420 Montgomery Street, 3rd Floor
P.O. Box 63939
San Francisco, CA 94163
415 983-0701 Fax

Private Client Services
Specialty Assets - Real Estate

WELLS FARGO

4252

October 12, 1999

Mr. Barney M. Chan
Hazardous Materials Specialist
Environmental Health Services
Alameda County Health Care Services Agency
1131 Harbor Way Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Blumert Trust Property, 490 43rd Street, Oakland

Dear Mr. Chan:

Enclosed please find a copy of the ORC Injection and Well Installation Report prepared by ACC Environmental Consultants for the referenced property.

If you have any questions regarding the report please let me know or call David Dement of ACC. Thank you.

Sincerely,

John M. Ward
Assistant Vice President
415/396-3019

A·C·C
ENVIRONMENTAL
CONSULTANTS

ORC® INJECTION AND WELL INSTALLATION REPORT

Blumert Paint Company
490 43rd Street
Oakland, California

ACC Project No. 99-6305-001.03

Prepared for:

Mr. John Ward
Wells Fargo Trust
Asset Management Division
Trust Real Estate Department
PO Box 63939
San Francisco, CA 94163

September 13, 1999

Prepared by: _____
Neil H. Doran
Technical Editor

Reviewed by: _____
David R DeMent, RG
Senior Geologist

A·C·C
ENVIRONMENTAL
CONSULTANTS

September 13, 1999

Mr. John Ward
Wells Fargo Trust
Asset Management Division
Trust Real Estate Department
PO Box 63939
San Francisco, CA 94163

RE: ORC® Injection and Well Installation Report
Blumert Paint Company, 490 43rd Street, Oakland, California
ACC Project No. 99-6305-001.03

Dear Mr. Ward:

ACC Environmental Consultants, Inc., (ACC) has enclosed three copies of the ORC® Injection and Well Installation Report.

ACC recommends that you forward a copy of the report with your cover letter to Barney Chan at the Alameda County Health Care Services Agency, Environmental Health Services, for review. His address is included below.

Barney M. Chan
Hazardous Materials Specialist
Environmental Health Services
Alameda County Health Care Services Agency
1131 Harbor Way Parkway, Suite 250
Alameda, CA 94502-6577

If you have any questions regarding this report or the findings of the work, please contact me at (510) 638-8400.

Sincerely,

David R. DeMent. RG
Senior Geologist

/nhd.drd

Enclosures

A·C·C ENVIRONMENTAL CONSULTANTS

TABLE OF CONTENTS

ORC® INJECTION AND WELL INSTALLATION REPORT

Blumert Paint Company
490 43rd Street
Oakland, California

1.0 INTRODUCTION

This ORC® Injection and Well Installation Report was prepared by ACC Environmental Consultants, Inc. (ACC), at the request of Mr. John Ward, to describe work performed at the Blumert Paint Company facility located at 490 43rd Street, Oakland, California. The project objectives were: 1) to introduce Oxygen Release Compound (ORC®) into groundwater to assist natural biodegradation of petroleum hydrocarbons by enhancing levels of dissolved oxygen; and 2) to install an additional groundwater monitoring well in the downgradient direction to further evaluate groundwater conditions. These objectives were performed to address a request of the Alameda County Health Care Services Agency (ACHCSA) for additional site investigation and delineation of impacted groundwater.

1.1 Site Description

The site is located at the northeastern corner of Telegraph Avenue and 43rd Street, Oakland, California (Figure 1). The property is relatively flat, at an elevation of approximately 90 feet above mean sea level (MSL). The predominant groundwater flow direction is to the south-southwest.

2.0 BACKGROUND

The facility formerly operated one 1,000-gallon gasoline underground storage tank (UST) and one 350-gallon mineral spirits UST, which were removed on December 11, 1991 (Figure 2). Laboratory analysis of soil samples collected underneath the gasoline UST indicated concentrations up to 220 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHg) and minor concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX). Laboratory analysis of soil samples collected underneath the mineral spirits UST indicated concentrations up to 25 ppm mineral spirits. Groundwater was observed in the excavation at a depth of approximately 12.5 feet below ground surface (bgs). The tank pit, which formerly contained both USTs, was overexcavated on March 31, 1992, to remove additional impacted soil. Laboratory analysis of soil samples collected from excavation sidewalls indicated concentrations up to 720 ppm TPHg, 30 ppm BTEX constituents, and 190 ppm mineral spirits.

Three groundwater monitoring wells were installed on April 12, 1993, by Kaprealian Engineering, Inc., (KEI) and have been monitored periodically since installation. Groundwater gradient was calculated at approximately 0.01 foot/foot and flow direction has consistently been to the south-southwest. Groundwater samples collected from the monitoring wells have repeatedly indicated elevated TPHg and mineral spirit concentrations

On June 1, 1994, KEI drilled exploratory soil borings EB1 and EB2. Concentrations of TPHg and mineral spirits ranging from 28 to 180 ppm were detected in soil samples collected from boring EB2 at depths of 10 and 12 feet bgs. Grab groundwater samples collected from borings EB1 and EB2 indicated concentrations of TPHg at 3,400 parts per billion (ppb) and 9,200 ppb, respectively, and mineral spirits at 7,000 ppb and 3,700 ppb, respectively. Sieve analysis of saturated soil at the site determined that the soil is classified as silty sand (SM).

To further evaluate the extent of hydrocarbon impact to soil and groundwater, ACC performed an exploratory soil boring investigation in April 1996. ACC drilled two exploratory soil borings (SB1 and SB2) to characterize soil conditions in the immediate vicinity of the former tank excavation and six additional exploratory borings (B3 through B8) upgradient and downgradient of the former USTs to characterize groundwater in the general vicinity of the former tank excavation. Concentrations of mineral spirits were detected in sample SB1-9.0 at 52 ppm and in sample SB2-9.0 at 78 ppm. Grab groundwater samples were collected from borings B3 through B8 and analyzed for TPHg, BTEX, and mineral spirits. Concentrations of TPHg ranged from below laboratory detection limits in grab groundwater samples collected from borings B3 and B8 to 46,000 ppb in boring B6. Concentrations of mineral spirits ranged from below laboratory detection limits in grab groundwater samples collected from borings B3 and B8 to 16,000 ppb in boring B7.

Petroleum hydrocarbon impacts to shallow groundwater were not fully delineated, but concentrations of TPHg and mineral spirits appeared to have migrated preferentially along utility trench lines. Field observations indicated general aquifer quality to be poor, and subsurface groundwater migration is believed to be minimal based on soil type, flat hydraulic gradient, and minimal surface water infiltration.

In a letter to Wells Fargo Bank dated October 17, 1996, ACHCSA approved biannual groundwater monitoring, the installation of one additional monitoring well, and evaluation of options to artificially introduce dissolved oxygen (DO) into shallow groundwater to assist natural bioremediation processes. Biannual groundwater monitoring and sampling has been conducted since December 1996. During this time, concentrations of petroleum hydrocarbons have decreased slightly in wells MW-1 and MW-3 and remained essentially unchanged in well MW-2. In two of the last eight monitoring events, methyl tertiary butyl ether (MTBE) was detected in well MW-2 at concentrations up to 300 ppb. MTBE has been detected less often and at lower concentrations in wells MW-1 and MW-3.

3.0 MONITORING WELL INSTALLATION

Excavation and encroachment permits were obtained from the City of Oakland Engineering Department prior to drilling and sampling activities. The location of the proposed monitoring well was marked with white paint. Underground Service Alert was notified 72 hours before commencing work. A copy of the encroachment permit is included in Appendix 1.

On July 23, 1999 the boring for monitoring well MW-4 was drilled with a truck-mounted drill rig equipped with pre-cleaned, hollow-stem, 8-inch-diameter rotary augers. The sampler and stainless steel liners were pre-cleaned before use and between sample drives by washing them with a trisodium

phosphate and potable water solution, a potable water rinse, and distilled water rinse. Soil samples were collected every 5 feet, at any noted changes in lithology, and at the approximate soil/groundwater interface. Sampling began at a depth of 9 feet bgs and continued to the bottom of the boring (22.5 feet bgs). Subsurface soil samples were obtained for soil identification and classification by drilling to the desired sampling location and driving the sampler 18 inches ahead into undisturbed material. Upon removal from the sampler, samples identified for analysis were preserved by capping each sample end with Teflon® sheeting and plastic end caps, attaching preprinted labels, and storing them in a pre-chilled, insulated container to be transported following chain of custody protocol to Chromalab, Inc. (Chromalab), a state-certified laboratory.

