

GW - 40

**GENERAL
CORRESPONDENCE**

YEAR(S):

1992 - 1990



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1135	Date 11/12/92
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<u>Originating Party</u>	<u>Other Parties</u>
Tim Kinney - Giant Refining	Bill Olson - OCP

Subject
 Giant Bloomfield Refinery

Discussion
 Air stripper has been cleaned and remediation system
 is running again

Conclusions or Agreements

Distribution file

Signed *Bill Olson*



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 0910

Date 11/4/92

Originating Party

Other Parties

Tim Kinney - Giant

Bill Olson - OCP

Subject

Giant Bloomfield Refinery

Discussion

Air stripper shut down, needs to be cleaned

Renovation shut down for approx 2 weeks to
 clean & repack air stripper

Conclusions or Agreements

Distribution

file

Signed

Bill Olson

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

June 11, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ANITA LOCKWOOD
CABINET SECRETARY

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-155-068

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: OFFSITE WORK PLAN
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation (OCD) has reviewed the June 1, 1992 Giant Refining Company "OFFSITE WORK PLAN". The document contains Giant's detailed work plan for installation of new recovery well SHS-18 and new monitor well SHS-17.

The OCD approves of the work elements contained in the above referenced document with the following conditions:

1. New monitor well SHS-17 will be completed as a 4 inch diameter monitor well.

Please be advised that OCD approval does not limit Giant to the proposed work plan should recovery operations fail to adequately contain and remediate petroleum contaminated ground waters related to Giant's activities. OCD approval also does not relieve you of responsibility for compliance with any other city, county, state and federal laws and/or regulations.

If you have any questions please, contact me at (505)827-5885.

Sincerely,


William C. Olson
Hydrogeologist

xc : Denny Foust, OCD Aztec District Office
Dale Doremus, ED Superfund Program
Monica Chapa, EPA Region VI
Chris Shuey, Southwest Research and Information Center



OIL CONSERVATION DIVISION
RECEIVED

P.O. Box 256
Farmington, New Mexico
87499

'92 JUN 5 AM 9 03

505
632-3306

June 3, 1992

Mrs. Anita Iskra
P. O. Box 912
Bloomfield, NM 87413

Dear Mrs. Iskra:

We were disappointed to hear of your decision to withhold permission for pumping of a well on your lot in the Suburban Heights Subdivision last year. After another year of investigating the problems with water in the area, we feel even more strongly that pumping water from one of the wells on your lot is important if we are to successfully clean up the groundwater. For this reason, I would like to explain our request again and ask for your help in cleaning up the water under your lot.

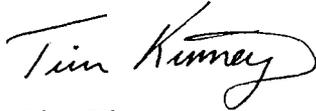
We would like your permission to install a pump in one of the wells we drilled in 1990. After we have finished installing the pump, the property will look the same as it does today. There will be no well house or other evidence of the well being pumped. Only a manhole cover will be visible. Please keep in mind that our pumping of water should not interfere with any plans you might have to rent the land or build on it. We would only need access for monitoring, repair, and maintenance of the well.

In return for your permission, we would like to offer you compensation. First, we are willing to pay you \$1,000 per year for access to the well. Second, we will complete the road access from the east by installing a crushed rock driveway onto the lot.

Mrs. Anita Iskra
June 3, 1992
Page 2

Mrs. Iskra, our goal is to clean up the groundwater under your property, and to do that we'll need your permission in this matter. Please give our proposal favorable consideration. I will look forward to hearing from you.

Sincerely,

A handwritten signature in cursive script that reads "Tim Kinney".

Tim Kinney
Refinery Remediation Manager

/dm

cc Bill Olson-NMOCD
Kim Bullerdick-Giant
Carl Shook-Giant
Debbie Smith-Giant



OIL CONSERVATION DIVISION
RECEIVED

'92 JUN 8 AM 9 08

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

June 1, 1992

Mr. Bill Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Olson:

RE: OFFSITE WORK PLAN

In accordance with your letter of May 1, 1992, Giant Industries Arizona, Inc. (Giant) is submitting the following work plan to address items noted in our March, 1992 report titled "Effectiveness of Offsite Recovery and Monitoring System."

Overview

Giant plans to install two additional wells south of the refinery. The first well will be a monitoring well. The second well, a recovery well, will replace recovery well SHS-11 which has silted in. Attached is a typical completion diagram and a location map.

Recovery Well

The new recovery well, labeled SHS-18, will be located approximately 50 feet west of well SHS-11 along the northern edge of Circle Drive in the Suburban Heights Subdivision. Upon completion and development, the well will be connected to the Offsite Recovery System and pumped in the same manner as other offsite recovery wells.

Monitor Well

A 2" monitor well will be located to the west of monitor well SHS-16 close to the intersection of Sage Street and County Road 5500 on the southern side of Sage Street in the Suburban Heights Subdivision.

Installation

Giant plans to utilize Western Technologies Inc. of Farmington, New Mexico for well installation. Prior to mobilizing the drill rig to the site, a utility survey will be conducted to ensure that borehole sites are not located over buried pipes or electric lines. San Juan County will also be contacted for road right-of-way access.

Drilling for both wells will be performed using a hollow-stem auger. All drilling equipment will be steam cleaned before initiation of drilling at each well. All cuttings will be contained on plastic and disposed of in an appropriate manner.

Continuous core soil samples from the monitor well only will be scanned using an H-Nu Photo-ionization Detector (H-Nu). A sample from each 5.0 - foot interval in the unsaturated zone from the monitor well only will be retained in a sealed sample container for headspace analysis using the H-Nu. We do not plan any core sampling of the recovery well as it is a replacement well only and additional data would be of limited value. The monitor well only will be logged on standard lithologic log forms, with H-Nu readings noted at the appropriate intervals.

The casing for both wells will consist of flush joint, polyvinyl chloride (PVC) screen and pipe, precleaned and prepackaged by the manufacturer. Casing will be installed by connecting individual sections as they are lowered into the borehole through the hollow center of the auger column. A 15-foot screen will be placed at the air/water interface, with 5 feet above the static water level and 10 feet below. The recovery well casing will be either 5" or 6" diameter, and the monitor well casing will be 2" diameter..

After the well casing has been installed, the auger flights will be retrieved in 5-foot intervals. Precleaned and prepackaged 10-20 grade silica sand will be poured down the auger annulus to fill the void left as each 5 foot flight is removed. This sand, combined with a small volume of formation sand that may slough into the borehole during retraction of the auger column, will provide the filter pack for the well screen. The sand will be placed to a level of 2 to 3 feet above the top of the screen.

A bentonite seal will be placed on top of the filter pack to form an impervious barrier and prevent downward migration of moisture. The remainder of the well annulus up to the ground surface will be grouted with a neat cement slurry containing 5% bentonite. The grout will be inserted from the surface after all remaining auger flights have been removed. The well head will be completed with a flush to grade water proof vault set in a 3-foot by 3-foot

Mr. Bill Olson
June 1, 1992
Page 3

concrete slab. The locations and elevations of the monitor and recovery wells will be surveyed by a certified land surveyor. Geotechnical support will be provided by H+GCL of Albuquerque, New Mexico.

Sampling

Both wells will be developed and sampled in accordance with procedures outlined in Giant's Discharge Plan. General water chemistry and EPA 601/602 analyses will be performed.

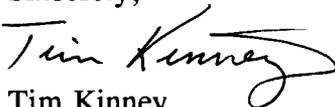
Reporting

A brief report describing the well installations, locations, elevations, completion diagrams, analytical results, and a lithology diagram for the monitor well will be submitted approximately 4 - 6 weeks after project completion.

Schedule

The work is scheduled to begin by July 1, 1992, pending your approval, and should be completed in 2 - 3 weeks.

Sincerely,

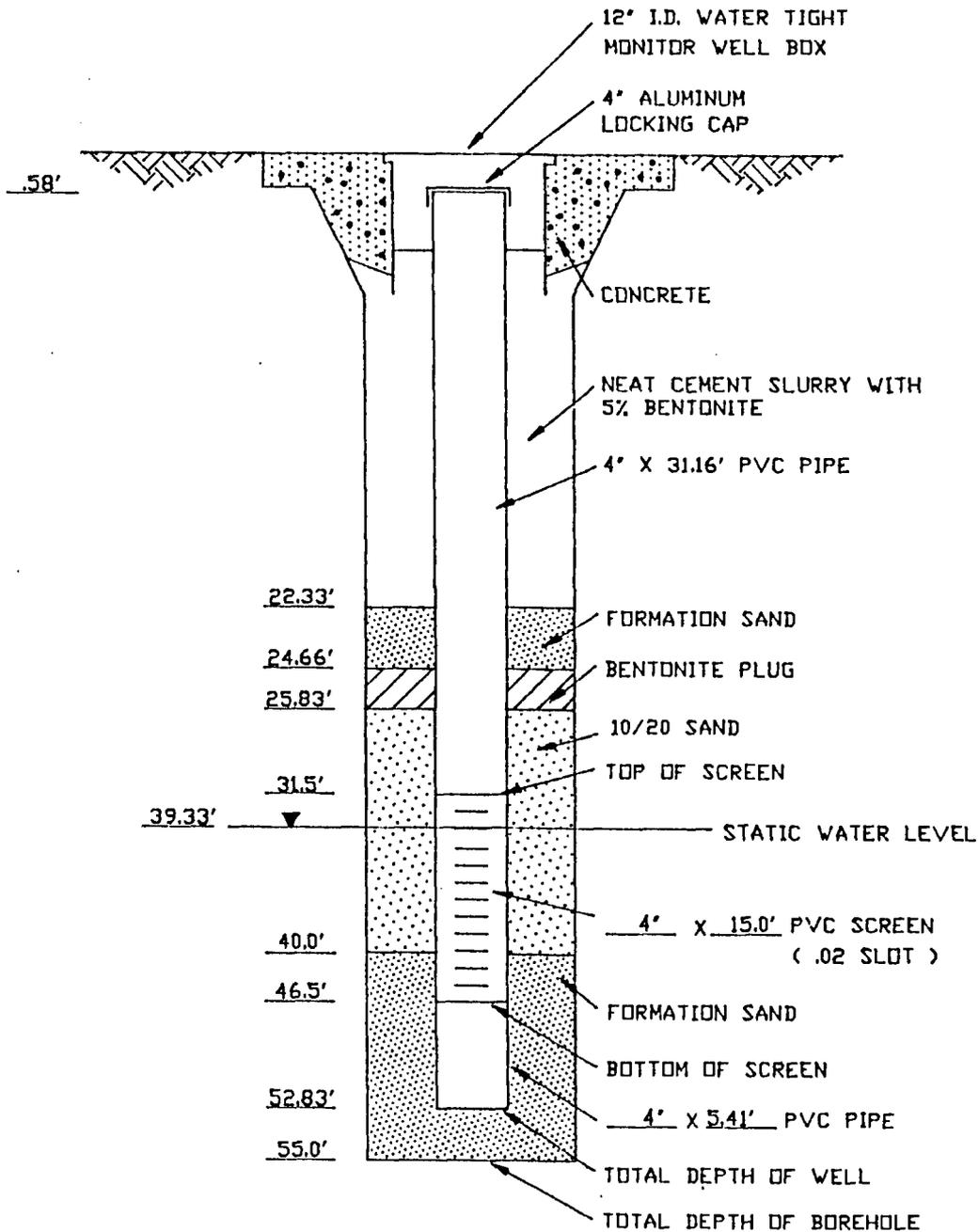


Tim Kinney
Remediation Project Manager

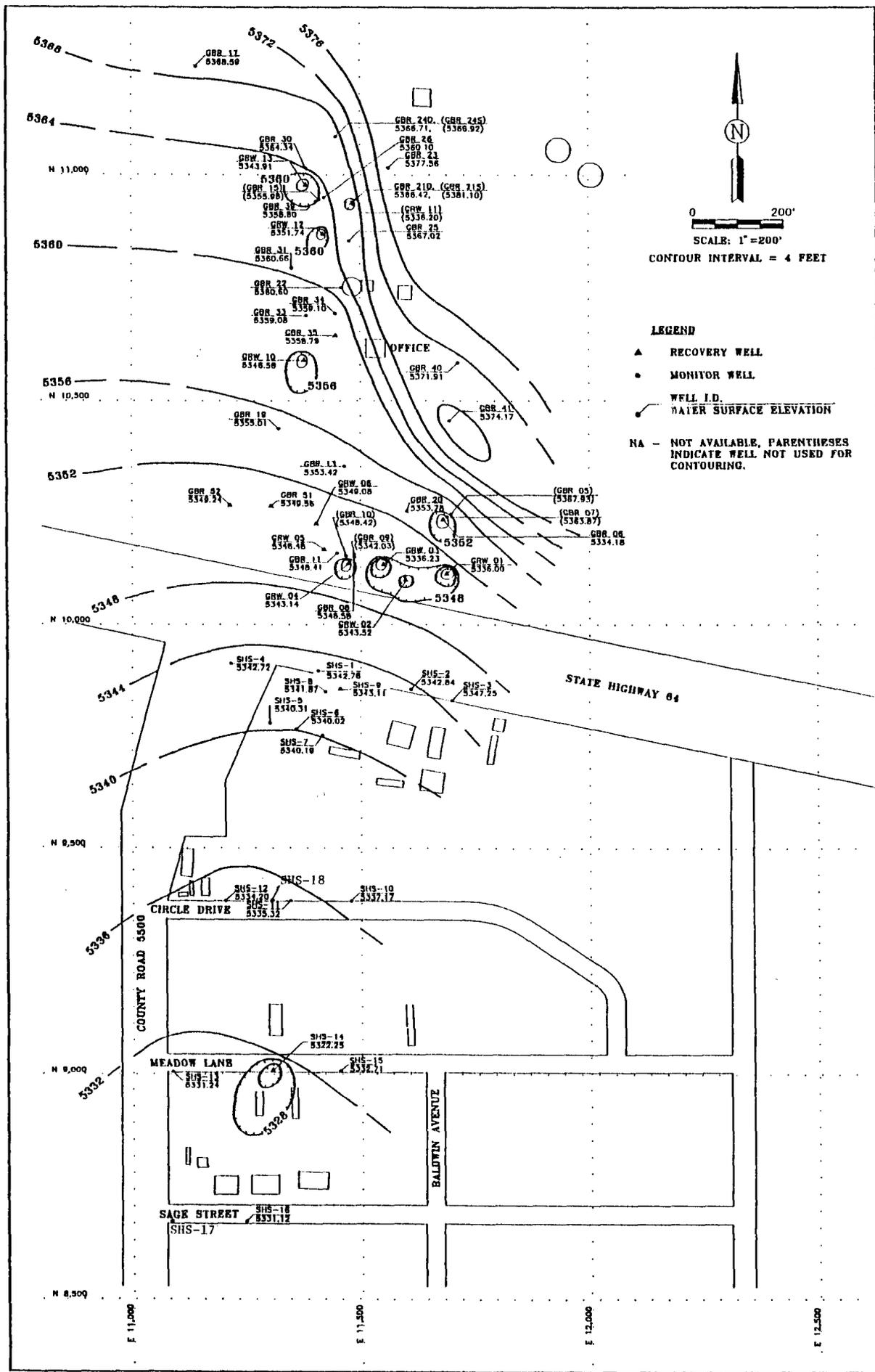
/dm

Attachment

cc Carl Shook-Giant
Kim Bullerdick-Giant
Debbie Smith-Giant
Martin Nee-H+GCL
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
Bill Baggett-SJC
Monica Chapa-EPA
T. B. Darby-USF&G
Peter Alvey-AIG
William Charles-Alexander and Alexander
William Potter-Firemans Fund
Joe Gaetano-Mission National
Rosemary McCue-Home Insurance
Kim Kiharo-Industrial Risk
Corinne Johnston-American Re-Insurance



SUBGRADE COMPLETION DIAGRAM SHS-12



0 200'

SCALE: 1"=200'

CONTOUR INTERVAL = 4 FEET

LEGEND

- ▲ RECOVERY WELL
 - MONITOR WELL
 - WELL I.D.
 - WATER SURFACE ELEVATION
- NA - NOT AVAILABLE, PARENTHESES INDICATE WELL NOT USED FOR CONTOURING.

5388
5384
5380
5356
5362
5348
5344
5340
5336
5332

5372 5376

GRR 11 5388.59
GRR 30 5384.34
GRW 12 5343.91
GRR 12 5355.88
GRR 13 5358.80
GRR 14 5351.74
GRR 31 5380.66
GRR 32 5380.80
GRR 33 5359.10
GRR 34 5359.08
GRR 35 5358.78
GRR 10 5348.58
GRR 18 5355.01
GRR 210 (GRR 215) 5366.71 (5366.92)
GRR 26 5369.10
GRR 23 5377.58
GRR 210 (GRR 215) 5366.42 (5381.10)
GRR 11 5338.20
GRR 28 5367.02
GRR 40 5371.91
GRR 41 5374.17
GRR 11 5348.41
GRR 04 5343.14
GRR 08 5348.58
GRR 02 5343.52
GRR 09 5342.03
GRR 10 5348.42
GRR 20 5353.78
GRR 05 5387.93
GRR 07 5383.87
GRR 08 5334.18
SHS-4 5342.74
SHS-1 5342.76
SHS-8 5341.87
SHS-9 5343.11
SHS-2 5342.84
SHS-3 5347.25
SHS-5 5340.31
SHS-6 5340.02
SHS-7 5340.18
SHS-12 5337.29
SHS-11 5335.32
SHS-10 5337.12
SHS-14 5327.25
SHS-15 5332.21
SHS-18 5331.12
SHS-17

OFFICE

STATE HIGHWAY 64

CIRCLE DRIVE

MEADOW LANE

SAGE STREET

BALDWIN AVENUE

5340
5348
5336
5332

N 11,000
N 10,500
N 10,000
N 9,500
N 9,000
N 8,500

E 11,000
E 11,500
E 12,000
E 12,500

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

May 1, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-155-063

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: OFFSITE REMEDIATION EVALUATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation (OCD) has reviewed the March 12, 1992 Giant Refining Company "EFFECTIVENESS OF OFFSITE RECOVERY AND MONITORING SYSTEM". The document contains Giant's evaluation of the recent implementation of Giant's offsite ground water remediation and monitoring system for petroleum contaminated ground water south of the Giant Bloomfield Refinery

The OCD approves of the recommendations contained in the above referenced document with the following conditions:

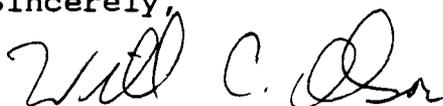
1. Within 30 days of receipt of this letter, Giant will submit a work plan, for OCD approval, describing the proposed well locations and construction details of monitor well SHS-17 and the new recovery well which will replace recovery well SHS-11
2. The current quarterly monitoring, as previously approved by OCD on December 6, 1990, will continue until April 1, 1993. At that time, if the water quality analyses from the quarterly monitoring demonstrates that clear water quality trends are evident, Giant may petition OCD for a reduction in the frequency of sampling.
3. Giant will keep OCD apprised of property access negotiations for recovery well SHS-7.

Mr. Timothy Kinney
May 1, 1992
Page 2

Please be advised that OCD approval does not limit Giant to the proposed remediation plan should recovery operations fail to adequately contain and remediate petroleum contaminated ground waters related to Giants activities. OCD approval also does not relieve you of responsibility for compliance with any other city, county, state and federal laws and/or regulations.

If you have any questions please, contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

xc : Denny Foust, OCD Aztec District Office
Dale Doremus, NMED
Monica Chapa, EPA Region VI
Chris Shuey, Southwest Research and Information Center

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 5/29/92

or cash received on 6-10-92 in the amount of \$ 50.00

from Giant Refining Co.

for Giant Bloomfield Refinery GW-40

Submitted by: _____ Date: 1-8

Submitted to ASD by: Kathy Brown Date: 6-10-92

Received in ASD by: Sherry Gonzales Date: 6/9/92

Filing Fee New Facility _____ Renewal _____

Modification _____ Other _____
(specify)

Organization Code 521.07 Applicable FY 80

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment _____

For DD modification

CINIZA PIPELINE 8-88
P. O. BOX 12999 505/632-8006
SCOTTSDALE, AZ 85267

95-252/1022

May 29, 1992

Pay to the order of New Mexico Water Quality Management \$ 50.00

Fifty and no/100----- Dollars

SUNWEST BANK Main Office of Farmington (505) 326-2221 • P.O. Drawer 1560 Farmington, NM 87499

For RFE #9834

Sharon Kennedy

OIL CONSERVATION DIVISION
RECEIVED
GIANT
REFINING CO.
'92 JUN 1 AM 9 31
P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

May 29, 1992

Mr. William Olson
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

Enclosed is a check for the \$50.00 filing fee to address changes in our recent sampling and analysis modification request.

Sincerely,



Tim Kinney
Remediation Manager

/dm

Enclosure



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

May 28, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-155-066

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: DISCHARGE PLAN GW-40 MODIFICATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed the May 13, 1992 Giant Refining Company proposing modifications in the discharge plan GW-40 monitoring and sampling program for the Giant Bloomfield Refinery ground water remediation project. The proposed modification consists of a reduction in the frequency of ground water elevation measurements from monthly to quarterly and reducing the frequency of water quality sampling at select onsite monitor wells.

The above referenced requested modification of the previously approved ground water discharge plan, GW-40, for the Giant Bloomfield Refinery located in sections 22 and 27, Township 29 North, Range 12 West (NMPM), San Juan County, New Mexico is hereby approved.

The discharge plan (GW-40) was originally approved on December 9, 1988. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

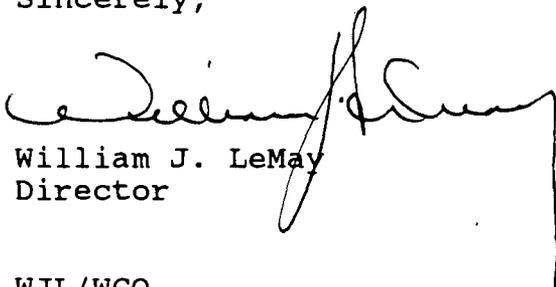
Mr. Timothy Kinney
May 28, 1992
Page 2

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. LeMay
Director

WJL/WCO

xc : Denny Foust, OCD Aztec District Office
Dale Doremus, NMED Ground Water Protection and Remediation
Bureau
Chris Shuey, Southwest Research and Information Center
Monica Chapa, EPA Region VI

'92 MAY 15 AM 8 57

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

May 13, 1992

Mr. Bill Olson
New Mexico Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Olson:

Over the course of investigation and remediation at the Bloomfield Refinery, a comprehensive data base has been compiled. The information exhibits consistent and predictable trends over the past several years. Due to this fact, Giant Refining Company proposes the following changes in the sampling and monitoring program.

1. Reducing the frequency of well water level monitoring and water surface map preparation from monthly to quarterly.
2. Eliminating shaded sampling events on the attached copy of the present sample matrix. As per our recent conversation, offsite sampling remains unchanged.

Also attached are analytical trend analyses for several of the wells indicating predictable trends or isolated instances of low level dissolved phase constituents.

Mr. Bill Olson
May 13, 1992
Page 2

We appreciate your consideration of these proposed changes. Please call if we need to discuss this request in more detail.

