

91 FEB -6 PM 4: 59

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

February 1, 1991

Mr. Scott O. Seery
Hazardous Materials Specialist
ALAMEDA COUNTY DEPARTMENT
OF ENVIRONMENTAL HEALTH
80 Swan Way, Room 200
Oakland, CA 94621

.. Re: Sunol Quarry Diesel Fuel
Cleanup - Quarterly Report #1

Dear Mr. Seery:

Pursuant to your letter dated November 16, 1990, we are submitting herewith the First Quarterly Report for the Sunol Site. Our last progress report dated November 1, 1990, explained our work on this site from the spill of August 20th through the month of October. Since that time we have closed the site and begun our first monthly sampling in January.

In order to present the latest information, this report includes the January testing results and project status as of February 1st. Our May 1st report will recap the January, February and March groundwater testing data.

As I indicated on November 1st, we were turning our attention to the proper classification of the fuel contaminated soil now stored at the Sunol site and developing our proposal for its management.

Since we provide paving materials to the construction industry, we have examined new developments by the DOHS Alternative Technology Division for incorporating petroleum contaminated soil into asphaltic concrete. Indeed, for such material classified as non-RCRA hazardous waste, a procedure now exists for exempting this recycling method from the "Use Constituting Disposal" restrictions of the Health and Safety Code (Section 25143.2). A copy of the DOHS draft on this subject is attached, along with a relevant article on the use of petroleum contaminated soil in asphaltic paving material.

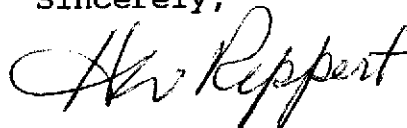
Scott O. Seery
February 1, 1991
Page Two

Another option which we have examined and believe may be an equally effective solution is bioremediation with a humic polymer. This process yields an enriched topsoil product suitable for landscaping. Since we have reclamation obligations associated with our quarrying operations there is an obvious benefit to such a conversion.

Yet, another alternative is to test the pile for hazardous characteristics and demonstrate that the soil is a non-hazardous waste. (We believe that is the proper characterization for this particular material.) In that event, we understand that while the DHS may deem no further jurisdiction over its management, the Regional Water Quality Control Board would certainly continue its regulatory authority over the project and would require remediation. At this stage, it appears that bioremediation is the best choice. Consequently, we are developing a Work Plan for the bioremediation option as the most expedient method for dealing with the Sunol stockpile. We intend to complete the Work Plan within two weeks and will forward it to you and Mr. Hossain Kazemi for your review and comments when it is finalized.

Thank you for your continued assistance.

Sincerely,



Harry W. Reppert
Director of Environmental Affairs

HWR:nc

cc: Mr. Hossain Kazemi, RWQCB
Al Spotorno, San Francisco Water Department
Jeffrey L. Peterson, GeoStrategies, Inc.
Ralph Mitchell
Louis Schipper

Enclosures

hr206a



GeoStrategies Inc.

PROGRESS REPORT

RMC Lonestar
6527 Calaveras Road
Sunol, California

700401-3

February 1, 1991



GeoStrategies Inc.

2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545

(415) 352-4800

February 1, 1991

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

Attn: Mr. Harry Reppert

Re: PROGRESS REPORT
RMC Lonestar
6527 Calaveras Road
Sunol, California

Gentlemen:

This report has been prepared by GeoStrategies Inc. (GSI) and describes the 1991 first quarter sampling of the ground-water monitoring network, the excavation of diesel contaminated soils, and the collection of soil and ponded surface water samples at the above referenced RMC Lonestar (RMC) site (Plate 1). Field work was performed in accordance with GSI Field Methods and Procedures presented in the GSI report dated November 1, 1990, the Alameda County Health Care Agency letter to RMC dated November 16, 1990, and recommendations presented in the GSI report dated November 1, 1990. Field work and laboratory analyses were performed to comply with current State of California Water Resources Control Board and local agency guidelines.

BACKGROUND

On August 21, 1990, approximately 2,700 gallons of diesel fuel were spilled near the diesel tank building (Plate 2). Clean-up of this fuel spill was conducted in three phases:

Phase 1: Initial Excavation

Excavation of observed diesel saturated soils and the collection of six reconnaissance soil samples (RMCX-1 through RMCX-6). These samples were analyzed for Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) according to EPA Method 8015 (Modified).

700401-3

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Phase 2: Monitoring Well Installation

Based on soil chemical analytical data, three monitoring wells (RMC-2, RMC-3 and RMC-4) were installed. The wells were developed and sampled for TPH-Diesel according to EPA Method 8015 (Modified).

Phase 3: Extended Excavation

The excavation was extended vertically and horizontally. Twenty-six soil samples (RMCX-7 through RMCX-32) were collected and analyzed for TPH-Diesel according to EPA Method 8015 (Modified). Ground-water seepage at the toe of the bank south of the spill area was collected in four constructed surface impoundments (Pond #1 through Pond #4). A product sheen in Pond #2 was removed using absorbent pads. These ponds were sampled for TPH-Diesel according to EPA Method 8015 (Modified).

The results of the three phases of work at the site, and a discussion of the shallow hydrogeologic conditions are presented in the GSI report dated November 1, 1990.

FIELD ACTIVITIES AND PROCEDURES

Based on the results of soil chemical analytical data collected during Phase 3, additional excavation was undertaken at the site to remove two isolated pockets of diesel in the soils. An additional water sample was also collected from Pond #2. Water-level measurements and ground-water samples were collected from the monitoring network in January 1991.

Additional Excavation of RMC Spillage

Two areas within the extended excavation were investigated further to remove diesel in soils. Approximately six inches of soil in the road area (near RMCX-8) was removed and an additional soil sample was collected (RMCX-33) on November 2, 1990. This sample was collected at a depth of approximately 1.5 feet below original grade.

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Gettler-Ryan Inc.
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Page 3

The second area investigated was located in the western portion of the excavation (near RMCX-19). One soil sample (RMCX-35) was collected at a depth of approximately 14 feet below original grade on November 6, 1990.

These samples were analyzed for TPH-Diesel according to EPA Method 8015 (Modified). Chemical analyses were performed by NET Pacific Inc. (NET), a State-certified environmental laboratory in Santa Rosa, California. Sample RMCX-33 contained 390 ppm TPH-Diesel. Sample RMCX-35 contained 25 ppm TPH-Diesel.

All soil samples were collected with a hand-driven soil core sampling device fitted with clean brass sample tubes. Upon removal, the ends of the sample tube were covered with aluminum foil and sealed with plastic end caps. The sample tube was then labeled, entered on a Chain-of-Custody, and placed in a cooler with blue ice for transport to the laboratory. Soil chemical analytical data are summarized in Table 1. The NET certified analytical reports are presented in Appendix A. Soil sample locations are presented on Plate 3.

