### ASSOCIATED TERRA CONSULTANTS, Inc.

ENVIRONMENTAL SERVICES ENGINEERING GEOLOGY HYDROGEOLOGY

### ENVIRONMENTAL MONITORING REPORT MAY 1997

800 FRANKLIN STREET (STID #37) OAKLAND, CALIFORNIA

for

Mr. Tommy Chiu 812 5<sup>th</sup> Avenue Oakland, California

October 10, 1997

-1 20 -1

Р<mark>И</mark> Э

64

### ASSOCIATED TERRA CONSULTANTS, Inc.

ENVIRONMENTAL SERVICES ENGINEERING GEOLOGY HYDROGEOLOGY

October 10, 1997 File No: 124575

Mr. Tommy Chiu 812 5<sup>th</sup> Avenue Oakland, California

#### Subject: ENVIRONMENTAL MONITORING REPORT, MAY 1997 800 Franklin Street (STID #37) Oakland, California

Dear Mr. Chiu:

We are pleased to present to you with our report of the installation of Groundwater Monitoring Well MW-6 and the sampling of all the wells at the site and the testing of the samples obtained. This monitoring and report are required by the Alameda County Health Care Services Agency, Department of Environmental Health, SWRCB, Division of Clean Water Programs, UST Local Oversight Program in their letter dated October 16, 1995.

Please do not hesitate to call us if you have any questions. Thank you.

Respectfully submitted,

ASSOCIATED TERRA CONSULTANTS, Inc.

**Rick Haltenhoff** 

President

Distribution: 3 copies - Addressee

1 copy - Ms. Jennifer Eberle, Alameda County, Department of Environmental Health

#### TABLE OF CONTENTS

INTRODUCTION
SITE DESCRIPTION AND SITE HISTORY
SCOPE OF WORK: MAY 1997
METHODS AND PROCEDURES
Site Health and Safety Plan
Groundwater Elevations
RECOMMENDATIONS
LIMITATIONS
REFERENCES

Attachments:	
Plate 1:	Site Vicinity Map
Plate 2:	Site Plan Showing Locations of Cross-Sections A-A', B-B', and C-C' and Monitoring Well MW-6
Plate 3:	Gradient 5/21/97 and The History of Site Groundwater Gradient Directions and Magnitudes
Plate 4:	Cross-section A-A'
Plate 5:	Cross-section B-B'
Plate 6:	Cross-section C-C'
	•
Table 1:	Compilation of Groundwater Elevations in Groundwater
	Monitoring Wells
Table 2:	Compilation of Compound Concentrations (in ppm) in
	Groundwater Samples
Table 3:	Compilation of Compound Concentrations (in ppm) in Soils Samples
Appendix A	Laboratory Testing Reports and Chain of Custody Documents
Appendix B:	Boring Log and Boring Log Key for Monitoring Well MW- 6
Appendix C:	Drilling and Excavation Permits
Appendix D	Standard Drilling and Sampling Protocol

October 10, 1997

#### **TECHNICAL REPORT**

#### MAY 1997

#### 800 FRANKLIN STREET (STID #37) OAKLAND, CALIFORNIA

#### ENVIRONMENTAL MONITORING REPORT: MAY 1997

#### 800 FRANKLIN STREET (STID #37) OAKLAND, CALIFORNIA

#### INTRODUCTION

Associated Terra Consultants, Inc. was retained by Mr. Tommy Chiu of Oakland, California to continue the environmental remedial investigation at and in the vicinity of 800 Franklin Street in Oakland, California. This report summarizes the work performed by Associated Terra Consultants, Inc. during the second half of 1996 and first half of 1997 and presents the results of the installation of Groundwater Monitoring Well MW-6 and the sampling and testing of groundwater from all the wells. This report is required pursuant to a letter to Mr. Tommy Chiu from the Alameda County Health Care Services Agency, Department of Environmental Health, SWRCB, Division of Clean Water Programs, UST Local Oversight Program, dated October 16, 1995, and as included in our approved work plan for this work, dated October 30, 1995. The additional sampling and monitoring was required by a letter from Ms. Jennifer Eberle dated March 4, 1997.

#### SITE DESCRIPTION AND SITE HISTORY

Both the site description and site history have been included in several recent reports, the most recent of which was dated March 29, 1995, and is not repeated here.

#### SCOPE OF WORK: MAY 1997

Activities performed by Associated Terra Consultants, Inc. for this report include the following:

a) Drilling, instillation and development of Monitoring Well MW-6;

- b) Measurement of the groundwater levels in all the wells and calculation of the
- c) Sampling of all existing wells;
- d) Testing of the soils samples from Monitoring Well MW-6 for oil & grease, total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, with benzene, toluene, ethyl benzene, xylenes and MTBE distinction;
- e) Testing of the water samples for total petroleum hydrocarbons as gasoline, with benzene, toluene, ethyl benzene, xylenes and MTBE distinction; and
- f) Preparation of this report of this monitoring event.

#### METHODS AND PROCEDURES

#### Site Health and Safety Plan

All personnel at the site were CFR 1910.120 Hazardous Waste Operations safety qualified. Level "D" Personal Protective Equipment was appropriate for this operation, and was worn by all present. Higher levels of Personal Protective Equipment were available on site for selected personnel. In accordance with the Site Health and Safety Plan, the Site Safety and Health Officer and Supervisor for this operation was Mr. Rick Haltenhoff of Associated Terra Consultants, Inc.

Drilling, Soils Sampling, and Well Construction

An exploratory soils boring within which a groundwater monitoring well, MW-6, addressionally was obstructed, was drilled at the site at the intersection of 8th Street and Franklin Street on May 15, 1997. Associated Terra Consultants, Inc. secured a permit for this well from the Alameda County Flood Control and Water Conservation District, Zone 7, prior to well installation. A permit was originally obtained in March 1996 (#96195), which subsequently needed to be updated. A second permit (#97315) was obtained in May 1997. The drilling and well installation were done by Kvilhaug Well Drilling and Pump Company, Inc. (C57# 482390) of Concord, under the supervision of the Certified Hydrogeologist/Certified Engineering Geologist. All permits obtained for the installation can be found in Appendix C. The boring was logged by Rick Haltenhoff of Associated Terra Consultants, Inc. A truck-mounted, Mobile B-61 drill rig equipped with continuous-flight, hollow-stem augers of 8-inch outside diameter, was used to drill the boring and construct the well. The augers and other drill parts were steam-cleaned prior to use to minimize the risk of cross-contamination. Soils cuttings from the boring were examined in the field and placed in open-top, 55-gallon drums specifically designated for that purpose.

The soils were sampled at various depths between the ground surface and the bottom of the borehole. A California sampler of 2-inch inside diameter equipped with pre-cleaned brass sleeves was used to retrieve the soils samples. At each sampling depth the sampler was driven 18 inches into the soils with a 140-pound hammer falling 30 inches. The blow counts necessary to drive the sampler were recorded for each six-inch interval, and the blow counts for the bottom two 6-inch intervals were totaled and reported on the boring logs as an indication of the consistencies of the materials encountered. The soils were characterized by the Staff Geologist and field-inspected for the presence of hydrocarbon fuel and volatile hydrocarbon compounds. The samples were promptly sealed, labeled, and placed in iced storage for transport along with a chain-of-custody record to Chromalab of Pleasanton, California, which is State-certified for the appropriate chemical analyses (California Department of Health Services Certificate 1094). Table 3, "Compilation of Compound Concentrations (in ppm) in Soils Samples", contains the results of the chemical testing of the soils samples. For more details about the drilling and sampling procedures, see Appendix D.

Groundwater monitoring well MW-6 was constructed with flush-threaded, Schedule 40, polyvinyl chloride (PVC) casing of 2-inch diameter, using screen slotting of 0.010-inch with a filter pack of No. 3 sand. Details of soils types encountered and the well construction are presented on the log of the monitoring well, Appendix B. Appendix B also contains "The Boring Log Key for Monitoring Well MW-6". The relationships of the soils between the borings are illustrated in Plates 4 through 6, Cross-sections A-A' through C-C'.

#### Monitoring Well Elevation and Location

The elevation of the well head of MW-6 relative to Mean Sea Level and the location of the well were surveyed by Geotopo, of Oakland, California as had all previous wells at the site. The elevation is reported in Table 1, "Compilation of Groundwater Elevations in Groundwater Monitoring Wells", and the location is shown on the "Site Plan Showing Locations of Cross-Sections A-A', B-B', and C-C' and Monitoring Well MW-6 " map.

#### Monitoring Well Development

The new monitoring well was developed on May 15, 1997 by purging using a bailer and hand pump, until the purged water appeared of relatively low turbidity, had a uniform appearance, and had a uniform temperature, pH, and conductivity. The water generated from the well development, sampling procedures and equipment cleaning, was placed in 5-gallon buckets.

#### Groundwater Level Measurements

The Staff Geologist measured the groundwater surface levels in all the groundwater monitoring wells on May 21, 1997, as shown on Table 1. The well caps were unlocked and removed, and the wells allowed to equilibrate with atmospheric pressure for at least an hour prior to measurement. The depth to water in each well was measured with an electronic water level sounder to the nearest 0.01-foot relative to the surveyed top of well casing. Depth to water data were subtracted from the surveyed wellhead elevations to calculate groundwater surface elevations relative to mean sea level. Table 1 is the "Compilation of Groundwater Elevations in Groundwater Monitoring Wells."

#### **Groundwater Sampling**

Groundwater samples were taken from all six groundwater monitoring wells on May 21, 1997. All sampling procedures were performed in accordance with the "Standard Sampling Protocol" used in all previous samplings by KDM Environmental, Inc. (1992, 1993a, and 1993b), Frank Lee and Associates (1993), and Associated Terra Consultants, Inc. (1994a,), and is not repeated here. Appendix D, "Standard Drilling, Sealing and Sampling Protocol", contains more specific information regarding the sampling.

#### Laboratory Sample Analyses

The soils and water samples were submitted on May 16, 1997 and May 22, 1997, respectively, to Chromalab of Pleasanton, California with positive chain of custody documentation. The laboratory was instructed to analyze each soils and water sample for total petroleum hydrocarbons as gasoline ("TPHg"); for benzene, toluene, ethyl benzene, total xylenes ("BTEX"); and for methyl tertiary-butyl ether ("MTBE") by EPA Methods 5030/8015/602. The soils samples were additionally analyzed for total oil and grease using EPA Method 5520 E&F, and total petroleum hydrocarbons as diesel ("TPHd"). The samples were analyzed within the holding time specified for these EPA methods. For the laboratory analyses of the samples, spike recoveries were considered acceptable. The laboratory testing reports, including the quality control results and the "Chain of Custody" documents, are included in Appendix A. Table 2 shows the analytical results of all the previous groundwater samplings known to us and the most recent sampling at the project site. Table 3 shows the analytical results of all current and known previous soils samplings at the project site.

#### **INVESTIGATION RESULTS**

#### **Groundwater Elevations**

The average of the elevations of the groundwater in all the wells in May were 0.5 feet higher than when last measured in October 1995. There have been significant changes in the water levels at the site with the seasons, and this level is within the range of levels previously measured at the site. The

average depth below the ground surface is 11.8 feet; the average depth below the ground surface has varied from about eight to 16 feet since 1991.

#### Groundwater Gradient

Based on topographical features and information generally available, the regional groundwater is believed to flow generally in a southwesterly direction toward San Francisco Bay, however, variations in the gradient direction can occur and have been reported in the vicinity of the project site. The calculated gradient based on the measurements on May 21, 1997 is shown on Plate 3.

#### Groundwater Sample Analyses

Monitoring wells MW-1 to MW-3 showed a decrease in analytes previously detected and MW-4 and MW-5 showed increases as compared to comparable testing performed in October 1995. The first round of testing for MW-6 indicated the presence of TPHg, Benzene, Toluene, Xylenes and MTBE. Total BTEX and TPHg levels in MW-1 through MW-3 decreased from October 1995, while a general increase for the same analytes was observed in MW-4 and MW-5. Finally, levels of MTBE decreased overall in MW-1 through MW-3, and remained non-detectable in MW-4 and MW-5. MW-6 tested positive for MTBE. It should be noted that concentrations reported for this most recent round of testing in MW-2 and MW-3 are laboratory estimates. Detection levels for these samples are different from the standard detection levels used by the laboratory, but the laboratory estimates exceed the detection levels by a factor of at least four. Please see Table 2 and Appendix A for more detail.

#### Soils Sample Analyses

Soils samples taken from the construction of MW-6 tested positive for TPHdiesel, BTEX, and MTBE. TPH-diesel was detected in soils at a depth of 10 feet, for BTEX at 25 feet, and for MTBE at 30 feet. See Table 3 for "Compilation of Compound Concentrations (in ppm) in Soils Samples."

#### RECOMMENDATIONS

1. We recommend, as a minimum, that the gradient direction and magnitude at the project site continue to be measured semi-annually, and that the groundwater in the monitoring wells be sampled and tested for TPHg, BTEX and MTBE at least semi-annually, and that future site activities should be based upon this information. All site activities must be done in accordance with County requirements and guidelines.

#### LIMITATIONS

1. This report has been prepared in accordance with generally accepted Engineering Geologic and Hydrogeologic practices. The conclusions and recommendations contained in this report have resulted from Engineering Geologic and Hydrogeologic analyses based upon reasonable interpretations of the surface and subsurface soils, geologic, and hydrogeologic conditions based upon our points of inspection and as reported by others in their borings at the project site at locations chosen by them, and that the soils, geologic, and hydrogeologic conditions between points of inspection do not deviate from those reported. No warranty, expressed or implied, is made.

2. The migration of contaminants in vadose zone soils and shallow aquifers is somewhat irregular and poorly understood, and the state-of-the-art in environmental investigation does not provide the means to completely evaluate such conditions. However, every reasonable effort has been made within the scope of work agreed to between the Client and Consultant to characterize the extent of the contamination at the project site based upon location of the wells and the well head elevations reported by others, and the groundwater elevations in the monitoring wells and the chemical testing results from this quarterly monitoring program. It remains, however, that it cannot be stated with certainty that all locations and the full extent of contamination in the groundwater at the project site have been discovered and evaluated. 3. The findings of this report are valid as of the present time. However, the passing of time will change conditions on the existing property due to natural processes or the works of man. In addition, legislation or the broadening of knowledge may require other recommendations. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

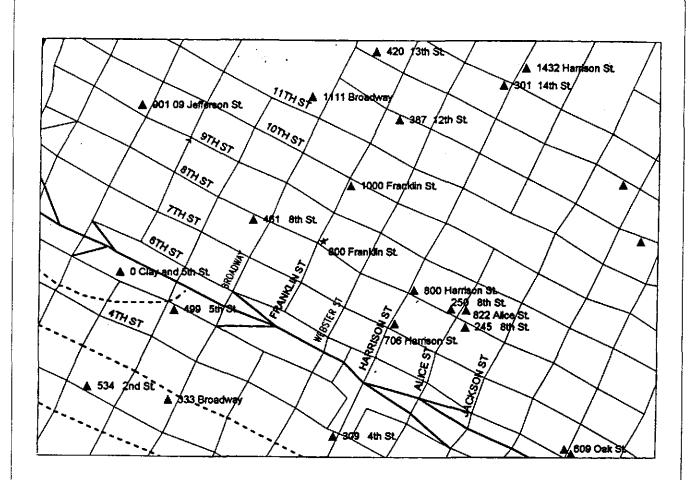
Very truly yours, ASSOCIATED TERE MSЫ NTS. Inc. Rick Haltenhoff NO. 244 Certified Hydrogeolog Certified Engineering Attachments as show le of Content

#### REFERENCES

- Associated Terra Consultants, Inc., 1994a, Report of sampling and testing results, STID #37, 800 Franklin Street, Oakland, California: Los Gatos, California, an unpublished letter report for Mr. Tommy Chiu, Oakland, California (April 8, 1994).
- \_\_\_\_, 1994b, Environmental monitoring report, Second Quarter 1994, 800 Franklin Street (STID #37), Oakland, California: Los Gatos, California, an unpublished report for Mr. Tommy Chiu, Oakland, California (July 15, 1994).
- \_\_\_\_, 1994c, Report of sampling and testing results, Third Quarter 1994, STID #37, 800 Franklin Street, Oakland, California: Los Gatos, California, an unpublished letter report for Mr. Tommy Chiu, Oakland, California (November 17, 1994).
- \_\_\_\_, 1995a, Report of sampling and testing results, Fourth Quarter 1994, STID #37, 800 Franklin Street, Oakland, California: Los Gatos, California, an unpublished letter report for Mr. Tommy Chiu, Oakland, California (March 29, 1995).
- \_\_\_\_\_, 1995b, Environmental monitoring report, October 1995, Fourth Quarter 1995, STID #37, 800 Franklin Street, Oakland, California: Los Gatos, California, an unpublished letter report for Mr. Tommy Chiu, Oakland, California (November 30, 1995).
- Frank Lee and Associates, 1993, Transmittal of testing results, former service station, 800 Franklin Street, Oakland, California: Los Gatos, California, an unpublished letter for Mr. Tommy Chiu, Oakland, California.
  - \_\_\_\_, 1994, Transmittal of groundwater level measurements, former service station, 800 Franklin Street, Oakland, California: Fremont, California, an unpublished letter for Mr. Tommy Chiu, Oakland, California.