Sincerely,



Tim Kinney
Refinery Remediation
Project Manager

/dm

Attachments

cc Kim Bullerdick - Giant
Carl Shook - Giant
Debbie Smith - Giant
Martin Nee - GCL
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T. B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier
William Charles - Alexander and Alexander
William Potter - Firemans Fund
Joe Gaetano - Mission National
Rosemary McCue - Home Insurance
Kim Kiharo - Industrial Risk
Corinne Johnston - American
Bill Baggett - SJC
Monica Chapa - EPA

GIANT BLOOMFIELD REFINERY
SAMPLE MATRIX

<u>LOCATION</u>	<u>MONTHLY</u>	<u>QUARTERLY</u>	<u>SEMI ANNUALLY</u>	<u>ANNUALLY</u>
Stripper Influent	601	601	601	601
	602	602	602	602
	GWC	GWC	GWC	GWC
Stripper Effluent	601	601	601	601
	602	602	602	602
	GWC	GWC	GWC	GWC
				Metals
				PAH
GRW-3		601	601	601
		602	602	602
		GWC	GWC	GWC
		PAH	PAH	PAH
GRW-6		601	601	601
		602	602	602
		GWC	GWC	GWC
		PAH	PAH	PAH
GRW-13		601	601	601
		602	602	602
		GWC	GWC	GWC
		PAH	PAH	PAH
GBR-15		601	601	601
		602	602	602
		GWC	GWC	GWC
GBR-17		601	601	601
		602	602	602
		GWC	GWC	GWC
				PAH
GBR-24D		601	601	601
		602	602	602
		GWC	GWC	GWC
				PAH

**GIANT BLOOMFIELD REFINERY
SAMPLE MATRIX**

<u>LOCATION</u>	<u>MONTHLY</u>	<u>QUARTERLY</u>	<u>SEMI ANNUALLY</u>	<u>ANNUALLY</u>
GBR-30		601	601	601
		602	602	602
		GWC	GWC	GWC PAH
GBR-31		601	601	601
		602	602	602
		GWC	GWC	GWC PAH
SHS-3		601	601	601
		602	602	602
			GWC	GWC
SHS-6		601	601	601
		602	602	602
			GWC	GWC
SHS-10		601	601	601
		602	602	602
			GWC	GWC
SHS-12		601	601	601
		602	602	602
			GWC	GWC
SHS-13		601	601	601
		602	602	602
			GWC	GWC
SHS-15		601	601	601
		602	602	602
			GWC	GWC
SHS-16		601	601	601
		602	602	602
			GWC	GWC

GIANT BLOOMFIELD REFINERY
SAMPLE MATRIX

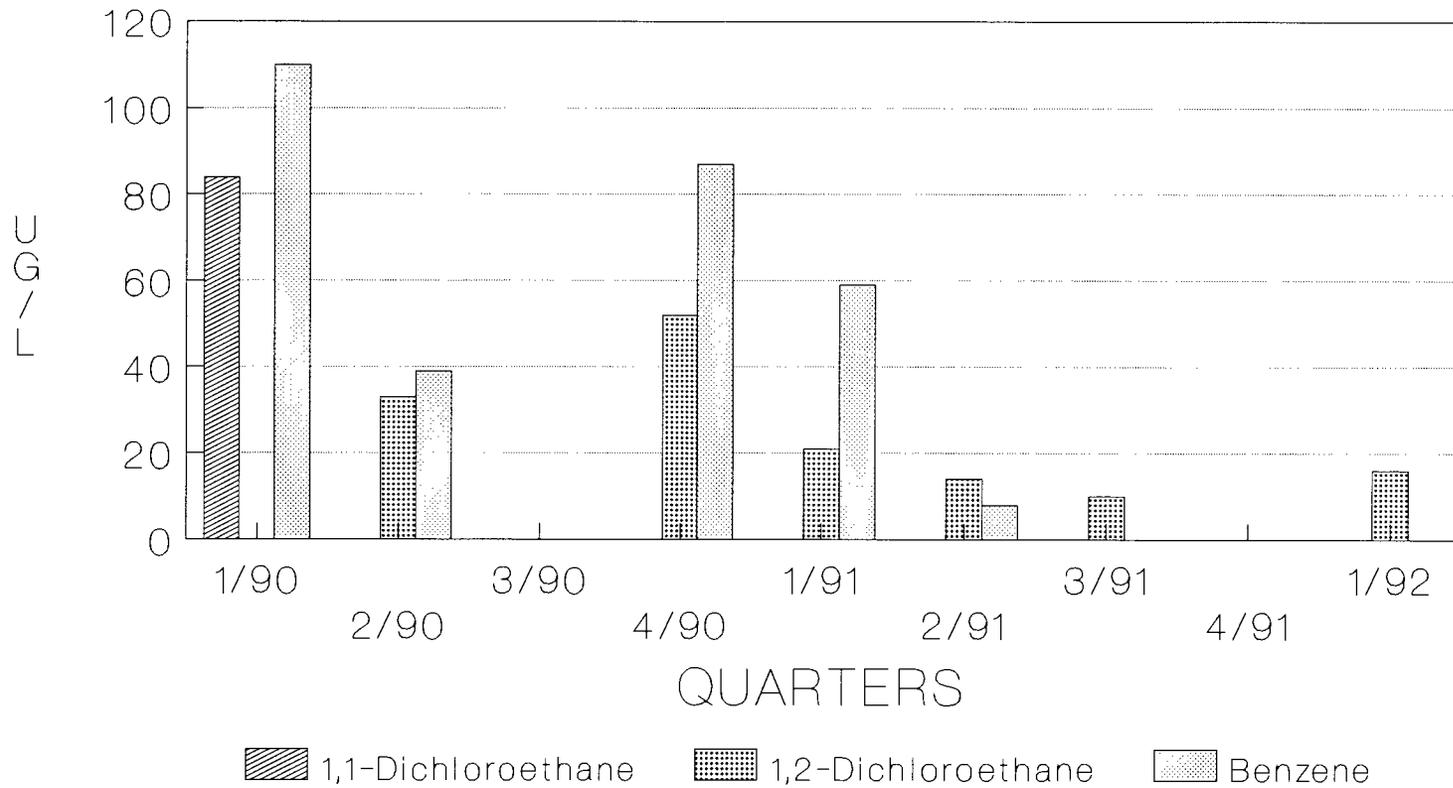
<u>LOCATION</u>	<u>MONTHLY</u>	<u>QUARTERLY</u>	<u>SEMI ANNUALLY</u>	<u>ANNUALLY</u>
SHS-7			601	601
			602	602
			GWC	GWC
SHS-9			601	601
			602	602
			GWC	GWC
SHS-11			601	601
			602	602
			GWC	GWC
Tank 21				601
				602
				GWC
				Metals
				PAH
Tank 27				601
				602
				GWC
				Metals
				PAH
Offsite Stream				601
				602
				GWC
				Metals
				PAH

Notes

All wells will have water and free product elevations determined on a monthly basis.

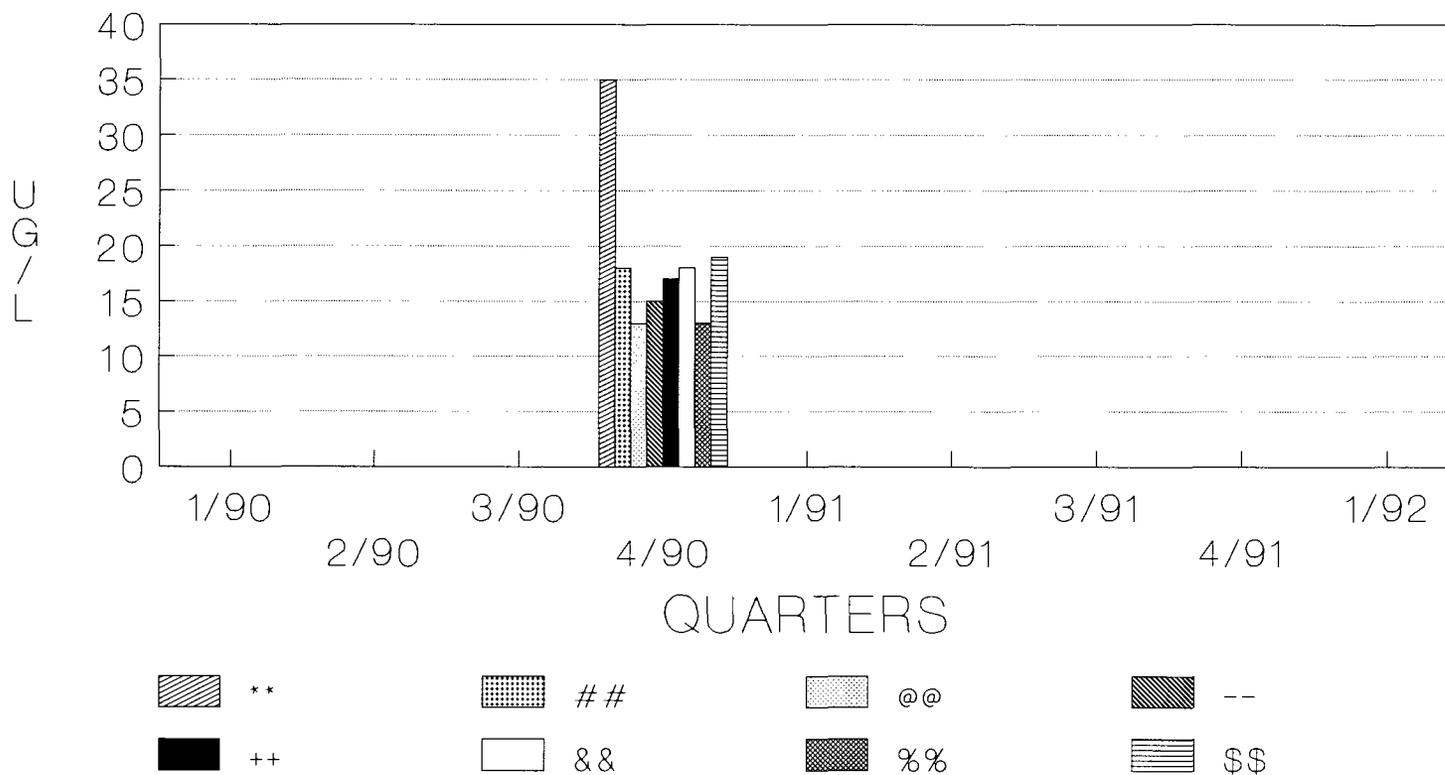
Wells exhibiting free product will not be sampled.

ONSITE WELL GBR-15 ANALYTICAL RESULTS 1ST QUARTER, 1990-1ST QUARTER, 1992



*All other elements tested were found to be under 10 ug/l.

ONSITE WELL GBR-17 ANALYTICAL RESULTS 1ST QUARTER, 1990-1ST QUARTER, 1992



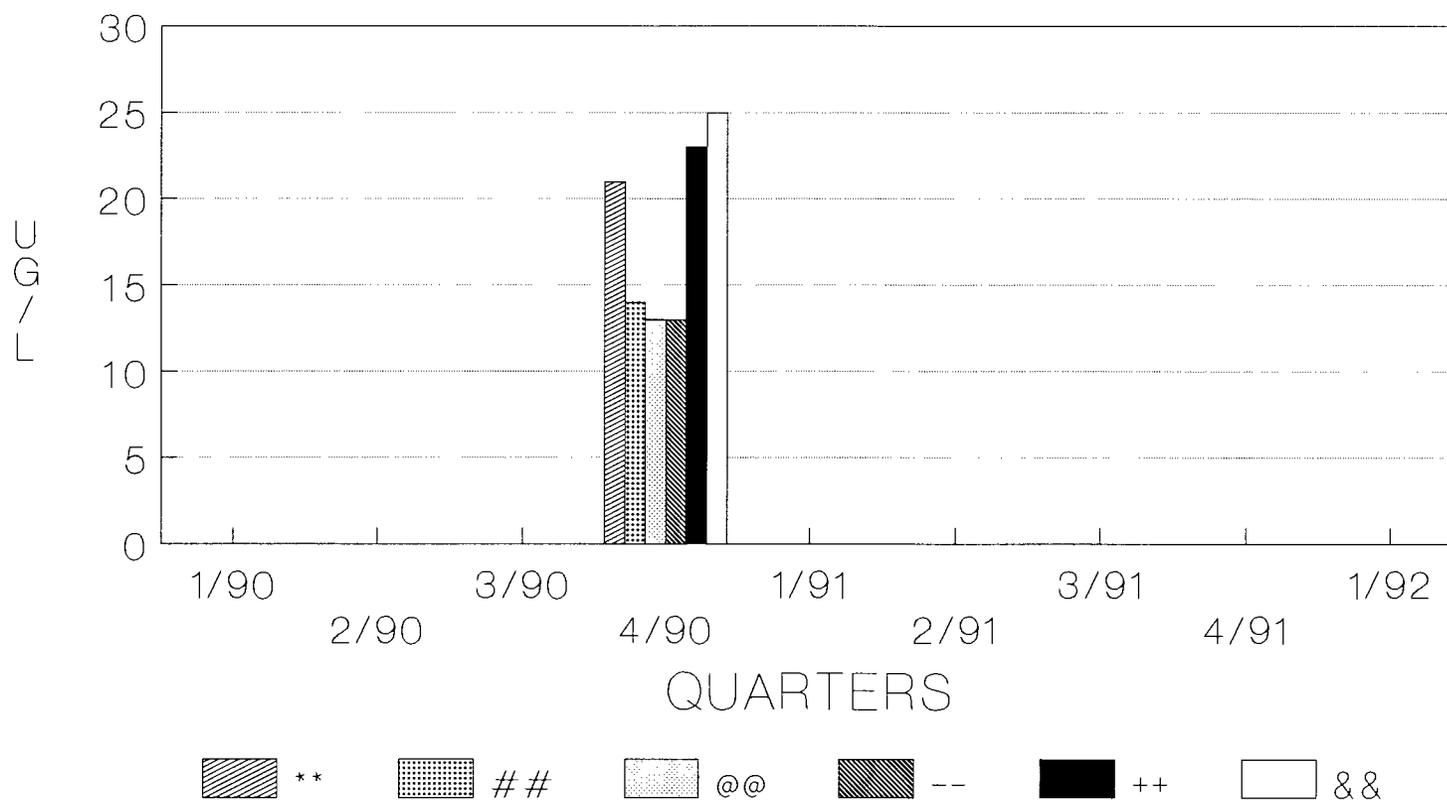
*All other elements tested were found to be under 10 ug/l.

** Xylenes	## cis-1,3-Dichloropropene	@@ trans-1,3-Dichloropropene
-- Tetrochloroethene	++ 1,1,1-Trichloroethane	&& Trichlorofluoromethane
% Chlorobenzene	\$\$ 1,3-Dichlorobenzene	

ONSITE WELL GBR-17

ANALYTICAL RESULTS

1ST QUARTER, 1990-1ST QUARTER, 1992



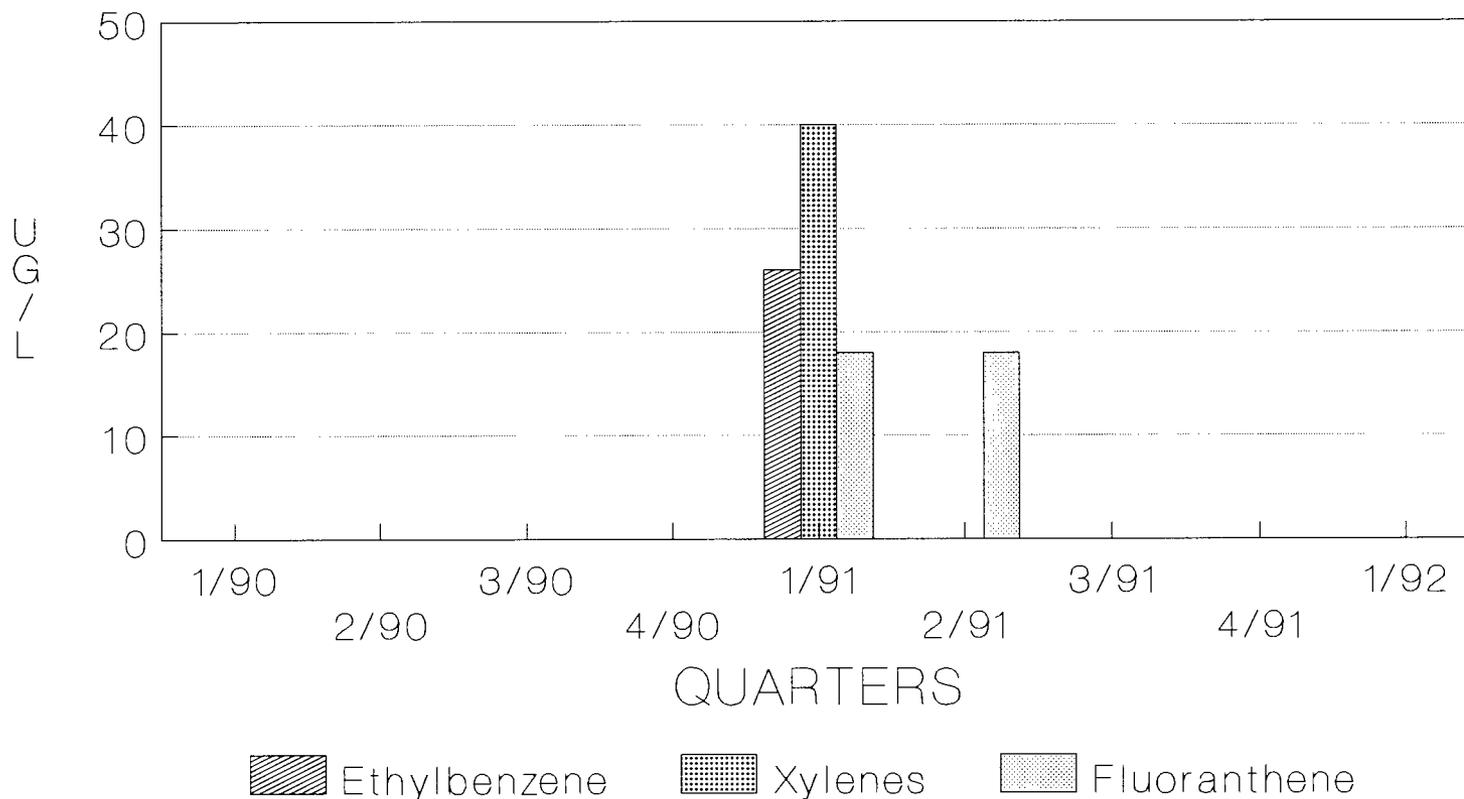
*All other elements tested were found to be under 10 ug/l.

** Bromoform	## Carbon Tetrachloride	@@ Chlorobenzene
-- Dibromochloromethane	++ 1,3-Dichlorobenzene	&& 1,4-Dichlorobenzene

ONSITE WELL GBR-30

ANALYTICAL RESULTS

1ST QUARTER, 1990-1ST QUARTER, 1992

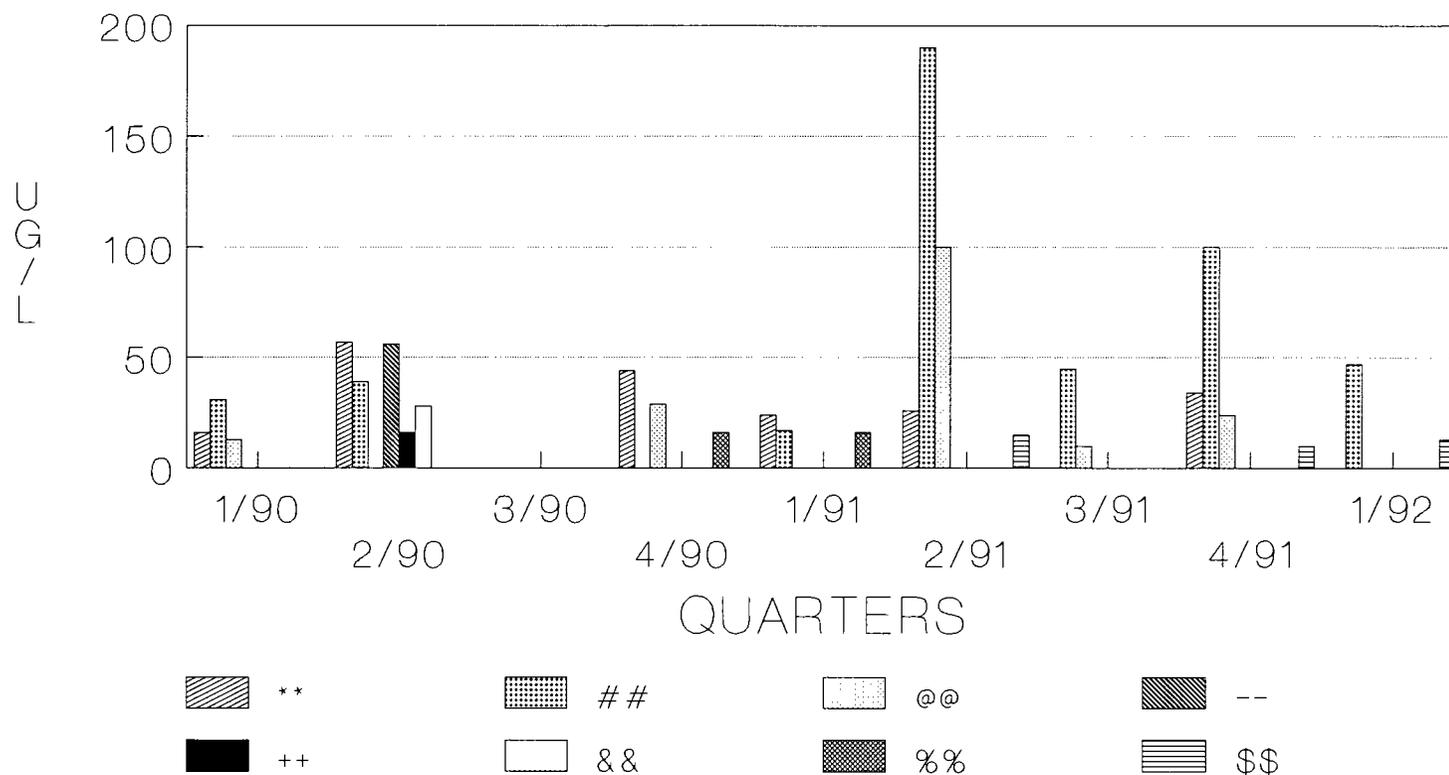


*All other elements tested were found to be under 10 ug/l.

ONSITE WELL GBR-24D

ANALYTICAL RESULTS

1ST QUARTER, 1990-1ST QUARTER, 1992



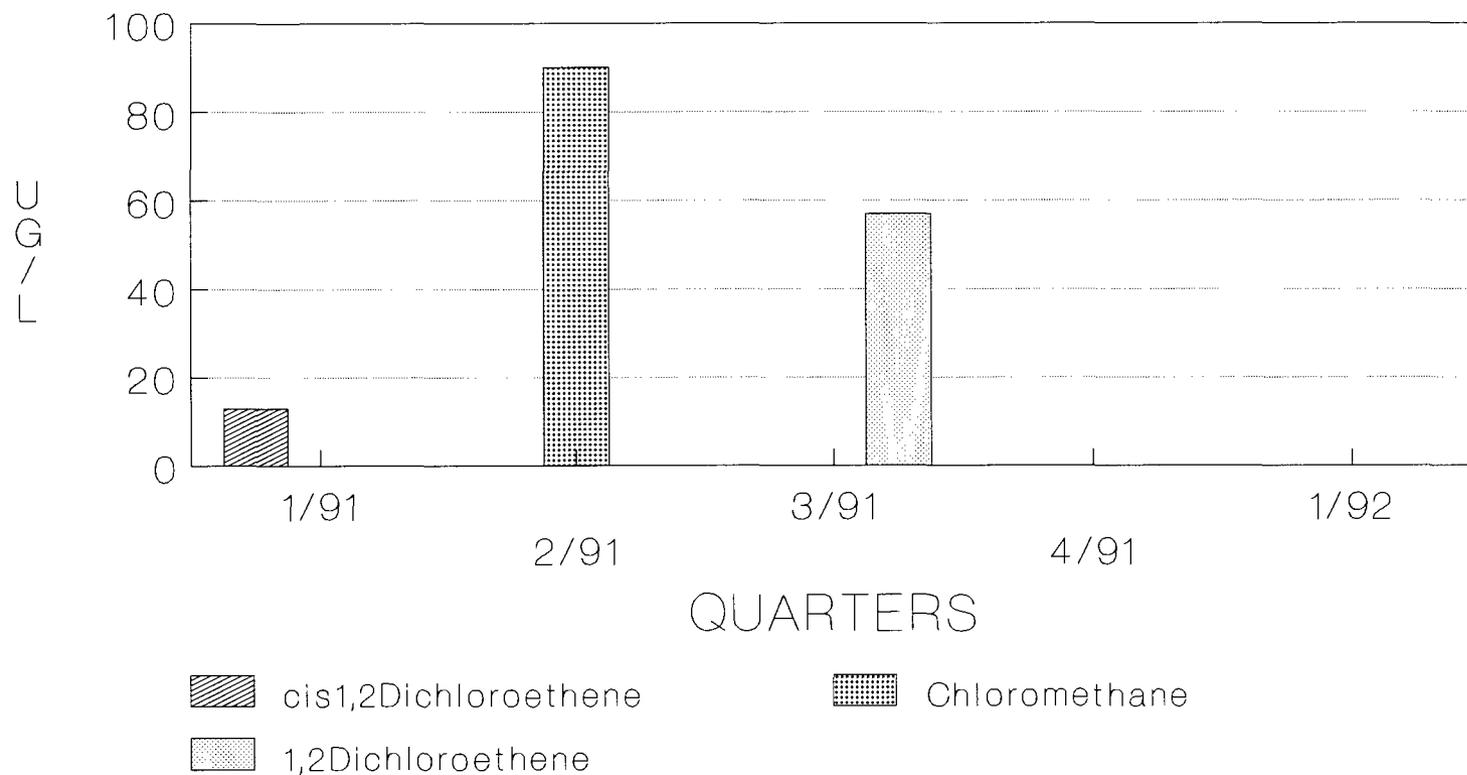
*All other elements tested were found to be under 10 ug/l.

** 1,2-Dichloroethane	## Benzene	@@ Ethylbenzene	-- Trichloroethene
++ Chlorobenzene	&& 1,4-Dichlorobenzene	%% Xylenes	\$\$ Toluene

ONSITE WELL GBR-31

ANALYTICAL RESULTS

1ST QUARTER, 1991-1ST QUARTER, 1992



*All other elements tested were found to be under 10 ug/l.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

March 9, 1992

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-154-688

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: REMEDIATION EVALUATION REPORT
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed the March 3, 1992 Giant Refining Company request for an extension of the submission deadline for Giant's report evaluating the effectiveness of ground water remedial activities at the Giant Bloomfield Refinery.