Excavation due to Independent Fuel Supplier Spillage

On November 1, 1990, approximately five gallons of diesel fuel were spilled into the excavated area adjacent to the diesel tank building and concrete slab (Plate 2). This spillage occurred during a fuel delivery to RMC by an independent fuel supplier. As a result, two soil samples were collected to delineate the extent of this spill. One sample (RMCX-34) was collected at a depth of approximately 11 feet below original grade on November 6, 1990. A second sample (RMCX-36) was collected on November 20, 1990 at a depth of approximately 14 feet below original grade.

These samples were analyzed for TPH-Diesel according to EPA Method 8015 (Modified). Chemical analyses were performed by NET. Sample RMCX-34 contained 370 ppm TPH Diesel. Sample RMCX-36 contained 48 ppm TPH-Diesel. These samples were collected, preserved, and transported in the same manner previously described.

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CURRENT QUARTERLY SAMPLING RESULTS

Potentiometric Data

Prior to ground-water sampling on January 19, 1991, depths to groundwater were measured in each well using an electronic oil-water interface probe. Static ground-water level was measured from the surveyed top of well casing and recorded to the nearest ± 0.01 foot. Depths to groundwater ranged from 4.64 to 34.60, corresponding to elevations from 65.20 to 66.81 feet above the project datum. Shallow groundwater appears to flow to the south, toward the active quarry operation, at a calculated hydraulic gradient of 0.011 (Plate 4).

Floating-Product Data

Each well was monitored for the presence of separate-phase hydrocarbons using a portable oil-water interface probe. A clear acrylic bailer was used to confirm interface probe results, and to check for the presence of a product sheen. Floating product or product sheens were not observed in the monitoring network.

Ground-water Analytical Data

Ground-water samples from the monitoring network were collected on January 19, 1991, and were analyzed for Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) according to EPA Method 8015 (Modified), and for Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) according to EPA Method 8020. TPH-Diesel was not detected in the monitoring network. BTEX compounds were not detected in Wells RMC-2 or RMC-3. BTEX compounds were detected in Well RMC-4. The benzene concentration in Well RMC-4 was at the current Regional Water Quality Control Board (RWQCB) Maximum Contaminant Level (MCL) of 0.001 ppm. Concentrations of ethylbenzene and xylenes did not exceed RWQCB MCLs and toluene concentration did not exceed the current Department of Health Services (DHS) Action Level. Chemical analytical data are summarized in Table 2. Monitoring well locations are presented on Plate 3. Chemical analyses were performed by NET. The NET certified analytical reports are attached to the G-R Ground-water Sampling Report presented in Appendix B.

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Pond Sampling

One water sample was collected from Pond #2 on November 7, 1990, and was analyzed for TPH-Diesel according to EPA Method 8015 (Modified) by NET. TPH-Diesel was not detected in this sample. These data are presented in Table 2. The location of Pond #2 is shown on Plate 3. The NET certified analytical report is presented with the soil analytical reports in Appendix A.

CURRENT SITE CONDITIONS

The extended excavation has been backfilled to approximately 2 feet below the original (pre-spill) ground surface, except in the area adjacent to the Diesel Tank Building. Backfill material consists of clayey soils from the active quarry pit located immediately south of the spill area. Mining activities have continued into the area immediately south of the original spill. These activities have destroyed Ponds #1 through #4. The bank sloping into the active mine area has been restored resulting in the destruction of the access road to Well RMC-3. The above-ground portion of Well RMC-3 well casing was removed during Phase 3 excavation activities. Continued mining and re-construction activities in this area prohibit the replacement of the extended above-ground well casing. The shortening of the well casing necessitated the re-surveying of Well RMC-3.

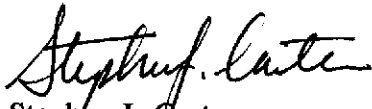
Diesel-contaminated soil beneath the Diesel Tank Building and adjacent concrete slab is presently being contained by the construction of a 9-inch thick, 4-foot deep concrete containment wall. The forming and pouring of the concrete containment wall has been completed as of this report, utilizing approximately 6½ cubic yards of 5-sack concrete.

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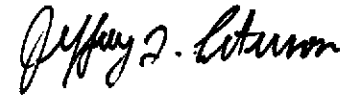
Gettler-Ryan Inc.
February 1, 1991
Page 6

If you have any questions, please call.

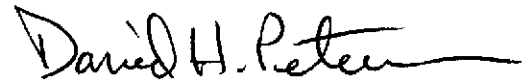
GeoStrategies Inc. by,



Stephen J. Carter
Geologist



Jeffrey L. Peterson
Senior Hydrogeologist
R.E.A. 1021



David H. Peterson
Senior Geologist
C.E.G. 1186

SJC/JLP/kjj

- Plate 1. Vicinity and Site Location Maps
- Plate 2. Site Plan
- Plate 3. Soil Sample Location Map
- Plate 4. Potentiometric Map
- Plate 5. TPH-D/Benzene Concentration Map

- Appendix A: Soil Chemical Analytical Reports
- Appendix B: Gettler-Ryan Inc. Groundwater Sampling Report

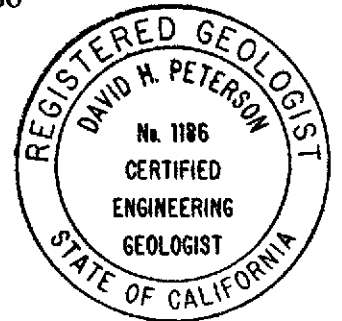


TABLE 1

SOIL ANALYSIS DATA

SAMPLE NO.	SAMPLE DATE	ANALYSIS DATE	TPH-D (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
RMCX-33	02-Nov-90	10-Nov-90	390	N/A	N/A	N/A	N/A
RMCX-34	06-Nov-90	10-Nov-90	370	N/A	N/A	N/A	N/A
RMCX-35	07-Nov-90	11-Nov-90	25	N/A	N/A	N/A	N/A
RMCX-36	20-Nov-90	26-Nov-90	48	N/A	N/A	N/A	N/A

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel

PPM = Parts Per Million

N/A = Not Analyzed

Note: For chemical parameter detection limits, refer to NET Pacific Laboratory reports.

