93 JUL 30 PM 2: 05

6601 Koll Center Parkway P.O. Box 5252 Pleasanton, CA 94566 (415) 426-8787

July 29, 1993

Mr. Amir Gholami, R.E.H.S. Alameda County Health Agency Division of Hazardous Materials Department of Environmental Health 80 Swan Way, Room 200 Oakland, CA 94621

Dear Mr. Gholami:

Please find enclosed two sampling reports for our aggregate plant located at 6527 Calaveras Road, Sunol.

The first of these reports was prepared by GeoStrategies Inc. (GSI) on November 9, 1992 and covers sampling from March 9, 1992 and June 30, 1992.

The second report was prepared by RMC Lonestar staff and includes two semi-annual reports, as you had discussed with Louis Schipper of our department. This report combines sampling performed by (GSI) on September 18, 1992 and December 29, 1992 and sampling performed by RMC Lonestar staff on March 13, 1993 and July 10, 1993.

Louis Schipper will be on vacation until August 30, 1993. Should you have any questions or concerns please feel free to call me at (510) 426-2261.

Sincerely,

Kelly J. McCarn, Environmental Records Clerk



November 9, 1992

RMC Lonestar P.O. Box 5252 Pleasanton, California 94566

Attn:

Mr. Harry Reppert

Director of Environmental Affairs

Re:

SITE UPDATE

RMC Lonestar

6527 Calaveras Road

Sunol, California

#### Gentlemen:

This site update has been prepared by GeoStrategies Inc. (GSI) and presents the results of the 1992 first and second quarter ground-water sampling performed by Gettler-Ryan Inc. (G-R) for the above referenced site (Plate 1). The scope of work presented in this document was performed at the request of RMC Lonestar. Field work and laboratory analysis methods were performed to comply with current State of California Water Resources Control Board guidelines.

#### SITE BACKGROUND

There are currently four ground-water monitoring wells at the site; Wells Sunol-1 and RMC-2 through RMC-4 (Plates 1 and 2). Well Sunol-1 was installed by Levine-Fricke in 1989 to assess the impact to soil and groundwater of a small, localized oil and water spill. Wells RMC-2 through RMC-4 were installed by GSI in September 1990 to assess the impact of a 2500 gallon diesel spill to the soil and groundwater beneath the site.

RMC Lonestar November 9, 1992 Page 2

Quarterly monitoring and sampling of wells RMC-2 through RMC-4 began in 1990. Ground-water samples have been analyzed for Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) according to EPA Method 3501 and Benzene, Toluene, Ethylbenzene, and Toluene (BTEX) according to EPA Method 8020.

#### CURRENT QUARTERLY SAMPLING RESULTS

#### Potentiometric Data

Prior to ground-water sampling in March and June 1992, depth to water-level measurements were obtained in each monitoring well using an electronic oil-water interface probe. Static ground-water levels were measured from the surveyed top of well cosing and recorded to the nearest  $\pm 0.01$  foot. Corresponding elevations, referenced to the project datum, are presented in Table 1. Quarterly water level measurements are included in Table 1. Water-level data were used to construct potentiometric maps for March and June 1992 (Plates 3 and 4, respectively). Shallow ground-water flow beneath the site during these quarters were to the southwest and south at calculated gradients ranging from 0.02 to 0.009.

#### Floating Product Measurements

Each well was checked for the presence of floating product using an electronic oil-water interface probe. A clear acrylic bailer was used to confirm probe results. Floating product was not detected in the wells this quarter.

RMC Lonestar November 9, 1992 Page 3

# Ground-Water Analytical Data

Ground-water samples were collected on March 9 and June 30, 1992. The samples were analyzed for TPH-Diesel according to EPA Method 3510 and BTEX according to EPA Method 8020 by NET Pacific Inc. (NET), a State of California certified laboratory located in Santa Rosa, California.

TPH-Diesel and benzene were not detected in Well RMC-4 in the first quarter and in Wells RMC-2, RMC-3 and RMC-4 in the second quarter of 1992. These data are summarized in Table 2. Chemical concentration maps for TPH-Diesel and benzene are presented on Plates 5 and 6, respectively. The NET certified analytical reports are presented in Appendix A. Historical chemical analytical data are summarized in Table 3.