The OCD approves of Giant's proposed extension of the deadline for submission of the report from February 29, 1992 to March 16, 1992.

If you have any questions please, contact me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script, appearing to read "William C. Olson".

William C. Olson
Hydrogeologist
Environmental Bureau

xc : Dale Doremus, NMED
Monica Chapa, EPA Region VI
Denny Foust, OCD Aztec District Office
Chris Shuey, Southwest Research and Information Center



OIL CONSERVATION DIVISION
RECEIVED

'92 MAR 03 AM 10 09

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

March 3, 1992

Mr. Bill Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Olson:

RE: OFFSITE UPDATE REPORT

As we discussed recently, Giant is requesting an extension of the deadline for the Offsite Update Report until March 16, 1992. We are currently reviewing a draft of the report and anticipate no problems meeting this new proposed date.

Sincerely,

Tim Kinney
Project Manager

/dm

cc Martin Nee - GCL
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T. B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier
William Charles - Alexander and Alexander
William Potter - Firemans Fund
Rosemary McCue - Home Insurance
Bill Baggett - San Juan County
Monica Chapa - EPA
Kim Bullerdick - Giant
Carl Shook - Giant

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JAN 31 1992

OIL CONSERVATION DIV.
SANTA FEThe Daily Times
Farmington, New Mexico

4 corners

January 31, 1992

Lee Acres landfill lawsuit dismissed

STAFF REPORT

AZTEC — A suit filed against the county by a couple who claimed landfill waste contaminated their groundwater has been dismissed by a U. S. district court judge, County Attorney Bill Baggett told the County Commis-

sion.

The suit filed by Ran and Linda Reynolds was dismissed by Judge James A. Parker, Baggett said.

"As of yesterday, we won the case," he said.

Baggett said most of the credit should go to attorney Les

Dow of Carlsbad, who was hired by the county to assist him.

The suit, filed in Sept. 14, 1990, claimed that groundwater was contaminated with solid and hazardous waste from the Lee Acres Landfill.

The judge granted motions for dismissal of the case filed by the

county and by the Department of the Interior, which was also named in the suit.

The Lee Acres landfill is presently a designated superfund site and a remedial investigation and feasibility study has been performed at the expense of some \$3

million, according to the ruin

Since action is already on going under the Comprehensive Environmental Response, Compensation and Liability Act, which superfund sites are listed precludes any action or brought about after the site has been listed, the judge wrote.



OIL CONSERVATION DIVISION
RECEIVED

'92 JAN 6 AM 10 17

January 2, 1992

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

This letter is to confirm our phone conversation of today.

As we discussed, recovery well SHS-11, located south of the refinery, has sanded in and is out of service. The well does not appear to be salvageable.

We plan on submitting a report on the effectiveness of the offsite project early this year and, with your approval, intend to replace, eliminate, or relocate SHS-11 based on the findings of the report.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

/dm

cc: Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
Bill Baggett-SJC
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander & Alexander
William Potter-Firemans Fund
Rosemary McCue-Home Insurance Co.
Monica Chapa-U. S. Environmental Protection Agency



OIL CONSERVATION DIVISION
RECEIVED

1991 DEC 4 AM 8 32

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

November 26, 1991

Ms. Monica Chapa (6H-EO)
U. S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75020-2733

RE: QUARTERLY DATA REPORTS

Dear Ms. Chapa:

In accordance with your recent request, I am forwarding, under separate cover, quarterly data reports referencing the Giant Bloomfield Refinery for all of 1990 and the first three quarters of 1991.

Again, I would like to thank you for your recent visit to the refinery and the opportunity to introduce you to the refinery remediation project.

Sincerely,

Timothy A. Kinney
Refinery Remediation
Project Manager

/gr

Enclosures

cc Kim Bullerdick
Carl Shook
Tom Gryp
William Olson
Dale Doremus



OIL CONSERVATION DIVISION
RECEIVED

'91 NOV 20 AM 8 51

October 29, 1991



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

RE: Giant Bloomfield Refinery Remediation
Quarterly Report
Third Quarter, 1991

Enclosed is the Quarterly Remediation Data Report referencing the
third quarter of 1991 for Giant's Bloomfield Refinery.

Please contact me with any questions or comments that may arise.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

/dm

Enclosure

cc w/enc: Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
Bill Baggett-SJC
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander & Alexander
Charlotte Toler-Firemans Fund
Rosemary McCue-Home Insurance Co.

San Juan County Ordered To Clean Up Landfill

By Margaret Cheasebro

JOURNAL CORRESPONDENT

AZTEC — San Juan County has 60 days to come up with a plan to clean up the Lee Acres landfill Superfund site or the Environmental Protection Agency will clean it up and bill the county.

County Attorney Bill Baggett said the county received a notice of potential liability from the EPA on Tuesday. The notice, he said, comes "before they lower the boom on you."

Although the county doesn't know how expensive an EPA cleanup would be, Baggett said they typically cost at least \$50 million and often more.

The county must now work with the

Bureau of Land Management, Giant Refinery and the Department of Interior to formulate a cleanup plan. All four organizations have been involved in some way with the landfill.

Liquid wastes were banned from Lee Acres in April 1985, according to a BLM fact sheet, after poisonous hydrogen sulfide gas at the septic pit may have caused medical problems for some people. Toxic chemicals also were found in a nearby residential water well.

The 20-acre landfill was closed to all waste disposal in April 1986. The EPA proposed it as a Superfund site in 1988, and it was later given that designation.

Superfund sites are considered an EPA

priority because they are the most seriously contaminated.

Barrels that let off an acrid odor after they were punched open by landfill machinery in 1985 still remain buried at the site, Baggett said, and plans must be made to dispose of them.

The county also must locate potentially liable parties who may have contaminated the landfill so they can share in the cleanup costs, he said.

"Ninety percent of the problem was caused by oil field waste dumped into the landfill with hydrogen sulfide in it," said Baggett.

If the county fails to come up with a plan, he said the EPA will create its own cleanup plan and contract the work at three to 10

times what it would otherwise cost. That could require the county to raise its property tax another 8 mills to pay for the cleanup, he said. The county currently has a property tax of 6 mills, or \$6 for every \$1,000 of a property's assessed value.

"They'd make us" pay for it, Baggett said of the EPA. "They could bankrupt us."

Finding people knowledgeable enough to formulate a cleanup plan could be difficult, he said. "You must have people who have been actually involved in cleanup of Superfund sites." He said there was no one in San Juan County with such experience.

"We have to convince the BLM, Giant and the Department of the Interior that they should accept help from someone who's a specialist in this cleanup," he said. "This is

not the sort of thing we can close our eyes to. It won't go away."

San Juan County is named as a potentially liable party because it operated one of two landfills at the Lee Acres site on land leased from the BLM, a Department of Interior agency. The BLM operated the other site.

There is a chance the county could be dropped from liability if it proves the contamination came from the landfill operated by the BLM, Baggett said.

Giant Refinery, near Lee Acres, has been considered a possible source of contamination. Giant is cleaning up groundwater it contaminated under its own refinery, Baggett said.

The BLM already has spent \$4 million on a study of the area, Baggett said.



PO. Box 256
Farmington, New Mexico
87499

505
632-3306

August 7, 1991

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

RECEIVED

AUG 14 1991

OIL CONSERVATION DIV.
SANTA FE

Dear Bill:

RE: Giant Bloomfield Refinery Remediation
Quarterly Report
Second Quarter, 1991

Enclosed is the Quarterly Remediation Data Report referencing the second quarter of 1991 for Giant's Bloomfield Refinery.

Please contact me with any questions or comments that may arise.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

/dm

Enclosure

cc w/enc: Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
Bill Baggett-SJC
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander & Alexander
Charlotte Toler-Firemans Fund
Rosemary McCue-Home Insurance Co.



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 28, 1991

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-359

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: BIOREMEDIATION PILOT TEST
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has completed review of the Giant Refining Company's March 11, 1991 "WORK PLAN, GIANT BLOOMFIELD REFINERY, BIOREMEDIATION PILOT TEST, CONTAMINATED SOILS" and Giant's May 9, 1991 correspondence transmitting information on the microbial consortium and substrate formulation to be used for the bioremediation pilot test.

The OCD approves of the above referenced Bioremediation Pilot Test with the following conditions:

1. Fluids will be applied to the test plots in a manner such that the fluid depth in the application areas will not exceed several inches at any one time.
2. Fluids will be applied only when an operator is on site.
3. Ground water from the monitor wells GBR-6, GBR-41, GBR-20, GRW-3, GBR-5, GBR-7, GBR-8 AND GBR-13 will be tested for nitrates prior to initiation and upon completion of the pilot test to determine baseline and post operational conditions surrounding the test plot area.

Mr. Timothy Kinney
May 28, 1991
page 2

4. Giant will notify the OCD of the initiation of the Bioremediation Pilot Test.
5. The schedule for performing weekly milestones, including submission of the final report, listed in the Bioremediation Pilot Test Schedule will begin upon initiation of the test.

The OCD looks forward to reviewing the results of the bioremediation test project. If you have any questions, please contact me at (505)827-5885.

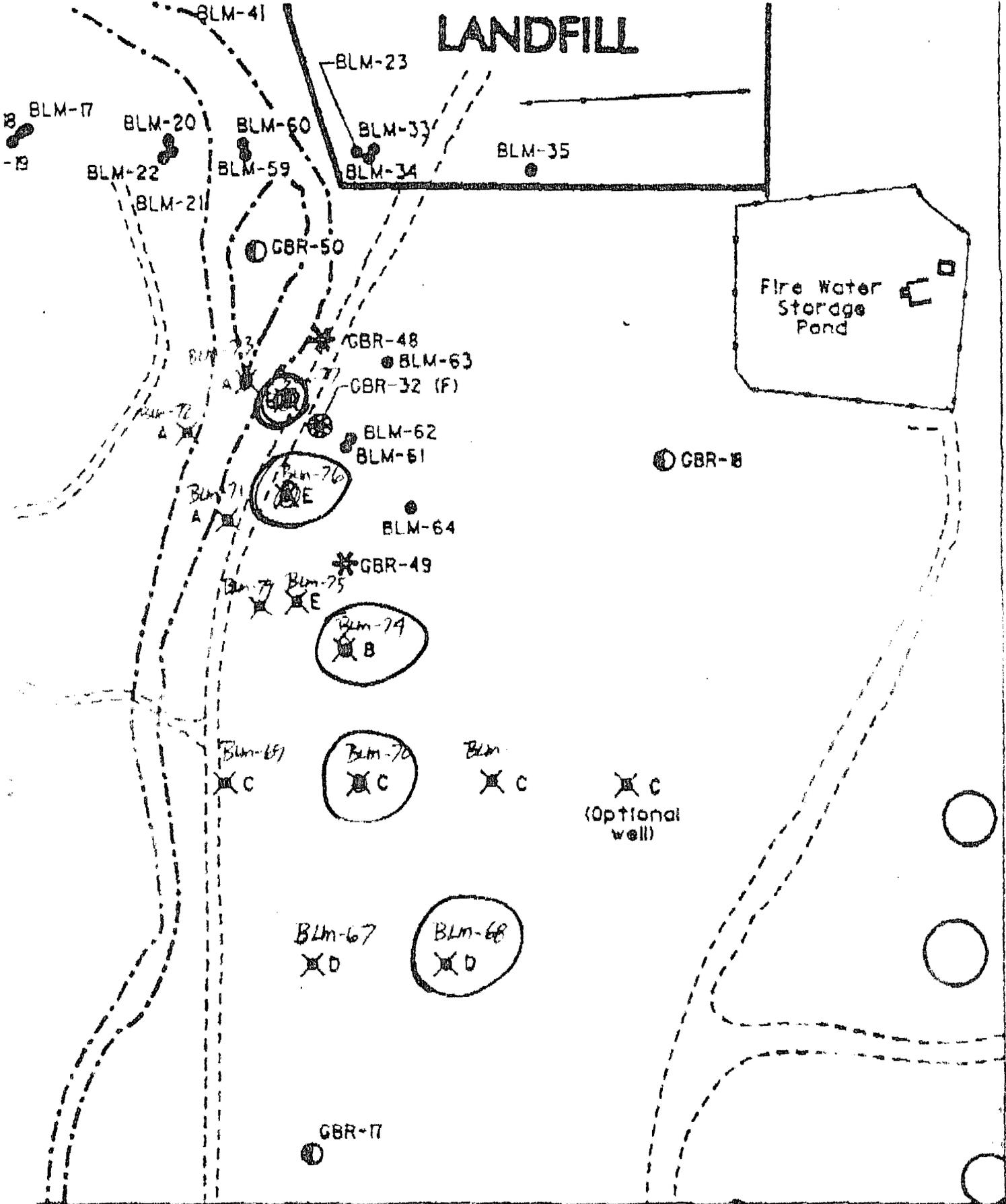
Sincerely,



William C. Olson
Hydrogeologist

xc: OCD Aztec District Office
EID Farmington Office
Dale Doremus, EID Toxic Sites Bureau
William Murphy, Bureau of Land Management
Martin Nee, Geoscience Consultants Ltd.
Chris Shuey, Southwest Research and Information Center

LANDFILL



LEGEND

Proposed group A monitoring wells



- A Proposed group A monitoring wells
- B Proposed group B monitoring wells
- C Proposed group C monitoring wells
- D Proposed group D monitoring wells





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

May 9, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-351

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: DISCHARGE PLAN GW-40 MODIFICATION
GIANT BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed your request to modify the above referenced, previously approved, discharge plan contained in the Giant Refinery Company correspondence of May 7, 1991. The modification requests a change in the method of applying treated ground water for the controlled water application from a surface application to an underground infiltration gallery.

The above referenced requested modification of the previously approved ground water discharge plan, GW-40, for the Giant Bloomfield Refinery located in sections 22 and 27, Township 29 North, Range 12 West (NMPM), San Juan County, New Mexico is hereby approved.

The discharge plan (GW-40) was originally approved on December 9, 1988. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of any facility

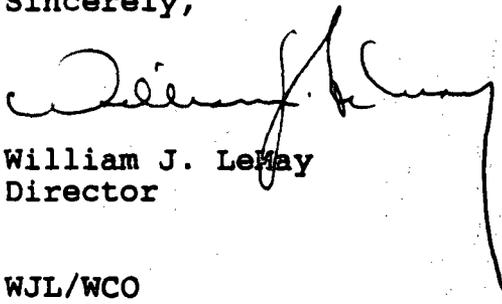
Mr. Timothy Kinney
May 9, 1991
Page 2

expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. LeMay
Director

WJL/WCO

xc : OCD Aztec District Office
Dale Doremus, ED Toxic Sites Bureau
Dave Tomko, ED Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, Bureau of Land Management



OIL CONSERVATION DIVISION
RECEIVED

'91 MAY 13 AM 9 21

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

May 9, 1991

Mr. William Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

As per your letter of March 25, 1991 referencing the Bioremediation Pilot Test at the Giant Bloomfield Refinery, I am forwarding the enclosed information on Microkey Sciences' microbial consortium and substrate formulation. I trust that the information will be sufficient. Please feel free to contact me if additional information is required.

Pending OCD approval, we intend to begin the pilot test in the near future.

Sincerely,

Timothy A. Kinney
Refinery Remediation
Project Manager

/dm

Enclosure

cc Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
William Murphy-BLM
Dale Doremus-EID
Bill Baggett-SJC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander and Alexander
Charlotte Toler-Firemans Fund
Robert Frias-Microkey



OIL CONSERVATION DIVISION
RECEIVED

PO. Box 256
Farmington, New Mexico
87499
505
632-3306

'91 MAY 8 PM 1 52

May 7, 1991

Mr. William Olson
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Olson:

Subject: Discharge Plan Modification

As per our recent discussion, Giant is submitting a proposal to further modify the discharge plan (GW-40) at the Giant Bloomfield Refinery.

Mr. Lemay's letter of April 12, 1991 granted Giant approval for controlled surface application of treated ground water to enhance recovery of free phase petroleum hydrocarbons. We propose to continue application of water in the area through an underground infiltration gallery in place of the application pond. There are several benefits to this modification: (1) year-round operation will be feasible; (2) evaporation losses will be minimized; (3) excessive ponding and possible release due to breach of the surface containment dikes will be eliminated; and (4) continuous operator attendance will not be necessary. Enclosed is a drawing which depicts the installation.

Mr. William Olson
May 7, 1991
Page 2

We appreciate your consideration of this request. Please contact me with any questions or if you require additional information.

Sincerely,



Timothy A. Kinney
Refinery Remediation
Project Manager

/dm

Enclosure

cc w/enc Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
William Murphy-BLM
Dale Doremus-EID
Bill Baggett-SJC
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander and Alexander
Charlotte Toler-Firemans Fund



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

MAY 02 1991

GENERAL NOTICE LETTER
URGENT LEGAL MATTER -- PROMPT REPLY NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Giant Refinery Company
Attn: Tim Kinney
Project Manager of Refinery Remediation
P.O. Box 256
Farmington, New Mexico 87499

Re: Lee Acres Landfill (the "Site")
Farmington, New Mexico

RECEIVED

MAY 06 1991

OIL CONSERVATION DIV.
SANTA FE

Dear Mr. Kinney:

This letter notifies you of potential liability, as defined by Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9607(a), as amended (CERCLA), that you may incur or may have incurred with respect to the above-referenced site. This letter also notifies you of potential response activities at the site, which you may be asked to perform or finance at a later date.

NOTICE OF POTENTIAL LIABILITY

The United States Environmental Protection Agency (EPA) has documented the release or threatened release of hazardous substances, pollutants, or contaminants at the above-referenced site. EPA has spent, or is considering spending, public funds on actions to investigate and control such releases or threatened releases at the site. Unless EPA reaches an agreement under which a potentially liable party or parties will properly perform or finance such actions, EPA may perform these actions pursuant to Section 104 of CERCLA.

Under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. Sections 9606(a) and 9607(a), Section 7003 of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6973, as amended (RCRA), and other laws, potentially liable parties may be ordered to perform response actions deemed necessary by EPA to protect the public health, welfare or the environment, and may be liable for all costs incurred by the government in responding to any release or threatened release at the site. Such actions and costs may include, but are not limited to, expenditures for conducting a Remedial Investigation/Feasibility Study (RI/FS), conducting a Remedial Design/Remedial Action (RD/RA), and other investigation, planning, response, oversight, and enforcement activities. In addition, potentially liable parties may be required to pay for

damages for injury to, destruction of, or loss of natural resources, including the cost of assessing such damages. EPA has evaluated information in connection with the investigation of the site. Based on this information, EPA believes that you may be a potentially responsible party (PRP) with respect to this site. Potentially responsible parties under CERCLA include current and former owners and operators of the site as well as persons who arranged for disposal or treatment of hazardous substances sent to the site, or persons who accepted hazardous substances for transport to the site. By this letter, EPA notifies you of your potential liability with regard to this matter and encourages you to voluntarily perform or finance those response activities that EPA determines are necessary at the site.

SPECIAL NOTICE AND NEGOTIATION MORATORIUM

You may receive an additional notice from EPA in the future. That notice would either inform you that EPA is using the CERCLA Section 122(e) special notice procedures to formally negotiate terms of a consent order or consent decree to conduct or finance site response activities, or it would inform you that EPA is not using such procedures pursuant to Section 122(a). If EPA does not use Section 122(e) special notice procedures, the notice would specify why the special notice procedures were not appropriate in this case.

Under Section 122(e), EPA has the discretionary authority to use the special notice procedures if EPA determines that such procedures would facilitate an agreement between EPA and the PRPs and would expedite remedial action at the site. Use of the special notice procedures triggers a moratorium on certain EPA activities at the site. The purpose of the moratorium is to provide a period of time when PRPs and EPA may enter into formal negotiations for PRP conduct or financing of the response activities at the site.

The initial moratorium for the RI/FS lasts for 60 days after the notice. If EPA determines that an offer to perform or finance the activities is submitted by the PRPs within those 60 days, and that the offer is a good faith offer, a 30-day extension is provided for by statute for further negotiations. The initial moratorium for the RD/RA also lasts for 60 days after the notice. If EPA determines that an offer is submitted by the PRPs within those 60 days, and that the offer is a good faith offer, a 60 day extension is provided for by statute for further negotiations.

If EPA determines that a good faith offer has not been submitted within the first 60 days of the moratorium period, EPA may terminate the negotiation moratorium under Section 122(e)(4) of CERCLA. EPA then may commence such cleanup or enforcement actions as it deems appropriate. In the absence of an agreement with the parties to perform or finance the necessary cleanup activities, EPA may undertake these activities and pursue civil

litigation against the parties for reimbursement of site expenditures. Alternatively, EPA may issue an administrative order pursuant to Section 106(a) of CERCLA to require PRPs to commence cleanup activities, or may commence civil litigation pursuant to Section 106(a) of CERCLA to obtain similar relief. Failure to comply with an administrative order issued under Section 106(a) of CERCLA may result in a fine of up to \$25,000 per day, under Section 106(b) of CERCLA, or imposition of treble damages, under Section 107(c)(3).

SITE RESPONSE ACTIVITIES

At present, EPA is planning to conduct the following studies and/or activities at the site:

1. Remedial Investigation (RI) to identify the site characteristics and to define the nature and extent of soil, air, surface water, and groundwater contamination at the site and risks posed by the site
2. Feasibility Study (FS) to evaluate alternative remedial actions to remove, treat, or contain hazardous substances, pollutants, and contaminants at the site
3. Remedial Design and Remedial Action (RD/RA) to design and implement the remedial action selected and approved by EPA for the site
4. Follow-through activities to monitor, operate, and maintain the completed remedial action as required at the site after the remedial action is complete

If you have any questions pertaining to this letter, please contact EPA's Remedial Project Manager, Ms. Monica Chapa, at 214-655-6730 or direct your attorney to contact EPA's attorney Mr. Mel McFarland at 214-655-2120.

Sincerely,

Allyn M Davis

Allyn M. Davis
Director,
Hazardous Waste Management Division

cc: Edmund Kendrick - Montgomery & Andrews
Dale Doremus - NHEID
Manuel Lujan - Secretary of the Interior
Bernie Hyde - Bureau of Land Management

Location of GBR-41



100'

Gravel Filled
Water Infiltration
Trench

25'

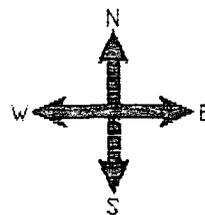
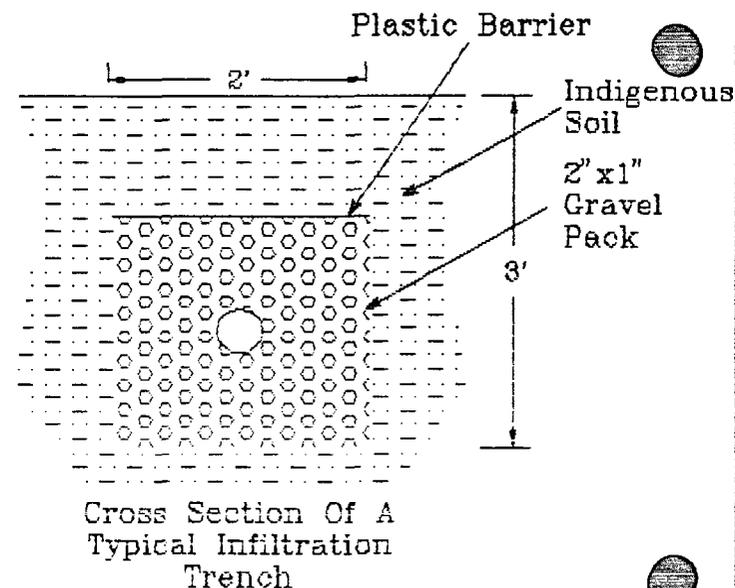
40 to 50 GPM
Water Inlet
Stream

2" Drain Field
Pipe With 1/4"
Holes On 2'
Spacing

4" Water
Distribution
Header

Trench Top View
Cut Away At The
Infiltration Line
Depth

Each 2'x 100' infiltration line
is designed to distribute up to
10 GPM of treated water.