TABLE 2

GROUND WATER ANALYSIS DATA

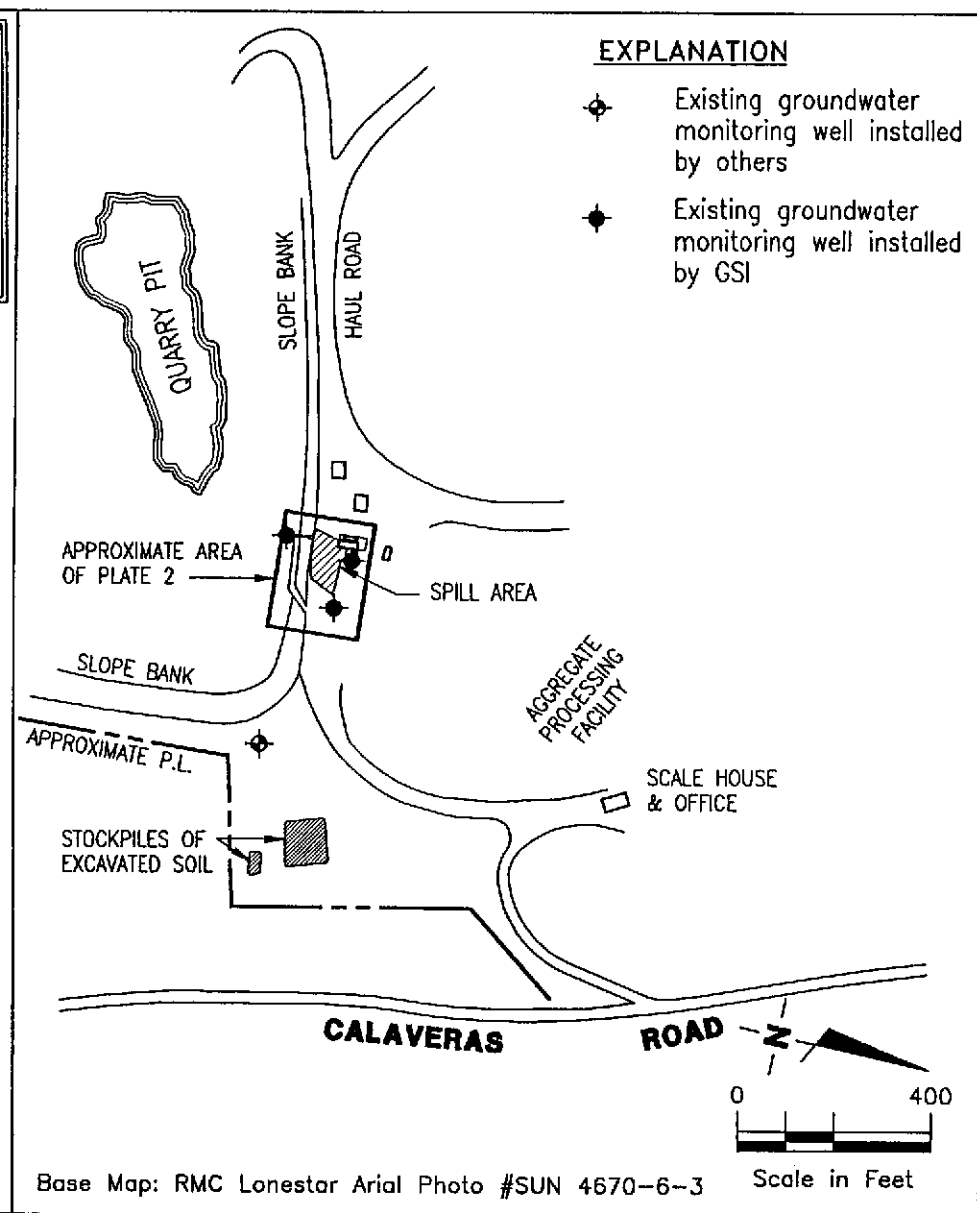
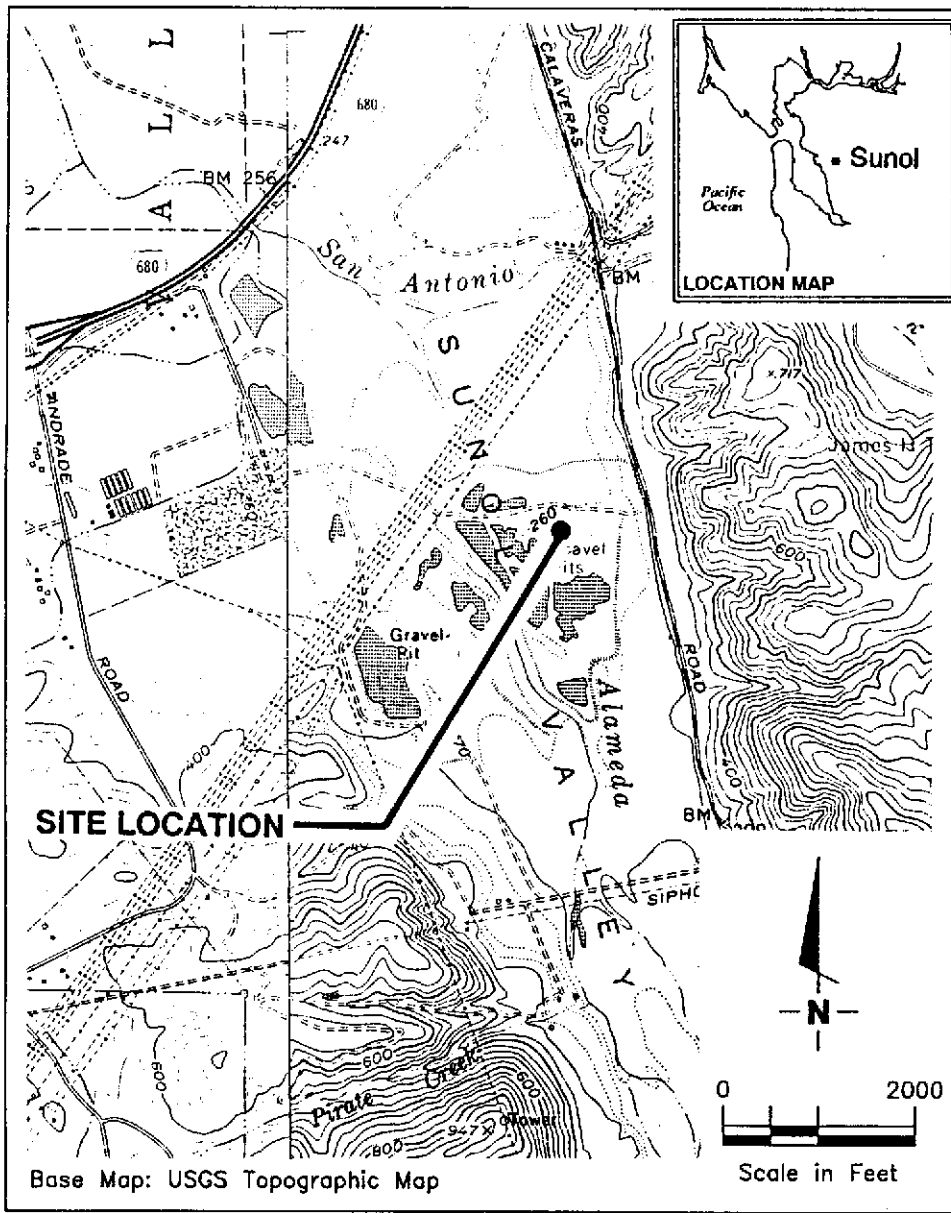
WELL NO	SAMPLE DATE	ANALYSIS DATE (4)	TPH-D (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	WELL ELEV (FT)	STATIC WATER ELEV (FT)	PRODUCT THICKNESS (FT)	DEPTH TO WATER (FT)
RMC-2	19-Jan-91	23-Jan-91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	100.00	66.81	----	33.19
RMC-3	19-Jan-91	23-Jan-91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	69.84	65.20	----	4.64
RMC-4	19-Jan-91	23-Jan-91	<0.05	0.0010	0.0008	0.0031	0.0042	101.38	66.78	----	34.6
POND #2	07-Nov-90	10-Nov-90	<0.05	NA	NA	NA	NA	----	----	----	----

