ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

January 11, 2011

Ms. Naomi Gatzke
1545 Scenic View Drive
San Leandro, CA 94577

Mr. Hooshi Ghassemi
1499 MacArthur Blvd.
Oakland, CA 94602-1045

Subject: Case Closure for Fuel Leak Case No. RO0000516 and Geotracker Global ID T0600100714, Hooshi's Auto Service, 1499 MacArthur Blvd., Oakland, CA 94602

Dear Ms. Gatzke and Mr. Ghassemi:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.swrcb.ca.gov) and the Alameda County Environmental Health website (http://www.acgov.org/aceh/index.htm).

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Total Petroleum Hydrocarbons as gasoline remain in soil at concentrations up to 560 ppm.
- Total Petroleum Hydrocarbons as gasoline remain in groundwater at concentrations up to 38,000 ppb.
- Benzene remains in groundwater at concentrations up to 220 ppb
- As described in section IV of the attached Case Closure Summary, the case was closed with Site Management Requirements that limit future land use to the current commercial land use and the existing buildings only.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Division Chief

Enclosures:
1. Remedial Action Completion Certification
2. Case Closure Summary

cc:

Leroy Griffin (w/enc)
Oakland Fire Department
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032
(*Sent via E-mail to: lgriffin@oaklandnet.com*)

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120
(*uploaded to GeoTracker*)

Bryan Fong
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
(*Sent via E-mail to:* bfong@craworld.com)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker (w/enc)
File (w/orig enc)

ALAMEDA COUNTY
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1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

January 11, 2011

Ms. Naomi Gatzke
1545 Scenic View Drive
San Leandro, CA 94577

Mr. Hooshi Ghassemi
1499 MacArthur Blvd.
Oakland, CA 94602-1045

Subject: Case Closure for Fuel Leak Case No. RO0000516 and Geotracker Global ID T0600100714, Hooshi's Auto Service, 1499 MacArthur Blvd., Oakland, CA 94602

Dear Ms. Gatzke and Mr. Ghassemi:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi
Director
Alameda County Environmental Health

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: July 27, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Hooshi's Auto Service		
Site Facility Address: 1499 MacArthur Blvd., Oakland, CA 94602		
RB Case No.: 01-0777	Local Case No.: StID#3597	LOP Case No.: RO0000516
URF Filing Date: 07/15/1991	Geotracker ID: T0600100714	APN: 23-516-5

Responsible Parties	Addresses	Phone Numbers
Ms. Naomi Gatzke	1545 Scenic View Drive, San Leandro, CA 94577	No Phone Number
Mr. Hooshi Ghassemi	1499 MacArthur Blvd., Oakland, CA 94602-1045	No Phone Number
---	---	---

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1,000 gallons	Gasoline	Removed	10/03/1990
2	1,000 gallons	Gasoline	Removed	10/03/1990
3	500 gallons	Gasoline	Removed	10/03/1990
4	100 gallon	Waste Oil	Removed	10/16/1995
Piping			Removed	10/03/1990

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. No holes, cracks, or other signs of failure were observed during tank removal. The product lines were reported as appearing sound; however, the vent lines contained a large number of corrosion holes. Strong hydrocarbon odors and discoloration were observed while removing the overburden surrounding the tanks.		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? Yes	Number: 6	Proper screened interval? See note a) below
Highest GW Depth Below Ground Surface: 6.2 feet bgs	Lowest Depth: 18.5 feet bgs	Flow Direction: South to Southwest; some mounding near former tank pit and MW-4.
Most Sensitive Current Use: Potential drinking water source.		

a) The wells were installed with screen intervals from 4.5 to 19 feet bgs and may have penetrated a semi-confining layer. As a result, groundwater appears to have risen up within the wells and come into contact with shallow contaminated soil. Therefore, the concentrations of petroleum hydrocarbons in groundwater samples collected from the monitoring wells may be biased high due to groundwater within the wells being in contact with shallow contaminated soil.

Summary of Production Wells in Vicinity: Based on a well survey conducted for a nearby site, no water supply wells appear to be located within 500 feet of the site. A door to door well survey conducted for this site on April 8, 2004 did not find any water supply wells within 250 feet of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: Central Reservoir is located approximately 1,600 feet east of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and City of Oakland Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	2 - 1,000-gallon tanks 1 – 500-gallon tank 1 – 100-gallon tank	The tanks were transported to Erickson, Inc. in Richmond, CA for disposal	10/03/1990 and 10/16/1995
Piping	Not reported	The piping was transported to Erickson, Inc. in Richmond, CA for disposal	10/03/1990
Free Product	---	---	---
Soil	Volume of stockpiled soil not reported	The excavated soil from the tank removal was stockpiled on site on 10/02/1990 pending disposal. In correspondence dated 11/12/1990, KTW & Associates notified the property owner that the stockpiled soil was no longer on site and recommended that the owner investigate the fate of the stockpiled soil. No further information was reported on disposal of the excavated soil.	Not reported
Groundwater	---	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)				
Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	1,460	560	260,000	38,000
TPH (Diesel)	NA	NA	NA	NA
Total Oil and Grease	NA	NA	NA	NA
Benzene	8.7	0.54	21,700	220
Toluene	57	3.2	25,000	530
Ethylbenzene	12	9.6	15,300	270
Xylenes	82	69	17,000	4,400
Organic Lead	0.15(1)	0.15(1)	NA	NA
MTBE	0.01(2)	0.01(2)	80(3)	<5(4)
Other (8240/8270)	NA	NA	NA	NA

(1) Organic Lead = 0.15 ppm; no other metals data were reported.
(2) MTBE = 0.01 ppm; no other fuel oxygenates analyzed.
(3) MTBE = 80 ppb using EPA Method 8020; no other fuel oxygenates analyzed.
(4) MTBE <5.0 ppb using EPA Method 8260; no other fuel oxygenates analyzed.

Site History and Description of Corrective Actions:

The site is an active auto repair facility but was a gasoline service station from circa 1941 until 1990. Surrounding land use is mixed commercial and residential. A residential building borders the site to the west and MacArthur Boulevard borders the site to the north. The developed area of the site is generally flat but the surrounding natural topography slopes to the south. A retaining wall up to approximately 8 feet high borders the site to the south and southeast. As a result, the southern end of the site is elevated up to approximately 8 feet above the surrounding land surface to the south and southeast.

On October 3, 1990, three USTs (two 1,000-gallon gasoline USTs and one 500-gallon gasoline UST) were removed from an underground concrete vault. Later investigation in 2009 found that the vault did not have a bottom. All of the USTs had been reportedly used for storage of gasoline. During the tank removal, strong petroleum hydrocarbon odors and discoloration was observed in the soil overburden surrounding the USTs. Six soil samples collected during the UST and product line removal contained Total Petroleum Hydrocarbons as gasoline (TPHg) at concentrations up to 450 ppm.

On January 7, 1993, two monitoring wells were installed adjacent to the former UST vault and one monitoring well was installed east of the former USTs. TPHg was detected only in soil samples from well MW-2, which was installed immediately south of the former USTs. The maximum concentration of TPHg in soil was 1,460 ppm detected in a soil sample collected at a depth of 10.0 feet bgs from well MW-2.

On June 24, 1996, 12 direct push soil borings (GP-1A through GP-9) were advanced to depths ranging from 7 to 20 feet bgs. TPHg was detected in 3 of 13 soil samples collected at concentrations ranging from 1.5 to 860 ppm. Benzene was detected in 4 of 13 soil samples collected at concentrations ranging from 0.006 to 3.1 ppm. Three additional groundwater monitoring wells (MW-4 through MW-6) were installed on June 27, 1996. Floating product was encountered in well MW-2 and MW-5. A soil vapor extraction (SVE) pilot test was performed using monitoring wells MW-1, MW-2, and MW-5 on July 10 and 11, 1996. Hydraulic slug tests performed in wells MW-1 and MW-3 concluded that the hydraulic conductivity of the aquifer materials at the site was 1.0x10-05 to 2.6x10-05 centimeters per second.

An SVE system using well MW-1, MW-2, and MW-5 began operation on September 19, 2000. On October 23, 2000, air sparging was initiated in wells MW-2 and MW-5 to help remove free-phase product. SVE operations continued from September 2000 through April 2001 but were terminated due to low hydrocarbon removal rates. A total of 16.5 pounds of hydrocarbons were removed during SVE operations.

In December 2006, five direct push soil borings (B-1 through B-5) were advanced in the area immediately outside the concrete vault that contained the former USTs. TPHg and benzene were detected in grab groundwater samples from borings B-1 through B-5 at concentrations up to 72,000 ppb and 1,100 ppb, respectively. These results indicated that residual contamination remains in soil and groundwater surrounding the concrete vault. Nine soil vapor probes were installed at the site in January 2007. The maximum concentration of benzene detected in the soil vapor samples from the nine probes was 15 micrograms per cubic meter (µg/m3).

One additional soil vapor probe was installed within the center of the concrete vault on August 13, 2009. In addition, one soil boring (SB-6) was advanced within the concrete vault to confirm that the vault did not have a bottom. Soil vapor samples were collected from all 10 soil vapor probes on August 25, 2009. The maximum concentrations of TPHg and benzene detected in the soil vapor samples were 17,000 µg/m3 and 4.4 µg/m3, respectively.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: Case closure for this fuel leak site is granted for the current commercial land use and the existing buildings only. If a change in land use to any residential or other conservative land use scenario occurs at this site; Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH must also be notified if any construction or excavation activities take place or the building structure is otherwise modified. ACEH will re-evaluate the case upon receipt of approved development/construction plans. This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 6
List Enforcement Actions Taken: Notice of Violation issued on March 14, 1994; Second Notice of Violation issued on April 20, 1994; and Per-Enforcement Review Panel on August 16, 1994		
List Enforcement Actions Rescinded: Further wok approved to regain site compliance in ACEH correspondence dated June 20, 1996.		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

Elevated concentrations of petroleum hydrocarbons remain in place in the area immediately surrounding the concrete vault. Soil vapor sampling indicates that the residual contamination does not pose a risk for vapor intrusion to existing buildings or nearby residents. However, the residual contamination in the area of the concrete vault may present a potential risk for excavation or re-development of the site. Please see the site management requirements regarding construction or excavation activities or other modifications to the existing buildings.

The downgradient extent of the plume has not been confirmed by groundwater sampling. Installation of a monitoring well was proposed at a location downgradient (south) of the site but was not completed due to the presence of utilities at the proposed well location. However, a soil vapor probe (SG-9) was installed adjacent to the proposed location of the downgradient well. Two soil vapor samples collected from SG-9 did not contain petroleum hydrocarbons. The screen of the soil vapor probe was installed in close vertical proximity to the depth where groundwater is typically encountered at the site. The absence of petroleum hydrocarbons in the soil vapor samples appears to indicate that it is unlikely that significant groundwater contamination extends beyond the site boundary. Therefore, further investigation does not appear to be warranted.

No analyses are reported for EDB and EDC.

No data were reported from removal of the 100-gallon waste oil tank in 1995.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment under the current commercial land use developed as an automotive service facility based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case may be required if land uses changes to any residential or other conservative land use scenario; or construction or excavation activities take place or the building structure is otherwise modified. ACEH staff recommend closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: Jerry Wickham	Date: 08/18/10
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: Donna L. Drogos	Date: 08/18/10

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: 08/18/10	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 8/19/10	Date of Well Decommissioning Report: 01/11/11	
All Monitoring Wells Decommissioned: (Yes) No	Number Decommissioned: 16	Number Retained: Ø
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: Jerry Wickham		Date: 01/12/11

Attachments:
1. Site Vicinity Map (1 p)
2. Site Plan Groundwater Elevation Contour Map (2 pp)
3. Sampling Results Maps and Concentration Trends (9 pp)
4. Soil and Soil Vapor Analytical Data (5 pp)
5. Groundwater Analytical Data (6 pp)
6. Boring Logs (37 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

Wickham, Jerry, Env. Health

From: Cherie MCcaulou [cmccaulou@waterboards.ca.gov]
Sent: Thursday, August 19, 2010 11:25 AM
To: Wickham, Jerry, Env. Health
Subject: Re: RO0516 Hooshi 1499 MacArthur closure summary

Jerry - The RB has no objection to ACEH closing the Hooshi case at 1499 MacArthur.

Sincerely,

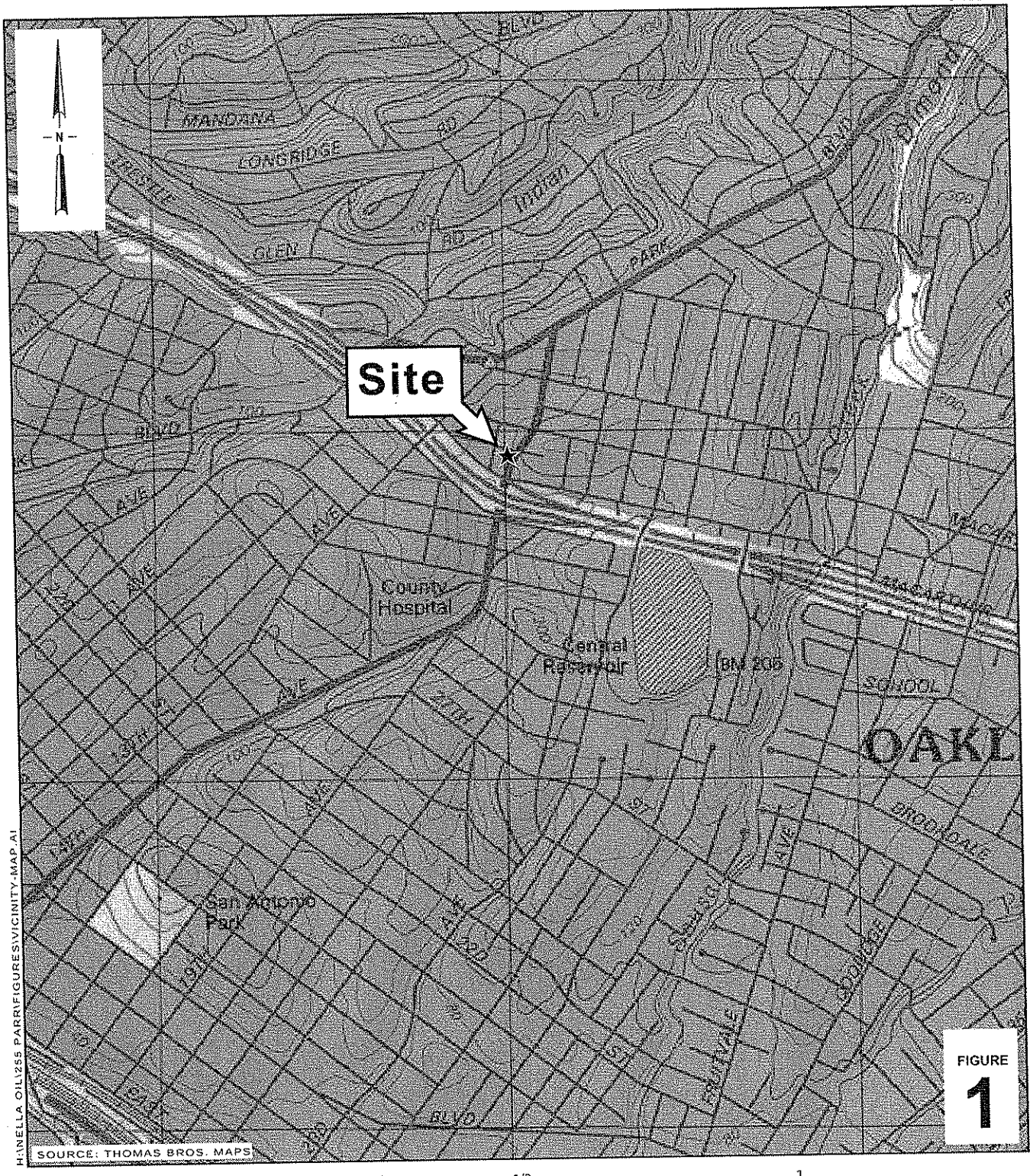
Cherie McCaulou
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board cmccaulou@waterboards.ca.gov
510-622-2342

>>> "Wickham, Jerry, Env. Health" <jerry.wickham@acgov.org> 08/18/10
>>> 6:23 PM >>>
Hi Cherie,

This message provides notification of the pending case closure for RO0516 Hooshi, 1499 MacArthur, Oakland.

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
510-567-6791
jerry.wickham@acgov.org