The soil cuttings and samples were logged by an ACC geologist during drilling, described in accordance with the Unified Soil Classification System (USCS), and reviewed by a California Registered Geologist. A lithologic log of the soil boring for MW-4 and the USCS guide are included as Appendix 2.

Cuttings were placed in capped drums, labeled, and left on site pending the receipt of analytical results. Drums of cuttings will be disposed at an approved facility upon acceptance. One soil sample collected from boring MW-4 at 10 feet below ground surface was submitted to Chromalab for analysis of total petroleum hydrocarbons as gas (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method SW846 8020A Nov 1990/8015 Modified, and for mineral spirits by EPA Method 8015 Modified. A groundwater sample was collected following installation and development of the monitoring well and analyzed for TPHg, BTEX, MTBE and mineral spirits. Soil sample analytical results from the boring MW-4 are summarized in Table 1, and groundwater sample analytical results are summarized in Table 2. Copies of all analytical results and chain of custody records are included in Appendix 3.

Is there overlap w/ TPHg + MS?

TABLE 1 – SOIL SAMPLE ANALYTICAL RESULTS

Sample Number	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Mineral Spirits (mg/kg)
MW4-10	30	<0.62	<0.62	<0.62	<0.62	<0.62	48

Notes: mg/kg = milligrams per kilogram, equivalent to parts per million (ppm)
< sample falls below indicated laboratory reporting limit

TABLE 2 – GROUNDWATER SAMPLE ANALYTICAL RESULTS

Sample Number	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Mineral Spirits (µg/l)
MW-4	3,200	410	<2 5	54	12	90	1,900

Notes: ug/l = micrograms per liter, equivalent to parts per billion (ppb)
< sample falls below indicated laboratory reporting limit

3.1 Subsurface Conditions

During the investigation, the surface was covered with asphalt pavement over sandy fill to a depth of approximately 1 foot bgs. Below the concrete and fill layers, native material consisted of silt and clay to a depth of approximately 9 feet bgs, and of sand, silt and gravel mixture to a depth of 20 feet bgs. Groundwater was encountered at a depth of approximately 15 feet bgs.

3.2 Monitoring Well Construction and Development

Upon completion of drilling, boring MW-4 was converted to a 2-inch-diameter groundwater monitoring well and identified as MW-4. The well casing was constructed of schedule 40 threaded polyvinyl chloride (PVC). The well was set with a 0.020-inch factory slotted screen from a depth of 10 to 20 feet bgs. Well construction details are included in Appendix 4.

Lonestar #2/12 sand was used as an annular fill from the base of the well to 1 foot above the top of the screen. A water-tight, traffic-rated vault box was cemented over the top of the PVC casing of the wells for protection. The vault box was set at the existing ground surface. An expansion cap with padlock was placed on the well head for additional security.

After well installation, the elevation of well MW-4 was surveyed by Wade Hammond, Professional Land Surveyor, to an accuracy of 0.01 foot. The well elevation was surveyed to the top of the PVC well casing relative to mean sea level (MSL) from a nearby benchmark. The well elevation and relative distances between wells are included in Appendix 4. The location of well MW-4 is illustrated on Figure 2.

On July 26, 1999, monitoring well MW-4 was developed with a surge block plunger followed by purging. The well was purged with a high-volume polyethylene bailer until approximately 20 well volumes were removed. The well monitoring worksheet maintained during purging is included in Appendix 5. The purge water was stored on site in sealed, Department of Transportation-approved 55-gallon drums. The drums were labeled with their contents and accumulation date pending laboratory analysis and proper disposal.

4.0 INJECTION OF OXYGEN RELEASE COMPOUND

On July 26 and 27, ACC introduced 350 pounds of ORC® into the subsurface. The work included drilling 25 exploratory borings and injecting ORC® into the water-bearing zone in the vicinity and downgradient of the former USTs. The purpose of the work was to further enhance natural biodegradation of petroleum hydrocarbons in shallow groundwater.

An excavation permit was obtained from the City of Oakland before drilling activities. The locations of the proposed soil borings were marked with white paint, and Underground Service Alert was notified 72 hours before commencing work so that any subsurface utilities could be marked and avoided. Soil boring locations are illustrated on Figure 3.

The borings were advanced using a hydraulically-driven Geoprobe® with 2-inch-diameter, hollow-stem direct-push augers operated under the supervision of a C-57 licensed contractor. An ACC geologist observed the advancement of each probe. No drill cuttings were generated using the pneumatic process.

The Geoprobe® was driven approximately 6 feet into the saturated zone. After completion of drilling, an ORC® and water mixture consisting of approximately 14 pounds of ORC® to 5 gallons of water was injected into each boring. This mixture represents a slurry with approximately 25% solids, and was disseminated at a rate of approximately 1 gallon of ORC® grout per one foot of boring while removing the probes. Each of 25 soil borings received approximately 14 pounds of ORC®, resulting in the introduction of 350 pounds of ORC® into the saturated zone. After installation of the ORC® slurry, portland cement was poured into each boring above the ORC® to complete each hole to just below the surface. The surface of each probe location was capped with concrete to match existing grade.

During installation of ORC®, one grab groundwater sample was obtained from a soil boring adjacent to the UST excavation. ACC attempted to collect grab groundwater samples from several of the soil borings located near the center of the street and downgradient of the former USTs. Attempted and completed grab groundwater sample locations are illustrated on Figure 3. Analytical results from the grab groundwater sample obtained from boring OB-1 indicate that mineral spirits are present at a concentration of 130,000 ppb, TPHg at 41,000 ppb, and benzene at 790 ppb. Toluene, ethylbenzene, total xylenes, and MTBE were not detected above the laboratory reporting limit. Analytical results are summarized in Table 3, and copies of the chain of custody record and laboratory analytical results are included in Appendix 3.

TABLE 2 – GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS

Sample Number	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Mineral Spirits (µg/l)
OB-1	41,000	790	<13	<13	<13	<130	130,000

Notes: µg/l = micrograms per liter, equivalent to parts per billion (ppb)
< sample falls below indicated laboratory reporting limit

5.0 DISCUSSION

Based on analytical results of the soil sample taken from boring MW-4 and the groundwater sample collected following well development, soil and groundwater have been impacted in the vicinity of well MW-4. The impact from gasoline is difficult to quantify due to a suspected gasoline plume originating from a former UST located at 489 43rd Street (see Figure 2). According to a January 1996 letter from the ACHCSA to the property owner, analytical results from soil samples collected during removal of a 1,000-gallon gasoline UST in 1995 reported concentrations of TPHg up to 1,900 ppm and concentrations of MTBE up to 1,300 (ppm). This confirmed downgradient source makes differentiation of the two gasoline plumes difficult in this area of the site.

In accordance with the work plan approved by ACHCSA, ACC attempted to collect grab groundwater samples in six of the 25 soil borings in order to better characterize groundwater conditions at the site. Five of the six sample locations did not produce enough water in the first-encountered water-bearing zone (14 to 18 feet bgs) to obtain a grab groundwater sample. ACC attributes this to generally poor aquifer quality with relatively little groundwater recharge in the area.

Analytical results indicate that an impact to groundwater remains in the immediate vicinity of the former USTs. The grab groundwater sample obtained from soil boring OB-1 contained small amounts of free-phase floating product (free product), indicating a residual source of petroleum hydrocarbons in the area of the former USTs. The relatively low levels of BTEX indicate that the majority of impact from petroleum hydrocarbons appears to be due to mineral spirits, and a proportion of the reported TPHg is probably mineral spirits. Increased levels of dissolved oxygen resulting from the introduction of ORC® should enhance natural attenuation and biodegradation processes in groundwater. These increased levels of dissolved oxygen should be measurable by the next groundwater monitoring event scheduled for December 1999.