CURRENT REGIONAL WATER QUALITY CONTROL BOARD MAXIMUM
 Benzene 0.001 ppm Xylenes 1.750 ppm Ethylbenzene 0.68 ppm

CURRENT DHS ACTION LEVELS
 Toluene 0.100 ppm

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel
 PPM = Parts Per Million
 NA = Not Analyzed

- Note: 1. For chemical parameter detection limits, refer to NET Pacific Laboratory reports.
 2. Water level elevations referenced to project datum.
 3. DHS Action Levels and MCL are subject to change pending State review.
 4. BTEX compounds analyzed 25-Jan-91.



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

PLATE

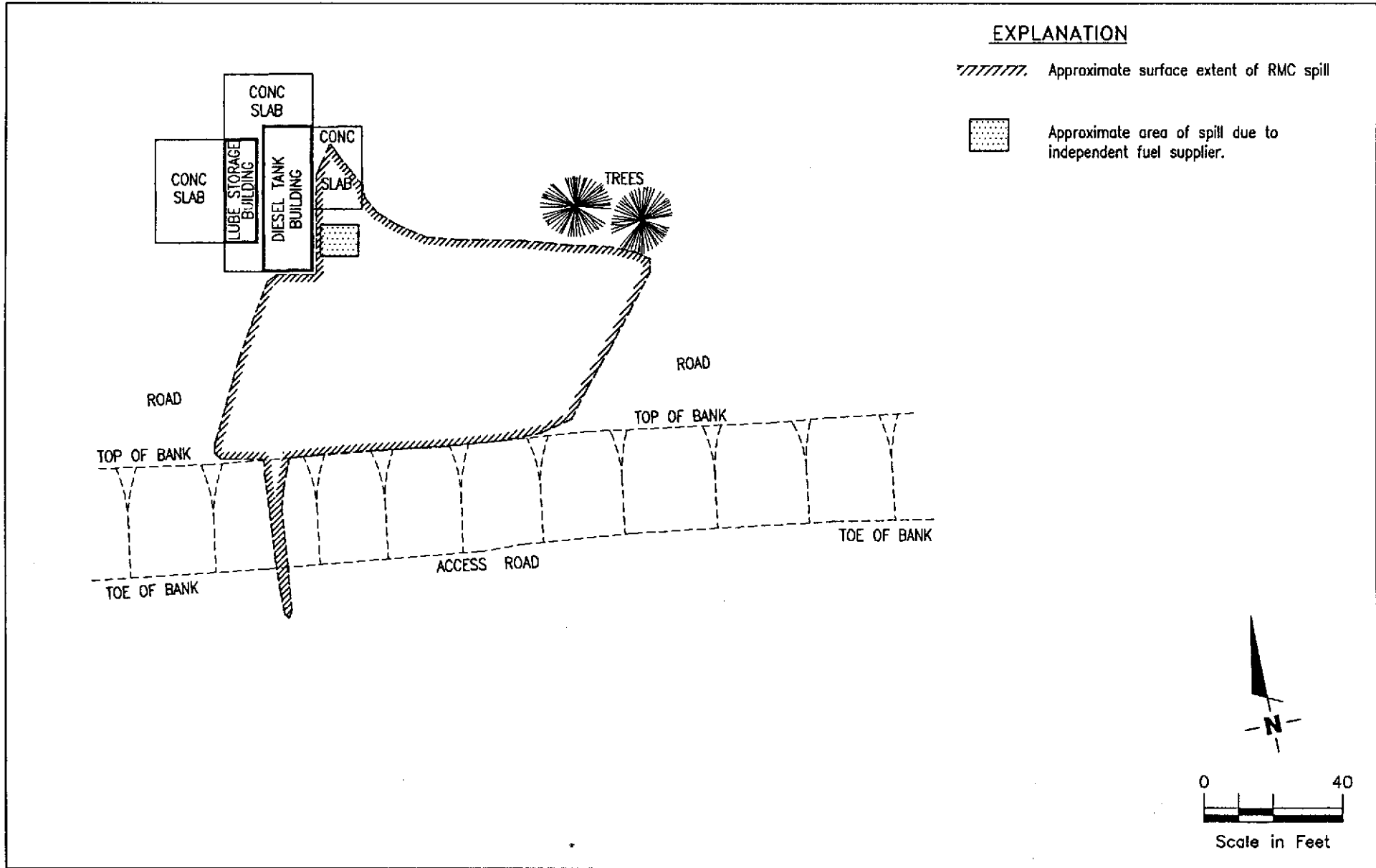
1

JOB NUMBER
7004

REVIEWED BY
SIC

DATE
9/90

REVISED DATE



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SITE PLAN
 RMC Lonestar
 6527 Calaveras Road
 Sunol, California

