç	js
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD		
Diesel	31.5	29.5	41.7	41.7	75.5	70.7	6.6	60-130	25				
Surrogate(s)													
o-Terphenyl	18.7	17.3	20.0	20.0	93.5	86.5		60-130					

Environmental Services (SDB)

### Gas/BTEX and MTBE

**URS Greiner Woodward Clyde- Oakland** 

⋈ 500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jay Clare

Phone: (510) 874-3027 Fax: (510) 874-3268

Project #: 51099670607

Project:

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
#1	Soil	08/10/2000 11:00	1

Submission #: 2000-08-0259

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020 8015M

Attn.: Jay Clare

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

#1

Lab Sample ID: 2000-08-0259-001

Project:

51099670607

Received:

08/11/2000 17:40

Extracted:

08/21/2000 18:46

Sampled:

08/10/2000 11:00

QC-Batch:

2000/08/21-01.02

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1.6	1.0	mg/Kg	1.00	08/21/2000 18:46	g
Benzene	ND	0.0050	mg/Kg	1.00	08/21/2000 18:46	
Toluene	ND	0.0050	mg/Kg	1.00	08/21/2000 18:46	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	08/21/2000 18:46	
Xylene(s)	ND	0.0050	mg/Kg	1.00	08/21/2000 18:46	
MTBE	ND	0.0050	mg/Kg	1.00	08/21/2000 18:46	
Surrogate(s)						
Trifluorotoluene	68.2	53-125	%	1.00	08/21/2000 18:46	
4-Bromofluorobenzene-FID	106.4	58-124	%	1.00	08/21/2000 18:46	

Submission #: 2000-08-0259

To: **URS Greiner Woodward Clyde- Oakland** 

Test Method:

8015M

8020

Attn.: Jay Clare

Prep Method:

5030

**Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Soil

QC Batch # 2000/08/21-01.02

MB:

2000/08/21-01.02-001

Date Extracted: 08/21/2000 07:47

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	08/21/2000 07:47	
Benzene	ND	0.0050	mg/Kg	08/21/2000 07:47	
Toluene	ND	0.0050	mg/Kg	08/21/2000 07:47	
Ethyl benzene	ND	0.0050	mg/Kg	08/21/2000 07:47	
Xylene(s)	ND	0.0050	mg/Kg	08/21/2000 07:47	
MTBE	ND	0.0050	mg/Kg	08/21/2000 07:47	
Surrogate(s)					
Trifluorotoluene	91.6	53-125	%	08/21/2000 07:47	
4-Bromofluorobenzene-FID	96.8	58-124	%	08/21/2000 07:47	

Submission #: 2000-08-0259

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

8015M Test Method:

8020

Attn: Jay Clare

Prep Method:

5030

#### **Batch QC Report**

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/08/21-01.02

LCS:

2000/08/21-01.02-002

Extracted: 08/21/2000 08:50

Analyzed

08/21/2000 08:50

LCSD:

2000/08/21-01.02-003

Extracted: 08/21/2000 08:50

Analyzed

08/21/2000 08:50

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	ery [%]	RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.583	0.574	0.500	0.500	116.6	114.8	1.6	75-125	35		
Benzene	0.0950	0.0912	0.1000	0.1000	95.0	91.2	4.1	77-123	35		
Toluene	0.0883	0.0848	0.1000	0.1000	88.3	84.8	4.0	78-122	35		
Ethyl benzene	0.0894	0.0862	0.1000	0.1000	89.4	86.2	3.6	70-130	35		
Xylene(s)	0.260	0.250	0.300	0.300	86.7	83.3	4.0	75-125	35		
Surrogate(s)											
Trifluorotoluene	452	424	500	500	90.4	84.8		53-125			
4-Bromofluorobenzene-FI	494	492	500	500	98.8	98.4		58-124			