#### **REFERENCES** (Continued)

- KDM Environmental, Inc., 1992, Quarterly monitoring of wells, third quarter 1992, 800 Franklin Street, Oakland, California: an unpublished report for Mr. Tommy Chiu of Continental Homes, Inc., Oakland, California.
- .\_\_\_\_, 1993a, Quarterly monitoring of wells, fourth quarter 1992, 800 Franklin Street, Oakland, California: an unpublished report for Mr. Tommy Chiu of Continental Homes, Inc., Oakland, California.
- \_\_\_\_\_, 1993b, Quarterly monitoring of wells, first quarter 1993, 800 Franklin Street, Oakland, California: an unpublished report for Mr. Tommy Chiu of Continental Homes, Inc., Oakland, California.
- Miller Environmental Company, 1989a, Update on 800 Franklin Street in Oakland, CA: Richmond, California, an unpublished letter for Mr. Tommy Chiu of the Montclair Valle Vista Partnership, Oakland, California.
  - \_\_\_\_\_, 1989b, Report on subsurface investigation and remediation of contaminated soil, 800 Franklin Street, Oakland, CA: Richmond, California, an unpublished report for Mr. Tommy Chiu of Dynagroup Development, Inc., Oakland, California.
- .\_\_\_\_, 1992, Report on subsurface investigation related to well installation and borings, 800 Franklin Street, Oakland, CA: Richmond, California, an unpublished report for Mr. Tommy Chiu of the Montclair Valle Vista Partnership, Oakland, California.

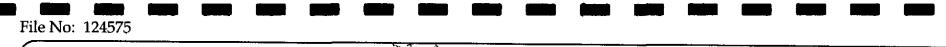


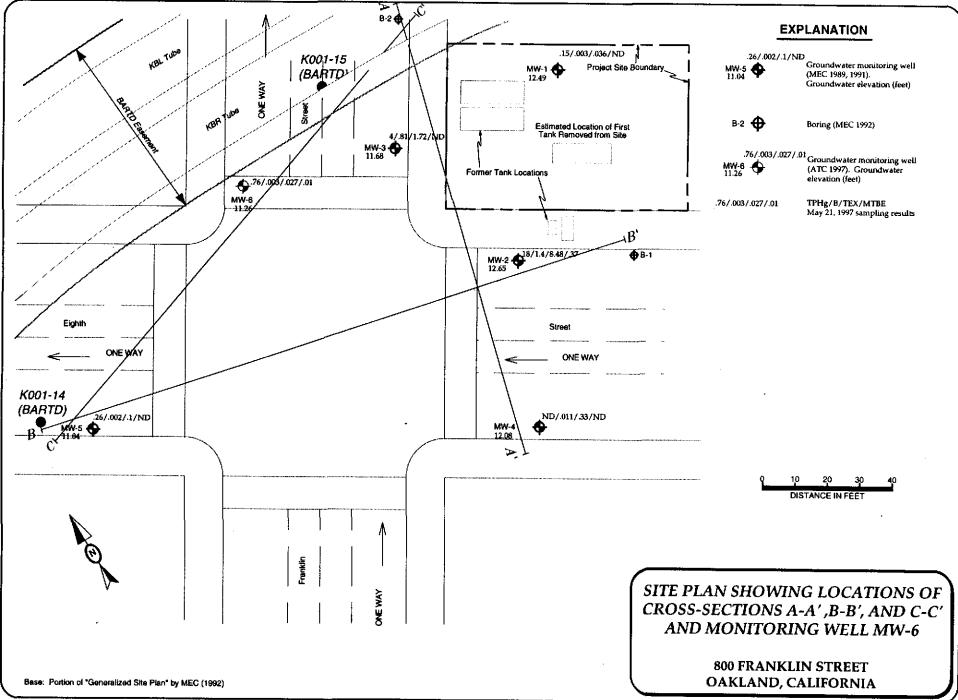
Approximate scale: 1" = 700'

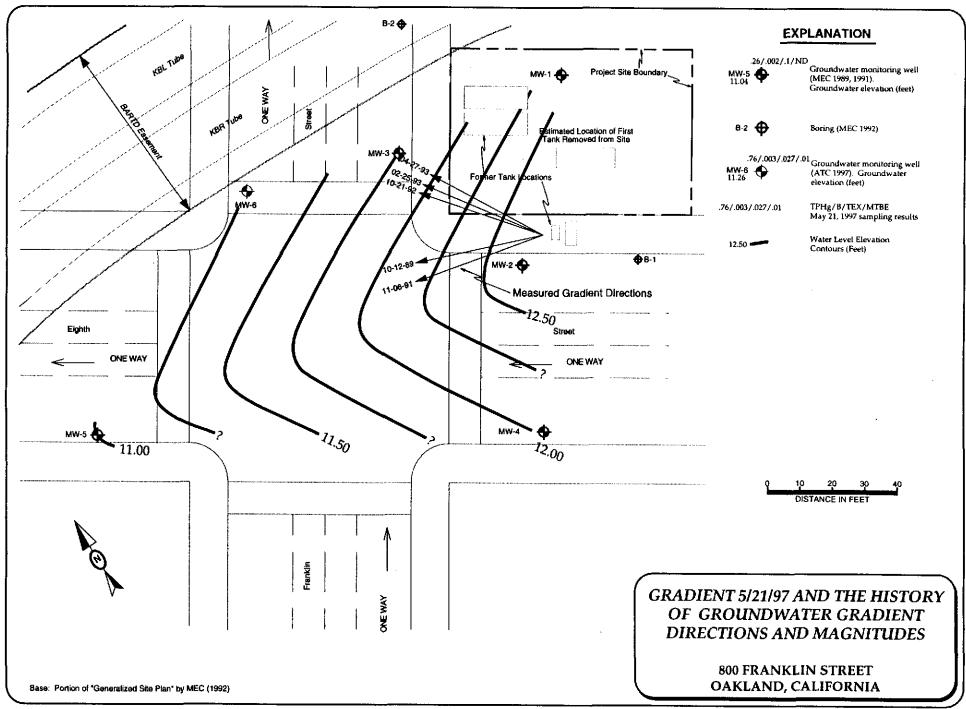
### SITE VICINITY MAP

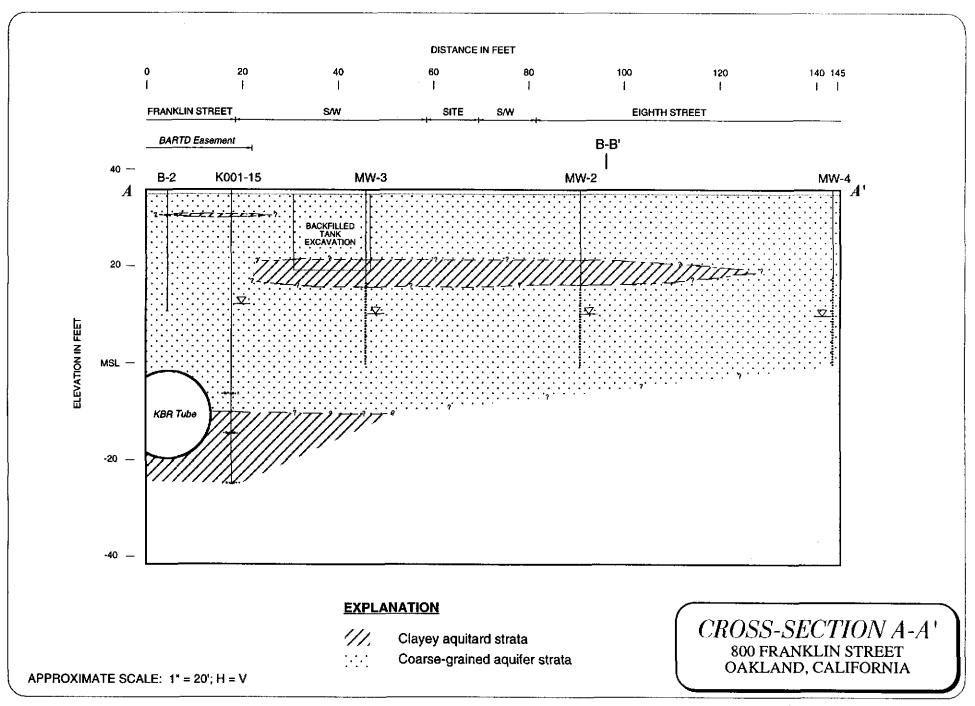
800 FRANKLIN STREET OAKLAND, CALIFORNIA

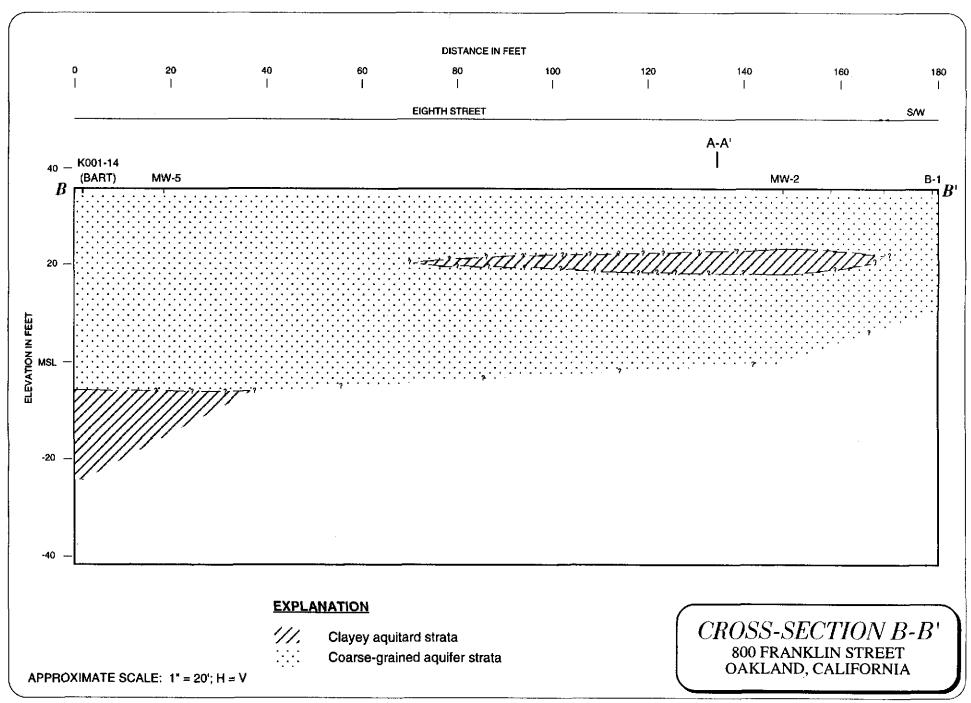
BASE: Computer graphic provided by ACDEHHMD.

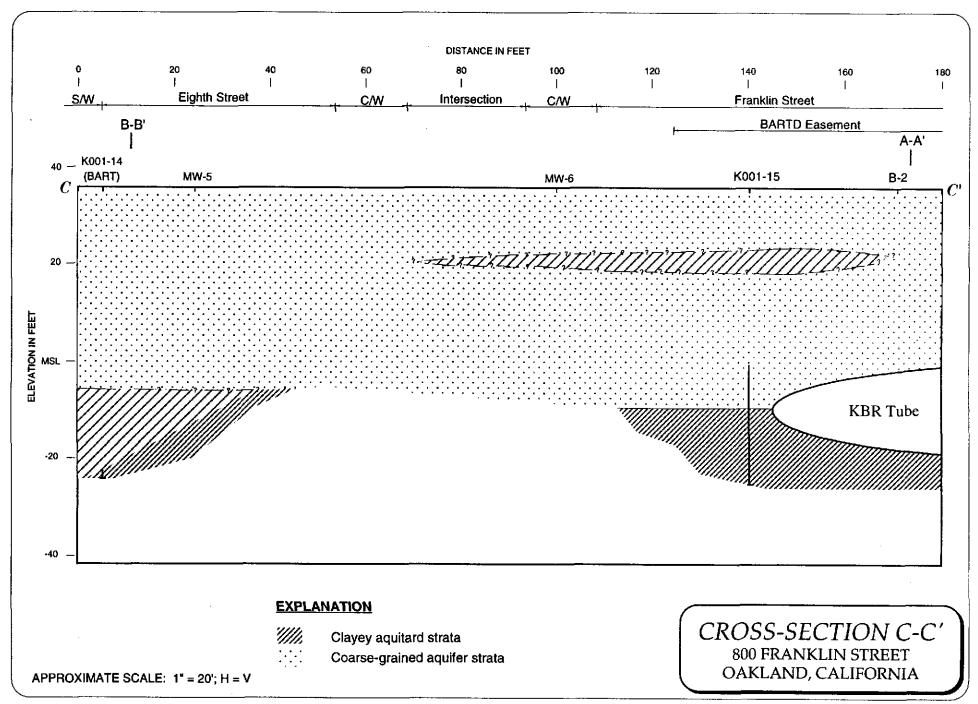












#### **TABLE 1**

#### **COMPILATION OF**

#### **GROUNDWATER ELEVATIONS IN GROUNDWATER MONITORING WELLS**

800 Franklin Street, Oakland, California

Well	MW1			MW2	MW3	MW4	MW5	MW6
Top of Casing	33.42	34.89#	33.98	33.66	34.23	33.64	33.56	33.98
10/12/89	10.55	-	-	10.40	10.21	*	*	*
11/06/91	NA	-	-	9.64	10.71	10.32	9.56	*
10/21/92	-	11.41	-	11.24	10.91	11.54	10.32	+
02/25/93	-	12.38	-	12.16	11.72	12.51	11.16	*
04/27/93	-	12.53	-	12.40	11.86	12.90	11.41	•
10/07/93	-	12.10	-	12.04	14.19	12.52	11.06	*
03/28/94	-	_	11.91	11.88	11.52	12.34	10.95	+
04/29/94	-	-	NA	11.87	11.34	11.33	10.91	
06/10/94	-	_	11.66	11.44	11.13	11.55	10.51	*
07/08/94	_	_	11.62	11.42	11.15	11.54	10.60	*
07/26/94	_		11.48	11.42	11.09	11.34 11.30	10.80	*
08/25/94	-	-	11.47	11.01	10.94	11.09	10.43	*
10/27/94	-	-	11.47	11.00	10.67	10.95	10.06	*
01/06/95	-	-	12.08	11.66	11.33	11.70	10.78	*
02/01/95	- )	-	12.79	12.21	11.79	12.34	11.25	*
03/29/95	-	-	12.75	12.66	12.10	12.76	11.63	*
10/31/95	-	-	12.48	11.51	11.23	11.61	10.64	*
05/21/97	-	-	12.49	12.65	11.68	12.08	11.04	11.26

@ MW-1 top of casing destroyed between 10/12/89 and 11/6/91. Repaired on 03/28/94.

"#" Top of slab next to MW1.

"\*" - Did not exist "NA" - Not available

10/12/89 and 11/06/91 data from Miller Environmental Company. 10/21/92 through 04/27/93 data from KDM Environmental. 10/07/93 data from Frank Lee & Associates. Datum is Mean Sea Level, based on surveying by LLS Jeffery D. Black,11/05/91; Existing wellhead, top of slab, & repaired wellhead of MW1 re-surveyed on 03/28/94 by Geotopo, Oakland, Calif.