PLATE

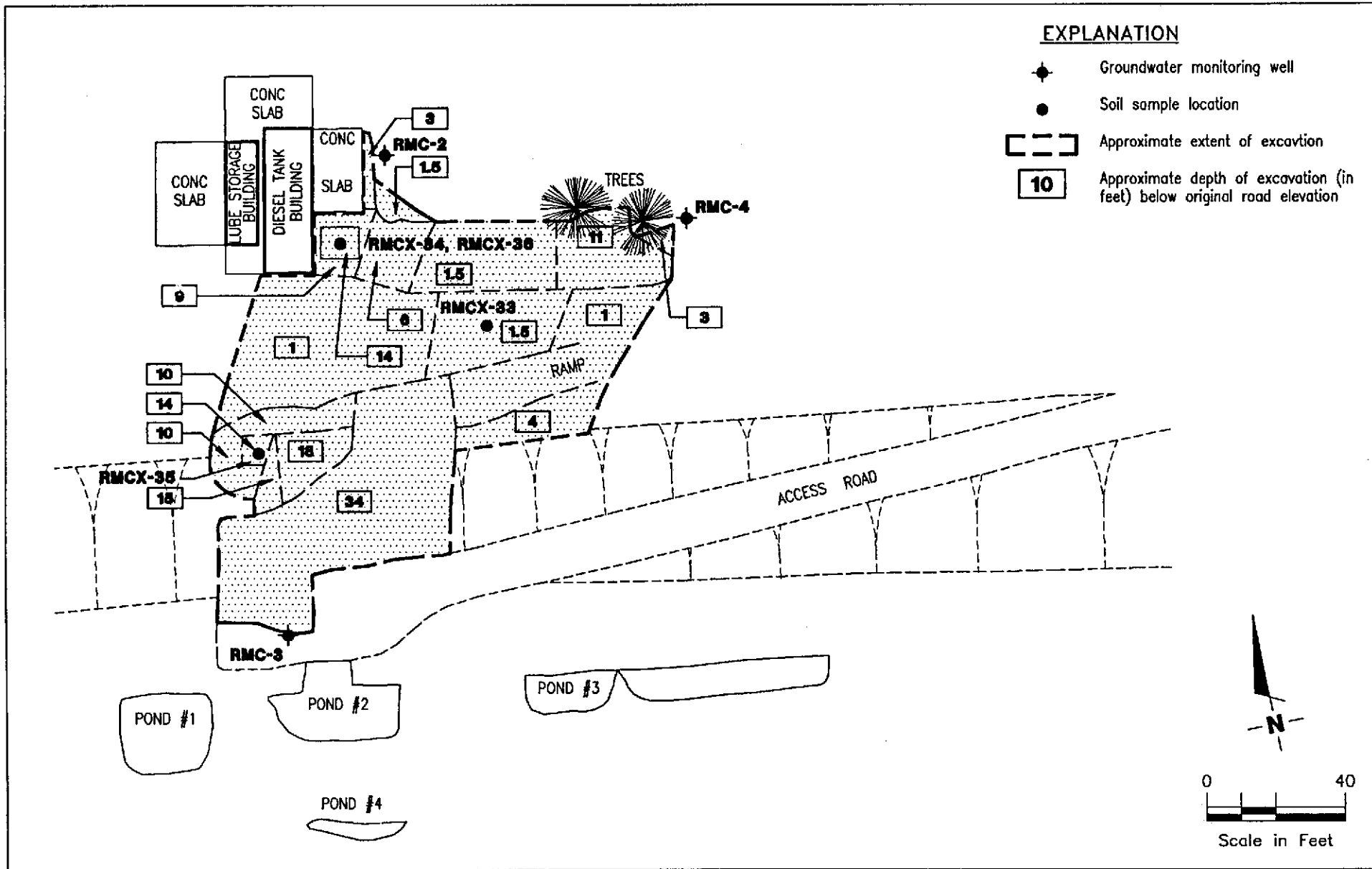
2

JOB NUMBER
 700401-3

REVIEWED BY
sjc

DATE
 2/91

REVISED DATE



EXPLANATION

- ◆ Groundwater monitoring well
- Soil sample location
- Approximate extent of excavation
- 10 Approximate depth of excavation (in feet) below original road elevation



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SOIL SAMPLE LOCATION MAP
 RMC Lonestar
 6527 Calaveras Road
 Sunol, California

PLATE

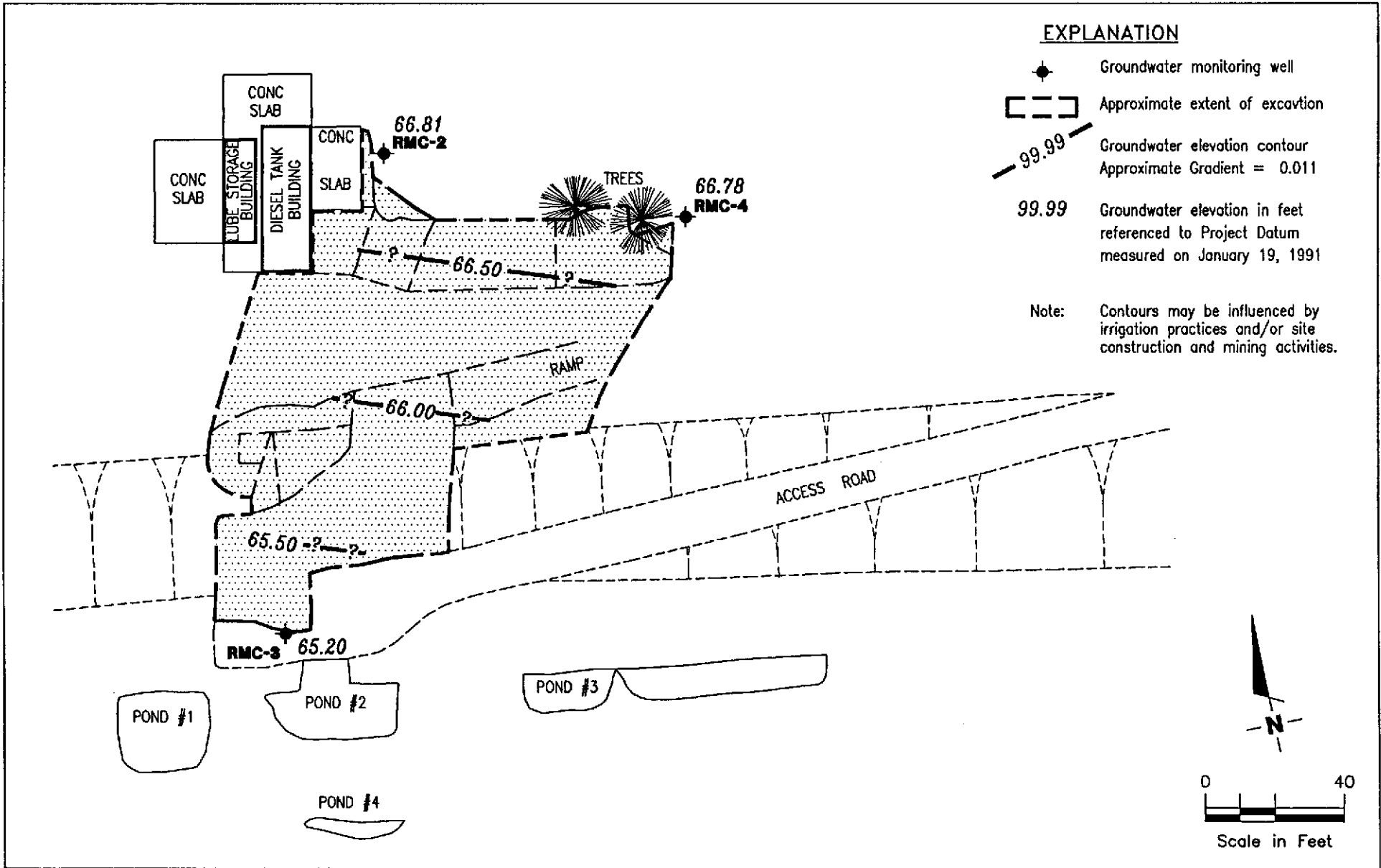
3

JOB NUMBER
700401-3

REVIEWED BY
SLC

DATE
2/91

REVISED DATE



EXPLANATION

- ◆ Groundwater monitoring well
- Approximate extent of excavation
- 99.99- Groundwater elevation contour
Approximate Gradient = 0.011
- 99.99 Groundwater elevation in feet
referenced to Project Datum
measured on January 19, 1991

