

1500 So. Union Avenue
Bakersfield, California 93307
Phone: (805) 835-7700
FAX: (805) 835-7717

no sec-1!

August 3, 1992

Eva Chu
Alameda County Department
of Environmental Health
80 Swan Way, Rm. 200
Oakland, CA 94621

Re: Scotsman Corp., Dublin CA
Groundwater Remediation
Second Quarter Report

Dear Ms. Chu:

This letter is an update on the groundwater remediation project underway at the Scotsman Corporation facility, 6055 Scarlett Ct., Dublin. As of July 9, 1992, the groundwater treatment system has treated 1,087,100 gallons of water. The only monitoring wells that have detectable hydrocarbon concentrations are MW-1 and MW-6 (see Plate 1). The plume has remained centered around these two wells throughout the project. These wells are in the heart of the plume and have historically had the highest concentrations. Below is a tabulation of the well concentrations reported for the samples collected on July 10, 1992. All samples were analyzed for BTX&E and TPH (gasoline). Enclosed are the analysis results from the samples collected from the wells.

Sample ID.	7-10-92	
	Benzene (ppb)	TPH (ppb)
MW-1	79	31000
MW-2	ND	ND
MW-3	ND	ND
MW-4	ND	ND
MW-5	ND	ND
MW-6	ND	2900
MW-7	ND	ND
MW-8	ND	ND
RW-3	ND	ND
Influent (RW-1 & RW-2)	ND	ND
Effluent	ND	ND

ND = Not detected

Eva Chu
Alameda County Department
of Environmental Health
August 3, 1992
Page Two

Depth to groundwater measurements were recorded on July 9, 1992 and calculated to Mean Sea Level as follows:

WELL	WELL ELEVATION	WATER ELEVATION	DEPTH TO WATER
MW-1	328.86	320.00 ft msl	8.86 ft
MW-2	329.50	323.40 ft msl	6.10 ft
MW-3	327.69	323.27 ft msl	4.42 ft
MW-4	329.19	322.89 ft msl	6.30 ft
MW-5	**	**	7.09ft
MW-6	328.16	318.86 ft msl	9.30 ft
MW-7	**	**	7.49 ft
MW-8	**	**	6.61 ft
RW-3	**	**	10.22 ft

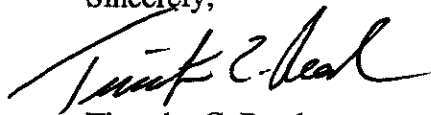
** Well not surveyed

Calculations indicate the direction of the groundwater gradient to be 39 degrees west of South with a slope of approximately 1.66 feet per 100 feet (see Plate 3).

The excavation work proposed in the April 13, 1992 Work Plan has been scheduled for the week of August 10, 1992. The work will consist of the excavation and disposal of the soil around MW-1 and MW-6. The well head elevations for the remaining monitoring wells will be surveyed to mean sea level. I will contact your office later this week to confirm the date work will begin.

If you have further questions or require additional information, please give me a call at (805) 835-7700.

