

REPORT OF GROUNDWATER MONITORING
Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California

Jan 23, 97

*STUD
3597*

CWEC 20596-001-03

Prepared for:

Ms. Naomi English
1545 Scenic View Drive
San Leandro, California 94577

Prepared by:

Century West Engineering Corporation
7950 Dublin Blvd., Suite 203
Dublin, California 94568

January 23, 1997

January 23, 1997

Alameda County Health Agency
UST Local Oversight Program
1131 East Harbor Bay Parkway
Alameda, CA 94502-6577

Attention: Mr. Dale Klettke

Subject: Report of Groundwater Monitoring, Hooshi's Auto Service, 1499 MacArthur Boulevard, Oakland, California, CWEC Project Number 20596-001-03

Dear Mr. Klettke:

Century West Engineering Corporation (CWEC) has prepared this report on behalf of Ms. Naomi English, of San Leandro, California. This report presents the results of the December 10, 1996, groundwater monitoring event performed at the subject site. The site location is shown on Figure 1.

Scope of Work

On December 10, 1996, CWEC staff purged and sampled ~~four~~ monitoring wells (MW-1, MW-3, MW-4, and MW-6) at the site. The site plan is shown on Figure 2. Monitoring wells MW-2 and MW-5 were not sampled due to the presence of floating product. Purging and sampling was conducted as follows:

- After unlocking six monitoring wells, water levels were measured to the nearest 0.01 foot with a conductivity based electronic sounder.
- Using a disposable PVC bailer, a single bail of groundwater was taken from each well to check for the presence or absence of floating product.
- Each monitoring well was purged of approximately three well volumes using a disposable PVC bailer. During purging, temperature, pH, conductivity, and turbidity of the well water were periodically monitored and recorded on *Groundwater Sampling Records* which are included as Appendix A.

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Report of Groundwater Monitoring, Hooshi's Auto Service

- After temperature, pH and conductivity had stabilized, groundwater samples were collected in appropriate containers. Each container was then tightly sealed, labeled and placed in cold storage for transport to the analytical laboratory under chain-of-custody.
- All purged water was stored on site in 55-gallon metal drums.

Results of Groundwater Monitoring

Groundwater Conditions

Depth to water ranged from approximately 8.5 to 14 feet below the top of the well casings. Based on depth to water measurements taken on December 10, 1996, water table elevation contours are shown on Figure 3. The average groundwater table elevation gradient was calculated at 0.1 feet/foot generally to the northeast.

Analytical Results

Groundwater samples collected from the four monitoring wells were analyzed for total petroleum hydrocarbons quantified as gasoline (TPH-G) by EPA Method 8015 modified; benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020; and Methyl tert butlyether (MTBE) by EPA Method 8020. These results are summarized in Table 1. Laboratory reports and chain-of-custody records are included as Appendix B.

Summary and Conclusions

- At the time of sampling the average groundwater elevation gradient was calculated to be 0.1 feet/feet generally to the northeast.
- Groundwater elevations increased approximately 8.53 feet in monitoring well MW-4 and approximately 6.76 feet in monitoring well MW-6 compared to the last monitoring event. The groundwater elevations in the remaining wells remained relatively the same. The increase in the water table elevation in monitoring wells MW-4 and MW-6 may be

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attributable to a rise in the water table above the elevation of the bottom of the retaining wall to the south.

- TPH-G concentrations have decreased in groundwater samples collected from MW-1, MW-3 and MW-4. BTEX and MTBE also decreased in samples collected from these wells.
- Field monitoring since June 1996 indicates that observed free product in monitoring wells MW-2 and MW-6 have decreased.

The decrease in hydrocarbon concentration and free phase hydrocarbon thickness in monitoring wells may be attributable to seasonal fluctuation in the water table elevation. At this time we recommend that vapor extraction be utilized at the site as proposed in the CWEC "Report of Phase II Site Characterization" dated August 30, 1996.

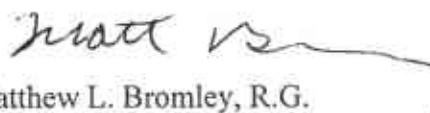
If you have questions please contact us at (510) 551-7774.