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



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POTENTIOMETRIC MAP
RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE

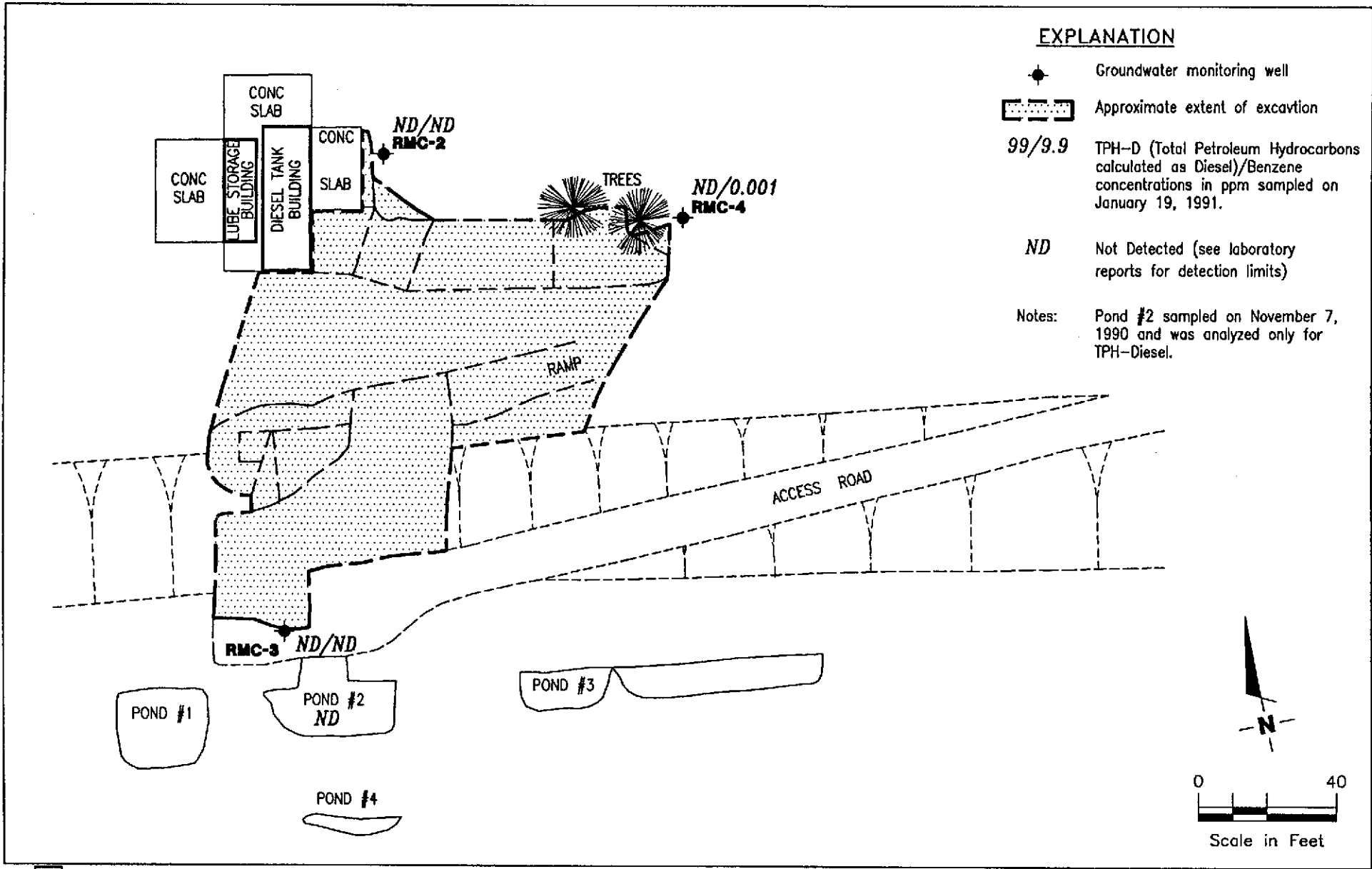
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JOB NUMBER
700401-3



REVIEWED BY
SLC

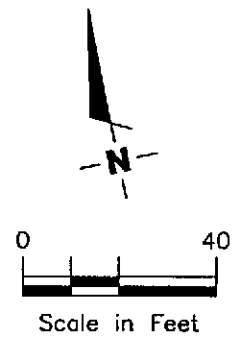
DATE
2/91

REVISED DATE



EXPLANATION

-  Groundwater monitoring well
-  Approximate extent of excavation
- 99/9.9 TPH-D (Total Petroleum Hydrocarbons calculated as Diesel)/Benzene concentrations in ppm sampled on January 19, 1991.
- ND Not Detected (see laboratory reports for detection limits)
- Notes: Pond #2 sampled on November 7, 1990 and was analyzed only for TPH-Diesel.



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TPH-D/BENZENE CONCENTRATION MAP
 RMC Lonestar
 6527 Calaveras Road
 Sunol, California

PLATE
5

JOB NUMBER
 700401-3

REVIEWED BY
SLC

DATE
 2/91

REVISED DATE

GeoStrategies Inc.

APPENDIX A
SOIL CHEMICAL ANALYTICAL REPORTS



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

Steve Carter
RMC Lonestar
P.O. Box 5252
6601 Koll Center Pkwy
Pleasanton, CA 94566

Date: 11-12-90
NET Client Acct No: 674
NET Pacific Log No: 4809
Received: 11-07-90 0800

REVISED 02-04-91

Client Reference Information

Sunol; Job: 7004-C

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

JS:rct
Enclosure(s)



NET Pacific, Inc.

Client No: 674
Client Name: RMC Lonestar
NET Log No: 4809

Date: 11-12-90

Page: 2

Ref: Sunol; Job: 7004-C

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	RMCX-34	RMCX-33	Units
			11-06-90 0937	11-02-90 0940	
			67483	67484	
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			10	1	
DATE EXTRACTED			11-08-90	11-08-90	
DATE ANALYZED			11-10-90	11-10-90	
METHOD GC FID/3550			--	--	
as Diesel		1	370	390	mg/Kg



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, $100 \frac{|\text{Value 1} - \text{Value 2}|}{\text{mean value}}$.
- 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.