07/08/04



H:\NELLA OIL\255 PARR\FIGURES\VICINITY-MAP.AI

Hooshi's Auto Service

1499 MacArthur Boulevard

Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

ATTACHMENT 1

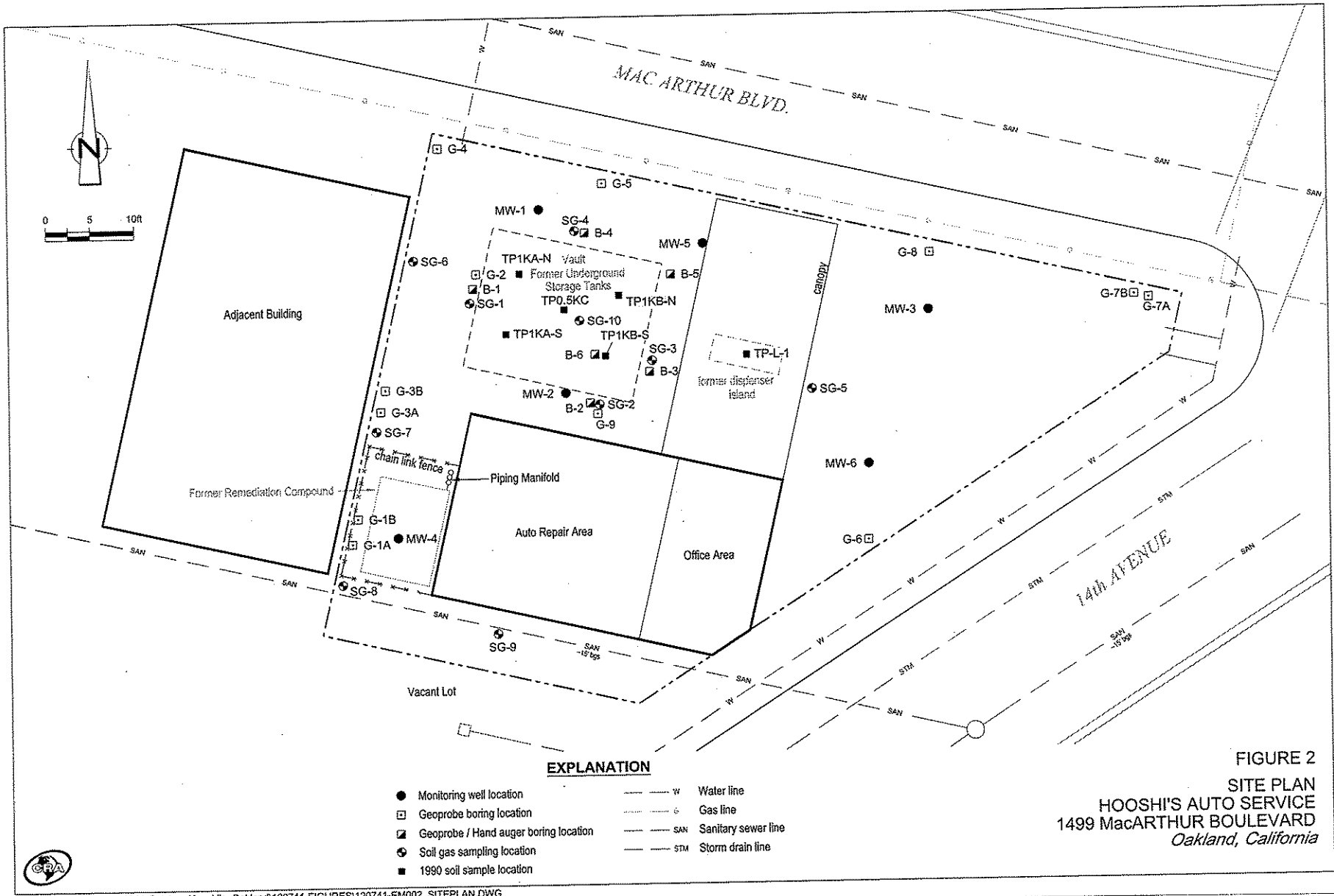


FIGURE 2

SITE PLAN
HOOSHI'S AUTO SERVICE
1499 MacARTHUR BOULEVARD
Oakland, California

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ATTACHMENT 2

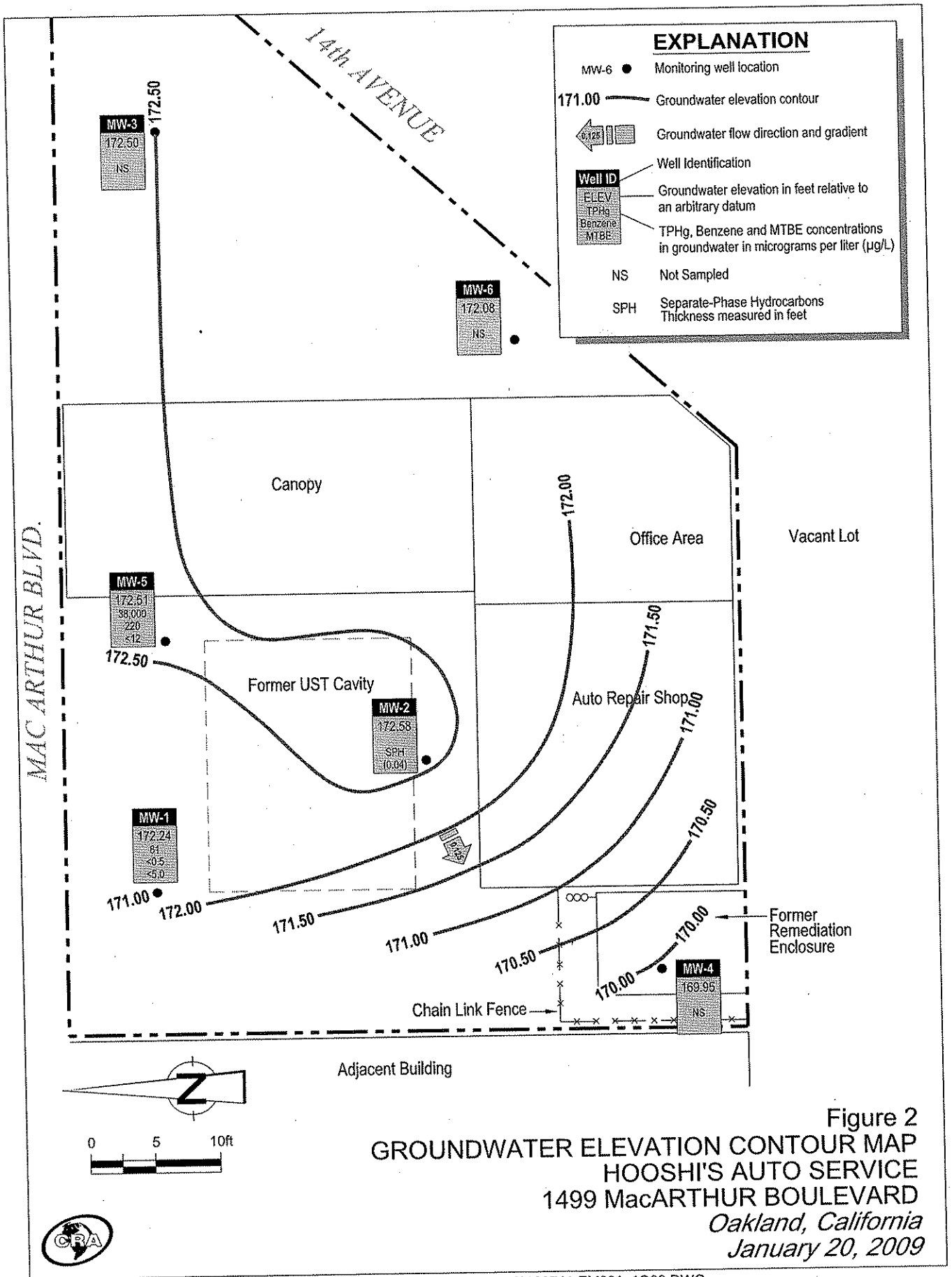
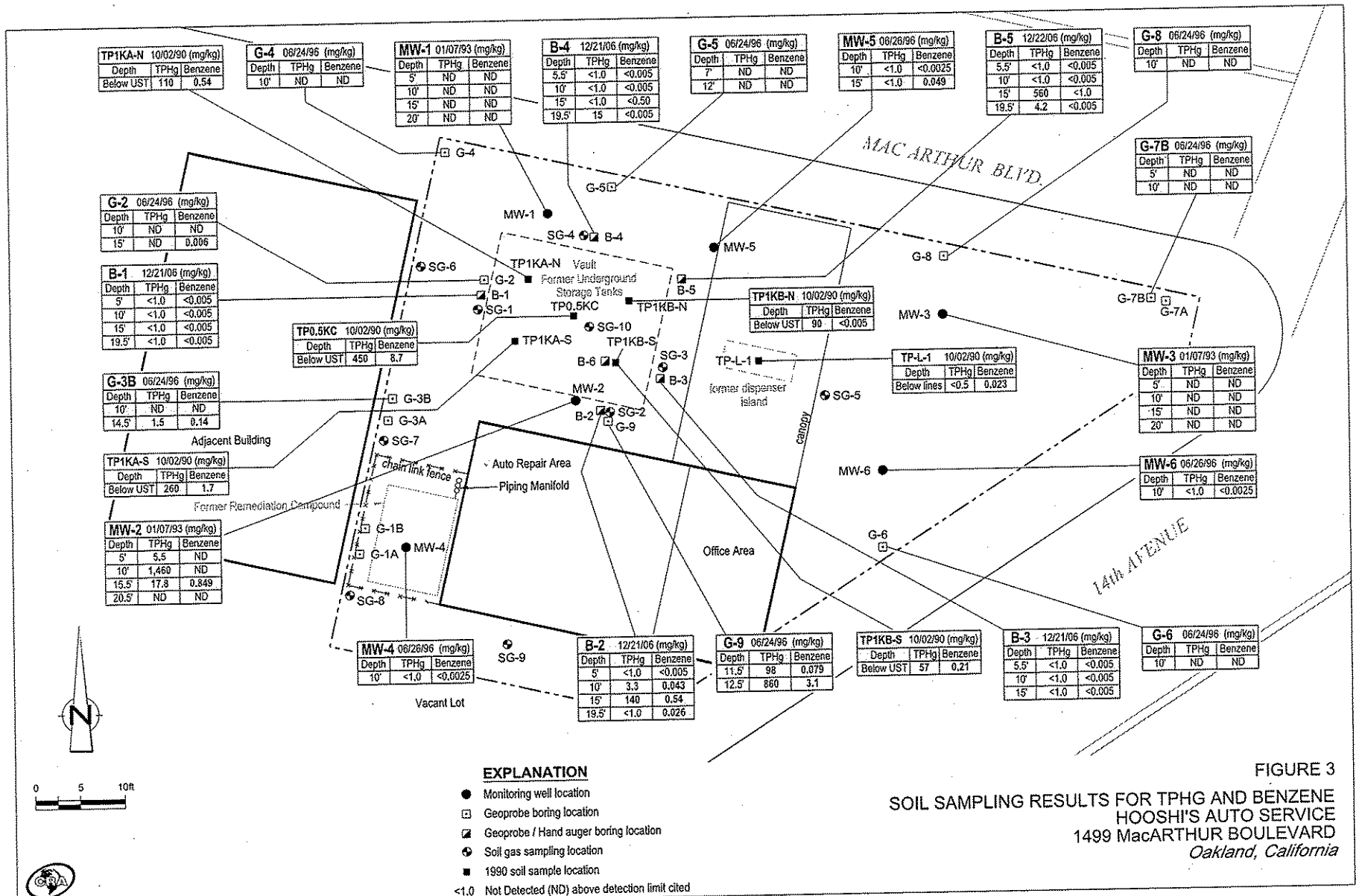


Figure 2
GROUNDWATER ELEVATION CONTOUR MAP
HOOSHI'S AUTO SERVICE
1499 MacARTHUR BOULEVARD
Oakland, California
January 20, 2009

I:\IR\6-chars\1207--\120741-Gatzke - Hooshi's, Oakland\120741-FIGURES\120741-EM001_1Q09.DWG



EXPLANATION

- Monitoring well location
- Geoprobe boring location
- Geoprobe / Hand auger boring location
- Soil gas sampling location
- 1990 soil sample location

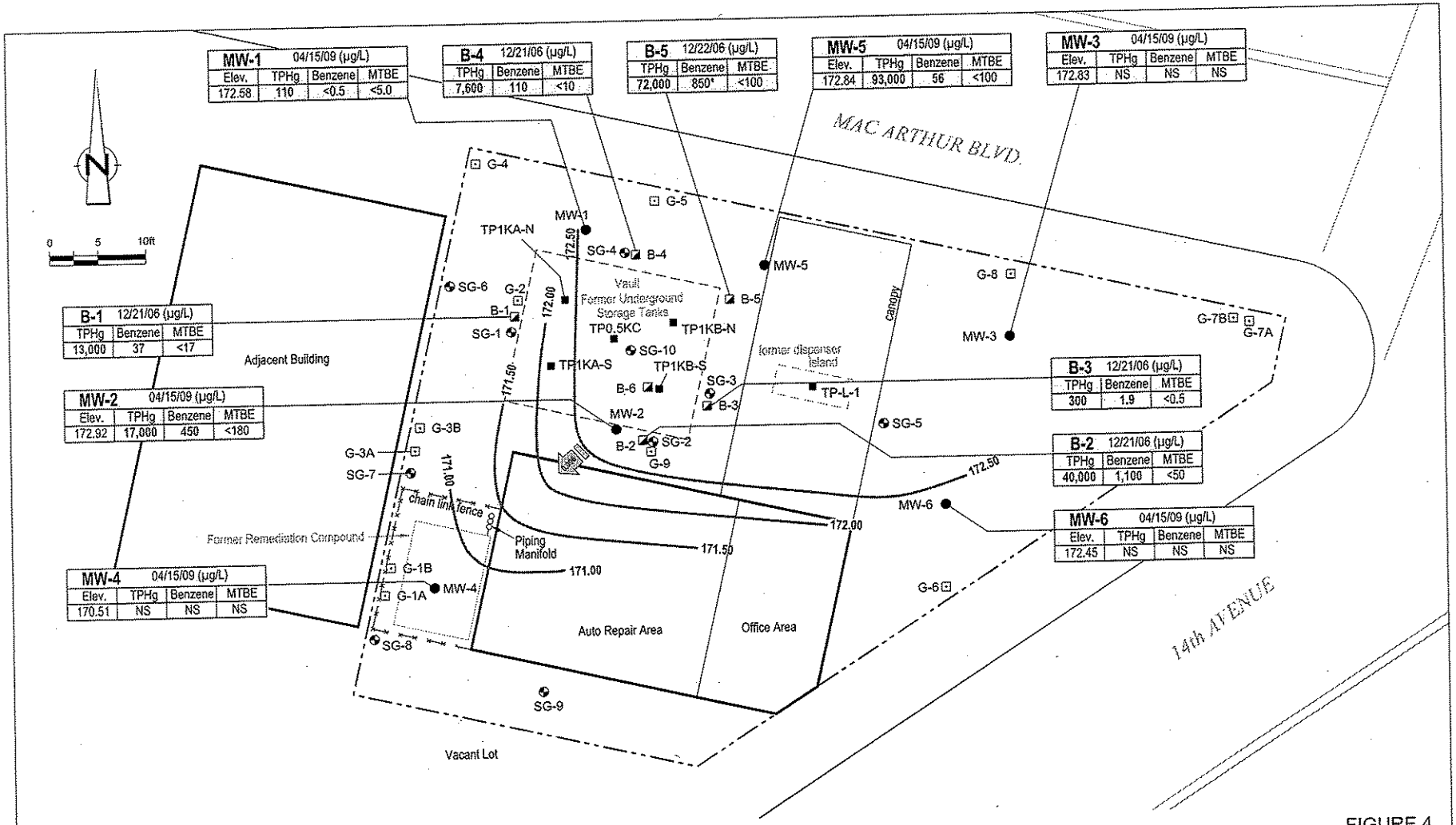
<1.0 Not Detected (ND) above detection limit cited

FIGURE 3

SOIL SAMPLING RESULTS FOR TPHG AND BENZENE
HOOSHI'S AUTO SERVICE
1499 MacARTHUR BOULEVARD
Oakland, California

I:\IR\6-chars\1207--\120741-Gatzke - Hooshi's, Oakland\120741-FIGURES\120741-EM003.DWG

ATTACHMENT 3



EXPLANATION

- Monitoring well location
- Geoprobe boring location
- Geoprobe / Hand auger boring location
- Soil gas sampling location
- 1990 soil sample location
- 171.00 — Groundwater elevation contour
- Groundwater flow direction and gradient
- NS — Not Sampled
- <0.5 — Not Detected (ND), above detection limit cited
- µg/L — Micrograms per Liter
- * — Benzene by EPA method 8260 B
- TPHg and Benzene by EPA method 8015 C / 8021 B
- MTBE by EPA method 8260 B

I:\IR\6-chars\1207--\120741-Gatzke - Hooshi's, Oakland\120741-FIGURES\120741-EM004.DWG

FIGURE 4

GROUNDWATER SAMPLING RESULTS
HOOSHI'S AUTO SERVICE
1499 MacARTHUR BOULEVARD
Oakland, California

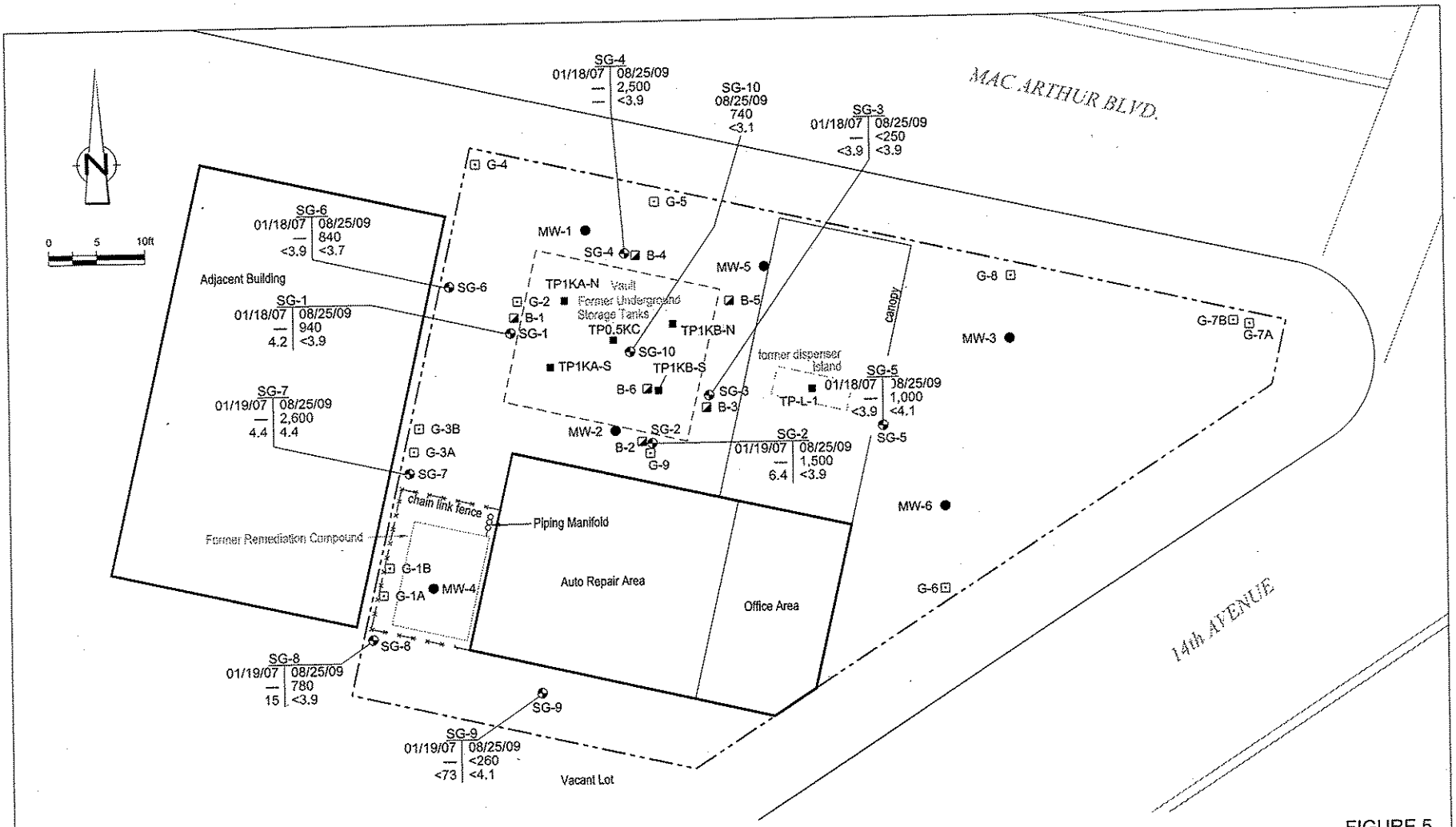


FIGURE 5

SOIL VAPOR SAMPLING RESULTS FOR TPHG AND BENZENE
HOOSHI'S AUTO SERVICE
1499 MacARTHUR BOULEVARD
Oakland, California

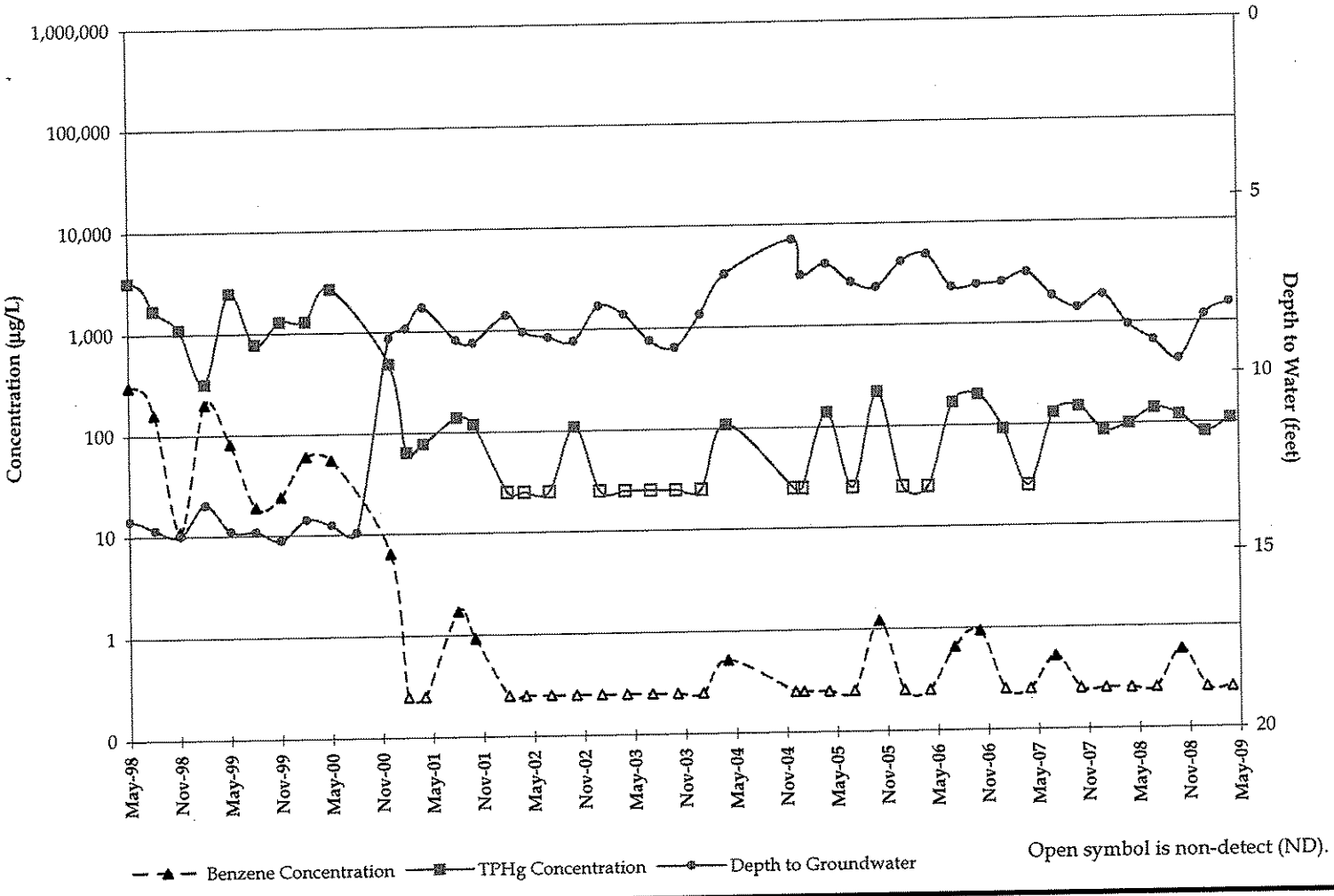
EXPLANATION

- Monitoring well location
- Geoprobe boring location
- Geoprobe / Hand auger boring location
- Soil gas sampling location
- 1990 soil sample location

