



groundwater resources inc.

5400 ALDRIN CT.
BAKERSFIELD, CALIFORNIA 93313

General Engineering Contractor
Class A/Haz License No. 520768

September 26, 1989

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

Re: Scotsman Corp., Dublin CA

Dear Mr. Wistar,

Pursuant to your letter dated March 28, 1989 requesting a monthly update on gradient determinations and water level data and bi-monthly groundwater sampling for the monitoring wells installed at the Scotsman Corp. facility, the following information has been submitted to your office for review.

Depth to groundwater measurements were recorded on August 30, 1989 and calculated to Mean Sea Level as follows:

MW-1	322.85 ft msl
MW-2	323.65 ft msl
MW-3	323.54 ft msl
MW-4	322.64 ft msl
MW-5	322.6 ft msl *
MW-6	322.65 ft msl
MW-7	323.0 ft msl *

* Wells not surveyed, depths are approximations.

Calculations indicate the direction of the groundwater gradient to be 33 degrees west of south with a slope of approximately 3.4 feet per 1000 feet (see Plate 1).

Enclosed are the analysis results for the water sampled from the groundwater monitoring wells present at the site. The samples were analyzed for BTX&E, TPH, TDS and pH. The wells were bailed dry and allowed to recover to the static water level before sampling. The samples were sealed, labeled and chilled at 4 degrees Celsius then transferred under a Chain of Custody to a State Certified Laboratory for analysis.

Groundwater gradient measurements will continue to be recorded on a monthly basis as per your request.

If you have further questions please give me a call at (805) 835-7700.

Sincerely,

Timothy C. Reed
Project Geologist

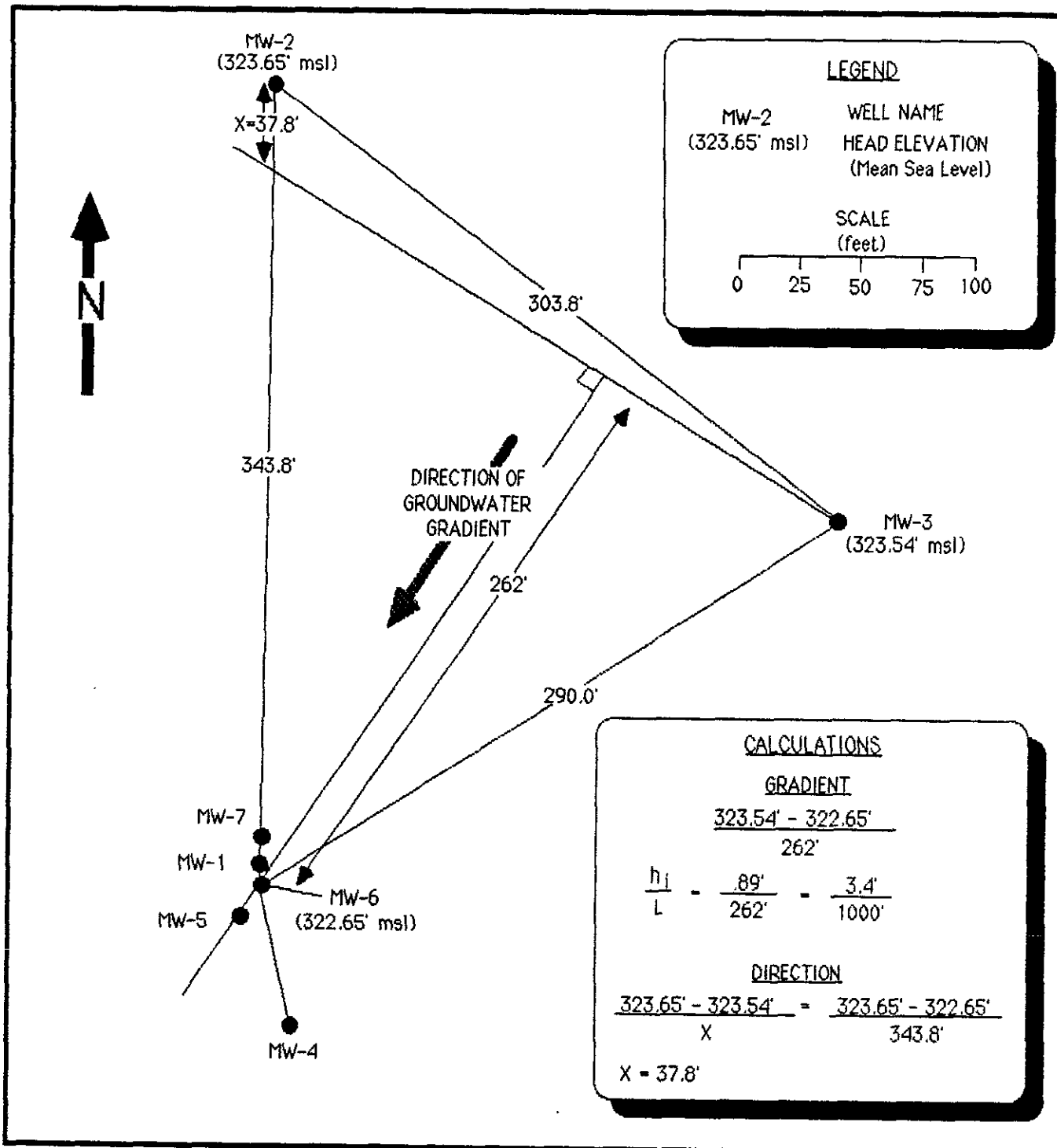
Encl.


