RMC LONESTAR

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

August 1, 1991

Mr. Scott O. Seery, Hazardous Materials Specialist
Department of Environmental Health,
Alameda County Health Agency
80 Swan Way, Rm. 200
Oakland, CA 94621

Subject: **Sunol Quarry Diesel Fuel Cleanup - Quarterly Report #3**

Dear Mr. Seery:

Since our last report dated May 15, we have completed the second quarter, 1991 groundwater testing requirement for monitoring wells RMC-2, RMC-3 and RMC-4 at this site. The relevant data are presented in Tables 1, 2 and 3 of the attached report.

Since October, 1990, we have sampled these monitoring wells five times and no analysis has exceeded current Regional Water Quality Control Board Maximum Contaminant Levels. We think that these data clearly show that there has been no significant impact to ground water from the diesel spill which occurred one year ago in August, 1990. Consequently, **we feel that no further testing is necessary and ask your approval to discontinue this ground water monitoring program.**

Thank you for your consideration of this request.

Sincerely,

H. W. Reppert

Harry W. Reppert,
Director of Environmental Affairs

cc: Mr. Hossain Kazemi, RWQCB
Mr. Phil Caskey, San Francisco Water Department,
Water Quality Division, Milbrae
Mr. Jeffrey Peterson, GeoStrategies, Inc.
Mr. Louis Schipper
Mr. Rich Bier, Sunol

91 AUG -2 PM 2:27

GeoStrategies Inc.

SITE UPDATE

RMC Lonestar
6527 Calaveras Road
Sunol, California

700401-5

August 1, 1991

GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545
(415) 352-4800

August 1, 1991

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 1991 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 evaluate the impact of a 2500 gallon diesel spill to the soil and groundwater beneath the site.

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 8015 (Modified) and Benzene, Toluene, Ethylbenzene, and Toluene (BTEX) according to EPA Method 602.

CURRENT QUARTERLY SAMPLING RESULTS

Potentiometric Data

Prior to ground-water sampling in June 1991, 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 casing and recorded to the nearest $\pm$0.01 foot. Corresponding elevations, referenced to the project datum, are presented in Table 1. Water-level measurements for April and May, 1991, were not collected. Monthly collection of water level measurements was initiated in July, 1991. These data are included in Table 1. Water-level data were used to construct potentiometric maps for the months of June and July 1991 (Plates 3 and 4). Shallow ground-water flow beneath the site during this quarter was to the southwest at a calculated gradient ranging from 0.009 to 0.011. Well Sunol-1 was dry.

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.

Ground-water Analytical Data

Ground-water samples were collected on June 10, 1991. The samples were analyzed for TPH-Diesel according to EPA Method 8015 (Modified) and BTEX according to EPA Method 602 by NET Pacific Inc. (NET), a State of California certified laboratory located in Santa Rosa, California.

TPH-Diesel and benzene were not detected in the wells this quarter. These data are summarized in Table 2. A chemical concentration map for TPH-Diesel and Benzene is presented on Plate 5. The NET certified analytical reports are presented in Appendix A. Historical chemical analytical data are summarized in Table 3.

Quality Control

A Quality Control (QC) sample (Trip Blank) was included in the June 10, 1991 sampling. This sample was 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.

If you have any questions, please call.

GeoStrategies Inc. by.

Stephen J. Carter
Geologist

John F. Vargas
Project Geologist
R.G. 5046

REGISTERED GEOLOGIST
JOHN F. VARGAS
NO. 5046
STATE OF CALIFORNIA

SJC/JFV/kjj

Plate 1. Vicinity and Site Location Maps
Plate 2. Site Plan
Plate 3. Potentiometric Map (June 10, 1991)
Plate 4. Potentiometric Map (July 17, 1991)
Plate 5. TPH-Diesel/Benzene Concentration Map

Appendix A: Analytical Laboratory Reports and Chains-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)	PURGED WELL VOLUMES	pH	TEMPERATURE (F)	CONDUCTIVITY (uMHOS/cm)
RMC-2	10-Jun-91	2	42.5	100.00	32.67	----	67.33	4	7.56	65.4	524
	17-Jul-91	2	42.5	100.00	33.20	----	66.80	----	----	----	----
RMC-3	10-Jun-91	2	18.5	69.84	4.01	----	65.83	5	7.50	65.5	503
	17-Jul-91	2	18.5	69.84	4.31	----	65.53	----	----	----	----
RMC-4	10-Jun-91	2	43.0	101.38	34.12	----	67.26	5	7.53	64.0	553
	17-Jul-91	2	43.0	101.38	34.50	----	66.88	----	----	----	----

Notes:
1. Static water elevations referenced to project datum.
2. Physical parameter measurements represent stabilized values.
3. pH values reported in pH units.
4. Static water-levels corrected for floating product (conversion factor = 0.80).