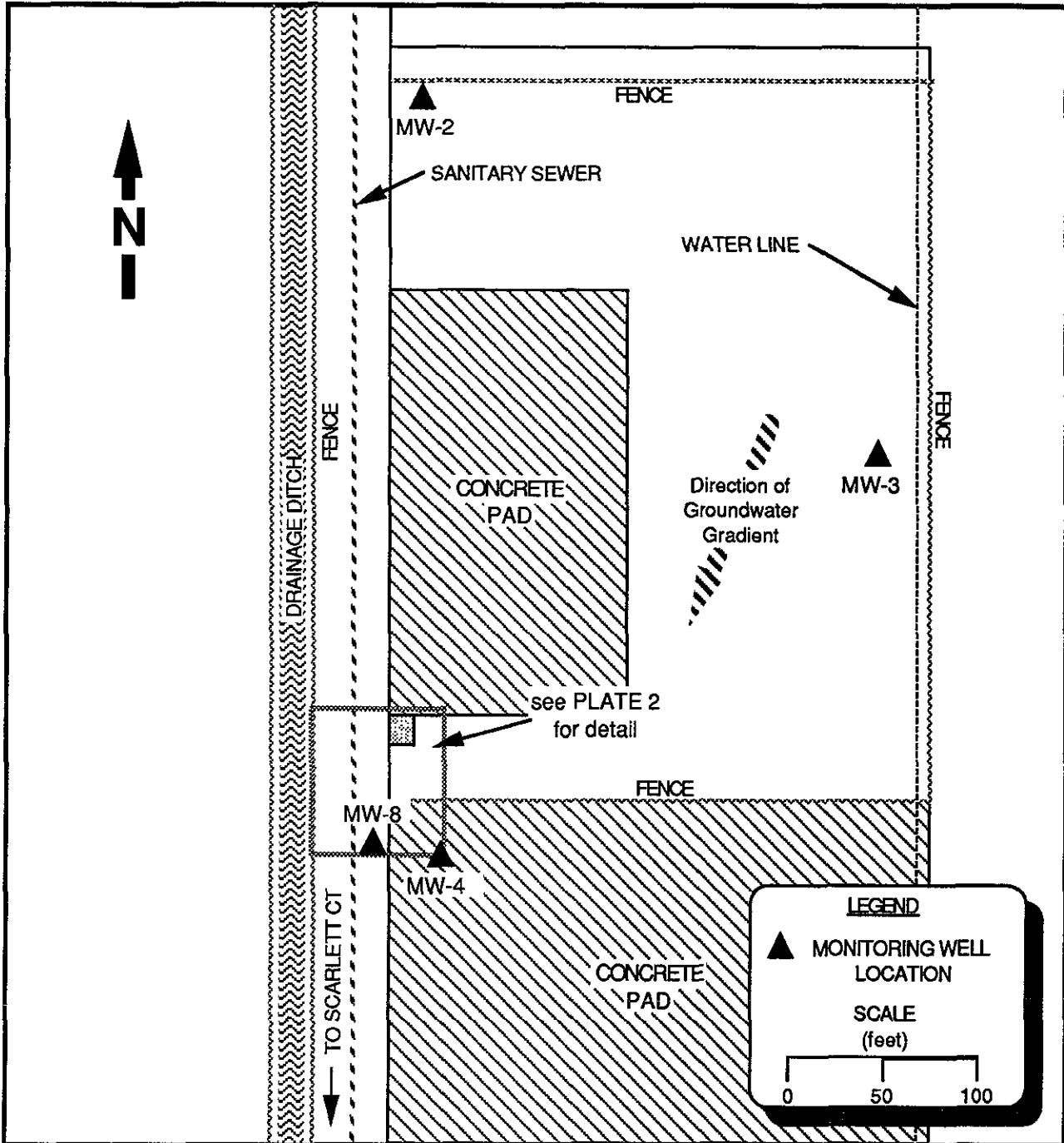
Sincerely,


Timothy C. Reed
Project Geologist


Rex J. Young
State Registered Geologist

Encl. Plot Plan
Plot Detail
Gradient Map
Laboratory Analysis