Sincerely,

Century West Engineering Corporation


J. Glenn Morelli
Staff Geologist




Matthew L. Bromley, R.G.
Senior Geologist/Division Manager

JGM/MLB:

Enclosures

- | | |
|------------|--|
| Table 1 | Summary of Groundwater Sampling Analytical Results |
| Figure 1 | Site Location |
| Figure 2 | Site Map |
| Figure 3 | Water Table Elevation Contour Map |
| Appendix A | Groundwater Sampling Records |
| Appendix B | Laboratory Report |

c: Ms. Naomi English

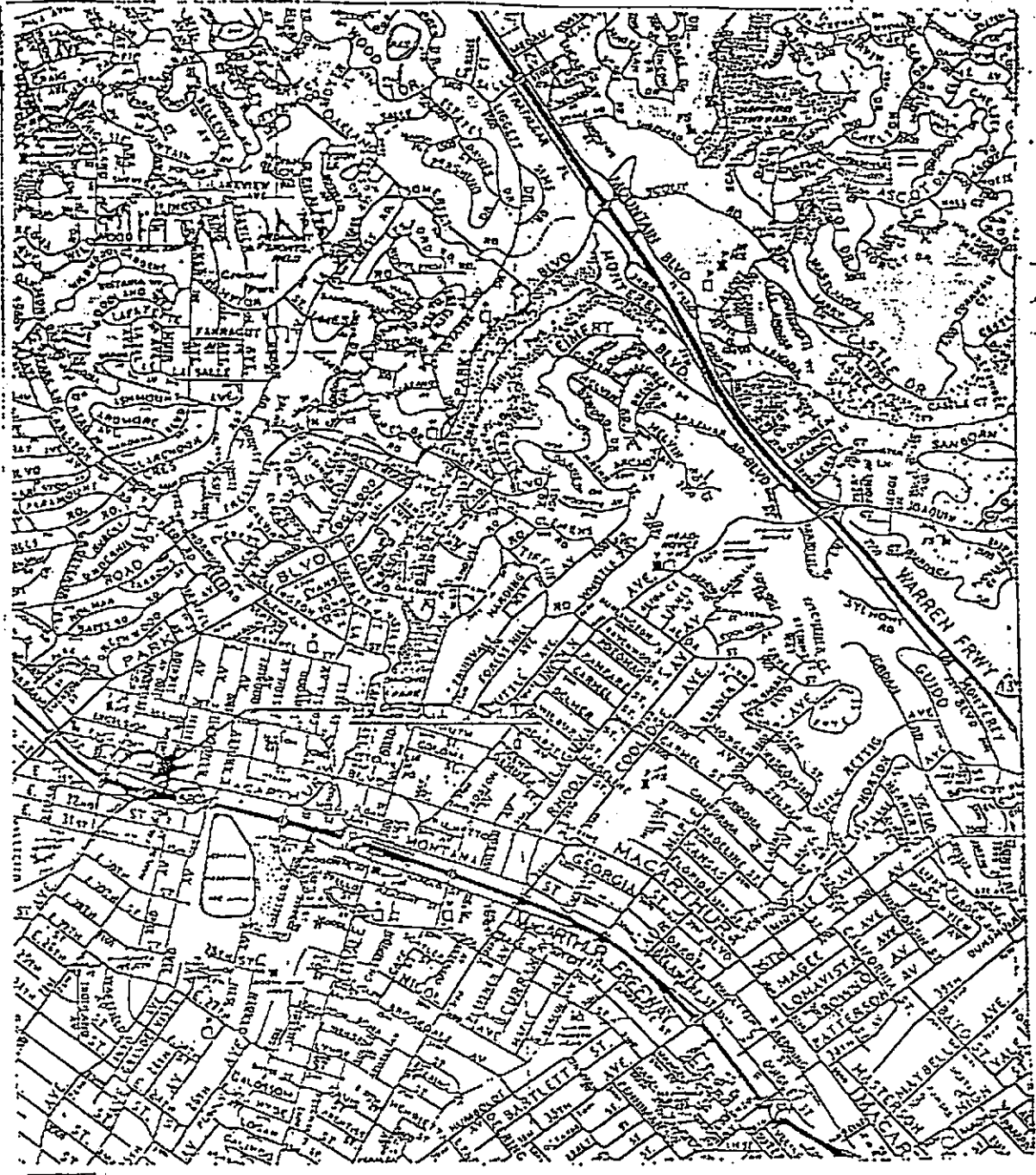
Table 1
Summary of Groundwater Sampling Analytical Results
Hooshi's Auto Service
1499 MacArthur Boulevard
Oakland, California

Groundwater Sample ID	Date of Sample	Depth to Groundwater (feet-toc)	Groundwater Elevation (feet-datum)	Free Product (inches)	Chemical Concentrations (mg/l)					
					TPH-G	Benzene	Toluene	Ethyl-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
	12/10/96	13.71	167.29	Not Present	1.5	0.084	0.011	0.022	0.032	0.034
MW-2	06/27/96	12.61	167.84	12	NA	NA	NA	NA	NA	NA
	12/10/96	11.1	169.35	0.25	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
	12/10/96	13.13	166.81	Not Present	0.97	<0.0005	<0.0005	<0.0005	<0.0005	0.024
MW-4	06/27/96	17.03	163.51	Not Present	0.72	0.002	0.0005	0.0025	0.023	0.0032
	12/10/96	8.5	172.04	Not Present	0.08	0.0024	<0.0005	<0.0005	0.0066	< 0.0020
MW-5	06/27/96	13.82	166.61	2	NA	NA	NA	NA	NA	NA
	12/10/96	13.26	166.97	1	NA	NA	NA	NA	NA	NA
MW-6	07/10/96	18.55	161.48	Not Present	ND	ND	ND	ND	ND	NA
	12/10/96	11.79	168.24	Not Present	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0020