Sample ID — Sample designation
Date — Date(s) of sample
TPHg — Soil vapor data for TPHg and Benzene
Benzene — in micrograms per cubic meter (µg/m³)
--- — Not Analyzed
<4.1 — Not Detected (ND), above detection limit cited

I:\IR\6-chars\1207-\120741-Gatzke - Hooshi's, Oakland\120741-FIGURES\120741-EM005.DWG

Monitoring Well MW-1
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



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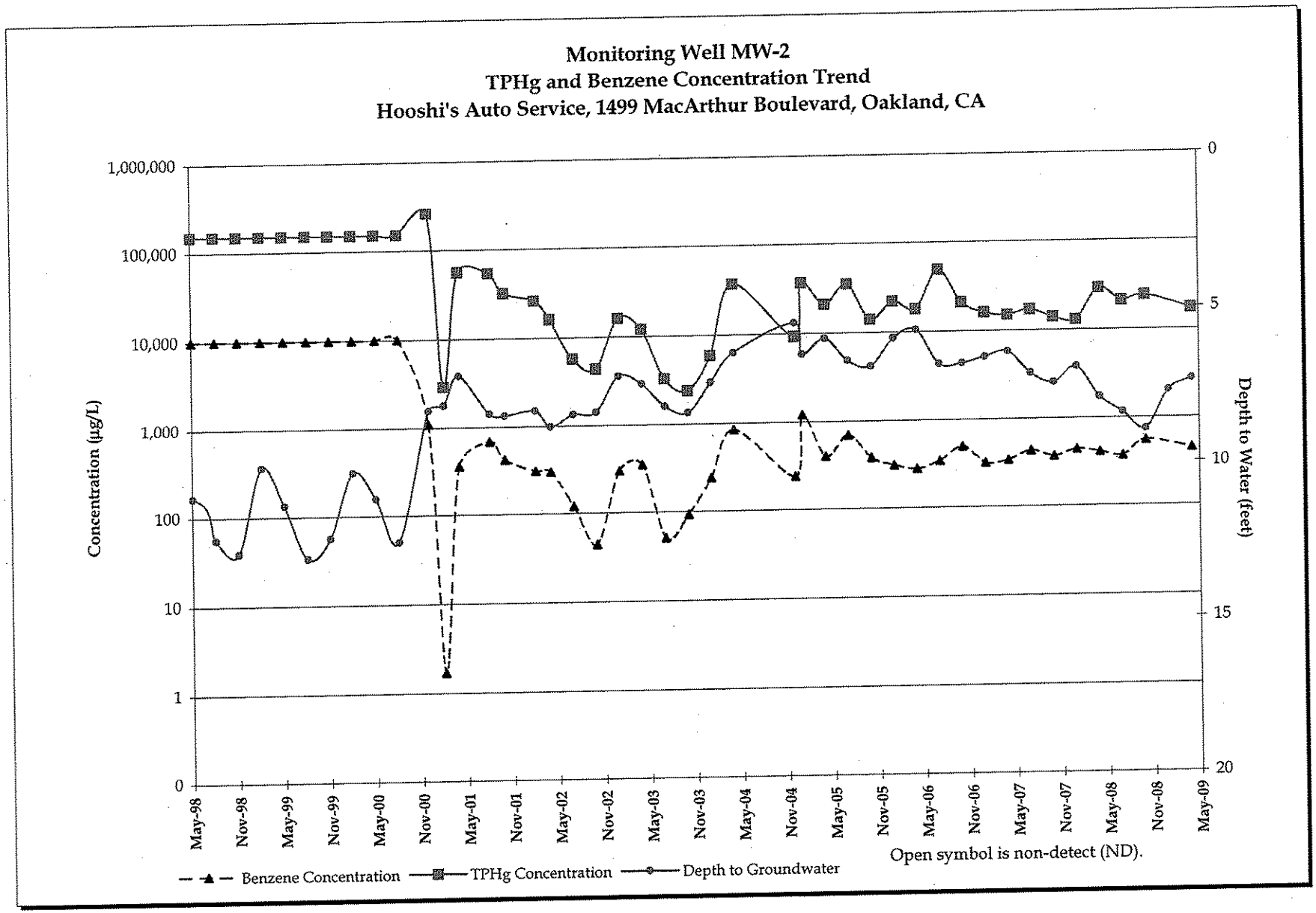
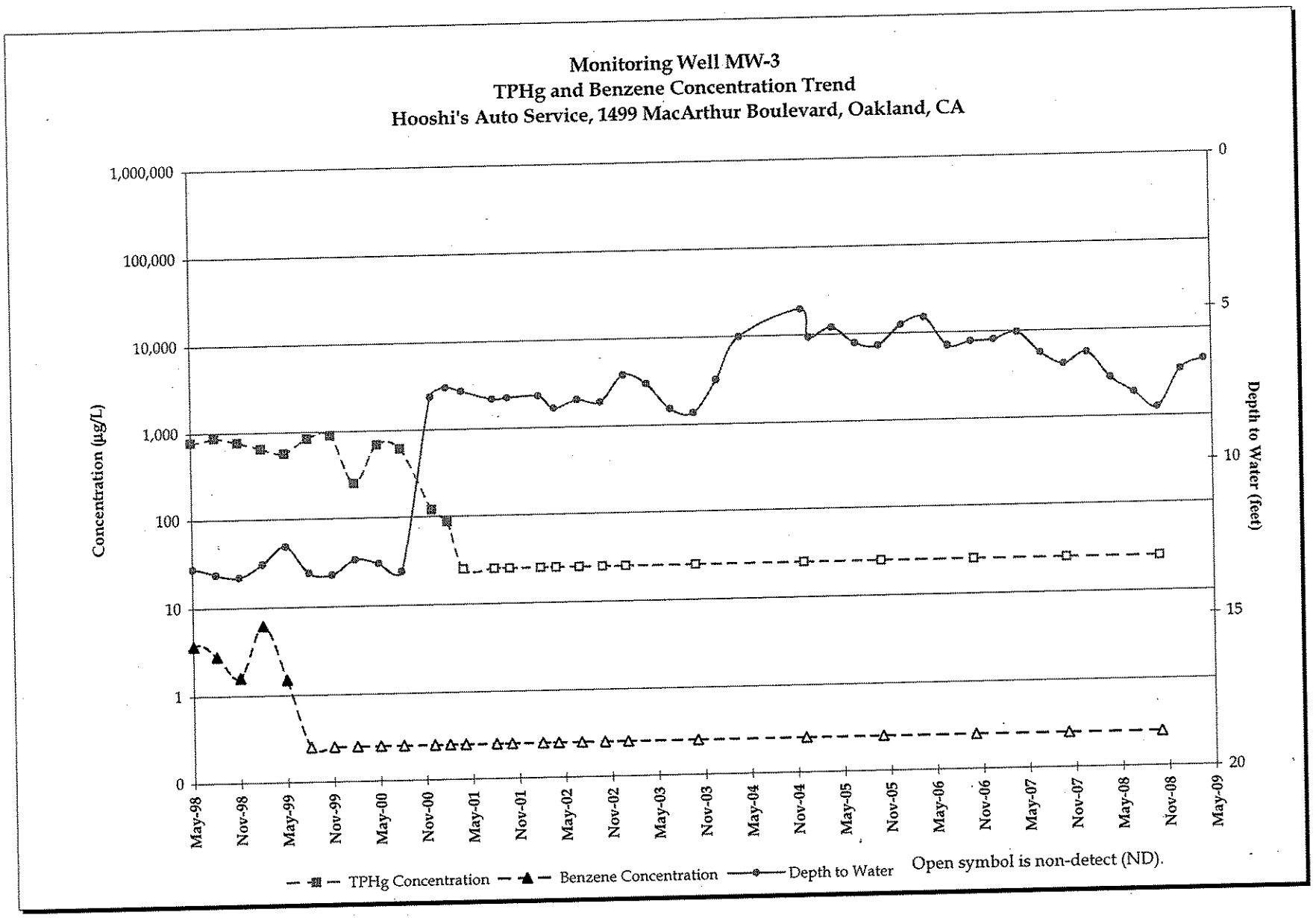
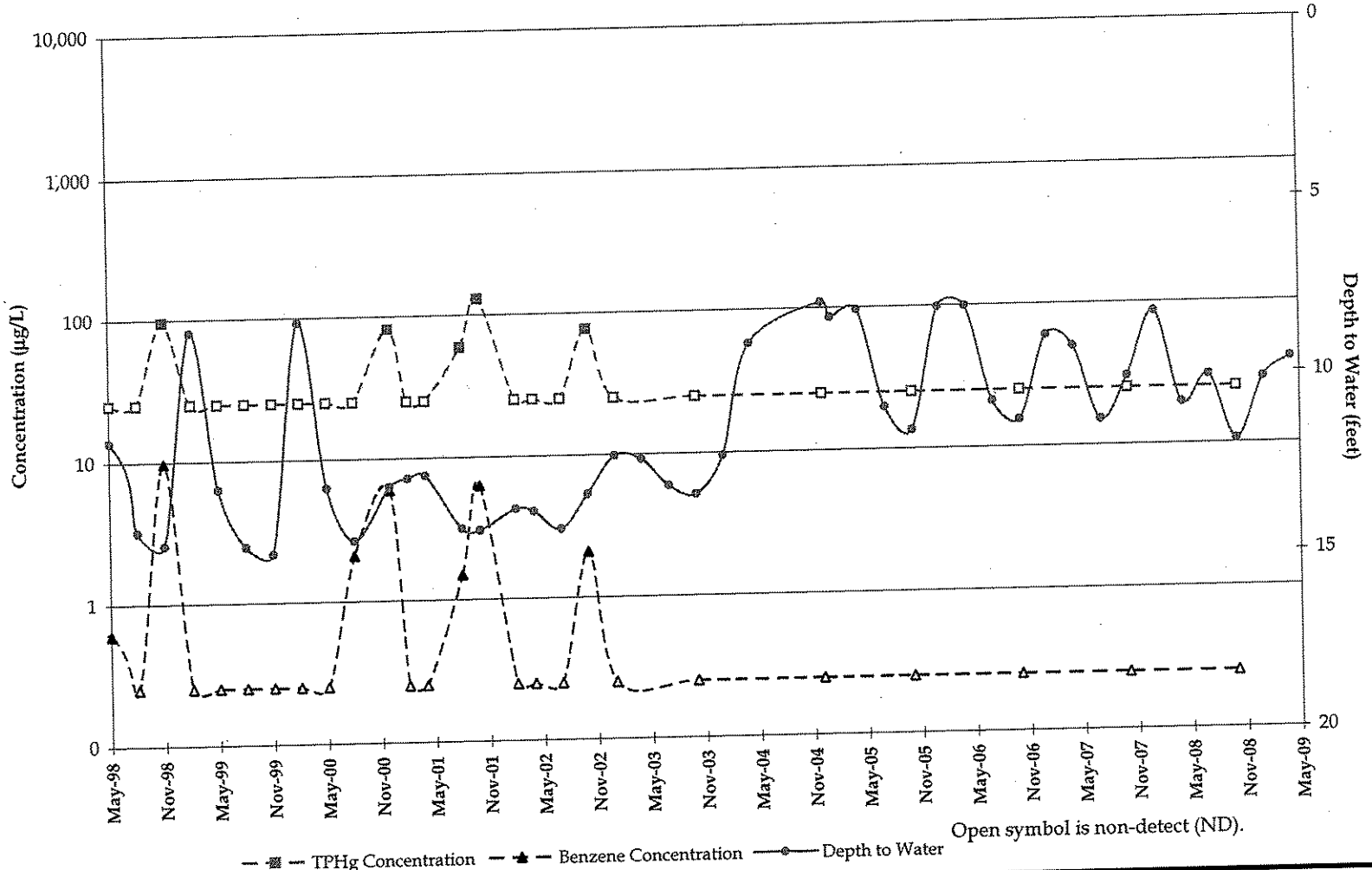
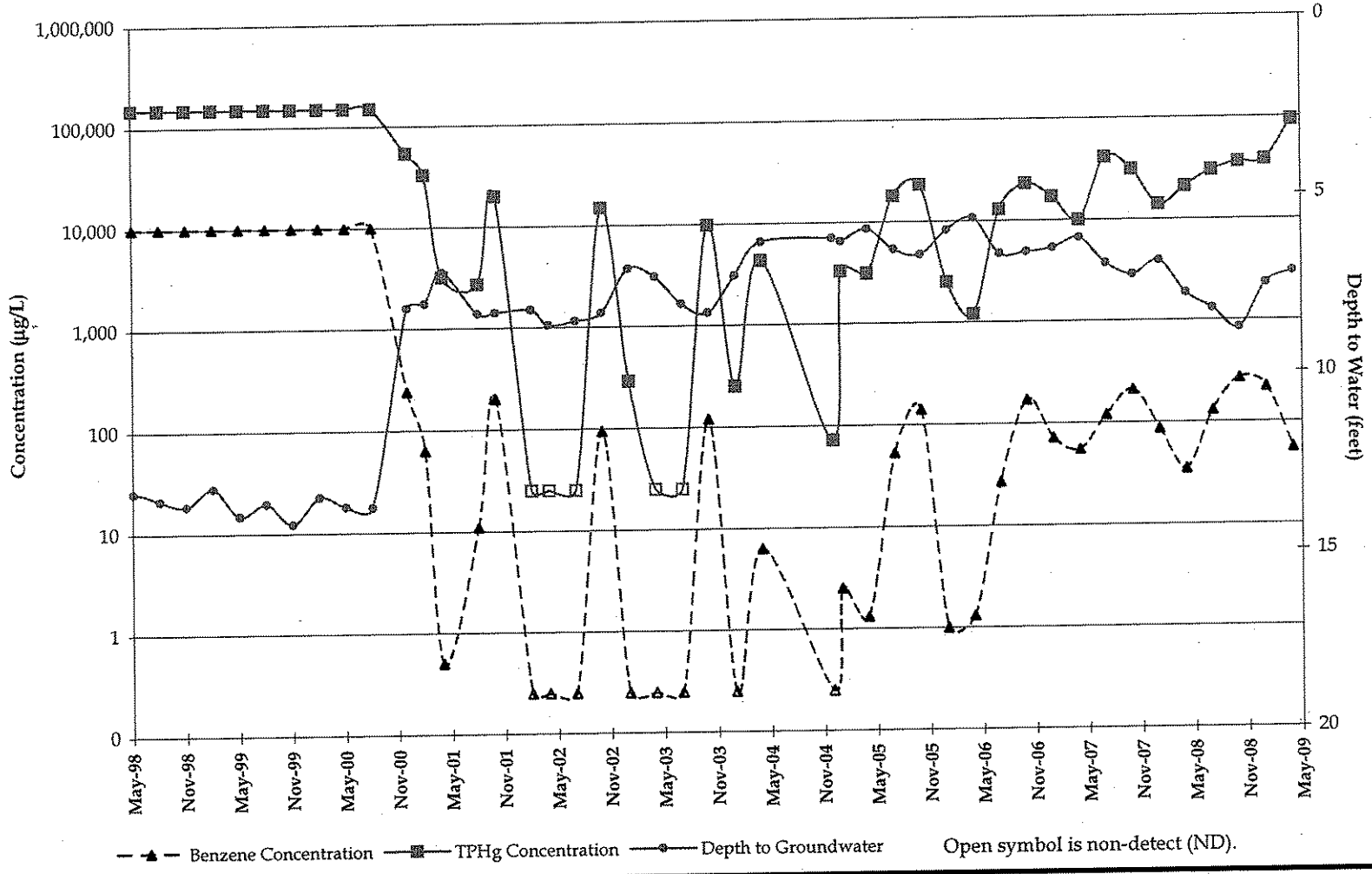

Monitoring Well MW-2
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA
Concentration (µg/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
Depth to Water (feet)
0
5
10
15
20
May-98
Nov-98
May-99
Nov-99
May-00
Nov-00
May-01
Nov-01
May-02
Nov-02
May-03
Nov-03
May-04
Nov-04
May-05
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Benzene Concentration
TPHg Concentration
Depth to Groundwater
Open symbol is non-detect (ND).


Monitoring Well MW-3
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA
Concentration (µg/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
Depth to Water (feet)
0
5
10
15
20
May-98
Nov-98
May-99
Nov-99
May-00
Nov-00
May-01
Nov-01
May-02
Nov-02
May-03
Nov-03
May-04
Nov-04
May-05
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
TPHg Concentration
Benzene Concentration
Depth to Water
Open symbol is non-detect (ND).