### TABLE 2COMPILATION OF

#### COMPOUND CONCENTRATIONS (in ppm) IN GROUNDWATER SAMPLES

800 Franklin Street, Oakland, California

	Smpl Date)	TPHg	Wst Oil	TPHd	Benzene	Toluene	Eth Benz		DCA (ppb)	MTBE
MW1	9/21/89	ND	ND	-	ND	NĎ	ND	ND	8.600	-
	10/31/91	0.630	1.700	0.960	0.003	ND	ND	0.130	0.010	-
	10/21/92	0.520	-	-	0.078	0.038	ND	0.120	ND	-
	2/25/93	1.600	-	•	0.160	0.190	0.034	0.350	-	-
	4/27/93	0.380	-	-	0.005	ND	ND	0.074	-	-
	10/7/93	1.000	-	-	0.081	0.150	0.047	0.230	-	-
	3/28/94	0.460	-	-	0.014	0.025	0.014	0.039	-	-
	10/27/94	ND	-	-	ND	ND	ND	ND	-	-
	10/30/95	1.400	-	-	0.015	0.038	0.049	0.510	_	0.019
	5/21/97	0.150	-	-	0.003	0.002	0.009	0.026	-	ND
MW2	9/21/89	38.000	3.900	-	1.300	1.200	ND	4.700	ND	
	10/31/91	10.000	ND	1.500	1.800	1.200	0.270	0.960	0.170	-
	10/21/92	270.000	-	-	9.700	4.540	9.600	56.000	15.400	-
	2/25/93	49.000	-	-	4.300	11.000	1.300	9.100	-	-
	4/27/93	39.000	-	_	1.400	4.000	0.220	5.200		-
	10/7/93	50.000	-	-	2.700	8.100	0.940	7.800	-	-
	3/28/94	20.000	-	-	0.360	1.300	0.220	1.800	_	-
	10/27/94	21.000	-	-	1.200	3.700	0.600	4.300	-	_
	10/30/95	45.000	-	_	3.100	8.800	1.200	8.400	-	0.810
	5/21/97	##18.000	-	-	##1.400	##4.200	##0.680	##3.600	-	##0.370
MW3	9/21/89	87.000	4.500	_	3.200	8.800	ND	6.500	70.000	-
	10/31/91	310.000	ND	25.000	9.300	25.000	5.600	27.000	0.058	-
	10/21/92	22.000	-	-	10.000	4.300	0.790	2.100	ND	· _
	2/25/93	29.000	-	-	8.400	5.400	1.300	3.300	-	-
	4/27/93	50.000	-	-	8.200	8.700	1.000	5.400	-	-
	10/7/93	1.700	-	-	3.100	3.700	0.400	1.700	_	-
	3/28/94	53.000	-	-	3.900	4.600	0.710	2.500	-	-
	10/27/94	8.500	-	-	2.700	2.700	0.490	2.000	-	-
	10/30/95	19.000	-	-	4.400	4.600	0.720	2.900	-	0.410
	5/21/97	##4.000	-	-	##.810	##.840	##.190	##.690	-	##ND
MW4	10/31/91	ND	ND	ND	ND	ND	ND	ND	ND	
	10/21/92	0.410	-	-	0.003	0.029	0.007	0.047	ND	-
	2/25/93	0.170	-	-	ND	ND	ND	ND	-	-
	4/27/93	0.100	-	-	ND	ND	ND	0.001	- )	-
	10/7/93	0.240	-	-	ND	ND	ND	ND	-	-
	3/28/94	ND	-	-	ND	ND	ND	ND	-	-
	10/27/94	ND	-	-	ND	ND	ND	ND	-	-
	10/30/95	0.080	-	-	ND	0.001	ND	0.001	-	ND
	5/21/97	ND	-	-	0.011	0.120	0.027	0.180	-	ND
AW5	10/31/91	ND	ND	ND	ND	ND	ND	ND	ND	-
	10/21/92	0.840	-	-	0.017	0.120	0.039	0.180	ND	-
	2/25/93	ND	-	-	ND	ND	ND	ND	-	-
	4/27/93	0.260	-	-	0.053	0.019	0.001	0.002	-	-
	10/7/93	ND	-	-	ND	ND	ND	ND		_
	3/28/94	ND	-	-	ND	ND	ND	ND	-	-
	10/27/94	ND	-	-	ND	ND	ND	ND	-	-
	10/30/95	ND	-	-	ND	ND	ND	ND	-	ND
	5/21/97	0.260	- 1	-	0.002	0.033	0.008	0.056	_	ND

#### **TABLE 2**

Well (S	Smpl Date)	TPHg	Wst Oil	TPHd	Benzene	Toluene	Eth Benz	Xvlenes	DCA (ppb)	MTBE
MW6	10/31/91	_	-	*	-		-	_		
	10/21/92	•	-	-	_	-	_	-		_
	2/25/93	-	-	-	-	-	_	-	_	_
	4/27/93	-	-	-	-	_	_	_		-
	10/7/93	-		-	-	-	_	_		-
	3/28/94	-	-	-	-	-	_	_		-
	10/27/94	-	-	_	_	-		_		-
	10/30/95	-		-	-	_	_	_		-
	5/21/97	0.760	_	-	0.003	0.002	ND	0.025	-	0.010

Notes: MW1 - .8 ppb chloroform on 09/21/89; MW3 - .68 ppb dichloropropane and 1.4 ppb TCA, MW4 - 2.6 ppb chloroform, and MW5 - 1.1 ppb chloroform, on 10/31/94. "ND" - Not Detected within specified detection limit; 50 ppb for TPHG and TPHd, and 0.5 for BTEX and MTBE for all values indicated. "-" - Not Analyzed. Values rounded-off to three decimal places where necessary. See laboratory data sheets for exact reported values. Testing 10/12/89 and 10/31/91 as reported by Miller Environmental Co. Testing 10/21/92, 2/25/93, and 4/27/93 as reported by KDM Environmental. Testing 10/07/93 as reported by Frank Lee & Associates.

See the laboratory testing reports for the detection limits for the specific analytes for the testing dated 5-21-97. See laboratory testing reports for specific testing methods. ACCULAB in Petaluma, California; location of NET Pacific, Inc. laboratory not reported by Miller Environmental Company/Chromalab, Pleasanton, CA. "##" - Laboratory results sheet contains notation: "Estimated concentration. Sample Exceeded linear calibration. Insufficient sample for reanalysis." Detection limits for these samples are 50 ppb for TPHg, 5ppb for MTBE, and .50 ppb for BTEX.

# TABLE 3COMPILATION OFCOMPOUND CONCENTRATIONS (in ppm) IN SOIL SAMPLES800 Franklin Street, Oakland, California

				1								est to ea	:	
		MW5	MW6	MW4	MW2	B1	EX2-A	EX2-B	MW3	EX1-A	EX1-B	EX1-C	MW1	B2
Date:		10-03-91	97-05-15	10-02-91	09-12-89	09-11-91	09-08-89	09-08-89	09-13-89	09-07-89	09-07-89	09-07-89	09-12-89	10-02-91
Lab:									(LABC)					
5	Oil and Grease	ND	ND	ND	ND	ND	•	-	ND	-	-	-	30	ND
("A")	TPHg	ND	ND	ND	ND	ND	-	- 1	ND	-	-	-	ND	ND
	Benzene	ND	ND	ND	ND	ND	- ;	-	ND	-	-	-	ND	ND
	Toluene	ND	ND	ND	ND	ND	-	-	ND	-	-	-	ND	ND
	Ethylbenzene	ND	ND	ND	ND	ND	-	-	ND	-	-	-	ND	ND
	Xylenes	ND	ND	ND	ND	ND	-	-	ND	-	-	-	ND	ND
	TPHd	ND	ND	ND	ND	ND	-	- 1	ND	-	-	-	23	ND
	Motor Oil	ND	-	ND	_	•	-	_		-		-	-	-
	TRPH	-	-	-	-	ND	-	-	_	_	-	_	-	-
	MTBE	-	ND	1	-	-	-	-	-	-	_	-	•	-
							1 í							
10	Oil and Grease	ND	ND	ND	ND	ND		-	ND	-	-	-	ND	ND
("B")	TPHg	ND	ND	ND	ND	ND	-	-	ND	-	-	-	ND	ND
	Benzene	ND	ND	ND	ND	ND	-	-	ND	-	-	_	ND	ND
	Toluene	ND	ND	ND	ND	ND	-	-	ND	-	-	_	ND	ND
	Ethylbenzene	ND	ND	ND	ND	ND	-	_	ND	_	-	-	ND	ND
	Xylenes	ND	ND	ND	ND	ND	-	-	ND	-	_	-	ND	ND
	TPHd	ND	#9.1	ND	ND	ND	-	_	25	_	_	_	ND	ND
	Motor Oil	ND	-	ND	-		-	-	-	-			-	ND
	TRPH		-	-	-	ND	-	_	-	-	-	_	_	
	MTBE	-	ND	-	-	-	-	-	-	-	-	-	-	-
1.5	01 10													
	Oil and Grease	ND	ND	ND	ND	ND	400	ND	ND	ND	40	80	ND	ND
$(\mathbf{C})$	TPHg	ND	ND	ND	ND	ND	10,000	4.1	ND	ND	ND	2.3	ND	ND
	Benzene	ND	ND	ND	ND	ND	50.0	ND	ND	ND	ND	ND	ND	ND
l	Toluene	ND	ND	ND	ND	ND	210.0	ND	ND	ND	ND	0.050	ND	ND
	Ethylbenzene	ND	ND	ND	ND	ND	54.0	ND	ND	ND	ND	ND	ND	ND
15	Xylenes	ND	ND	ND	ND	ND	270.0	0.15	0.070	ND	ND	0.14	ND	ND
("C")	TPHd	ND	ND	ND	ND	ND	250	ND	ND	ND	ND	ND	ND	ND
	Motor Oil	ND	-	ND	-	-	-	-	-	-	-	-	-	ND
ontinued	TRPH	-	-	-	-	ND	-	-	-	-	-	-	-	-
	MTBE	-	ND	-	-	-	-	-	-	•	- (	- [	-	-
20	Oil and Grease				50									
	TPHg	ND	ND	ND	50	ND	-	-	40	-	-	-	ND	ND
0,		ND	ND	ND	1,900	ND	-	-	2,200	-	-	-	52.0	ND
	Benzene	ND	ND	ND	7.4	ND	-	-	7.5	-	-	-	0.12	ND
	Toluene	ND	ND	ND	51.0	ND	-	-	42.3	-	-	-	0.700	ND
	Ethylbenzene	ND	ND	ND	24.0	ND	-	-	16.0	-	-	-	0.53	ND
	Xylenes	ND	ND	ND	180.0	ND	-	-	180.0	-	-	-	4.5	ND
	TPHd	ND	ND	ND	110	ND	-	-	160	-	-	-	ND	ND
	Motor Oil	ND	-	NÐ	-	-	- [	-	-	-	•	-	-	ND
ľ	TRPH	-	-	-	-	ND	-	-		-	-	-	-	-
	MTBE	- [	##ND	-	-	-	-	- :	- :	-	-	-	-	-

Depth

(feet)	Compound		<u>,</u>	W	ell/Boriı	ng/Excav	vation (a	rranged	іл аррг	oximate	order w	est to ea	st)	
		MW5	MW6	MW4	MW2	B1	EX2-A	EX2-B	MW3	EX1-A	EX1-B	EX1-C	MW1	B2
Date:		10-03-91	97-05-15	10-02-91	09-12-89	09-11-91	09-08-89	09-08-89	09-13-89	09-07-89	09-07-89	09-07-89	09-12-89	10-02-91
Lab:											(LABC)			
							·							
25	Oil and Grease	ND	ND	ND	30	ND	-	- ·	ND	-	-	•	ND	ND
("E")	TPHg	ND	ND	ND	7,800	*2,900	-	-	24	-	-	-	ND	120
	Benzene	ND	0.050	ND	52.0	ND	-	-	0.60	-	- (	-	ND	ND
	Toluene	ND	0.011	ND	220.0	60	-	-	1.10	-	-	-	ND	0.210
	Ethylbenzene	ND	0.023	ND	77.0	ND	-	-	0.17	-	-	-	ND	0.310
	Xylenes	ND	0.099	ND	400.0	ND	-	-	1.40	-		-	ND	0.600
	TPHd	ND	ND	ND	170	160	-	-	ND	-	-	-	ND	83
	Motor Oil	ND	-	ND	-	-	-	-	-	-	-	•	-	ND
	TRPH	-	-	-	-	190	-	-	-	-	• İ	-	-	•
	MTBE	-	ND	•	-	•	•	-	-		-	-		
	Oil and Grease	<b>.</b>	ND	-	-	-	-	-	- }	-	-	-	-	-
("E")	TPHg	-	ND	•	-	-	-	-	-	-	-	-	-	
	Benzene	-	ND	-	-	-	-	-	-	-	-	-	-	-
	Toluene	-	ND	-	-	-	-	-	-	- ]	-	-	-	-
30	Ethylbenzene	-	ND	-	-	-	- 1	-	-	-	-	-	- [	-
("E")	Xylenes	-	ND	- )	-	-	-	-	· _ [	-	-	-	-	-
Continued	TPHd	-	ND	-	-	-	-	-	-	-	-	-	-	-
	Motor Oil	-	-	-	-	-	-	-	-	-	-	-	-	-
	TRPH	-	-	-	-	-	-	-	-	-	-	-	-	-
	MTBE	•	0.005	-			-	-	-	-	-		-	-
35	Oil and Grease	_	ND	-	-	-	-	-		-	-	-	-	-
("E")	TPHg	-	ND	-	-	-	-	-	-	-	-	-	•	-
	Benzene	-	ND	-	-	-	-	-	-	-	-	-	-	-
	Toluene	-	ND	-	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	-	ND	-	-	-	-	-	-	-	-	-	-	
	Xylenes	-	ND	-	-	-	-	-	-	-	-	-	-	-
	TPHd	-	ND	-	-	-	-	-	-	-	-	-	-	-
	Motor Oil	-	-	-	-	- ]	-	-	-	-	-	•	-	-
	TRPH	-	-	-	-	- 1	-	-	-	-	-	-	_	-
	MTBE	-	ND	-		-	-	-	- 1	-	-	-	-	-

Notes Results compiled from laboratory reports provided in Miller Environmental Company (1989 and 1992), and shown to the degree of accuracy reported by the laboratories. ACCULAB (LAB C) in Petaluma, California; location of NET Pacific, Inc. laboratory (LAB A) not reported by Miller Environmental Company/Chromalab, (LAB B) Pleasanton, CA.

"\*" - Laboratory testing report contains notation : "Sample chromatograph for sample ID R1[sic]-25 was not representative of a gasoline pattern". "#" - Laboratory testing report contains notation: "Hydrocarbon reported has characteristics of weathered/ag Diesel. Estimated concentration due to overlapping fuel patterns. See laboratory testing reports for specific testing methods.

Environmental Services (SDB)

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997 Project#: 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW1 Spl#: 133042 Sampled: May 21, 1997

Matrix: WATER Run#: 7034

Analyzed: May 28, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DILU Spike FAG (%)	JTION CTOR
GASOLINE MTBE BENZENE TOLUENE ETHYL BENZENE XYLENES	150 N.D. 2.9 1.5 8.6 26	50 5.0 0.50 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.	106 1 94 1 93 1 97 1 107 1 104 1	

Marianne Alexander Gas/BTEX Supervisor

Chip Poalinelli Operations Manager

<del>408-354-7208</del>

Environmental Services (SDB)

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997

*Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sau	mple ID:	MW2
Spl#:	133043	
Sampled:	May 21,	1997

Matrix: WATER Run#: 7034

Analyzed: May 28, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK Spike (%)_	DILUTION FACTOR
GASOLINE	18000	1000	N.D.	106	20
MTBE	370	100	N.D.	94	20
BENZENE	1400	10	N.D.	93	20
TOLUENE	4200	10	N.D.	97	20
ETHYL BENZENE	680	10	N.D.	107	20
XYLENES	3600	10	N.D.	104	20
Note: Estimated conc Insufficient s	entration. Sample ample for reanaly:	e exceeded line: sis.	ar calibrati	on.	

Marianne Alexan Gas/BTEX Supervisor

Chip Poalinelli Operations Manager

<del>408 354 7208</del>

Environmental Services (SDB)

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997

*Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID:	MW3
<i>Spl#:</i> 133044	
Sampled: May 21,	1997

Matrix: WATER Run#: 7034

Analyzed: May 28, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK Spike (%)	DILUTION FACTOR
GASOLINE	4000	1000	N.D.	106	20
MTBE	N.D.	100	N.D.	94	20
 BENZENE	810	10	N.D.	93	20
TOLUENE	840	10	N.D.	97	20
ETHYL BENZENE	190	10	N.D.	107	20
XYLENES	690	10	N.D.	104	20
 Note: Est:	imated concentration. Sample	e exceeded line	ar calibrat:	ion.	
	ufficient sample for reanalys				

Marianne Alexándér

Gas/BTEX Supervisor

7208

Chip Poalinelli Operations Manager

Environmental Services (SDB)

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997 Project#: 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW4 Spl#: 133045 Sampled: May 21, 1997

Matrix: WATER Run#: 7034

Analyzed: May 28, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DILUTI SPIKE FACTO (%)	
GASOLINE	N.D.	50	N.D.	106 1	
MTBE	N.D.	5.0	N.D.	94 1	
BENZENE	11	0.50	N.D.	93 1	
TOLUENE	120	0.50	N.D.	97 1	
ETHYL BENZENE	27	0.50	N.D.	107 1	
XYLENES	180	0.50	N.D.	104 1	

Marianne Alexander

Gas/BTEX Supervisor

Chip Poalinelli

Operations Manager

Environmental Services (SDB)

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997

*Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW5 Spl#: 133046 Sampled: May 21, 1997

Matrix: WATER Run#: 7034

Analyzed: May 28, 1997

ANALYTE	RESULT	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK Spike (%)	DILUTION FACTOR
GASOLINE	260	50	N.D.	106	1
MTBE	N.D.	5.0	N.D.	94	1
BENZENE	2.4	0.50	N.D.	93	1
TOLUENE	33_	0.50	N.D.	97	1
ETHYL BENZENE	7.7	0.50	N.D.	107	1
XYLENES	56	0.50	N.D.	104	1

Marianne Alexander

Gas/BTEX Supervisor

Chip Poalinelli **Operations Manager** 

408-354-7208

**Environmental Services (SDB)** 

June 2, 1997

Submission #: 9705339

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 22, 1997

Project#: 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW6 *Spl#:* 133047 Sampled: May 21, 1997

Matrix: WATER *Run#:* 7034

Analyzed: May 28, 1997

ANALYTE	RESULT	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK Spike (%)	DILUTION FACTOR
GASOLINE	760	50	N.D.	106	1
MTBE	9.9	5.0	N.D.	94	1
BENZENE	2.5	0.50	N.D.	93	1
TOLUENE	1.7	0.50	N.D.	97	1
ETHYL BENZENE	N.D.	0.50	N.D.	107	1
XYLENES	25	0.50	N.D.	104	1

Marianne Alexander Gas/BTEX Supervisor

Chip Poalinelli

**Operations Manager** 

339/133042-1330417

ASSOCIATED TERRA CONSULTANTS, Inc.