NOTES

feet-toc feet below top of well casing
feet-datum feet above arbitrary datum with assumed elevation of 10 ft.
TPH-G total petroleum hydrocarbons quantified as Gasoline
MTBE methyl tert butylether
mg/l milligrams per liter
ND not detected above laboratory method detection limit
NA not analyzed or not available





Site Location

Source: Thomas Brothers Maps

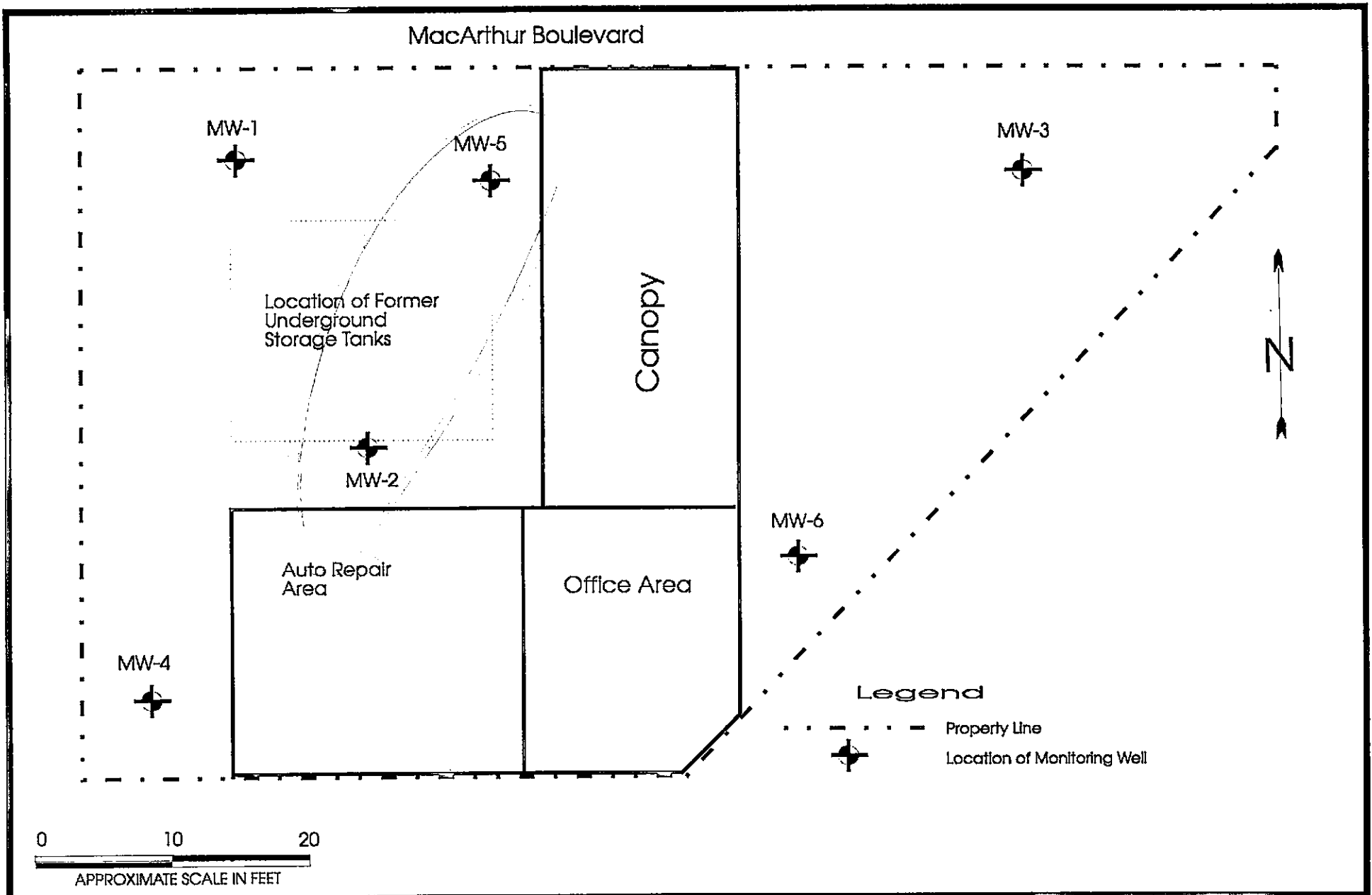
DATE: MAY 31, 1996



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HOOSHI'S AUTOMOTIVE
1499 MacArthur Boulevard
Oakland, California
CWEC 20596-001-01