Monitoring Well MW-4
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



Monitoring Well MW-5
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA



Monitoring Well MW-6
TPHg and Benzene Concentration Trend
Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, CA

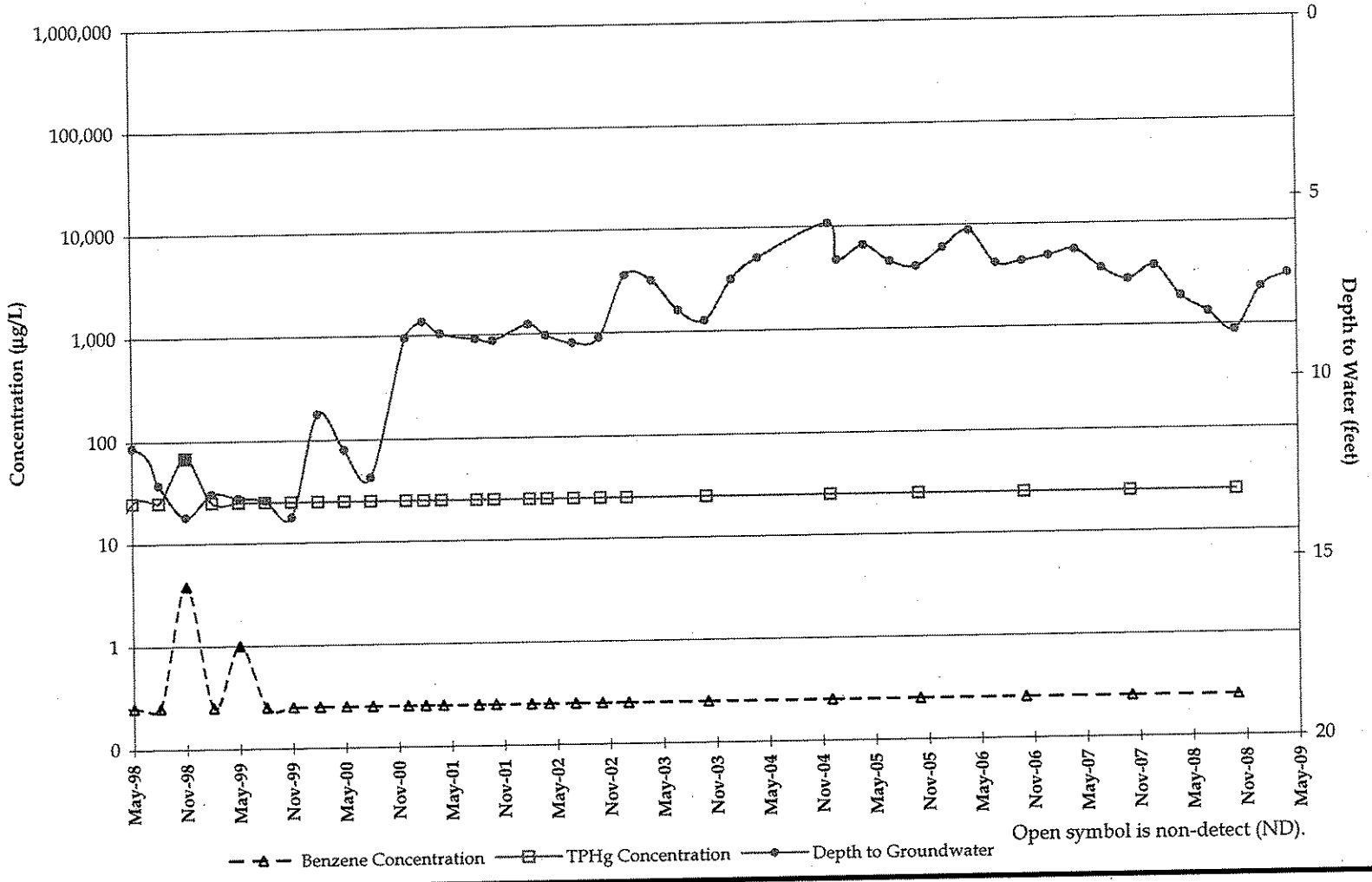


TABLE 3

SOIL ANALYTICAL DATA
HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Sample ID	Sample Depth (ft)	Sample Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	notes
			← (mg/kg) →						
B-1-5	5	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-1-10	10	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-1-15	15	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	**0.011**	ND<0.005	
B-1-19.5	19.5	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-2-5	5	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-2-10	10	12/21/06	**3.3**	**0.043**	ND<0.005	ND<0.005	ND<0.005	**0.01**	a
B-2-15	15	12/21/06	**140**	**0.54**	**0.74**	**0.83**	**6.1**	<0.20	a
B-2-19.5	19.5	12/21/06	ND<1.0	**0.026**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-3-5.5	5.5	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-3-10	10	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-3-15	15	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-4-5.5	5.5	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-4-10	10	12/21/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-4-15	15	12/21/06	ND<1.0	ND<0.050	**0.060**	**1.2**	**2.7**	ND<0.050	
B-4-19.5	19.5	12/21/06	**15**	ND<0.005	ND<0.005	**0.0057**	**0.0097**	ND<0.005	b,m
B-5-5.5	5.5	12/22/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-5-10	10	12/22/06	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	
B-5-15	15	12/22/06	**560**	ND<1.0	**3.2**	**9.6**	**69**	ND<1.0	a
B-5-19.5	19.5	12/22/06	**4.2**	ND<0.005	ND<0.005	**0.017**	**0.12**	ND<0.005	b,m
(MW-1) B1-5.0	5	01/07/93	ND	ND	ND	ND	ND	--	
10.0	10	01/07/93	ND	ND	ND	ND	ND	--	
15.0	15	01/07/93	ND	ND	ND	ND	ND	--	
20.0	20	01/07/93	ND	ND	ND	ND	ND	--	
(MW-2) B2-5.0	5	01/07/93	**5.5**	ND	ND	ND	ND	--	
10.0	10	01/07/93	**1,460**	ND	**6.44**	ND	**63.1**	--	
15.5	15.5	01/07/93	**17.8**	**0.849**	**0.125**	ND	**0.309**	--	
20.5	20.5	01/07/93	ND	ND	ND	ND	ND	--	
(MW-3) B3-5.0	5	01/07/93	ND	ND	ND	ND	ND	--	
10.0	10	01/07/93	ND	ND	ND	ND	ND	--	
15.0	15	01/07/93	ND	ND	ND	ND	ND	--	
20.0	20	01/07/93	ND	ND	ND	ND	ND	--	
MW-4-10	10	06/26/96	ND<1.0	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	--	
MW-5-10	10	06/26/96	ND<1.0	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	--	
MW-5-15	15	06/26/96	ND<1.0	**0.049**	**0.094**	**0.022**	**0.13**	--	
MW-6-10	10	06/26/96	ND<1.0	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	--	
G-2-10	10	06/24/96	ND	ND	ND	ND	ND	--	
G-2-15	15	06/24/96	ND	**0.006**	**0.009**	ND	**0.025**	--	
G-3B-10	10	06/24/96	ND	ND	ND	ND	ND	--	
G-3B-14.5	14.5	06/24/96	**1.5**	**0.14**	**0.012**	**0.052**	**0.18**	--	
G-4-10	10	06/24/96	ND	ND	ND	ND	ND	--	
G-5-7	7	06/24/96	ND	ND	ND	ND	ND	--	
G-5-12	12	06/24/96	ND	ND	ND	ND	ND	--	
G-6-10	10	06/24/96	ND	ND	ND	ND	ND	--	

ATTACHMENT 4

TABLE 3

SOIL ANALYTICAL DATA
HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Sample ID	Sample Depth (ft)	Sample Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	notes
			← (mg/kg) →						
G-7B-5	5	06/24/96	ND	ND	ND	ND	ND	--	
G-7B-10	10	06/24/96	ND	ND	ND	ND	ND	--	
G-8-10	10	06/24/96	ND	ND	ND	ND	ND	--	
G-9-11.5	11.5	06/24/96	98	0.079	0.064	1.3	4.2	--	
G-9-12.5	12.5	06/24/96	860	3.1	11	14	97	--	
TP1KA-N	see note	10/02/90	110	0.54	2.4	1.6	9.5	--	Below Reg. Gas UST Org. Lead = ND<0.08 mg/kg
TP1KA-S	see note	10/02/90	260	1.7	15	5.4	35	--	Below Reg. Gas UST Org. Lead = 0.15 mg/kg
TP0.5K-C	see note	10/02/90	450	8.7	57	12	82	--	Below Prem. Gas UST
TP1KB-N	see note	10/02/90	90	ND<0.005	ND<0.005	0.61	1.3	--	Below Unleaded Gas UST
TP1KB-S	see note	10/02/90	57	0.21	0.18	0.35	1.4	--	Below Unleaded Gas UST
TP-L-1	see note	10/02/90	ND<0.5	0.023	0.022	ND<0.005	0.048	--	Below Gas Dispenser

Notes:

TPHg = Total petroleum hydrocarbons as gasoline.

Benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260 for 2006 soil samples.

ND<n = Not Detected (ND), above detection limit cited.

-- = Not analyzed.

a = Laboratory Note: Unmodified or weakly modified gasoline is significant.

b = Laboratory Note: Heavier gasoline range compounds are significant (aged gasoline?).

m = No recognizable pattern.

TABLE 2

ANALYTICAL RESULTS
1499 MacArthur Boulevard
Oakland, California

SOIL BORING SAMPLES
January 7, 1993

SAMPLE ID	DEPTH (feet)	TPH-g (ppm)	BENZENE (ppm)	TOLUENE (ppm)	ETHYLBENZENE (ppm)	XYLENES (ppm)
MONITORING WELL #1						
B1 - 5.0	5.0	ND	ND	ND	ND	ND
B1 - 10.0	10.0	ND	ND	ND	ND	ND
B1 - 15.0	15.0	ND	ND	ND	ND	ND
B1 - 20.0	20.0	ND	ND	ND	ND	ND
MONITORING WELL #2						
B2 - 5.0	5.0	5.5	ND	ND	ND	ND
B2 - 10.0	10.0	1,460	ND	6.44	ND	63.1
B2 - 15.5	15.5	17.8	0.849	0.125	ND	0.309
B2 - 20.5	20.5	ND	ND	ND	ND	ND
MONITORING WELL #3						
B3 - 5.0	5.0	ND	ND	ND	ND	ND
B3 - 10.0	10.0	ND	ND	ND	ND	ND
B3 - 15.0	15.0	ND	ND	ND	ND	ND
B3 - 20.0	20.0	ND	ND	ND	ND	ND

Notes:

TPH-g = Total Petroleum Hydrocarbons as gasoline
ppm = parts-per-million
ND = Not Detected (consult laboratory analytical reports for specific limits)

Ref.: 92150SSR.T2

TABLE 4

SOIL VAPOR ANALYTICAL DATA
HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Sample ID	Date Sampled	Depth (ft)	TPHg (ug/m^3)	Benzene (ug/m^3)	Toluene (ug/m^3)	Ethylbenzene (ug/m^3)	m,p-Xylene (ug/m^3)	o-Xylene (ug/m^3)	Butane (ppbv)	Isobutane (ppbv)	Propane (ppbv)	Oxygen (%)	Methane (%)	Carbon Dioxide (%)
SG-1	1/18/2007	5	--	4.2	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	940	ND<3.9	14	6.5	39	14	ND	ND	ND	1.8	ND<0.00025	14
SG-2	1/19/2007	5	--	6.4	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	1,500	ND<3.9	ND<4.6	ND<5.2	ND<5.2	ND<5.2	ND	ND	ND	6.0	ND<0.00024	11
SG-3	1/18/2007	5	--	ND<3.9	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	ND<250	ND<3.9	ND<4.6	ND<5.4	ND<5.4	ND<5.4	ND	ND	ND	10	ND<0.00025	7.8
SG-4	1/18/2007	5	*Not sampled. Groundwater encountered in probe.*											
	8/25/2009	5	2,500	ND<3.9	ND<4.6	ND<5.4	ND<5.4	ND<5.4	ND	ND	ND	8.2	ND<0.00025	14
SG-5	1/18/2007	5	--	ND<3.9	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	1,000	ND<4.1	ND<4.9	ND<5.6	ND<5.6	ND<5.6	ND	ND	ND	1.4	0.0039	17
SG-6	1/18/2007	5	--	ND<3.9	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	840	ND<3.7	ND<4.4	ND<5.0	ND<5.0	ND<5.0	ND	ND	ND	14	ND<0.00023	6.2
SG-7	1/19/2007	5	--	4.4	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	2,600	4.4	ND<4.6	ND<5.2	7.5	ND<5.2	ND	ND	ND	18	0.00028	3.0
SG-8	1/19/2007	5	--	15	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	780	ND<3.9	7.8	ND<5.4	ND<5.4	ND<5.4	ND	ND	ND	10	0.0008	5.9
SG-9	1/19/2007	5	--	ND<73	--	--	--	--	--	--	--	--	--	--
	8/25/2009	5	ND<260	ND<4.1	ND<4.9	ND<5.6	ND<5.6	ND<5.6	ND	ND	ND	11	ND<0.00026	7.9
SG-10	8/25/2009	5	740	ND<3.1	41	ND<4.3	8.8	ND<4.3	ND	ND	ND	19	ND<0.00020	2.1
Duplicate Samples														
SG-1-Dup (field)	1/18/2007	5	--	3.9	--	--	--	--	--	--	--	--	--	--
SG-2-Dup (field)	1/19/2007	5	--	6.5	--	--	--	--	--	--	--	--	--	--
SG-2-Dup (lab.)	8/25/2009	5	--	--	--	--	--	--	--	--	--	6.0	ND<0.00024	10
SG-4-Dup (lab.)	1/19/2007	5	--	--	--	--	--	--	--	--	--	--	--	--
SG-4-Dup (lab.)	8/25/2009	5	2,600	ND<3.9	ND<4.6	ND<5.4	ND<5.4	ND<5.4	ND	ND	ND			
SG-7-Dup (field)	1/19/2007	5	--	ND<3.6	--	--	--	--	--	--	--	--	--	--
SG-5-Dup (field)	8/25/2009	5	8,800	--	--	--	--	--	--	--	--	--	--	--
SG-5-Dup (lab.)	8/25/2009	5	12,000	--	--	--	--	--	--	--	--	--	--	--
SG-5-Dup (lab.)	8/25/2009	5	17,000	--	--	--	--	--	--	--	--	--	--	--
SG-5-Dup (field)	8/25/2009	5	--	ND<4.1	10	ND<5.6	8.2	7.1	7.8	ND	ND	1.4	0.0040	17
SG-5-Dup (lab.)	8/25/2009	5	--	ND<4.1	ND<4.9	ND<5.6	ND<5.6	ND<5.6	ND	ND	ND	--	--	--

TABLE 4

SOIL VAPOR ANALYTICAL DATA
HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Sample ID	*Date Sampled*	*Depth (ft)*	*TPHg (ug/m^3)*	*Benzene (ug/m^3)*	*Toluene (ug/m^3)*	*Ethylbenzene (ug/m^3)*	*m,p-Xylene (ug/m^3)*	*o-Xylene (ug/m^3)*	*Butane (ppbv)*	*Isobutane (ppbv)*	*Propane (ppbv)*	*Oxygen (%)*	*Methane (%)*	*Carbon Dioxide (%)*

Abbreviations and Analyses:

ND<n = Not dectected (ND) above laboratory detection limit, n.

ug/m^3 = Microgram per cubic meter.

% = Percent

ppbv = Parts ber billion by volume

ft = Measured in feet

TPHg by EPA Method TO-3

Benzene, Toluene, Ethylbenzene, m,p-Xylenes, & o-Xylenes by modified EPA Method TO-15.

BTEX, Butane, Isobutane, Propane by EPA Method Modified TO-15/TICs

Oxygen, Methane, Carbon Dioxide by ASTM D-1946

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
2006 Grab Groundwater Analytical Data											
B-1*	12/21/2006	--	--	--	13,000	37 / 28	32 / ND<17	380 / 520	1,100 / 1,300	ND<17	a,i
B-2*	12/21/2006	--	--	--	40,000	1,100 / 1,100	1,300 / 1,300	990 / 840	6,400 / 5,900	ND<50	a,i
B-3*	12/21/2006	--	--	--	300	1.9 / 3.2	1.0 / 0.98	0.76 / 1.4	0.62 / 1.2	ND<0.5	a,i
B-4*	12/21/2006	--	--	--	7,600	110 / 87	32 / 22	470 / 520	520 / 450	ND<10	a,i
B-5*	12/22/2006	--	--	--	72,000	-- / 850	-- / 3,100	-- / 2,800	-- / 16,000	ND<100	a,b
Monitoring Well Groundwater Analytical Data											
MW-1	1/4/1993	--	--	--	539	130	12	22	13	--	
181.00	4/22/1993	--	--	--	1,130	75	8.0	38	11	--	
	12/27/1994	--	--	--	770	22	6.6	14	21	--	
	6/27/1996	14.11	166.89	--	3,300	260	34	59	170	80	
	12/10/1996	13.71	167.29	--	1,500	84	11	22	32	34	
	5/8/1998	13.85	167.15	--	3,200	300	12	62	36	ND<120	a
	8/17/1998	14.11	166.89	--	1,700	160	18	32	27	39	a
	11/4/1998	14.28	166.72	--	1,100	11	4.3	3.6	6.5	ND<50	a
	2/17/1999	13.41	167.59	--	320	200	47	72	75	57	a
	5/27/1999	14.16	166.84	--	2,500	81	12	29	41	ND<80	a
	8/19/1999	14.18	166.82	--	780	19	ND<0.5	5.7	4.5	28	a
180.83	11/23/1999	14.43	166.40	--	1,300	24	0.64	1.8	3.3	ND<100	a
	2/17/2000	13.85	166.98	--	1,300	60	9.1	22	19	22/16	a,b
	5/9/2000	14.01	166.82	--	2,700	55	13	19	25	34/29	a
	8/15/2000	14.24	166.59	--	--	--	--	--	--	--	
	12/1/2000	8.75	172.08	--	480	6.4	5.9	1.1	3.9	18 (21)	a
180.63	2/8/2001	8.49	172.14	--	64	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1/5.6	a,c
	4/9/2001	8.71	171.92	--	--	--	--	--	--	--	
	4/24/2001	7.90	172.73	--	77	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.6/3.7	c
	8/6/2001	8.83	171.80	--	140	1.7	0.55	ND<0.5	0.63	5.8/4.0	a
	10/22/2001	8.91	171.72	--	120	0.92	ND<0.5	ND<0.5	0.59	11(10)	a
	2/1/2002	8.15	172.48	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	8.63	172.00	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	8.79	171.84	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	8.90	171.73	--	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	f
	1/10/2003	7.93	172.70	--	ND<50	ND<0.5	0.74	ND<0.5	ND<0.5	ND<5.0	
	4/21/2003	8.17	172.46	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/9/2003	8.92	171.71	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/7/2003	9.13	171.50	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	8.20	172.43	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/2/2004	7.09	173.54	--	110	0.52	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	12/29/2004	6.15	174.48	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	7.15	173.48	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	4/6/2005	6.84	173.79	--	140	ND<0.5	0.55	ND<0.5	0.70	ND<5.0	c
	7/28/2005	7.36	173.27	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/14/2005	7.51	173.12	--	220	1.2	ND<0.5	0.56	0.75	ND<5.0	a
	1/30/2006	6.80	173.83	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/11/2006	6.60	174.03	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/14/2006	7.53	173.10	--	170	0.65	0.60	ND<0.5	ND<0.5	ND<5.0	a
	10/13/2006	7.47	173.16	--	200	0.93	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	1/12/2007	7.40	173.23	--	92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c,i
	4/20/2007	7.14	173.49	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/30/2007	7.81	172.82	--	130	0.52	ND<0.5	ND<0.5	0.61	ND<10	a,c
	10/24/2007	8.15	172.48	--	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c
	1/15/2008	7.79	172.84	--	86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c
	4/17/2008	8.64	171.99	--	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c
	7/9/2008	9.09	171.54	--	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c
	10/28/2008	9.62	171.01	--	120	0.59	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
	1/20/2009	8.39	172.24	--	81	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c