cc: Mr. Chris Ingram, Scotman Corporation

MAILING ADDRESS: P.O. BOX 9383, BAKERSFIELD, CA 93389
LOS ANGELES (213) 724-3147

(805) 835-7700

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH



 groundwater resources, inc.
 environmental/geotechnical services
 Project Number: 55018 9-6-89

SCOTSMAN CORPORATION
 DUBLIN, CALIFORNIA

SHALLOW GROUNDWATER
 GRADIENT MAP
 AUGUST 30, 1989

PLATE
 1

Client Name: Groundwater Resources, Inc.
Address : 5400 Aldrin Court
Bakersfield, CA 93313

Date sample received : 9-01-89
Date analysis completed: 9-14-89
Date of report : 9-18-89

Laboratory No. 2370 through 2384 Project No. 55018

RESULTS OF ANALYSIS

	<u>pH</u>	<u>TDS, mg/L</u>
#2370 ID: MW-1A	7.38	0.668
#2371 ID: MW-2A	7.02	4.76
#2372 ID: MW-3A	7.44	2.06
#2373 ID: MW-4A	7.20	6.66
#2374 ID: MW-5A	7.05	3.05
#2375 ID: MW-6A	7.30	0.935
#2376 ID: MW-7A	8.03	0.890

Method of Analysis for pH: 150.1
Method of Analysis for TDS: 160.3
TDS = Total Dissolved Solids
mg/L = milligrams per liter


Stan Comer

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RESULTS OF ANALYSIS

	ugm/L	MRL,ugm/L
#2377 ID: MW-1B		
Benzene	1,100	0.5
Toluene	2,100	0.5
Ethylbenzene	1,800	0.5
p-Xylene	1,900	0.5
m-Xylene	1,800	0.5
o-Xylene	1,400	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	79,000	50

	ugm/L	MRL,ugm/L
#2378 ID: MW-2B		
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	ND	50

Method of Analysis: 5030/8020
MRL = Minimum Reporting Level
TPH = Total Petroleum Hydrocarbons
ugm/L = micrograms per liter
ND = Not detected


Stan Comer

Laboratory No. 2370 through 2384 Project No. 55018

RESULTS OF ANALYSIS

#2379 ID: MW-3B	ugm/L	MRL, ugm/L
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	ND	50

#2380 ID: MW-4B	ugm/L	MRL, ugm/L
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	ND	50

#2381 ID: MW-5B	ugm/L	MRL, ugm/L
Benzene	18	0.5
Toluene	0.88	0.5
Ethylbenzene	0.66	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	530	50