GIANT

Storm Water
Containment Area
Water Infiltration
Gallery

NEW MEXICO OIL CONSERVATION COMMISSION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR Giant Refining Company				ADDRESS P. O. Box 256 Farmington, NM 87499				
REPORT OF	FIRE	BREAK	SPILL X	LEAK	BLOWOUT	OTHER* '91 APR 23 AM 9 31		
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY X	OTHER*	
NAME OF FACILITY Giant Bloomfield Refinery								
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC. 22427	TWP. 29N	RGE. 12W	COUNTY San Juan
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK								
DATE AND HOUR OF OCCURENCE Between 4-19-91 and 4-22-91				DATE AND HOUR OF DISCOVERY 4-22-91 8:00 a.m.				
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT RE-QUIRED	IF YES, TO WHOM Roger Anderson				
BY WHOM Tim Kinney				DATE AND HOUR 4-23-91				
TYPE OF FLUID LOST Water (See attached analysis)				QUANTITY OF LOSS 2,525 Barrels	VOLUME RE-COVERED 1,250 Barrels			
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY					
IF YES, DESCRIBE FULLY**								
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** A 1" plug blew out of a line. It was replaced.								
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** The area affected was in a bermed area of the refinery with some water escaping into the main area of the refinery. All water that could be pumped was transferred back into Tank 37.								
DESCRIPTION OF AREA	FARMING		GRAZING		URBAN		OTHER*	
SURFACE CONDITIONS	SANDY X	SANDY LOAM	CLAY	ROCKY	WET	DRY X	SNOW	
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** Temperature - 30°-70°F. No precipitation.								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF								
SIGNED				Tim Kinney	TITLE	Refinery Remediation Project Manager	DATE	4-24-91

*SPECIFY

**ATTACH ADDITIONAL SHEETS IF NECESSARY



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 10186804

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: GIANT REFINING, FARMINGTON	DATE SAMPLED	: 01/29/91
PROJECT #	: 9834	DATE RECEIVED	: 01/30/91
PROJECT NAME	: RIFINE REMED	DATE EXTRACTED	: N/A
CLIENT I.D.	: 9101291050 TANK 27	DATE ANALYZED	: 02/11/91
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
2-CHLOROETHYL VINYL ETHER	<0.5
1,3-DICHLOROBENZENE	<0.5
1,2 & 1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	0.8
1,2-DICHLOROETHANE	2.4
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	2.8
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	1.7
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.2
TOTAL XYLENES	<0.5
TRICHLOROTRIFLUOROETHANE	<2.0

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	88
BROMOFLUOROBENZENE (%)	83



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

April 24, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Monica Chapa
EPA Region VI Superfund
1445 Ross Ave
Dallas, TX 75202

Dear Ms. Chapa:

On April 24, 1991 you contacted me to discuss ongoing ground water investigation and remedial activities at the Giant Bloomfield Refinery (GBR) located south of the Lee Acres Landfill Superfund site. During our conversation you requested copies of the New Mexico Oil Conservation Division's (OCD) historical water quality database for onsite and offsite GBR monitor wells and up to date maps of the locations of all wells.

Enclosed you will find a copy of the OCD's water quality database for all GBR monitor wells through the fourth quarter of 1990 and a map of the locations of all offsite GBR wells in the Lee Acres Subdivision. Offsite monitor wells SHS-9, SHS-11 and SHS-14 have been converted to recovery wells and are currently pumping petroleum contaminated ground water into the onsite OCD permitted treatment and disposal system. The OCD has also approved offsite well SHS-7 as a recovery well, however Giant has been unsuccessful negotiating an access agreement with the landowner and therefore the well has not yet been placed in operation. In addition to the above items, I have separately mailed you the latest aerial photo of the refinery showing the locations of all onsite monitor and recovery wells.

The OCD is glad to assist EPA in providing any available information regarding contaminated ground water emanating from either the refinery or the Lee Acres Landfill. If you have any questions, please contact me at (505)827-5885.

Sincerely,

William C. Olson
Hydrogeologist

Enclosures

Dale Doremus, N.M Environment Department/Toxic Sites Bureau
William Murphy, Bureau of Land Management
Chris Shuey, Southwest Research and Information Center
Dave Tomko, N.M. Environment Department Farmington Field Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

April 12, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-346

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: DISCHARGE PLAN GW-40 MODIFICATION
GIANT BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed your request to modify the above referenced, previously approved, discharge plan contained in Giant's February 21, 1991 "EVALUATION OF CONTROLLED WATER APPLICATION PILOT TEST, GIANT BLOOMFIELD REFINERY" and your correspondence of April 3, 1991. The modification consists of continued application of treated ground water pumped from onsite recovery wells onto the previously approved water application pilot test area for the purpose of enhancing the recovery of free phase petroleum hydrocarbons.

The above referenced requested modification of the previously approved ground water discharge plan, GW-40, for the Giant Bloomfield Refinery located in sections 22 and 27, Township 29 North, Range 12 West (NMPM), San Juan County, New Mexico is hereby approved with the following conditions:

1. The water application will be operated in accordance with the requirements in OCD's April 11, 1990 approval of the pilot test.
2. The volume of water applied will be reported quarterly.
3. In order to prevent excessive ponding in the water application areas, water will be applied only when an operator is on site.

Mr. Timothy Kinney
April 12, 1991
Page 2

The discharge plan (GW-40) was originally approved on December 9, 1988 and included the land application of treated water in the southern refinery area conditioned upon OCD and Giant agreeing to monitoring requirements for operation. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

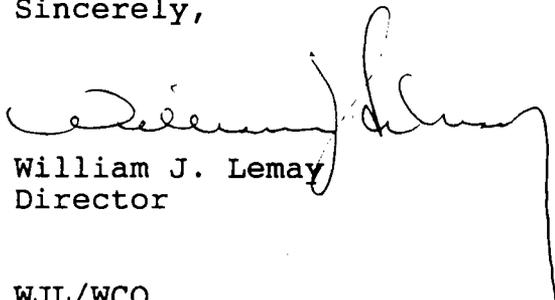
The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc : OCD Aztec District Office
Dale Doremus, EID Toxic Sites Bureau
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, Bureau of Land Management

April 3, 1991

William Olson
Hydrogeologist
Oil Conservation Division
Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

OIL CONSERVATION
RECEIVED
GIANT
REFINING CO.
'91 APR 5 AM 8 50
PO Box 256
Farmington, New Mexico
87499
505
632-3306

RE: CONTROLLED WATER APPLICATION

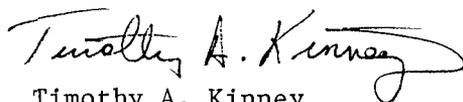
Dear Bill:

Following is Giant Refining Company's response to your letter of March 22, 1991 referencing controlled water application at the refinery. The responses are in the same order as the questions noted in your letter.

1. Prior to the construction and application of water to other areas in the refinery we will submit a plan detailing the quantity, location, and type of application for your review.
2. Again, the details of additional water application areas will be submitted for approval. The existing water application area will be operated in the same manner as the pilot test was.
3. Giant feels that our regular monthly and quarterly monitoring and sampling plan is sufficient to monitor progress and effectiveness of the water applications.

Please call with any questions or comments.

Sincerely,



Timothy A. Kinney
Refinery Remediation
Project Manager

cc: Carl Shook - Giant
Tom Gryp - Giant
Kim Bullerdick - Giant
T. B. Darby - U. S. F. & G.
Gary Barton - AIG Consultants, Inc.
Monte Hensley - Frontier Adjusters
William Charles - Alexander & Alexander, Inc.
Ms. Charlotte Toler, SCLA - Firemans Fund Insurance Company
Martin Nee - Geoscience Consultants
Chris Shuey - SWRIC
Dale Doremus - Environmental Improvement Division
William Murphy - Bureau of Land Management

/gr



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

March 25, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-321

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: BIOREMEDIATION PILOT TEST
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed the Giant Refining Company's March 11, 1991 "WORK PLAN, GIANT BLOOMFIELD REFINERY, BIOREMEDIATION PILOT TEST, CONTAMINATED SOILS".

The OCD has the following comments and requests for information:

1. Please provide all available information on the MicroKey Sciences, Inc. commercial microbial consortium and substrate formulation.
2. Due to the addition of nitrogen-phosphate fertilizer on one of the test plots, the OCD requires that ground water from the monitor wells surrounding the test plot area be analyzed for nitrates.

If you have any questions, please contact me at (505)827-5885.

Sincerely,

William C. Olson
Hydrogeologist

xc: OCD Aztec District Office
Dale Doremus, EID Toxic Sites Bureau
William Murphy, Bureau of Land Management
Martin Nee, Geoscience Consultants Ltd.
Chris Shuey, Southwest Research and Information Center



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

March 25, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-320

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: DISCHARGE PLAN GW-40 MODIFICATION
GIANT BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has received your request, dated March 6, 1991 to modify the above referenced, previously approved, discharge plan. The modification consists of the addition of ground water pumped from onsite recovery wells GBR-6, GBR-51 and GBR-52 into the OCD approved ground water treatment and disposal system.

The March 6, 1991 requested modification of the previously approved ground water discharge plan, GW-40, for the Giant Bloomfield Refinery located in sections 22 and 27, Township 29 North, Range 12 West (NMPM), San Juan County, New Mexico is hereby approved with the condition that the monthly pumped volume from each well be reported quarterly. The discharge plan (GW-40) was approved on December 9, 1988. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of

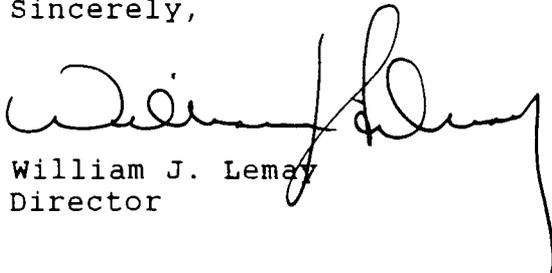
Mr. Timothy Kinney
March 22, 1991
Page 2

any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc : OCD Aztec District Office
Dale Doremus, EID Toxic Sites Bureau
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, Bureau of Land Management

OIL CONSERVATION DIVISION
RECEIVED

GIANT
REFINING CO.

'91 MAR 27 AM 8 42

March 22, 1991

P.O. Box 256
Farmington, New Mexico
87499

Mrs. Anita Iskra
Post Office Box 912
Bloomfield, New Mexico 87413

505
632-3306

Dear Mrs. Iskra:

We appreciate your kind consideration in granting us permission to drill monitor wells on your Lots 2 & 3 of Block 7 in the Suburban Heights Subdivision, San Juan County, New Mexico last year. The wells have provided information about the environmental problems south of the refinery.

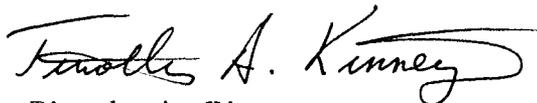
The next step in our project is to begin cleaning up the ground water in the area. To accomplish this, we will need to pump water from some of the wells we drilled last year. The water will be cleaned and pumped back into the ground.

Once again, we would like to ask for your help. Some of the wells that we would like to use are located on your property. With your permission, we propose to connect at least one well and pump water from it. Connecting the well will require burying water, air, and power lines. We also may want to put some of the clean water back into the ground on your lots. The water would be pumped back into a well or an infiltration line.

Giant is willing to compensate you for the use of the property. We propose to lease the property for a sum of \$1,000 per year for a period of 10 years.

We would appreciate your agreement with our proposal. Please let us know what you decide. If you should want to call me, I can be reached at 632-3306. Again, thank you for your cooperation.

Sincerely,



Timothy A. Kinney
Refinery Remediation
Project Manager

/gr

cc ~~Bill Olson - New Mexico Oil Conservation Division~~
Bill Baggett - San Juan County Attorney
Kim Bullerdick - Giant
Carl Shook - Giant
Tom Gryp - Giant



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

March 22, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-319

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: CONTROLLED WATER APPLICATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed the Giant Refining Company's February 21, 1991 "EVALUATION OF CONTROLLED WATER APPLICATION PILOT TEST, GIANT BLOOMFIELD REFINERY".

The OCD has the following questions and requests for information:

1. The report recommends additional water applications be implemented to facilitate product recovery but does not define the areas for application. Please provide information on the locations of the areas considered for water application.
2. How will the water application areas be constructed and operated?
3. What additional monitoring will Giant perform to monitor the progress and effectiveness of the water application?

If you have any questions, please contact me at (505)827-5885.

Sincerely

William C. Olson
Hydrogeologist

xc: OCD Aztec District Office
Dale Doremus, EID Toxic Sites Bureau
William Murphy, Bureau of Land Management
Martin Nee, Geoscience Consultants Ltd.
Chris Shuey, Southwest Research and Information Center



REFINING CO.

OIL CONSERVATION DIVISION

RECEIVED
P.O. Box 256

Farmington, New Mexico

'91 MAR 15 AM 8 41

505
632-3306

March 14, 1991

Mr. Bill Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

Enclosed is a copy of "WORK PLAN GIANT-BLOOMFIELD REFINERY
BIOREMEDIATION PILOT TEST CONTAMINATED SOILS" for your
review and comment. We plan to initiate this pilot test
in the Spring and Summer of this year.

Please call if you have any question or require additional
information.

Sincerely,

Timothy A. Kinney
Bloomfield Refinery
Remediation Project Manager

/dm

Enclosure

cc w/enc. Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
T. B. Darby-U.S.F.&G.
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander & Alexander
Charlotte Toler-Firemans Fund



OIL CONSERVATION DIVISION
RECEIVED

P.O. Box 256
Farmington, New Mexico
87499

'91 MAR 7 AM 9 15

505
632-3306

March 6, 1991

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Re: Discharge Plan Modification

Dear Bill,

As we discussed on your recent visit to the Bloomfield Refinery, Giant is submitting a proposed modification to the discharge plan. We propose to convert GBR-51, GBR-52, and GBR-6, from monitoring to recovery wells. GBR-51 would be labeled GRW-7, GBR-52 would be labeled GRW-8, and GBR-6 would be labeled GRW-9.

Pumping from GBR-51 and GBR-52 will increase the volume of water available for application and infiltration. Pumping GBR-6 should enhance free product recovery adjacent to the controlled application areas.

Please contact me with any questions or if you require additional information.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

cc:

Carl Shook - Giant
Kim Bullerdick - Giant
Martin Nee - GCL
Tom Gryp - Giant
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T.B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier Adjusters
William Charles - Alexander & Alexander
Charlotte Toler - Fireman's Fund



OIL CONSERVATION DIVISION
RECEIVED

'91 FEB 27 AM 9 37

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

February 26, 1991

Mr. William Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

Enclosed is the Evaluation of Controlled Water Application Pilot Test Giant Bloomfield Refinery report for your review and comment.

As noted in the report, we would like to continue controlled water applications in the pilot test area and also additional areas within the refinery.

Please contact me with your comments, or if you require additional information.

Sincerely,

Timothy A. Kinney
Refinery Remediation
Project Manager

/dm

Enclosure

cc w/enc Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
Bill Baggett-SJC Attorney
William Murphy-BLM
Dale Doremus-EID
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander and Alexander
Charlotte Toler-Firemans Fund

OIL CONSERVATION DIVISION
RECEIVED

'91 FEB 19 AM 9 29

TRANSMITTAL SHEET

Date: February 14, 1991

To: Bill Olson

From: Giant Refining Company
Bloomfield Refinery
Remediation Project
P. O. Box 256
Farmington, NM 87499

Enclosed is (are) the following document(s) for your information:

- Laboratory results from Canonic Environmental Services Corp. and Inter-Mountain Laboratories, Inc.

/gr



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

February 14, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-318

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: OFFSITE REMEDIATION PIPING PLANS
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO

Dear Mr. Kinney:

The New Mexico Oil Conservation (OCD) has reviewed the February 11, 1990 Giant Refining Company "OFFSITE REMEDIATION PIPING PLANS" containing the construction specifications and testing procedures for the offsite piping system.

The OCD approves of the above plan with the following conditions:

1. The emergency floor drain in the control building, shown in figure 3, will drain to an enclosed vessel.
2. The results of all pipe integrity testing will be included in the quarterly report to OCD in which the test occurs.
3. The OCD will be notified immediately of any leaks, spills or test failure of the piping system.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment. OCD approval also does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact me at (505)827-5885.

Sincerely,

William C. Olson
Hydrogeologist

xc : Frank Chavez, OCD Aztec District Office



Route 3, Box 7
Gallup, New Mexico
87301

505
722-3833

February 13, 1991

John A. Biava
Assaigai Analytical Laboratories
7300 Jefferson, Northeast
Albuquerque, New Mexico 87109

RE: Response to Analytical Proposal

Dear Mr. Biava:

Giant Refining Company appreciated your analytical proposal for Phase II of the RCRA Facility Investigation for the Ciniza Refinery. Your proposal was the most cost effective proposal received. However, this work is being required by the EPA and they are requesting the use of a laboratory with the Superfund Contract Laboratory approval. Since AAL does not have this approval, Giant is not able to accept your proposal for this project.

We have also discussed the possible use of AAL for the Part B permit required analysis. You have indicated that you are working with the Oil Conservation Division and the Environmental Improvement Division to resolve some discrepancies. Please keep me informed of your progress in these discussions.

If you have any questions, contact my office at (505) 722-0217.

Sincerely,


Claud Rosendale
Environmental Manager
Ciniza Refinery

CCR/sp



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

NEW MEXICO OIL CONSERVATION DIVISION
SANTA FE, NM 87504-2088
'91 FEB 6 AM 8 51

February 1, 1991

Mr. William Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

RE: Offsite Remediation Piping Plans

In accordance with your letter of December 7, 1990, I am submitting piping plans relating to the offsite expansion of the Giant Bloomfield Refinery Remediation Project for your approval.

Enclosed are the General Construction Specifications and applicable drawings labeled Figures 1 through 8. As noted in Figure 2, the above-ground termination of each underground water and air line will include a block valve, a test valve, and a union. One test valve will be used for a vent and the other for applying test pressure.

To perform pressure testing of water lines, water will be injected through the test valve at one end of each line while block valves on each end of the line are closed. The test valve on the opposite end from the injection point will be used to vent any air from the line. When the line is purged of all air, a pressure indicator will be installed on one end of the line, and the line will be pumped up to the desired test pressure. Air lines will be similarly tested except that air will be used in place of water. Air lines will be tested to 200 psig. Water lines will be tested at 150 psig. During the four-hour duration of the test, the pressure gauge will be monitored for decreases indicating line leakage. After the initial post-construction testing, tests will be conducted yearly as noted in the discharge plan.

Mr. William Olson
February 1, 1991
Page 2

We will await your approval prior to installation. Please call with any questions that may arise.

Sincerely,



Timothy A. Kinney
Bloomfield Refinery Remediation
Project Manager

/dm

Enclosures

cc w/o enclosures: Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander and Alexander
Charlotte Toler-Firemans Fund
Bill Baggett-San Juan County Attorney

GIANT REFINING COMPANY
1991 OFFSITE REMEDIATION
SYSTEM EXPANSION
GENERAL CONSTRUCTION SPECIFICATIONS

GENERAL

A. This document (the "Specifications") sets forth the general construction specifications for Giant Refining Company's ("Giant's") proposed 1991 offsite remediation system expansion (the "Work"). The Specifications set forth both the plumbing and electrical specifications applicable to the Work. Giant presently intends to select both a plumbing contractor and an electrical contractor. Unless otherwise set forth herein, the Specifications will be applicable to both the plumbing contractor and the electrical contractor.

B. No work shall be performed by the contractor until after a contract is entered into between Giant and the contractor (the "Contract"). A copy of Giant's General Conditions for Construction Contracts ("General Conditions") is appended hereto. It is anticipated that the Contract will be substantially similar to the General Conditions, as supplemented by these Specifications. In the event of a conflict between any of the terms and conditions in the body of the Contract and these Specifications, the Specifications will prevail.

C. The location of existing underground utilities and obstructions shall be determined by the contractor.

D. Time sheets shall be submitted on a daily basis for Giant's approval and shall include all applicable charges for the day.

E. Approval shall be obtained from Giant prior to any work performed on an overtime basis.

F. If applicable ordinances and codes conflict with these Specifications, the contractor shall notify Giant of the conflict and contractor and Giant shall negotiate, in good faith, appropriate revisions to the Specifications and the Contract.

G. Trenching which obstructs traffic or creates a safety hazard shall be backfilled as soon as it is practical. In no case shall trenches be left open overnight when they create a traffic obstruction or a safety hazard. Adequate barricades, signs, pylons, and other appropriate safety devices shall be utilized to minimize safety hazards.

H. All material will be supplied by Giant. Authorized contractor representatives will be allowed to sign for material from the vendor as required. Delivery tickets will be supplied to Giant for review.

I. Access to land adjacent to trenches and facilities is very limited. Figure 1 illustrates the path of utility trenches and accessible land. For the most part, accessible land is limited to San Juan County and State of New Mexico road rights-of-way. Property boundaries will be surveyed and marked. The survey will be arranged by Giant. Contractor will respect property boundaries. No vehicles or equipment will trespass on adjacent property. Additional property access will be negotiated by Giant if required.

J. It will be necessary to coordinate installation of utilities under Highway 64 with the State Highway Department. Necessary permits have already been obtained by Giant. Giant will arrange details of the State's inspection of utility installation in coordination with the contractor.

K. Figures 1-8 illustrate various aspects of the project.

TERMS AND CONDITIONS APPLICABLE TO THE PLUMBING CONTRACTOR

A. Water Piping and Valves

1. All water piping to be buried at a minimum depth of 3 feet.
2. All buried water piping to be schedule 40 PVC minimum.
3. All above-ground water piping to be schedule 80 PVC. The transition from schedule 40 to schedule 80 shall be made underground at a coupling located a minimum of 3 feet before the piping ells up out of the trench.
4. All valves to be brass ball valves unless otherwise indicated.
5. No steel, iron, or galvanized piping, valves, or fittings will be used.
6. Unions will be installed so as to permit maintenance of valves and equipment.

B. Air Piping and Valves

1. All air piping to be buried at a minimum depth of 3 feet.
2. All buried air piping to be schedule 40 PVC minimum.
3. All above-ground air piping to be schedule 80 PVC. The transition from schedule 40 to schedule 80 shall be made underground at a coupling located a minimum of 3 feet before the piping ells up out of the trench.
4. All valves to be brass ball valves unless otherwise indicated.

C. Pressure Testing

1. All buried water and air lines will be pressure tested prior to acceptance by Giant.
2. Water lines will be hydrotested at 150 psig for a minimum of 4 hours. Giant personnel must be present to witness the testing.
3. Air lines will be pressure tested with air at 200 psig for 4 hours. Giant personnel must be present to witness the testing.
4. Defects revealed by pressure testing will be corrected to Giant's satisfaction at no charge to Giant unless the defects are due to faulty material supplied by Giant.

D. Water Line Details

1. A separate 1" pump discharge water line will connect each well with the control building. A common header will not be used. See Figure 3 for control building utility entrance details.
2. Two separate 2" PVC water lines will connect the control building south of the highway with the system north of the highway. One line will terminate at Tank 102. The other line will terminate at Tank 101. The line terminating at Tank 101 (the return line) will have an underground vault installed every 250 feet between Tank 101 and the highway. Each vault will contain a schedule 80 PVC tee in the line with a threaded plug installed. A 2" ball valve will be installed downstream of each tee.
3. The two 2" PVC water lines will be installed inside a 6" pipe within a culvert under the highway. The lines will require heat tracing for freeze protection. Giant will supply the heat tracing. The plumbing contractor will coordinate the installation of heat tracing with the electrical contractor. After heat tracing is applied, the pipe will be insulated with fiberglass pipe wrap and wrapped with pipeline tape. Giant will supply materials.
4. A 2" PVC injection header connecting each well with the control building will be installed. It will be terminated at each well and at the control building.
5. Figure 2 illustrates the hydrotest fittings to be installed at the termination of each separate run of piping.

E. Air Line Details

1. A common 1" PVC air header will connect each well with the control building.
2. Figure 2 illustrates the pressure test fittings to be installed at the terminations of each separate run of piping.

F. Submersible pumps will be installed in wells SHS-7, SHS-9, SHS-11, and SHS-14. SHS-9 will be plumbed through a pitless adaptor already installed in the well. The remaining wells will be connected inside the well enclosures. The pumps will be connected to the surface via flexible, black 1" 100 psig poly pipe. The plumbing contractor will coordinate electrical connections with the electrical contractor.

G. Lockable ball valves will be installed where water piping enters and exits the 6" pipe under Highway 64. See Figure 4 for detail.

TERMS AND CONDITIONS APPLICABLE TO THE ELECTRICAL CONTRACTOR

A. A power drop will be made at the control building from the adjacent power pole. Required service is 200 amp, 230 volt single phase. Necessary arrangements for the service will be made with the electric utility by the electrical contractor.

B. Correctly-sized individual circuit breakers for each pump or circuit will be installed and located in the control building. A minimum of ten spare breaker slots, minus breakers, will be provided.

C. Submersible pumps will be installed in four wells, SHS-7, SHS-9, SHS-11, and SHS-14. Each submersible pump, with the exception of SHS-9, will have a local disconnect inside the well enclosure. SHS-9 will not have a well enclosure. It will have subsurface electrical and water connections.

D. Submersible pumps will be supplied by Giant. Submersible pump motors will be 230 VAC/1/60, two-wire type. Each pump will be installed with a Pumptec motor protector supplied by Giant. The Pumptec will be installed by the contractor in the well enclosure at wells SHS-7, SHS-11, and SHS-14 and in the control building for well SHS-9.