ATTACHMENT 5

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
MW-2	1/4/1993	--	--	--	149,000	21,700	25,000	ND	7,760	--	
180.45	4/22/1993	--	--	--	136,300	9,900	15,870	15,300	2,190	--	
	12/27/1994	--	--	--	94,000	11,000	18,000	2,700	16,000	--	
	6/27/1996	12.61	168.64	1.00	--	--	--	--	--	--	
	12/10/1996	11.10	169.55	0.25	--	--	--	--	--	--	
	5/8/1998	10.81	169.66	0.03	--	--	--	--	--	--	
	8/17/1998	12.16	168.31	0.02	--	--	--	--	--	--	
	11/4/1998	12.61	167.86	0.02	--	--	--	--	--	--	
	2/17/1999	9.82	170.66	0.04	--	--	--	--	--	--	
	5/27/1999	11.07	169.48	0.13	--	--	--	--	--	--	
	8/19/1999	12.79	167.68	0.02	--	--	--	--	--	--	
180.24	11/23/1999	12.14	168.20	0.12	--	--	--	--	--	--	
	2/17/2000	10.01	170.37	0.18	--	--	--	--	--	--	
	5/9/2000	10.88	169.38	0.03	--	--	--	--	--	--	
	8/15/2000	12.28	167.97	0.01	--	--	--	--	--	--	
	12/1/2000	8.03	172.21	Sheen Field	260,000	1,100	5,000	1,900	17,000	ND<100	a
	2/8/2001	7.86	172.38	Sheen Field	2,900	1.7	14	5.0	140	ND<5.0	c,d
	4/9/2001	7.95	172.29	Sheen Field	--	--	--	--	--	--	
	4/24/2001	6.90	173.34	Sheen Lab	56,000	360	980	1,000	4,700	ND<5.0	a,b
	8/6/2001	8.15	172.09	Sheen Field & Lab	54,000	680	1,900	1,500	7,800	ND<200/ND<10	a,b,j
	10/22/2001	8.22	172.02	Sheen Field & Lab	32,000	420	770	1,100	4,100	ND<250	a,b
	2/1/2002	8.07	172.17	--	26,000	310	490	920	1,600	ND<1,000	a
	4/19/2002	8.60	171.64	--	16,000	300	240	1,000	990	ND<100	a
	7/16/2002	8.21	172.03	--	5,700	120	18	340	15	ND<50	a
	10/3/2002	8.14	172.10	--	4,400	44	16	68	20	ND<25	a
	1/10/2003	6.98	173.26	Sheen Lab	16,000	300	320	580	830	ND<100	a,b
	4/21/2003	7.25	172.99	--	12,000	350	260	610	380	ND<50	a
	7/9/2003	7.99	172.25	--	3,300	51	7.4	47	2.8	ND<17	a
	10/7/2003	8.21	172.03	--	2,400	93	11	34	22	ND<50	a
	1/22/2004	7.24	173.00	--	5,900	240	130	350	200	ND<50	a
	4/2/2004	6.29	173.95	--	37,000	840	1,500	1,300	5,900	ND<500	a
	12/29/2004	5.37	174.87	--	9,300	240	230	330	880	ND<50	a
	1/27/2005	6.38	173.86	Sheen Field	37,000	1,200	1,400	1,300	5,200	<250	a
	4/6/2005	5.88	174.36	--	21,000	400	340	780	1,700	ND<100	a
	7/28/2005	6.61	173.63	--	35,000	690	1,200	1,200	5,200	ND<500	a
	10/14/2005	6.80	173.44	Sheen Field & Lab	14,000	380	120	780	1,200	ND<100	a, b
	1/30/2006	5.91	174.33	Sheen Field & Lab	22,000	310	140	1,300	2,800	ND<50	a,b,i
	4/11/2006	5.65	174.59	Sheen Field & Lab	18,000	280	170	780	1,400	ND<250	a,b,i
	7/14/2006	6.76	173.48	Sheen Field & Lab	49,000	340	140	1,600	4,800	ND<500	a,b
	10/13/2006	6.74	173.50	Sheen Field & Lab	21,000	490	73	600	1,100	ND<110	a,b,i
	1/12/2007	6.55	173.69	Sheen Field	16,000	320	170	600	2,100	ND<250	a,i
	4/20/2007	6.39	173.85	Sheen Field & Lab	15,000	340	160	420	1,700	ND<120	a,b
	7/30/2007	7.09	173.15	Sheen Field	17,000	430	170	740	2,100	ND<100	a
	10/24/2007	7.40	172.84	Sheen Field & Lab	14,000	370	40	240	490	ND<100 (8.3)	a,b
	1/15/2008	6.90	173.34	Sheen Field	13,000	440	180	510	1,700	ND<250	a,i
	4/17/2008	7.89	172.35	Sheen Field	29,000	410	200	830	2,700	ND<130	a
	7/9/2008	8.39	171.85	Sheen Field	21,000	370	170	760	2,200	ND<120	a
	10/28/2008	8.94	171.30	Sheen Field	24,000	550	140	810	1,600	ND<200	a
	1/20/2009	7.69	172.58	0.04	--	--	--	--	--	--	
MW-3	1/4/1993	--	--	--	1,610	772	14	11	ND	--	
179.94	4/22/1993	--	--	--	3,040	980	34	19	16	--	
	12/27/1994	--	--	--	2,600	180	9.0	7.2	13	--	
	6/27/1996	13.20	166.74	--	2,000	22	2.9	11	7.4	56	
	12/10/1996	13.13	166.81	--	970	ND<0.5	ND<0.5	ND<0.5	ND<0.5	24	
	5/8/1998	13.03	166.91	--	780	3.7	2.1	1.1	2.4	ND<32	a
	8/17/1998	13.22	166.72	--	870	2.8	ND<0.5	ND<0.5	3.7	ND<5.0	b,c
MW-3 cont'd	11/4/1998	13.31	166.63	--	770	1.6	4.4	2.0	6.9	ND<30	c

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
	2/17/1999	12.89	167.05	--	650	6.2	3.4	1.5	2.6	ND<5.0	b,c
	5/27/1999	12.32	167.62	--	570	1.5	1.2	0.72	1.1	ND<20	a
	8/19/1999	13.19	166.75	--	830	ND<0.5	1.9	ND<0.5	1.3	ND<20	c,d
179.55	11/23/1999	13.26	166.29	--	900	ND<0.5	1.8	0.56	1.4	ND<20	c,d
	2/17/2000	12.78	166.77	--	250	ND<0.5	1.5	ND<0.5	0.62	ND<5.0	d
	5/9/2000	12.92	166.63	--	690	ND<0.5	2.1	0.85	1.6	ND<5.0	a
	8/15/2000	13.19	166.36	--	610	ND<0.5	2.3	0.75	1.2	ND<5.0	c,d
	12/1/2000	7.50	172.05	--	120	ND<0.5	0.90	0.65	0.62	ND<5.0	c,d
	2/8/2001	7.20	172.35	--	87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	c,d
	4/9/2001	7.33	172.22	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	7.61	171.94	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/22/2001	7.58	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/1/2002	7.53	172.02	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5/8.5	
	4/19/2002	7.95	171.60	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.0/11	
	7/16/2002	7.68	171.87	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	20/30	
	10/3/2002	7.78	171.77	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/10/2003	6.91	172.64	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19/16	
	4/21/2003	7.21	172.34	--	--	--	--	--	--	--	
	7/9/2003	8.05	171.50	--	--	--	--	--	--	--	
	10/7/2003	8.19	171.36	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	7.13	172.42	--	--	--	--	--	--	--	
	4/2/2004	5.73	173.82	--	--	--	--	--	--	--	
	12/29/2004	4.88	174.67	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	5.80	173.75	--	--	--	--	--	--	--	
	4/6/2005	5.49	174.06	--	--	--	--	--	--	--	
	7/28/2005	6.02	173.53	--	--	--	--	--	--	--	
	10/14/2005	6.11	173.44	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/30/2006	5.45	174.10	--	--	--	--	--	--	--	
	4/11/2006	5.22	174.33	--	--	--	--	--	--	--	
	7/14/2006	6.15	173.40	--	--	--	--	--	--	--	
	10/13/2006	6.03	173.52	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/12/2007	5.98	173.57	--	--	--	--	--	--	--	
	4/20/2007	5.76	173.79	--	--	--	--	--	--	--	
	7/30/2007	6.44	173.11	--	--	--	--	--	--	--	
	10/24/2007	6.82	172.73	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/15/2008	6.45	173.10	--	--	--	--	--	--	--	
	4/17/2008	7.30	172.25	--	--	--	--	--	--	--	
	7/8/2008	7.79	171.76	--	--	--	--	--	--	--	
	10/28/2008	8.29	171.26	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	i
	1/20/2009	**7.05**	**172.50**	--	--	--	--	--	--	--	--
MW-4	6/27/1996	17.03	163.51	--	720	2	0.5	2.5	23	3.2	
180.54	12/10/1996	8.50	172.04	--	80	2.4	ND<0.5	ND<0.5	6.6	ND<2.0	
	5/8/1998	11.46	169.08	--	ND<50	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/17/1998	13.98	166.56	--	ND<50	ND<0.5	ND<0.5	ND<0.5	0.5	ND<5.0	
	11/4/1998	14.36	166.18	--	96	9.7	8.1	4.8	18	ND<5.0	a
	2/17/1999	8.39	172.15	--	ND<50	ND<0.5	ND<0.5	ND<0.5	0.5	ND<5.0	
	5/27/1999	12.80	167.74	--	ND<50	ND<0.5	1.0	ND<0.5	2.9	ND<5.0	
	8/19/1999	14.42	166.12	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
180.12	11/23/1999	14.63	165.49	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/17/2000	8.15	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/9/2000	12.81	167.31	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/15/2000	14.29	165.83	--	ND<50	2.1	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	12.80	167.32	--	81	6.0	8.4	1.0	5.6	ND<5.0	a
	2/8/2001	12.57	167.55	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/9/2001	12.50	167.62	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	14.00	166.12	--	59	1.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	a
MW-4 cont'd	10/22/2001	14.05	166.07	--	130	6.3	ND<0.5	0.88	ND<0.5	ND<5.0	a

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
	2/1/2002	13.47	166.65	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	13.55	166.57	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	14.05	166.07	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	13.09	167.03	--	77	2.1	0.51	ND<0.5	ND<0.5	ND<5.0	a
	1/10/2003	12.04	168.08	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	20/15	a
	4/21/2003	12.15	167.97	--	--	--	--	--	--	--	
	7/9/2003	12.90	167.22	--	--	--	--	--	--	--	
	10/7/2003	13.15	166.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/22/2004	12.09	168.03	--	--	--	--	--	--	--	
	4/2/2004	8.97	171.15	--	--	--	--	--	--	--	
	12/29/2004	7.85	172.27	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/27/2005	8.28	171.84	--	--	--	--	--	--	--	
	4/6/2005	8.07	172.05	--	--	--	--	--	--	--	
	7/28/2005	10.83	169.29	--	--	--	--	--	--	--	
	10/14/2005	11.49	168.63	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/30/2006	8.04	172.08	--	--	--	--	--	--	--	
	4/11/2006	8.03	172.09	--	--	--	--	--	--	--	
	7/14/2006	10.72	169.40	--	--	--	--	--	--	--	
	10/13/2006	11.25	168.87	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/12/2007	8.89	171.23	--	--	--	--	--	--	--	
	4/20/2007	9.22	170.90	--	--	--	--	--	--	--	
	7/30/2007	11.29	168.83	--	--	--	--	--	--	--	
	10/24/2007	10.08	170.04	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/15/2008	8.26	171.86	--	--	--	--	--	--	--	
	4/17/2008	10.84	169.28	--	--	--	--	--	--	--	
	7/9/2008	10.08	170.04	--	--	--	--	--	--	--	
	10/28/2008	11.90	168.22	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/20/2009	**10.17**	**169.95**	--	--	--	--	--	--	--	
MW-5	6/27/1996	13.62	166.74	0.16	--	--	--	--	--	--	
180.23	12/10/1996	13.26	167.77	1.00	--	--	--	--	--	--	
	5/8/1998	13.15	167.11	0.04	--	--	--	--	--	--	
	8/17/1998	13.36	166.89	0.02	--	--	--	--	--	--	
	11/4/1998	13.52	166.73	0.02	--	--	--	--	--	--	
	2/17/1999	13.02	167.23	0.02	--	--	--	--	--	--	
	5/27/1999	13.80	166.71	0.35	--	--	--	--	--	--	
	8/19/1999	13.45	166.86	0.10	--	--	--	--	--	--	
180.09	11/23/1999	14.03	166.35	0.36	--	--	--	--	--	--	
	2/17/2000	13.28	167.02	0.26	--	--	--	--	--	--	
	5/9/2000	13.55	166.77	0.29	--	--	--	--	--	--	
	8/15/2000	13.58	166.54	0.04	--	--	--	--	--	--	
	12/1/2000	8.00	172.09	0.00	54,000	240	1,700	870	1,000	ND<300	c,d
180.04	2/8/2001	7.88	172.16	Sheen [Lab]	33,000	63	420	120	4,500	ND<50	a,b
	4/9/2001	7.97	172.07	0.00	--	--	--	--	--	--	
	4/24/2001	7.00	173.04	0.00	3,200	ND<1.0	11	7	260	ND<5.0	c,d
	8/6/2001	8.17	171.87	--	2,700	11	40	21	240	ND<5.0	a
	10/22/2001	8.15	171.89	Sheen [Lab]	20,000	200	1,200	330	2,900	ND<100	a,b
	2/1/2002	8.07	171.97	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	8.51	171.53	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	8.40	171.64	--	ND<50	ND<0.5	ND<0.5	ND<0.5	1.7	ND<5.0	
	10/3/2002	8.18	171.86	--	15,000	94	830	460	2,200	ND<500	a
	1/10/2003	6.95	173.09	--	290	ND<0.5	1.8	ND<0.5	17	ND<5.0	a
	4/21/2003	7.18	172.86	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/9/2003	7.95	172.09	--	ND<50	ND<0.5	ND<0.5	ND<0.5	2.7	ND<5.0	
	10/7/2003	8.22	171.82	--	9,800	120	340	180	2,000	ND<50	a
	1/22/2004	7.18	172.86	--	250	ND<0.5	0.82	ND<0.5	29	ND<5.0	d
	4/2/2004	6.23	173.81	--	4,300	6.3	18	59	750	ND<25	a
MW-5 cont'd	12/29/2004	5.27	174.77	--	72	ND<0.5	0.78	ND<0.5	6.5	ND<5.0	d

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
	1/27/2005	6.25	173.79	--	3,300	<5.0	22	18	320	<50	a
	4/6/2005	5.90	174.14	Sheen Field	3,100	1.3	6.9	7.2	100	ND<10	c,d
	7/28/2005	6.50	173.54	--	18,000	53	230	130	2,100	ND<500	a
	10/14/2005	6.65	173.39	Sheen Field & Lab	23,000	140	370	240	2,100	ND<500	a, b
	1/30/2006	5.96	174.08	Sheen Field & Lab	2,500	1.0	8.7	ND<1.0	130	ND<10	b,c,d
	4/11/2006	5.63	174.41	Sheen Field	1,200	1.3	3.1	1.7	54	ND<5.0	a
	7/14/2006	6.65	173.39	Sheen Field & Lab	13,000	27	66	30	480	ND<50	a,b
	10/13/2006	6.60	173.44	Sheen Field & Lab	23,000	170	390	260	2,500	ND<250	a,b
	1/12/2007	6.50	173.54	Sheen Field & Lab	17,000	72	130	70	1,600	ND<250	a,b,i
	4/20/2007	6.22	173.82	Sheen Field & Lab	10,000	55	120	37	620	ND<50	a,b
	7/30/2007	6.95	173.09	Sheen Field	41,000	120	580	270	3,100	ND<250	a
	10/24/2007	7.27	172.77	Sheen Field & Lab	31,000	210	440	300	2,500	ND<200 (ND<5.0)	a,b,j
	1/15/2008	6.89	173.15	Sheen Field & Lab	14,000	87	120	39	1,400	ND<100	a,b
	4/17/2008	7.80	172.24	Sheen Field & Lab	21,000	35	150	71	1,100	ND<80	a,b
	7/9/2008	8.24	171.80	Sheen Field & Lab	30,000	130	600	290	4,000	ND<180	a,b
	10/28/2008	8.78	171.26	Sheen Field & Lab	36,000	270	780	530	4,600	ND<250	a,b
	1/20/2009	**7.53**	**172.51**	**Sheen** Field & Lab	**38,000**	**220**	**530**	**270**	**4,400**	**ND<500 (ND<12)**	**a,b,j**
MW-6	6/27/1996	18.55	161.48	--	ND	ND	ND	ND	ND	--	
180.03	12/10/1996	11.79	168.24	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	
	5/8/1998	11.62	168.41	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/17/1998	12.66	167.37	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/4/1998	13.56	166.47	--	68	3.8	3.7	2.8	11	ND<5.0	a
	2/17/1999	12.91	167.12	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/27/1999	13.03	167.00	--	ND<50	1.0	1.7	0.82	4.9	ND<5.0	
	8/19/1999	13.10	166.93	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
179.63	11/23/1999	13.58	166.05	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/17/2000	10.72	168.91	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/9/2000	11.71	167.92	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/15/2000	12.49	167.14	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	8.64	170.99	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/8/2001	8.20	171.43	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/9/2001	8.53	171.10	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	8/6/2001	8.69	170.94	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/22/2001	8.75	170.88	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	2/1/2002	8.31	171.32	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	4/19/2002	8.62	171.01	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	7/16/2002	8.84	170.79	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/3/2002	8.71	170.92	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19 (16)	
	1/10/2003	6.99	172.64	--	--	--	--	--	--	--	
	4/21/2003	7.15	172.48	--	--	--	--	--	--	--	
	7/9/2003	7.98	171.65	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/7/2003	8.28	171.35	--	--	--	--	--	--	--	
	1/22/2004	7.15	172.48	--	--	--	--	--	--	--	
	4/2/2004	6.56	173.07	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/29/2004	5.63	174.00	--	--	--	--	--	--	--	
	1/27/2005	6.66	172.97	--	--	--	--	--	--	--	
	4/6/2005	6.25	173.38	--	--	--	--	--	--	--	
	7/28/2005	6.71	172.92	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/14/2005	6.86	172.77	--	--	--	--	--	--	--	
	1/30/2006	6.35	173.28	--	--	--	--	--	--	--	
	4/11/2006	5.89	173.74	--	--	--	--	--	--	--	
	7/14/2006	6.80	172.83	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	10/13/2006	6.75	172.88	--	--	--	--	--	--	--	
	1/12/2007	6.61	173.02	--	--	--	--	--	--	--	
	4/20/2007	6.45	173.18	--	--	--	--	--	--	--	
	7/30/2007	6.98	172.65	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
MW-6 cont'd	10/24/2007	7.30	172.33	--							

TABLE 2

GROUNDWATER ELEVATION AND ANALYTICAL DATA
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TOC Depth to Groundwater	Groundwater Elevation	SPH Thickness	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
TOC (ft*)		(ft)	(ft msl**)	(ft)	←			(µg/L)		→	
	1/15/2008	6.93	172.70	--	--	--	--	--	--	--	
	4/17/2008	7.78	171.85	--	--	--	--	--	--	--	
	7/9/2008	8.22	171.41	--	--	--	--	--	--	--	
	10/28/2008	8.73	170.90	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	1/20/2009	7.55	172.08	--	--	--	--	--	--	--	
Trip Blank	5/8/1998	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/4/1998	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	5/27/1999	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	11/23/1999	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
	12/1/2000	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
MCLs	--	--	--	--	NE	1	150	700	1,750	NE	

Abbreviations and Methods:

TOC = Top of casing elevation
ft = Measured in feet
ft msl = elevation in feet mean sea level.
SPH = Separate phase hydrocarbons
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C
Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B
MTBE = Methyl tertiary butyl ether by EPA Method SW8021B or SW8260B in parenthesis.
µg/L = Micrograms per liter
-- = Not sampled, not analyzed, not applicable, or no SPH measured or observed.
ND<0.5 = Not Detected (ND) above Detection Limit.
x.x/y.y = Result of EPA Method SW8021B / Result of EPA Method SW8260B
TOC Depth to Groundwater = Groundwater depth measured in feet below TOC
Sheen = A sheen was observed on the water's surface.
Field = Observed in the field
Lab = Observed in analytical laboratory

Analytical Laboratory Notes:

a - Unmodified or weakly modified gasoline is significant.
b - Lighter than water immiscible sheen is present.
c - No recognizable pattern on laboratory chromatogram.
d - Heavier gasoline range compounds are significant (aged gasoline?).
f - One to a few isolated non-target peaks present on laboratory chromatogram.
i- Liquid sample contains greater than ~1 vol. % sediment
j - Sample diluted due to high organic content.

