

See
4/6/93



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

835-7717

December 1, 1992

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

Re: Scotsman Corp., Dublin CA
Groundwater Remediation
Third 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. On August 19, 1992, approximately 125 cubic yards of soil was removed along with the groundwater monitoring wells MW-1, MW-6, and RW-2. A tabulation of the concentrations reported for the samples collected from the remaining wells on October 21, 1992 is presented in Table 1. All samples were analyzed for BTX&E and TPH (gasoline). The analytical report is enclosed.

TABLE 1
(Analytical Results for October 21, 1992)

Sample ID.	Benzene (ppb)	TPH (ppb)
MW-2	ND	ND
MW-3	ND	ND
MW-4	ND	ND
MW-5	ND	ND
MW-7	ND	ND
MW-8	ND	ND
RW-1	ND	ND
RW-3	ND	ND
Influent (RW-1 & RW-3)	ND	ND
Effluent	ND	ND

ND = No Detection

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Depth to groundwater measurements were recorded on October 20, 1992 and calculated to Mean Sea Level. The results are presented in Table 2.

TABLE 2
(Groundwater Elevation for December 1, 1992)

WELL	WELL ELEVATION	WATER ELEVATION	DEPTH TO WATER
MW-2	329.49	322.49 ft msl	7.00 ft
MW-3	327.69	321.99 ft msl	5.70 ft
MW-4	329.19	321.49 ft msl	7.70 ft
MW-5	328.44	321.59 ft msl	6.85 ft
MW-7	328.78	321.78 ft msl	7.00 ft
MW-8	328.54	321.69 ft msl	6.85 ft
RW-1	328.94	**	**
RW-3	329.36	**	**

** Pumping well, not measured

A groundwater elevation contour map is presented on Plate 1.

Upon review of the last four quarterly monitoring reports for the remaining wells, it can be shown that all of the wells have been reported to have hydrocarbon concentrations below detection since September, 1991 (see Table 3). The one exception is MW-5, sampled on April 23, 1992, which had been reported clean for the four months proceeding and all subsequent sampling events. The concentrations for BTX&E in the April, 1992 analysis for MW-5 was below the California Drinking Water Standard. There is presently no standard set for total petroleum hydrocarbons, however, the reported level of 110 ppb is well below the limits for the volatile constituents toluene, ethylbenzene, and xylene. Since all of the wells have been below detection in the last four quarterly sampling events, with the one exception, it can be shown that a historic trend of clean analysis has been established.

Eva Chu
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TABLE 3
Quarterly Hydrocarbon Concentrations
(Sept. 1991 to Oct. 1992)

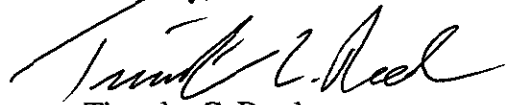
DATE	MW-2	MW-3	MW-4	MW-5	MW-7	MW-8	RW-1	RW-3
Benzene (ppb)								
TPH (ppb)								
9/17/91	ND	ND	NA	ND	ND	ND	ND	NA
	ND	ND	NA	ND	ND	ND	ND	NA
4/23/92	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	110	ND	ND	ND	ND
7/10/92	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	ND	ND	ND
10/21/92	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	ND	ND	ND


NA = Not Analyzed
ND = No Detection

Based on the data presented, it is recommended that closure of the site be initiated. In addition, it is recommended that all of the remaining wells be destroyed in a manner approved by the Zone 7 Flood Control District. Monthly monitoring of the groundwater will continue until closure of the site is approved.