15881 Winchester Boulevard

33872 **CHAIN OF CUSTODY** 

		Lo	os Gatos, CA 95030 (408) 354-6040 (408) Fax 354-7208 그러브 # # 9705339 REI	ha M
Job Name: CHILL	Joh Number S 124575	Sampling Round Number:	LIENT: ASSTER ANALYSIS REQUEST JE: 05/30/97 EF #:33072	
Well or Sample ID Date Time Matrix	Sample Container	Preservative Turn-around Time HOLD	TPH-Gasoline (EPA 5030, 8015) TPH-Gasoline (EPA 5030, 8015) w/BTEX + MTBE (EPA 602, 8020) TPH-Diesel (EPA 3510/3550, 8015) Purgeable aromatics BTEX + MTBE (EPA 602, 8020) Purgeable aromatics (EPA 601, 8010) Volatile Organics (EPA 601, 8010) Volatile Organics (EPA 601, 8010) Volatile Organics (EPA 624, 8240, 524.2) Base/Neutrals, Acids (EPA 624, 8240, 524.2) Base/Neutrals, Acids (EPA 624, 8240, 524.2) Drotal Oil & Grease (EPA 624, 8240, 524.2) Protal Oil & Grease (EPA 624, 8240, 524.2) Protal Oil & Grease (EPA 608, 8080) Pctal Oil & Grease (EPA 5520, B+F, E+F) PCB (EPA 608, 8080) Pctal Recoverable Hydrocarbons (EPA 418.1) LUFT Metals (Cd, Cr, Ni, Pb, Zn) CAM Metals (17) Priority Pollutant Metals (13) Organic Lead Total Lead Total Lead Total Lead	Number of Containers
MWZ MW3 MW4 MW5 MW6 MW6	VOA/LITER	TOAS 5 DAY		4 4 4 4 4 4
Reliven hy: (signature)	572	Relinquished by Received by: (st	(signature/date/time) (2) Relinquished by: (signature/date/time) (3) The second secon	
SAMPLE RECEIPT - Field To Of Total No. of Containers Head Space Rec'd in Good Condition/Cold Conforms to Record Initials/Date	<u>24</u> 1 F	SAMPLE REC Fotal No. of Co Head Space Rec'd in Good C Conforms to Re nitials/Date	CEIPT/- Laboratory COMMENTS:	

ASSOCIATED TERRA CONSULTANTS, Inc.

Page \_\_\_\_ of \_\_\_\_

CHROMALAB, INC.			
Environmental Service (SDB)			
	Sample Rece	ipt Checklist	
Client Name: ASSOCIATED T	ERRA CONSULTANTS	Date/Time Received	1; 05/22/97   <u>1/1/</u>
Reference/Submis: 33872	\$705339	Received by:	
hecklist completed by:	Mris Kowly	5/23/97 Review	ed by: MD 5/23
Han	Signature	Date	Initials   Date
atrix: <u>1120</u>	Carrie:	r name: Client - (C/1	L
Shipping container/cooler in go	ood condition?	Yes	Not No Present
ustody seals intact on shippir	g container/cooler?	Yes	No Not Not
ustody seals intact on sample	bottles?	Yes	No Present
Chain of custody present?			Yes No
hain of custody signed when re	linquished and recei	ved?	Yes No
chain of custody agrees with sa	mple labels?		Yes No
amples in proper container/bot	tle?		Yes No
ample containers intact?			Yes No
sufficient sample volume for in	dicated test?		Yes No
ll samples received within hol	ding time?	10	Yes No
Container/Temp Blank temperatur	e in compliance?	Temp: <u>50</u> .	C YesNo
ater - VOA vials have zero hea	dspace? No V	OA vials submitted	Yes No
Nater - pH acceptable upon rece	ipt? Adj	usted? Checked	by CR
ny No and/or NA (not applicabl			
lient contacted:			
ontacted by:	Regarding:		
			11
comments: <u>AMbers Rec</u>	d w/mo a	inalysis sig	ulsted -
DH acceptable	of Suse	07 8080 L	1 sequested
	$\mathcal{V}$	- -	$\mathcal{V}$
·····			
· · · · · · · · · · · · · · · · · · ·		<u> </u>	<u></u>
orrective Action:			
			in an ann ann an Air
	- <del></del> -		

Environmental	Services (	(SDB)
---------------	------------	-------

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997 Project#: 124575

re: 7 samples for Oil and Grease analysis. Method: 5520 E&F

Sample	ed: May	15,	1997		<i>Matrix:</i> <i>Run#:</i>		Extracted: Analyzed:		
Spl#	CLIENT	SDI.	TD	OIL &	GREASE	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
<b>Spl#</b> 132289 132290 132292 132294 132296 132298 132298 132299	B6-1 B6-2 B6-3B B6-4B B6-5B B6-6B	<u>521</u>	ID		N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	50 50 50 50 50 50 50 50 50 50	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.	93.5 93.5 93.5 93.5 93.5 93.5 93.5 93.5	1 1 1 1 1 1 1

Carolyn House

Extractions Supervisor

Chip Poalinelli

Operations Manager

Environmental Services (SDB)					
May 23, 1997		Å	Submission	#: 970	5247
ASSOCIATED TERRA CONSULT	NTS				
Atten: Nicole Duarte					
Project: CHIU Received: May 16, 1997		Projecta	<b>#: 124575</b>		
re: 7 samples for 7 Method: EPA 8015M	TPH - Diesel a	analysis.			
Sampled: May 15, 1997	Matrix: SC Run#: 69		Extracted: Analyzed:		
Spl# CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (ma/Ka)	BLANK RESULT (mg/Kg)	SPIKE	DILUTION FACTOR
132289 B6-1	<u>(mg/Kg)</u> N.D.	LIMIT (mg/Kg) 1.0	RESULT (mg/Kg) N.D.	<b>SPIKE</b> (%) 86.4	FACTOR
132289 B6-1 132290 B6-2	<u>(mg/Kg)</u> N.D. 9.1	LIMIT (mq/Kq) 1.0 1.0	<b>RESULT</b> (mg/Kg) N.D. N.D.	<b>SPIKE</b> (%) 86.4 86.4	FACTOR
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep	(mg/Kg) N.D. 9.1 orted has charac	LIMIT (mq/Kq) 1.0 1.0 steristics of	RESULT (mg/Kg) N.D. N.D. weathered/ad	<b>SPIKE</b> (%) 86.4 86.4 ged Diese	FACTOR
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D.	LIMIT (mq/Kq) 1.0 1.0 steristics of	<b>RESULT</b> (mg/Kg) N.D. N.D. weathered/aguel patterns N.D.	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D. N.D.	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D.	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D. N.D. N.D. N.D.	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D. N.D. N.D.	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4 86.4 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D. N.D.	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D.	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B 132298 B6-6B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D. N.D. N.D. N.D. Matrix: SC	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D. N.D. N.D.	<b>SPIKE</b> (%) 86.4 86.4 ged Diese 5. 86.4 86.4 86.4 86.4 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B	(mg/Kg) N.D. 9.1 orted has charac ntration due to N.D. N.D. N.D. N.D. N.D.	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D. N.D. N.D. N.D.	<b>SPIKE</b> (%) 86.4 ged Diese s. 86.4 86.4 86.4 86.4 86.4 86.4	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B 132298 B6-6B	(mg/Kg) N.D. 9.1 orted has charace ntration due to N.D. N.D. N.D. N.D. Matrix: SC Run#: 69	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag fuel patterns N.D. N.D. N.D. N.D. Extracted: Analyzed: BLANK	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4 86.4 86.4 86.4 86.4 May 19 May 21, <b>BLANK I</b>	FACTOR 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B 132298 B6-6B Sampled: May 15, 1997	(mg/Kg) N.D. 9.1 orted has charace ntration due to N.D. N.D. N.D. N.D. Matrix: SC Run#: 69 DIESEL	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D. N.D. N.D. S.T. Extracted: Analyzed: BLANK RESULT	SPIKE (%) 86.4 86.4 ged Diese 86.4 86.4 86.4 86.4 86.4 May 19 May 21, BLANK I SPIKE	<b>FACTOR</b> 1 1 1 1 1 1 1 1 1 1 1 1 1
132289 B6-1 132290 B6-2 Note: Hydrocarbon rep Estimated conce 132292 B6-3B 132294 B6-4B 132296 B6-5B 132298 B6-6B	(mg/Kg) N.D. 9.1 orted has charace ntration due to N.D. N.D. N.D. N.D. Matrix: SC Run#: 69	LIMIT (mq/Kq) 1.0 1.0 teristics of overlapping f 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	RESULT (mg/Kg) N.D. N.D. weathered/ag uel patterns N.D. N.D. N.D. N.D. S.T. Extracted: Analyzed: BLANK RESULT	<b>SPIKE</b> (%) 86.4 86.4 ged Diese s. 86.4 86.4 86.4 86.4 86.4 May 19 May 21, <b>BLANK I</b>	FACTOR 1 1 1 1 1 1 1 1 1 1 1 1 1

$\bigwedge$
-(0
-

Bruce Havlik Chemist

Ala

Alex Tam Semivolatiles Supervisor

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997

*Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-1** Spl#: 132289 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK : Spike (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	78	1
MTBE	N.D.	0.0050	N.D.	97	1.
BENZENE	N.D.	0.0050	N.D.	101	ī
TOLUENE	N.D.	0.0050	N.D.	97	ī
ETHYL BENZENE	N.D.	0.0050	N.D.	114	ī
XYLENES	N.D.	0.0050	N.D.	112	ī

Kayvan Kimyai

Kayvan Kimyai Chemist

Marianne Alexander

Gas/BTEX Supervisor

**Environmental Services (SDB)** 

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997 Project#: 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-2** Spl#: 132290 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINË	N.D.	1.0	N.D.	78	1
MTBE	N.D.	0.0050	N.D.	97	1.
BENZENE	N.D.	0.0050	N.D.	101	1
TOLUENE	N.D.	0.0050	N.D.	97	ī
ETHYL BENZENE	N.D.	0.0050	N.D.	114	1
XYLENES	N.D.	0.0050	N.D.	112	ī

Kayvan Kimyai Chemist

#### Marianne Alexander Gas/BTEX Supervisor

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997

*Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-3B** Spl#: 132292 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK Spike (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	78	1
MTBE	N.D.	0.0050	N.D.	97	1:
BENZENE	N.D.	0.0050	N.D.	101	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	114	1
XYLENES	N.D.	0.0050	N.D.	112	1

Kayvan Kimyai

Chemist

7208

Marianne Alexander

Gas/BTEX Supervisor

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997

re: 7 samples for Oil and Grease analysis. Method: 5520 E&P

Sampled: May 15, 1997

Matrix: SOIL Run#: 6982 Extracted: May 22, 1997 Analyzed: May 22, 1997

124575

Project#:

REPORTING

BLANK BLANK DILUTION

Sol# CLIENT SPL ID	OIL & GREASE (mg/Kg)	LIMIT (mg/Kg)	RESULT (mg/Kg)	Spike (%)	FACTOR
132289 B6-1 132290 B6-2 132292 B6-3B 132294 B6-4B 132296 B6-5B 132298 B6-6B 132299 B6-11	N.D. N.D. N.D. N.D. N.D. N.D. N.D.	50 50 50 50 50 50 50 50	N.D. N.D. N.D. N.D. N.D. N.D. N.D.	93.5 93.5 93.5 93.5 93.5 93.5 93.5	111111111111111111111111111111111111111

Carolyn House

Extractions Supervisor

Chip Poalinelli

Operations Manager

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997 *Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-5B** Spl#: 132296 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	78	1
MTBE	N.D.	0.0050	N.D.	97	1.
BENZENE	0.050	0.0050	N.D.	101	1
TOLUENE	0.011	0.0050	N.D.	97	1
ETHYL BENZENE	0.023	0.0050	N.D.	114	1
XYLENES	0.099	0.0050	N.D.	112	1

Kayvan Kimyai Chemist

Kimyai

Marianne Alexander

Gas/BTEX Supervisor

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997 *Project#:* 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-6B** Spl#: 132298 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	78	1
MTBE	0.0050	0.0050	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	101	. 1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	114	1
XYLENES	N.D.	0.0050	N.D.	112	1

Marianne Alexá nder

Gas/BTEX Supervisor

Kayvan Kimyai Chemist

7208

1220 Quarry Lane • Pleasanton, California 94566-4756 (510) 484-1919 • Facsimile (510) 484-1096 Federal ID #68-0140157

Environmental Services (SDB)

May 23, 1997

Submission #: 9705247

ASSOCIATED TERRA CONSULTANTS

Atten: Nicole Duarte

Project: CHIU Received: May 16, 1997 Project#: 124575

re: One sample for Gasoline BTEX MTBE analysis. Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **B6-11** Spl#: 132299 Sampled: May 15, 1997

Matrix: SOIL Run#: 6964

Analyzed: May 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	78	1
MTBE	N.D.	0.0050	N.D.	97	1.
BENZENE	N.D.	0.0050	N.D.	101	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	114	. 1
XYLENES	N.D.	0.0050	N.D.	112	1

Kavyan Kimyai

Chemist

Marianne Alexander

Gas/BTEX Supervisor

2417/132281-132299

ASSOCIATED TERRA CONSULTANTS, Inc.



15881 Winchester Boulevard

Los Gatos, CA 95030 (408) 354-6040 (408) Fax 354-7208

Job Name:	Job Number	Sampling	1										·					•				
CHIU	124575	Round Number:	_							ANA	LYS	IS RE	QUE	ST								
		Preservative Turn-around Time		IPH-Gasoline (EPA 5030, 8015) TPH-Gasoline (EPA 5030, 8015)	w/BTEX + MTBE (EPA 602, 8020) TPH-Diesel (EPA 3510/3550, 8015)	Purgeable aromatics BTEX + MTBE (EPA 602, 8020)		rganics 8240, 524.2)	trals, Acids	Case	IEN E: F #	:33	988 357 754	TEF 237	₹ 797   <del>5</del> 1			•				Number of Contair
Well or Sample ID Date Time Matrix		Preservative Turn-around	НОГР	IPH-Gas TPH-Gas	w/BTEX TPH-Die (EPA 35	Purgeable BTEX + 1	Purgeable Haloci (EPA 601, 8010)	Volatile Organics (EPA 624, 8240, 1	Base/Neutrals,	Fotal Oil FPA 55	PCB (EPA 608,	resucides (EFA Total Recoverat	Hydrocarbons (E LUFT Metals (Cd	CAM Metals (17	Priority Pollutant	Organic Lead	Total Lead	Xuacuo		:		lumber o
B6-1970515NA SOIL B6-2 B6-3 B6-4 B6-5 B6-6 B6-6 B6-7 B6-8 B6-8 B6-9 B6-4 B6-9 B6-4 B6-9 B6-9 B6-9				XXXXXXXXX																		
Received by: (stenature)	5/6	Relinquishe Received by	al e	77		<u>~/</u>	<u>8 97</u>	-		Relin Recei					ıre/d	ate/	time	:)	<u> </u>	(3)		
SAMPLE RECEIPT- Field To Offi Total No. of Containers Head Space Rec'd in Good Condition/Cold	10	SAMPLE R Total No. of Head Space	Cont	amers	Labora	<u>5-1(</u> tory	<u>2-7 (</u>	186		СОМ	IMEN	NTS:				<u></u>						
Conforms to Record Initials/Date	(	Rec'd in Goo Conforms to Initials/Date	Reco		Cold					で	510	20	LE	5	łł	£.	E	>l	lβ	,R	E	i

ASSOCIATED TERRA CONSULTANTS, Inc.

Page \_\_\_\_ of \_\_\_\_

9705247

ASSOCIATED TERRA CONSULTANTS, Inc.

15881 Winchester Boulevard

33754 CHAIN OF CUSTODY

Los Gatos, CA 95030 (408) 354-6040 (408) Fax 354-7208

Job Name:	Job Number	Samoli	ng							· · · · ·			••						<u>.</u>		<del></del>			
CHILE	124575	Round Numbe	<u>er:</u>			-					ANA	LYS	SIS R	EQU	JEST	Г								
Well or Sample ID Date Time Matrix	Sample Container 3 <sup>17</sup> BL	Preservative	Turn-around Time	HOLD TPH-Gasoline (EPA 5030, 8015)	TPH-Gasoline (EPA 5030, 8015) WRTEX + MTBE (EPA 607, 8020)	TPH-Dicsel (EPA 3510/3550, 8015)	Purgeable aromatics BTEX + MTBE (EPA 602, 8020)	Purgeable Halocarbons (EPA 601, 8010)	Volatile Organics (EPA 624, 8240, 524.2)	Base/Neutrals, Acids (EPA 625/627, 8270, 525)	Oil & Grease 5520. B+F. F+F	PCB (EPA 608, 8080)	Pesticides (EPA 608, 8080) Total Recoverable	Hydrocarbons (EPA 418.1)	LUFT Metals (Cd, Cr, Ni, Pb, Zn)	CAM Metals (1/) Priority Pollutant Metals (13)	Organic Lead	Total Lead	Extraction (TCLP, STLC)					Number of Containers
B6-11 970515 HA SOIL	3"BL	YAS	-201		X	>					×													1
ARD															0									
Relinguished by Astraction of the line	70576		<u>0</u> :		a	rc/date	/time)	1.97	7 18	)) 158	Relin	quisl	hed b	y: (s	signa	ature	/date	/tim	ie)		(	3)		
Received by: (signature)	1326	Receive	d by; (	sjgna	ture)		<u>5</u> .	16-9			Recei	ved	by: (:	signa	iture	)								
SAMPLE RECEIPT- Field To Offi Total No. of Containers		SAMPI Total No				abora	tory		<u>. (v</u>		СОМ	IME	NTS	:										
Head Space		Head Sp		und																				
Rec'd in Good Condition/Cold		Rec'd in		Conc	lition/	Cold				{														
Conforms to Record		Conform				~010			<u>.</u>												~	_	_	
Initials/Date		Initials/I									$\mathcal{N}$	10	C	<u>&gt;</u>	E		t+	•	$\square$	>U	A	<u>_</u>	15	5

ASSOCIATED TERRA CONSULTANTS, Inc.