### Quality Control

Quality Control (QC) samples (Trip Blank) were included in the June 1992 sampling. These samples were prepared in the laboratory using organic - free water to evaluate laboratory and field handling procedures of samples. The results of QC sample analyses are presented in Table 2.

# **DISCUSSION**

The groundwater flow direction appears to have stabilized in a southerly direction during the first and second quarters of 1992. The gradients are approximately 0.02 and 0.009, respectively. As outlined in the January 21, 1992 letter from Alameda County Health Care Services, monitoring of this well network will continue on a quarterly basis while sampling will be quarterly for Well RMC-4 and semi-annual for Wells RMC-2 and RMC-3.

RMC Lonestar November 9, 1992 Page 4

If you have any questions, please call.

GeoStrategies Inc. by.

Timothy J. Walker

Geologist

John F. Vargas Project Geologist

R.G. 5046

TJW/JFV/rmt

Plate 1. Vicinity and Site Location Maps

Plate 2. Site Plan

Plate 3. Potentiometric Map (March 9, 1992)

Plate 4. Potentiometric Map (June 30, 1992)

Plate 5. TPH-D/Benzene Concentration Map (March 9, 1992)

NO. 5046

Plate 6: TPH-D/Benzene Concentration Map (June 30, 1992)

Appendix A: Analytical Laboratory Reports and Chain-of-Custody

QC Review:

TABLE 1
FIELD MONITORING DATA

WELL NO.	MONITORING DATE	CASING DIA. (IN)	TOTAL WELL DEPTH (FT)	WELL ELEV. (FT)	DEPTH TO WATER (FT)	PRODUCT THICKNESS (FT)	STATIC WATER ELEV. (FT)
RMC-2	09-Mar-92	2		100.00	28.54		71.46
RMC-2	30-Jun-92	2	42.5	100.00	33.78		66.82
RMC-3	09-Mar-92	2	18.5	69.84	1.47	***	68.37
RMC-3	30-Jun-92	2	18.5	69.84	4.17		65.67
RMC-4	09-Mar-92	2	40.4	101.38	29.58		71.53
RMC-4	30-Jun-92	2	40.4	101.38	34.8		66.58

Notes: 1. Static water elevations referenced to Project Site Datum.

2. Physical parameter measurements represent stabilized values.

TABLE 2

WELL NO.	SAMPLE DATE	ANALYSIS DATE	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)	TPH-D (PPB)	TPH-G (PPB)
RMC-2	30-Jun-92	15-Jul-92	< 0.5	< 0.5	< 0.5	< 0.5	<50	< 50
RMC-3	30-Jun-92	15-Jul-92	< 0.5	< 0.5	< 0.5	< 0.5	<50	< 50
RMC-4	09-Mar-92	17-Mar-92	< 0.5	< 0.5	< 0.5	< 0.5	<50	NA
RMC-4	30-Jun-92	15-Jul-92	<0.5	< 0.5	< 0.5	< 0.5	<50	< 50
ТВ	•••	15-Jul-92	< 0.5	< 0.5	< 0.5	< 0.5	< 50	< 50

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline.

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel.

PPB = Parts Per Billion.

TB = Trip Blank.

NA = Not Analyzed.

Note: All data shown as <x are reported as ND (none detected).