E. Adequate fluorescent lighting will be installed by the contractor in the control building.

F. A duplex 115 VAC/1/60 20 amp outlet will be installed by the contractor in the control building.

G. Buried conduit to be 3/4" minimum PVC. Above ground conduit to be galvanized.

H. Individual conduit runs will be utilized for each well.

I. All electrical devices to be suitable for non-hazardous locations and weather resistant where applicable.

J. A suitable single magnetic contactor will be installed in the common feed between the power source and the circuit breakers for the four submersible pumps. It will serve to shut down all submersible pumps in the event of an abnormal event in the refinery or in the system south of the highway. The 115 VAC contactor coil will be energized by a signal emanating from the microprocessor control panel located in the dispatch office at the refinery. The contactor will be equipped with a HOA switch to enable local override. A surge suppressor will be installed across the contactor coil.

K. A 1" PVC conduit originating from the Tank 101 building in the refinery will connect with the control building. A minimum of 6 pair of control wires will be pulled in the conduit. At approximately 250 foot intervals, beginning at Tank 101 and proceeding to Highway 64, a weatherproof junction box will be installed above ground. At the highway crossing, the conduit will be run through a 6" pipe inside a culvert. The conduit under the highway will be galvanized rigid type. A weatherproof junction box will be installed at each end of the culvert. A junction box in the control building will be the termination of the control wires. All lines buried within the State highway right-of-way leading up to the culvert will be at least 3 feet below the surface.

L. Terminal strips will be utilized in junction boxes. Consistent numbering, corresponding to the existing wire numbering in the refinery, will be used. A wiring sketch will be supplied to Giant so that Giant's wiring diagrams can be updated.

M. The electrical contractor will coordinate the installation of heat tracing with the plumbing contractor.

N. A heat tracing circuit will be installed between the control building and the highway crossing. Heat tracing will be controlled by a temperature switch located on the outside of the control building. A control relay, if required, will be installed by the contractor. The contractor will specify the control relay. The temperature switch will be supplied by Giant. A pilot light will indicate when the heat tracing circuit is on.

O. A 1000-watt electric baseboard heater with thermostat will be installed in the control building.

P. Electrical devices will be located along the east wall of the control building.

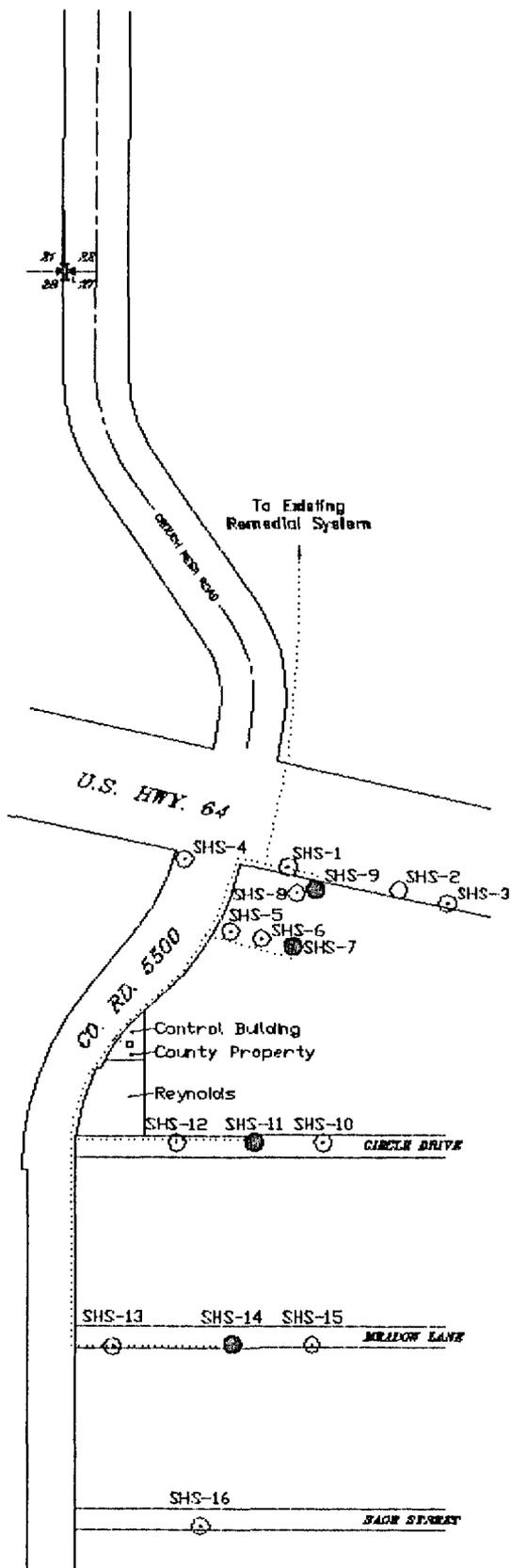
Figure 1

GIANT

Proposed Utility Routes For The Offsite Remediation System

By: Tim Kinney

Date: 1/8/91 Rev: 1



NOTES

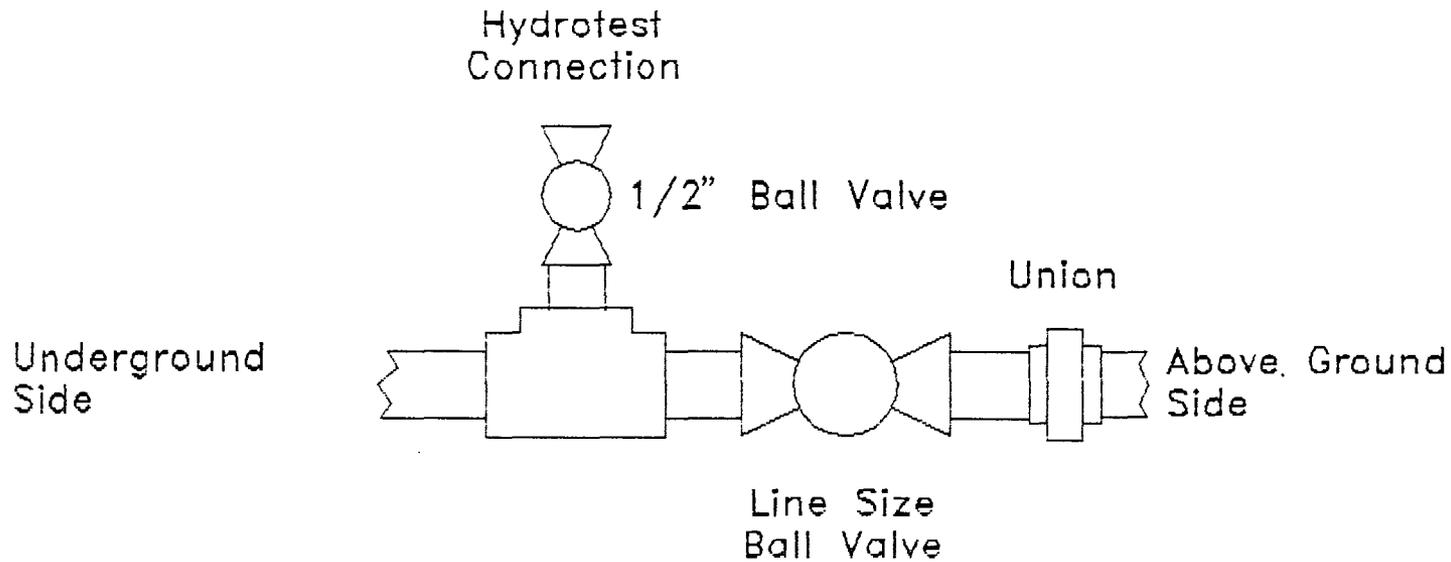
- Trenches to be dug approximately three feet from the edge of road easements
- ▲ - Trenches to be 3 feet deep minimum
- Water and air piping to be Sch 40 PVC
- Electrical conduit to be PVC
- Power drop to be at the control room
- Control room to be fenced with 6' chain link with a locked gate

Legend

- Proposed Utility Route (dotted line)
- Monitor Wells ○ (open circle)
- Recovery Wells ● (filled circle)



Figure 2

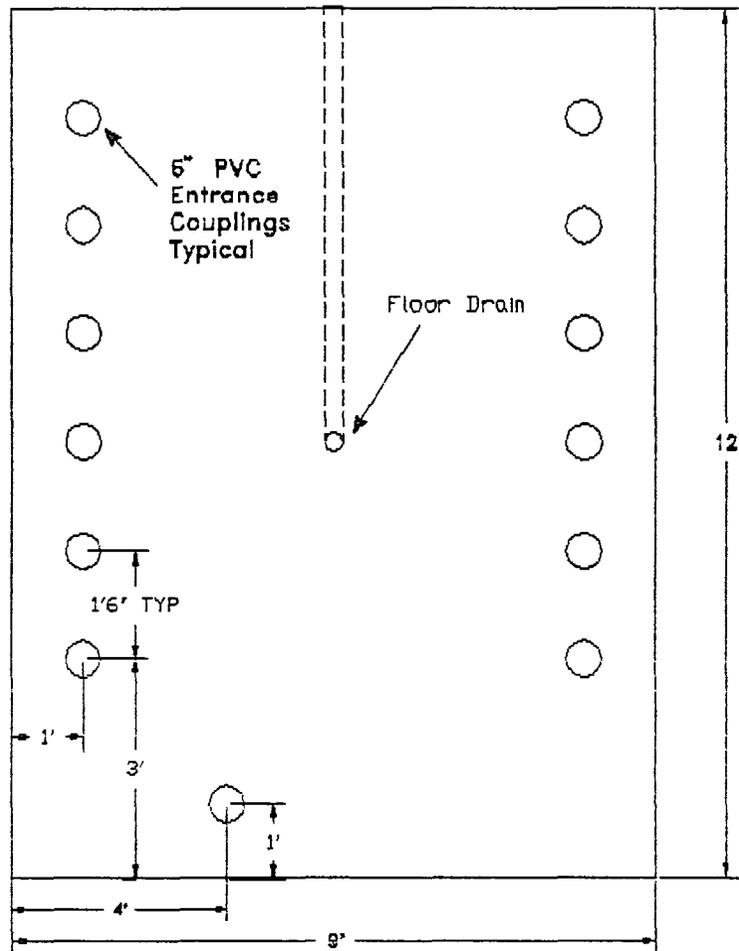


Note:

The above ground termination of all piping will be constructed as per this sketch.

GIANT

Hydrotest
Connection
Detail



Note:

Floor Drain to be 1" lower than slab perimeter to facilitate drainage

Drain pipe to slope 1" to edge of slab

Slab to be poured with 3000 lb concrete and reinforced with remesh

Concrete surface to a broom finish

Slab thickness to be 4" with an 8" perimeter poured monolithic footing

FIGURE 3

GIANT

Slab Detail
For Offsite Project
Control Building

DWG # 1041

By: Tim Kinney

Date: 12/19/90 Rev: 0

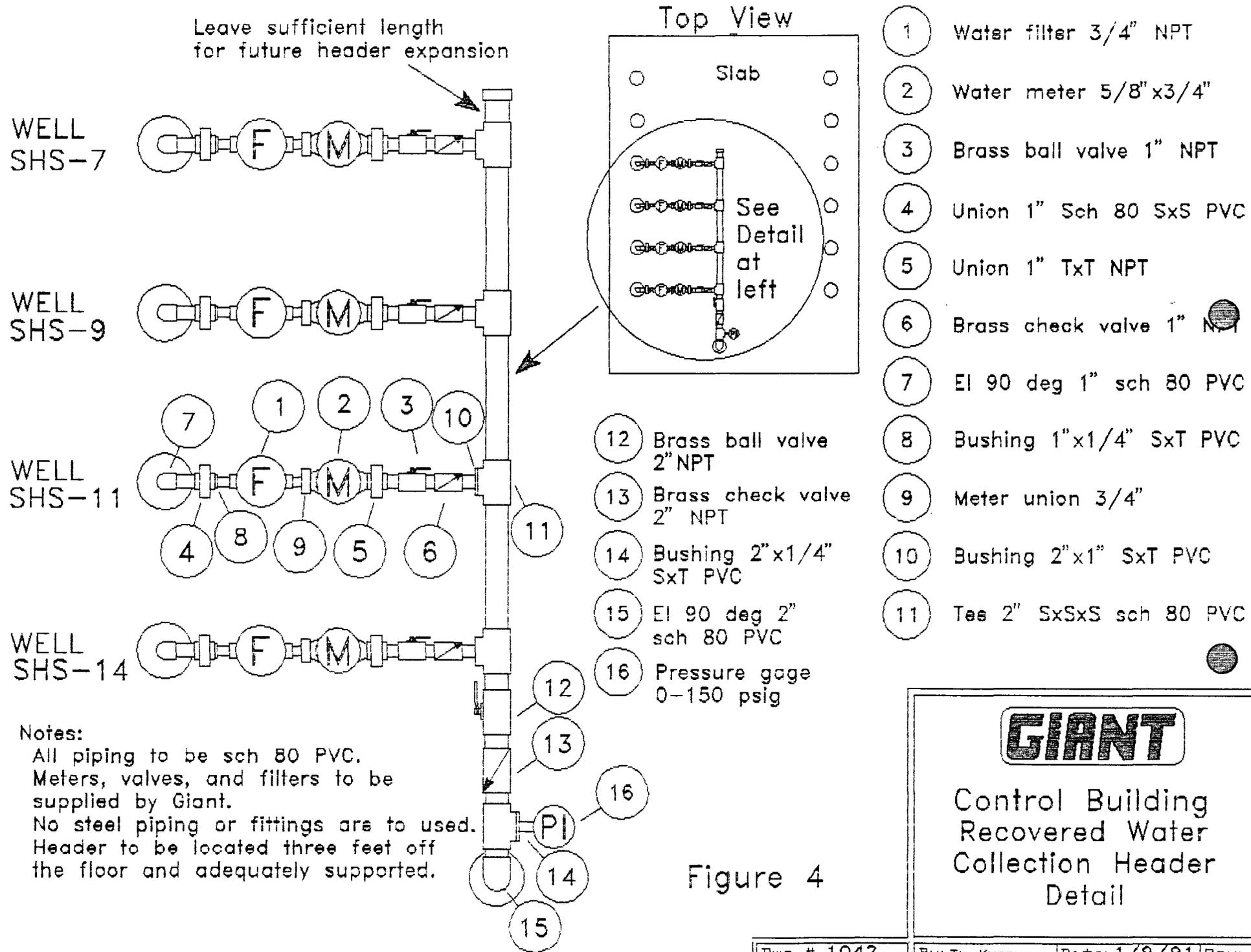
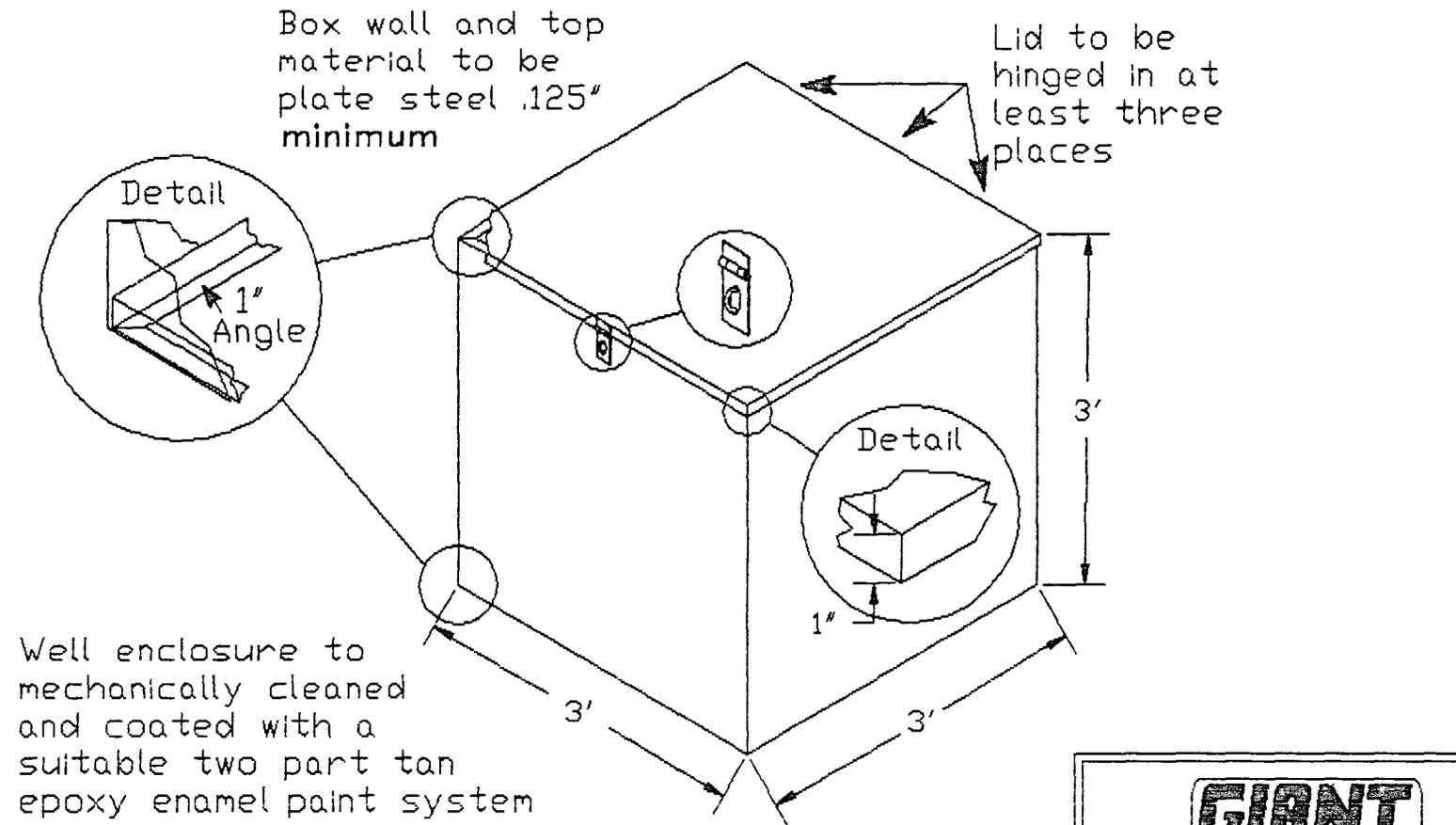


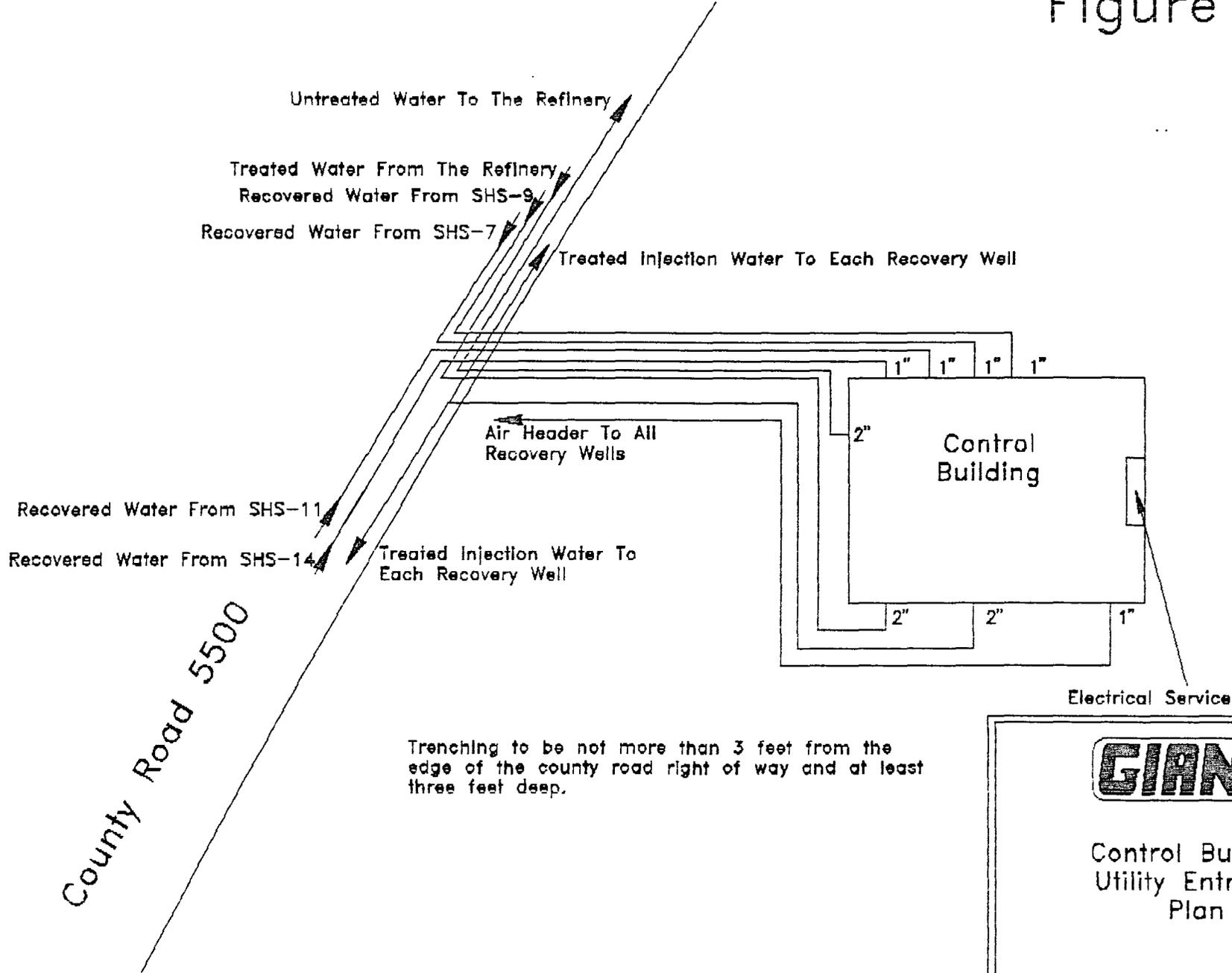
Figure 5



GIANT
Offsite Well
Enclosure
Detail

Dwg # 1038 By: _____ Date: 12/7/90 Rev: 0

Figure 6

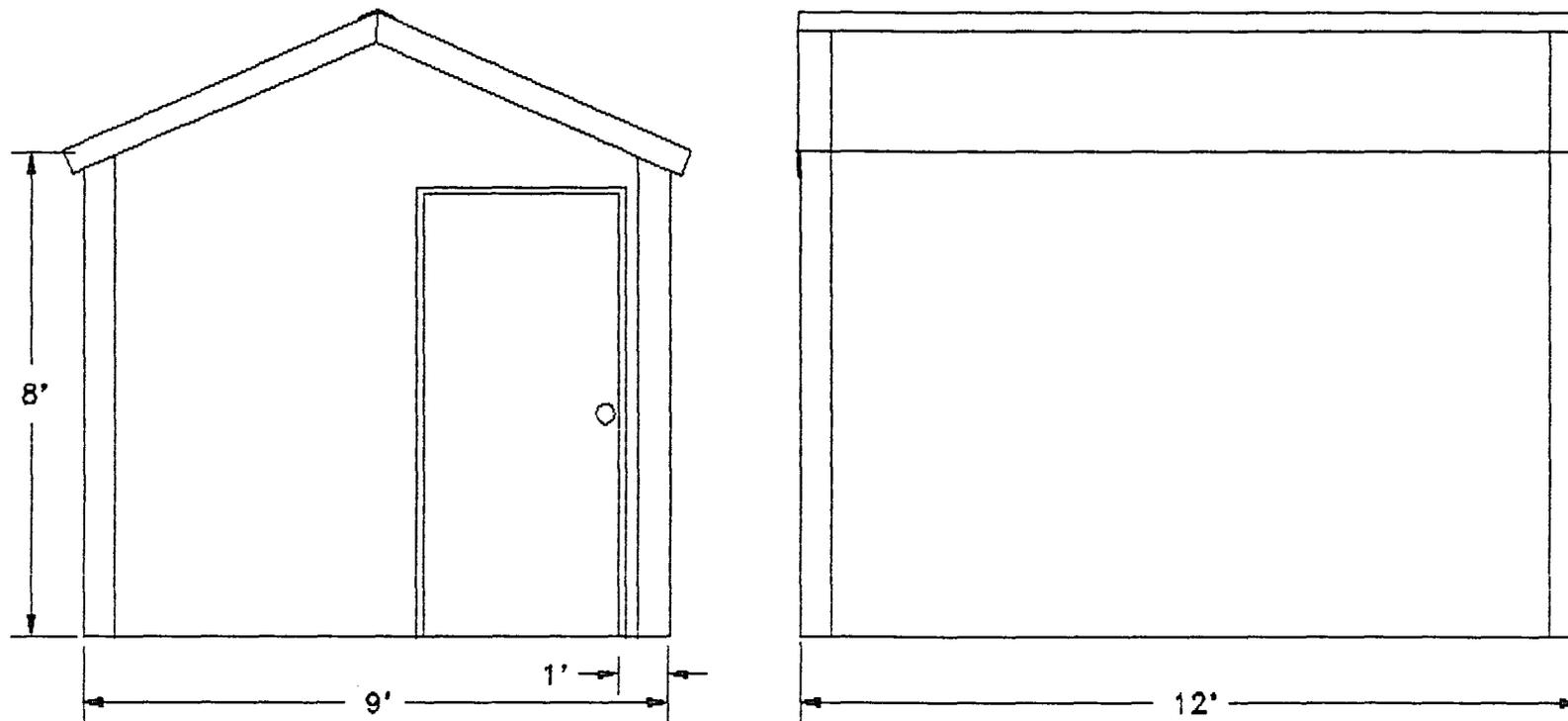


Trenching to be not more than 3 feet from the edge of the county road right of way and at least three feet deep.