Figure 1



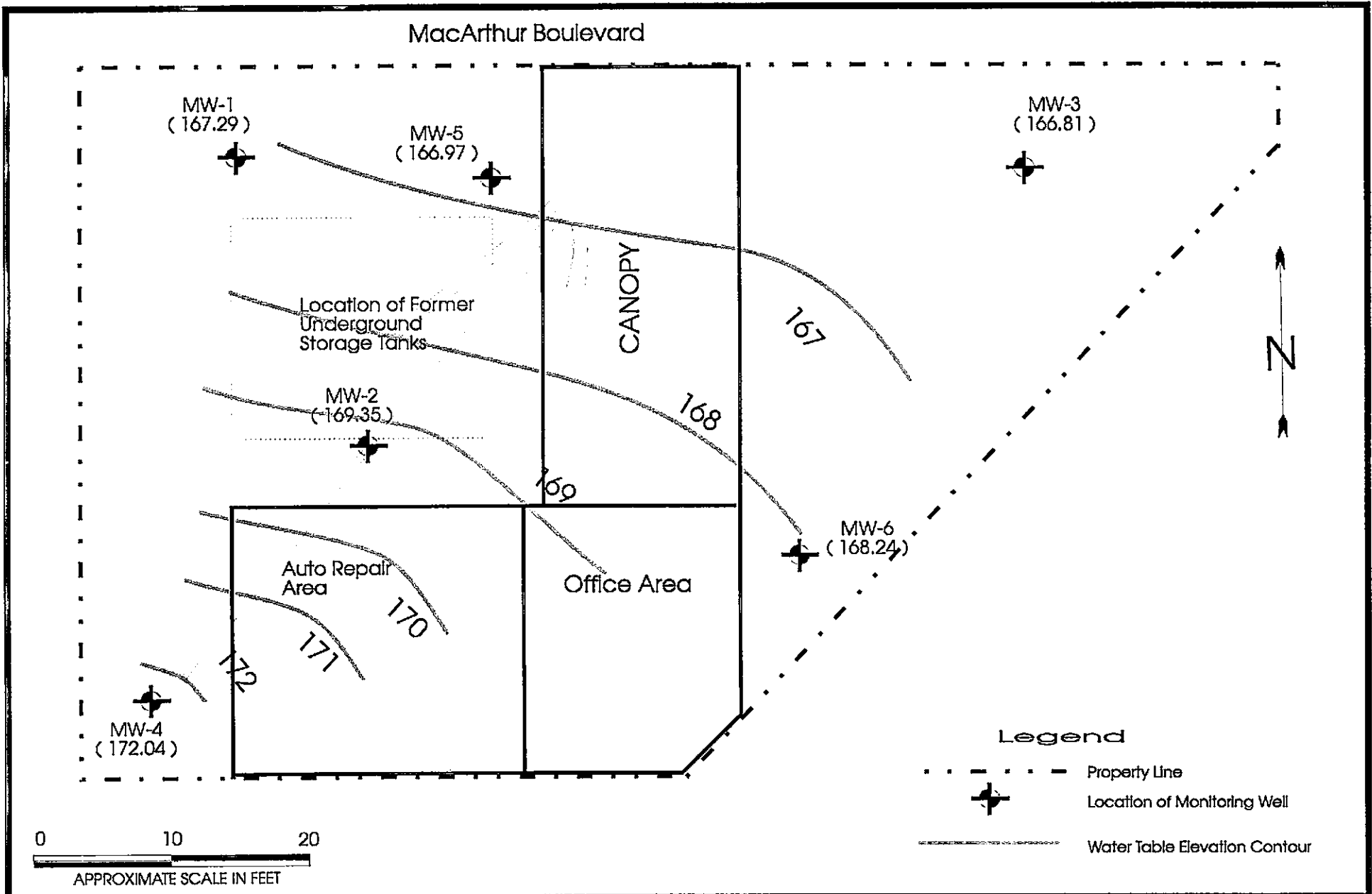
DATE: JANUARY 1997


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Site Map

HOOSHI'S AUTO SERVICE
 1499 MacArthur Boulevard
 Oakland, California
 CWEC 20596-001-03

Figure 2



DATE: JANUARY 1997

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Water Table Elevation
Contour Map
(12/10/96)

HOOSHI'S AUTO SERVICE
1499 MacArthur Boulevard
Oakland, California
CWEC 20596-001-03

Figure 3

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-1 WELL NO. MW-1

PROJECT NAME Horsho's Automotive PROJECT NO. 20596-061-03

DATE 12/16/96 TIME ELEV. TOP OF CASING

WELL DIAMETER 2" WELL DEPTH ~~27'~~ SCREEN INTERVAL 15'

H2O LEVEL INIT. 13.0' FIN. N/A

CALC. PURGE H2O VOL. 2.16 to 15 FT. (X) ** = 1.63 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-C/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD bucket