cc: Ms. Amanda Howard, First Interstate Bank
Mr. Marc Selover, RESNA



RESNA
Working to Restore Nature

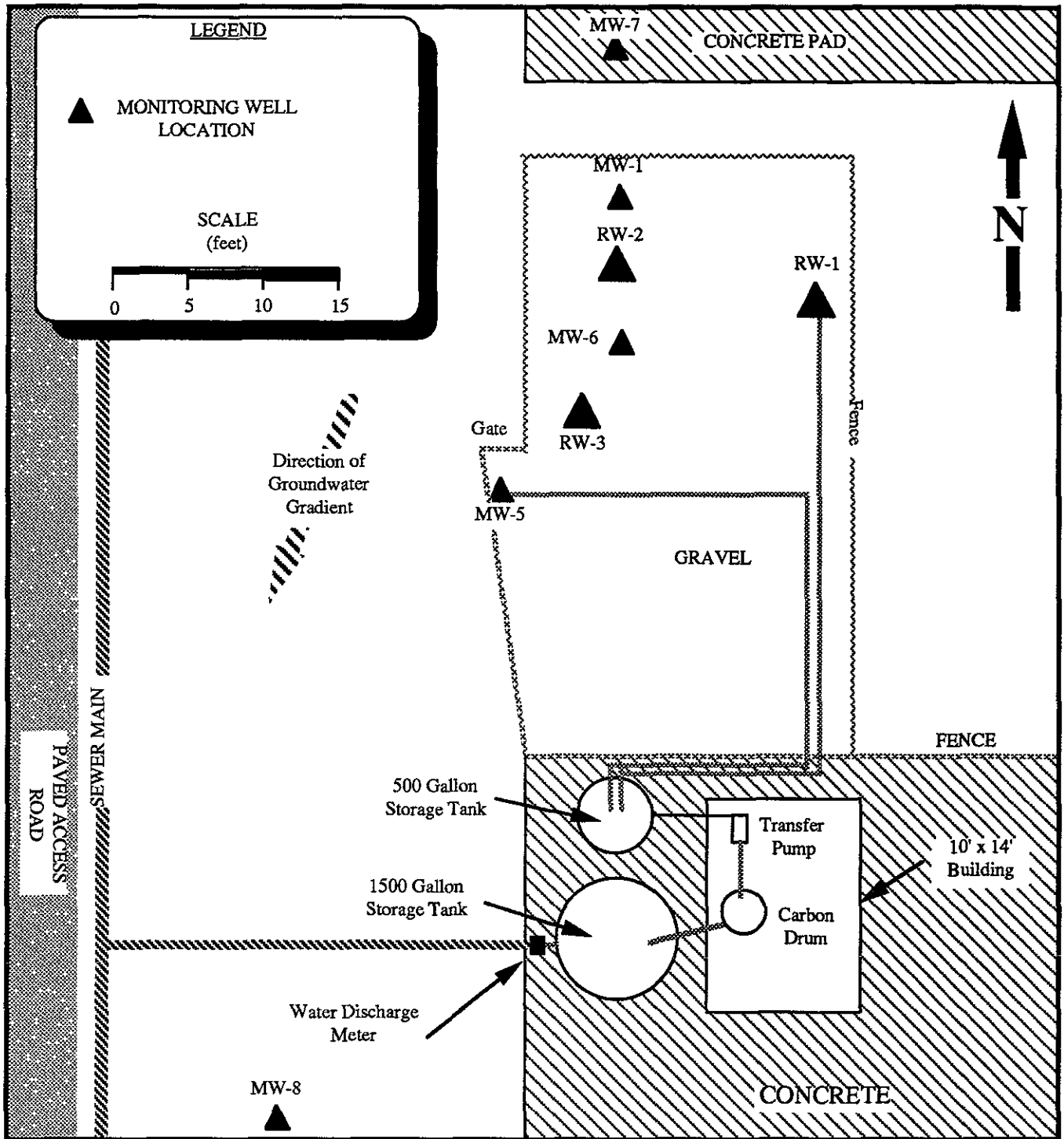
Project Number: 55018

8-3-92

SCOTSMAN CORP.
DUBLIN, CA.