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

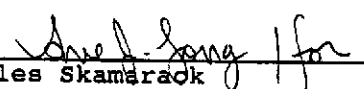
Date: 11-14-90
NET Client Acct. No: 674
NET Pacific Log No: 4840s
Received: 11-08-90 0800

Client Reference Information

Sunol; Job: 7004

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

Enclosure(s)



NET Pacific, Inc. Client Acct: 674
 Client Name: RMC Lonestar
 NET Log No: 4840s

Date: 11-14-90
 Page: 2

Ref: Sunol; Job: 7004

SAMPLE DESCRIPTION: RMCX-35 11-07-90 0954
 LAB Job No: (-67621)

Parameter	Reporting Limit	Results	Units
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PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (SOIL)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		11-11-90	
DATE ANALYZED		11-12-90	
METHOD GC FID/3550		--	
as Diesel	1	25	mg/Kg



NET Pacific, Inc.

Client Acct: 674
Client Name: RMC Lonestar
NET Log No: 4840w

Date: 11-14-90
Page: 3

Ref: Sunol; Job: 7004

SAMPLE DESCRIPTION: pond no. 2 11-07-90 1000
LAB Job No: (-67625)

Parameter	Reporting Limit	Results	Units
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PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		11-09-90	
DATE ANALYZED		11-10-90	
METHOD GC FID/3510		--	
as Diesel	0.05	ND	mg/L



- < : 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, (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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
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SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

Gettler - Ryan Inc.

ENVIRONMENTAL DIVISION

0396 Chain of Custody

4840

COMPANY RMC LoneStar JOB NO. 7004

JOB LOCATION 6527 Calaveras Road

CITY Sund PHONE NO. _____

AUTHORIZED Steve Carter DATE 11-7-90 P.O. NO. _____

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
<u>RMCX-35</u>	<u>1</u>	<u>Soil</u>	<u>9:54/11-7-90</u>	<u>TPH-Diesel</u>	
<u>Pond #2</u>	<u>3</u>	<u>Liq</u>	<u>10:00/11-7-90</u>	<u>TPH-Diesel</u>	<u>1 x 1 liter amber broken in transit 11/8/90</u>

RELINQUISHED BY: Stephen Carter

RECEIVED BY: Rana Bennett 10:45 a.m. 11-07-90

RELINQUISHED BY: Rana M. Bennett

RECEIVED BY: 15 sample 11/8/90 0800
RECEIVED BY LAB: _____

DESIGNATED LABORATORY: NET Pacific DHS #: _____

REMARKS: _____

custody seal 11/7/90 @ 19:00 custody seal intact

DATE COMPLETED _____ FOREMAN _____



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

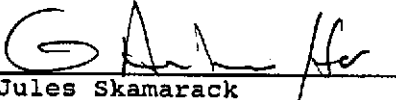
Date: 11-28-90
NET Client Acct. No: 674
NET Pacific Log No: 5049
Received: 11-21-90 0800

Client Reference Information

6527 Calaveras Road, Sunol, Job: 7004

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

Enclosure(s)



NET Pacific, Inc.

Client Acct: 674
Client Name: RMC Lonestar
NET Log No: 5049

Date: 11-28-90
Page: 2

Ref: 6527 Calaveras Road, Sunol, Job: 7004

SAMPLE DESCRIPTION: RMCX-36 11-20-90 0910
LAB Job No: (-69036)

Parameter	Method	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (SOIL)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			11-25-90	
DATE ANALYZED			11-26-90	
METHOD GC FID/3550			--	
as Diesel		1	48	mg/Kg



KEY TO ABBREVIATIONS and METHOD REFERENCES

NET Pacific, Inc.

- < : 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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- 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.

GeoStrategies Inc.

**APPENDIX B
GETTLER-RYAN INC.
GROUNDWATER SAMPLING REPORT**



January 31, 1991

GROUNDWATER SAMPLING REPORT

Reference: RMC Lonestar Gravel Quarry
6527 Calaveras Road
Sunol, California

Sampling Date: January 19, 1991

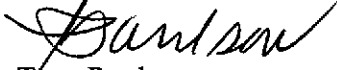
This report presents the results of the groundwater sampling conducted by Gettler-Ryan Inc. on January 19, 1991 at the referenced location. The site is currently an active gravel quarry and aggregate processing facility located west of Calaveras Road in the Sunol Valley. RMC Lonestar maintains lube and diesel storage facilities on this property.

There are currently three groundwater monitoring wells and four holding ponds on location as indicated on the attached site map. Prior to sampling, all monitoring wells were inspected for total well depth, water levels, and presence of separate-phase product using an electronic interface probe. A clean acrylic bailer was used to confirm or deny the presence of separate-phase product. Groundwater depths ranged from 4.64 to 34.60 feet below grade. Separate-phase product was not observed in any monitoring wells.

The wells were then purged and sampled. Standard sampling procedure calls for a minimum of four case volumes to be purged from each well. Each well was purged while pH, conductivity, and temperature were monitored for stability. Details of the final well purging results are presented on the attached Table of Monitoring Data. In cases where a well de-watered or less than four case volumes were purged, groundwater samples were obtained after the physical parameters had stabilized. Under such circumstances the sample may not represent actual formation water, due to low flow conditions.

Monitoring well samples were collected using Teflon bailers, in properly cleaned and laboratory-prepared containers. The samples were labeled, stored on blue ice, and transported to the laboratory for analysis. Chain of custody records were established noting sample identification numbers, time, date, and custody signatures.

The samples were analyzed at NET Pacific Incorporated, located at 435 Tesconi Court, Santa Rosa, California. The laboratory is assigned a California DHS-HMTL Certification number of 178. The analytical results are presented as a Certified Analytical Report, a copy of which is attached to this report.