WEATHER CONDITIONS NET

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	pH	REMARKS (TURBIDITY)
10:38	0		67.6	.44	5.51	Clear w/line color
10:44	2		66.2	.28	6.05	muddy
10:49	4		66.8	.32	6.11	muddy
10:54	6		67.8	.36	6.36	muddy

Sample 11 P&S

SAMPLE CREW JLM

REMARKS bucket

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT) 155.1, 2 water, 1 pump

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-2 WELL NO. MW-2

PROJECT NAME Horshi's Automotive PROJECT NO. 20596-001-03

DATE 12/10/96 TIME ELEV. TOP OF CASING

WELL DIAMETER 2" WELL DEPTH SCREEN INTERVAL 15'

H2O LEVEL INIT. 11.10 FIN. 11.17

CALC. PURGE H2O COL. 2.10 to 15 FT. (X) ** = 1.63 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-G/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD boiler

WEATHER CONDITIONS w/c

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	pH	REMARKS (TURBIDITY)
------	-----------------------	-----------------	-----------	-------	----	---------------------

12:36	0					1/4" free product
-------	---	--	--	--	--	-------------------

	2					
--	---	--	--	--	--	--

	4					
--	---	--	--	--	--	--

	6					
--	---	--	--	--	--	--

SAMPLE CREW JLM

REMARKS 1/4" free product

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT)

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-3 WELL NO. MW-3

PROJECT NAME Hoshis Automotive PROJECT NO. 20596-(01-93)

DATE 12/10/91 TIME — ELEV. TOP OF CASING —

WELL DIAMETER 2" WELL DEPTH — SCREEN INTERVAL 15'

H2O LEVEL INIT. 1.13 FIN. N/A

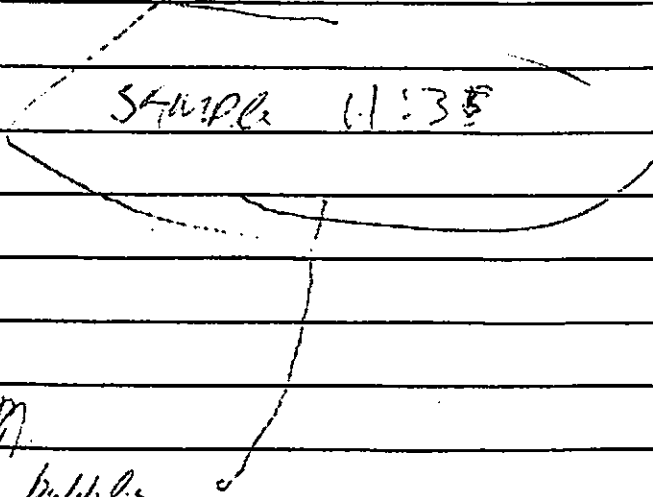
CALC. PURGE H2O COL. 2 to 15 FT. (X) ** = 1.63 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-C/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD boiler

WEATHER CONDITIONS rainy

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	PH	REMARKS (TURBIDITY)
11:15	0		77.4	.91	6.67	clear
11:20	2		73	.98	6.85	Semi murky
11:25	4		76.8	1.76	7.06	Semi murky
11:30	6		78.8	1.27	7.12	



SAMPLE CREW JGM

REMARKS no bubbles

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT)

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-4 WELL NO. MW-4

PROJECT NAME Hoshis' Automotive PROJECT NO. 20596-D01-02

DATE 12/10/96 TIME ELEV. TOP OF CASING

WELL DIAMETER 2" WELL DEPTH SCREEN INTERVAL 15'

H2O LEVEL INIT. 8.5 FIN. 1.8

CALC. PURGE H2O COL. ~10 to 15 FT. (X) ** = 1.13 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-6/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD boiler

WEATHER CONDITIONS W/C

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	pH	REMARKS (TURBIDITY)
1:07	0		70.2	.88	8.76	(low)
1:11	2		71.7	1.31	7.63	semi cloudy
1:16	4		72.3	1.43	7.42	↓
1:20	6		72.8	1.66	7.42	↓

SAMPLE 1:30

SAMPLE CREW JLM

REMARKS no debris

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT)

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-5 WELL NO. MW-5

PROJECT NAME Hoshis Automotive PROJECT NO. 20596-001-03

DATE 12/10/91 TIME ELEV. TOP OF CASING

WELL DIAMETER 2" WELL DEPTH SCREEN INTERVAL 15'

H2O LEVEL INIT. FIN. N/A

CALC. PURGE H2O COL. 2 to 15 FT. (X) ** = 1.63 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-6/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD bucket

WEATHER CONDITIONS Amberly

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	PH	REMARKS (TURBIDITY)
<u>12:12 PM</u>	<u>0</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>1 inch of pipe</u>
	<u>2</u>					<u>plus bucket</u>
	<u>4</u>					
	<u>6</u>					

not sampled

SAMPLE CREW AGM

REMARKS 1" of pipe product

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT)

CENTURY WEST ENGINEERING

GROUNDWATER SAMPLING RECORD

SAMPLE NO. MW-3 WELL NO. MW-6

PROJECT NAME Harsh's Automotive PROJECT NO. 20596-001-03

DATE 12/16/96 TIME — ELEV. TOP OF CASING —

WELL DIAMETER 2" WELL DEPTH 107' SCREEN INTERVAL 15'

H2O LEVEL INIT. 11.79 FIN. 11.79

CALC. PURGE H2O COL. 2.16 to 15 FT. (X) ** = 1.63 to 2.41 (X) 3 = 5 to 7 GALS.