Control Building
Utility Entrance
Plan

Figure 7



Note:

Building to include a fiberglass skylight
Eave overhang to be approximately 6"
Door to be insulated steel 36"
Color to be tan with white trim
Exterior to be Propanel II

GIANT

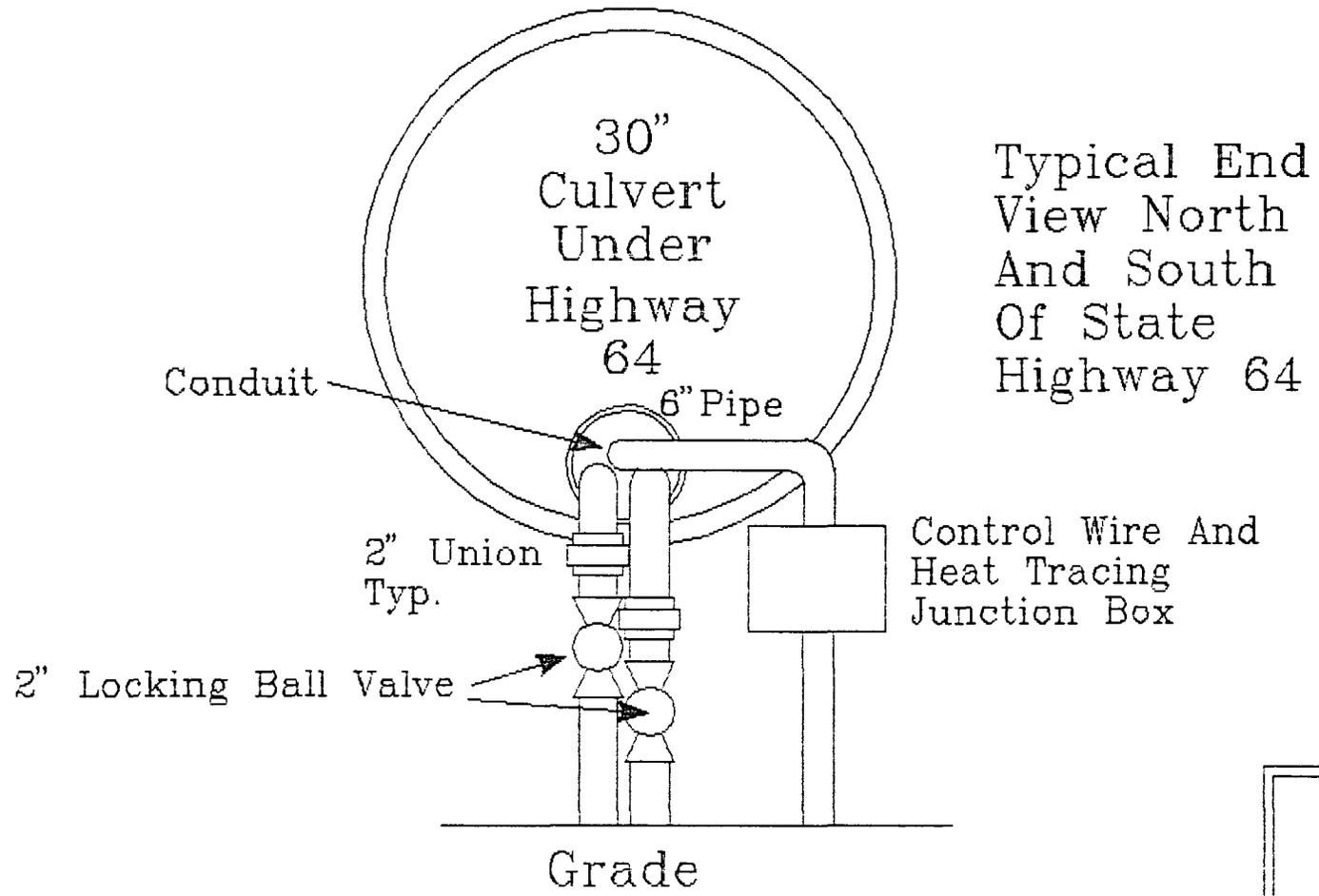
Offsite Remediation
Project Control
Building

Dwg # 1039

By: Tim Kinney

Date: 12/14/90 Rev: 0

Figure 8



Note:
Turn valve handles to the side
to allow for conduit clearance

GIANT

Piping Detail
For
Road Crossing

Donald Benally
Chairman

Michael B. Sullivan
Chairman Pro Tem

Danny Carpenter
Member

Gordon Crane
Member

Sherry L. Galloway
Member

IN DIVISION

90 DEC 19

AM 8 57



B.J. Baggett
County Attorney
(505) 334-9481

San Juan County

112 South Mesa Verde
Aztec, New Mexico 87410

December 18, 1990

Mr. Timothy A. Kinney
Refinery Remediation Project Manager
Giant Refining Co.
P. O. Box 256
Farmington, New Mexico 87499

RE: REQUEST FOR USE OF R-O-W's -- LEE ACRES AREA

Dear Mr. Kinney:

On Thursday, December 13, 1990 I met with the Board of County Commissioners with reference to your request for r-o-w's for the purpose of recovering contaminated water under Lee Acres and returning it to the Giant Refining Co. property for cleanup.

According to Figure 1 of Drawing #1037, you will need r-o-w's on the south side of Meadow Lane westerly from SHS-14 to the east side of County Road 5500 that is north along said easterly r-o-w to Highway 64; on the north side of Circle Drive westerly from Well SHS-11 to the east r-o-w of County Road 5500 and tying into the line from SHS-14. According to your request, you will also need the authorization to set an 8' x 10' building to house the necessary controls and an electrical utility drop on the small triangular piece of County-owned property immediately to the north of the Reynolds residence.

It is understood and agreed that this control room will be fenced with a 6-foot chain link fence with a locked gate. It is further understood that you will bury the lines not less than 3 feet deep, and they will be not more than 3 feet from the outside edge of the easements. All lines will be PVC, with the water lines and the compressed air line being schedule 40.

Mr. Timothy A. Kinney
December 18, 1990
Page 2

Based upon the above, the Board of County Commissioners has authorized you to proceed with your project. Please let us know if we may be of further assistance to you in this very important matter of the water table cleanup.

Thank you for your cooperation and consideration in the past.

Very truly yours,


B. J. Baggett
County Attorney

BJB/emj-m

xc Mr. Carl Shook - Giant
Mr. Kim Bullerdick - Giant
Mr. Tom Gryp - Giant
Mr. Martin Nee - Geoscience Consultants
~~Mr. William Olson - NMOCD~~



NEW MEXICO OIL CONSERVATION DIVISION
RECEIVED

'90 DEC 11 AM 8 49

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

December 10, 1990

Mr. Bill Baggett
San Juan County Attorney
112 S. Mesa Verde
Aztec, NM 87410

Dear Mr. Baggett:

Re: Remediation South of the Giant Bloomfield Refinery

I trust that you received our recent report of the third phase of the investigation south of the refinery titled "Third Report of Offsite Investigation". Several recommendations were made in the report concerning remediation of the area. We are proceeding, pending approval from the New Mexico Oil Conservation Division, to install a system to begin remediation in accordance with the recommendations contained in the report. There are two issues where we would appreciate the county's participation.

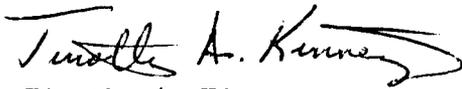
First, we would request access to the road easements in the Lee Acres area to facilitate installation of the necessary piping, facilities, and utilities to recover contaminated ground water and transfer it to the refinery for treatment. Treated water would also be transferred back to the area for reintroduction to the aquifer. Two 2" schedule 40 PVC water lines, one 1" schedule 40 PVC compressed air line, and a 1 1/2" PVC electrical conduit would be required. The lines would be buried at a depth of between two and three feet. Located over each well would be a 3' X 3' X 3' locked well enclosure constructed of steel, housing a pump and filter assembly. The enclosures would be located on the extreme edge of the road easements. Figure 1 illustrates the proposed route of the system arteries. Figure 2 illustrates a typical well enclosure.

Second, to effectively control and monitor the system, we will need to erect a small building approximately 8' X 10' to house necessary controls and an electrical utility drop. We request that the county provide us access to the small parcel of land indicated in Figure 1 for this purpose. The building would be a wood frame structure resting on a concrete slab foundation with an exterior of painted metal siding.

It is our intention to install the system in accordance with applicable local regulations utilizing licensed contractors. As in the past, Giant is willing to enter into a reasonable agreement with the county regarding access, construction, and final disposition of the system. The county will continue to be copied on reports addressing the remedial and investigative actions in the area.

Your early response would be appreciated. Please call me with any questions or comments that arise.

Sincerely,



Timothy A. Kinney
Refinery Remediation
Project Manager

/dm

Enclosures

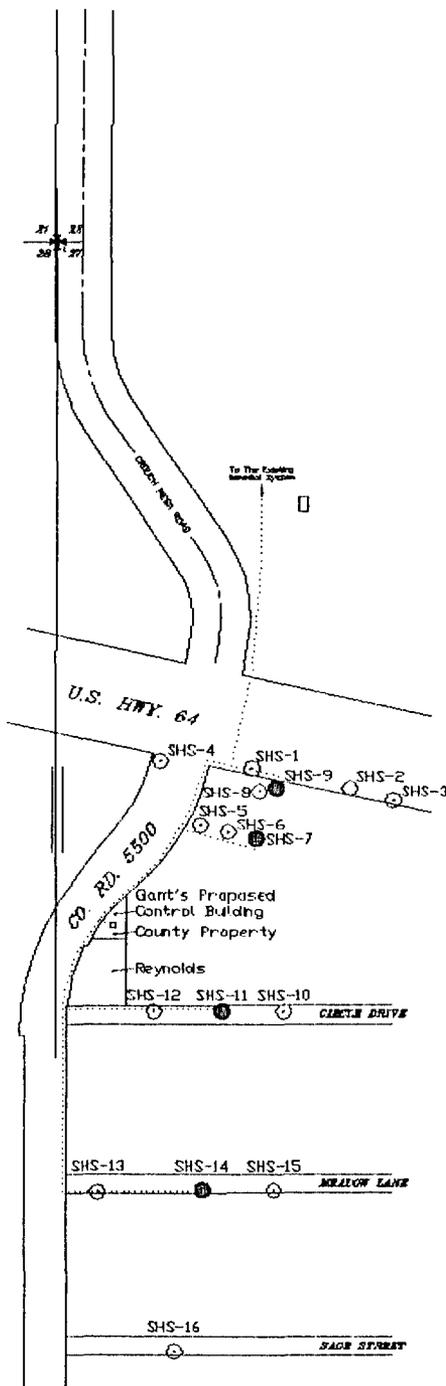
cc w/enc: Carl Shook - Giant
Kim Bullerdick - Giant
Tom Gryp - Giant
Martin Nee - Geoscience Consultants
William Olson - NMOCD

Figure 1



Proposed Utility Routes For The Offsite Remediation System

By: Tim Kinney Date: 12/4/90 Rev: 0



NOTES

- Trenches to be dug approximately three feet from the edge of road easements
- Trenches to be 2-3 feet deep
- Water and air piping to be Sch 40 PVC
- Electrical conduit to be PVC
- Power drop to be at the control room
- Control room to be fenced with 6' chain link with a locked gate

Legend

- Proposed Utility Route
- Monitor Wells
- Recovery Wells

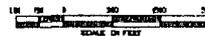
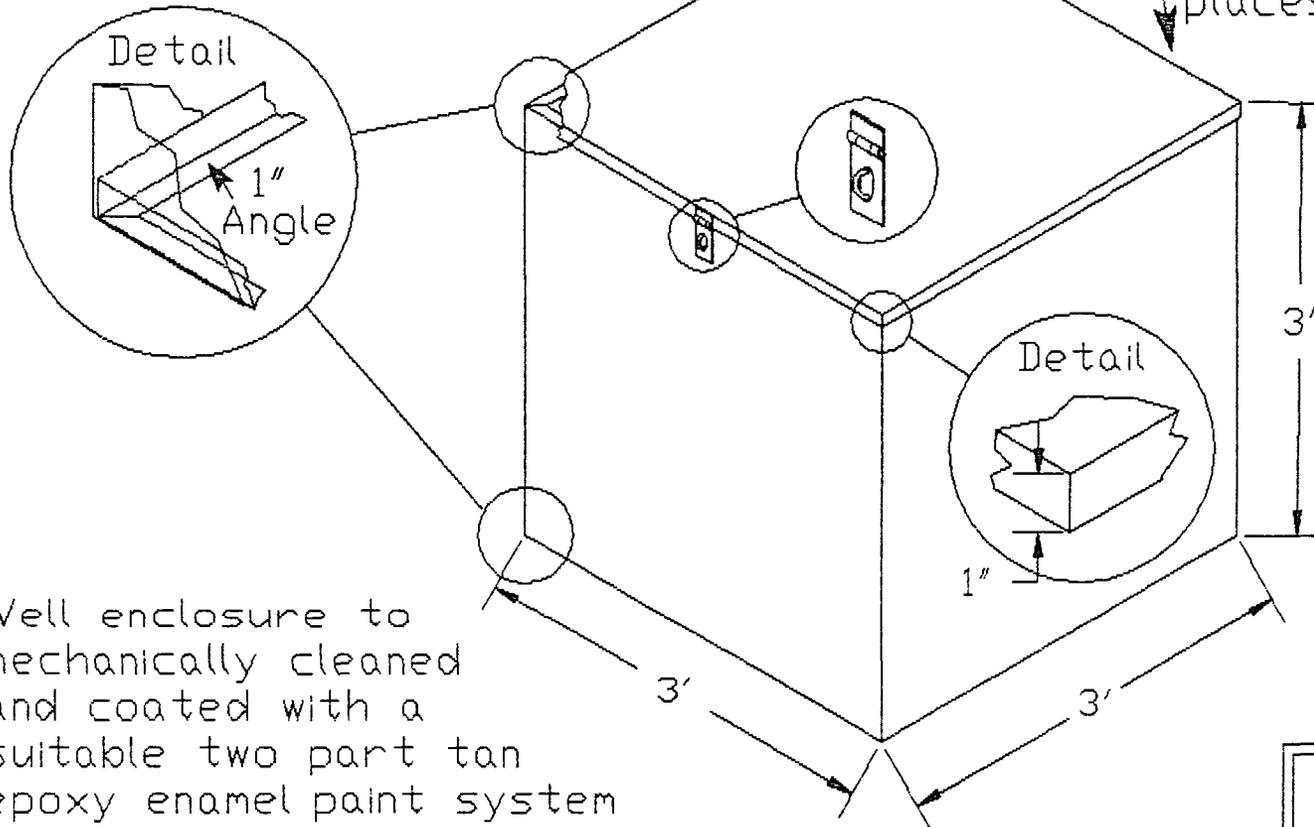


Figure 2

Box wall and top material to be plate steel .125" minimum

Lid to be hinged in at least three places



Well enclosure to mechanically cleaned and coated with a suitable two part tan epoxy enamel paint system

GIANT

Offsite Well Enclosure Detail



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 6, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-434

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: OFF-SITE HYDROGEOLOGIC INVESTIGATION AND REMEDIATION
GIANT BLOOMFIELD REFINERY**

Dear Mr. Kinney:

On November 28, 1990 the New Mexico Oil Conservation Division (OCD) met with representatives of the Giant Refining Company and Giant's consultant Geoscience Consultants, Ltd. (GCL) to discuss OCD's review of Giant's November 1, 1990 "THIRD REPORT OF OFF-SITE INVESTIGATION". This letter will serve to confirm those discussions.

During the meeting, OCD stated that the investigation appeared to define the extent of petroleum contaminated ground water that has migrated off-site from the Giant Bloomfield Refinery and approved of the off-site investigation work performed.

However, the OCD expressed that they did not have confidence in the results of the RESSQ computer modeling of the predicted capture zone. The model is designed to model confined aquifer conditions and assumes that the aquifer is a uniform, homogeneous and isotropic system. In fact, the aquifer is an unconfined, nonhomogeneous, anisotropic system as evidenced by drilling logs. Since many of the of the model assumptions are violated, it is likely that actual pumping conditions will differ from those predicted by the model.

Although the OCD lacks confidence in the capture zone modeling results, the OCD believes that the off-site remediation system proposed should be implemented to contain and remediate petroleum contaminated ground water. Therefore, the OCD approves of

Mr. Timothy Kinney
December 6, 1990
Page 2

Giant's recommendation to remediate off-site ground water contaminated by free phase and dissolved phase petroleum hydrocarbons by pumping and treating ground water from off-site wells SHS-7, 9, 11 and 14 conditioned upon the following agreements reached during the meeting:

1. Pumped fluids from the off-site recovery wells will be piped into the current on-site ground water treatment and disposal system pursuant to the approved Giant Bloomfield Refinery Discharge Plan GW-40. Construction on the off-site recovery system will begin by January 31, 1991.
2. Giant will measure water table elevations and product thickness in all off-site monitor wells on a monthly basis.
3. Giant will perform quarterly water quality sampling of ground water from monitor wells SHS-3, 6, 10, 12, 13, 15 and 16. Quarterly ground water samples will be analyzed for dissolved phase aromatic and halogenated volatile organics using either EPA methods 601/602 or 8010/8020. Every other quarter ground water samples will also be analyzed for major cations and anions.
4. Giant will perform semi-annual water quality sampling of ground water from recovery wells SHS-7, 9, 11 and 14. Semi-annual ground water samples will be analyzed for dissolved phase aromatic and halogenated volatile organics using either EPA methods 601/602 or 8010/8020. Samples will also be analyzed for major cations and anions. Water quality sampling for dissolved phase volatiles will not be required for recovery wells containing free phase petroleum hydrocarbons.
5. Giant will incorporate the above off-site monitoring information into the on-site quarterly reports submitted to OCD. The quarterly reports will be submitted by the first day of the month following the end of the quarter.
6. Giant will submit a report evaluating the effectiveness of the off-site recovery and monitoring system to OCD by February 29, 1992.
7. Giant will design the underground piping which will carry fluids from the recovery wells to the on-site treatment and disposal system such that the system can be regularly tested or inspected to ensure integrity. The design will be submitted to OCD for approval prior to installation.

Please be advised that OCD approval does not limit you to the work performed should the off-site recovery system fail to

Mr. Timothy Kinney
December 6, 1990
Page 3

contain and remediate petroleum contaminated ground water migrating from the Giant Bloomfield Refinery. In addition, OCD approval does not relieve you of liability under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

xc : Frank Chavez, OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.
Richard Mitzelfelt, EID Director
Dale Doremus, EID Superfund
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, BLM Albuquerque

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time <u>1045</u>	Date <u>11/27/90</u>
---	------------------	----------------------

Originating Party

Other Parties

Kim Bullock - Giant Refining

Bill Olson - OCD Santa Fe

Subject

Giant Bloomfield Offsite Investigation Report

Discussion

Giant wants to meet with OCD to discuss above submitted report
Tim Kinney and Martin Lee will attend

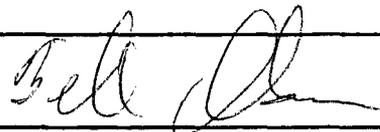
Conclusions or Agreements

Tentative meeting date 11/28/90 at 10:30 am
Tim Kinney will call to confirm

Distribution

GBR Offsite File

Signed



County Hires Water Legal Expert

By Margaret Cheasebro

JOURNAL CORRESPONDENT

AZTEC — San Juan County commissioners Thursday agreed to hire John Les Dow of Carlsbad, a groundwater legal expert, to advise the county in a suit filed against it over contaminated groundwater.

Ron and Linda Reynolds filed suit in federal court in September against the county and several federal agencies for allegedly failing to clean up the Lee Acres landfill.

The couple lives in a subdivision less than a mile from the closed landfill, which County Attorney Bill Baggett said has been designated a Superfund site.

"If we lose this case, it's going to cost us a bunch of money," Baggett said, "so we don't want to lose it."

Baggett told commissioners that a lengthy report just issued on the results of a study of 16 groundwater monitoring wells dug by Giant Refinery indicates the

groundwater pollution is not coming from the Lee Acres landfill but from the refinery. However, he said, the refinery has not been named in the suit.

The Reynoldses maintain that the landfill, leased by the county from the Bureau of Land Management, accepted solid wastes beginning in 1962 and liquid wastes beginning in 1981 in unlined pits without leak detection equipment or pollution controls. Landfill lagoons, they claim, were built and operated in violation of the 1978 state Water Quality Act and were not fenced or monitored. The landfill was closed in 1985 after the state Environmental Improvement Division discovered hazardous wastes there. The couple claims the landfill has contaminated groundwater and well water and endangers the nearby San Juan River.

They charge that "the limited measures taken by the BLM and the county" to clean up the landfill "are grossly inadequate."



'90 NOV 6 AM 9 57

P.O. Box 256
Farmington, New Mexico
87499

November 1, 1990

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

505
632-3306

Re: Third Report of Offsite Investigation

Dear Bill,

Enclosed is the Third Report Of Off-site Investigation for Giant's Bloomfield Refinery, prepared by Geoscience Consultants, Ltd.

I would like to draw special attention to Section 6 of the report where recommendations are outlined. We would like to implement the second and third recommendations in the next few weeks and begin to recover both free product and dissolved phase hydrocarbons before the onset of inclement weather. I trust that you will approve of the installation of a basic recovery system while the details of the remaining recommendations and any additional comments you may have are brought to closure.

Please contact me with any questions or comments that may arise. Also, Martin Nee and I are willing to sit down and discuss the report in detail if you so desire.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

cc: w/encl

Carl Shook - Giant
Kim Bullerdick - Giant
Martin Nee - GCL
Tom Gryp - Giant
Bill Baggett - San Juan County Attorney
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T.B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier Adjusters
William Charles - Alexander & Alexander

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal Time 1030 Date 10/1/90

Originating Party

Other Parties

Martin Nee - Geoscience Consultants Ltd.

Bill Olson - OCP

Subject

Phillips Lee Report and Giant Bloomfield Report

Discussion

GOR - Radon soil samples complete but have not got water quality
expect to have report on all site in approximately 2 weeks

Phillips Lee Plant - just finishing report
will send to Mike Ford for review
report should be to ~~OCP~~ OCP by 10/10/90

Conclusions or Agreements

Distribution

Phillips Lee file
GOR site file

Signed

Bill Olson

NEW MEXICO

Tuesday, September 25, 1990

Albuquerque Journal

Couple Sue To Have Lee Acres Landfill Cleaned Up

By Margaret Cheasebro

JOURNAL CORRESPONDENT

AZTEC — A San Juan County couple is suing the county and several federal agencies for allegedly failing to clean up the Lee Acres landfill.

Ron and Linda Reynolds in a suit filed last week in U.S. District Court in Albuquerque say the defendants, which include Interior Secretary Manuel Lujan Jr., the Interior Department, the Bureau of Land Management and San Juan County,

violated the Resource Conservation and Recovery Act by failing to clean up the landfill. It was closed in 1985 and has been designated a Superfund site by the Environmental Protection Agency.

The couple, who live in a subdivision less than a mile from the landfill, are asking the court to enforce RCRA regulations, order defendants to clean up hazardous waste at the site and pollution resulting from it, impose civil penalties and award court-related costs.

The Reynolds maintain that the landfill, leased by the county from the BLM, accepted solid wastes beginning in 1962 and liquid wastes beginning in 1981 in unlined pits without leak detection equipment or pollution controls. Landfill lagoons, they claim, were built and operated in violation of the 1978 state Water Quality Act and were not fenced or monitored.

The landfill, they say in their suit, has contaminated groundwater and well water and endangers the nearby San Juan River. The state En-

vironmental Improvement Division discovered hazardous wastes at the landfill in 1985 and ordered it closed after several people were exposed to hydrogen sulfide fumes from a landfill lagoon.

The Reynolds say that "the limited measures taken by the BLM and the county" to clean up the landfill "are grossly inadequate."

BLM is doing a study to discover the extent of contamination. It is also conducting a \$3 million study of water well contamination in the area.