Submission #: 2000-08-0259

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Test Method: 8020

8015M

Attn:Jay Clare

Prep Method: 5030

### **Legend & Notes**

Gas/BTEX and MTBE

**Analyte Flags** 

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

5387

### **URS Greiner Woodward Clyde**

500 12th Street, Suite 200, Oakland, CA 94607-4014 510.893.3600

## **Chain of Custody Record**

SAMPL		16702 ignature)	.07		(A)ir	14. CE	3	136	ANA	LYSE	S		T.		Containers		REMA (San	ple	
DATE	TIME		IPLE NUMBER	Sample Matrix	(S)oil, (W)ater, (A)ir	EPA Method Dec	EPA Method KARK	EPA Method MTDE					maramaran periodo de la compansión de la		Number of		hand procedur	ling	
810.0	1100			#1 5	> x	X	×	X								91 5 R	LEAS & ENID ESUL	TS T	-0 2 <i>E</i>
																	•		
														The state of the s		2	.9		
													TC	TAL		3	'		
(Signat	OUISHED (ure)		DATE/TIME	RECEI' (Signat	ure)	(· 81	(11) /11	100	(Sign	NQUIS lature)	SHED I	COL	MBEF	DA	TE/TIM	E D FOR L	RECEIVED (Signature)	BY:	ПМЕ
	اع المحال			(Signat						ature)					gnature				

Submission #: 2000-07-0300

Date: August 2, 2000

URS Greiner Woodward Clyde- Oakland 500 12th Street, Suite 200 Oakland, CA 94607-4014

Atsanch. Salinpoe

Attn.: Jim Springer

Attached is our report for your samples received on Wednesday July 19, 2000 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after August 18, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

#### Diesel

**URS Greiner Woodward Clyde- Oakland** 

Oakland, CA 94607-4014

Attn: Jim Springer

Phone: (510) 893-3600 Fax: (510) 874-3268

Project #: 510996706007

Project:

### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
T-9	Soil	07/19/2000 13:55	1

Submission #: 2000-07-0300

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

Attn.: Jim Springer

Prep Method:

3550/8015M

Diesel

Sample ID:

T-9

Lab Sample ID: 2000-07-0300-001

Project:

510996706007

Received:

07/19/2000 17:18

Extracted:

07/20/2000 07:17

Sampled:

07/19/2000 13:55

QC-Batch:

2000/07/20-02.10

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	280	1.0	mg/Kg	1.00	07/20/2000 14:37	edr
Surrogate(s) o-Terphenyl	84.5	60-130	%	1.00	07/20/2000 14:37	

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8015M

Attn.: Jim Springer

Prep Method:

3550/8015M

**Batch QC Report** 

Diesel

Method Blank

Soil

QC Batch # 2000/07/20-02.10

Submission #: 2000-07-0300

MB:

2000/07/20-02.10-001

Date Extracted: 07/20/2000 07:17

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	07/20/2000 11:31	
Surrogate(s) o-Terphenyl	85.5	60-130	. %	07/20/2000 11:31	

To: **URS Greiner Woodward Clyde- Oakland** 

8015M Test Method:

Prep Method:

3550/8015M

Submission #: 2000-07-0300

Attn: Jim Springer

**Batch QC Report** 

Diesel

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/07/20-02.10

LCS:

2000/07/20-02.10-002

Extracted: 07/20/2000 07:17

Analyzed

07/20/2000 12:49

LCSD:

2000/07/20-02.10-003

Extracted: 07/20/2000 07:17

Analyzed

07/21/2000 09:05

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recovery [%		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	34.3	32.7	41.7	41.7	82.3	78.4	4.9	60-130	25		
Surrogate(s) o-Terphenyl	19.1	20.6	20.0	20.0	95.5	103.0		60-130			

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jim Springer

Test Method: 8015M

Prep Method: 3550/8015M

**Batch QC Report** 

Diesel

Matrix Spike (MS/MSD)

Soil

QC Batch # 2000/07/20-02.10

Submission #: 2000-07-0300

Lab Sample ID: 2000-07-0298-002

Sample ID: 29B4-COMP

2000/07/20-02.10-004 Extracted: 07/20/2000 07:17 Analyzed: 07/20/2000 20:48 Dilution: 1.0 MS: MSD: 2000/07/20-02.10-006 Extracted: 07/20/2000 07:17 Analyzed: 07/20/2000 21:33 Dilution: 1.0

Compound	Conc.	[ n	ng/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	ery [%]	RPD	Ctrl. Limi	ts [%]	FI	ags
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Diesel	38.3	39.2	6.37	41.7	41,7	76.6	78.7	2.7	60-130	25		
Surrogate(s) o-Terphenyl	19.2	19.5		20.0	20.0	96.0	97.5		60-130			