PLOT PLAN

PLATE
1



RESNA
Working to Restore Nature

environmental/geotechnical services

Project Number: 55018

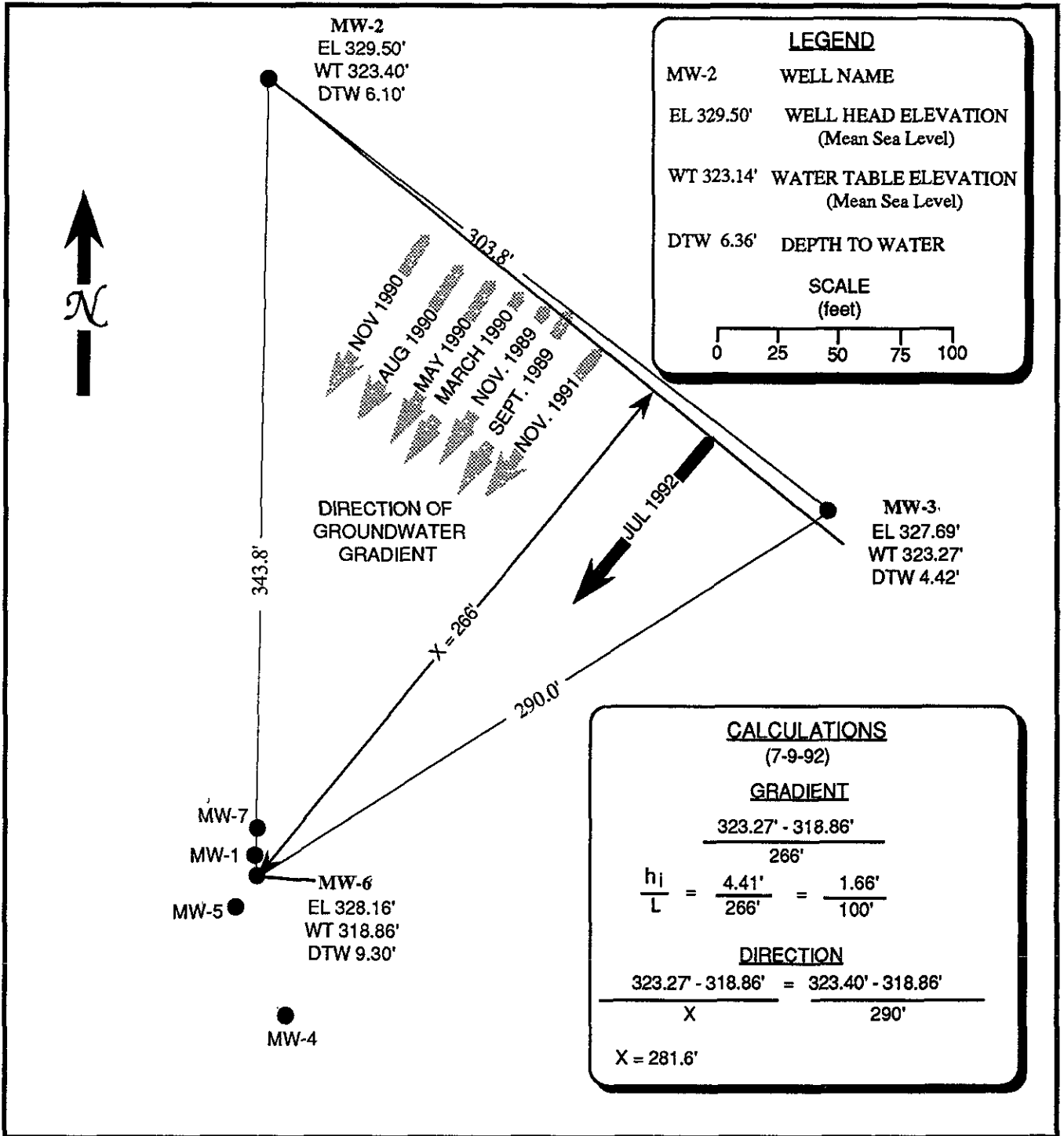
6-4-91

SCOTSMAN CORP.
DUBLIN, CA.

**DETAIL OF WELLS AND
REMEDATION EQUIPMENT
LOCATIONS**

PLATE

2



RESNA
Working to Restore Nature

Project Number: 55018

8-3-92

SCOTSMAN CORP.
DUBLIN, CA.