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

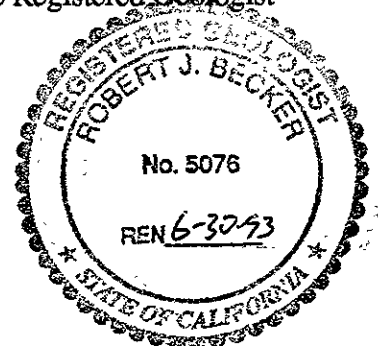
Sincerely,

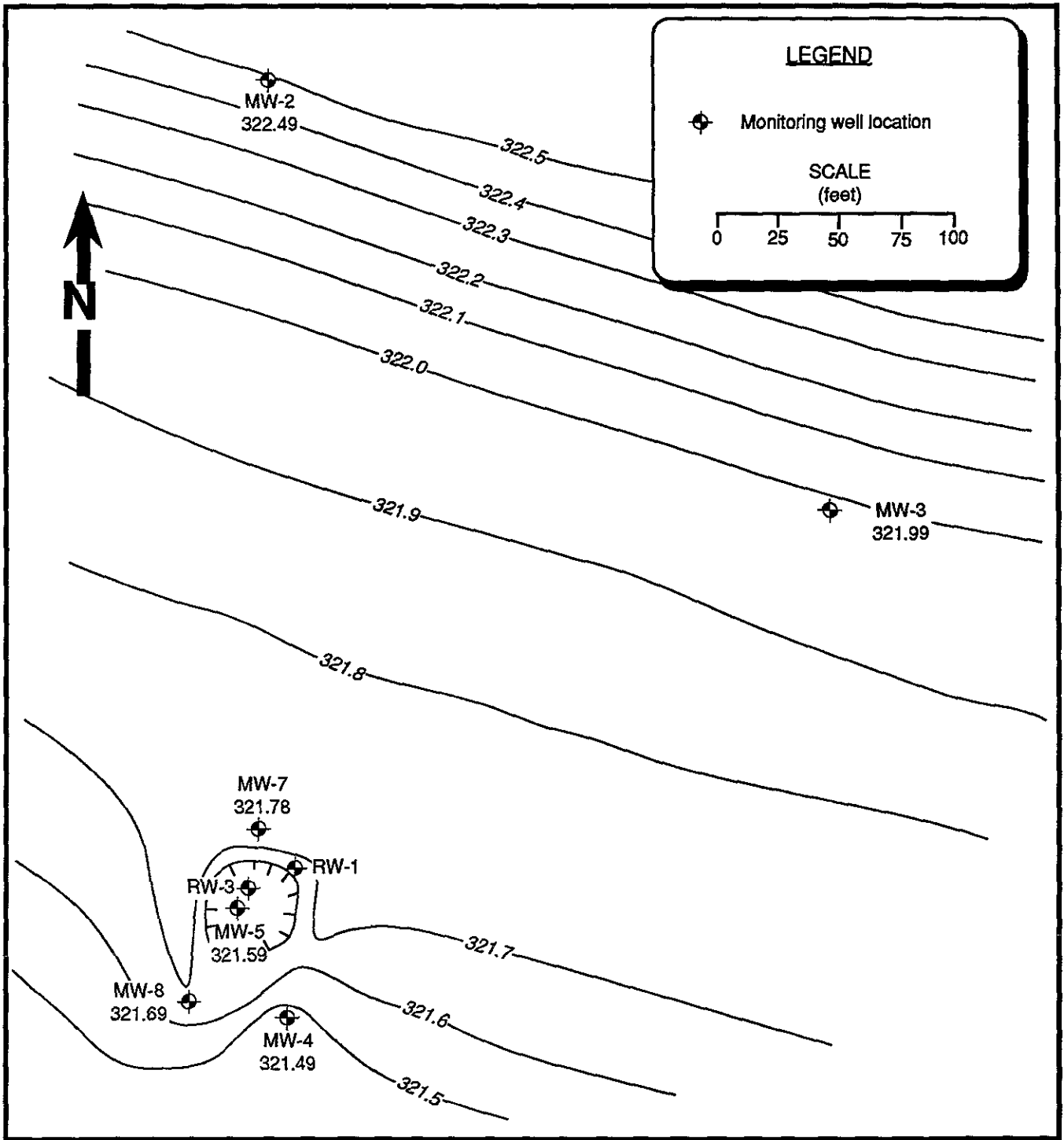

Timothy C. Reed
Project Geologist


Robert J. Becker
State Registered Geologist

Encl. Plot Plan
Plot Detail
Groundwater Contour Map
Laboratory Analysis

cc: Ms. Amanda Howard, First Interstate Bank
Mr. Bud Gennoy, John P. Gennoy Realty





RESNA
Working to Restore Nature

Project Number: B7172.42

12-1-92

SCOTSMAN CORP.
DUBLIN, CA.