6.0 CONCLUSIONS

Based on previous site investigations and the work to date, ACC has made the following conclusions:

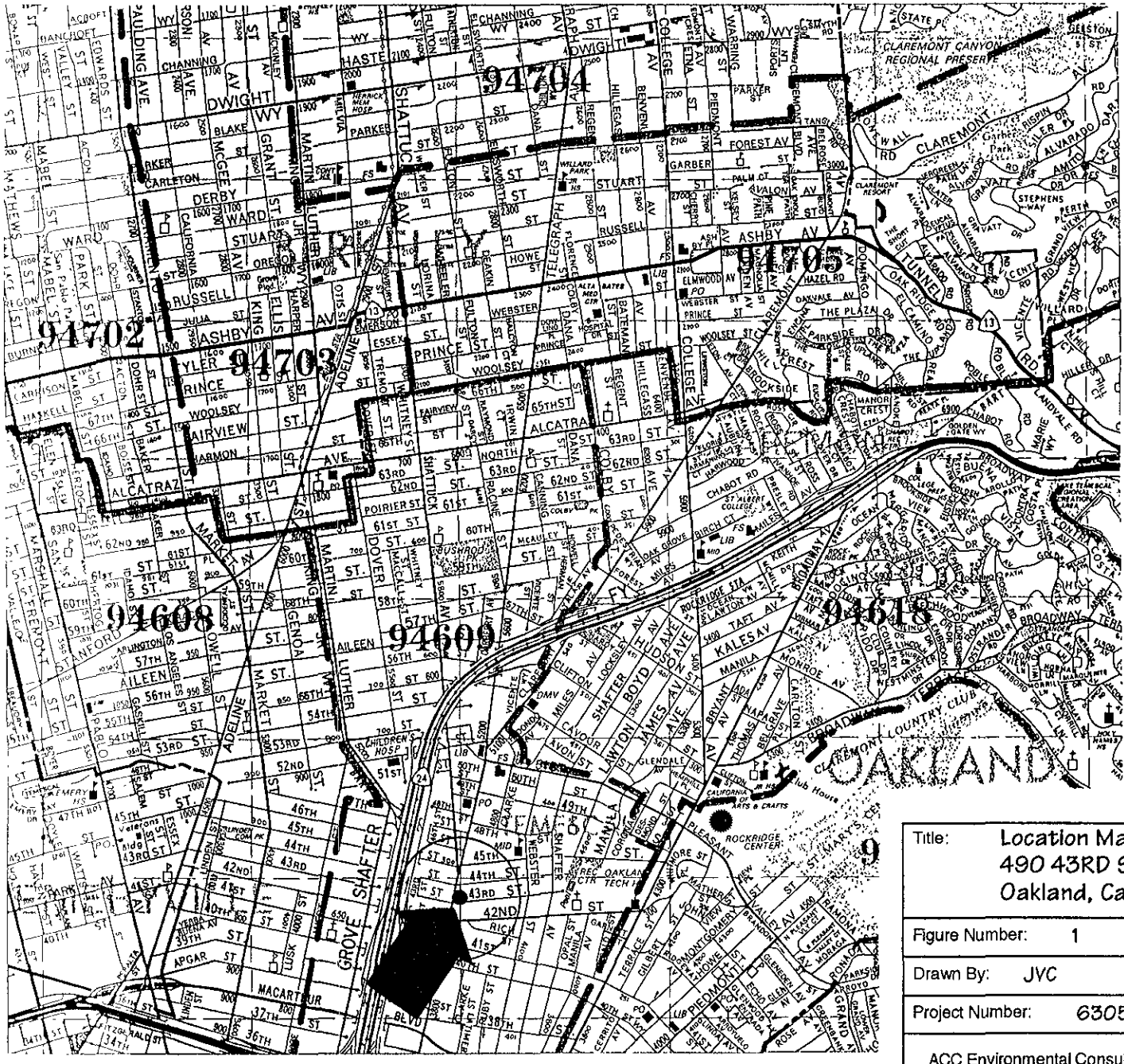
- Concentrations of mineral spirits, gasoline, and benzene in groundwater continue to be elevated in the vicinity of the former UST excavation and in the downgradient direction;
- The low levels of BTEX constituents in groundwater samples indicate that the majority of petroleum hydrocarbon impact appears to be due to mineral spirits, and a proportion of hydrocarbons reported as TPHg is probably mineral spirits; and
- Increased levels of dissolved oxygen should be apparent by the next semiannual sampling and monitoring event, scheduled for December 1999

7.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.



SOURCE: THOMAS BROTHERS GUIDE

Title:	Location Map 490 43RD Street Oakland, California
Figure Number: 1	Scale:
Drawn By: JVC	Date: 12/19/95
Project Number: 6305-1.1	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

N
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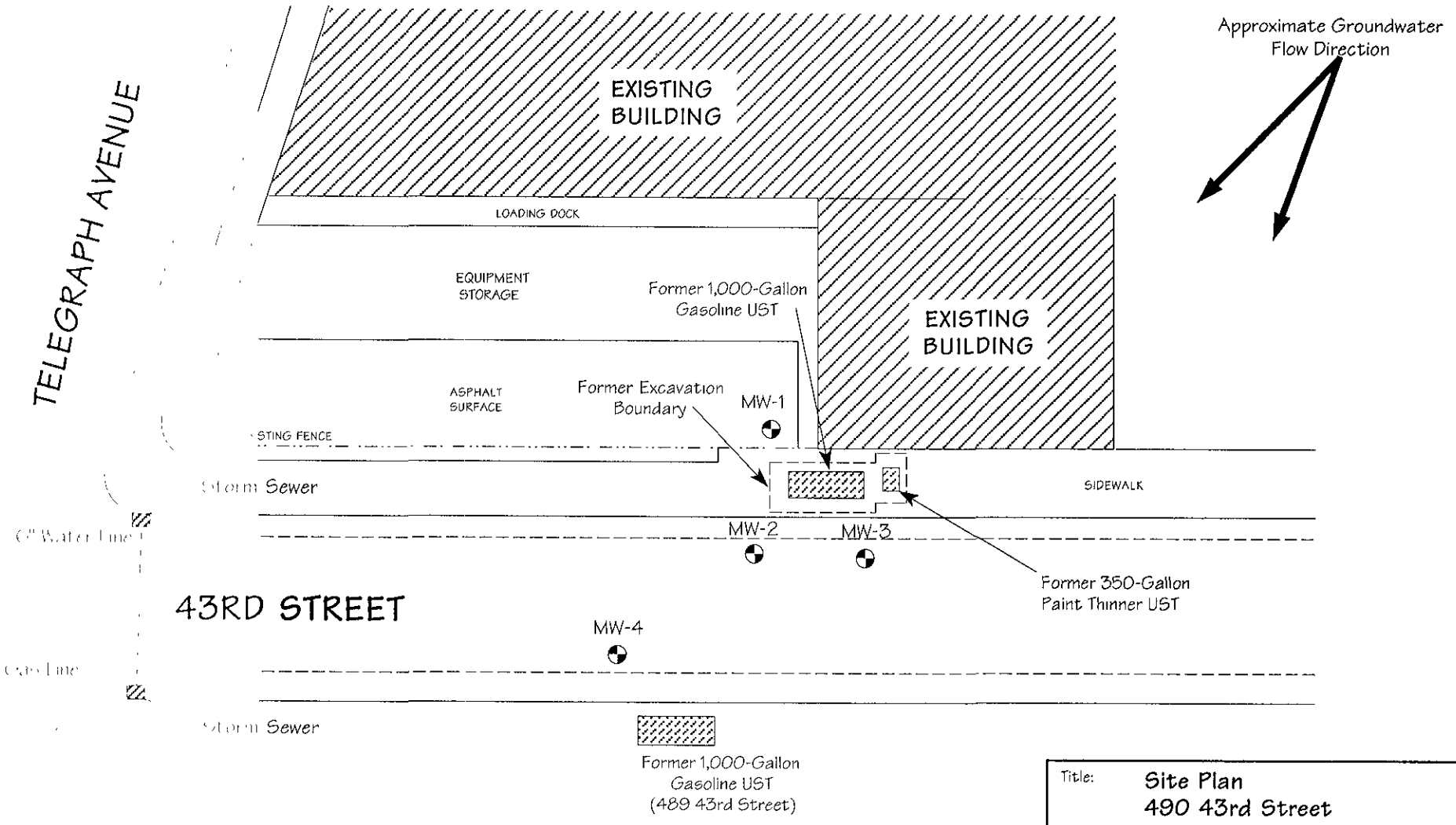