TABLE 3
HISTORICAL GROUND-WATER QUALITY DATABASE

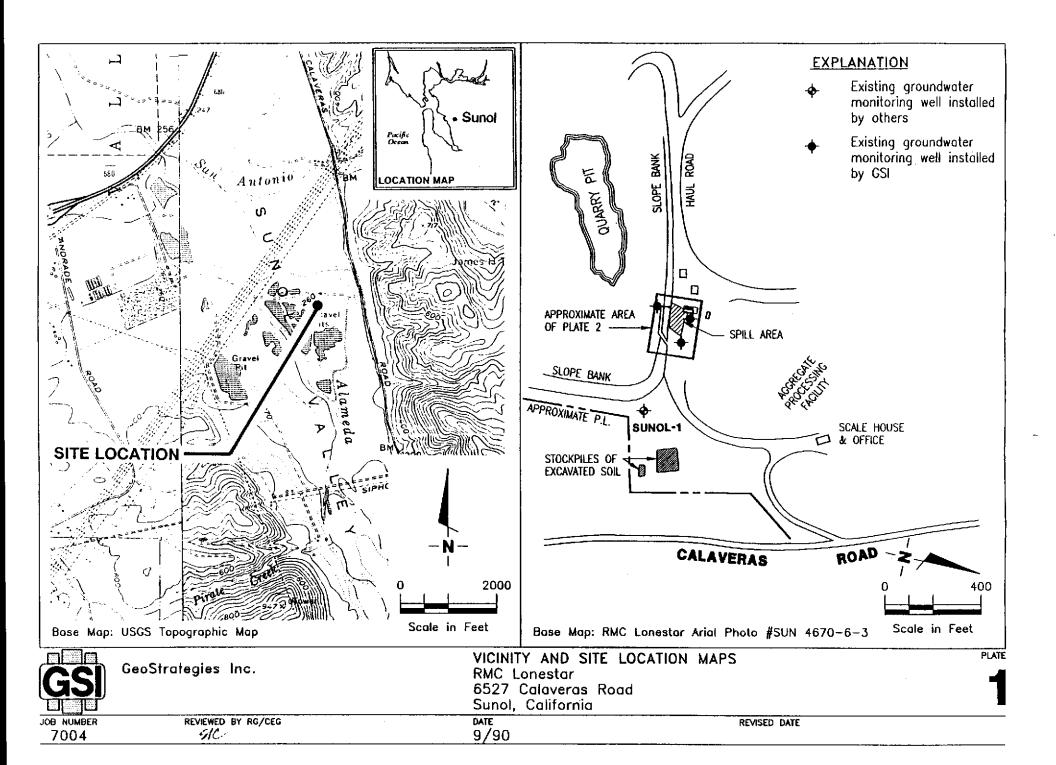
SAMPLE DATE	SAMPLE POINT	TPH-D (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)	TPH-G (PPB)
05-Oct-90	RMC-2	< 60.					****
19-Jan-91	RMC-2	< 50.	< 0.5	<0.5	<0.5	< 0.5	****
20-Feb-91	RMC-2	< 50.	< 0.5	<0.5	<0.5	<0.5	****
18-Mar-91	RMC-2	<50.	< 0.5	<0.5	<0.5	< 0.5	
10-Jun-91	RMC-2	< 50.	< 0.5	< 0.5	< 0.5	<0.5	
17-Sep-91	RMC-2	< 50.	< 0.5	< 0.5	< 0.5	<0.5	
16-Dec-91	RMC-2	<50.	<0.5	< 0.5	<0.5	< 0.5	
09-Mar-92	RMC-2	Not S	Sampled				
30-Jun-92	RMC-2	<50.	<0.5	<0.5	<0.5	< 0.5	
05-Oct-90	RMC-3	<b>&lt;</b> 50.	****	****			
19-Jan-91	RMC-3	< 50.	<0.5	<0.5	<0.5	<0.5	
20-Feb-91	RMC-3	< 50.	<0.5	<0.5	<0.5	<0.5	
18-Mar-91	RMC-3	<50.	<0.5	<0.5	<0.5	<0.5	
10-Jun-91	RMC-3	<50.	<0.5	<0,5	<0.5	<0.5	
17-Sep-91	RMC-3	<50.	<0.5	<0.5	<0.5	<0.5	
16-Dec-91	RMC-3	< 50.	<0.5	<0.5	<0.5	<0.5	
09-Mar-92	RMC-3	Not S	Sampled				****
30-Jun-92	RMC-3	<50.	<0.5	< 0.5	<0.5	<0.5	****
05-Oct-90	RMC-4	<50.		***			
19-Jan-91	RMC-4	<b>&lt;</b> 50.	1.0	0.8	3.1	1.2	***
20-Feb-91	RMC-4	<b>&lt; 50</b> .	<0.5	< 0.5	<0.5	<0.5	
18-Mar-91	RMC-4	<50.	0.83	4.4	< 0.5	2.3	
10-Jun-91	RMC-4	< 50.	<0.5	4.1	<0.5	0.6	
17-Sep-91	RMC-4	<50.	<0.5	<0.5	<0.5	<0.5	
16-Dec-91	RMC-4	< 50.	<0.5	<0.5	<0.5	<0.5	
09-Mar-92	RMC-4	< 50.	<0.5	<0.5	<0.5	<0.5	
30-Jun-92	RMC-4	<50.	<0.5	<0.5	<0.5	<0.5	