Page Z of Z

9705247

ASSOCIATED TERRA CONSULTANTS, Inc. ENGINEERING GEOLOGY HYDROGEOLOGY ENVIRONMENTAL SERVICES

# **FACSIMILE COVER SHEET**

970516 Date

NICOLE H. DUARTE From

(408) 354-6040 / (408) 354-7208 Tel/Fax Number

124575 Chiu Reference/File No

Number of pages transmitted, including this page is: 2

Subject:

Gary, Please ammend the chain of custody for the Chiu soils samples dated 970515 as follows:

B6-3 & 4 become B6-3A & 3B respectivly B6-5 & 6 become B6-4A & 4B respectivly

B6-7 & 8 become B6-5A & 5B respectively B6-9 & 10 become B6-6A & 6B respectively

Please test B6-1, -2, -3B, -4B, -5B, -6B, and -11 for the tests originally indicated. Please hold all other

samples for possible retesting. Thank you, NHD

See the chain of custody attached

Mr. Gary Cook

To

Chromalab Firm

1 510 484 1096

Fax Number

15881 Winchester Boulevard, Los Gatos, CA 95030

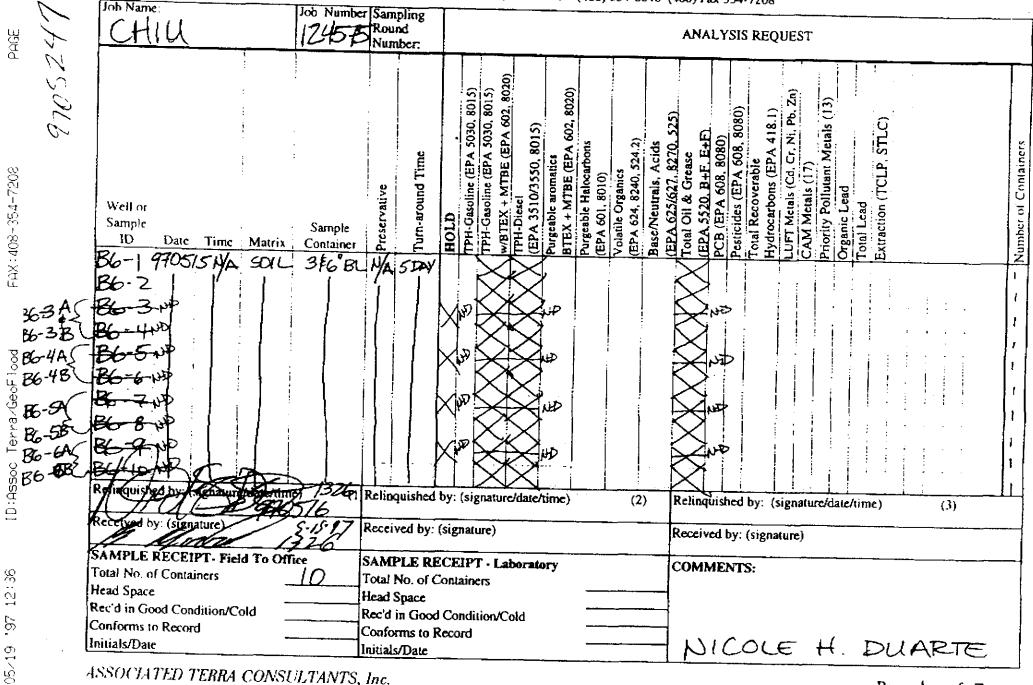
ASSOCIATED TERRA CONSULTANTS, Inc.

 $\infty$ 

15881 Winchester Boulevard

# **CHAIN OF CUSTODY**

Los Galos, CA 95030 (408) 354-6040 (408) Fax 354-7208



ASSOCIATED TERRA CONSULTANTS, Inc.

Page \_\_\_\_ of \_\_\_

ASSOCIATED TERRA CONSULTANTS, Inc.

15881 Winchester Boulevard

**CHAIN OF CUSTODY** 

Joh Name:	Job Number	Sampling	1		CA 95																	
CHILE	124575	Round Number:								٨N	VAL	YSIS	5 REC	QUES	ST							
Well or Sample ID Date Time Matrix	Sample Container	Preservative Turn-around Time	HOLD			Purgeable aromatics BTEX + MTBE (EPA 602, 8020)	Purgeable Halocerbons (EPA 601, 8010)	Volatile Organics (EPA 624, 8240, 524.2)		(EPA 625/627, 8270, 525) Total Oil & Grease	(EPA 5520, B+F, E+F)	Pesticides (EPA 608, 8080)	Total Recoverable		etals (17)	Promity Pollulant Metals (13)	Total Lead	Extraction (TCLP, STI.C)				
B6-11970515 MA SOIL		YASDA		$\mathbf{i}$		<u>, a</u>	<u>a e</u>	<u>&gt; e</u>			7		<u>; F</u> <b>ਸ</b> 	<u>: בי</u>		<u> - 0</u>	й Ч	ய				
	:		:							:						1					÷	
										ĺ				• •	i	:					·	
, .				i					ļ				:			i	i	;	!		•	
				ĺ					i	1						1		ļ	•			
;								-		İ					Ì			•	+	:	:	
	*			Ì	:		i			ļ							. !		·	·		
$\bigcirc$			i		4	ļ			•		•					÷		•	•	-	:	
than			:				ļ			:	-											
Relinfuished by Asian for the		Relinquished	by: (s	ignatu	re/date	/time)	1	(2	2)	Reli	i. inqui	ished	І Ъу:	i (sign	alure	/dau	e/tim	10)		(3		
Received by: (signature)	5-15-971	Received by:	(signa	ature)				<del></del> ,		Reco	eiveo	d by:	(sigi	nature	:)		<u> </u>					
SAMPLE RECEIPT- Field To Of	Tice	SAMPLE RI	ECED	PT - L	aborat	ory				CO	ММ	ENT	S:									
Total No. of Containers		Total No. of (	Contai	ners						]												
Head Space Rec'd in Good Condition/Cold		Head Space																				
Conforms to Record		Rec'd in Good			Cold		<u></u>															
Initials/Date		Conforms to H initials/Date	Kecon	t						1.	مالا	<b>م</b> ,	$\supset$	E	_	H				Δτ	> 7	7

ASSOCIATED TERRA CONSULTANTS, Inc.

Page  $\underline{Z}$  of  $\underline{Z}$ 

 $\sim$ 

PAGE

12:35

79,

05/19

CHROMALAB, INC.			
Environmental Service (SDB)	int Observitet		
Sample Rece	eipt Checklist		
Client Name: ASSOCIATED TERRA CONSULTANTS	Date/Time Re	ceived: C	)5/16/97   <u>/54</u>
Reference/Submis: 33754 79705247	Received by:	BM	
Checklist completed by: M.M. MMULLY	<u>5/19/97</u> R Date	eviewed b	y: 15/1 Initials Day
Matrix: <u>Sul</u> Carrie	er name: Client	C/L_	
Shipping container/cooler in good condition?	Yes	No	Not Present
Custody seals intact on shipping container/cooler?	Yes	No _	Not Present <u>~</u> Not
Custody seals intact on sample bottles?	Yes	No _	Present
Chain of custody present?			Yes No
Chain of custody signed when relinquished and rece	ived?		YesNo
Chain of custody agrees with sample labels?			Yes No
Samples in proper container/bottle?			Yes No
Sample containers intact?			Yes No
Sufficient sample volume for indicated test?			Yes No
All samples received within holding time?		-1	Yes No
Container/Temp Blank temperature in compliance?	Temp:	<u>9.le.</u>	Yes No
Water - VOA vials have zero headspace? No V	VOA vials submitte	ed	Yes No
Water - pH acceptable upon receipt? Adj	justed? Cl	necked by _	
Any No and/or NA (not applicable) response must be			
Client contacted: Date contacted	: Pers	on contact	ed:
Contacted by: Regarding:		• • • • • • • • • • • • • • • • • • •	
Comments:			
	<u></u>	<u></u>	
Corrective Action:			

# CHROMALAB

Change request received by: M. DUARTE

Date Requested: 5, 19, 97

	SAI	VIPLE STATUS C	HANGE FORM	Requested by
Submission#	Client Samp.ID	Old Status Description	Description of Changes	(Client's name)
9705247	See	Attached	SAMPLE ID'S HAVE BEEN CHANGED AND ISG 3A, BLO-4A BLO-5A, FBG-6A HAVE BEEN' PUT ON "HOLD	
hanges were	done in lims by{	login): Challen	On: <u>5119197</u>	
C: Lab.Di	rector Dept	.manager Analyst	Proj.Manager	·

4575

		<u> </u>		LC	DG OF	MONI	TORI	NG WELL - MW-6
Clier	nt:	<u>Chiu</u>	L					Logged By: <u>RH</u>
Site:	80	<u>0 Fra</u>						
Drill	ers:	Kvi	haug					Date Completed: May 15, 1997
Drill	Rig	: <u>B-6</u>	1					Casing Diameter: <u>2 in.</u>
1								Screen Size:010
Тор	of C	asing	g Eleva	tion:	<u>    33 (L</u>	<u>ocal D</u>	<u>atum)</u>	Filter pack: <u>#3 sand</u>
				Symł	ools use	d expla	ained o	on "Key to Boring Logs"
Sample Number		Blows per foot	F.I.D. Reading (ppm)	Dry Unit Weight	Well Data	Depth in feet	U.S. C.S.	Surface Conditions: Concrete
	. 01		Q P	p.c.f.				Description
								Concrete Slab.
					$\boxtimes$	-	-	Baserock, grayish-brown crushed rock.
					$\boxtimes$		-	Sand, medium-grained, brown, slightly
						-	-	damp to damp, dense; no odor.
					$\boxtimes$	-	-	
								Some clay
					$\square$	5		-
					$\otimes$	F		
B6-1		<b>4</b> 8			$\mathbb{N}$			
					$\otimes \otimes$		<b>-</b>	
					$\Im$	ł	-	
					$\mathbb{N}$			
					$\Im$		-	Easy drilling.
		:			$\otimes$	10	1	No odor.
B6-2		24			$\otimes \otimes$			
202		61			$\Im$			
					$\mathbb{R}$	F	-	Increased sand, decreased clay, moisture change to
					12 12		4	wet.
and the first state of the stat					$\square$	Ī	+	
4 sakatas kar						15	+ e	
ſ						~~		<b>Clayey sand,</b> medium-grained, grayish-green, damp, dense; some petroleum hydrocarbon odor.
B6-3A		42					ľ	anny, actise, some perforeant nyurocarbon outri-
B6-3B						ł		
						Ļ		
							-	Sand, medium- to coarse-grained, greenish-gray,
						ļ	-	damp, dense.
	1					20 +	1	

File No: 124575

r

I

	LOG OF MONITORING WELL MW- 6 (Continued)									
Sample Number	Sampler	Blows per foot	F.I.D. Reading (ppm)	Dry Unit Weight p.c.f.	Well Data	Depth in feet	U.S. C.S.	Description		
B6-4A B6-4B		42				20		, Color change to gray.		
B6-5A B6-5B		97					-			
B6-6A B6-6B		50				30		Change color to grayish-green.		
B6-11		14				35		Pottom of hole at 26 1 (4 ft Error anoundurator		
						40		Bottom of hole at 36-1/4 ft. Free groundwater encountered at 22-1/2 ft.		
						45				

E

# **KEY TO BORING LOGS**

### BORING LOG SYMBOL

	Geologic contact line
	Termination of boring
	Water level, preliminary measurement
<b>_</b>	Water level, stabilized

### SAMPLE RECOVERY

	Undisturbed sample, retained for lab testing
	Sampler drive distance, sample examined in the field
	No sample recovered
SPT	Standard Penetration Test

#### SOIL SAMPLE TYPE

C	California
CM	California Modified
HS	Driven manual Hand Sampler
NQ	NQ Wireline
Р	Piston
PB	Pitcher Barrel
SS	Split Spoon (Terzaghi)



BAY AREA RAPID TRANSIT DISTRICT 800 Madison Street - Lake Merritt Station P.O. Box 12688 Oakland, CA 94604-2688. Telephone (510) 464-6000

August 29, 1996

Dear Ms Duarte:

Re:

## ALSO VIA FAX @ (408) 377-1810

Nicole Duarte Associated Terra Consultants, Inc. 15039 Downing Oak Court, Suite 3 Los Gatos, CA 95032

DAN RICHARD

MARGARET K. PRYOR

VACANT GENERAL MANAGER

DIRECTORS

DAN RICHARD

JOEL KELLER

ROY NAKADEGAWA

MARGARET K. PRYOR

SHERMAN LEWIS

THOMAS M. BLALOCK

VACANT

JAMES FANG

MICHAEL BERNICK

Based on field obversations made by me on August 28, 1996, there is no conflict with the proposed location of your well, as marked on the ground, and our facilities in that area. The marked location was approximately: six feet east of the curb on the west side of Franklin Street and three feet north of the northerly crosswalk stripe crossing Franklin on the north side of Eighth Steet. Based on those dimensions, the proposed well will be about 5.9 feet south of the southerly edge of our subsurface easement and 17.5 feet from the southerly outside edge of our "KBR" tunnel, more or less.

Monitoring Well #6, 800 Franklin St, Oakland

Based on the above, no further review or BART permit will be required. If the proposed location is changed or if the work is to be done by other than standard auger type drilling equipment, please contact me immediately for review of any changes

Thank you for letting us review your proposal and the possible impact on our system. If you have any further questions, or if you need more information, please call me at (510) 464-6161.

Sincerely,

: 61. Dulig

Les Freligh, PLS Senior Real Estate Engineer

cc: D. Hill R. Jones M. Chiu

- J. Yee
- H. Tafaghodi
- C. McDonald
- C. Koukis

G:\LES\MEMOLTRS\800FRKLN.OAK



CITY OF OAKLAND



# OFFICE OF PLANNING & BUILDING + 1330 BROADWAY + OAKLAND, CALIFORNIA 94612

Administration	 Building Services	238-3587	Planning	238-3941
Engineering Services	Operations	238-3443	Zoning	238-7206

#### June 24, 1996

Mr. Chen-Tso Chiu 812 - 5th Avenue Oakland, CA 94606

Dear Mr. Chiu:

### RE: MINOR ENCROACHMENT PERMIT FOR MONITORING WELL IN PRANKLIN STREET

Enclosed are the Minor Encroachment Permit and Agreement and the Conditions For Granting a Minor Encroachment Permit allowing you to place one monitoring well within the public right-of-way of Franklin Street.

Before the permit will become effective, however, it must be signed by the person(s) having the legal authority to do so, properly notarized with notary acknowledgement slip(s) attached, and returned to this office to the attention of Roger Tam for recordation.

You must also obtain a street excavation permit from the Engineering Information Counter, 2nd Floor, 1330 Broadway, prior to the start of the proposed work in the City right-of-way. For questions regarding the street excavation permit, call the Engineering Information Counter at (510) 238-4777 between 8 a.m. and 4 p.m., Monday through Friday.

If you have any other questions regarding this minor encroachment permit, please call Roger Tam at (510) 238-6314.

Very truly yours,

TERI ROBINSON Office of Planning & Building Interim Director

By GRUBSTICK PHILIP A.

Engineering Services Manager

Enclosures

:rt

füle: frkth\$00.mw\covv-let(9) Facsimile: Administration 238-3586 Planning 238-6538 Building Services 238-7287 Plan Check 238-6445 TDD: (510) 238-6332

## NOTICE TO ALL APPLICANTS

PLEASE SIGN this instrument in the presence of a NOTARY PUBLIC.

Sign name(s) EXACTLY as you print or type your name(s) and title(s) in instrument (same spelling, match middle initial(s), etc.). Otherwise, it cannot be recorded.

If the benefiting property is owned by an individual, or individuals, all deeded owners must sign. If the benefiting property is owned by a corporation or a partnership, etc. the document must be signed by corporate officer(s) or authorized person(s) with the authority to execute such a document.

**RETURN** all originals to our office (to the attention of **ROGER TAM**, Office of Planning & Building, City of Oakland, 1330 Broadway, 2nd Floor, Oakland, CA 94612) for recordation. You may make copies for your files since the recorded document will <u>NOT</u> be mailed to you after it is recorded in the Office of Recorder, Alameda County, California.

### NOTICE TO NOTARY PUBLIC

Please DO NOT MAKE ANY changes or any additions of any nature on this instrument. PRINT your name in notarization form and sign only in space provided.