Legend

- Existing Groundwater Monitoring Well
- Former Underground Storage Tank

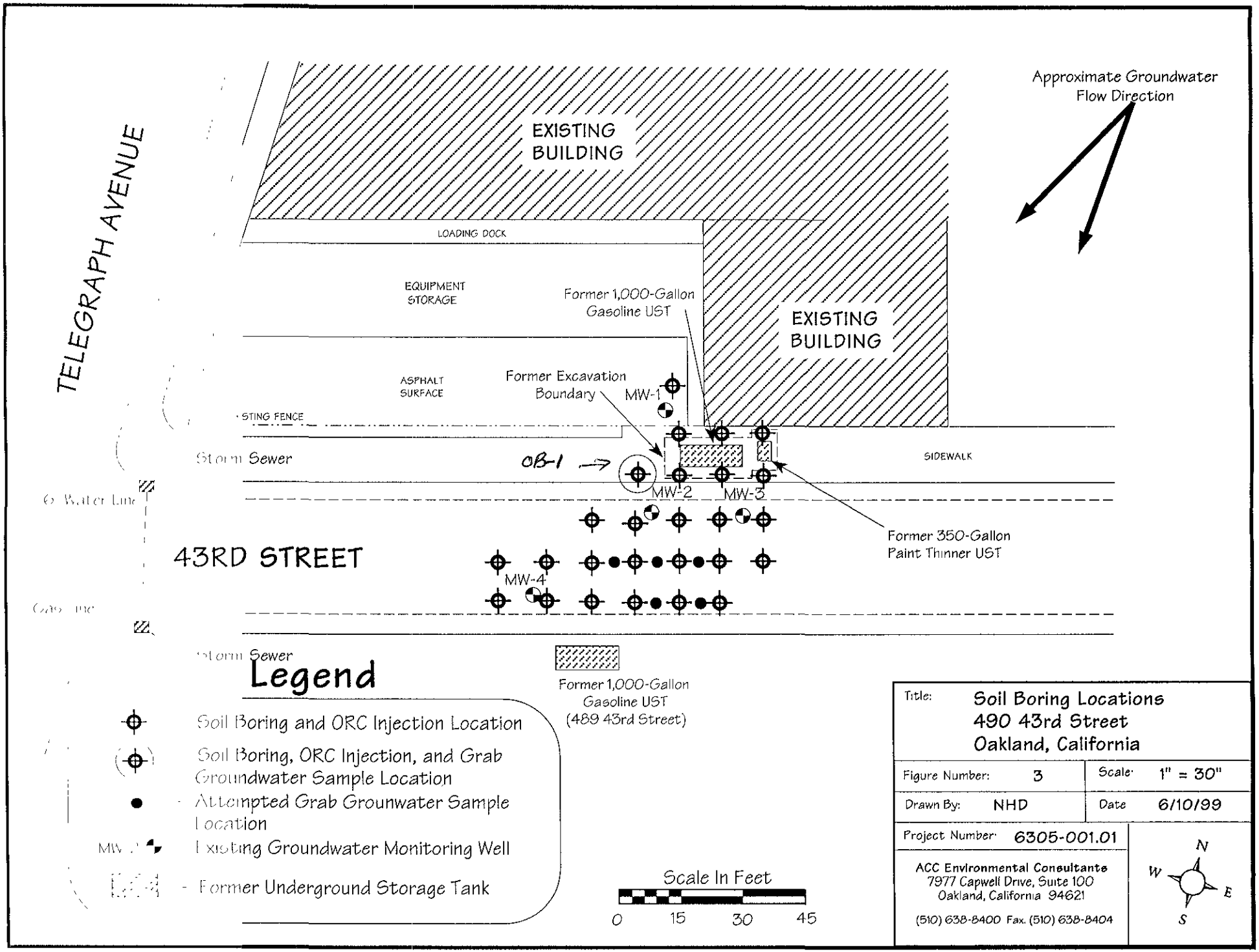
Scale In Feet

0 15 30 45

Title:	Site Plan 490 43rd Street Oakland, California		
Figure Number:	2	Scale:	1" = 30"
Drawn By:	NHD	Date:	6/10/99
Project Number:	6305-001.01		

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

N W E S


Approximate Groundwater Flow Direction
TELEGRAPH AVENUE
EXISTING BUILDING
LOADING DOCK
EQUIPMENT STORAGE
Former 1,000-Gallon Gasoline UST
EXISTING BUILDING
ASPHALT SURFACE
Former Excavation Boundary
MW-1
STING FENCE
Storm Sewer
OB-1
SIDEWALK
MW-2
MW-3
Former 350-Gallon Paint Thinner UST
43RD STREET
MW-4
Storm Sewer
Legend
Soil Boring and ORC Injection Location
Soil Boring, ORC Injection, and Grab Groundwater Sample Location
Attempted Grab Grounwater Sample Location
Existing Groundwater Monitoring Well
Former Underground Storage Tank
Former 1,000-Gallon Gasoline UST (489 43rd Street)
Scale In Feet
0 15 30 45
Title: Soil Boring Locations 490 43rd Street Oakland, California
Figure Number: 3
Scale: 1" = 30"
Drawn By: NHD
Date 6/10/99
Project Number: 6305-001.01
ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax. (510) 638-8404
N
W
E
S

PERMITS

EXCAVATION

Job Site 490 43RD ST Parcel# 013 -1098-027-00 Appl# X9900550

Descr install one monitoring well on 43rd st Permit Issued 07/15/99

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	License Classes
Owner	DECESARE ANTHONY M TR				
Contractor	ENVIRONMENTAL CONTROL ASSO	X	(408)662-8178	695970	C57
Arch/Engr					
Agent					

Applic Addr 3011 TWIN PALM DR, APTOS CA, 95003

$246.00 TOTAL FEES PAID AT ISSUANCE

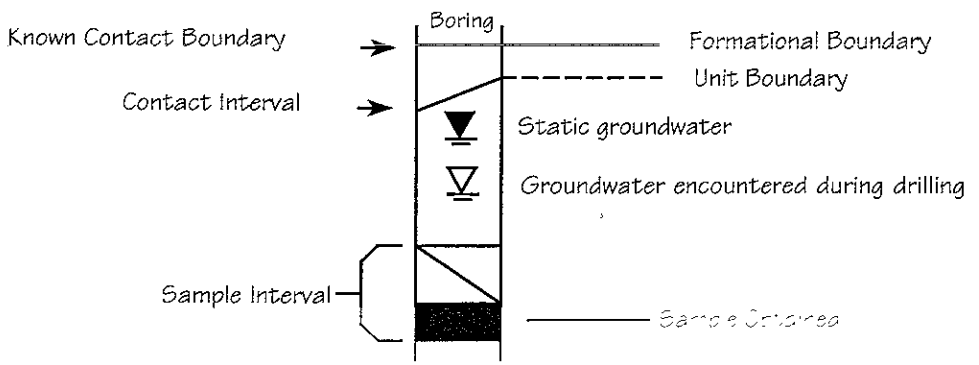
$41.00 Applic	$205.00 Permit
$.00 Process	$.00 Rec Mgmt
$.00 Gen Plan	$.00 Invstg
$.00 Other	