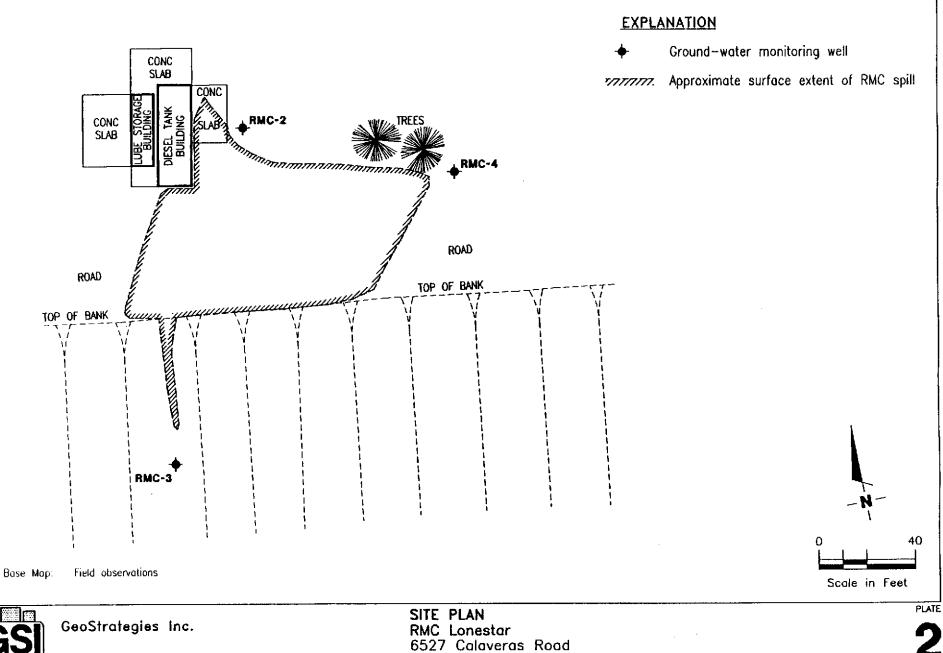
TPH-D = Total Petroleum Hydrocarbons calculated as Diesel.

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline.

PPB = Parts Per Billion.

Note: All data shown as <x are reported as ND (none detected).