Affix Notary Seal (do not place seal over any inked or colored portion; it will not be microfilmed and will be returned unrecorded, causing a delay in the transaction) onto an acknowledgement slip(s) only.

If document is signed in California:

You <u>MUST</u> attach a <u>FULL-PAGED</u> California All-Purpose Acknowledgement Slip(s), fill in all necessary information and check appropriate box(es).

For signers other than individuals (corporate officer, company representative, etc. you <u>MUST</u> check the appropriate box and fill in the name of entity signer(s) is (are) representing under "SIGNER IS REPRESENTING:" in the "CAPACITY CLAIMED BY SIGNER" Section.

file: encrate.doc Updated 05/95

1330 Broa	Dakland of Plann adway, 2nd CA 9461	d Floor	ilding	
Engineer: Office of City of ( 1330 Broa	orded Mai ing Inform Planning Dakland adway, 2nd CA 9461	mation y and Bu d Floor	ilding	
	ROLL PARCI DR'S REFEI			
001	0193	057	00	
МАР	BLOCK	PARCEL	SUB	SPACE ABOVE FOR RECORDER'S USE ONLY
Address:	800 Fra	klin st	reet,	

#### MINOR ENCROACHMENT PERMIT AND AGREEMENT

Chen-Tso Chiu, owner of that certain property described in the Grant Deed recorded July 24, 1991, Series No. 91-192371, in the Office of the Recorder, Alameda County, California and commonly known as 800 Franklin Street, is hereby granted a Conditional Revocable Permit to encroach into the public right-of-way of Franklin Street with one monitoring well. The location of said encroachment shall be as delineated in Exhibit 'A' attached hereto and made a part hereof.

The permittee agrees to comply with and be bound by the conditions for granting an Encroachment Permit attached hereto and made a part hereof.

This agreement shall be binding upon the undersigned, the present owner of the property described above, and his successors in interest thereof.

In witness whereof, we have set our signatures this day of , 1996.

Name: Chen-Tso Chiu

<-- Please attach California all-purpose acknowledgment slip here
BELOW FOR OFFICIAL USE ONLY</pre>

#### CITY OF OAKLAND

Dated	
	A reason of the second s

By: CALVIN N. WONG Deputy Director Building Services For TERI ROBINSON Office of Planning & Building Interim Director

:rt

file: fikin800.mw\per&agt(9)

TO: Chen-Tso Chiu (APN: 001-0193-057-00)

Address: 812 - 5th Ave, Oakland, CA 94606

RE:

4

Minor Encroachment Permit for Monitoring Well in Franklin Street

# CONDITIONS FOR GRANTING A MINOR ENCROACHMENT PERMIT

- 1. That this permit shall be revocable at the pleasure of the Director of Planning & Building.
- 2. That the permittee, by the acceptance, either expressed or implied, of the minor encroachment permit hereby disclaims any right, title, or interest in or to any portion of the public sidewalk or street area, and agrees that said temporary use of said area does not constitute an abandonment on the part of the City of Oakland of any of its rights for street purposes and otherwise.
- √3. The permittee shall maintain in force and effect at all times that said encroachment occupies said public sidewalk or street area, good and sufficient public liability insurance in the amount of \$300,000 for each occurrence, and property damage insurance in the amount of \$50,000 for each occurrence, both including contractual liability insuring the City of Oakland against any and all claims arising out of the existence of said encroachment in said public sidewalk or street area, and that a certificate of such insurance and subsequent notices of the renewal thereof, shall be filed with the Director of Planning & Building of the City of Oakland, and that such certificate shall state that said insurance coverage shall not be canceled or be permitted to lapse without thirty (30) days written notice to said Director of Planning & Building. The Permittee also agrees that the City may review the type and amount of insurance required of the Permittee every five (5) years and may require the permittee to increase the amount of and/or change the type of insurance coverage required.
  - 4. That the permittee, by the acceptance, either expressed or implied, of this revocable permit shall be solely and fully responsible for the repair or replacement of any portion or all of said improvements in the event that said improvements shall have failed or have been damaged to the extent of creating a menace or of becoming a hazard to the safety of the general public; and that the permittee shall be liable for the expenses connected therewith.

- 5. That upon the termination of the permission herein granted, permittee shall immediately remove said encroachment from the sidewalk and street area, and any damage resulting therefrom shall be repaired to the satisfaction of the Director of Planning & Building.
- $\sqrt{6}$ . That the permittee shall file with the City of Oakland for recordation a Minor Encroachment Permit and Agreement, and shall be bound by and comply with all the terms and conditions of said permit.
- 7. That said permittee shall obtain an excavation permit prior to the construction and a separate excavation permit prior to the removal of the ground water monitoring wells.
- $\sqrt{8}$ . That said permittee shall provide to the City of Oakland an AS BUILT plan showing the actual location of the ground water monitoring wells and the results of all data collected from the monitoring wells.
  - 9. That said permittee shall remove the monitoring wells and repair any damage to the sidewalk or street area in accordance with City standards two (2) years after construction or as soon as monitoring is complete.
  - 10. That said permittee shall notify the Office of Planning & Building after the monitoring well(s) is/are removed and the sidewalk or street area restored to initiate the procedure to rescind the minor encroachment permit.
  - 11. That monitoring well covers installed within the sidewalk area shall have a skidproof surface. A precast concrete utility box may be used in conjunction with the bolted cast iron cover with City approval.
  - 12. That the ground water monitoring well casting and cover shall be cast iron and shall meet H-20 load rating. The cover shall be secured with a minimum of two stainless steel bolts. Bolts and cover shall be mounted flush with the surrounding surface.
- 13. That the permittee acknowledges that the City makes no representations or warranties as to the conditions beneath said encroachment. By accepting this revocable permit, permittee agrees that it will use the encroachment area at its own risk, is responsible for the proper coordination of its activities with all other permittees, underground utilities, contractors, or workmen operating within the encroachment area and for the safety of itself and any of its personnel in connection with its entry under this revocable permit.
- 14. That the permittee acknowledges that the City is unaware of the existence of any hazardous substances beneath the

٠.

Page 3

encroachment area, and hereby waives and fully releases and forever discharges the City and its officers, directors, employees, agents, servants, representatives, assigns and successors from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs), whether direct or indirect, known or unknown, foreseen or unforeseen, that may arise out of or in any way connected with the physical condition, or required remediation of the excavation area or any law or regulation applicable thereto, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601 et seg.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seg.), the Clean Water Act (33 U.S.C. Section 466 et Seq.), the Safe Drinking Water Act (14 U.S.C. Sections 1401-1450), the Hazardous Materials Transportation Act (49 U.S.C. Section 1801 et seg.), the Toxic Substance Control Act (15 U.S.C. Sections 2601-2629), the California Hazardous Waste Control Law (California Health and Safety Code Sections 25100 et seq.), the Porter-Cologne Water Quality Control Act (California Health and Safety Code Section 13000 <u>et seq.)</u>, the Hazardous Substance Account Act (California Health and Safety Code Section 25300 et seq.), and the Safe Drinking Water and Toxic Enforcement Act ( California Health and Safety Code Section 25249.5 et seq.).

- 15. Permittee further acknowledges that it understands and agrees that it hereby expressly waives all rights and benefits which it now has or in the future may have, under and by virtue of the terms of California Civil Code Section 1542, which reads as follows: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."
- 16. Permittee recognizes that by waiving the provisions of this section, permittee will not be able to make any claims for damages that may exist, and to which, if known, would materially affect his/her decision to execute this encroachment agreement, regardless of whether permittee's lack of knowledge is the result of ignorance, oversight, error, negligence, or any other cause.
- 17. (a) That the permittee, by the acceptance of this revocable permit, agrees and promises to indemnify, defend, and hold harmless the City of Oakland, its officers, agents, and employees, to the maximum extent permitted by law, from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs;

collectively referred to as "claims"), whether direct or indirect, known or unknown, foreseen or unforeseen, to the extent that such claims were caused by the permittee, its agents, employees, contractors or representatives.

- (b) That, if any contamination is discovered below or in the immediate vicinity of the encroachment, and the contaminants found are of the type used, housed, stored, processed or sold on or from the <u>800 Franklin Street</u>. <u>Oakland, California</u> site, such shall amount to a rebuttable presumption that the contamination below, or in the immediate vicinity of, the encroachment was caused by the permittee, its agents, employees, contractors or representatives.
- (c) That the permittee shall comply with all applicable federal, state, county and local laws, rules, and regulations governing the installation, maintenance, operation and abatement of the encroachment.
- (d) That the permittee hereby does remise, release, and forever discharge, and agree to defend, indemnify and save harmless, the City, its officers, agents and employees and each of them, from any and all actions, claims, and demands of whatsoever kind or nature, and any damage, loss or injury which may be sustained directly or by the undersigned and any other person or persons, and arising out of, or by reason of, the occupation of said public property, and the future removal of the abovementioned encroachment.
- 18. That the hereinabove conditions shall be binding upon the permittee and the successive owners and assigns thereof.
- 19. That said Minor Encroachment Permit and Agreement shall take effect when all the conditions hereinabove set forth shall have been complied with to the satisfaction of the Director of Planning & Building, and shall become null and void upon the failure of the permittee to comply with all conditions hereinabove set forth.

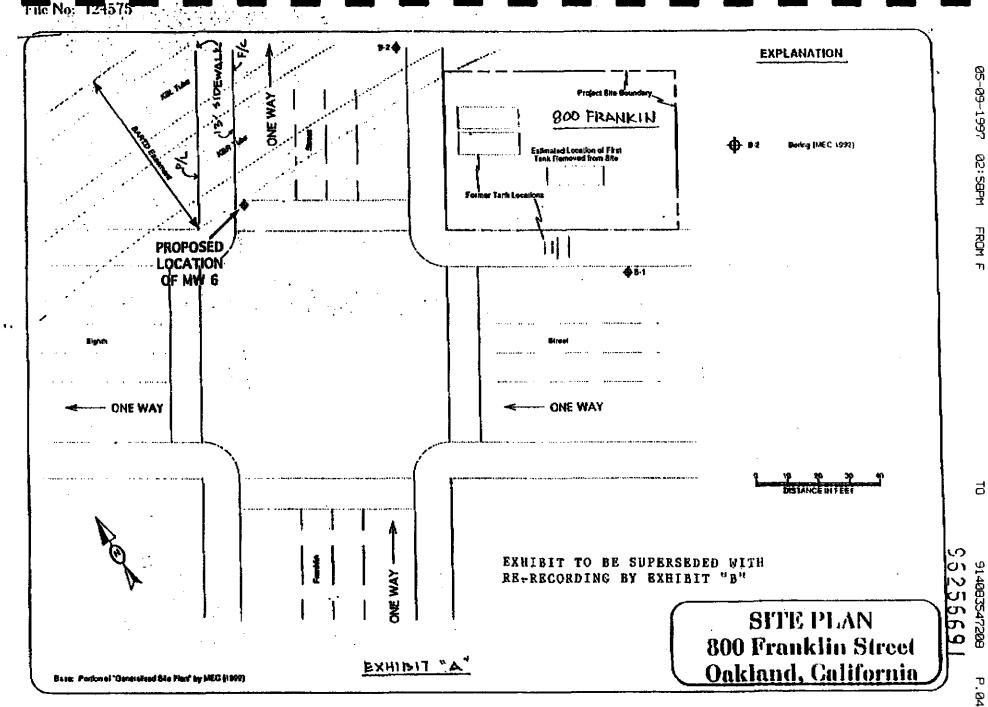
file: frkin800.mw\conditn(9)

City of Oakland Director of Planning & Building 1330 Broadway, 2nd Floor Oakland, CA 94612	- the official Records, Alameda County
When Recorded Mail to: Engineering Information Office of Planning and Building City of Oakland 1330 Broadway, 2nd Floor Oakland, CA 94612	Recorded in Official, Clerk-Recorder Patrick O'Connell, Clerk-Recorder 96256691 11:18am 10/07/96 006 26030409 26 10 B52 A15 8 14.00 21.00 0.00 0.00 0.00 0.00 0.00 0.00
TAX ROLL PARCEL NUMBER (ASSESSOR'S REFERENCE NUMBER)	
001 0193 057 00	
MAP BLOCK PARCEL SUB Address: 800 Franklin Street, C	SPACE ABOVE FOR RECORDER'S USE ONLY
MINOR ENCROACHME	NT PERMIT AND AGREEMENT
Deed recorded July 24, 1991, Ser Recorder, Alameda County, Califo Street, is hereby granted a Con into the public right-of-way o well. The location of said en Exhibit 'A' attached hereto and	
The permittee agrees to comply a granting an Encroachment Permit	with and be bound by the conditions for attached hereto and made a part hereof.
This agreement shall be bin of the property described above. In witness whereof, we have	and his successors in interest thereof. signatures this .9th day of July
RESIGN FOR AMENDED DOCUMENT:	Om. too Chin
Name: Chen-Tso Chiu Date: 4/15/97	Name- Chen-Tso Chiu
< Please attach California all	1-purpose acknowledgment slip here
BELOW FOR OFFICIAL USE ONLY	
	City of Oakland
	Calvin N. Wong Chief of Building Services
	Kofi Bonner Director
By: Calvin N. Wong	Community & Economic Development Agency

Chief of Building Services Date: for Kofi Bonner, Director of Community & Economic Development Agency

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of <u>Colefornie</u>	- <b>3</b>
County of alane	La
an 15 Cenil 1997	before me, James M. Oug Nortary Pu Name and Tile of Officer (e.g., Jane Doe. Notary Public) en-Tso Child Name(a) of Signer(s)
Date	Name and Title of Officer (e.g., "Jane Doe, Notary Public")
personally appeared	$e_{n-1so}$ ( $u_{1so}$
JAMES M. ONG Commission #1078711 Notory Public - California Normeda County My Comm. Expires Nav 29, 1999	oved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted executed the instrument.           WITNESS my hand and official seal.           WITNESS my hand and official seal.           Signature of Notary Public
Description of Attached Docu	NOR ENCRUMENT
Description of Attached Document:	NOR ENCRUMENT
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: _	NOR ENCRUMENT Number of Pages:
Description of Attached Document:	INOR     ENCRUME HMENT        Number of Pages:
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: _	INOR ENCRUMENT   Number of Pages:
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: Capacity(ies) Claimed by Sign Signer's Name: Individual Corporate Officer Title(s):	INOR         ENCRUME HMENT
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: Capacity(ies) Claimed by Sign Signer's Name: Individual Corporate Officer Title(s): Partner — 🗆 Limited 🗆 General	Image: Image:
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: Capacity(ies) Claimed by Sign Signer's Name: Gapacity(ies) Claimed by Sign Signer's Name: Document Date: Capacity(ies) Claimed Dy Sign Signer's Name: Capacity(ies) Claimed Dy Sign Signer's Name: Corporate Officer Title(s): Document Date: Capacity(ies) Claimed Dy Sign Signer's Name: Capacity(ies) Claimed Dy Sign Signer's Name: Capacity(ies) Claimed Dy Sign Signer's Name: Signer's Name: Signer's Name: Capacity(ies) Claimed Dy Sign Signer's Name: Signer's Nam	ment         INDEX       ENCRUMENT         Number of Pages:
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: Capacity(ies) Claimed by Sign Signer's Name: Capacity(ies) Claimed by Sign Signer's Name: Document Date: Capacity(ies) Claimed Document Signer's Name: Document Date: Capacity(ies) Claimed Document Signer's Name: Capacity(ies) Claimed Document Signer's Name: Corporate Officer Title(s): Partner — D Limited D General Attorney-in-Fact Trustee Guardian or Conservator	Image: Image:
Description of Attached Docum Title or Type of Document: Document Date: Signer(s) Other Than Named Above: Capacity(ies) Claimed by Sign Signer's Name: Capacity(ies) Claimed by Sign Signer's Name: Document Date: Capacity(ies) Claimed Document Signer's Name: Document Date: Capacity(ies) Claimed Document Signer's Name: Capacity(ies) Claimed Document Signer's Name: Corporate Officer Title(s): Partner — D Limited D General Attorney-in-Fact Trustee Guardian or Conservator	Image: Image:



ASSOCIATED TERRA CONSULTANTS, Inc.

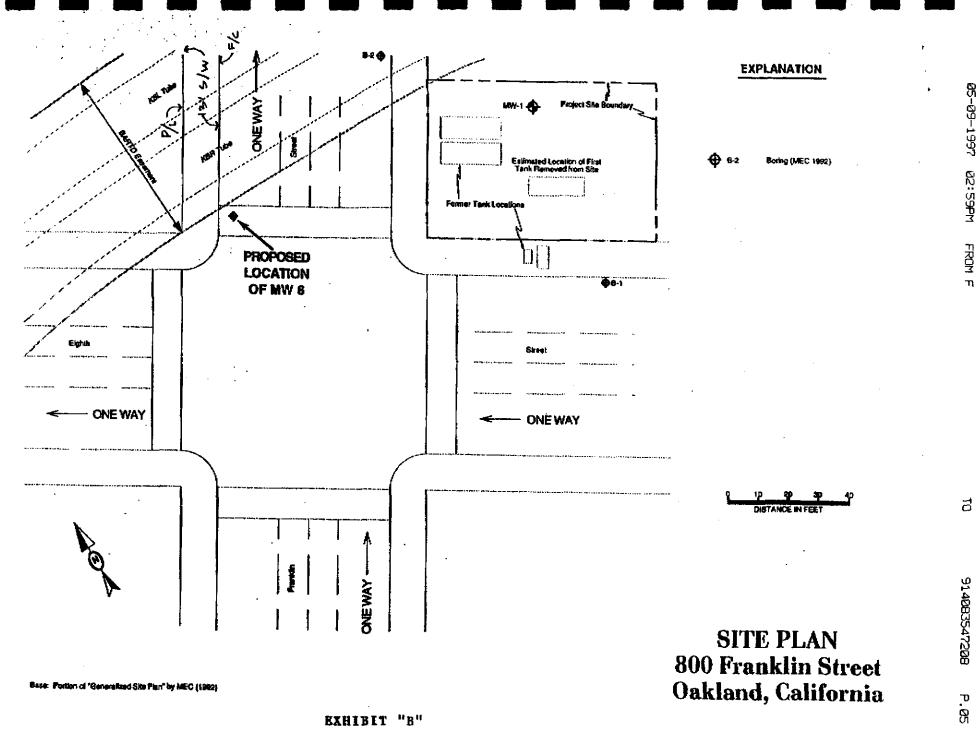
1 . M. W. G. W.