LAB ANALYSIS TPH-6/BTEX/MTBE

LABORATORY NET PURGE/SAMPLE METHOD bio. lab

WEATHER CONDITIONS WMA

TIME	VOLUME PUMPED (GALS.)	PUMP RATE (GPM)	TEMP. (C)	COND.	pH	REMARKS (TURBIDITY)
11:48	0		74.8	1.72	7.69	clear
11:52	2		76.9	1.84	7.35	semi murky
11:56	4		77.5	2.92	7.37	
12:00 PM	6		78.6	2.27	7.90	↓

SAMPLE 12:10 PM

SAMPLE CREW JGM

REMARKS no bubbles

** (2" = 0.163 GAL/FT) (4" = 0.653 GAL/FT)



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Glenn Morelli
Century West Engineering
7950 Dublin Blvd., Ste 210
Dublin, CA 94568

Date: 12/28/1996
NET Client Acct. No: 75300
NET Job No: 96.03426
Received: 12/12/1996

Client Reference Information

Hooshi Automotive/Project No. 20596-001-03

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

A handwritten signature in cursive script that reads "Ginger Brinlee".

Ginger Brinlee
Project Coordinator

Enclosure(s)

Client Name: Century West Engineering
Client Acct: 75300
NET Job No: 96.03426

Date: 12/28/1996
ELAP Cert: 1386
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Ref: Hooshi Automotive/Project No. 20596-001-03

SAMPLE DESCRIPTION: MW-1
Date Taken: 12/10/1996
Time Taken: 11:00
NET Sample No: 271025

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch
TPH (Gas/BTXE,Liquid)								
5030/M8015	--					12/16/1996		3774
DILUTION FACTOR*	10					12/16/1996		3774
as Gasoline	1.5		0.50	mg/L	5030	12/16/1996		3774
8020 (GC,Liquid)	--					12/16/1996		3774
Benzene	84		5.0	ug/L	8020	12/16/1996		3774
Toluene	11		5.0	ug/L	8020	12/16/1996		3774
Ethylbenzene	22		5.0	ug/L	8020	12/16/1996		3774
Xylenes (Total)	32		5.0	ug/L	8020	12/16/1996		3774
Methyl-tert-butyl ether	34		20	ug/L	8020	12/16/1996		3774
SURROGATE RESULTS	--					12/16/1996		3774
Bromofluorobenzene (SURR)	97			% Rec.	5030	12/16/1996		3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering
Client Acct: 75300
NET Job No: 96.03426

Date: 12/28/1996
ELAP Cert: 1386
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Ref: Hooshi Automotive/Project No. 20596-001-03

SAMPLE DESCRIPTION: MW-3
Date Taken: 12/10/1996
Time Taken: 11:35
NET Sample No: 271026

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
TPH (Gas/BTXE, Liquid)								
5030/M8015	--						12/16/1996	3774
DILUTION FACTOR*	1						12/16/1996	3774
as Gasoline	0.97		0.050	mg/L	5030		12/16/1996	3774
8020 (GC, Liquid)	--						12/16/1996	3774
Benzene	ND		0.50	ug/L	8020		12/16/1996	3774
Toluene	ND		0.50	ug/L	8020		12/16/1996	3774
Ethylbenzene	ND		0.50	ug/L	8020		12/16/1996	3774
Xylenes (Total)	ND		0.50	ug/L	8020		12/16/1996	3774
Methyl-tert-butyl ether	24		2.0	ug/L	8020		12/16/1996	3774
SURROGATE RESULTS	--						12/16/1996	3774
Bromofluorobenzene (SRR)	104			% Rec.	5030		12/16/1996	3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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Ref: Hooshi Automotive/Project No. 20596-001-03

SAMPLE DESCRIPTION: MW-4
Date Taken: 12/10/1996
Time Taken: 13:30
NET Sample No: 271027