JOB NUMBER

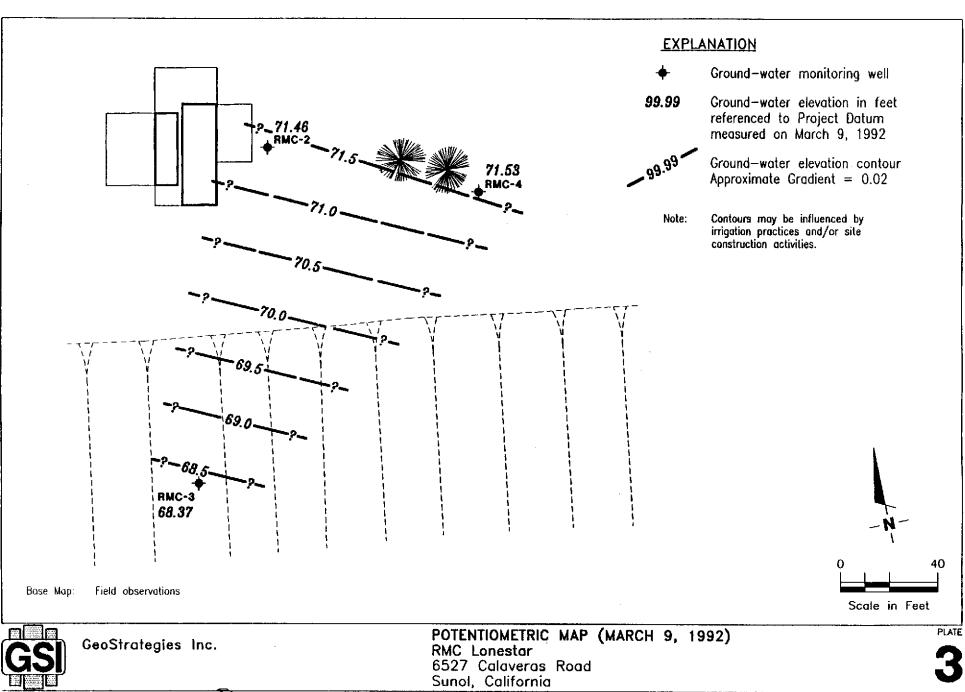
700401-8

REVIEWED BY

Sunol, California DATE

4/92

REVISED DATE

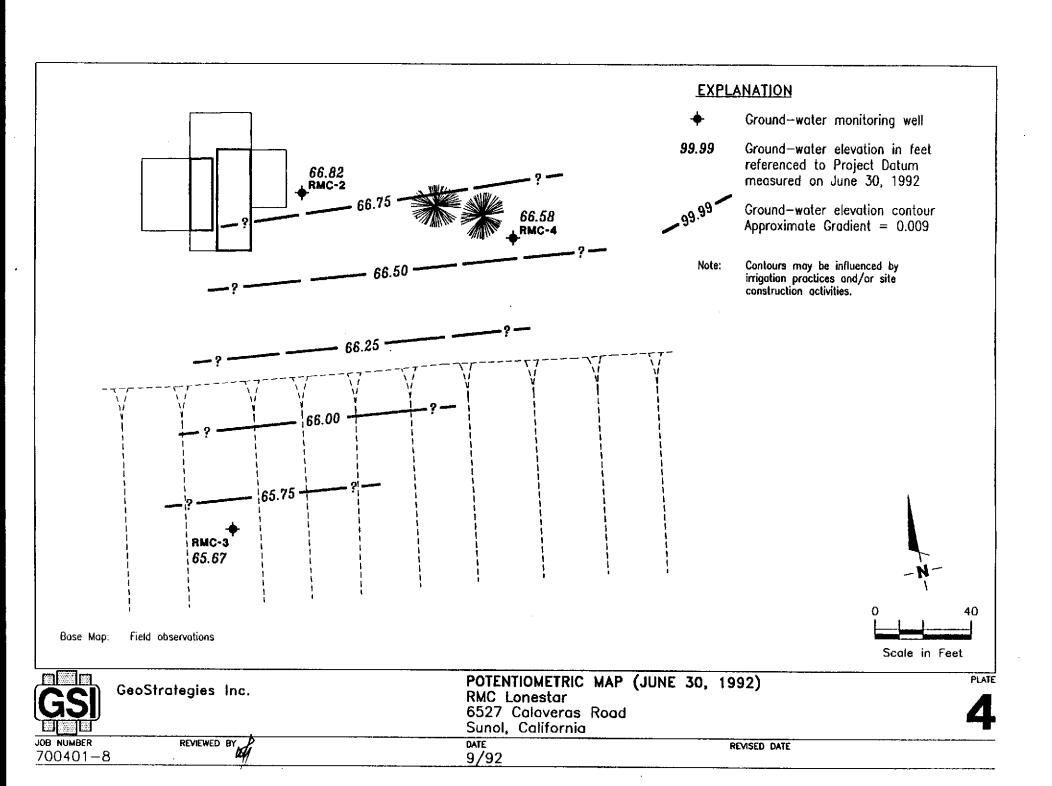


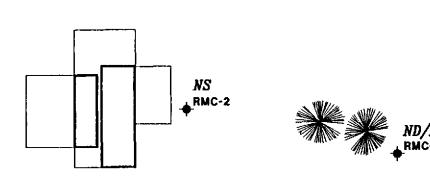
JOB NUMBER REVIE 700401-8

REVIEWED BY

DATE 9/92

REVISED DATE





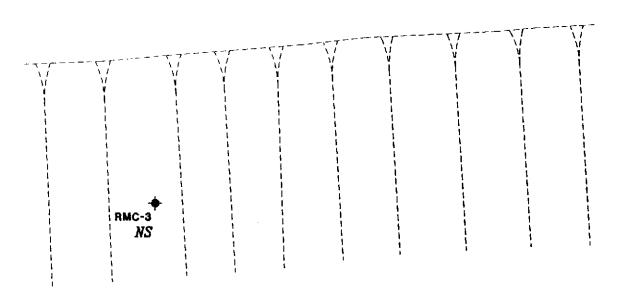
# **EXPLANATION**

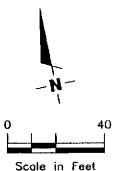
◆ Ground-water monitoring well

99/9.9 TPH-D (Total Petroleum Hydrocarbons calculated as Diesel)/Benzene concentrations in ppb sampled on March 9, 1992

ND Not Detected (See laboratory reports for detection limits)

NS Not Sampled





PLATE

Base Map:

Field observations

GeoStrategies Inc.

TPH-D/BENZENE CONCENTRATION MAP (MARCH 9, 1992)