LITHOLOGIC LOG AND UNIFIED SOIL CLASSIFICATION SYSTEM GUIDE

UNIFIED SOIL CLASSIFICATION SYSTEM

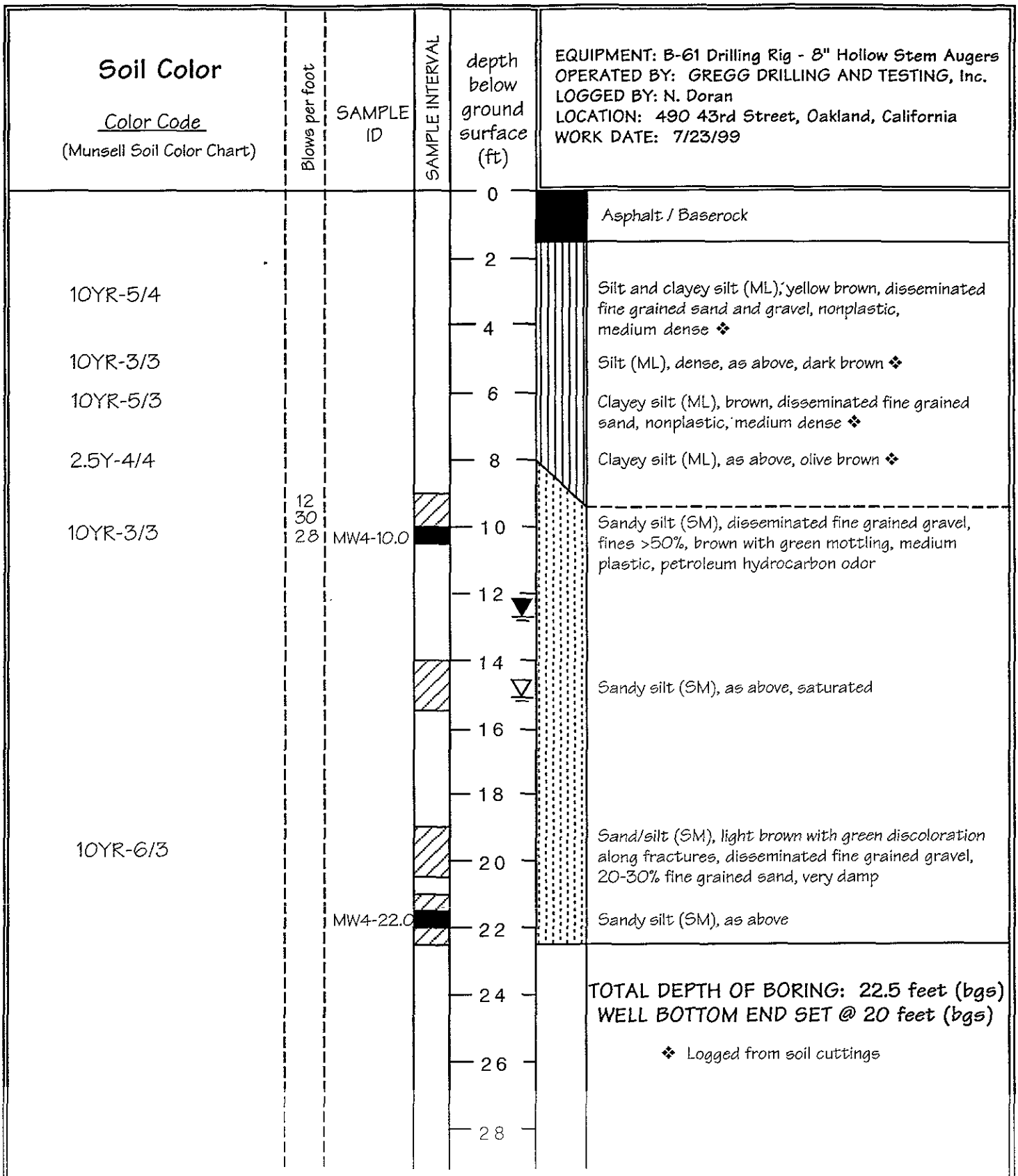
MAJOR DIVISIONS					TYPICAL NAMES
COARSE GRAINED SOILS more than half > #200 sieve	GRAVELS more than half coarse fraction is larger than No. 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		well graded gravels, gravel-sand mixtures
			GP		poorly graded gravels, gravel-sand mixtures
		GRAVELS WITH OVER 12% FINES	GM		silty gravels, poorly graded gravel-sand silt mixtures
			GC		clayey gravels, poorly graded gravel-sand clay mixtures
	SANDS more than half coarse fraction is smaller than No. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES	SW		well graded sands, gravelly sands
			SP		poorly graded sands, gravelly sands
		SANDS WITH OVER 12% FINES	SM		silty sands, poorly graded sand-silt mixtures
			SC		clayey sands, poorly graded sand-clay mixtures
FINE GRAINED SOILS more than half < #200 sieve	SILTS AND CLAYS liquid limit less than 50		ML		inorg. silts and v.fine sands, rock flour silty or clayey sands, or clayey silts w/sl. plasticity
			CL		inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL		organic clays and organic silty clays of low plasticity
	SILTS AND CLAYS liquid limit greater than 50		MH		inorganic silty, micaceous or diatomacious fine sandy or silty soils, elastic silts
			CH		inorganic clays of high plasticity, fat clays
			OH		organic clays of medium to high plasticity organic silts
	HIGHLY ORGANIC SOILS		PT		peat and other highly organic soils

Legend for Boring Logs



ACC Environmental Consultants, Inc.
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

EQUIPMENT: B-61 Drilling Rig - 8" Hollow Stem Augers
OPERATED BY: GREGG DRILLING AND TESTING, Inc.
LOGGED BY: N. Doran
LOCATION: 490 43rd Street, Oakland, California
WORK DATE: 7/23/99



TOTAL DEPTH OF BORING: 22.5 feet (bgs)
WELL BOTTOM END SET @ 20 feet (bgs)

❖ Logged from soil cuttings

ACC Environmental Consultants, Inc.
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510)638-8400 FAX. (510)638-8404

Project No: 6305-001.01

Date: 7/23/99

LOG OF BORING MW-4
Blumert Paint Company
490 43rd Street
Oakland, California

SOIL, GROUNDWATER AND GRAB GROUNDWATER ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORDS

ACC Environmental Consultants
7977 Capwell Drive,-Suite 100
Oakland, CA 94621

Attn.: Mr. Dave DeMent

Project: 6305-001.01
490 43rd St.

Dear Mr. DeMent,

Attached is our report for your samples received on Monday July 26, 1999.
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after August 25, 1999 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

Sincerely,

Pierre Monette

Total Extractable Petroleum Hydrocarbons (TEPH)

ACC Environmental Consultants

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn: Dave DeMent

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 6305-001.01

Project: 490 43rd St.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OB-1	Water	07/26/1999 08:40	1
MW-4	Water	07/26/1999 12:15	2
SOIL DRUM	Soil	07/26/1999 12:30	3
MW-4-10	Soil	07/23/1999 08:22	4

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**OB-1**	Lab Sample ID:	**1999-07-0405-001**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 09:00
Sampled:	07/26/1999 08:40	QC-Batch:	1999/07/29-02.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits -	130000	500	ug/L	10.00	08/02/1999 13:13	
Surrogate(s)						
o-Terphenyl	81.3	60-130	%	10.00	08/02/1999 13:13	

Mineral Spirits = naptha, likely (VM&P) petroleum spirits/pet. thinner
bp 93 - 204°C, dist range 119-143° C
~ $C_7 - C_{12}$) $C_8 - C_9$

? what min spirits std is used

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**MW-4**	Lab Sample ID:	**1999-07-0405-002**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 09:00
Sampled:	07/26/1999 12:15	QC-Batch:	1999/07/29-02.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	1900	50	ug/L	1.00	08/02/1999 12:08	,nmsp
Surrogate(s)						
o-Terphenyl	76.7	60-130	%	1.00	08/02/1999 12:08	

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**MW-4-10**	Lab Sample ID:	**1999-07-0405-004**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 09:00
Sampled:	07/23/1999 08:22	QC-Batch:	1999/07/29-01.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	48	10	mg/Kg	1.00	08/02/1999 12:40	
Surrogate(s)						
o-Terphenyl	65.3	60-130	%	1.00	08/02/1999 12:40	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**SOIL DRUM**	Lab Sample ID:	**1999-07-0405-003**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 09:00
Sampled:	07/26/1999 12:30	QC-Batch:	1999/07/29-01.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	10	10	mg/Kg	1.00	08/02/1999 11:36	
Surrogate(s)						
o-Terphenyl	67.7	60-130	%	1.00	08/02/1999 11:36	

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank | **Soil** | **QC Batch # 1999/07/29-01.10**

MB: 1999/07/29-01.10-001 | Date Extracted: 07/29/1999 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	07/29/1999 14:52	
Mineral spirits	ND	10	mg/Kg	07/29/1999 14:52	
Surrogate(s)					
o-Terphenyl	88.0	60-130	%	07/29/1999 14:52	