Parameter	Results	Flags	Reporting			Date Extracted	Date Analyzed	Run Batch No.
			Limit	Units	Method			
TPH (Gas/BTEXE, Liquid)								
5030/M8015	--						12/16/1996	3774
DILUTION FACTOR*	1						12/16/1996	3774
as Gasoline	0.08		0.050	mg/L	5030		12/16/1996	3774
8020 (GC, Liquid)	--						12/16/1996	3774
Benzene	2.4		0.50	ug/L	8020		12/16/1996	3774
Toluene	ND		0.50	ug/L	8020		12/16/1996	3774
Ethylbenzene	ND		0.50	ug/L	8020		12/16/1996	3774
Xylenes (Total)	6.6		0.50	ug/L	8020		12/16/1996	3774
Methyl-tert-butyl ether	ND		2.0	ug/L	8020		12/16/1996	3774
SURROGATE RESULTS	--						12/16/1996	3774
Bromofluorobenzene (SURR)	93			% Rec.	5030		12/16/1996	3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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NET Job No: 96.03426

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ELAP Cert: 1386
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Ref: Hooshi Automotive/Project No. 20596-001-03

SAMPLE DESCRIPTION: MW-6
Date Taken: 12/10/1996
Time Taken: 12:10
NET Sample No: 271028

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch
TPH (Gas/BTXE, Liquid)								
5030/M8015	--						12/16/1996	3774
DILUTION FACTOR*	1						12/16/1996	3774
as Gasoline	ND		0.050	mg/L	5030		12/16/1996	3774
8020 (GC, Liquid)	--						12/16/1996	3774
Benzene	ND		0.50	ug/L	8020		12/16/1996	3774
Toluene	ND		0.50	ug/L	8020		12/16/1996	3774
Ethylbenzene	ND		0.50	ug/L	8020		12/16/1996	3774
Xylenes (Total)	ND		0.50	ug/L	8020		12/16/1996	3774
Methyl-tert-butyl ether	ND		2.0	ug/L	8020		12/16/1996	3774
SURROGATE RESULTS	--						12/16/1996	3774
Bromofluorobenzene (SURR)	102			% Rec.	5030		12/16/1996	3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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Date: 12/28/1996
ELAP Cert: 1386
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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
	Standard % Recovery	Standard Amount Found	Standard Amount Expected					
TPH (Gas/BTXE, Liquid)								
as Gasoline	105.8	0.529	0.50		mg/L	12/16/1996	aal	3774
Benzene	111.1	22.21	20.0		ug/L	12/16/1996	aal	3774
Toluene	105.0	21.00	20.0		ug/L	12/16/1996	aal	3774
Ethylbenzene	107.1	21.41	20.0		ug/L	12/16/1996	aal	3774
Xylenes (Total)	102.6	61.54	60.0		ug/L	12/16/1996	aal	3774
Methyl-tert-butyl ether	92.5	73.97	80.0		ug/L	12/16/1996	aal	3774
Bromofluorobenzene (SURRE)	100.0	100	100		% Rec.	12/16/1996	aal	3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering
Client Acct: 75300
NET Job No: 96.03426

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ELAP Cert: 1386
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Ref: Hooshi Automotive/Project No. 20596-001-03

METHOD BLANK REPORT

Parameter	Method	Reporting	Flags	Units	Date	Analyst	Run
	Blank						
	Amount	Limit			Analyzed	Initials	Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	ND	0.050		mg/L	12/16/1996	aal	3774
Benzene	ND	0.50		ug/L	12/16/1996	aal	3774
Toluene	ND	0.50		ug/L	12/16/1996	aal	3774
Ethylbenzene	ND	0.50		ug/L	12/16/1996	aal	3774
Xylenes (Total)	ND	0.50		ug/L	12/16/1996	aal	3774
Methyl-tert-butyl ether	ND	2.0		ug/L	12/16/1996	aal	3774
Bromofluorobenzene (SURR)	100			% Rec.	12/16/1996	aal	3774

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering
 Client Acct: 75300
 NET Job No: 96.03426

Date: 12/28/1996
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Ref: Hooshi Automotive/Project No. 20596-001-03

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike				Matrix Spike				Date Analyzed	Run Batch	Sample Spiked	
	Matrix Spike % Rec.	Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Spike Dup. Conc.	Flags				
TPH (Gas/BTXE,Liquid)											270988	
as Gasoline	102.6	103.4	0.8	0.50	ND	0.513	0.517		mg/L	12/16/1996	3774	270988
Benzene	96.6	99.8	3.3	5.06	ND	4.89	5.05		ug/L	12/16/1996	3774	270988
Toluene	93.9	101.0	7.2	43.87	ND	41.20	44.29		ug/L	12/16/1996	3774	270988
Bromofluorobenzene (SURR)	98.0	102.0	3.9	100	94	98	102		% Rec.	12/16/1996	3774	270988