Tom Paulson
Sampling Manager

attachments

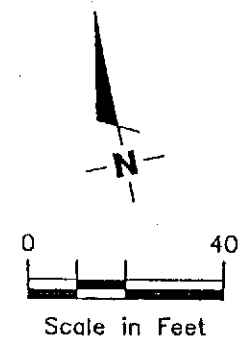
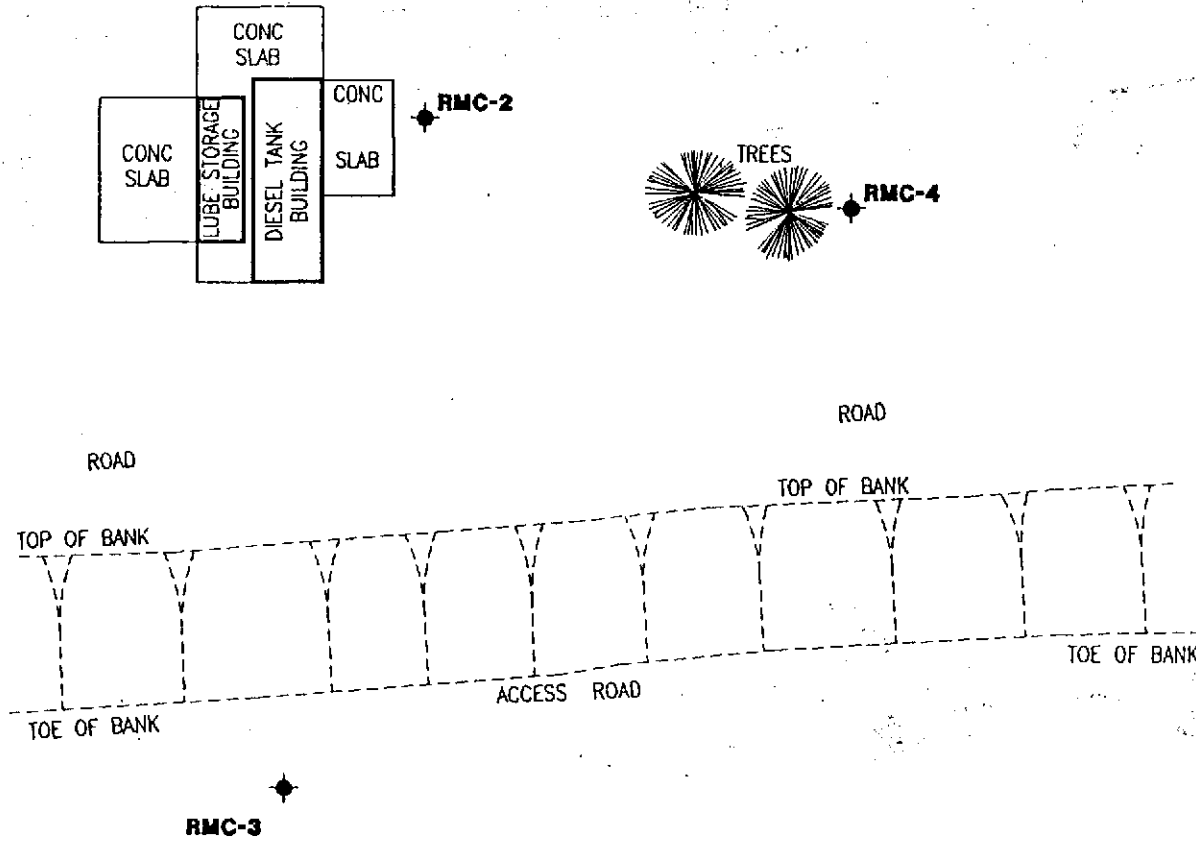
TABLE OF MONITORING DATA
GROUNDWATER WELL SAMPLING REPORT

<u>WELL I.D.</u>	RMC-2	RMC-3	RMC-4
Casing Diameter (inches)	2	2	2
Total Well Depth (feet)	44.0	20.5	43.0
Depth to Water (feet)	33.19	4.64	34.60
Free Product (feet)	none	none	none
Reason Not Sampled	----	----	----
Calculated 4 Case Vol.(gal.)	7.4	11.2	5.7
Did Well Dewater?	yes	no	no
Volume Evacuated	4.5	14.0	7.3
Purging Device	Bailer	Bailer	Bailer
Sampling Device	Bailer	Bailer	Bailer
Time	11:35	11:08	09:55
Temperature (F)*	62.9	62.4	61.6
pH*	7.41	7.23	6.82
Conductivity (umhos/cm)*	623	572	650

* Indicated Stabilized Value

EXPLANATION

◆ Ground-water monitoring well



GeoStrategies Inc.

SITE PLAN
RMC Lonestar
6527 Calaveras Road
Sunol, California

PLATE

2

JOB NUMBER
7004

REVIEWED BY RG/CEG

DATE
10/90

REVISED DATE



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

RECEIVED

JAN 30 1991

GETTLER-RYAN INC.
GENERAL CONTRACTORS

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

Date: 01-28-91
NET Client Acct No: 674
NET Pacific Log No: 5738
Received: 01-21-91 1306

Client Reference Information

RMC Lonestar, 6527 Calavares Rd.

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 Paulson
Gettler-Ryan, Inc.
2150 Winton Ave.
Hayward, CA 94545

JS:rct
Enclosure(s)

C



NET Pacific, Inc.

Client No: 674
Client Name: RMC Lonestar
NET Log No: 5738

Date: 01-28-91

Page: 2

Ref: RMC Lonestar, 6527 Calavares Rd.

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	RMC-2	RMC-3	Units
			01-19-91 1135	01-19-91 1108	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			01-25-91	01-25-91	
METHOD 602			--	--	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	ND	ND	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			01-22-91	01-22-91	
DATE ANALYZED			01-23-91	01-23-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	ND	ND	mg/L



NET Pacific, Inc.

Client No: 674
Client Name: RMC Lonestar
NET Log No: 5738

Date: 01-28-91

Page: 3

Ref: RMC Lonestar, 6527 Calavares Rd.

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	RMC-4 01-19-91 1955 72699	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			01-25-91	
METHOD 602			--	
Benzene		0.5	1.0	ug/L
Ethylbenzene		0.5	0.8	ug/L
Toluene		0.5	3.1	ug/L
Xylenes, total		0.5	4.2	ug/L
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (WATER)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			01-22-91	
DATE ANALYZED			01-23-91	
METHOD GC FID/3510			--	
as Diesel		0.05	ND	mg/L

2



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.
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- mean : Average; sum of measurements divided by number of measurements.
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- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2]}/\text{mean value}$.
- 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

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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.

COMPANY RMC / Longstar ENVIRONMENTAL TESTS 5738 JOB NO. _____
JOB LOCATION 6527 Calaveras Blvd Rd
CITY Sunnyvale CA PHONE NO. _____
AUTHORIZED Tom Panken DATE 1-19-91 P.O. NO. 3007.01

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
RMC-2	6	Liquid	1-19-91/11:35	TPH Diesel, BTEX	
RMC-3	6	↓	↓ 11:08	↓ ↓	
RMC-4	6	↓	↓ 19:55	↓ ↓	

Bill to ~~Longstar~~ RMC/Longstar - directly
PO Box 5252
Pleasanton CA 94566

ATTN:

RELINQUISHED BY: <u>[Signature]</u> 1-19-91 17:00	RECEIVED BY: <u>Refrig #1</u> 1-19-91 17:00
RELINQUISHED BY: <u>Refrig #1</u> 1-21-91 930	RECEIVED BY: <u>Bw Br</u> 1-21-91 931
RELINQUISHED BY: <u>Bw Br</u> 1-21-91 1306	RECEIVED BY LAB: <u>[Signature]</u> 1/21/91, 1306
DESIGNATED LABORATORY: <u>NET Pacific</u>	DHS #: <u>178</u>

REMARKS: 5-Day TAT

DATE COMPLETED 1-19-91 FOREMAN [Signature]

DUPLICATE