网络网络希尔德国 医长长

3  Plate 1

05-09-1997

n.



18 (Sec. 27) - 1 and a state of the second state of the ٠.

The following condition is in addition to the "Conditions for Granting a Minor Encroachment Permit" which was recorded previously along with the Minor Encroachment Permit and Agreement:

The permittee shall provide adequate pedestrian access and protection at the site at all times, during well installation and when performing monitoring in the vicinity of the pedestrian crossing. Adequate traffic signage such as lane closure sign and other safety measures shall be employed.

File: 800franklin.mw\re-record(9)

TOTAL P.06

	<b>CAVA1</b>	IONPE	RMII	CIV	Ш.
AGE 2 of 2	CAVATE IN STREE	ETS OR OTHER SE	ECIFIED WOR	K HAAD EN TOE LAJINE	GINEERING
	9600713	SITE ADDRESS/LOCATIO	N 8/2	57H an	~e
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY P (Permit not valid without 24-	HONE NUMBER		
CONTRACTOR'S LICENSE # AND	CLASS	CITY BUSINESS TAX #		······································	
ATTENTION:	·		· · · · ·	·	· ·
State law requires that the inquiry identification num	contractor/owner call Underground S ber issued by USA. The USA teleph	Service Alert (USA) two working d some number is 1 (800) 642-2444.	ays before excavating. This UNDERGROUND SERVIC	permit is not valid unless ap CE ALERT (USA) #:	plicant has secured an
<b>48 hours prior to</b>	o starting work, YOU M	TUST CALL (510) 238	-3651 TO SCHEL	ULE AN INSPEC	TION.
WNER/BUILDER	· · · · · · · · · · · · · · · · · · ·				
onstruct, alter, improve, demolish, o rovisions of the Contractor's License illeged exemption. Any violation of S	the Contractor's License Law for the r repair any structure, prior to its issue law Chapter 9 (commencing with Se Section 7031.5 by any applicant for a	nance, also requires the applicant for c. 7000) of Division 3 of the Busin permit subjects the applicant to a c	or such permit to file a signe ness and Professions Code, ivil penalty of not more that	d statement that he is license or that he is exempt therefrom a \$500);	d pursuant to the m and the basis for the
rofessions Code: The Contractor's I rovided that such improvements are a	my employees with wages as their sol License Law does not apply to an owr not intended or offered for sale. If ho	ner of property who builds or improvement of property who building or improvement the building or improvement.	oves thereon, and who does	such work himself or through	zh his own employees.
urden of proving that he did not build	d or improve for the purpose of sale). empt from the sale requirements of th				
e performed prior to sale, (3) I have	resided in the residence for the 12 mo three-year period. (Sec. 7044 Busines	onthe prior to completion of the wo	rk, and (4) I have not claim	ed exemption on this subdivi	sion on more than two
I I, as owner of the property, am ex- oes not apply to an owner of property	clusively contracting with licensed con y who builds or improves thereon, an , B&PC for this reason	ntractors to construct the project, ( ind who contracts for such projects y	Sec. 7044, Business and Prewith a contractor(s) licensed	ofessions Code: The Contrac pursuant to the Contractor's	ztor's License Law License law).
ORKER'S COMPENSATION			· · · · · · · · · · · · · · · · · · ·		
	icate of consent to self-insure, or a ce	rtificate of Worker's Compensation	n Insurance, or a certified co	ppy thereof (Sec. 3700, Labo	r Code).
olicy #	Сопралу На				
C certify that in the performance of f California (not required for work v	f the work for which this permit is iss alued at one hundred dollars (\$100) o	ued, I shall not employ any person r less).	in any manner so as to bec	ome subject to the Worker's	Compensation Laws
omply with such provisions or this p pon the express condition that the per te obligations with respect to street m mployees, from and against any and i sistained or arising in the construction	making this Certificate of Exemption, ermit shall be deemed revoked. This rmittee shall be responsible for all clai taintenance. The permittee shall, and all suits, claims, or actions brought by a of the work performed under the per- of issuance unless an extension is gran	permit is issued pursuant to all pro- ims and liabilities arising out of we by acceptance of the permit agrees y any person for or on account of a rmit or in consequence of permitter	wisions of Chapter 6, Articl ork performed under the per s to defend, indemnify, save any bodily injuries, disease ( s's failure to perform the ob	e 2 of the Oakland Municipa mit or arising out of permitte and hold harmless the City, or illness or damage to person	Code. It is granted e's failure to perform its officers and as and/or property
hereby affirm that 1 am licensed undo his permit and agree to its requirement	er provisions of Chapter 9 of Division us, and that the above information is t	a 3 of the Business and Professions true and correct under penalty of la	Code and my license is in w.	full force and effect (if contra	actor), that I have read
ignature of Personal Control	Agent for Contractor Ow			8/28/9	6
ATE STREET LAST	SPECIAL PAVING DETAIL	HOLIDAY RESTRICTION	Date	LIMITED OPERATION AR	EA?
esurfaced 1975	REQUIRED? O YES XNO	(NOV 1 - JAN 1)	· · · · · ·	(7AM-9AM & 4PM-6PM)	
SSUED BY M.	Whilla	DATE ISSUED	8/28	196	

AC				1889) <b>(1</b> 9))	III DRASILIK				fiNes Gib
PERMIT NUMBER	X 9.	700	608		SS/LOCATION		11/-	ane	
APPROX. START DATE		PROX. END D	ATE	5 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec. 6 Sec.	ERGENCY PHO				
CONTRACTOR'S LICENS	E / AND CL			1 m l	ISS TAX /				
inquiry identific	ation number i	ractor/owner cal stued by USA.	<i>Underground Se</i> The USA telepho	oe number is 1 (80	wo working days 0) 642-2444. UN	before excivating. DEEGROUND SE	RVICE ALERT (	USA) F: <u>/</u>	2.502/
OWNER/BUILDER		41. T. C. Mar	建心证明定					14 - 14 - 14 M	
provisions of the Contractor alleged exemption. Any vio I, as an owner of the pro- Professions Code: The Con- provided that such improven burden of proving that he di I, as owner of the proper be performed prior to sale. ( structures more than once the I, as owner of the proper does not apply to an owner of	molish, or rep 's License law lacion of Section perty, or my of tractor's Licen- nents are not in d not build or ty, am exemply 3) I have reaid uring any threa- try, am exclusion	Contractor's Lio air any structure. Chapter 9 (com in 7031.5 by any imployees with in se Law does not wended or offere improve for the p from the sale re ed in the residen -year period. (So very contracting o builds or impr	ense Law for the , prior to its issue mencing with Sec vages as their sole : apply to an own d for sale. If hor- purpose of sale). quirements of the sec for the 12 mos ac, 7044 Business with licensed com oves thereon, and	following reason ( incc, also requires a . 7000) of Division remnit subjects the se- compensation, will cr of property who wever, the building subove due to: (1) aths prior to comple and Professions C tractors to construct t who contracts for	the applicant for an 3 of the Business applicant to a civil 1 do the work, and builds or improve or improvement is 1 am improving m stion of the work, ode).	sch permit to file a s and Professions Co penalty of not more I the structure is not s thereon, and who s sold within one ye by principal place of and (4) I have not 7044, Business an	igned statement d de, or that he is e than \$500): imended or offer does such work h ar of completion, residence or appr faimed comption d Professions Cod	at he is licensed zeropt therefrom ed for sale (Sec. inself or through the owner-build intenances there on this subdivis in: The Contract	pursuant to the r and the basis for 7044, Business h his own employer er will have the 1, (2) the work will ino on more than or's License Law
provisions of the Contractor alleged exemption. Any vio I, as an owner of the pro- Professions Code: The Con- provided that such improven burden of proving that he di I, as owner of the proper be performed prior to sale. ( structures more than once the I, as owner of the proper does not apply to an owner of	molish, or rep 's License law lacion of Section perty, or my of tractor's Licen- nents are not in d not build or ty, am exemply 3) I have reaid uring any threa- try, am exclusion	Contractor's Lio air any structure. Chapter 9 (com in 7031.5 by any imployees with in se Law does not wended or offere improve for the p from the sale re ed in the residen -year period. (So very contracting o builds or impr	ense Law for the , prior to its issue mencing with Sec , applicant for a p rages as their sole , apply to an own d for sale. If hor- purpose of sale), quirements of the ice for the 12 mos ac, 7044 Business with licensed com	following reason ( incc, also requires a . 7000) of Division remnit subjects the se- compensation, will cr of property who wever, the building subove due to: (1) aths prior to comple and Professions C tractors to construct t who contracts for	the applicant for an 3 of the Business applicant to a civil 1 do the work, and builds or improve or improvement is 1 am improving m stion of the work, ode).	sch permit to file a s and Professions Co penalty of not more I the structure is not s thereon, and who s sold within one ye by principal place of and (4) I have not 7044, Business an	igned statement d de, or that he is e than \$500): imended or offer does such work h ar of completion, residence or appr faimed comption d Professions Cod	at he is licensed zeropt therefrom ed for sale (Sec. inself or through the owner-build intenances there on this subdivis in: The Contract	pursuant to the r and the basis for 7044, Business h his own employer er will have the 1, (2) the work will ino on more than or's License Law
provisions of the Contractor alleged exemption. Any vio [] I, as an owner of the pro Professions Code: The Con provided that such improven burden of proving that he di [] I, as owner of the proper be performed prior to sale, ( structures more than once do [] I, as owner of the proper does not apply to an owner of [] I an exempt under Sec. [] WORKER'S COMPENSAT [] I hereby affirm that I have	molish, or rep 's License law iation of Section perty, or my entractor's Licens tractor's Licens tractor's Licens and the sector of the d not build or ty, am exemp 3) I have resist aring any three ty, am exclusion of property when the sector of the sector ty and the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector ty and the sector of the sector of the sector ty and the sector of the sector of the sector ty and the sector of the sector of the sector of the sector ty and the sector of the sector of the sector of the sector ty and the sector of the sector of the sector of the sector of the sector ty and the sector of the s	Contractor's Lio air any structure: Chapter 9 (com in 7031.5 by anj imployees with in se Law does not mended or offere improve for the p from the sale re- ed in the resides -year period. (Se vely contracting o builds or impro- . Bdef	ense Law for the , prior to its issue mencing with Sec vages as their sole : apply to an own of for sale. If how purpose of sale). quinements of the the for the 12 mon ac. 7044 Business with licensed com oves thereon, and C for this reason	following reason ( ince, also requires , . 7000) of Division termit subjects the re- ecompensation, will er of property who wever, the building who due to: (1) this prior to comple and Professions C tractors to construct t who contracts for the contracts of Worker'	the applicant for su 3 of the Business applicant to a civil 4 do the work, and builds or improve or improvement is 1 am improving m stion of the work, ode). 2 the project, (Sec. such projects with	sch permit to file a s and Professions Co penalty of not more i the structure is not s thereon, and who is sold within one ye sy principal place of and (4) I have not c . 7044, Business an a contractor(s) lice	igned statement d de, or that he is e dam 3500): intended or offer does such work h ar of completion, residence or appr faimed exemption 4 Professions Cod need persuant to t	at he is licensed zempt therefrom ed for sale (Sec. inself or throug the owner-build intenances therefore on this subdivis e: The Contractor's he Contractor's	pursuant to the i and the basis for 7044, Bassiness h his own employer will have the intervention on more than tor's License Law License Law).
construct, aner, improve, de provisions of the Contractor alleged exemption. Any vio [], as an owner of the pro- Professions Code: The Con provided that such improven burden of proving that he di []], as owner of the proper be performed prior to sale. ( structures more than once dh []], as owner of the proper does not apply to an owner of []] am exempt under Sec. []] WORKER'S COMPENSAT []] I hereby affirm that I hav Policy #] []] I certify that in the perfor of California (not required f	molish, or rep 's License law iation of Section perty, or my or tractor's License menus are not in d not build or ty, am exemp 3) I have resid any three ty, am exclusion of property whe not build property when not build property and property ty and property	Contractor's Lio air any structure. Chapter 9 (com in 7031.5 by any imployees with in see Law does not mended or offere improve for the p from the sale re ed in the residers year period. (So very contracting o builds or impr . B&F	ense Law for the , prior to its issue mencing with Sec 'applicant for a p vages as their sole : apply to an own d for sale. If hor- purpose of sale), quirements of the sec for the 12 more convertight of the sole with licensed com- oves thereon, and C for this reason lf-insure, or a cer Company Nau- this permit is issue	following reason ( incc, also requires is, 7000) of Division remnit subjects the re- ecompensation, will cr of property who wever, the building the and Professions C tractors to construct and Professions C tractors to construct who contracts for this contracts for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for the contract for	the applicant for an 3 of the Business applicant to a civil 1 do the work, and builds or improvement is 1 am improvement is 1 am improving m etion of the work, ode). 4 the project, (Sec. such projects with a Compensation In	sch permit to file a s and Professions Co permity of not more the structure is not s thereon, and who s sold within one ye sold within one ye y principal place of and (4) I have not of 7044, Business an a contractor(s) lice surance, or a certificant any manner so as to	igned statement d de, or that he is e dam 3500): intended or offer does such work h ar of completion, and the such work h residence or apper fained exemption d Professions Cod med pursuant to t ed copy thereof (S	at he is licensed xempt therefrom ed for sale (Sec. inself or throug the owner-build ritenances theref on this subdivis e: The Contractor's he Contractor's sec. 3700, Labor	pursuant to the and the basis for 7044, Business h his own employe will have the construction on more than the will have the construction on more than the work will be work with the work will be work with the work will be work with the work work the work work work the work work work the work work work the work work work the work work work the work work work work the work work work work the work work work work work work the work work work work work work work work
provisions of the Contractor alleged exemption. Any vio I, as an owner of the pro- Professions Code: The Con- provided that such improven burden of proving that he di I, as owner of the proper be performed prior to sale, ( structures more than once the I, as owner of the proper does not apply to an owner of I am exempt under Sec. WORKER'S COMPENSAT I hereby affirm that I hav Policy # I certify that in the perfor of California (not required f NOTICE TO APPLICANT comply with such provisions upon the express condition to the obligations with respect employees, from and agains sustained or arising in the oc	molish, or rep 's License law iation of Section perty, or my ex- tractor's Licen- ments are not in d not build or ty, am exemp 3) I have resis aring any three ty, am exclusion of property when ty, an exclusion of property when TON we a certificate or work value inf, after mak to or this permi- hat the permi- ta to any and all so nostruction of	Contractor's Lio air any structure Chapter 9 (com in 7031.5 by any imployees with it is a contraction of the improve for the p from the sale re- ed in the resider year period. (So very contracting o builds or impro- year period. (So very contracting o builds or impro- builds or impro- year period. (So very contracting o builds or impro- year period. (So very contracting o builds or impro- period. (So very contracting o builds or impro- very contracting o bui	ense Law for the , prior to its issue mencing with Sec 'applicant for a p rages as their sole : apply to an own d for sale. If hor- purpose of sale), quirements of the kee for the 12 more ac, 7044 Business with licensed com- oves thereon, and C for this reason C for this reason C for this reason this permit is issue dollars (\$100) or te of Exemption, i revoked. This p mittee shall, and ictions brought by hed under the per-	following reason ( ince, also requires is, 7000) of Division remnit subjects the second secon	the applicant for su 3 of the Business applicant to a civil 4 do the work, and builds or improve or improvement is 1 am improving metion of the work, ode). 1 am improving metion of the work, ode). 1 am improving metion at the project. (Sec. such projects with a Compensation In loy any person in e subject to the Work sing out of work e permit agrees to on account of any nee of permittee's	sch permit to file a s and Professions Co penalty of not more i the structure is not s thereon, and who s sold within one ye sy principal place of and (4) I have not o 7044, Besiness an a contractor(s) lice surance, or a certifi any manner so as to wrker's Compensatio ions of Chapter 6, J performed under th defend, indemnify, bodily injuries, diss failure to perform th	igned statement d de, or that he is e dam SSOD: intended or offer does such work h ar of completion, residence or appr ising exampletion devices and work has residence or appr ising exampletion devices or appr ising exampletion devices or appr ising exampletion devices or appr ising exampletion devices or appr ising exampletion devices or appr exampletion of the residence of the origination of the origination of the residence of the origination is a provisions of the residence of the origination is a provisions of the residence of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination is a provision of the origination of the residence of the origination of the origination is a provision of the origination of the origination is a provision of the origination of the origination of the residence of the origination of the origination of the origination of the residence of the origination of the origination of the origination of the residence of the origination of the ori	at he is licensed xempt therefrom def for sale (Sec. inself or throug the owner-build renances theret on this subdivis er. The Contract he Contractor's fec. 3700, Labor o the Worker's e Labor Code, y kland Municipal y out of permitter miless the City, tamage to person	r Code).
provisions of the Contractor alleged exemption. Any vio I, as an owner of the pro Professions Code: The Con provided that such improven burden of proving that he di I, as owner of the proper be performed prior to sale, ( structures more than once the I, as owner of the proper does not apply to an owner of I an exempt under Sec. WORKER'S COMPENSAT I hereby affirm that I hav Policy #	molish, or rep 's License law iation of Sectio perty, or my ex- tractor's License removes are not in d not build or ty, am exemp 3) I have reak aring any three ty, am exclusion of property when the section of the or work value or work value is ff, after make to or this permin- hat the permini- hat the permini- tion of the date of iss tensed under per- tensed under per-	Contractor's Lio air any structure: Chapter 9 (com in 7031.5 by anj imployees with in se Law does not interesting from the sale re- ed in the resider of consent to sel work for which i at one hundred is shall be deemeet ee shall be response. The per- uits, claims, or a he work perform uance unless an ovisions of Chap	ense Law for the , prior to its issue mencing with Sec 'applicant for a p vages at their sole : apply to an own d for sale. If how purpose of sale). quirements of the the for the 12 mon ac. 7044 Business with licensed com oves thereon, and C for this reason C for this reason d for sale. If how purpose of sale). quirements of the the for the 12 mon ac. 7044 Business with licensed com oves thereon, and C for this reason d for sale. If how purpose of sale). quirements of the the for the 12 mon ac. 7044 Business with licensed com oves thereon, and C for this reason d for sale. If how purpose of sale). ac. 7044 Business with licensed com over thereon, and C for this reason over thereon, and C for this reason the for all claim mittee shall, and I charter the per- extension is grant over 9 of Division e information is the over 1 over  following reason ( ince, also requires is. 7000) of Division termit subjects the re- ecompensation, will cr of property who wever, the building showe due to: (1) and Professions C tractors to construct who contracts for the contracts for who contracts for the contracts for the contracts of the contracts of the contracts of the contracts of the contracts of the contracts of the show and liabilities and by acceptance of the and person for or mit or in consequence of the Business rule and correct uncontracts of the Business rule and correct uncontracts the contracts of the second of the second of the second of the Business rule and correct uncontracts of the second of the Business rule and correct uncontracts of the second	the applicant for su 3 of the Business applicant to a civil 4 do the work, and builds or improve or improvement is 1 am improving metion of the work, ode). 5 the project, (Sec. such projects with a Compensation In 1 doy any person  sch permit to file a s and Professions Co penalty of not more i the structure is not s thereon, and who is sold within one ye sy principal place of and (4) I have not of 7044, Besiness an a contractor(s) lice surance, or a certific any manner so as to wrker's Compensatio ions of Chapter 6, J performed under the defend, indemnify, bodily injuries, diss failure to perform th arming and Building	igned statement d de, or that he is e dam SSOD: intended or offer does such work h ar of completion, residence or appr faineed exemption d Professions Cod meed persuant to t ed copy thereof (S become subject t a provisions of th Article 2 of the Oa e permit or arising save and hold has case or illness or o is obligations with	at he is licensed xempt therefrom et al. and the second second et al. and the second second intenances therefore on this subdivis et: The Contractor's fee: The Contractor's fe	yournismi to the i and the basis for 7044, Bassiness h his own employer will have the ion on more than tor's License Law License Law License Law License Law License Law Compensation Law you must forthwith Code. It is grant e's failure to perfo- its officers and as and/or property t maintenance. The actor), that I have 2		