* = 2006 grab groundwater samples collected from 20 ft bgs.
** = Calculated groundwater elevation corrected for SPH by the relation: Groundwater Elevation = Well Elevation - Depth to Water + (0.8xSPH thickness (ft))
*** = Due to the air sparge system running during sampling, samples collected on 4/9/01 were anomalous. Well was resampled on 4/24/01 with the air sparge system off.

Table 2
Summary of Groundwater Sampling Analytical Results
Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California
August 1996

(ppm)

G.W. Sample ID	Date of Sample	Depth to Groundwater (feet-bgs)	Ground-water Elv. (feet datum)	Free Product	Chemical Concentrations (mg/l)					
					TPH-G	Benzene	Toulene	Ethyle-benzene	Total Xylenes	MTBE
G-4-W	06/24/96	NA	NA	NA	ND	ND	0.001	ND	0.0012	NA
G-7-W	06/24/96	NA	NA	NA	ND	ND	0.0013	ND	0.0015	NA
MW-1	06/27/96	14.11	166.89	Not Present	3.3	0.260	0.034	0.059	0.170	0.080
MW-2	06/27/96	12.61	167.84	12"	NA	NA	NA	NA	NA	NA
MW-3	06/27/96	13.20	166.74	Not Present	2	0.022	0.0029	0.011	0.0074	0.056
MW-4	06/27/96	17.03	163.51	Not Present	0.72	0.002	0.0005	0.0025	0.023	0.0032
MW-5	06/27/96	13.62	166.61	2"	NA	NA	NA	NA	NA	NA
MW-6	07/10/96	18.55	161.48	Not Present	ND	ND	ND	ND	ND	NA

NOTES

feet bgs	feet below ground surface
feet datum	feet above arbitrary datum with assumed elevation of 10 ft.
TPH-G	total petroleum hydrocarbons quantified as Gasoline
mg/l	milligrams per liter
ND	not detected above laboratory method detection limit
NA	not analyzed or not available

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hydraulic push
BORING DIAMETER 2-Inch
LOGGED BY C. McClelland
REVIEWED BY M. Jonas
REMARKS West side of former tank cavity

BORING/WELL NAME B-1
DRILLING STARTED 21-Dec-06
DRILLING COMPLETED 21-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS NA
DEPTH TO WATER (First Encountered) 10.0 fbg (21-Dec-06)
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2-inches thick.	0.2	
0		B-1-5		5			**FILL: SAND with gravel:** Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; moderate estimated permeability. @ 5-feet: moist.	7.0	
0		B-1-10		10	ML		**Clayey SILT with sand:** Grey; moist; 25% clay, 60% silt, 15% sand; medium plasticity; low estimated permeability.	10.0	Portland Type I/II
					SM		**Silty SAND:** Light brown; wet; 20% silt, 80% fine grained sand; non-plastic; high estimated permeability.	12.0	
0		B-1-15		15	SC		**Clayey SAND with gravel:** Light brown; moist; 20% clay, 60% medium coarse to coarse grained sand, 20% gravel; low plasticity; medium estimated permeability. @ 15-feet: wet.		
0		B-1-19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) H:\GATZKE-1\GINT\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

ATTACHMENT 6

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BORING/WELL LOG

CLIENT NAME	Naomi Gatzke	**BORING/WELL NAME**	B-2
JOB/SITE NAME	Hooshi's Auto Service	**DRILLING STARTED**	21-Dec-06
LOCATION	1499 MacArthur Blvd. Oakland, CA	**DRILLING COMPLETED**	21-Dec-06
PROJECT NUMBER	129-0741	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push		
BORING DIAMETER	2-inch	**SCREENED INTERVALS**	NA
LOGGED BY	C. McClelland	**DEPTH TO WATER (First Encountered)**	12.0 fbg (21-Dec-06) ▽
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	South side of former tank cavity, garage entrance		

PID (ppm)	BLOW COUNTS	SAMPLE ID	DEPTH (fbg)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
					ASPHALT: 2-inches thick.	0.2
					FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; moderate estimated permeability.	
					@ 3-feet: moist.	
0		B-2-5	5	ML	**Clayey SILT :** Brown; moist; 30% clay, 60% silt, 10% sand; low plasticity; low estimated permeability.	5.0
					CLAY: Light brown; moist; 60% clay, 40% silt; high plasticity; low estimated permeability.	7.5
0		B-2-10	10	CL		
				GC	**Clayey GRAVEL :** Light brown; moist; 30% clay, 10% silt, 60% gravel; non-plastic; high estimated permeability. ▽	11.0
				CL	**CLAY:** Brown; wet; 80% clay, 20% silt; high plasticity; low estimated permeability.	12.5
					Clayey GRAVEL : Light brown; wet; 30% clay, 10% silt, 60% gravel; non-plastic; high estimated permeability.	13.0
0		B-2-15	15	GC	@ 16-feet: 40% clay, 60% gravel; low plasticity; medium estimated permeability	
				ML	**Sandy SILT :** Light brown to grey; moist; 10% clay, 70% silt, 20% sand; medium plasticity; low estimated permeability.	18.0
0		B-2-19.5	20			20.0

WELL DIAGRAM: Portland Type I/II

Bottom of Boring @ 20 fbg

WELL LOG (PID) H:\GATZKE-1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME	Naomi Gatzke	**BORING/WELL NAME**	B-3
JOB/SITE NAME	Hooshi's Auto Service	**DRILLING STARTED**	21-Dec-06
LOCATION	1499 MacArthur Blvd. Oakland, CA	**DRILLING COMPLETED**	21-Dec-06
PROJECT NUMBER	129-0741	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push		
BORING DIAMETER	2-inch	**SCREENED INTERVALS**	NA
LOGGED BY	C. McClelland	**DEPTH TO WATER (First Encountered)**	6.0 fbg (21-Dec-06) ▽
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	East side of former tank cavity near canopy		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2-inches thick.	0.2	
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; moderate estimated permeability.		
0		B-3-5.5		5			▽	6.0	
					ML		**SILT with sand:** Grey; wet; 10% clay, 60% silt, 30% sand; low plasticity; medium estimated permeability.		Portland Type I/II
0		B-3-10		10	SC		**Clayey SAND:** Light brown; moist; 40% clay, 60% sand; medium plasticity; low estimated permeability.	10.0	
					SM		**SAND with silt :** Light brown; wet; 20% silt, 80% sand; non-plastic; high estimated permeability.	12.0	
0		B-3-15		15	SC		**Clayey SAND with gravel:** Light brown to grey; moist; 20% clay, 60% sand, 20% gravel; low plasticity; high estimated permeability.	14.0	
								16.0	Bottom of Boring @ 16 fbg

WELL LOG (PID) H:\GATZKE~1\GINT\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/31/07

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BORING/WELL LOG

CLIENT NAME	Naomi Gatzke	**BORING/WELL NAME**	B-4
JOB/SITE NAME	Hooshi's Auto Service	**DRILLING STARTED**	21-Dec-06
LOCATION	1499 MacArthur Blvd. Oakland, CA	**DRILLING COMPLETED**	21-Dec-06
PROJECT NUMBER	129-0741	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push		
BORING DIAMETER	2-inch	**SCREENED INTERVALS**	NA
LOGGED BY	C. McClelland	**DEPTH TO WATER (First Encountered)**	5.0 fbg (21-Dec-06)
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA
REMARKS	North side of former tank cavity near driveway		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2 inches thick.	0.2	
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; high estimated permeability.		
							@ 2-feet: moist.		
							@ 4-feet: wet; 30% clay, 60% sand, 10% gravel; medium plasticity; moderate estimated permeability. ▽	5.0	
				5					
0		B-4-5.5			CL		**Sandy CLAY:** Light brown; moist; 60% clay, 40% fine grained sand; medium plasticity; low estimated permeability.		
								8.0	
							SAND with clay: Brown; damp; 40% clay, 60% sand; medium plasticity; low estimated permeability.		
0		B-4-10		10			@ 10-feet: Brown to red; damp; 20% clay, 60% sand, 20% gravel; low plasticity; high estimated permeability.		◄ Portland Type I/II
							@ 12-feet: Light brown; wet; 20% clay, 80% sand; non-plastic.		
					SC		@ 14-feet: Damp; 20% clay, 60% sand, 20% gravel; low plasticity.		
0		B-4-15		15			@ 16-feet: Wet; 20% clay, 75% sand, 5% gravel; non-plastic.		
							@ 18-feet: Light brown to grey; damp; 20% clay, 60% sand, 20% gravel; low plasticity.		
0		B-4-19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) H:\GATZKE~1\GINT\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hydraulic push
BORING DIAMETER 2-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS Northeast corner of former tank cavity near canopy

BORING/WELL NAME B-5
DRILLING STARTED 22-Dec-06
DRILLING COMPLETED 22-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS NA
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2 inches thick.	0.2	
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% fine sand, 20% gravel; low plasticity; low to moderate estimated permeability.	3.0	
					ML		**Clayey SILT with sand:** Light brown; soft; moist; 25% clay, 55% silt, 20% fine grained sand; medium plasticity; low estimated permeability.		
				5			@ 4.5-feet: Light brown; soft; moist; 15% clay, 65% silt, 20% sand; low plasticity; low estimated permeability.	6.0	
0		B-5-5.5					**Sandy CLAY :** Light grey; stiff; damp; 60% clay, 10% silt, 30% fine to medium grained sand; medium plasticity; low estimated permeability.		
					CL				
0		B-5-10		10					Portland Type I/II
								11.5	
							Clayey SAND with gravel: Green-grey; dense; damp; 20% clay, 55% fine to coarse grained sand, 35% fine gravel; low plasticity to non-plastic; moderate estimated permeability.		
					SC		@ 14-feet: Moist; 10% clay, 60% fine to coarse grained sand, 30% fine gravel; non-plastic; high estimated permeability.		
613		B-5-15		15					
								17.6	
					ML		**Clayey SILT with sand:** Dark brown-grey; wet to moist; 15% clay, 65% silt, 20% fine grained sand; low plasticity; low estimated permeability.	18.0	
					SC		**Clayey SAND with gravel:** Green-grey; moist; 10% clay, 60% fine to coarse grained sand, 30% fine gravel; non-plastic; high estimated permeability.		
15		B-5-19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING / WELL LOG

CLIENT NAME	Naomi Gatzke	BORING/WELL NAME	B-6
JOB/SITE NAME	Hooshi's Auto Service	DRILLING STARTED	13-Aug-09
LOCATION	1499 MacArthur Blvd. Oakland, CA	DRILLING COMPLETED	13-Aug-09
PROJECT NUMBER	120741	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Vapor Tech Services C-57 Lic. #916085	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2.5-inches	SCREENED INTERVALS	NA
LOGGED BY	B. Fong	DEPTH TO WATER (First Encountered)	NA
REVIEWED BY	M. Jonas, P.G.	DEPTH TO WATER (Static)	NA
REMARKS	In Vault and Location of Former USTs		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 4-inches thick	0.3	
							CONCRETE: 8-inches thick	1.0	
							FILL: Sandy SILT with Gravel: Moderate yellowish brown (10YR 5/4); moist; 55% silt, 35% fine to coarse grained sand, 10% gravel up to 1"; non-plastic; moderate estimated permeability.		
				5					
							Bottom of Vault @ 7'. No Concrete Bottom.	7.0	◄ Portland Type I/II
					ML		**Clayey Sandy SILT:** Light olive gray (5Y 5/2); moist; 20% clay, 55% silt, 25% fine grained sand; low plasticity; low estimated permeability.		
				10					
435					SW		**SAND with Silt:** Light olive gray (5Y 5/2); wet; 10% silt, 90% fine to coarse grained sand; non-plastic; high estimated permeability.	12.0	
								14.5	Bottom of Boring @ 14.5 fbg

WELL LOG (PID) I:\IR\6-CHARS\1207--\120741-1\12B0FE-1\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 9/24/09

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Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS West side of former tank cavity, adjacent to boring B-1

BORING/WELL NAME SG-1
DRILLING STARTED 20-Dec-06
DRILLING COMPLETED 20-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT: 2-inches thick	0.2
							FILL: SAND with gravel: Light brown; moist; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; moderate estimated permeability.	
				5			@ 3.5-feet: Brown; 75% silt, 25% sand; low estimated permeability.	5.5

WELL DIAGRAM

- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC

Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSH\ BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS South side of former tank cavity, adjacent to boring B-2

BORING/WELL NAME SG-2
DRILLING STARTED 22-Dec-06
DRILLING COMPLETED 22-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2-inches thick.	0.2	Concrete
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% gravel; low plasticity; moderate estimated permeability.		Portland Type I/II
									Hydrated Granular Bentonite 1.5-3.5 fbg
							@ 3-feet: moist.		1/4-inch Nyflow tubing
									Dry Granular Bentonite 3.5-4.5 fbg
				5	ML		**Clayey SILT :** Brown; moist; 30% clay, 60% silt, 10% sand; low plasticity; low estimated permeability.	5.0	Monterey Sand #2/12
								5.5	1"-diam., 0.010" Slotted Schedule 40 PVC
									Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINT\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS East side of former tank cavity, adjacent to boring B-3

BORING/WELL NAME SG-3
DRILLING STARTED 21-Dec-06
DRILLING COMPLETED 21-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT: 2-inches thick.	0.2
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% subrounded medium coarse gravel; low plasticity; high estimated permeability.	
				5				5.5

WELL DIAGRAM

- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC

Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS North side of former tank cavity, adjacent to boring B-4

BORING/WELL NAME SG-4
DRILLING STARTED 20-Dec-06
DRILLING COMPLETED 20-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT: 2-inches thick.	0.2
							FILL: SAND with gravel: Light brown; damp; 10% clay, 10% silt, 60% coarse to fine grained sand, 20% subrounded medium coarse gravel; low plasticity; high estimated permeability.	
				5	ML		**Sandy SILT:** Dark brown; moist; 10% clay, 70% silt, 20% fine grained sand; low plasticity; high estimated permeability.	3.5
								5.5

WELL DIAGRAM

- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC

Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

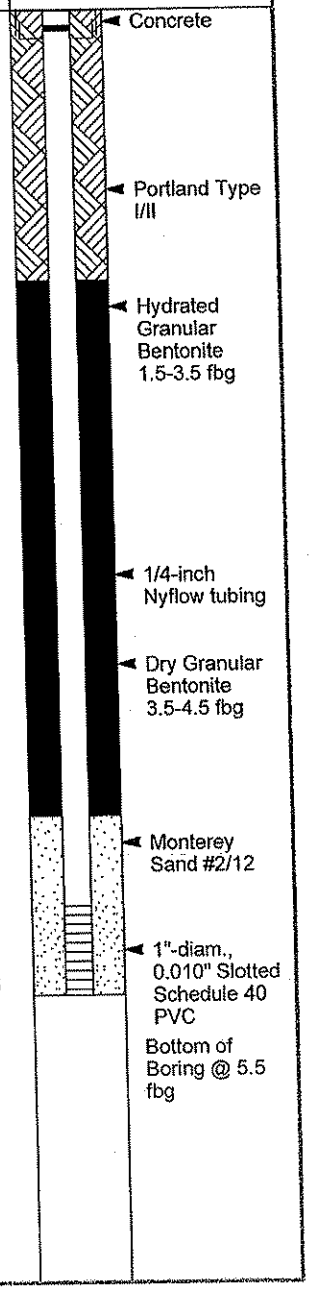
CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS East of canopy, adjacent to boring B-5

BORING/WELL NAME SG-5
DRILLING STARTED 20-Dec-06
DRILLING COMPLETED 20-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT: 2-inches thick.	0.2
							FILL: SAND with silt: Light brown; damp; 25% silt, 60% sand, 15% gravel; low plasticity; medium estimated permeability.	
							@ 1-foot: 5% clay, 35% silt, 60% fine to medium grained sand; low plasticity; low estimated permeability.	2.0
					SM		**Silty SAND with gravel:** Brown; damp; 10% silt, 60% fine to coarse grained sand, 30% fine gravel; non-plastic; high estimated permeability.	4.0
				5	ML		**Sandy SILT:** Dark grey; damp; 5% clay, 70% silt, 25% fine grained sand; low plasticity; low estimated permeability.	
							@ 5-feet: Dark brown; moist; 70% silt, 30% fine sand.	5.5

WELL DIAGRAM



WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS West of former tank cavity, along fenceline

BORING/WELL NAME SG-6
DRILLING STARTED 22-Dec-06
DRILLING COMPLETED 22-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT: 2-inches thick.	0.2
							FILL: Silty SAND with gravel: Yellow-orange; 30% silt, 55% sand, 15% gravel; non-plastic; medium estimated permeability.	
							@ 1-foot: Dark grey; 20% clay, 65% silt, 15% fine to medium grained sand; medium plasticity; low esteimated permeability.	
							@ 2-feet: Yellow-orange; non-plastic; moderate estimated permeability.	
								3.0
					ML		**Sandy SILT:** Yellow-orange; 5% clay, 70% silt, 25% fine grained sand; low plasticity; low estimated permeability.	
				5				5.5

WELL DIAGRAM:
- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/31/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS Northwest corner of former remediation compound

BORING/WELL NAME SG-7
DRILLING STARTED 20-Dec-06
DRILLING COMPLETED 20-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 2-inches thick.	0.2	Concrete
							FILL: Silty SAND with gravel: Yellow-orange; damp; 15% clay, 30% silt, 50% sand, 5% gravel; low plasticity; moderate estimated permeability.		Portland Type I/II
									Hydrated Granular Bentonite 1.5-3.5 fbg
							@ 2-feet: 25% silt, 60% fine to coarse grained sand, 15% fine gravel.		1/4-inch Nyflow tubing
									Dry Granular Bentonite 3.5-4.5 fbg
				5					Monterey Sand #2/12
								5.5	1"-diam., 0.010" Slotted Schedule 40 PVC
									Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS South side of repair shop off of 14th Avenue, below former remediation compound

BORING/WELL NAME SG-8
DRILLING STARTED 22-Dec-06
DRILLING COMPLETED 22-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Surface: topsoil and grass 6-inches thick.	
							Sandy SILT: Dark brown; damp; 5% clay, 70% silt, 25% sand; low plasticity; low estimated permeability.	0.5
					ML		@ 3.5-feet: Light brown; 10% clay, 65% silt, 25% sand.	
				5	CL		**Sandy CLAY with gravel:** Yellow-orange; moist; 50% clay, 10% silt, 25% sand, 15% gravel; low plasticity; low estimated permeability.	5.0
								5.5