TABLE 2

GROUND-WATER ANALYSIS DATA

WELL NO	SAMPLE DATE	ANALYSIS DATE	TPH-D (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
RMC-2	10-Jun-91	13-Jun-91	<50.	<0.5	<0.5	<0.5	<0.5
RMC-3	10-Jun-91	13-Jun-91	<50.	<0.5	<0.5	<0.5	<0.5
RMC-4	10-Jun-91	13-Jun-91	<50.	<0.5	4.1	<0.5	0.6
TB	----	13-Jun-91	<50.	<0.5	<0.5	<0.5	<0.5

CURRENT REGIONAL WATER QUALITY CONTROL BOARD MAXIMUM CONTAMINANT LEVELS
Benzene 1.0 ppb Xylenes 1,750 ppb Ethylbenzene 680 ppb

CURRENT DHS ACTION LEVELS
Toluene 100.0 ppb

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel
PPB = Parts Per Billion
TB = Trip Blank

Note: 1. All data shown as <x are reported as ND (none detected).
2. DHS Action Levels and MCL are subject to change pending State review.

TABLE 3

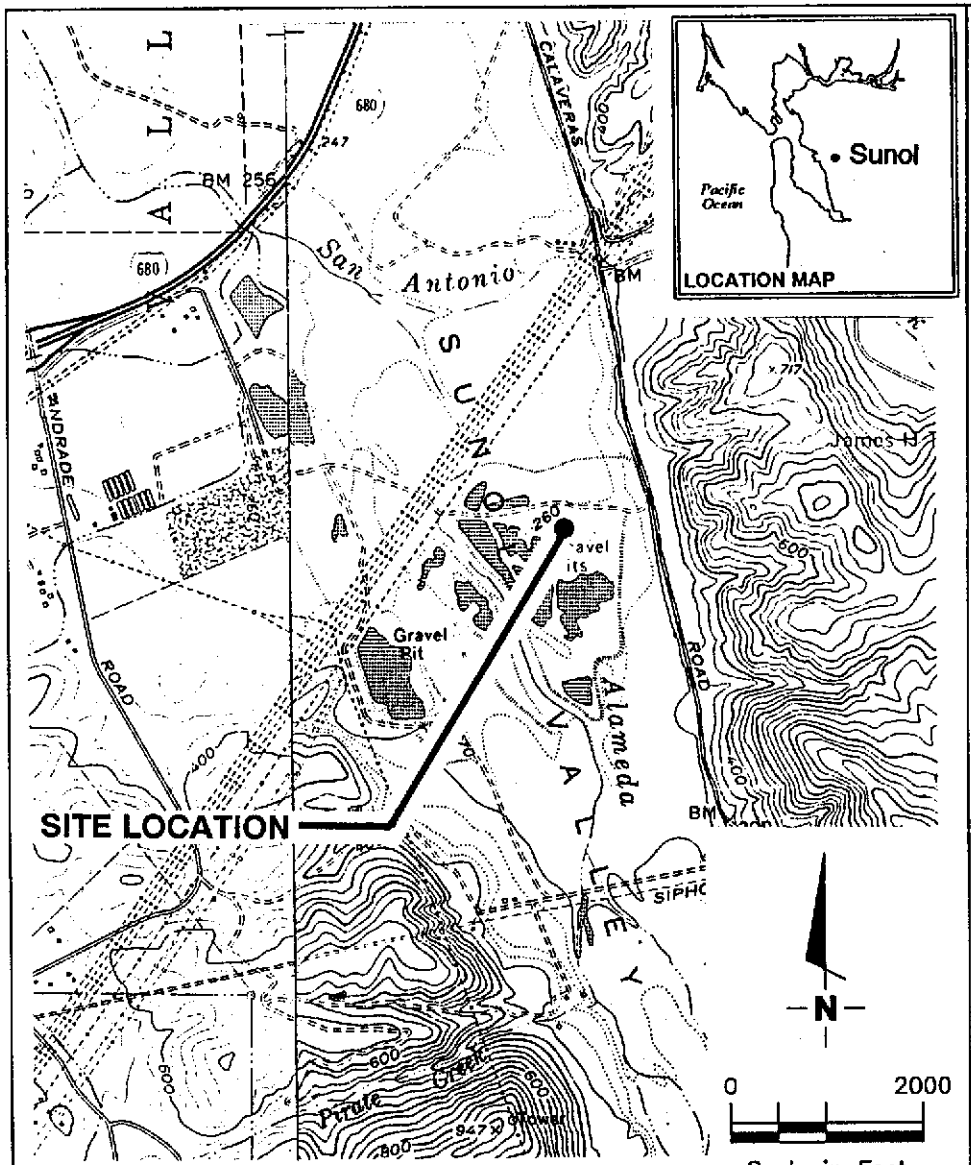
HISTORICAL GROUND-WATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-D (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (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
05-Oct-90	RMC-3	<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
05-Oct-90	RMC-4	<50.	----	----	----	----
[illegible]	RMC-4	<50.	[illegible]	[illegible]	[illegible]	[illegible]
20-Feb-91	RMC-4	<50.	<0.5	<0.5	<0.5	<0.5
[illegible]	RMC-4	<50.	[illegible]	[illegible]	<0.5	[illegible]
[illegible]	RMC-4	<50.	<0.5	[illegible]	<0.5	[illegible]