1987 P. 19

# TRAFFIC PLAN

800 FRANKLIN STREET - OAKLAND

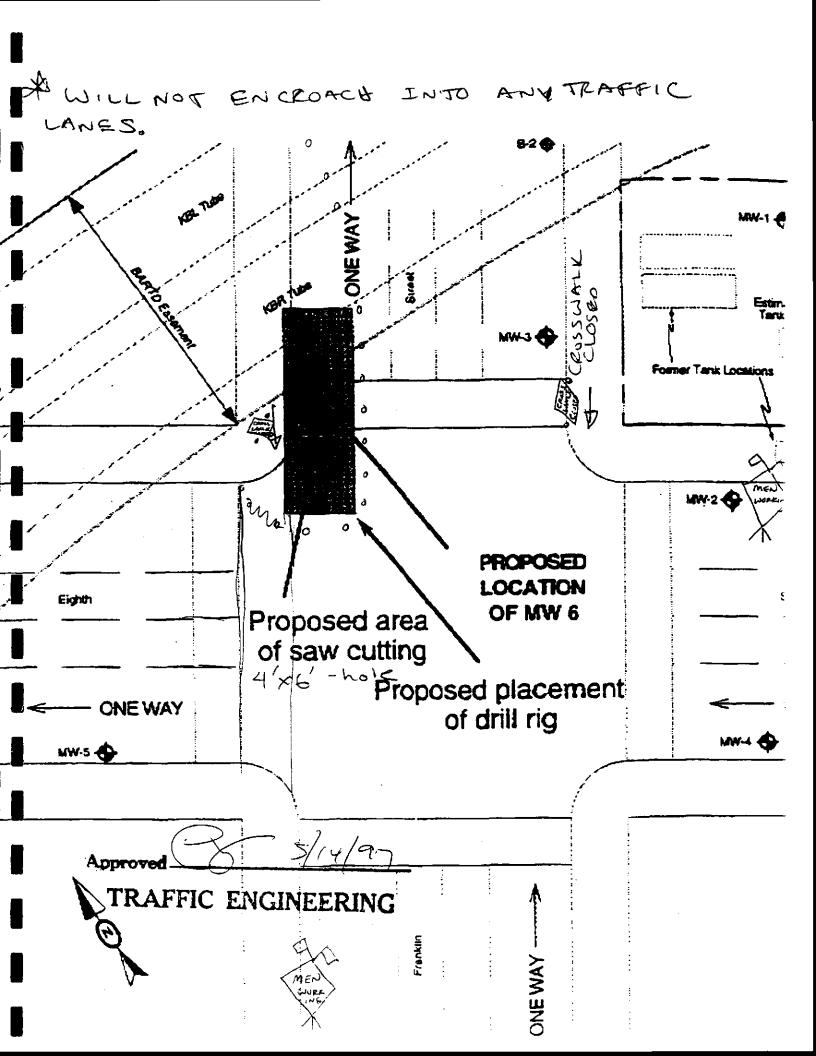
1.) LOCATION OF the DRILL RIG & SUPPORT EQUIPMENT ARE IN PARKING LANES & TRAFFIC CONTROLS OR LANE CLOSURES ARE NOT NESESSARY HOWEVER - MEN WORKING OR AHEAL SIGNS WILL BE POSTED IN THE MEND LEFT HAND PARKING LANE FACING THE NORTH BOUND TRAFFIC ON FRANKLIN STREET.

- 2) ROAD WORK AHEAD SIGNS OR MEN WORKING SIGNS WILL BE POSTED IN THE RIGHT HAND PARKING LANE OF EIGHTH STREET FACING THE WEST BOUND TRAFFIC.
- 3) CONES WILL BE PLACED AROUND THE RIG + SUPPORT EQUIPMENT TO FURTHER ADVISE MOTORIST + PEDESTRIAUS OF OUR PRESENCE.
- 4.) HANDMADE SIGNS WILL BE POSTED AT EITHER SIDE of THE CROSS WALK WITH BARRACADES STATING THAT THE CROSS WALK IS CLOSED + POINTING PEDESTRIANS IN THE DIRECTION OF THE CROSS WALKS THAT RUN NORTH/SOUTH.

SEE ATTACHED PLAN.

XC \$/14/97 Approvel

TRAFFIC ENGINEERING



# ZONE 7 WATER AGENCY



5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

# DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE FOR OFFICE USE LOCATION OF PROJECT INTERS 97197 ECTON PERMIT NUMBER RANKUN #  ${\mathcal B}$ TH LOCATION NUMBER 16 AKCAN סנ LIENT lame PERMIT CONDITIONS Address Voice Citv Zip Circled Permit Requirements Apply PPLICANT Name Α. GENERAL Fax A permit application should be submitted so as to arrive at the 1 ddress / 5 Ziploice 4/17 Zone 7 office five days prior to proposed starting date. City BLVD. 105 GATOS Zip 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well YPE OF PROJECT Drillers Report or equivalent for well Projects, or drilling logs Well Construction Geotechnical Investigation and location sketch for geotechnical projects. Cathodic Protection General З. Permit is void if project not begun within 90 days of approval Water Supply Contamination date. Monitoring Well Destruction B. WATER WELLS, INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of cement grout ROPOSED WATER SUPPLY WELL USE placed by tremie. omestic Industrial Other QUAUT 2. Minimum seal depth is 50 feet for municipal and industrial wells Municipal Irrigation or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for RILLING METHOD: monitoring wells is the maximum depth practicable or 20 feet. Mud Rotary Air Rotary C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or Cable Other heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout RILLER'S LICENSE NO. shall be used in place of compacted cuttings. D. CATHODIC. Fill hole above anode zone with concrete placed by ELL PROJECTS tremie. **Drill Hole Diameter** Maximum E. WELL DESTRUCTION. See attached. Casing Diameter Deoth 2 Surface Seal Depth Number EOTECHNICAL PROJECTS Number of Borings Maximum Hole Diameter îΠ. Depth ft. ESTIMATED STARTING DATE STIMATED COMPLETION DATE Date 28 Mar 97 Approved Thereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68. PPLICANT'S SIGNATURE 91992

#### APPENDIX D

#### STANDARD DRILLING, SEALING AND SAMPLING PROTOCOL

# SUBSURFACE INVESTIGATION AND TESTING

### 800 FRANKLIN STREET, OAKLAND, CALIFORNIA

#### DRILLING AND SEALING

1. Associated Terra Consultants, Inc. will acquire the proper permit necessary to drill the proposed well.

2. The borings will be drilled with continuous-flight, hollow-stem augers of at least three inches ID and six to 12 inches OD, or a hand auger of four inches OD. All augers will be thoroughly steam cleaned at a location well away from the location of the proposed boring. This will be accomplished before drilling begins to prevent the introduction of contamination from off-site. Cleaned augers will be stored when not actually in use during drilling operations on steam-cleaned benches set-up for that purpose.

3. A geologic drilling log will be maintained of the materials encountered in each boring. The log will include descriptions of the texture, color, moisture content, consistency, plasticity and any unusual characteristics noted, including any indications noted that might indicate the presence or absence of contamination.

4. The exploratory soils borings will be drilled to a depth of approximately nine feet, or to the top of the saturated zone beneath the waste water sump. The boring for the ground water monitoring well will be drilled to a depth of at least 15 feet below the top of the saturated zone, or to a depth of five feet into a perching layer encountered beneath the saturated zone, whichever is shallowest. If no perching layer is encountered after the boring has been advanced 15 feet into saturated materials, the boring will be terminated. If contaminants are present in earth samples from the bottom of the boring when the depth above is encountered during drilling, the Engineering Geologist will consult with the designated on-site representative as to the client's desire to complete the borings at that depth or to continue until no contamination is detected.

5. All PVC pipe used in the construction of the well will be thoroughly steam-cleaned or cleaned with trisodiumphosphate (TSP) and de-ionized water prior to being introduced into the bore hole.

File No: 124575

6. A ground water monitoring well will be constructed in the deepest boring. A bentonite seal plug will be positioned as necessary as a base for the well casing, and two-inch ID schedule 40 PVC pipe, screened over the interval expected to be the saturated zone during wet and dry seasonal fluctuations, will be introduced into the boring. Sections may be either threaded or screwed together, and no PVC cement will be used. The annulus of the perforated sections will be packed with washed pea gravel or coarse sand for the length of the saturated zone, upon which will be placed a layer of washed fine sand as a transition zone between the gravel and the bentonite slurry or bentonite pellets. About 1/2-bag of bentonite slurry or bentonite pellets will be placed on top of the sand, upon which will be inserted a class-A cement grout plug to the surface. Multiple aquifers encountered will be isolated from one another and from the surface by class-A cement and bentonite grout plugs tremied or inserted into proper position. The top of the well casing will be locked to prevent contamination and tampering.

7. During drilling operations sufficient 55-gallon drums will be necessary onsite for proper storage of potentially contaminated earth cuttings. About three 55-gallon drums will be required for the proper disposal of potentially contaminated soils and waste water at a certified disposal site, if necessary.

### SAMPLING

### General

8. All chemical sampling, handling, and storage will be conducted under the direction of our Registered Environmental Assessor.

9. All sample containers will be properly tagged and identified in the field with a label containing the date, sample identification, and the Associated Terra Consultants, Inc. job number for the work being performed.

10. At no time will the time elapsed between sample acquisition and sample delivery to the outside laboratory be greater than three days.

11. Under no circumstances will preservatives be added to the samples.

12. At no time will sample containers be opened by other than laboratory personnel who will perform the specified chemical analyses.

13. We have been advised by our outside laboratory that the useful durations of soils and ground water samples for the appropriate chemical testing are one month and two weeks, respectively.

14. Ground water and soils samples will be disposed of in Class 1 or Class 2-1 sites as necessary after acceptance of our report or upon receipt of your authorization.

## **Concrete Samples**

15. The concrete samples will be obtained using a jack hammer. Pieces of the removed concrete will be selected so as to be representative of the entire thickness of the concrete slab.

### Soils Samples

16. Soils samples will be taken in the borings starting at the approximate depth of the bottom of the sump as best known or estimated, and at 2- to 5-foot intervals beneath that depth to the depth at which a saturated zone is encountered, or to the bottom of each boring if no saturated zone is encountered.

17. Soil sampler casings will be disassembled, and steam-cleaned or cleaned in soapy water, rinsed with tap water and de-ionized water and air-dried, just prior to taking each sample. The casings will then be re-assembled with similarly cleaned and dried brass sample liners and carefully lowered into the hollow stem of the auger string. At least one empty brass liner from each boring will be prepared in the same manner as those in the sample casings, but sealed directly after drying to be analyzed as a quality control sample blank.

18. The soils samples in the bottom of the three brass liners in the sample casings, if in good condition, will be taken as the samples to be tested. The samples will be labeled and sealed in the field in their original liners or in thoroughly cleaned Teflon-lined sample containers provided by the outside laboratory specifically for that purpose. Aluminum foil covers will be placed on the ends of the liners and held in place by clean plastic caps wrapped with aluminized duct tape.

19. The middle liners from the sampler will be extruded in the field and examined to help provide the detailed information recorded on the boring logs. The cuttings from the borings also will be examined during the drilling operations to provide a continuous log of the materials encountered. The soils from the top two liners and all cuttings from the drilling operations will be placed in 55-gallon drums.

20. All samples will be packed in ice in a covered cooler-box specifically designated for that purpose, for transport to the outside laboratory. The condition of the ice will be monitored and renewed as necessary.

21. The center core material will be extracted from the sample liners in the laboratory for testing purposes. The remaining soil materials will be kept stored at the lab in their original sample liners for 30 days after testing, or until authorized to dispose of the samples by Associated Terra Consultants, Inc..

## Ground Water Samples for Laboratory Testing

22. Water samples will be withdrawn from the well using a teflon bailer or a ground water sampling pump only after at least three to five well bore volumes have been evacuated from the casing by pumping or bailing, and withdrawal has been of sufficient duration to result in stabilized pH, temperature, and electrical conductivity levels. A field log will be maintained of all evacuation procedures and parameter monitoring.

23. The pump, hose, bailer and wire connectors will be thoroughly steamcleaned, or rinsed in tap water and then in de-ionized water between samplings. Any rubber gloves worn for protection during sampling also will be cleaned in the same manner.

24. All water samples will be placed in cleaned teflon screw-cap sample containers designated for that purpose. Samples will be taken in duplicate with one set of samples delivered to the laboratory for analysis, and one set kept under refrigeration in our laboratory. The sample containers will be thoroughly cleaned and sealed prior to delivery to the site. The vials will be topped-off to avoid air space, and the screw cap sealed. All vials will be inverted to check for air bubbles, and re-sampled as necessary if air bubbles are found. Samples will be kept refrigerated at all times.

25. Water sample blanks using de-ionized water will be placed in cleaned 40 ml screw-cap teflon sample containers designated for that purpose. One water sample blank will be taken for each ground water sample obtained. The water sample blank will be poured into the sample vial directly from the teflon bailer after the bailer has been thoroughly steam-cleaned or rinsed and rerinsed with de-ionized water, or pumped directly into the sample vial from the ground water sampling pump as the last stages of de-ionized cleaning water.

## SAMPLE RECORDS AND CUSTODY

26. Sample records for each sample will contain information on sample type and source; our job number; the date of sampling; location; significant weather conditions; laboratory name; well data; and sampling method.

27. A chain of positive, signature custody and transference will be strictly maintained at all times.