WELL DIAGRAM

- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC

Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING/WELL LOG

CLIENT NAME Naomi Gatzke
JOB/SITE NAME Hooshi's Auto Service
LOCATION 1499 MacArthur Blvd. Oakland, CA
PROJECT NUMBER 129-0741
DRILLER Vironex
DRILLING METHOD Hand Auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS South side of repair shop off of 14th Avenue, below auto repair shop

BORING/WELL NAME SG-9
DRILLING STARTED 22-Dec-06
DRILLING COMPLETED 22-Dec-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5 to 5.5 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Surface: topsoil and grass 6-inches thick.	
					ML		**Sandy SILT:** Dark brown; damp; 5% clay, 70% silt, 25% sand; low plasticity; low estimated permeability.	0.5
				5			@ 3.5-feet: Light brown; moist; 10% clay, 65% silt, 25% sand.	
					CL		**Sandy CLAY with gravel:** Yellow-orange; damp; 50% clay, 10% silt, 25% sand, 15% gravel; low plasticity; low estimated permeability.	5.0 5.5

WELL DIAGRAM

- Concrete
- Portland Type I/II
- Hydrated Granular Bentonite 1.5-3.5 fbg
- 1/4-inch Nyflow tubing
- Dry Granular Bentonite 3.5-4.5 fbg
- Monterey Sand #2/12
- 1"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 5.5 fbg

WELL LOG (PID) H:\GATZKE~1\GINTHOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 1/26/07

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BORING / WELL LOG

CLIENT NAME	Naomi Gatzke	**BORING/WELL NAME**	SG-10 (Vapor Probe)
JOB/SITE NAME	Hooshi's Auto Service	**DRILLING STARTED**	13-Aug-09
LOCATION	1499 MacArthur Blvd. Oakland, CA	**DRILLING COMPLETED**	13-Aug-09
PROJECT NUMBER	120741	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 Lic. #916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	2.5-inches	**SCREENED INTERVALS**	4.9 to 5 fbg
LOGGED BY	B. Fong	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	M. Jonas, P.G.	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Location of Former USTs		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT: 4-inches thick	0.3	
							CONCRETE: 8-inches thick	1.0	
							FILL: Sandy SILT with Gravel: Moderate yellowish brown (10YR 5/4); moist; 55% silt, 35% fine to coarse grained sand, 10% gravel up to 1"; non-plastic; moderate estimated permeability.		Hydrated Bentonite Chips 0.5' to 3.5' 1/4" teflon sample tubing Dry Granular Bentonite 3.5' to 4.5' Monterey Sand #2/12 1/4" diam. screen, High Density Polyethylene
				5				5.5	Bottom of Boring @ 5.5 fbg

WELL LOG (PID) I:\R16-CHARS\1207--\120741--\112BOFE--1\HOOSHI BORING LOGS DEC 2006.GPJ DEFAULT.GDT 9/24/09

TABLE 1

MONITORING WELL CONSTRUCTION DETAILS
GATZKE / HOOSHI'S AUTO SERVICE
1499 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	*Former ID*	*Date Installed*	*Date Destroyed*	*Borehole diameter (in)*	*Depth of borehole (ft)*	*Casing diameter (in)*	*Screened interval (ft bgs)*	*Filter Pack (ft bgs)*	*Bentonite seal (ft bgs)*	*Cement (ft bgs)*	*TOC elevation (ft above msl)*
MW-1	B1	1/7/1993	--		20*	2					180.83
MW-2	B2	1/7/1993	--		20*	2					180.24
MW-3	B3	1/7/1993	--		20*	2					179.55
MW-4	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	180.12
MW-5	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	180.09
MW-6	--	6/27/1996	--		20	2	4.5 - 19	3.5 - 19	2.5 - 3.5	1 - 2.5	179.63

Abbreviations / Notes

ft = feet
in = inches
ft bgs = feet below grade surface
ft above msl = feet above mean sea level
TOC = top of casing
Elevations surveyed by Virgil Chavez Land Surveying.
* = Depth assume by downhole measurement.

PROJECT: Mac Arthur | PROJECT NO: 92150 | SHEET 1 OF 2

PROJECT LOCATION: 1499 MacArthur Blvd., Oakland | HOLE NUMBER: MW-1

DRILL METHOD: Hollow Stem Auger | DATE STARTED 1-7-93 TIME 825

BORING DIAMETER: 8" OD | DATE COMPLETED 1-7-93 TIME 1025

SAMPLER: 18" Modified Split Barrel: OD: 2.5" ID: 2.0" | BORING DEPTH: 20.0 GROUNDWATER DEPTH: 13.25

DRILLING COMPANY: Clearheart | LOGGED BY: Randall D. Smith

DRILLER: Tim | CHECKED BY: Peter Almendinger

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/ 6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
						0.5			Asphalt
		ND				1.0		CL	Sandy Clay (fill) light brown, light brown, stiff, damp, low est K
						1.5			
						2.0			
		ND				2.5		CL	Silty clay, dark grey, medium stiff, moist, high plasticity, low est K
						3.0			
						3.5			
		ND			3	4.0			
					4	4.5			
Grout / Blank			B1-5.0	X	5	5.0			
						5.5			Same as above
						6.0			
						6.5			
		ND				7.0		GC	Clayey Gravel, gray with red-yellow mottling, medium dense, damp, 20-30% fines, low est K
						7.5			
Bentonite						8.0			
						8.5			
		ND			5	9.0		CL	Sandy Clay, light grey, very stiff, moist, 15-20% fine to med. sand, low est K
					9	9.5			
Sand			B1-10.0	X	12	10.0			

PROJECT: Mac Arthur	PROJECT NO: 92150 SHEET 2 OF 2
PROJECT LOCATION: 1499 MacArthur Blvd., Oakland	HOLE NUMBER: MW-1
DRILL METHOD: Hollow Stem Auger	DATE STARTED 1-7-93 TIME 825
BORING DIAMETER: 8" OD	DATE COMPLETED 1-7-93 TIME 1025
SAMPLER: 18" Modified Split Barrel OD: 2.5" ID: 2.0"	BORING DEPTH: 20.0 GROUNDWATER DEPTH: 13.25
DRILLING COMPANY: Clearheart	LOGGED BY: Randall D. Smith
DRILLER: Tim	CHECKED BY: Peter Almendinger

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
						10.5		CL	Sandy Clay (Same as above)
		ND				11.0		SC	Clayey Sand, brown, medium dense, moist, 15-20% fines, low est K, occasional gravel up to ½"
						11.5			
						12.0			
						12.5			
						13.0		▽	First water at 13.25'
						13.5			Gravel % increases to 20-30% @ 13.25'
		ND			8	14.0		SP	Gravelly Sand, gray-brown, dense, wet, 20-30% fine to coarse gravel, mod est K
					9	14.5			
Sand			B1-15.0	X	12	15.0			
						15.5			
						16.0			
Sand						16.5		GW	Sandy Gravel, brown with reddish mottling, medium dense, wet, 30-40% fine to coarse sand, high est K
						17.0			
						17.5			
						18.0			
						18.5		SC	Clayey Sand, dark brown, stiff, wet, 25-35% fines, low est K
		ND			14	19.0			
Screen					21	19.5		CL	Clay, light brown, very stiff, highly plastic, moist, low est K
			B1-20.0	X	12	20.0		BOH	

PROJECT: Mac Arthur | PROJECT NO: 92150 | SHEET 1 OF 2

PROJECT LOCATION: 1499 MacArthur Blvd., Oakland | HOLE NUMBER: MW-2

DRILL METHOD: Hollow Stem Auger | DATE STARTED 1-7-93 TIME 1040

BORING DIAMETER: 8" OD | DATE COMPLETED 1-7-93 TIME 1255

SAMPLER: 18" Modified Split Barrel OD: 2.5" ID: 2.0" | BORING DEPTH: 20.5' GROUNDWATER DEPTH: 13.0

DRILLING COMPANY: Clearheart | LOGGED BY: RDS

DRILLER: Tim | CHECKED BY: Peter Almendinger

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
									Asphalt
		ND				0.5		CL	Sandy Clay, light brown, stiff, damp, low est K
						1.0			slight hydrocarbon odor
						1.5			
						2.0			
						2.5			
		ND				3.0			same as above
						3.5			
					3	4.0			
					6	4.5		CL	Silty Clay, dark grey, stiff, moist, high plasticity, low est K
		ND	B2-5.0	X	12	5.0			
						5.5			
Grout						6.0			
						6.5			same as above
						7.0			
						7.5			
Bentonite		20 ppm				8.0		GC	Clayey Gravel, grey, medium dense, moist, 20-30% fines, low est K, strong hydrocarbon odor
					8	8.5			
						9.0			
Blank					11	9.5		CL	Clay, light grey, stiff, moist, low est K
			B2-10.0	X	19	10.0			

ROJECT: MacArthur	PROJECT NO: 92150 SHEET 2 OF 2
PROJECT LOCATION:	HOLE NUMBER: MW-2
ILL METHOD:	DATE STARTED 1-7-93 TIME 1040
BORING DIAMETER:	DATE COMPLETED 1-7-93 TIME 1255
MPLER: OD: ID:	BORING DEPTH: 20.5' GROUNDWATER DEPTH: 13.0
ILLING COMPANY:	LOGGED BY: RDS
DRILLER:	CHECKED BY: Peter Almendinger

(See p. 1)

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/ 6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
								CL	Clay (same as above).
						10.5			
		38 ppm				11.0		SC	Clayey Sand, light brown, med. dense, moist, 20-30% fines, low est K
						11.5			noticeable hydrocarbon odor
						12.0			
						12.5			
						13.0	▽		First water at 13.0'
						13.5			
					5	14.0		SP	Gravelly Sand, grey, dense, wet, 20-30% fine to coarse gravel, mod est K
		ND			11	14.5			
			B2-15.0	X	15	15.0			
									(dotted line)
						15.5			
SAND						16.0		GW	Sandy Gravel, brown, med. dense, wet, 25-30% fine to coarse sand, 10-15% Franciscan chert, mod. est K
SAND						16.5			
						17.0			
		ND				17.5		SC	Clayey Sand, dark brown, dense, wet, 20-30% fines, low est K
						18.0			
						18.5			
SCREEN					11	19.0			
		ND			16	19.5		CL	Clay, light brown, v stiff, high plasticity, moist, low est K
			B2-20.0	X	18	20.0			

PROJECT: MacArthur	PROJECT NO: 92150 SHEET 1 OF 2
PROJECT LOCATION: 1499 MacArthur Blvd., Oakland	HOLE NUMBER: MW-3
DRILL METHOD: Hollow stem Auger	DATE STARTED 1-7-93 TIME 1345
BORING DIAMETER: 8" OD	DATE COMPLETED 1-7-93 TIME 1630
SAMPLER: 18" Modified Split Barrel OD: 2.5" ID: 2.0"	BORING DEPTH: 21.0' GROUNDWATER DEPTH: 13.25'
DRILLING COMPANY: Clearheart	LOGGED BY: RDS
DRILLER: Tim	CHECKED BY: Peter Almendinger

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/ 6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
									Asphalt
		ND				0.5		CL	Sandy Clay, brown, stiff, damp, 20-30% fine to med. sand, low est K
						1.0			
						1.5			
						2.0		SC	Clayey Sand, light brown, med. dense, damp, 15-25% fines, low est K
		ND				2.5			
						3.0			
						3.5			
					2	4.0			
		ND			3	4.5		CL	Silty Clay, dark grey, med. stiff, damp, low est K
Grout			B3-5.0	x	5	5.0			
						5.5			
						6.0			Same as above
		ND				6.5			
						7.0			
						7.5			
Bentonite						8.0		GC	Clayey Gravel, reddish w/yellow brown mottling, med. dense, damp, 20-25% fines, low est K
						8.5			
Blank					5	9.0		SC	Clayey Sand, brown, dense, moist, 20-30% fines, low est K
		ND			9	9.5			
Sand			B3-10.0	x	11	10.0			

PROJECT: MacArthur	PROJECT NO: 92150 SHEET 2 OF 2
PROJECT LOCATION:	HOLE NUMBER: MW-3
DRILL METHOD: See Sheet 1	DATE STARTED 1-7-93 TIME 1345
BORING DIAMETER:	DATE COMPLETED 1-7-93 TIME 1630
SAMPLER: OD: ID:	BORING DEPTH: GROUNDWATER DEPTH:
DRILLING COMPANY:	LOGGED BY: RDS
DRILLER:	CHECKED BY: Peter Almendinger

WELL CONSTR.	RECOVERY	PID (PPM)	SAMPLE NUMBER	SUBMITTED SAMPLE	BLOWS/ 6 inches	DEPTH	LITHOLOGY	USCS SYMBOL	SOIL DESCRIPTION / FIELD NOTES
						10.5			Clayey Sand (Same as above)
		ND				11.0			
						11.5			
						12.0			
						12.5			
						13.0			First water at 13.25'
						13.5		GW	Sandy Gravel, brown with red mottling, dense, wet, 20-30% fine to coarse sand, high est K
					10	14.0			
		ND			6	14.5			
			B3-15.0	X	14	15.0			
						15.5		SC	Clayey Sand, dark brown, dense, wet, 25-35% fines low est K
						16.0			
		ND				16.5			
						17.0			Same as above
						17.5			(dotted line)
						18.0			
						18.5		CL	Clay, light brown to reddish brown, very stiff, high plasticity damp, low est K
					7	19.0			
		ND			12	19.5			
			B3-20.0	X	19	20.0			

SAND

SAND

Screened

LOG OF BORING

BORING NUMBER : G-1A

PROJECT NAME: Hooshl Automotive

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 9:00 AM

COMPLETION DATE: 6/24/96 9:15 AM

DRILL MANUFACTURER/MODEL: Geoprobe

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
5	G-1A-5'	Geoprobe		100% / 95%	NA	SP	Gravelly SAND, SP, medium dense, moist, red-yellow (7.5 YR 6/8), no hydrocarbon odor or discoloration	
10							Total Depth = _7ft_ - hit concrete or cobbles, decided to move 4' northerly - see log G-1B - backfilled at end of day with grout and top 6" was resurfaced with asphalt.	
15								
20								

LOG OF BORING

BORING NUMBER : G-1B

SHEET _1_ OF _1_

PROJECT NAME: Hooshl Automotive

DRILL MANUFACTURER/MODEL: Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING METHOD : Geoprobe

TYPE OF BIT:

DRILLING CONTRACTOR: Kvilhaug

START DATE: 6/24/96 9:20 AM

BORE HOLE DIAMETER: 2"

COMPLETION DATE: 6/24/96 9:25 AM

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
5				100%		SP	Gravelly SAND, SP, medium dense, moist, red-yellow 7.5 YR 6/8, no hydrocarbon odor or discoloration, coarse grained - fill material	
				100%				
10							Total Depth = 7.5 ft - hit concrete or cobbles, backfilled at end of day with grout and top 6" was resurfaced with asphalt.	
15								
20								

LOG OF BORING

BORING NUMBER : G-2

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL: Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING METHOD : Geoprobe

DRILLING CONTRACTOR: Kvilhaug

START DATE: 6/24/96 9:30 AM

TYPE OF BIT:

COMPLETION DATE: 6/24/96 10:10 AM

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
				100%		SW	Gravelly SAND, SM, medium dense, dry red-yellow 7.5 YR 6/8, no hydrocarbon odor or discoloration - fill material	
5	G-2-5' 9:50 AM	geoprobe		100%		ML	Sandy Clayey SILT, ML, medium stiff, moist, olive 5Y 5/4 no hydrocarbon odor or discoloration	
0	G-2-10' 9:55 AM			100%		SP	Silty SAND, SP, medium dense, moist, olive-gray 5Y 4/2. hydrocarbon odor and discoloration present.	
				100%		CL	CLAY, CL, medium stiff, moist, dark gray, moderate plasticity	
0							Depth = 16' - backfilled at end of day with grout and top 6' was resurfaced with asphalt.	

LOG OF BORING

BORING NUMBER : G-3A

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING METHOD : Geoprobe

TYPE OF BIT:

DRILLING CONTRACTOR: Kvilhaug

START DATE: 6/24/96 10:20 AM

COMPLETION DATE: 6/24/96 10:35 AM

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
5		geoprobe		90% 100%		SP	Clayey, Gravelly, Silty SAND, SP medium dense, moist, red-brown 2.5YR 4/2 no hydrocarbon odor or discoloration - fill material	
10							Total depth = 6' - hit concrete, moved 4' easterly see boring 6-3B, backfilled at end of day with grout and top 6" was resurfaced with asphalt.	
15								
20								

LOG OF BORING

BORING NUMBER : G-3B

SHEET _1_ OF _1_

PROJECT NAME: Hooshl Automotive

DRILL MANUFACTURER/MODEL:

Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 10:40 AM

COMPLETION DATE: 6/24/96 11:10 AM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
5	G-3B-6' 10:44 AM	geoprobe		100%		SP/ML	Gravelly, Clayey SAND and SILT, SP/ML medium dense, moist, red-brown 2.5YR 4/2 no hydrocarbon odor or discoloration - fill material	
				100%				
10	G-3B-10' 10:54 AM			100%	1.8 ppm	CH	CLAY, CH, medium stiff, dark gray to black with red iron staining and no hydrocarbon odor or discoloration from 7-8', from 8-11' color changes to olive gray 5Y 4/2 with apparent hydrocarbon staining.	
						CL	Gravelly CLAY, CL, medium stiff, moist, moderate plasticity with green hydrocarbon discoloration	
15	G-3B-14.5 11:00 AM			100%	9 ppm	SC	Clayey SAND, SC, medium dense, moist, olive gray 5Y 4/2, moderate hydrocarbon odor	
20							Total Depth = 16' - backfilled at end of day with grout and top 6" was resurfaced with asphalt.	