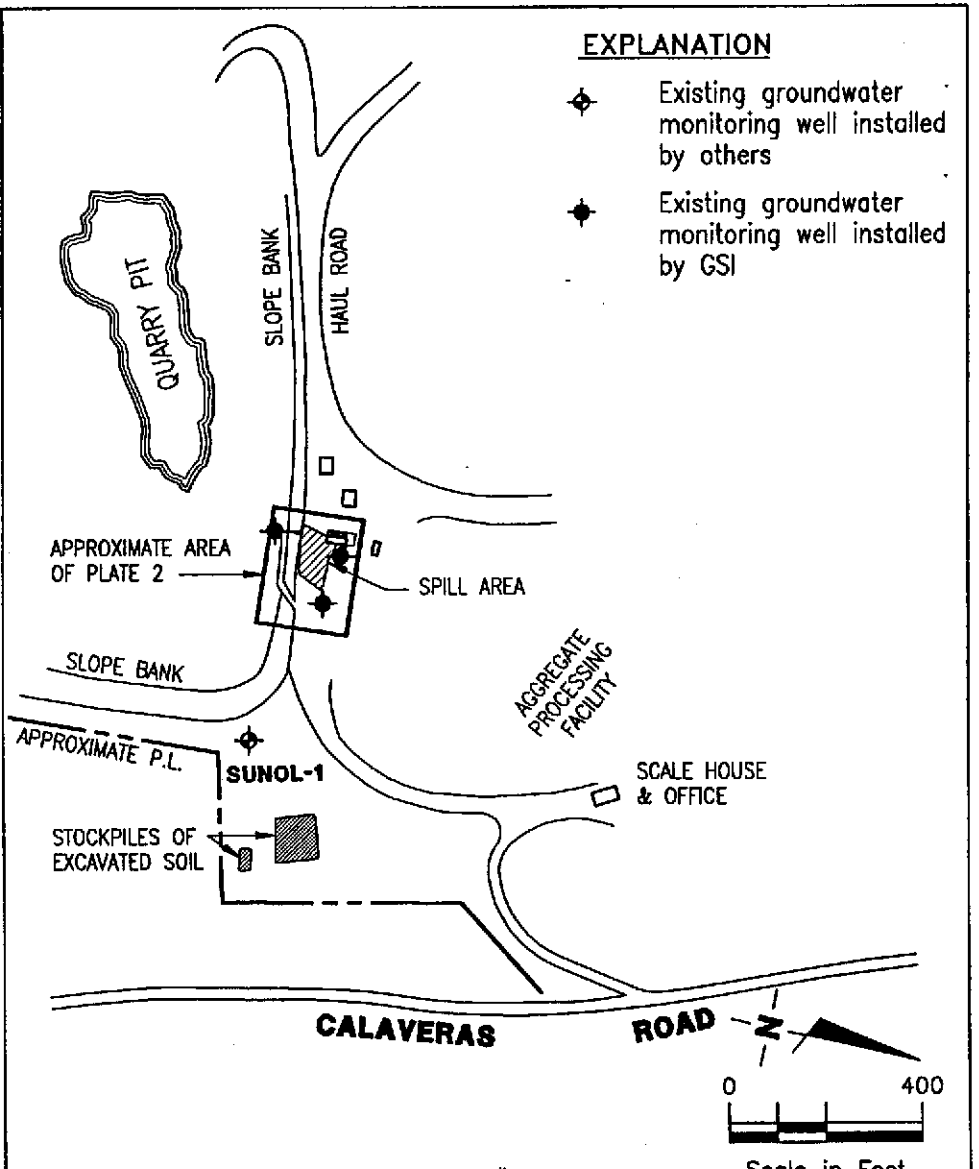
Current Regional Water Quality Control Board Maximum Contaminant Levels
Benzene 1. ppb Xylenes 1750. ppb Ethylbenzene 680. ppb