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0920	Date 9/17/90
---	-----------------------------------	-----------	--------------

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Tim Kinney - GBR

Subject

GBR Report, & TCLP

Discussion

Problems with Radion reporting results, well locations wrong, Radion had change of personnel. GBR has other info for quarterly report ready, will submit report as soon as results reported

White report should go out next week. GCL currently evaluating slug test data

Discussed "confined in" rule as discussed with Boyer last week
I discussed EPA January 1989 Memo on this with him

Conclusions or Agreements

I will send him copy of above EPA Memo.

Distribution

GBR D.P. file
GBR White file

Signed

Bill Olson



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 16, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-421

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: OFF-SITE HYDROGEOLOGIC INVESTIGATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

On August 9, 1990, the New Mexico Oil Conservation (OCD) approved of Giant Bloomfield Refinery's modified work plan to continue investigating the limit of petroleum contaminants migrating off-site from the Giant Bloomfield Refinery (GBR) based on several agreements reached between the OCD and GBR.

One of these agreements was to defer locating new monitor wells until reviewing the results of soil vapor measurements from a soil boring program conducted south of the GBR monitor wells SHS-10, SHS-11 and SHS-12 located on Circle Drive.

On August 16, 1990, you discussed the results of the soil vapor measurements in a conference call between yourself, OCD and your consultant Geoscience Consultants, Ltd. During these discussions you stated that:

- 1) Soil vapor measurements from the top of the water table along the Meadow Lane county right of way indicate that contaminated soils are laterally limited to the area between 73 to 382 feet east of River Road.
- 2) Soil vapor measurements from the top of the water table along the Sage Drive county right of way show no evidence of contamination.

Based on these results, you proposed installing four monitor wells at the following locations:

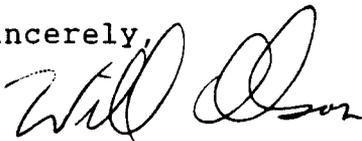
- 1) One monitor well on Meadow Lane 100 feet east of River Road to define the western boundary of the plume.
- 2) One monitor well on Meadow Lane 400 feet east of River Road to define the eastern boundary of the plume.
- 3) One monitor well on Meadow Lane 250 feet east of River Road to determine the concentrations of contaminants in the center of the plume.
- 4) One monitor well on Sage Drive 200 feet east of River Road to verify that the southern extent of the plume is north of Sage Drive.

The OCD approves of the above monitor well locations proposed by GBR with condition that the monitor wells be constructed and sampled for ground water quality using the methods employed in the past investigation. The OCD understands that monitor well drilling will begin on August 16, 1990 with ground water quality sampling to be completed within the next two weeks.

The OCD requests that a comprehensive report on the investigation including all information obtained from previous off-site investigations be submitted to OCD within 6 weeks of the final sampling event.

Please be advised that OCD approval does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

WCO

xc : Frank Chavez, OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.
Richard Mitzelfelt, EID Director
Dale Doremus, EID Superfund
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, BLM Albuquerque



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 9, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-338

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: GIANT BLOOMFIELD REFINERY OFF-SITE HYDROGEOLOGIC INVESTIGATION

Dear Mr. Kinney:

On July 31, 1990, the Giant Refining Company sent correspondence to the New Mexico Oil Conservation (OCD) proposing a modification of the July 24, 1990 agreement between OCD and Giant to investigate the limit of petroleum contaminants migrating offsite from the Giant Bloomfield Refinery. The OCD discussed their review of Giant's July 31, 1990 modified work plan with you on August 9, 1990 and several agreements were reached regarding the plan. The OCD approves of the proposed modified investigation plan based on the following agreements:

- 1) Soil vapor measurements will be taken using standard procedures employed in the previous investigation.
- 2) Giant will maintain geologic well logs, including soil vapor measurements with depth for each soil boring.
- 3) Insitu soil samples for laboratory analysis of aromatic and halogenated volatile organics will be taken across the unsaturated-saturated interface for borings with positive HNU readings.
- 4) Significant hydrocarbon will be defined as any soil vapor HNU reading from the unsaturated-saturated interface over 1 ppm.

- 5) Soil borings will be performed in east-west transects along the county road to determine the lateral extent of the plume prior to moving downgradient for successive soil borings.
- 6) To prevent demobilization of the drill rig, Giant will contact OCD immediately following completion of the soil borings for approval of proposed monitor well locations based on the soil vapor results.
- 7) A comprehensive report on the investigation including all information obtained from previous offsite investigations will be submitted to OCD within 6 weeks of the final sampling event.

The OCD understands that the soil borings will begin on August 13, 1990. The OCD will have a staff member visit the site at various times to observe and discuss the investigation activities with you.

The OCD looks forward to working with you to define the full extent of offsite contaminant migration related to Giant's activities. Please be advised that OCD approval does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

WCO

xc : Frank Chavez, OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.
Richard Mitzelfelt, EID Director
Dale Doremus, EID Superfund
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, BLM Albuquerque

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 1320

Date 8/9/90

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Tim Kinney - ~~CRB~~ Giant Refining,
632-3306

Subject

GBR offsite Investigation

Discussion

OCD wants soil borings to totally define extent in this round

Significant hydrocarbon = 1 ppm vapor on HNU at water table

Held off on MHW's until review of soil vapor from borings

Conclusions or Agreements

Soil borings will continue on laterals (east-west) before moving down gradient

OCD will be onsite to observe & discuss

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1030	Date 8/8/90
---	-----------------------------------	-----------	-------------

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Tim Kinney - Grant Retiring
632-3306

Subject

Grant Bloomfield D.P. and Offsite Investigation

Discussion

OCD reviewed July 31, 1990 modified offsite work plan.

On bench scale test he has estimated he will need approximately 1-2 drops of HCl per gallon of influent to reduce pH to about 7
Wants to add acid before air stripper

I informed him acid addition will be a modification of the GBR discharge plan which must be formally submitted for OCD Director's approval.

Conclusions or Agreements

OCD will approve modified offsite work plan with conditions

He will finalize volume estimates for acid addition and submit a request to OCD for discharge plan modification

Distribution

GBR D.P. file
GBR offsite file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0930	Date 8/8/90
---	-----------------------------------	-----------	-------------

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Richard Kilbury - Weston
255-1445

Subject

GBR and OCD Sample Analyses

Discussion

Weston requested access to copy OCD ~~copy~~ comprehensive file on water quality analyses for the GBR
I told him the file was large and they would have to send someone to copy it
They have a portable copier but he needs to locate someone to copy files
Weston tentatively scheduled for sometime next week.

Conclusions or Agreements

He will call later this week to confirm

Distribution

Lee Acres file
GBR file
GBR off site file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal Time 1415 Date 8/6/90

Originating Party

Other Parties

Tim Kinney - Giant Refining

Bill Olson - OCD Santa Fe

Subject

Giant Bloomfield Refinery

Discussion

Giant is proposing an alternate investigation with soil boring than previously agreed. Giant wants to put a boring in suspect plume area, if product found will move to next road, if not borings will move out laterally on 100 ft intervals. Proposal should be to OCD in next couple of days.

Giant is having problems with scale buildup on pumps after air stripper. Want to add HCl to fluid stream to bring pH down approximately 0.5 to 1 pH unit. Current pH after stripper = 8.0. I asked what

Conclusions or Agreements

kind of volume is needed to do this.

I will review proposal when comes in and check with Boye on HCl. He will determine amount of acid needed to lower pH.

Distribution

GBR D.P. file

GBR offsite file

Signed

Bill Olson



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

February 1, 1991

Mr. William Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

RECEIVED

FEB 6 1991

**OIL CONSERVATION DIV.
SANTA FE**

Dear Bill:

RE: Laboratory Data Sheets for the Third and Fourth
Quarters of 1990

Enclosed are copies of the actual data reports received from the
laboratory, referencing the third and fourth quarters of 1990.

As you will note, quality control is very much in doubt for
numerous samples. Several positive indications of analytes,
incongruous with results for past quarters, appear in the data.
The following is a listing of analyses that are questionable as
noted by a lack of confirmation by the laboratory in the second
column. Not all the analytes in every sample are unconfirmed, but
each listed sample contains one or more that are.

<u>SAMPLE #</u>	<u>LOCATION</u>	<u>DATE</u>	<u>METHOD</u>
901008950...	Stripper Effluent	10/8/90	SW8020
9010081035	GBR-31	10/8/90	SW8020
9010081135	GBR-33	10/8/90	SW8020
9010081240	GBR-30	10/8/90	SW8020
9010081350	GBR-24D	10/8/90	SW8020
901004945	RW-4	10/4/90	SW8010
9010041010	RW-6	10/4/90	SW8010
9010041028	RW-3	10/4/90	SW8010
9010041100	RW-13	10/4/90	SW8010
9010041115	Stripper Influent	10/4/90	SW8010
9010041125	Stripper Effluent	10/4/90	SW8010
9010041320	GBR-17	10/4/90	SW8010
9010041028	RW-3	10/4/90	SW8020
9010041100	RW-13	10/4/90	SW8020
9010041115	Stripper Influent	10/4/90	SW8020
9010041125	Stripper Effluent	10/4/90	SW8020
9010041320	GBR-17	10/4/90	SW8020
9011051002	Stripper Effluent	11/5/90	SW8020
9008211514	Stripper Influent	8/21/90	SW8010
9008211524	Stripper Effluent	8/21/90	SW8010
9008211524	Stripper Effluent	8/21/90	SW8010
900905957	Stripper Influent	9/09/90	SW8020

Mr. William Olson
February 1, 1991
Page 2

Also note that during the October sampling event, we were in the first mode of our batch processing sequence in which the air stripper effluent is pumped to storage awaiting a second air stripping. In the future, all air stripper samples will be gathered while the system is in mode three. In mode three, twice-stripped water is being reintroduced to the aquifer. Effluent samples from mode three are the only ones truly indicative of our treated water discharge.

We have contracted with a new laboratory, Analytical Technology Inc. (ATI) of Phoenix, for our 1991 sampling due to the aforementioned and other problems encountered in 1990 with Radian Analytical.

Upon request, the raw data enclosed is also available to other interested parties. Please call if questions arise, or if I can provide additional information.

Sincerely,



Timothy A. Kinney
Bloomfield Refinery Remediation
Project Manager

/dm

Enclosures

cc w/o enclosures: Carl Shook-Giant
Kim Bullerdick-Giant
Tom Gryp-Giant
Martin Nee-GCL
William Murphy-BLM
Dale Doremus-EID
Bill Baggett-San Juan County Attorney
Chris Shuey-SWRIC
T. B. Darby-USF&G
Gary Barton-AIG
Monte Hensley-Frontier
William Charles-Alexander and Alexander
Charlotte Toler-Firemans Fund

RECEIVED
EID
'91 JAN 31 AM 9 12
EN DIVISION
EID

TRANSMITTAL SHEET

Date: January 29, 1991

To: Dale Doremus - EID
Bill Olson - OCD

From: Giant Refining Company
Bloomfield Refinery
Remediation Project
P. O. Box 256
Farmington, NM 87499

Enclosed is (are) the following document(s) for your information:

- Letter to Giant Refining Company from Berg Keshain, Jr.
of Roy F. Weston, Inc., dated January 24, 1991

/dm



PO. Box 256
Farmington, New Mexico
87499

505
632-3306

January 28, 1991

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Re: Giant Bloomfield Refinery Quarterly Report, Third and Fourth
Quarter 1990

Dear Bill,

Enclosed is the Quarterly Data Report referencing the third and
fourth quarters of 1990 for Giant's Bloomfield Refinery.

As we discussed, the report does not include quarterly sampling
for the fourth quarter of 1990. This information will be reported
as part of the first quarter of 1991. In the future, all quar-
terly data will be collected at the beginning of the quarter
rather than at the end, as has been the previous practice.

Please contact me with any questions or comments that may arise.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

cc: w/encl.

Carl Shook - Giant
Kim Bullerdick - Giant
Martin Nee - GCL
Tom Gryp - Giant
Bill Baggett - San Juan County Attorney
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T.B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier Adjusters
William Charles - Alexander & Alexander
Charlotte Toler - Fireman's Fund



5301 CENTRAL AVENUE, N.E.
SUITE 1000
ALBUQUERQUE, NM 87108
PHONE: (505) 255-1445

January 24, 1991

Tim Kinney
Giant Refineries
P.O. Box 256
Farmington, NM 87499

RE: Lee Acres Landfill
Access Agreement
RFW WO# 2878-04-01

Dear Tim:

Enclosed is a proposed access agreement for drilling, soil sampling, and water sampling on Giant Refineries properties for Lee Acres Landfill RI activities in Farmington, NM.

This access agreement is almost identical to the one negotiated in March 1990; however, it reflects the new characterization work that is proposed to determine the nature and extent of contamination south of the Lee Acres Landfill security fence.

The proposed work is made up of 14 additional well locations and six soil boring locations and includes the replacement of GBR 32, since this well is no longer operational.

If you have any questions, please contact me as soon as possible. We would like to finalize the agreement during the week of February 4, 1991, so that we may mobilize as soon as possible.

Sincerely,

ROY F. WESTON, INC.



Berg Keshian, Jr. P.E.
Project Manager

BK/jem

pc: B. Murphy

GNTagmt

AGREEMENT

This Agreement is entered into as of _____, 1991 by and between Giant Industries, Inc. ("Giant" or "the Company") and Roy F. Weston, Inc. ("WESTON"), collectively referred to as "the parties."

WHEREAS, WESTON has requested access to Giant's property south of the Lee Acres Landfill for the purpose of installing boreholes and wells to obtain subsurface information pursuant to WESTON's contract with the United States Bureau of Land Management ("BLM");

WHEREAS, Giant desires to cooperate with WESTON's collection of data in this geographical area;

NOW, THEREFORE, in consideration of the promises contained herein, and for other good and valuable consideration, the parties agree as follows:

1. From January 21, 1991 through April 30, 1991 and during any such additional time period that the parties may agree to in a separate agreement, Giant will allow WESTON to install six boreholes. Three boreholes will be installed adjacent to Giant monitoring wells GBR-32, GBR-48, and GBR-49 and soil samples collected for analysis. The boreholes will be at distance of at least 15 ft from the previously placed Giant wells. The remaining three boreholes will be installed in the main channel of the unnamed arroyo in the immediate vicinity of the locations indicated on the map appended hereto as Attachment 1. The final locations will be within a 100 foot radius of the respective borehole location shown on Attachment 1. The boreholes will be drilled to penetrate into the water table or to a depth not to exceed 75 feet.

2. From January 21, 1991 through April 30, 1991 and during any such additional time period that the parties may agree to in a separate agreement, Giant will allow WESTON to install at least fourteen monitoring wells on the northern portion of Giant's property south of the Lee Acres Landfill. Specifically, Giant will allow WESTON access to install monitoring well groups "A" through "F" in the immediate vicinity of the locations indicated on the map appended hereto as Attachment 2. The final location selected by WESTON for each well will be within a 100 foot radius of the respective well location shown on Attachment 2, as long as each well is at least 25 ft distant from any previously placed Giant well. It is anticipated that 10 ft or less of alluvial water will be encountered during installation of the monitoring wells. However, if a saturated alluvial thickness of 8 ft or more is encountered, a pair of monitoring wells will be installed using two 10 ft well screens. One of the well pairs will be screened so that the upper 3 ft of the screen extends above the water table. The second well of the cluster will be installed so that the bottom of the screen is flush with the alluvium/bedrock contact. It is anticipated that five locations will require well pairs, and therefore, increasing the number of monitoring wells to be installed to 19.

3. WESTON will locate monitoring well "F" shown on Attachment 2 as a replacement to Giant's monitoring well GBR-32. The existing well GBR-32 is no longer able to be sampled and requires replacement. The existing well GBR-32 will be overdrilled using a 6-5/8-inch auger and samples of well construction materials will be collected for analysis. A new 5-inch ID monitoring well will be completed in the same hole.

4. WESTON will allow Giant to observe the installation of the boreholes and wells and will provide Giant with borehole and well logs promptly after the boreholes and wells are completed.

5. WESTON will secure the boreholes and wells so as to prevent tampering by third parties.

6. After the boreholes and wells are completed and until such time as WESTON discontinues use of the boreholes and wells under Paragraph 14 or 18 or Giant exercises the option under Paragraph 16 or 18 to retain any borehole or well installed by WESTON, Giant will allow WESTON access to the boreholes and wells only for the purpose of obtaining groundwater samples, measuring water levels or performing maintenance in accordance with conditions set forth below. WESTON agrees that it will not enter Giant's property unless a representative of Giant is present with WESTON or Giant informs WESTON that such presence is not necessary. If a date selected by WESTON for obtaining groundwater samples, measuring water levels or performing maintenance on Giant's property is inconvenient for Giant, the parties will agree to an alternate date.

7. WESTON will give Giant written notification at least 10 days in advance of its intention to obtain groundwater samples from the boreholes and wells. Such notice will include the volume of groundwater to be obtained and the parameters to be analyzed.

8. WESTON will give Giant written notification at least 10 days in advance of its intention to measure water levels in the boreholes and wells. Giant may simultaneously measure water levels upon reasonable advance notice to WESTON.

9. Within a reasonable time after receipt of WESTON's notice of intent to obtain groundwater samples, Giant may notify WESTON of its desire to obtain a split sample in an amount to be specified by Giant from each of the boreholes and wells to be sampled by WESTON. WESTON will provide Giant with the requested split samples as soon as they are obtained. All bottles and supplies for split samples will be provided by Giant.

10. WESTON will allow Giant to observe the taking of all groundwater samples and water level measurements from the boreholes and wells.

11. Giant may take groundwater samples from any boreholes and wells installed by WESTON on Giant's property upon giving WESTON written notification at least 10 days in advance of the date it wishes to take samples. Such notice will specify the volumes of water required from each borehole and well and the parameters to be analyzed. WESTON will cooperate fully with Giant's sampling and may take split samples at the same time.

12. Giant may measure water levels in any boreholes and wells installed by WESTON on Giant's property upon giving WESTON written notification at least 10 days in advance of the date it wishes to obtain measurements. WESTON will cooperate fully with Giant's measurements and may measure water levels at the same time.

13. WESTON will give Giant written notification at least 5 days in advance of any maintenance, repair or other work to be performed on the boreholes and wells and will allow Giant to observe the performance of such work.

14. Unless Giant exercises the option provided in Paragraph 16 or 18 to retain any boreholes or wells installed by WESTON, WESTON will remove all of WESTON's well casing and other well improvements and plug all of WESTON's boreholes and wells in a safe and workmanlike manner at the earliest possible time, but in no event later than December 31, 1992, unless otherwise agreed by the parties in writing or otherwise required by a governmental entity.

15. WESTON will give Giant 30 days written notice of its intent to remove casing or other well improvements or plug any borehole or well.

16. Giant will give WESTON written notification within 15 days of the notice received from WESTON pursuant to Paragraph 15 if Giant wishes to retain any boreholes or wells installed by

WESTON. Such notification will release Weston from any obligation to Giant that may arise from occurrences after the date that Giant retains those boreholes or wells.

17. WESTON will allow Giant to observe the removal of well casing and other equipment and the plugging of any borehole or well by WESTON.

18. If Giant determines that installation, sampling, maintenance or other procedures followed by WESTON with respect to any borehole or well are not in accordance with good engineering, quality control or scientific practice, Giant may give WESTON written notification identifying the objectionable procedure. If WESTON does not rectify the problems to Giant's satisfaction within 30 days of receipt of the notification, Giant has the option of withdrawing the permission it has granted to WESTON to conduct activities on its property and requiring WESTON, within a reasonable time, to remove all WESTON's well casing and other well improvements and plug all of WESTON's boreholes and wells in a safe and workmanlike manner. If Giant withdraws such permission, Giant may retain any boreholes or wells installed by WESTON by so notifying WESTON in writing at the same time as Giant's withdrawal of permission. If Giant retains any boreholes or wells, the obligations of Giant and WESTON with respect to those boreholes or wells will be as set forth in Paragraph 16.

19. If any governmental entity does not allow the plugging and abandonment of any boreholes or wells by WESTON in accordance with Paragraph 14 or 18, WESTON will continue to be responsible for complying with all governmental requirements with respect to those boreholes or wells.

20. WESTON will promptly provide Giant with copies of all raw data and reports generated from the soil samples, boreholes and wells.

21. Each obligation imposed on or right granted to the parties by Paragraphs 1 through 20 of this Agreement may be performed by their respective consultants or subcontractors.

22. WESTON agrees to indemnify and hold harmless Giant from any and all claims which may be made against Giant in connection with activities conducted on Giant's property by WESTON, including its consultants, contractors, subcontractors, agents and any other person or entity acting on its behalf.

23. WESTON will comply with any requirements of the New Mexico Environmental Improvement Division, the New Mexico State Engineer and of any other federal, state or local governmental agency that may be applicable to any activity of WESTON on Giant's property, including, but not limited to, the installation, maintenance, sampling, plugging and abandonment of the boreholes and wells.

24. Neither execution of this Agreement nor any discussion between representatives of Giant and representatives of WESTON or of BLM signifies approval by Giant of any aspect of WESTON's or BLM's investigation of environmental conditions at and near the Lee Acres Landfill.

25. This Agreement constitutes a license personal to the parties and does not convey an easement, a covenant running with the land or any other interest in real property. The parties agree that they will not record this Agreement with any governmental entity, including, but not limited to, any real property records maintained by BLM or San Juan County, New Mexico.

26. The parties each represent and warrant that the person executing this Agreement on its behalf is empowered to bind them to the terms of this Agreement, and that once executed, this Agreement shall be valid and binding and enforceable in accordance with its terms.

27. This Agreement shall be governed in all respects by the laws of the State of New Mexico.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

GIANT INDUSTRIES, INC.

By _____
Timothy A. Kinney
Giant Refining Company,
Farmington, NM

ROY F. WESTON, INC.

By _____
Kelly Peil
Vice President

ACKNOWLEDGMENTS

STATE OF NEW MEXICO)
) ss.
COUNTY OF SAN JUAN)

The foregoing instrument was acknowledged before me this ____ day of January, 1991 by Timothy A. Kinney of Giant Refining Company, on behalf of the Company.

Notary Public

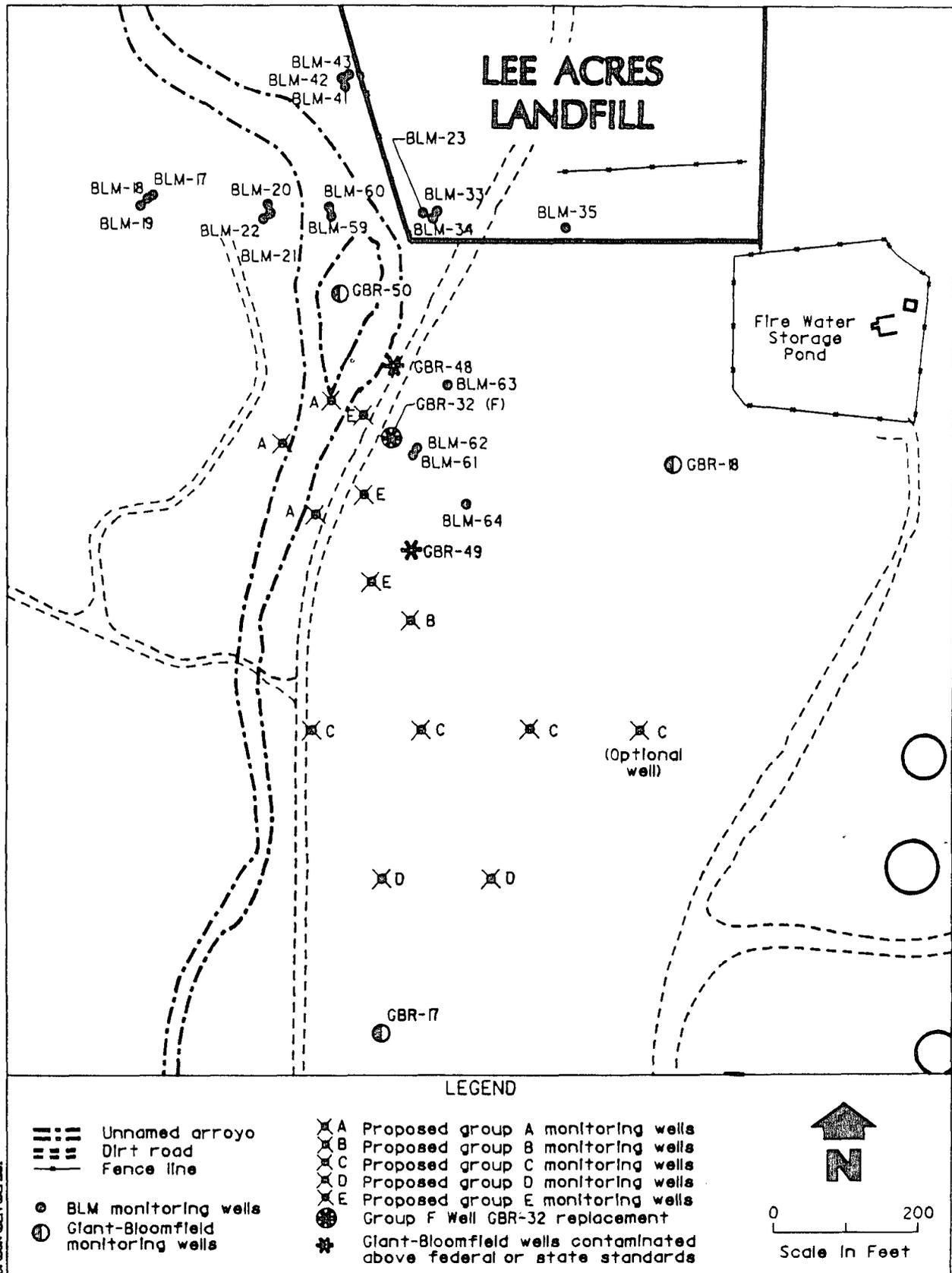
My Commission Expires:

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this ____ day of January, 1991 by Kelly Peil, Vice President of Roy F. Weston, Inc., on behalf of WESTON.