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank **Soil** **QC Batch # 1999/07/29-02.10**

MB: 1999/07/29-02.10-001 Date Extracted: 07/29/1999 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	07/30/1999 13:51	
Mineral spirits	ND	10	mg/Kg	07/30/1999 13:51	
Surrogate(s)					
o-Terphenyl	78.5	60-130	%	07/30/1999 13:51	

To: **ACC Environmental Consultants**

Attn: Dave DeMent

Test Method: 8015m

Prep Method: 3510/8015M
3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/29-01.10**

LCS: 1999/07/29-01.10-002 Extracted: 07/29/1999 09:00 Analyzed: 07/29/1999 15:30

LCSD: 1999/07/29-01.10-003 Extracted: 07/29/1999 09:00 Analyzed: 07/29/1999 16:02

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	34.3	37.0	41.7	41.7	82.3	88.7	7.5	60-130	25		
Surrogate(s)											
o-Terphenyl	22.4	23.7	20.0	20.0	112.0	118.5		60-130			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**
Attn: Dave DeMent

Test Method: 8015m
Prep Method: 3510/8015M
3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/29-02.10**

LCS: 1999/07/29-02.10-002 Extracted: 07/29/1999 09:00 Analyzed: 07/30/1999 12:25
LCSD: 1999/07/29-02.10-003 Extracted: 07/29/1999 09:00 Analyzed: 07/30/1999 12:57

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	37.8	33.3	41.7	41.7	90.6	79.9	12.6	60-130	25		
Surrogate(s)											
o-Terphenyl	24.4	21.4	20.0	20.0	122.0	107.0		60-130			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Matrix Spike (MS / MSD) **Soil** **QC Batch # 1999/07/29-01.10**

Sample ID: **SOIL DRUM** Lab Sample ID: 1999-07-0405-003

MS: 1999/07/29-01.10-004 Extracted: 07/29/1999 09:00 Analyzed: 07/29/1999 16:34 Dilution: 1.0
MSD: 1999/07/29-01.10-005 Extracted: 07/29/1999 09:00 Analyzed: 07/29/1999 17:07 Dilution: 1.0

Compound	Conc [mg/Kg]			Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Diesel	54.6	74.5	0.00	41.7	41.7	130.9	178.7	30.9	60-130	25		
Surrogate(s)												
o-Terphenyl	14.3	16.9		20.0	20.0	71.5	84.5		60-130			rpd

To: **ACC Environmental Consultants**
Attn:Dave DeMent

Test Method: 8015m
Prep Method: 3510/8015M
3550/8015M

Legend & Notes

Total Extractable Petroleum Hydrocarbons (TEPH)

QC Compound Flags

rpd

Analyte RPD was out of QC limits due to sample heterogeneity.

Analysis Notes

MW-4 (Lab# 1999-07-0405-002)

nmsp=Hydrocarbon reported in the Mineral Spirit range do not resemble our Mineral Spirit Standard.

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

Gas/BTEX and MTBE

ACC Environmental Consultants

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn: Dave DeMent

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 6305-001.01

Project: 490 43rd St.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OB-1	Water	07/26/1999 08:40	1
MW-4	Water	07/26/1999 12:15	2
SOIL DRUM	Soil	07/26/1999 12:30	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**OB-1**	Lab Sample ID:	**1999-07-0405-001**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 15:53
Sampled:	07/26/1999 08:40	QC-Batch:	1999/07/29-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	41000	1300	ug/L	25.00	07/29/1999 15:53	g
Benzene	790	13	ug/L	25.00	07/29/1999 15:53	
Toluene	ND	13	ug/L	25.00	07/29/1999 15:53	
Ethyl benzene	ND	13	ug/L	25.00	07/29/1999 15:53	
Xylene(s)	ND	13	ug/L	25.00	07/29/1999 15:53	
MTBE	ND	130	ug/L	25.00	07/29/1999 15:53	
Surrogate(s)						
4-Bromofluorobenzene	102.1	50-150	%	1.00	07/29/1999 15:53	
4-Bromofluorobenzene-FID	153.2	50-150	%	1.00	07/29/1999 15:53	sh

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**1999-07-0405-002**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/29/1999 15:24
Sampled:	07/26/1999 12:15	QC-Batch:	1999/07/29-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	3200	250	ug/L	5.00	07/29/1999 15:24	g
Benzene	410	2.5	ug/L	5.00	07/29/1999 15:24	
Toluene	ND	2.5	ug/L	5.00	07/29/1999 15:24	
Ethyl benzene	54	2.5	ug/L	5.00	07/29/1999 15:24	
Xylene(s)	12	2.5	ug/L	5.00	07/29/1999 15:24	
MTBE	90	25	ug/L	5.00	07/29/1999 15:24	
Surrogate(s)						
4-Bromofluorobenzene	102.2	50-150	%	1.00	07/29/1999 15:24	
4-Bromofluorobenzene-FID	109.0	50-150	%	1.00	07/29/1999 15:24	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**SOIL DRUM**	Lab Sample ID:	**1999-07-0405-003**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/27/1999 20:36
Sampled:	07/26/1999 12:30	QC-Batch:	1999/07/27-01.02
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	3.2	1.0	mg/Kg	1.00	07/27/1999 20:36	
Benzene	ND	0.0050	mg/Kg	1.00	07/27/1999 20:36	
Toluene	ND	0.0050	mg/Kg	1.00	07/27/1999 20:36	
Ethyl benzene	0.028	0.0050	mg/Kg	1.00	07/27/1999 20:36	
Xylene(s)	ND	0.0050	mg/Kg	1.00	07/27/1999 20:36	
MTBE	ND	0.0050	mg/Kg	1.00	07/27/1999 20:36	
Surrogate(s)						
4-Bromofluorobenzene	66.2	58-124	%	1.00	07/27/1999 20:36	
Trifluorotoluene-FID	73.1	53-125	%	1.00	07/27/1999 20:36	

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Soil** | **QC Batch # 1999/07/27-01.02**

MB: 1999/07/27-01.02-001

Date Extracted: 07/27/1999 06:32

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	07/27/1999 06:32	
Benzene	ND	0.0050	mg/Kg	07/27/1999 06:32	
Toluene	ND	0.0050	mg/Kg	07/27/1999 06:32	
Ethyl benzene	ND	0.0050	mg/Kg	07/27/1999 06:32	
Xylene(s)	ND	0.0050	mg/Kg	07/27/1999 06:32	
MTBE	ND	0.0050	mg/Kg	07/27/1999 06:32	
Surrogate(s)					
Trifluorotoluene	106.2	53-125	%	07/27/1999 06:32	
4-Bromofluorobenzene-FID	98.0	58-124	%	07/27/1999 06:32	

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 1999/07/29-01.03**

MB: 1999/07/29-01.03-003

Date Extracted: 07/29/1999 09:55

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	07/29/1999 09:55	
Benzene	ND	0.5	ug/L	07/29/1999 09:55	
Toluene	ND	0.5	ug/L	07/29/1999 09:55	
Ethyl benzene	ND	0.5	ug/L	07/29/1999 09:55	
Xylene(s)	ND	0.5	ug/L	07/29/1999 09:55	
MTBE	ND	5.0	ug/L	07/29/1999 09:55	
Surrogate(s)					
Trifluorotoluene	115.4	58-124	%	07/29/1999 09:55	
4-Bromofluorobenzene-FID	108.2	50-150	%	07/29/1999 09:55	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Test Method: 8020
8015M

Attn: Dave DeMent

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/27-01.02**

LCS: 1999/07/27-01.02-002 Extracted: 07/27/1999 06:59 Analyzed: 07/27/1999 06:59

LCSD: 1999/07/27-01.02-003 Extracted: 07/27/1999 07:54 Analyzed: 07/27/1999 07:54