RMC\_Lonestar

6527 Calaveras Road Sunol, California

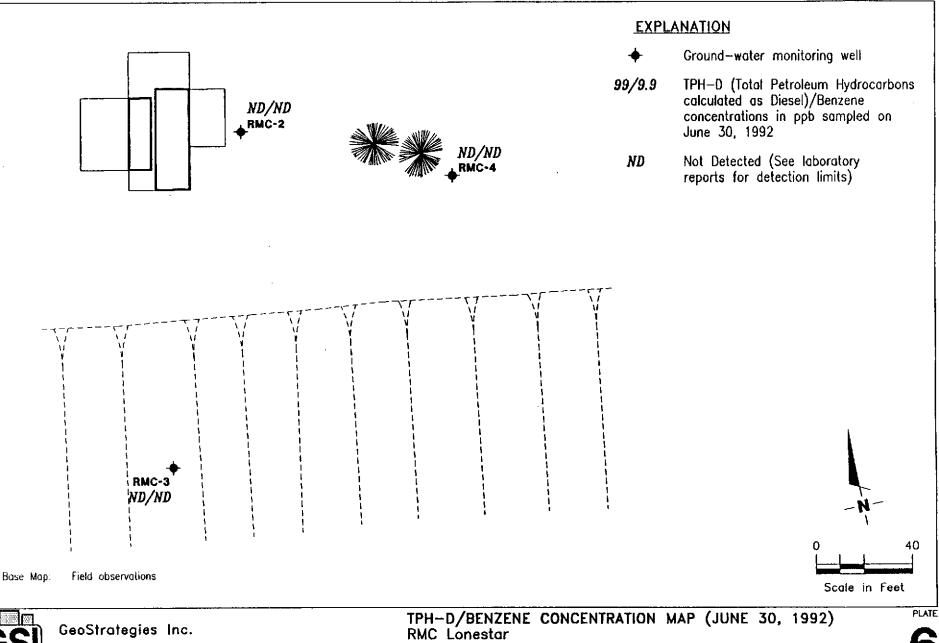
DATE 9/92

REVISED DATE

JOB NUMBER 700401-8

REVIEWED BY

BY





REVIEWED BY

6527 Calaveras Road

Sunol, California

DATE

REVISED DATE

JOB NUMBER 700401-8

9/92

APPENDIX A

CHEMICAL ANALYTICAL REPORTS

AND CHAIN-OF-CUSTODY FORMS



# **NATIONAL ENVIRONMENTAL** TESTING, INC.

NET Pacific, Inc. 435 Tesconi Circle Santa Rosa, CA 95401

Tel: (707) 526-7200 Fax: (707) 526-9623

GETTLER-RYAN INC

Frank Cline Gettler-Ryan 2150 W. Winton Hayward, CA 94545 Date: 03/26/1992

Date: 03/26/1992 NET Client Acct. No: 67400

NET Pacific Log No: 92.1323 Received: 03/13/1992

Client Reference Information

RMC Lonestar, 6527 Calaveras Rd., Sunol

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Júles Skamarack Laboratory Manager

cc:

Harry Reppart RMC Lonestar P.O. Box 5252

6601 Koll Center Pkwy Pleasanton, CA 94566

Enclosure(s)



Clien. Acct: 67400

Client Name: RMC Lonestar

NET Log No: 92.1323

Date: 03/26/1992

Page: 2

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

SAMPLE DESCRIPTION: RMC-4

Date Taken: 03/09/1992 Time Taken: 16:10 LAB Job No: (-116337)

,	,	Reportin	ıg		
Parameter	Method	Limit	Results	Units	
METHOD 8020 (GC, Liquid)					
DATE ANALYZED			03-15-92		
DILUTION FACTOR*			1		
Benzene	8020	0.5	ND	ug/L	
Ethylbenzene	8020	0.5	ND	ug/t	
Toluene	8020	0.5	ND	ug/L	
Xylenes (Total)	8020	0.5	ND	ug/L	
SURROGATE RESULTS					
Bromofluorobenzene			78	% Rec.	
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1		
DATE EXTRACTED			03-16-92		
DATE ANALYZED			03-17-92		
as Diesel	3510	0.05	ND	mg/L	



Clien. Acct: 67400

Client Name: RMC Lonestar

NET Log No: 92.1323

Date: 03/26/1992

Page: 3

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

# QUALITY CONTROL DATA

<u>Parameter</u>	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Benzene	0.5	ug/L	91	ND	93	81	14
Toluene	0.5	ug/L	96	ND	96	86	10
Diesel	0.05	mg/L	72	ND	103	89	13

COMMENT: Blank Results were ND on other analytes tested.



#### KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte
		not detected at the value following. This datum supercedes
		the listed Reporting Limit.

 Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).

ICVS : Initial Calibration Verification Standard (External Standard).

mean : Average; sum of measurements divided by number of measurements.

mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample,

wet-weight basis (parts per million).

mg/L : Concentration in units of milligrams of analyte per liter of sample.

mL/L/hr : Milliliters per liter per hour.

MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.

N/A : Not applicable.

NA : Not analyzed.

ND : Not detected; the analyte concentration is less than applicable listed

reporting limit.

NTU : Nephelometric turbidity units.

RPD : Relative percent difference, 100 [Value 1 - Value 2]/mean value.

SNA : Standard not available.

ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample,

wet-weight basis (parts per billion).

ug/L : Concentration in units of micrograms of analyte per liter of sample.

umhos/cm : Micromhos per centimeter.

#### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

 $\underline{\mathtt{SM}}$ : see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Gettler -	Ryan Inc		VIRONMENTAL DI	<u> </u>	101 Chain of Custody
COMPANY	ENIC	- Lones	Jan		_ JOB NO. (4468)
JOB LOCATION	v 6527	Cala	vares Rd		
CITY	Sunol	CA		PHON	E NO
AUTHORIZED_	RMC Harry	Reppart	Frank Chite	3-9-92 P.O. N	o. <u>3004.01</u>
SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
PMC-L	1 5	Liguid	3-9-92/16:10	TPH Diesel/	BIXE
Trip	3	Liguid		Same	Trip blage not heard 15/13/92
			TODY SEAL	ED 3/4/42 )	left mess LD 3/13/92_
Report 4 Bill 70	0	nestar Opcvi		TO G/R Atin Fra.	rk dini
RELINQUISHED RELINQUISHED	Pefrig #1	3-19-92 - Elai 3-11-9	. 17:00	EIVED BY:  Rely in # 1  EIVED BY:  Kuple	January 3/12/92 3/13/92 0800
DESIGNATED L		NET			
REMARKS:	Mai	ma (	7A T		
DATE COMPLETE	D		FORE	MAN	