LOG OF BORING

BORING NUMBER : G-4

PROJECT NAME: Hooshi Automotive

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 11:20

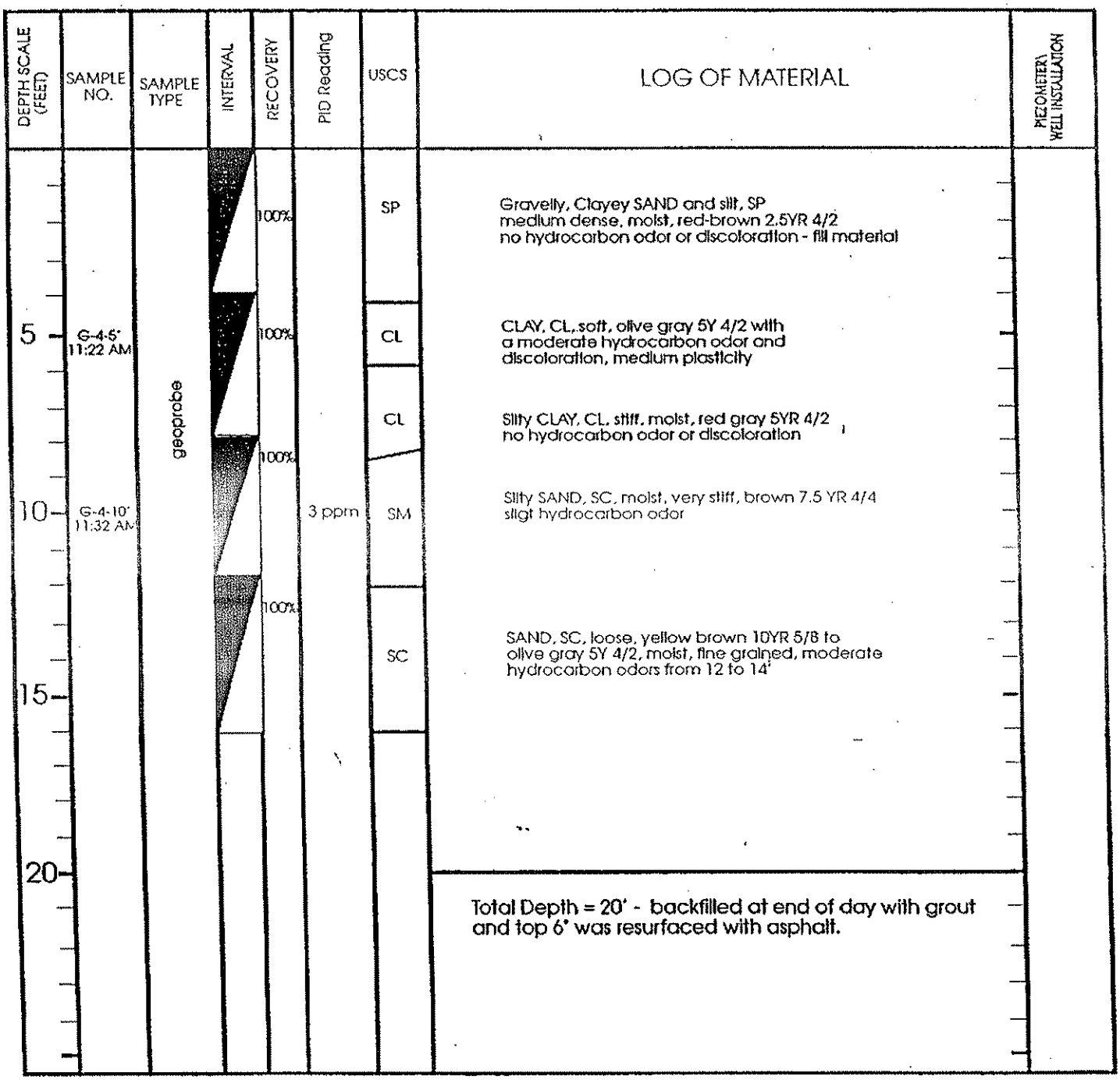
COMPLETION DATE: 6/24/96 11:50 AM

DRILL MANUFACTURER/MODEL:

Geoprobe

TYPE OF BIT:

BORE HOLE DIAMETER: 2"



LOG OF BORING

BORING NUMBER : G-5

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL: Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 11:55

COMPLETION DATE: 6/24/96 12:15 PM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER/ WELL INSTALLATION
5	G-5-7' 11:59 AM	geoprobe		100%		SP	Gravelly, Clayey, Silty, SAND, SP medium dense, moist, red-brown 2.5YR 4/2 no hydrocarbon odor or discoloration - fill material	
				100%		CH	CLAY, CH, medium stiff, brown gray 5Y 5/2 with a moderate hydrocarbon odor	
						CL	Silty CLAY, CL, stiff, olive gray 5Y 4/2, moist strong hydrocarbon odor and discoloration	
10	G-5-12' 12:12 AM			100%	1.2 ppm	SC	SAND, SC, loose, moist, olive brown 2.5YR 4/2, fine grained	
15								
20							Total Depth = 20' - backfilled at end of day with grout and top 6" was resurfaced with asphalt.	

LOG OF BORING

BORING NUMBER : G-6

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL: Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 1:00 PM

COMPLETION DATE: 6/24/96 1:30 PM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	PID Reading	USCS	LOG OF MATERIAL	PIEZOMETER/ WELL INSTALLATION
5	G-6-10' 1:27 PM	geoprobe		100%	2 ppm	SC	Gravelly, Silty, SAND, SM, medium dense, moist, red-brown 2.5YR 4/2, poorly graded, no hydrocarbon odor or discoloration - fill material	
				50%				
0				80%		ML	SILT, ML, very soft, black, low plasticity	
						CL	CLAY, CL, medium stiff, olive gray 5Y 4/2, moist, high plasticity	
5								
20							Total Depth = 20' - backfilled at end of day with grout and top 6' was resurfaced with asphalt.	

LOG OF BORING

BORING NUMBER : G-7B

PROJECT NAME: Hooshi Automotive

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 1:45 PM

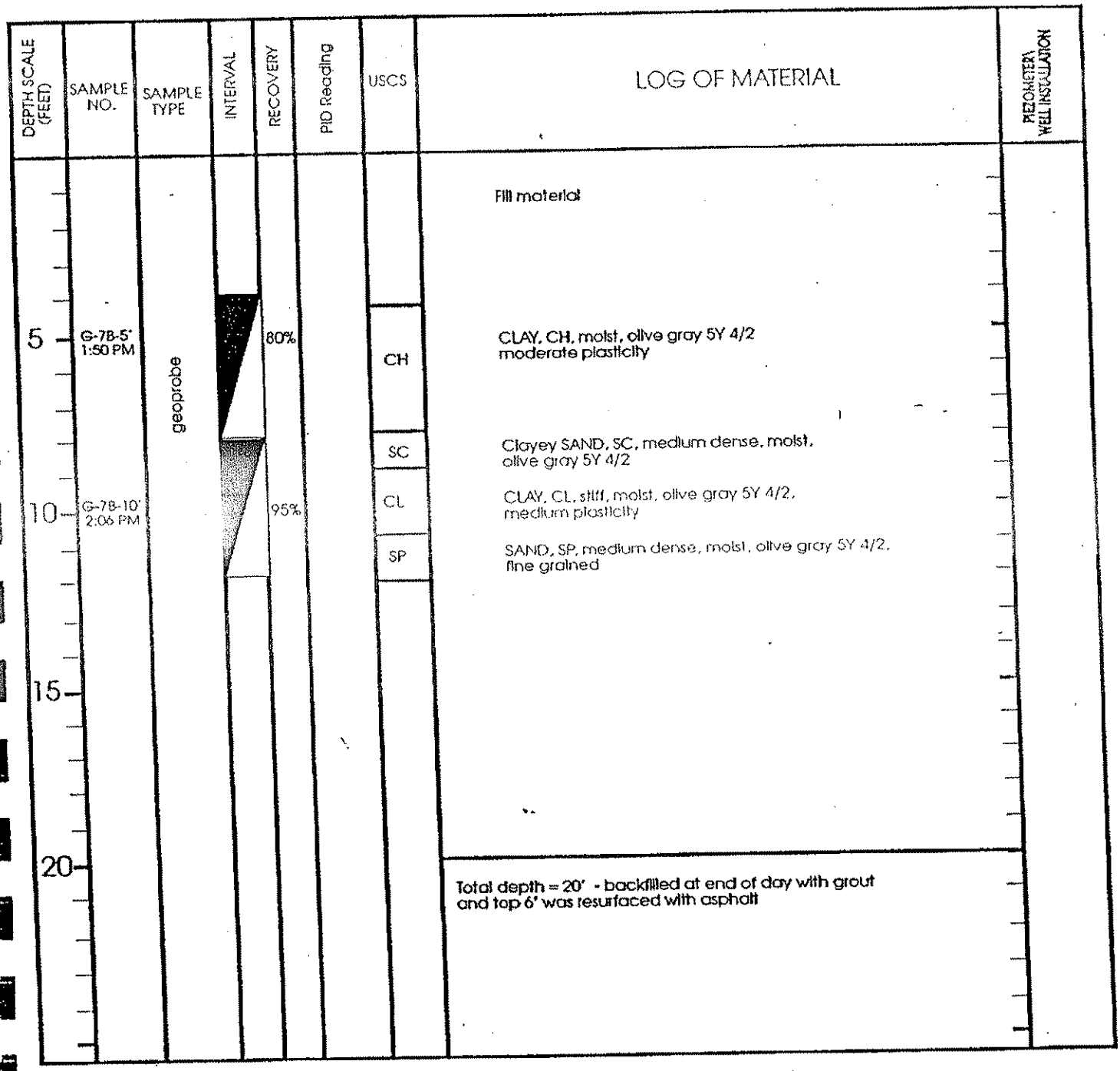
COMPLETION DATE: 6/24/96 2:15 PM

DRILL MANUFACTURER/MODEL:

Geoprobe

TYPE OF BIT:

BORE HOLE DIAMETER: 2"



LOG OF BORING

BORING NUMBER : G-8

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD :

START DATE: 6/24/96 2:20 PM

COMPLETION DATE: 6/24/96 2:35 PM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO:	SAMPLE TYPE	INTERVAL	RECOVERY	BLOWS PER 6 IN.	USCS	LOG OF MATERIAL	PIEZOMETER/ WELL INSTALLATION
5							Fill Material	
							No sample taken	
10	G-8-10'	geoprobe		95%		CH	CLAY, CH, medium stiff, moist, olive gray 5Y 4/2 high plasticity	
						SM	SAND, SM, medium dense, moist, olive 5Y 5/4, fine grained	
15								
20							Total Depth = 20' - backfilled at end of day with grout and top 6" was resurfaced with asphalt	

BORING NUMBER : G-9

LOG OF BORING

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Geoprobe

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

DRILLING METHOD : Geoprobe

START DATE: 6/24/96 2:40 PM

COMPLETION DATE: 6/24/96 3:07 PM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE TYPE	INTERVAL	RECOVERY	BLOWS PER 6 IN.	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
5				100%			Fill material	
				100%	2 ppm	CH	Clay, CH, medium stiff, gray/black to Olive 5Y 5/4 moist, moderate plasticity, hydrocarbon odor present	
10	G-9-11.5 2:55 PM			100%	2 ppm			
	G-9-12.5 3:05 PM				2.1 ppm	CL	Sandy Clay, CL, stiff, olive gray 5Y 4/2, slightly moist, medium plasticity	
				80%		GM	Silty Gravel, GM, loose, red-brown 2.5YR 4/4, slightly moist	
5							Total Depth = 14' - backfilled at end of day with grout and top 6" was resurfaced with asphalt	
20								

LOG OF BORING

BORING NUMBER : MW-4

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Hollow Stem Auger Equipment

PROJECT NUMBER: 20596-001-01

DRILLING METHOD : Hollow Stem Auger

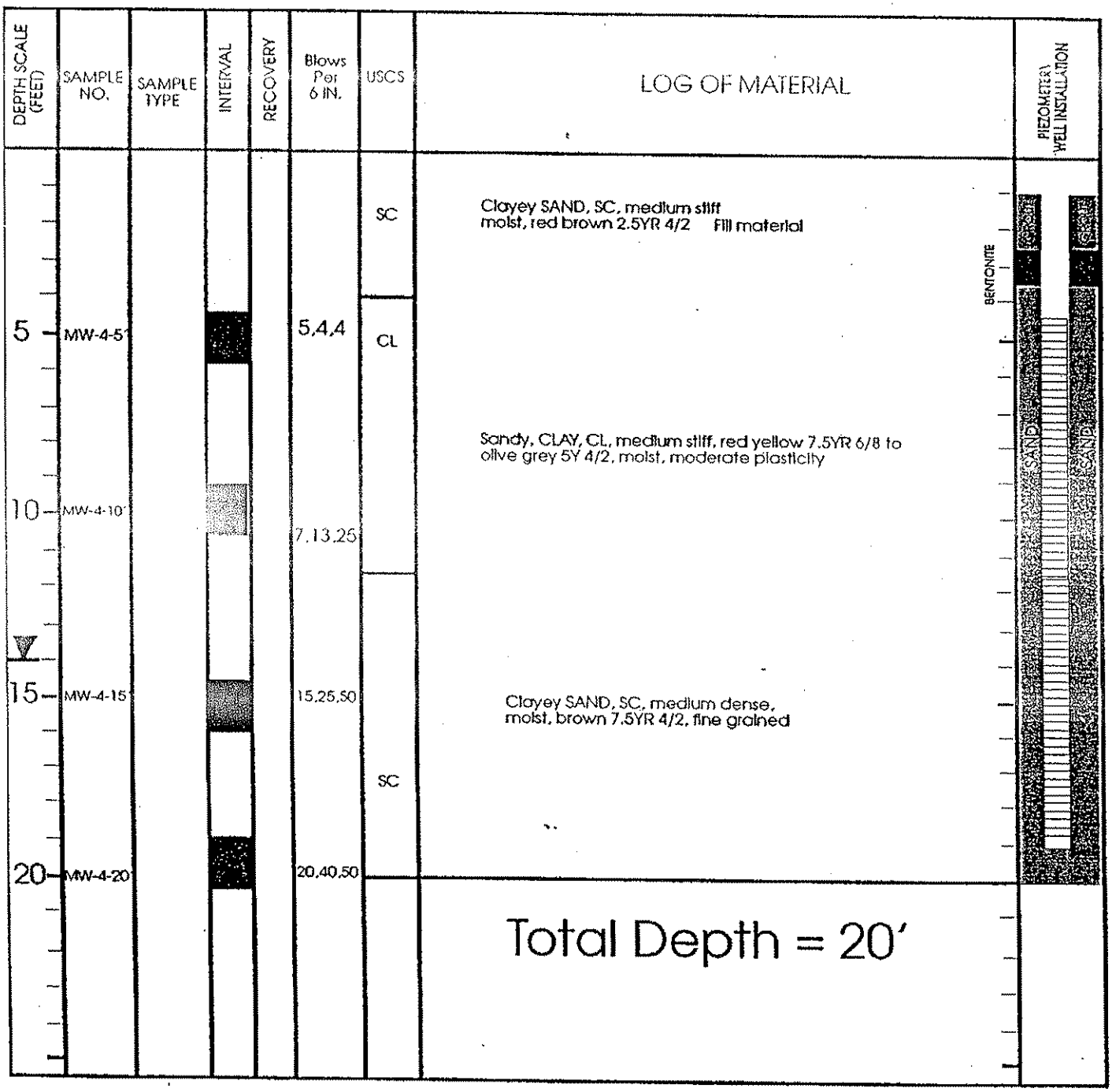
DRILLING CONTRACTOR: Kvilhaug

START DATE: 6/27/96 9:15 AM

TYPE OF BIT:

COMPLETION DATE: 6/27/96 10:20 AM

BORE HOLE DIAMETER: 2"



LOG OF BORING

BORING NUMBER : MW-5

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Hollow Stem Auger Equipment

PROJECT NUMBER: 20596-001-01

DRILLING CONTRACTOR: Kvilhaug

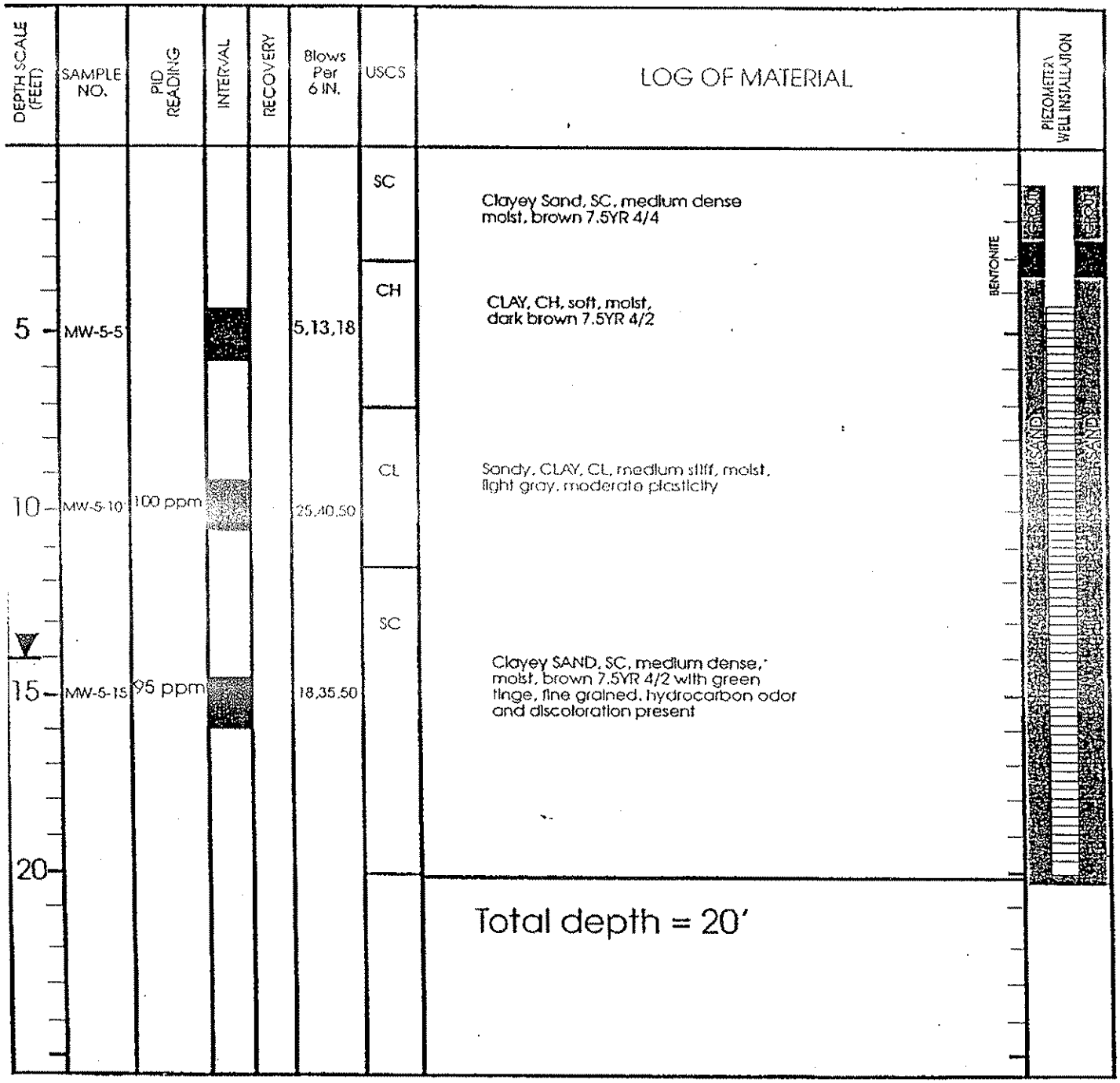
DRILLING METHOD : Hollow Stem Auger

START DATE: 6/27/96 11:15 AM

COMPLETION DATE: 6/27/96 11:47 AM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"



LOG OF BORING

BORING NUMBER : MW-6

SHEET _1_ OF _1_

PROJECT NAME: Hooshi Automotive

DRILL MANUFACTURER/MODEL:

Hollow Stem Auger Equipment

PROJECT NUMBER: 20596-001-01

DRILLING METHOD : Hollow Stem Auger

DRILLING CONTRACTOR: Kvilhaug

START DATE: 6/27/96 1:20 PM

COMPLETION DATE: 6/27/96 2:30 PM

TYPE OF BIT:

BORE HOLE DIAMETER: 2"

DEPTH SCALE (FEET)	SAMPLE NO.	PID READING	INTERVAL	RECOVERY	Blows Per 6 IN.	USCS	LOG OF MATERIAL
						SC	Clayey Sand, SC, medium dense moist, brown 7.5YR 4/4
5	MW-6-5' 1:35 PM	1.3 ppm			5,8,8	CH	CLAY, CH, soft, moist, dark brown 7.5YR 4/2
10	MW-6-10' 1:50 PM				10,18,20	GC	Gravel-Sand-Clay mixture, GC medium dense, moist, olive brown 2.5Y 4/2
15	MW-6-15 2:05 PM	1.8 ppm			14,25,40	ML	Silty, Clayey, SAND, ML, medium stiff, moist, light gray to brown 7.5YR 4/4, slight plasticity, very fine grained
20	MW-6-20' 2:20 PM	600 ppm			25,45,50		Total depth = 20'

PIEZOMETER/ WELL INSTALLATION

BENTONITE

SANDY

SAND