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.510	0.517	0.500	0.500	102.0	103.4	1.4	75-125	35		
Benzene	0.0870	0.0900	0.1000	0.1000	87.0	90.0	3.4	77-123	35		
Toluene	0.0840	0.0890	0.1000	0.1000	84.0	89.0	5.8	78-122	35		
Ethyl benzene	0.0810	0.0860	0.1000	0.1000	81.0	86.0	6.0	70-130	35		
Xylene(s)	0.243	0.260	0.300	0.300	81.0	86.7	6.8	75-125	35		
Surrogate(s)											
Trifluorotoluene	376	371	500	500	75.2	74.2		53-125			
4-Bromofluorobenzene-FI	486	479	500	500	97.2	95.8		58-124			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Test Method: 8020
8015M

Attn: Dave DeMent

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/07/29-01.03**

LCS: 1999/07/29-01.03-001 Extracted: 07/29/1999 06:20 Analyzed: 07/29/1999 06:20

LCSD: 1999/07/29-01.03-002 Extracted: 07/29/1999 07:13 Analyzed: 07/29/1999 07:13

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	460	483	500	500	92.0	96.6	4.9	75-125	20		
Benzene	87.1	95.0	100.0	100.0	87.1	95.0	8.7	77-123	20		
Toluene	86.1	94.3	100.0	100.0	86.1	94.3	9.1	78-122	20		
Ethyl benzene	82.7	93 7	100.0	100.0	82.7	93.7	12.5	70-130	20		
Xylene(s)	245	272	300	300	81.7	90.7	10.4	75-125	20		
Surrogate(s)											
Trifluorotoluene	442	469	500	500	88.4	93.8		58-124			
4-Bromofluorobenzene-FI	416	442	500	500	83.2	88.4		50-150			

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

To: **ACC Environmental Consultants**

Attn:Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

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

sh

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

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

Gas/BTEX (Methanol Extraction)

ACC Environmental Consultants	7977 Capwell Drive, Suite 100 Oakland, CA 94621
Attn: Dave DeMent	Phone: (510) 638-8400 Fax: (510) 638-8404
Project #: 6305-001.01	Project: 490 43rd St.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-4-10	Soil	07/23/1999 08:22	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX (Methanol Extraction)

Sample ID:	**MW-4-10**	Lab Sample ID:	**1999-07-0405-004**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/27/1999 14:45
Sampled:	07/23/1999 08:22	QC-Batch:	1999/07/27-05.03
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	30	10	mg/Kg	1.00	08/02/1999 14:45	g
Benzene	ND	0.62	mg/Kg	1.00	08/02/1999 14:45	
Toluene	ND	0.62	mg/Kg	1.00	08/02/1999 14:45	
Ethyl benzene	ND	0.62	mg/Kg	1.00	08/02/1999 14:45	
Xylene(s)	ND	0.62	mg/Kg	1.00	08/02/1999 14:45	
MTBE	ND	0.62	mg/Kg	1.00	08/02/1999 14:45	
Surrogate(s)						
4-Bromofluorobenzene	115.0	58-124	%	.00	08/02/1999 14:45	
4-Bromofluorobenzene-FID	82.0	58-124	%	.00	08/02/1999 14:45	

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX (Methanol Extraction)

Method Blank | **Soil** | **QC Batch # 1999/07/27-05.03**

MB: 1999/07/27-05.03-001

Date Extracted: 07/27/1999 11:11

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	10	mg/Kg	07/27/1999 11:11	
Benzene	ND	0.62	mg/Kg	07/27/1999 11:11	
Toluene	ND	0.62	mg/Kg	07/27/1999 11:11	
Ethyl benzene	ND	0.62	mg/Kg	07/27/1999 11:11	
Xylene(s)	ND	0.62	mg/Kg	07/27/1999 11:11	
MTBE	ND	0.62	mg/Kg	07/27/1999 11:11	
Surrogate(s)					
4-Bromofluorobenzene-FID	106.0	58-124	%	07/27/1999 11:11	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**

Test Method: 8020
8015M

Attn: Dave DeMent

Prep Method: 5030

Batch QC Report

Gas/BTEX (Methanol Extraction)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/27-05.03**

LCS: 1999/07/27-05.03-002 Extracted: 07/27/1999 11:39 Analyzed: 07/27/1999 11:39

LCSD: 1999/07/27-05.03-003 Extracted: 07/27/1999 14:03 Analyzed: 07/27/1999 14:03

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.526	0.563	0.625	0.625	84.2	90.1	6.8	75-125	35		
Benzene	0.145	0.136	0.125	0.125	116.0	108.8	6.4	77-123	35		
Toluene	0.148	0.140	0.125	0.125	118.4	112.0	5.6	78-122	35		
Ethyl benzene	0.145	0.137	0.125	0.125	116.0	109.6	5.7	70-130	35		
Xylene(s)	0.373	0.359	0.375	0.375	99.5	95.7	3.9	75-125	35		
Surrogate(s)											
4-Bromofluorobenzene-FI	510	525	500	500	102.0	105.0		58-124			

To: **ACC Environmental Consultants**

Attn:Dave DeMent

Test Method: 8020
8015M

Prep Method: 5030

Legend & Notes

Gas/BTEX (Methanol Extraction)

Analyte Flags

g

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

Lead by Flame AA

ACC Environmental Consultants

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn: Dave DeMent

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 6305-001.01

Project: 490 43rd St.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SOIL DRUM	Soil	07/26/1999 12:30	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 6010B
Prep Method: 3050B

Lead by Flame AA

Sample ID:	**SOIL DRUM**	Lab Sample ID:	**1999-07-0405-003**
Project:	6305-001.01 490 43rd St.	Received:	07/26/1999 16:30
		Extracted:	07/27/1999 15:41
Sampled:	07/26/1999 12:30	QC-Batch:	1999/07/27-02.17
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	7.4	5.0	mg/Kg	1.00	07/28/1999 01:22	

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 6010B
Prep Method: 3050B

Batch QC Report
Lead by Flame AA

Method Blank | **Soil** | **QC Batch # 1999/07/27-02.17**

MB: 1999/07/27-02.17-083

Date Extracted: 07/27/1999 15:41

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	5.0	mg/Kg	07/27/1999 23:19	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0405

To: **ACC Environmental Consultants**
Attn: Dave DeMent

Test Method: 6010B
Prep Method: 3050B

Batch QC Report

Lead by Flame AA

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/27-02.17**

LCS: 1999/07/27-02.17-084 Extracted: 07/27/1999 15:41 Analyzed: 07/27/1999 23:24
LCSD: 1999/07/27-02.17-085 Extracted: 07/27/1999 15:41 Analyzed: 07/27/1999 23:29

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Lead	251	251	250	250	100.4	100.4	0.0	80-120	20		

CHROMALAB, INC.

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Reference #: 7709

Chain of Custody

Environmental Services (SDB) (DOHS 1094)

DATE 7/26/99 PAGE ____ OF ____

PROJ MGR Dave DeMent
COMPANY ACC Environmental
ADDRESS 1977 Capwell
Oakland 94611
SAMPLERS (SIGNATURE) Neil Doran
(PHONE NO.) 510·638·8400
(FAX NO.) 510·638·8404

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-EPA 8015,8020) w/ Gas w/ BTEX RATIO	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Kerosene, ☐Diesel, ☐M.O.	PURGEABLE HALOCARBONS, (EVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)	STRONG HYDROC. ODOR	☐ PESTICIDES (EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Benzalkat Chloridum ☐ pH (24 hr hold time for H2O)	Mineral Spirits			NUMBER OF CONTAINERS
OB-1	7/26/99	08:40	H_2O	HCl/cold	X								X										X			3
MW-4	7/26/99	12:15	H_2O	HCl/cold	X								X										X			3
SOIL DRUM	7/26/99	12:30	Soil	cold	X														X				X			1
MW-4-10	7/23/99	08:22	Soil	cold	X																		X			1

PROJECT INFORMATION

PROJECT NAME 490 43rd Street
PROJECT NUMBER 6305-001.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
HEAD SPACE	
TEMPERATURE	
CONFORMS TO RECORD	

TAT	STANDARD 5 DAY			24	48	72	OTHER

Report: [1] Routine [ ] Level 2 [ ] Level 3 [ ] Level 4 [ ] Electronic Report

SPECIAL INSTRUCTIONS/COMMENTS:
*Please note: samples known to contain gas and mineral spirits.