Current DHS Action Levels Toluene 100.0 ppb

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel
PPB = Parts Per Billion
NOTE: 1. DHS Action levels and MCL's are subject to change pending State of California review.
2. All data shown as <X are reported as ND (none detected).



Base Map: USGS Topographic Map



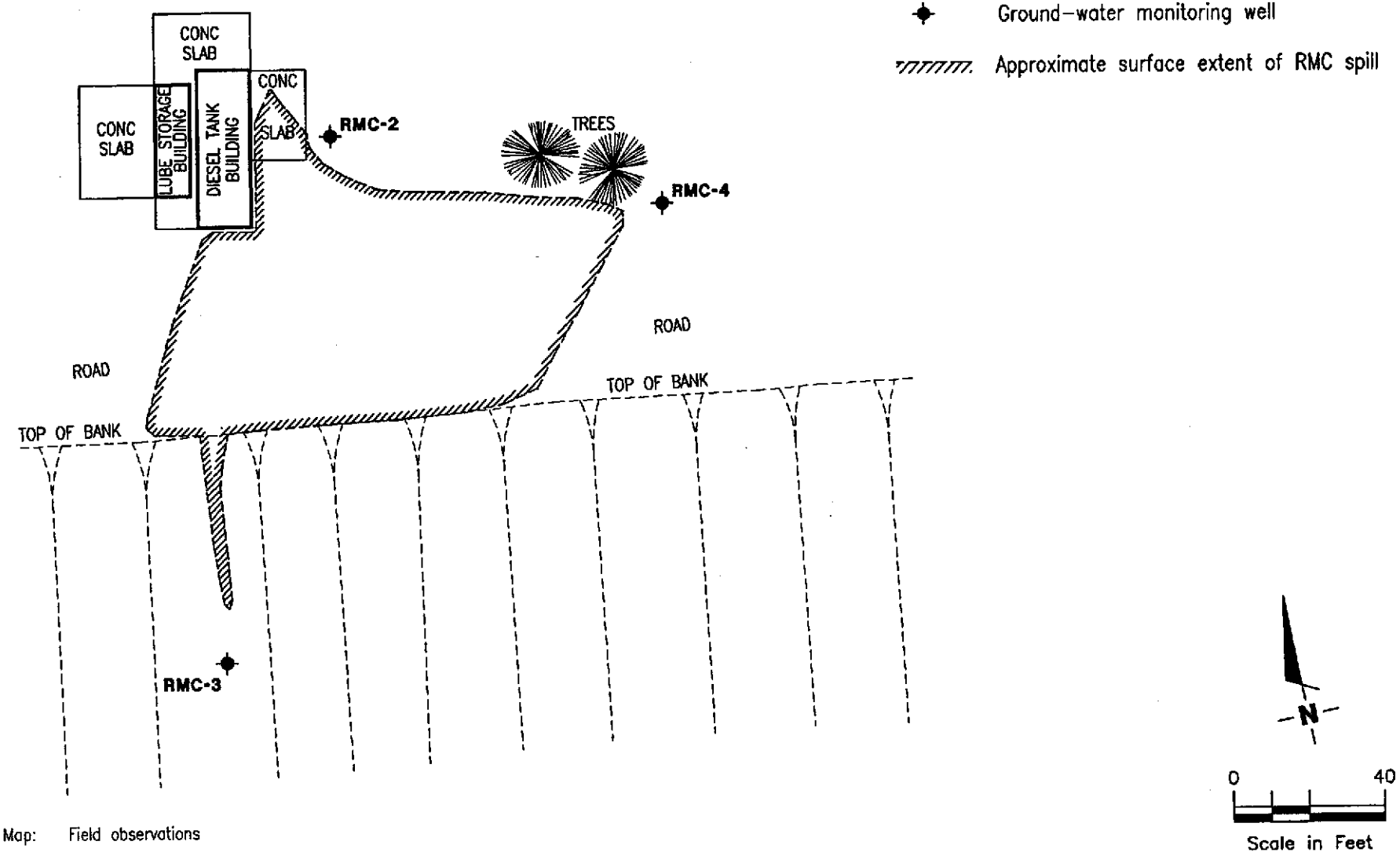
Base Map: RMC Lonestar Arial Photo #SUN 4670-6-3