To: URS Greiner Woodward Clyde- Oakland

Attn:Jim Springer

Test Method: 8015M

Prep Method: 3550/8015M

Submission #: 2000-07-0300

**Legend & Notes** 

Diesel

Analyte Flags

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard

Printed on: 07/28/2000 12:01

Page 6 of 6

### Gas/BTEX (Methanol Extraction)

**URS Greiner Woodward Clyde- Oakland** 

№ 500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jim Springer

Phone: (510) 893-3600 Fax: (510) 874-3268

Project #: 510996706007

Project:

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
T-9	Soil	07/19/2000 13:55	1

Submission #: 2000-07-0300

Environmental Services (SDB)

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

8020

8015M

Attn.: Jim Springer

Prep Method:

5030

Gas/BTEX (Methanol Extraction)

Sample ID:

T-9

Lab Sample ID: 2000-07-0300-001

Project:

510996706007

Received:

07/19/2000 17:18

Sampled:

Extracted:

07/20/2000 13:34

07/19/2000 13:55

QC-Batch:

2000/07/20-05.02

Matrix:

Soil

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	530	20	mg/Kg	2.00	07/20/2000 13:34	g
Benzene	ND	1.2	mg/Kg	2.00	07/20/2000 13:34	_
Toluene	ND	1.2	mg/Kg	2.00	07/20/2000 13:34	
Ethyl benzene	3.9	1.2	mg/Kg	2.00	07/20/2000 13:34	
Xylene(s)	9.0	1.2	mg/Kg	2.00	07/20/2000 13:34	
Surrogate(s)						
Trifluorotoluene	107.3	53-125	%	1.00	07/20/2000 13:34	
Trifluorotoluene-FID	241.2	53-125	%	1.00	07/20/2000 13:34	sh

Environmental Services (SDB)

**URS Greiner Woodward Clyde- Oakland** 

Test Method:

8020

Prep Method:

8015M 5030

**Batch QC Report** 

Gas/BTEX (Methanol Extraction)

**Method Blank** 

Soil

QC Batch # 2000/07/20-05.02

Submission #: 2000-07-0300

MB:

Attn.: Jim Springer

To:

2000/07/20-05.02-001

Date Extracted: 07/20/2000 19:10

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	10	mg/Kg	07/20/2000 19:10	
Benzene	ND	0.62	mg/Kg	07/20/2000 19:10	
Toluene	ND	0.62	mg/Kg	07/20/2000 19:10	
Ethyl benzene	ND	0.62	mg/Kg	07/20/2000 19:10	
Xylene(s)	ND	0.62	mg/Kg	07/20/2000 19:10	
Surrogate(s)					
Trifluorotoluene	71.2	53-125	%	07/20/2000 19:10	

Submission #: 2000-07-0300

To: **URS Greiner Woodward Clyde- Oakland** 

8020 Test Method:

8015M

Attn: Jim Springer

Prep Method:

5030

#### **Batch QC Report**

Gas/BTEX (Methanol Extraction)

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/07/20-05.02

100

2000/07/20-05 02-002

Extracted: 07/20/2000 19:42

Analyzed

07/20/2000 19:42

LUS.	2000/07/20-05.02-002
LCSD:	2000/07/20-05.02-003

Extracted: 07/20/2000 20:13

07/20/2000 20:13 Analyzed

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	/ery [%]	RPD	Ctrl. Lim	its [%]	Fla	Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD	
Gasoline	0.700	0.662	0.625	0.625	112.0	105.9	5.6	75-125	35			
Benzene	0.106	0.107	0.125	0.125	84.8	85.6	0.9	77-123	35			
Toluene	0.102	0.104	0.125	0.125	81.6	83.2	1.9	78-122	35			
Ethyl benzene	0.105	0.105	0.125	0.125	84.0	84.0	0.0	70-130	35			
Xylene(s)	0.318	0.318	0.375	0.375	84.8	84.8	0.0	75-125	35			
Surrogate(s)												
Trifluorotoluene	396	417	500	500	79.2	83.4		53-125				

Submission #: 2000-07-0300

To: URS Greiner Woodward Clyde- Oakland

8020 Test Method:

8015M

Attn:Jim Springer

Prep Method: 5030

### Legend & Notes

Gas/BTEX (Methanol Extraction)

**Analyte Flags** 

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

sh

Surrogate recoveries were higher than QC limits due to matrix interference.