- - -



NET Pacific. Inc. 435 Tesconi Circle Santa Rosa, CA 95401

Tel: (707) 526-7200 Fax: (707) 526-9623

Casa se

Harry Rapport RMC Lonestar P.O. Box 5252 6601 Koll Center Pkwy Pleasanton, CA 94566 Date: 07/23/1992

NET Client Acct No: 67400 NET Pacific Job No: 92.3700

Received: 07/02/1992

REVISED 08-17-92

Client Reference Information

RMC Lonestar, 6527 Calaveras Rd., Sunol, Job No. 3004.01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Laboratory Manager

cc:

John Vargas Gettler-Ryan

2150 W. Winton Avenue Hayward, CA 94545

JS:rct Enclosure(s)



Client No: 67400 Client Name: RMC Lonestar

NET Job No: 92.3700

Date: 07/23/1992

Page: 2

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol, Job No. 3004.01

# Descriptor, Lab No. and Results

			RMC-2	RMC-3		
Parameter	Method	Reporting Limit	06/30/1992 13:50 128446	06/30/1992 12:40 128447	Units	
TPH (Gas/BTXE,Liquid)			-		-	
METHOD 5030 (GC, FID)						
DATE ANALYZED			07-10-92	07-10-92		
DILUTION FACTOR*			î	1		
as Gasoline	5030	0.05	ND	ND	mg/L	
METHOD 8020 (GC, Liquid)						
DATE ANALYZED			07-10-92	07-10-92		
DILUTION FACTOR*			1	1		
Benzene	8020	0.5	ND	ND	ug/L	
Ethylbenzene	8020	0.5	ND	ND	ug/L	
Toluene	8020	0.5	ND	ND	ug/L	
Xylenes (Total)	8020	0.5	ND	ND	ug/L	
SURROGATE RESULTS			<b></b>			
Bromofluorobenzene	5030		88	85	% Rec.	
METHOD 3510 (GC,FID)						
DILUTION FACTOR*			1	1		
DATE EXTRACTED			07-06-92	07-06-92		
DATE ANALYZED			07-15-92	07-15-92		
as Diesel	3510	0.05	ND	ND .	mg/L	



Client No: 67400 Client Name: RMC Lonestar

NET Job No: 92.3700

Date: 07/23/1992

Page: 3

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol, Job No. 3004.01

# Descriptor, Lab No. and Results

RMC-4

Trip

Parameter	Method	Reporting Limit	06/30/1992 13:12 128448	128449	Units
TPH (Gas/BTXE, Liquid)				<u> </u>	
METHOD 5030 (GC,FID)					
DATE ANALYZED			07-10-92	07-10-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	ND	ND	mg/L
METHOD 8020 (GC, Liquid)					
DATE ANALYZED			07-10-92	07-10-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	ND	ND	ug/L
Ethylbenzene	8020	0.5	ND	ND	ug/L
Toluene	8020	0.5	ND	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ND	ug/L
SURROGATE RESULTS					
Bromofluorobenzene	5030		84	80	% Rec.
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			07-06-92	07-06-92	
DATE ANALYZED			07-15-92	07-15-92	
as Diesel	3510	0.05	ND	ND	mg/L



Client No: 67400

Client Name: RMC Lonestar

NET Job No: 92.3700

Date: 07/23/1992

Page: 4

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol, Job No. 3004.01

# QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
		· .					
Gasoline	0.05	mg/L	103	ND	101	102	1.0
Benzene	0.5	ug/L	95	ND	100	100	<1
Toluene	0.5	ug/L	109	ND	74	100	<1
Diesel	0.05	mg/L	89	ND	83	71	16
Motor Oil	0.5	mg/L	90	ND	N/A	N/A	N/A

COMMENT: Blank Results were ND on other analytes tested.