GeoStrategies Inc.

VICINITY AND SITE LOCATION MAPS
RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
7004	SIC	9/90	

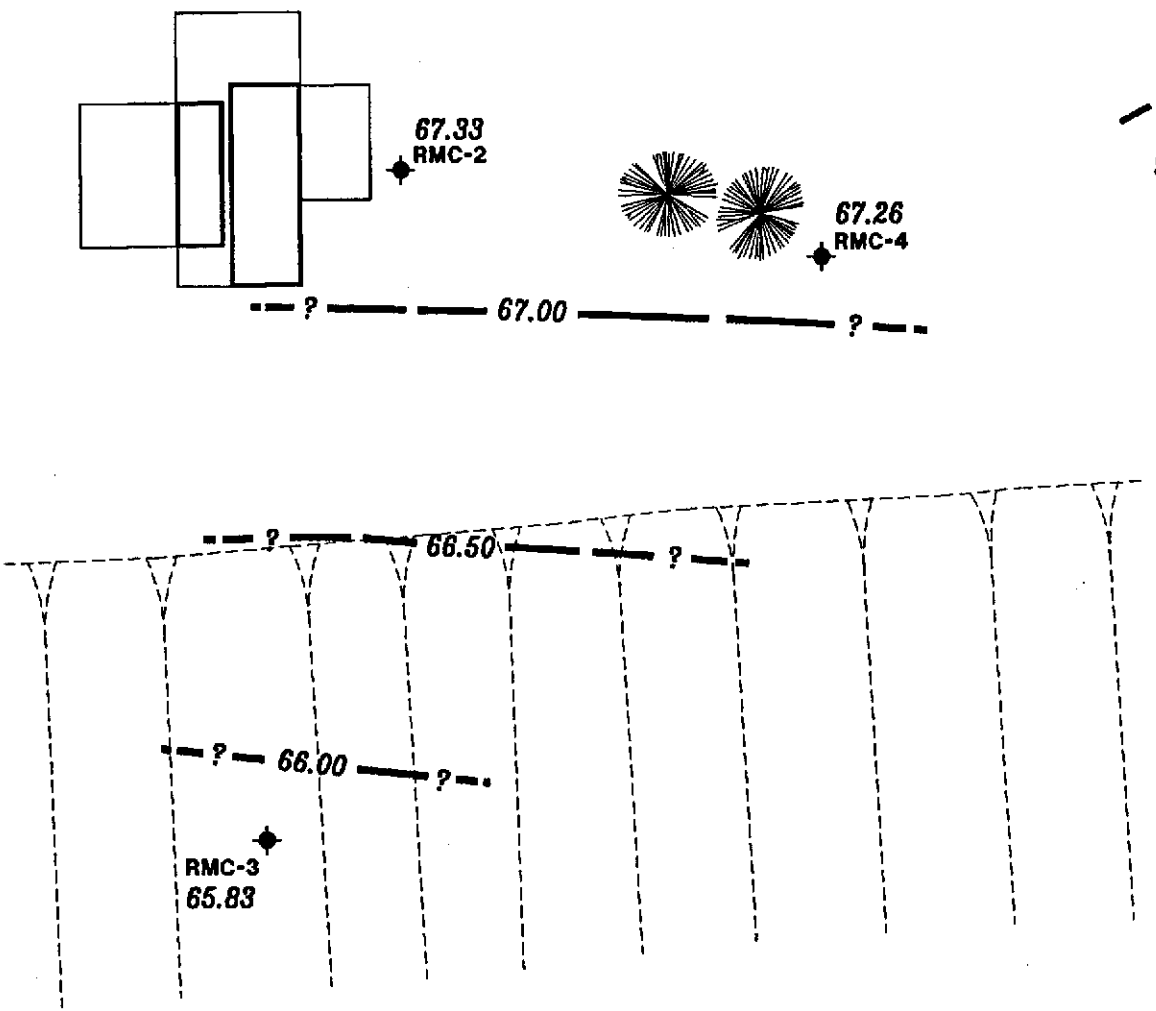


GeoStrategies Inc.

SITE PLAN
RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE **2**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
700401-5		8/91	



EXPLANATION

- Ground-water monitoring well