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

KEY TO RESULT FLAGS

- * : RPD between sample duplicates exceeds 30%.
- *M : RPD between sample duplicates or MS/MSD exceeds 20%.
- + : Correlation coefficient for the Method of Standard Additions is less than 0.995.
- < : Sample result is less than reported value.
- B-I : Value is between Method Detection Limit and Reporting Limit.
- B-O : Analyte found in blank and sample.
- C : The result confirmed by secondary column or GC/MS analysis.
- CNA : Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
- COMP : Sample composited by equal volume prior to analysis.
- D- : The result has an atypical pattern for Diesel analysis.
- D1 : The result for Diesel is an unknown hydrocarbon which consists of a single peak.
- DH : The result appears to be a heavier hydrocarbon than Diesel.
- DL : The result appears to be a lighter hydrocarbon than Diesel.
- DR : Elevated Reporting Limit due to Matrix.
- DS : Surrogate diluted out of range.
- DX : The result for Diesel is an unknown hydrocarbon which consists of several peaks.
- FA : Compound quantitated at a 2X dilution factor.
- FB : Compound quantitated at a 5X dilution factor.
- FC : Compound quantitated at a 10X dilution factor.
- FD : Compound quantitated at a 20X dilution factor.
- FE : Compound quantitated at a 50X dilution factor.
- FF : Compound quantitated at a 100X dilution factor.
- FG : Compound quantitated at a 200X dilution factor.
- FH : Compound quantitated at a 500X dilution factor.
- FI : Compound quantitated at a 1000X dilution factor.
- FJ : Compound quantitated at a greater than 1000x dilution factor.
- FK : Compound quantitated at a 25X dilution factor.
- FL : Compound quantitated at a 250X dilution factor.
- G- : The result has an atypical pattern for Gasoline.
- G1 : The result for Gasoline is an unknown hydrocarbon which consists of a single peak.
- GH : The result appears to be a heavier hydrocarbon than Gasoline.
- GL : The result appears to be a lighter hydrocarbon than Gasoline.
- GX : The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
- HT : Analysis performed outside of the method specified holding time.
- HTC : Confirmation analyzed outside of the method specified holding time.
- HTP : Prep procedure performed outside of the method specified holding time.
- HTR : Received after holding time expired, analyzed ASAP after receipt.
- HX : Peaks detected within the quantitation range do not match standard used.
- J : Value is estimated.
- MI : Matrix Interference Suspected.
- MSA : Value determined by Method of Standard Additions.
- MSA* : Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
- NI1 : Sample spikes outside of QC limits; matrix interference suspected.
- NI2 : Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
- NI3 : Matrix Spike values exceed established QC limits, post digestion spike is in control.
- P : There is >40% difference between primary and confirmation analysis.
- P7 : pH of sample > 2; sample analyzed past 7 days.
- RSC : Refer to subcontract laboratory report for QC data.
- S2 : Matrix interference confirmed by repeat analysis.
- SCN : Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
- UMDL : Undetected at the Method Detection Limit.



ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY Century West Engineering Corporation
 ADDRESS 7950 Dublin Blvd.
 PHONE 510-551-7774 FAX _____
 PROJECT NAME/LOCATION Hoosh Automotive - Oakland CA
 PROJECT NUMBER 20596-001-03
 PROJECT MANAGER _____

REPORT TO: Glenn Morelli
 INVOICE TO: _____
 P.O. NO. _____
 NET QUOTE NO. _____

A. G.M.

SAMPLED BY
J. Glenn Morelli
 (PRINT NAME)

 (PRINT NAME)

SIGNATURE
Glenn Morelli
 SIGNATURE

ANALYSES

To assist us in selecting the proper method

Is this work being conducted for regulatory compliance monitoring? Yes ___ No ___

Is this work being conducted for regulatory enforcement action? Yes ___ No ___

Which regulations apply: RCRA ___ NPDES Wastewater ___
 UST ___ Drinking Water ___
 Other ___ None ___

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers					OTHER	TPH-6/BTEX	MTBE (quantity)
						HCl	NaOH	HNO ₃	H ₂ SO ₄				
12/11/94	11 AM	MW-1 2-40 ml WWS										✓	✓
	11:30	MW-2											
	1:30	MW-3											
		MW-4											
		MW-5											
	12:10	MW-6										✓	✓

COMMENTS

CUSTODY SEALED
 Date 12/11/94 Time 1737 Initials GM
 SEAL INTACT?
 Yes ✓ No ___ Initials GM

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
 FIELD FILTERED? YES / NO

COC SEALS PRESENT AND INTACT? YES / NO
 VOLATILES FREE OF HEADSPACE? YES / NO

TEMPERATURE UPON RECEIPT: 0.8°C
 Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA _____
 I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS _____ DATE _____

RELINQUISHED BY: <u>John C. Peck</u>	DATE: <u>12/11/94</u>	TIME: <u>3:51</u>	RECEIVED BY: <u>C. Smart</u>	RELINQUISHED BY: <u>C. Smart</u>	DATE: <u>12/11/94</u>	TIME: <u>1737</u>	RECEIVED FOR NET BY: <u>Paul Dasser</u>
METHOD OF SHIPMENT			REMARKS: <u>VIA NCS</u>				