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RESULTS OF ANALYSIS

#2382 ID: MW-6B	ugm/L	MRL,ugm/L
Benzene	3,100	0.5
Toluene	59	0.5
Ethylbenzene	62	0.5
p-Xylene	1,300	0.5
m-Xylene	1,200	0.5
o-Xylene	130	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	6,800	50

#2383 ID: MW-7B	ugm/L	MRL,ugm/L
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	ND	50

#2384 ID: Travel Blank	ugm/L	MRL,ugm/L
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
p-Xylene	ND	0.5
m-Xylene	ND	0.5
o-Xylene	ND	0.5
Isopropylbenzene	ND	0.5
TPH (Gasoline)	ND	50

Stan Comer
Stan Comer

CHAIN OF CUSTODY RECORD

SHIP TO:					PROJECT NUMBER	SAMPLE CONDITION UPON RECEIPT	EPA-602 (WATER)	BTX-TVH (GASOLINE)	OIL & GREASE (TOX) LEAD (WASTE OIL)	EPA 418.1 (DIESEL)	TPH (OIL & GREASE), BENZENE (DIESEL)	REMARKS (LAB #'S ETC.)		
SAMPLERS: (Signature)														
SAMPLE NUMBER	DATE	TIME	COMP.	DEB WATER	SAMPLE LOCATION									
2370	MW-1A	8-31-89	10:46	X	MW-1							TDS & pH		
371	MW-2A	"	9:40		MW-2							"		
372	MW-3A	"	9:30		MW-3							"		
2373	MW-4A	"	11:10		MW-4							"		
374	MW-5A	"	10:18		MW-5							"		
375	MW-6A	"	10:30		MW-6							"		
376	MW-7A	"	10:00		MW-7							"		
2377	MW-1B	"	10:46		MW-1							BTX:G TPH (GASOLINE) 5030/2020		
2378	MW-2B	"	9:40		MW-2							"		
2379	MW-3B	"	9:25		MW-3							"		
380	MW-4B	"	11:10		MW-4							"		
381	MW-5B	"	10:18		MW-5							"		
382	MW-6B	"	10:30		MW-6							"		
383	MW-7B	"	10:00		MW-7							"		
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Relinquished by: (Signature)			Date/Time		Received by: (Signature)	
Tim Reed			9/1/89 7:31		Theresa G...									
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Relinquished by: (Signature)			Date/Time		Received by: (Signature)	
Relinquished by: (Signature)			Date/Time		Received for Laboratory by: (Signature)			Date/Time		Remarks			CC: DEB FILE LAB INDEX	
Theresa G...			9/1/89 3:35		Karla Henry			9/1/89 pm 3:40						

CHAIN OF CUSTODY RECORD

5610 District Blvd., Suite 106
Bakersfield, California 93313
(805) 835-7700 — Bakersfield
(213) 724-3147 — Los Angeles

SHIP TO:					PROJECT NUMBER	SAMPLE CONDITION	EPA-602 (WATER)	BTX-TWH (GASOLINE)	OIL & GREASE (TOX) (LEAD, WASTE OIL)	EPA 418.1 (DIESEL)	TPH (OIL & GREASE), BENZENE (DIESEL)	REMARKS (LAB #'S ETC.)
SAMPLERS: (Signature)												
SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	SAMPLE LOCATION							
2384 BLANK												BTA, TPH (GASOLINE)
Relinquished by: (Signature)					Date/Time	Received by: (Signature)			Relinquished by: (Signature)		Date/Time	Received by: (Signature)
<i>T. Lead</i>					9/1/89 7:31	<i>T. Lead</i>						
Relinquished by: (Signature)					Date/Time	Received by: (Signature)			Relinquished by: (Signature)		Date/Time	Received by: (Signature)
Relinquished by: (Signature)					Date/Time	Received for Laboratory by: (Signature)			Date/Time	Remarks		CC: DEB FILE LAB INDEX
<i>T. Lead</i>					11/1/89 3:25	<i>Karla Honey</i>			9/1/89 3:40 pm			