- 99.99 — Ground-water elevation contour Approximate Gradient = 0.011
- 99.99 — Ground-water elevation in feet referenced to Project Datum measured on June 10, 1991

Note: Contours may be influenced by irrigation practices and/or site construction activities.

Base Map: Field observations

N

0 40

Scale in Feet

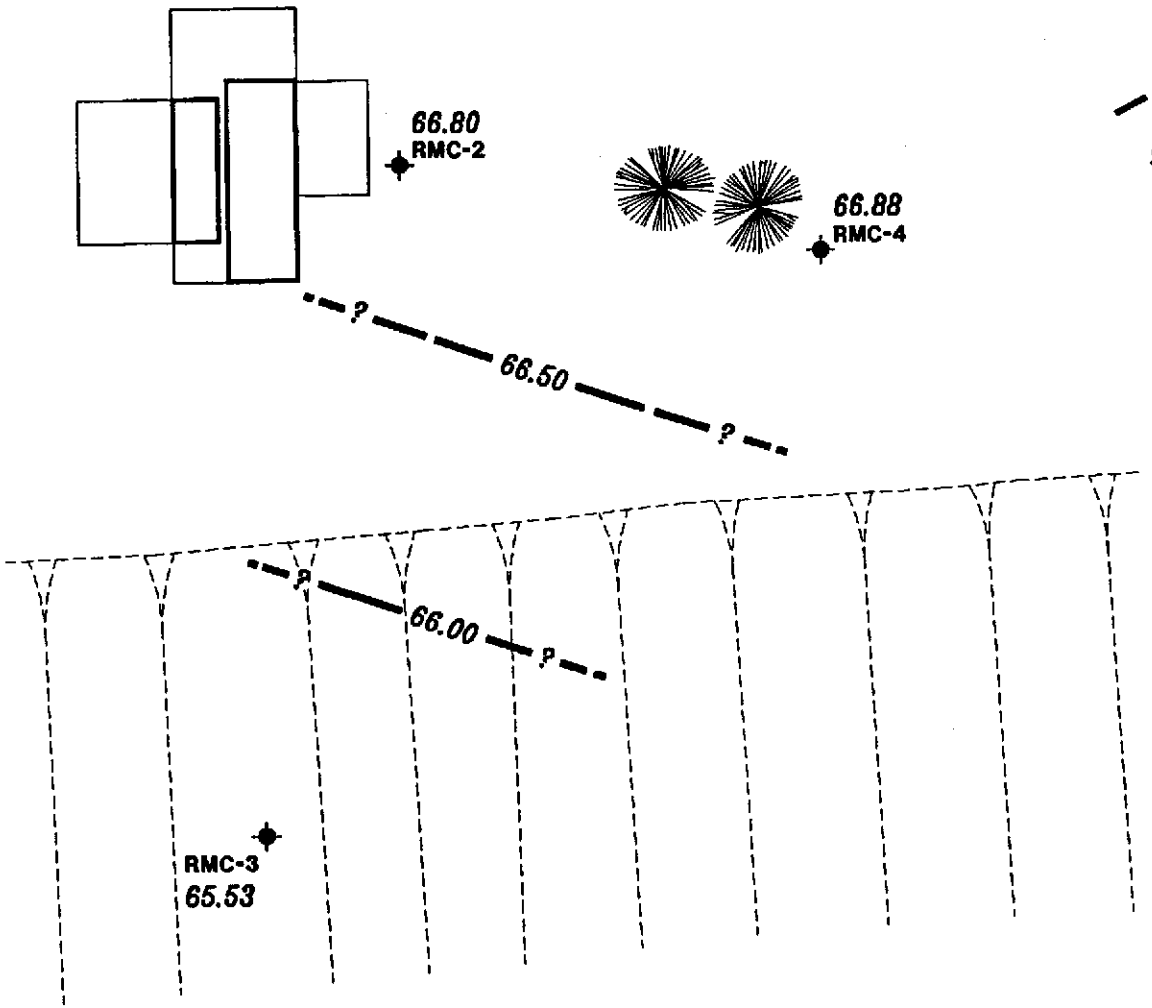
GeoStrategies Inc.