SHALLOW GROUNDWATER
CONTOUR MAP
(DECEMBER 1, 1992)

PLATE

1

ANALYSIS REPORT

1020lab.frm

Attention:	Mr. Tim Reed RESNA 1500 South Union Ave. Bakersfield, CA 93307	Date Sampled:	10-21-92
Project:	19514-L, Project #6712-42 Scotsman	Date Received:	10-21-92
		BTEX Analyzed:	10-21-92
		TPHg Analyzed:	10-21-92
		TPHd Analyzed:	NR
		Matrix:	Water

	Benzene ppb	Toluene ppb	Ethyl- benzene ppb	Total Xylenes ppb	TPHg ppb	TPHd ppb
Detection Limit:	0.5	0.5	0.5	0.5	50	50

SAMPLE
Laboratory Identification

RW-1 W1210357	ND	ND	ND	ND	ND	NR
RW-3 W1210358	ND	ND	ND	ND	ND	NR
RW-5 W1210359	ND	ND	ND	ND	ND	NR
MW-2 W1210360	ND	ND	ND	ND	ND	NR
MW-3 W1210361	ND	ND	ND	ND	ND	NR

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

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

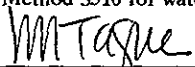
NR = Analysis not requested.

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.

TPHg—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.

TPHd—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

November 3, 1992
Date Reported

ANALYSIS REPORT

1020lab.frm

Attention:	Mr. Tim Reed	Date Sampled:	10-21-92
	RESNA	Date Received:	10-21-92
	1500 South Union Ave.	BTEX Analyzed:	10-21-92
	Bakersfield, CA 93307	TPHg Analyzed:	10-21-92
Project:	19514-L, Project #6712-42	TPHd Analyzed:	NR
	Scotsman	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 W1210362	ND	ND	ND	ND	ND	NR
MW-8 W1210363	ND	ND	ND	ND	ND	NR
MW-7 W1210364	ND	ND	ND	ND	ND	NR
INF W1210365	ND	ND	ND	ND	ND	NR
EFF W1210366	ND	ND	ND	ND	ND	NR

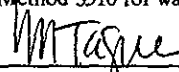
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TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPHd--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

November 3, 1992

 Date Reported



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

095646

PROJECT NO. 6712-42		PROJECT NAME/SITE Scotsman Dublin, Calif						ANALYSIS REQUESTED											P.O. # 8647-G		
SAMPLERS (SIGN) Paul Branson		(PRINT) Paul Branson						NO. CONTAINERS	SAMPLE TYPE	/											REMARKS
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED	BTEX (602/8020)			TPH _g (8015)	TPH _d (8015)	TOG 418.1/5520	601/8010	624/8240	625/8270						
RW-1	10/21/92	8:52 AM		X	H.C.L.	X	2	NO	X	X								W1210357			
RW-3	✓	8:47 AM		X	✓	X	2	✓	X	X								358			
RW-5	✓	8:30 AM		X	✓	X	2	✓	X	X								359			
MW-2	✓	7:45 AM		X	✓	X	2	✓	X	X								360			
MW-3	✓	7:55 AM		X	✓	X	2	✓	X	X								361			
MW-4	✓	8:40 AM		X	✓	X	2	✓	X	X								362			
MW-8	✓	8:15 AM		X	✓	X	2	✓	X	X								363			
MW-7	✓	8:05 AM		X	✓	X	2	✓	X	X								364			
INF	✓	8:52 AM		X	✓	X	2	✓	X	X								365			
EAF	✓	9:05 AM		X	✓	X	2	✓	X	X								366			
Travel Blank																		367			

RELINQUISHED BY: <i>Paul Branson</i>	DATE 10/21	TIME 9:32 AM	RECEIVED BY:	LABORATORY: RESNA Freemont, Calif	PLEASE SEND RESULTS TO: Tim Reed 1500 South Union Bakersfield, Calif 93304 Phone 1-800-289-3252
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:		
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	REQUESTED TURNAROUND TIME: Req	
RELINQUISHED BY:	DATE 10/21/92	TIME 9:32	RECEIVED BY LABORATORY: <i>Anthony Melo</i>	RECEIPT CONDITION: Good	