SHALLOW GROUNDWATER
GRADIENT MAP
July 9, 1992

PLATE
3



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

095283

PROJECT NO. 33018		PROJECT NAME/SITE Scotsman						ANALYSIS REQUESTED										P.O. #:					
SAMPLERS (SIGN) Tem Moore		SAMPLERS (PRINT) Tem Moore						NO. CONTAINERS 2	SAMPLE TYPE GL	BTEX (602/6020)	TPH-g (8015)	TPH-d (8015)	TOG 418.1/5520	601/8010	624/8240	625/8270							
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED			REMARKS													
Influent	7/10/92	8:25		X	No	X	X			X	X									W/207158			
Effluent		8:30																159					
MW-1		11:00																160					
MW-2		8:55																161					
MW-3		9:20																162					
MW-4		8:15																163					
MW-5		10:30																164					
MW-6		10:42																165					
MW-7		11:10																166					
MW-8		10:20																167					
RW-3		11:35																168					
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				LABORATORY:				PLEASE SEND RESULTS TO:											
Tem Moore		7/10/92	1:40					Resna - Fremont				Resna - Bakersfield											
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				REQUESTED TURNAROUND TIME:															
								Normal															
RELINQUISHED BY:		DATE	TIME	RECEIVED BY LABORATORY:				RECEIPT CONDITION:				PROJECT MANAGER:											
		7/10/92	1:40	Anthony Trainor				good				Tim Reed											

ANALYSIS REPORT

Attention: Mr. Tim Reed
RESNA
1500 South Union Ave.
Bakersfield, CA 93307
Project: AGS 19514-L, Project #33018
Scotsman

Date Sampled: 07-10-92
Date Received: 07-10-92
BTEX Analyzed: 07-15/16-92
TPHg Analyzed: 07-15/16-92
TPHd Analyzed: NR
Matrix: Water

1020lab.frm

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg	TPHd
	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>
Detection Limit:	0.5	0.5	0.5	0.5	50	50

SAMPLE
Laboratory Identification

Influent W1207158	ND	ND	ND	ND	ND	NR
Effluent W1207159	ND	ND	ND	ND	ND	NR
MW-1 W1207160	79	32	26	84	31000	NR
MW-2 W1207161	ND	ND	ND	ND	ND	NR
MW-3 W1207162	ND	ND	ND	ND	ND	NR

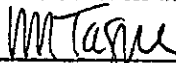
ppb = parts per billion = µg/L = micrograms per liter.
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

TPH_g--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPH_d--Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 for soils and EPA Method 3510 for water, followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.



Laboratory Representative

July 24, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. 1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

1020lab.frm

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RESNA
1500 South Union Ave.
Bakersfield, CA 93307
Project: AGS 19514-L, Project #33018
Scotsman

Date Sampled: 07-10-92
Date Received: 07-10-92
BTEX Analyzed: 07-15/16-92
TPHg Analyzed: 07-15/16-92
TPHd Analyzed: NR
Matrix: Water

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg	TPHd
	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>
Detection Limit:	0.5	0.5	0.5	0.5	50	50

SAMPLE
Laboratory Identification

MW-4 W1207163	ND	ND	ND	ND	ND	NR
MW-5 W1207164	ND	ND	ND	ND	ND	NR
MW-6 W1207165	ND	1.7	1.5	1.1	2900	NR
MW-7 W1207166	ND	ND	ND	ND	ND	NR
MW-8 W1207167	ND	ND	ND	ND	ND	NR

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ANALYSIS REPORT

1020lab.frm

Attention:	Mr. Tim Reed RESNA 1500 South Union Ave. Bakersfield, CA 93307	Date Sampled:	07-10-92
Project:	AGS 19514-L, Project #33018 Scotsman	Date Received:	07-10-92
		BTEX Analyzed:	07-15/16-92
		TPHg Analyzed:	07-15/16-92
		TPHd Analyzed:	NR
		Matrix:	Water

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg	TPHd
	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>
Detection Limit:	0.5	0.5	0.5	0.5	50	50

SAMPLE

Laboratory Identification

RW-3	ND	ND	ND	ND	ND	NR
W1207168						


ppb = parts per billion = $\mu\text{g/L}$ = micrograms per liter.
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