POTENTIOMETRIC MAP (June 10, 1991)

RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE **3**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
700401-5	SJC	8/91	



EXPLANATION

- Ground-water monitoring well
- 99.99 — Ground-water elevation contour. Approximate Gradient = 0.009
- 99.99 — Ground-water elevation in feet referenced to Project Datum measured on July 17, 1991

Note: Contours may be influenced by irrigation practices and/or site construction activities.

N

0 40

Scale in Feet

Base Map: Field observations

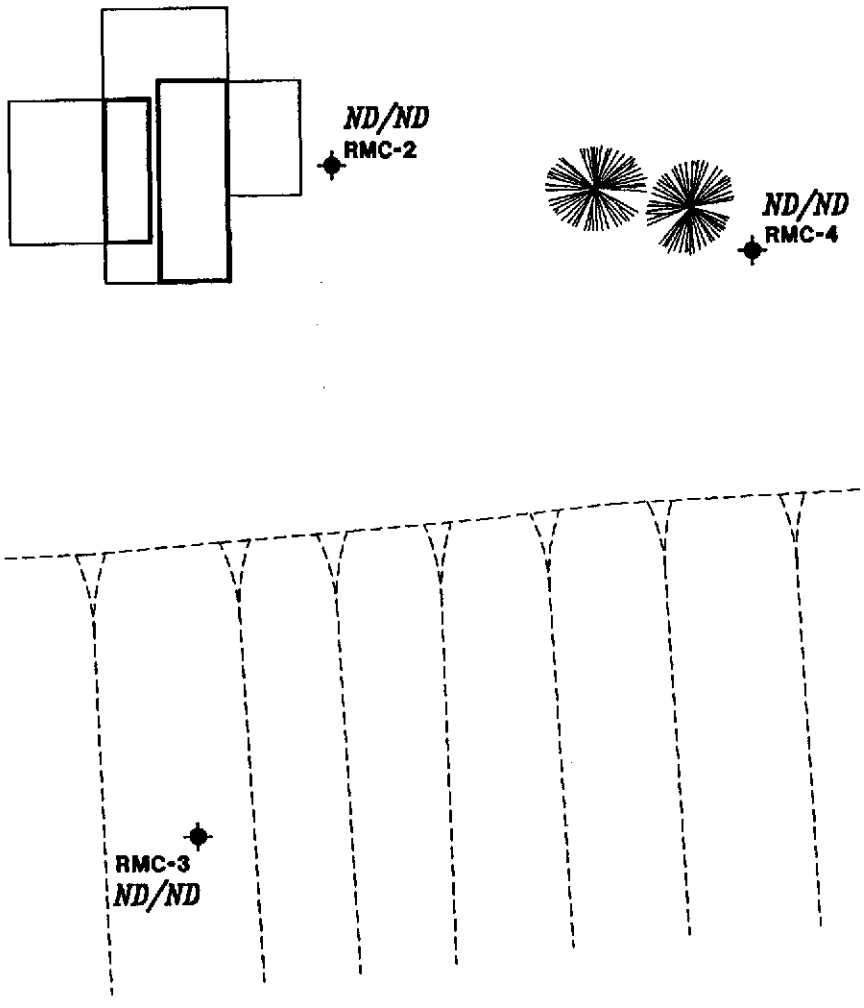
GeoStrategies Inc.