RELINQUISHED BY 1.
Neil Doran 14:25
(SIGNATURE) (TIME)
Neil Doran 7/26/99
(PRINTED NAME) (DATE)
ACC
(COMPANY)

RECEIVED BY 1.
(SIGNATURE) 1725 (TIME)
B. Doran 7-26-99
(PRINTED NAME) (DATE)
Chromalab
(COMPANY)

RELINQUISHED BY 2
(SIGNATURE) 1627 (TIME)
B Doran 7:26 99
(PRINTED NAME) (DATE)
Chromalab
(COMPANY)

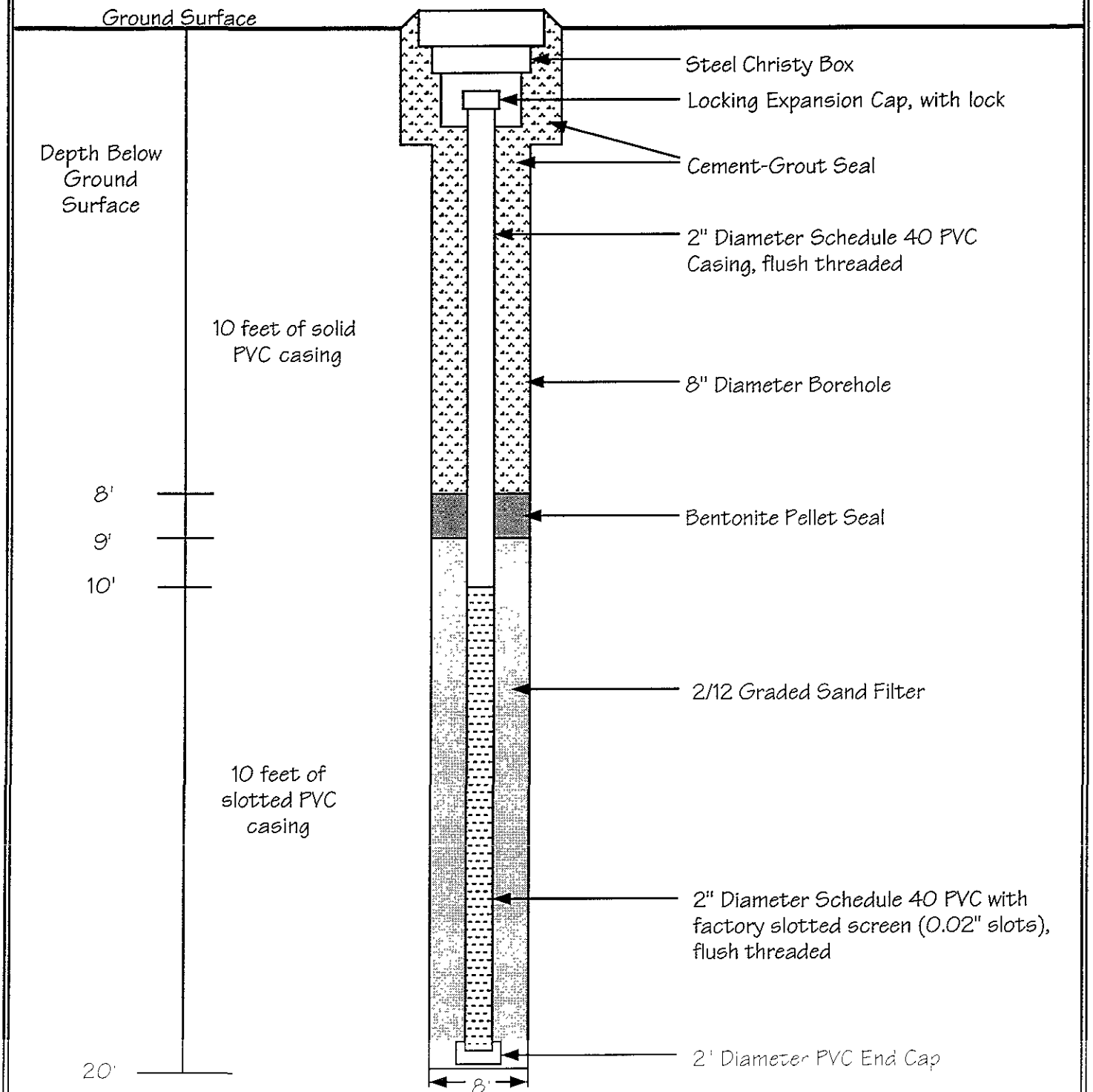
RECEIVED BY 2
(SIGNATURE) 1630 (TIME)
(PRINTED NAME) 7/26/99 (DATE)
(COMPANY)

RELINQUISHED BY 3
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY) 3
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(LAB)

WELL SURVEY AND CONSTRUCTION DETAILS

Monitoring Well Construction Schematic



*well illustrated as schematic only

Installation Contractor: Gregg Drilling and Testing, Martinez, California

ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 Fax: (510)638-8404	Project No: 6305-001.01 Installation Date: 7/23/99	Title MONITORING WELL MW-4 Blumert Paint Company 490 43rd Street Oakland, California

Wade Hammond
Land Surveyor
36660 Newark Blvd. Suite D
Newark, California 94560-3000
Tel:510-739-1600 Fax:510-739-1620 hammonds@pacbell.net

August 20, 1999

ACC Environmental Consultants
7977 Capwell Dr. Suite 100
Oakland, CA 94621
Tel:510-638-8400 Fax:510-638-8404

Subject: 490 43rd St. Oakland
Well Surveying RESULTS 8-20-99 SURVEY

WELL NAME	PVC CASING ELEVATION	RIM
MW 2	90.55 BENCHMARK	90.98
MW 4	90.16	90.31

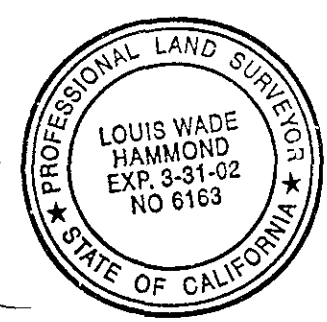
MW 1 & MW 3 were used to confirm MW 2 as a suitable benchmark.

RELATIVE DISTANCES

MW 1 - MW 2:	25.7
MW 1 - MW 3:	37.5
MW 1 - MW 4:	58.3
MW 2 - MW 3:	21.5
MW 2 - MW 4:	39.0
MW 3 - MW 4:	58.6

BENCHMARK: EXISTING WELLS
DATUM PER ACC ENVIRONMENTAL

L. Wade Hammond PLS



WELL MONITORING WORKSHEET

A·C·C ENVIRONMENTAL CONSULTANTS

ACC MONITORING WELL WORKSHEET

JOB NAME: Blumert Paint Co.	PURGE METHOD: Manual Bailing
SITE ADDRESS: 490 43rd Street	SAMPLED BY: Neil Doran
JOB #: 6305-001.01	LABORATORY: Chromalab
DATE: 7/26/99	ANALYSIS: TPHg/BTEX/MTBE & Mineral Spirits
Onsite Drum Inventory SOIL: 1 Full, 1 ~ 70%	MONITORING ☒ DEVELOPING ☒
EMPTY: WATER: 1 Full	SAMPLING ☒

WELL: MW-4

DEPTH OF BORING: 19.90'

DEPTH TO WATER: 12.82'

WATER COLUMN: 7.08'

WELL DIAMETER: 2"

WELL VOLUME: 1.1 gal

COMMENTS:
- readings taken for 2 well volumes only
- DO meter inoperable

PURGE VOL. (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.1	—	—	—	—	—	—
2.2	6.28	19.1	.727	0.03	850	✓
3.3	—	—	—	—	—	—
4.4	6.11	19.4	0.719	0.03	730	✓

PURGE WATER READINGS

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____ Type_____ ☐ Other

WELL:

DEPTH OF BORING:

DEPTH TO WATER:

WATER COLUMN:

WELL DIAMETER:

WELL VOLUME:

COMMENTS:

(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____ Type_____ ☐ Other

WELL:

DEPTH OF BORING:

DEPTH TO WATER

WATER COLUMN

WELL DIAMETER

WELL VOLUME

COMMENTS

(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____ Type_____ ☐ Other

7977 Capwell Drive Suite 100 • Oakland, CA 94621 • (510) 638-8400 • FAX (510) 638-8404

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