1220 Quarry Lane \* Pleasanton, CA 94566-4756 Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

Printed on: 07/24/2000 17:47

Submission #: 2000-07-0300

Metals

**URS Greiner Woodward Clyde- Oakland** 

⊠ 500 12th Street, Suite 200

Oakland, CA 94607-4014

Attn: Jim Springer

Phone: (510) 893-3600 Fax: (510) 874-3268

Project #: 510996706007

Project:

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
T-9	Soil	07/19/2000 13:55	1

**Environmental Services (SDB)** 

To: **URS Greiner Woodward Clyde- Oakland** 

Attn.: Jim Springer

Test Method:

6010B

Submission #: 2000-07-0300

Prep Method:

3050B

Metals

Sample ID:

Project:

T-9

510996706007

Received:

Lab Sample ID: 2000-07-0300-001

07/19/2000 17:18

Extracted:

07/20/2000 08:54

Sampled:

07/19/2000 13:55

QC-Batch:

2000/07/20-01.15

Matrix:

Soil

Sample/Analysis Flag . ( See Legend & Note section )

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	4.4	1.0	mg/Kg	1.00	07/20/2000 12:45	

Printed on: 07/20/2000 14:56

To: **URS Greiner Woodward Clyde- Oakland**  Test Method:

6010B

Attn.: Jim Springer

Prep Method:

3050B

**Batch QC Report** Metals

Method Blank

Soil

QC Batch # 2000/07/20-01.15

Submission #: 2000-07-0300

MB:

2000/07/20-01.15-025

Date Extracted: 07/20/2000 08:54

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	1.0	mg/Kg	07/20/2000 11:32	

Submission #: 2000-07-0300

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

the the Orestone

Test Method:

6010B

Attn: Jim Springer Prep Method:

3050B

**Batch QC Report** 

Metals

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2000/07/20-01.15

LCS:

2000/07/20-01.15-026

Extracted: 07/20/2000 08:54

Analyzed

07/20/2000 11:36

LCSD:

2000/07/20-01.15-027

Extracted: 07/20/2000 08:54

Analyzed

07/20/2000 11:40

Compound	Conc.	[ mg/Kg ]	Exp.Conc.	[mg/Kg]	(g ] Recovery [%]		RPD	Ctrl. Limi	ts [%]	Flags		
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD	
Lead	104	104	100.0	100.0	104.0	104.0	0.0	80-120	20			

**URS Greiner Woodward Clyde- Oakland** 

Attn.: Jim Springer

To:

Test Method: 6010B

Submission #: 2000-07-0300

Prep Method: 3050B

### **Batch QC Report**

Metals

Matrix Spike (MS/MSD)

Soil

QC Batch # 2000/07/20-01.15

Sample ID: 10-174

MSD:

Lab Sample ID: 2000-07-0291-001

MS:

2000/07/20-01.15-040 Extracted: 07/20/2000 08:54 Analyzed: 07/20/2000 12:32 Dilution: 1.0

2000/07/20-01.15-041 Extracted: 07/20/2000 08:54 Analyzed: 07/20/2000 12:35 Dilution: 1.0

Compound	Conc.	[ mg	/Kg ]	Exp.Conc.	[ mg/Kg ]	Recov	ery [%]	RPD	Ctrl. Limit	ts [%]	FI	ags
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Lead	81.8	82.8	10.0	100.0	100.0	71.8	72.8	1.4	75-125	20	mso	mso

Submission #: 2000-07-0300

Environmental Services (SDB)

To: URS Greiner Woodward Clyde- Oakland

Attn:Jim Springer

Test Method: 6010B

Prep Method: 3050B

### **Legend & Notes**

Metals

### **QC Compound Flags**

mso

MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.

	<b>UR</b> 500 1:	<b>S Greiner Woodu</b> 2th Street, Suite 200, Oakland 510.893.3600	<b>vard Cly</b> 1, CA 94607-	1 <b>de</b> )	を形文	Snalle				Ch	ai	n c	of C	u	stc	ody Record
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SAMP	ERS: (Si	ignature) Ming	Z × ig	8/05/05	13/08/2	3550	P65	した							Number of Containers	REMARKS (Sample preservation,
BATE	TIME	SAMPLE NUMBE	Sample Matrix (S)oil, (W)ater, (A)ir	EPA Method 503	EPA Method 503	EPA Method 3	EPA Method	581							Number o	handling procedures, etc,)
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