POTENTIOMETRIC MAP (July 17, 1991)

RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE **4**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
700401-5	S/C	8/91	



EXPLANATION

- Ground-water monitoring well
- *99/9.9* TPH-D (Total Petroleum Hydrocarbons calculated as Diesel)/Benzene concentrations in ppb sampled on June 10, 1991
- *ND* Not Detected (See laboratory reports for detection limits)

Base Map: Field observations

N

0 40

Scale in Feet

GeoStrategies Inc.

TPH-D/BENZENE CONCENTRATION MAP

RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE **5**

JOB NUMBER 700401-5

REVIEWED BY SC

DATE 8/91

REVISED DATE

APPENDIX A
ANALYTICAL LABORATORY REPORT
AND CHAIN-OF-CUSTODY

NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Louis Schipper
RMC Lonestar
P.O. Box 5252
6601 Koll Center Pkwy
Pleasanton, CA 94566

Date: 06-26-91
NET Client Acct. No: 674
NET Pacific Log No: 7974
Received: 06-11-91 1110

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:

Jules Skamarack
Laboratory Manager

cc: Tom Paulsen
Gettler Ryan
2150 Winton Avenue
Hayward, CA 94545

Enclosure(s)

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

SAMPLE DESCRIPTION: RMC-2 06-10-91 1245
LAB Job No: (-87849)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		06-19-91	
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	ND	ug/L
Xylenes, total	0.5	ND	ug/L
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		06-12-91	
DATE ANALYZED		06-13-91	
METHOD GC FID/3510		--	
as Diesel	0.05	ND	mg/L

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

SAMPLE DESCRIPTION: RMC-3 06-10-91 1226
LAB Job No: (-87850)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		06-19-91	
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	ND	ug/L
Xylenes, total	0.5	ND	ug/L
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		06-12-91	
DATE ANALYZED		06-13-91	
METHOD GC FID/3510		--	
as Diesel	0.05	ND	mg/L

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

SAMPLE DESCRIPTION: RMC-4 06-10-91 1145
LAB Job No: (-87851)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		06-19-91	
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	4.1	ug/L
Xylenes, total	0.5	0.6	ug/L
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		06-12-91	
DATE ANALYZED		06-13-91	
METHOD GC FID/3510		--	
as Diesel	0.05	ND	mg/L

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

SAMPLE DESCRIPTION: Trip Blank
LAB Job No: (-87852)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		06-19-91	
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	ND	ug/L
Xylenes, total	0.5	ND	ug/L
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		06-12-91	
DATE ANALYZED		06-13-91	
METHOD GC FID/3510		--	
as Diesel	0.05	ND	mg/L

Ref: RMC Lonestar, 6527 Calaveras Rd., Sunol

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	95	ND	69	65	6.0
Benzene	0.5	ug/L	83	ND	108	107	1.3
Toluene	0.5	ug/L	91	ND	105	105	< 1

COMMENT: Blank Results were ND on other analytes tested.

NET Pacific, Inc.

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.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

(1997)

Gettler - Ryan Inc. ENVIRONMENTAL DIVISION — **2530 Chain of Custody**

COMPANY RMC Lonestar JOB NO. _____

JOB LOCATION 6527 Calaveras Road

CITY Sunol CA PHONE NO. _____

AUTHORIZED Tom Panbon DATE 6-10-91 P.O. NO. 3004.01

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
RMC-2	6	Liquid	6-10-91 / 12:45	TPH (Diesel) BTXE	
RMC-3	6		/ 12:26		
RMC-4	6		/ 11:45		
Trip	6		—		
WIC				samples received cold, VOAs have no headspace bubbles 6/11/91	

RELINQUISHED BY: 6-10-91 18:00

RECEIVED BY: Retrg #1 6-10-91 18:00

RELINQUISHED BY: Retrg #1 6-10-91 07:00

RECEIVED BY: 6-11-91 07:00

RELINQUISHED BY: 6-11-91 01:10

RECEIVED BY LAB: 6/4/91 1110

DESIGNATED LABORATORY: (Net Pacific) DHS #: _____

REMARKS: (Normal TAT)

DATE COMPLETED 6-10-91 FOREMAN _____