Notary Public

My Commission Expires:



Attachment 1. Proposed additional monitoring and pumping well locations.



5301 CENTRAL AVENUE, N.E.
SUITE 1000
ALBUQUERQUE, NM 87108
PHONE: (505) 255-1445

January 24, 1991

Tim Kinney
Giant Refineries
P.O. Box 256
Farmington, NM 87499

RE: Lee Acres Landfill
Access Agreement
RFW WO# 2878-04-01

Dear Tim:

Enclosed is a proposed access agreement for drilling, soil sampling, and water sampling on Giant Refineries properties for Lee Acres Landfill RI activities in Farmington, NM.

This access agreement is almost identical to the one negotiated in March 1990; however, it reflects the new characterization work that is proposed to determine the nature and extent of contamination south of the Lee Acres Landfill security fence.

The proposed work is made up of 14 additional well locations and six soil boring locations and includes the replacement of GBR 32, since this well is no longer operational.

If you have any questions, please contact me as soon as possible. We would like to finalize the agreement during the week of February 4, 1991, so that we may mobilize as soon as possible.

Sincerely,

ROY F. WESTON, INC.



Berg Keshian, Jr. P.E.
Project Manager

BK/jem

pc: B. Murphy

GNTagmt

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1000	Date 1/17/91
---	-----------------------------------	-----------	--------------

Originating Party

Other Parties

Tim Kinney - Giant Refining Co

Bill Olson - OCO

Subject

Giant Bloomfield Refinery

Discussion

Annual sampling & quarterly sampling being done

Repairs to pump & treat system (from freezing of lines) complete. Pump & treat resumed approximately 2 weeks ago

Conclusions or Agreements

Distribution

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1015	Date 1/2/91
---	-----------------------------------	-----------	-------------

<u>Originating Party</u>	<u>Other Parties</u>
Tim Kinney - Giant Refining	Bill Olson - OCD

Subject
Giant Bloomfield Refinery

Discussion
Cold weather has shut down recovery system
Ice layer in Intermediate tank broke sensor, all water then
pumped to long term storage until tank filled and sensor
shut down entire system
With system shut down water lines above ground at pumps
froze, water line to Air Stripper (underground) froze

Conclusions or Agreements
Giant will repair system as it there - and pressure
test Air Stripper undergrd. line

<u>Distribution</u> GBR DR file	Signed Bill Olson
------------------------------------	----------------------

Canonie Environmental

RECEIVED DEC 26 1990

December 18, 1990

Canonie Environmental Services Corp.
212 Frank West Circle
Suite A
Stockton, California 95206
Phone: 209-983-1340

85-052-10056

Sample Manager
Geoscience Consultants, Ltd.
500 Copper N.W., Suite 200
Albuquerque, NM 87102

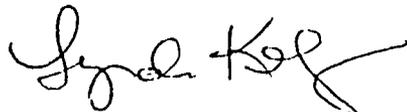
Dear Sample Manager:

Enclosed are the laboratory results for samples submitted to the Canonie Environmental Analytical Laboratory.

Unless otherwise instructed, samples will be returned to you two weeks from the date of this letter.

If you have any questions, please call me at (209) 983-1340.

Very truly yours,



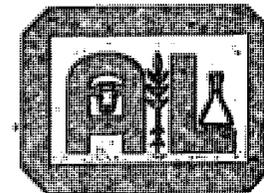
Lynda Kelly
Project Administrator

LWK/l dv

Enclosure

103-07a

A & L PLAINS AGRICULTURAL LABORATORIES, INC.
302 34th St. • P.O. Box 1590 • Lubbock, TX 79408 • (806) 763-4278
April 17, 1990



REPORT NUMBER

Microkey Sciences, Inc.
P.O. Box 27701-450
Houston, Tx. 77227-7701

Lab No: 92201
Sample ID: Base Material #1

ANALYSIS:

Total Nitrogen:	6.2 %
Moisture:	4.39%
Saturation:	40.75%
Elemental Phosphorus, as P:	11.1 %
Phosphate, P_2O_4 is equivalent to:	34.03%
Phosphoric Acid, P_2O_5 is equivalent to:	25.43%
Total Chlorine:	0.02%
Nitrate-Nitrogen:	<1 ppm
Boron:	0.4 ppm
Electrical Conductivity:	20.2 μ hos/cm
Potassium:	0.44%
Calcium:	0.55%
Magnesium:	0.27%
Sodium:	0.13%
Copper:	0.003%
Zinc:	490 ppm
Iron:	750 ppm
Total Sulfur:	<1 %

Respectfully submitted,

E.A. Coleman

E.A. Coleman



MICROKEY SCIENCES, INC.

P.O. BOX 27701-450

HOUSTON, TEXAS 77227-7701

(713) 342-5331

FAX (713) 232-4973



MICROBIAL CULTURES AND SUBSTRATE FORMULATION FOR SOIL REMEDIATION PRODUCTS

Background

Due to public disclosures required in connection with patent applications enabling competitors to reverse engineer products and design around the patent, the licensors and MicroKey have opted to protect products and technology as trade secrets.

Each MicroKey product consists of selected microorganisms in a supporting substrate or host medium. Over a 39-year period, Dr. John C. Porter, Sr. and John C. Porter, Jr., have developed a technology consisting of: banks of common and exotic microbial cultures; detailed knowledge of the attributes and environmental requirements of various strains of microorganisms; natural adaptation and mutation techniques for modifying the characteristics of microorganisms; and substrate for supporting, stimulating, and controlling microorganisms.

MicroKey uses no artificial gene splicing or recombinant DNA techniques. Naturally occurring microorganisms are selected, naturally adapted, and blended to perform specific tasks. This approach, selecting and blending proprietary, naturally occurring or adapted microorganisms to perform specific tasks, is relatively unique in the industry and is superior to the approaches generally used by other biotechnology companies.

Cultures

Microorganisms present in the formulations for soil remediation will include bacilli (Bac. subtilis, and Bac. Cereus and Bac. circulans, etc.) and Thiobacilli (T. thiooxidans, T. thioparus and T. denitrificans, etc.) for (1) biological control, (2) degradation of petroleum products, (3) oxidation of sulphur compounds, and (4) removal of other contaminants presently located at various depths within the soil structure. Azobacter will be present for the production of growth-stimulating substances. Nitrosomonas sp. and nitrobacter sp. will be used for nitrogen-transformation.

Substrate

Materials within the substrates are selected for purity and flashdried at 110 to 120 degrees Celsius, then are steam sterilized for 15 to 20 minutes, at 15 psig. This eliminates pathogenic organisms. Finished material is composted matter containing fishmeal, bonemeal, bloodmeal and carbon ash. The attached analysis from A & L Plants Agricultural Laboratories, Inc., is typical of substrate used as the host medium.





STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 7, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-435

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: DISCHARGE PLAN GW-40 MODIFICATION
GIANT BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has received your request, dated November 1, 1990, to modify the above referenced, previously approved, discharge plan. The modification consists of the addition of ground water pumped from off-site recovery wells SHS-7, 9, 11 and 14 into the OCD approved treatment and disposal system.

The November 1, 1990 requested modification of the previously approved ground water discharge plan, GW-40, for the Giant Bloomfield Refinery located in sections 22 and 27, Township 29 North, Range 12 West (NMPM), San Juan County, New Mexico is hereby approved with the monitoring conditions contained in OCD's December 6, 1990 approval of the off-site remediation plan. The discharge plan (GW-40) was approved on December 9, 1988. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of

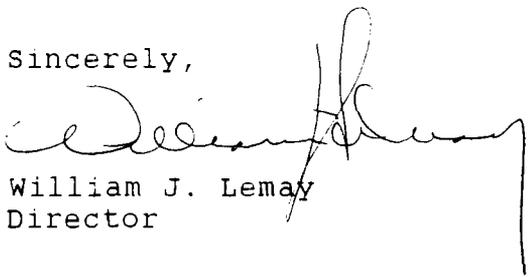
Mr. Timothy Kinney
December 7, 1990
Page 2

any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc : OCD Aztec District Office



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

October 22, 1990

Mr. William Olson
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

RECEIVED

OCT 25 1990

OIL CONSERVATION DIV.
SANTA FE

Dear Mr. Olson:

Enclosed is Giant's report referencing the second quarter of 1990 for the Bloomfield Refinery Remediation Project.

Please call me if you have any questions or require additional information.

Sincerely,

Timothy A. Kinney
Refinery Remediation
Project Manager

TAK/dm

Enclosure

cc w/enclosure Carl Shook - Giant
Kim Bullerdick - Giant
Tom Gryp - Giant
Martin Nee - GCL
William Murphy - BLM
Dale Doremus - EID
Chris Shuey - SWRIC
T. B. Darby - USF&G
Gary Barton - AIG
Monte Hensley - Frontier Adjusters
William Charles - Alexander and Alexander



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

October 17, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-344

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: SAMPLING MODIFICATION FOR CONTROLLED WATER APPLICATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has reviewed the October 12, 1990 Giant Refining Company "Sampling modifications to the Controlled Application Of Water To Remediate Hydrocarbon In Soil At The Giant Bloomfield Refinery plan submitted in October of 1989" correspondence.

The OCD approves of Giant's October 12, 1990 request for modification of the specific conductance ground water monitoring requirements for Giant's Controlled Application Of Water in the south refinery area of the Giant Bloomfield Refinery.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under any other laws and/or regulations.

If you have any questions, please contact me at (505)827-5885.

Sincerely,

William C. Olson
Hydrogeologist

xc: OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.

OIL CONSERVATION DIVISION
RECEIVED

'90 OCT 17 AM 8 46



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

October 12, 1990

Mr. David Boyer
New Mexico Oil Conservation Division
Environmental Bureau
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Sampling modifications to the Controlled Application Of Water To
Remediate Hydrocarbon In Soil At The Giant Bloomfield Refinery
plan submitted in October of 1989.

Dear Mr. Boyer:

Controlled application of water to remediate hydrocarbon in soil at Giant's Bloomfield Refinery has been initiated in accordance with the proposal submitted in October of 1989 and the OCD'S comments of April 11, 1990. The proposal includes monitoring procedures for the daily monitoring of depth to water and free product thickness in various wells to evaluate hydraulic response to the applied water. If a hydraulic response is observed, the plan requires measurement of the specific conductance of a water sample from that well.

Giant requests that the monitoring program be modified based on difficulties encountered during field implementation of the proposed plan. To obtain representative groundwater samples for the measurement of specific conductance, free product must be disturbed and/or purged from the well. Disturbances in free product thickness resulting from sampling, disturb the equilibrium of the system and mask the hydraulic effects of the controlled application.

Mr. David Boyer
October 12, 1990
Page 2

Therefore, as discussed in our telephone conversation of October 11, 1990, Giant proposes the following changes to the original monitoring plan.

1. Monitor wells GBR-41, GBR-20, GBR-5, GBR-6, GBR-7, GBR8, and GBR-13 will be monitored daily for depth to water and free product thickness.
2. Specific conductance measurements will be obtained based on hydraulic response in monitor wells where free product has not been observed. The proposed monitor wells are: GBR-6, GBR-20, GBR-41, and GRW-3.

This change in the monitoring program should enable Giant to distinguish hydraulic responses due to the controlled application from those resulting from sampling disturbances. If you have any further questions, please call me at 632-3306.

Sincerely,



Tim Kinney
Project Manager

cc: Martin Nee, GCL-Albuquerque
Kim Bullerdick - Giant
Carl Shook - Giant
Tom Gryp - Giant
Gary Barton - AIG
Monte Hensley - Frontier Adjusters
T.B. Darby - USF&G
William Charles - Alexander and Alexander Inc.

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal Time 0920 Date 9/17/90

Originating Party

Other Parties

Bill Olson - OCP Santa Fe

Tim Kinney - GBR

Subject

GBR Reports & TCLP

Discussion

Problems with Radon reporting results, well locations wrong, Radon had change of personnel. GBR has other info for quarterly report ready, will submit report as soon as results reported

Site report should go out next week. GCL currently evaluating slug test data

Discussed "confined in" rule as discussed with Boyan last week I discussed EPA January 1989 Memo on this with him

Conclusions or Agreements

I will send him copy of above EPA Memo.

Distribution

GBR D.P. file
GBR Site file

Signed

Bill Olson



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 17, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-422

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

**RE: DISCHARGE PLAN MODIFICATION
GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO**

Dear Mr. Kinney:

The New Mexico Oil Conservation (OCD) has reviewed the August 15, 1990 Giant Refining Company correspondence proposing a modification in the Giant Bloomfield Refinery (GBR) Discharge Plan GW-40.

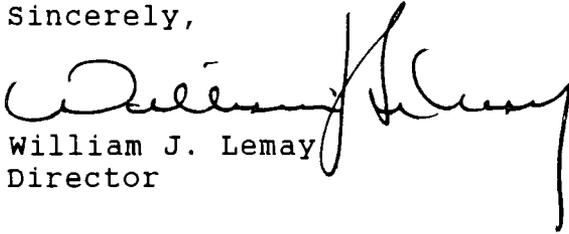
The modification proposes adding small amounts of hydrochloric acid to the air stripper treatment system to lower the pH of the effluent from 8 to 7. This will reduce the amount of scaling throughout the water treatment system so that it will operate more efficiently. The OCD has determine that the proposed modification does not represent a significant change in discharge quality and will not issue a public notice for the change.

The modification of the Giant Bloomfield Refinery Discharge Plan GW-40 as proposed in your August 15, 1990 correspondence is hereby approved. OCD approval is contingent on Giant maintaining the pH of the water above 6.0 which is the lower limit for pH authorized by New Mexico Water Quality Control Commission Regulations. At no time will Giant reinject treated water with a pH lower than 6.0. The OCD requests that Giant maintain records of all pH measurements and that these records be included in all future quarterly reports.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under any other laws and/or regulations. Additionally, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc : Frank Chavez, OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.
Dale Doremus, EID Superfund
Chris Shuey, Southwest Research and Information Center
William Murphy, BLM Albuquerque

OIL CONSERVATION DIVISION
RECEIVED



'90 AUG 17 AM 9 08

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

August 15, 1990

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Re: Discharge Plan Modification For Scale Inhibition

Dear Bill,

With the addition of batch processing and double air stripping of water in the treatment system, the rate of scale deposition in pumps, valves and piping has increased to the point that operation of the system extremely cumbersome. Water analysis and testing reveals that the addition of a small quantity of hydrochloric acid (HCL) would reduce the deposition of scale.

We propose to add up to 2 gallons of 20 Baume A (31% by weight) HCL per 10,000 gallons of water treated. Experimentation reveals that this will reduce the ph of the water from approximately 8 to 7, while reducing or eliminating scale deposition. Smaller reductions in the ph value may be equally effective and it will be our goal to inject the minimum amount required to reduce scale deposition to an acceptable rate. Utilizing a metering pump, HCL will be injected on a continual basis into the feed stream of the air stripper.

For the first eight hours of operation we will determine the change in ph on an hourly schedule utilizing a portable ph meter. Thereafter, for the first two weeks, we will monitor ph daily, making necessary adjustments to insure scale reduction while preventing the ph of the water from dropping below 7.0. After determination of an effective injection rate, the ph will be monitored weekly. Our goal is to insure that the ph does not fall below 7.0.

In summary, we propose to inject HCL for scale deposition control in the water treatment system. The minimum effective injection rate will be determined and utilized. In no case will we depress the ph level below 7.0. Up to two gallons of 31% HCL may be required for each 10,000 gallons of water treated.

Please call with any questions or comments that may arise.

Sincerely,



Timothy A. Kinney
Project Manager
Refinery Remediation

cc:

Carl Shook - Giant
Kim Bullerdick - Giant
Martin Nee - GCL
Pat Crain - AIG

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1030

Date 8/8/90

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Tim Kinney - Grant Refining,
632-3306

Subject

Grant Bloomfield D.P. and Offsite Investigation

Discussion

OCD reviewed July 31, 1990 modified offsite work plan.

On bench scale test he has estimated he will need approximately 1-2 drops of HCl per gallon of influent to reduce pH to about 7
Wants to add acid before air stripper

I informed him acid addition will be a modification of the GBR discharge plan which must be formally submitted for OCD Director's approval.

Conclusions or Agreements

OCD will approve modified offsite work plan with conditions

He will finalize volume estimates for acid addition and submit a request to OCD for discharge plan modification

Distribution

GBR D.P. file
GBR offsite file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0930	Date 8/8/90
---	-----------------------------------	-----------	-------------

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Richard Kilbury - Weston
255-1445

Subject

GBR and OCD Sample Analyses

Discussion

Weston requested access to copy OCD ~~data~~ comprehensive file on water quality analyses for the GBR
I told him the file was large and they would have to send someone to copy it
They have a portable copier but he needs to locate someone to copy files
Weston tentatively scheduled for sometime next week.

Conclusions or Agreements

He will call later this week to confirm

Distribution

Lee Acres file
GBR file
GBR off site file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

7/15

Date

8/6/90

Originating Party

Other Parties

Tim Kinney - Giant Refining

Bill Olson - OCD Santa Fe

Subject

Giant Bloomfield Refinery

Discussion

Giant is proposing an alternate investigation with soil boring than previously agreed. Giant wants to put a boring in suspect plume area, if product found will move to next record, if not borings will move out laterally on 100 ft intervals. Proposal should be to OCD in next couple of days.

Giant is having problems with scale buildup on pumps after air stripper. Want to add HCl to fluid stream to bring pH down approximately 0.5 to 1 pH unit. Current pH after stripper = 8.0. I asked what

Conclusions or Agreements

kind of volume is needed to do this.

I will review proposal when comes in and check with Boye on HCl. He will determine amount of acid needed to lower pH.

Distribution

GBR D.P. file
GBR offsite file

Signed

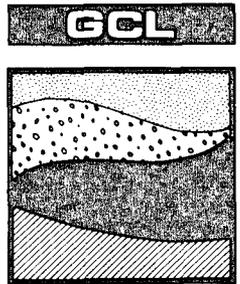
Bill Olson

Geoscience Consultants, Ltd.

OIL CONSERVATION DIVISION

RECEIVED

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595



August 2, 1990

'90 AUG 6 AM 9 22

Mr. Bill Olson
New Mexico Oil Conservation District
P.O. Box 2088
Land Office Building
Santa Fe, NM 87501

FILE: ON-SITE INVESTIGATION

RE: TRANSMITTAL OF ANALYTICAL RESULTS

Dear Mr. Olson:

Enclosed please find the analytical results for the ground-water samples collected at Giant's Bloomfield Refinery. I have enclosed copies of the laboratory reports for the following sampling locations, as requested by Tim Kinney.

LOCATION	SAMPLE NUMBER
GBR-14	8812071123
GBR-15	8812071352
GBR-17	8812070930
GBR-24D	8812071016
GBR-30	8812071201
GBR-31	8812071431

If you have any questions or require further assistance, please do not hesitate to call me.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.

Martin J. Nee
Project Hydrogeologist

MJN/lc/0348/LTR/OLSON01.LTR

Enclosure

cc: Kim Bullerdick, Giant Industries, Phoenix
Tim Kinney, Giant Bloomfield Refinery, Farmington

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

0930

Date

7/25/90

Originating Party

Other Parties

Bill Olson - OCD Santa Fe

Tim Kinney - Giant Refining,
632 - 3306

Subject

Giant Bloomfield Refinery

Discussion

Requested Giant send legible copies of organic analyses for
~~Dec 07~~ Dec 07, 1988 samples at GDR-14, 15, 17, 24, 30, 31

Also requested locations of sample analyses taken by Groundwater
Technology, Inc. in Dec 18, 1987 which was submitted with
the 1990 1st quarter report

Notified him at 7/18/90 Santa Fe Reporter article on
Reynolds lawsuit

Conclusions or Agreements

He will locate and send aft. Not sure about Groundwater
Tech sample locations
I will fax copy of news article

Distribution

f/k

Signed

Bill Olson



RECEIVED
OIL CONSERVATION DIVISION

1990 JUN 14 AM 9 01



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

June 12, 1990

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: First Quarter 1990 Data Report From Giant's Bloomfield
Refinery

Dear Mr. Boyer

In accordance with Giant's Discharge Plan (G-40), on May 31, 1990 the quarterly data report referencing January, February, and March of 1990 was distributed. It was transmitted under separate cover. The copy list (cc) below indicates those that received copies of the report. In the future, a cover letter will accompany the report

Sincerely,

Timothy A. Kinney
Remediation Project Manager

cc: Dennis McQuillan, EID
William J. Murphy, BLM
Chris Shuey, SWRIC
Martin Nee, GCL
Ned Kendrick, M&A
Alvis Moore, Giant
Kim Bullerdick, Giant

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

June 1, 1990

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: OCD SAMPLING OF GIANT BLOOMFIELD MONITOR WELLS

Dear Mr. Kinney:

On April 9, 1990, the New Mexico Oil Conservation Division (OCD) sampled ground water from Giant Bloomfield Refinery monitor wells GBR-32, GBR-48 and GBR-49 for aromatic and halogenated volatile organics. Enclosed you will find copies of the analytical results for these wells.

No aromatic purgeables were detected in any of the samples. Varying levels of Trichloroethene, Tetrachloroethene and cis-1,2-Dichloroethene were observed in all of the wells. In addition, 1,1-Dichloroethane was observed in well GBR-32 and Chloroform in well GBR-48.

If you have any questions please contact me at 827-5885.

Sincerely,



William C. Olson
Hydrogeologist

Enclosures

xc with enclosures: Ned Kendrick, Montgomery and Andrews
Dale Doremus, EID Superfund
William Murphy, Bureau of Land Management

MONTGOMERY & ANDREWS

PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

May 30, 1990

Victor R. Ortega
Jeffrey R. Brannen
John B. Pound
Gary R. Kilpatrick
Thomas W. Olson
William C. Madison
Walter J. Melendres
Bruce Herr
Robert P. Worcester
John B. Draper
Nancy Anderson King
Janet McL. McKay
Joseph E. Earnest
W. Perry Pearce
Sarah M. Singleton
Stephen S. Hamilton
Michael H. Harbour
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi

Galen M. Buller
Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
Gary P. Kaplan
Anne B. Hemenway
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Nancy A. Taylor
Rod D. Baker
R. Michael Shickich
Janet W. Cordova
M. Eliza Stewart
Scott K. Atkinson
Martin R. Esquivel
Catherine E. Pope
Phyllis S. Lynn

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Mr. William C. Olson
Environmental Bureau
Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Giant's Discharge Plan (GW-40)

Dear Mr. Olson:

In accordance with your letter of April 11, 1990, I am enclosing the following volumes containing laboratory analysis sheets for samples collected in 1989:

1. Analytical Results for 1st Quarter, 1989;
2. Analytical Results for 2nd Quarter, 1989;
3. Analytical Results for 3rd Quarter, 1989;
4. Analytical Results for 4th Quarter, 1989;
and
5. Analytical Results for Upgradient Wells,
1989

Mr. William C. Olson
May 30, 1990
Page 2

I believe you have already received all this data in a different form. In the future, we will submit analytical results in the form submitted today.

Sincerely,



Edmund H. Kendrick

EHK:gr:38

Enclosures

File #8361-85-09

cc: Dennis McQuillan, EID (w/encls.)
William J. Murphy, BLM (w/encls.)
Chris Shuey, SWRIC (w/encls.)

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

May 24, 1990

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Victor R. Ortega
Jeffrey R. Brannen
John B. Pound
Gary R. Kilpatrick
Thomas W. Olson
William C. Madison
Walter J. Melendres
Bruce Herr
Robert P. Worcester
John B. Draper
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Neils L. Thompson
Nancy A. Taylor
Rod D. Baker
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova
Martin R. Esquivel
Scott K. Atkinson
Catherine E. Pope

Mr. William C. Olson
Environmental Bureau
Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Giant's Discharge Plan (GW-40)

Dear Mr. Olson:

In response to your letter of April 11, 1990, I am enclosing a copy of the 1986 report by Daniel B. Stephens titled "Final Data Report on Laboratory Analysis of Soil Hydraulic Properties." This report was previously submitted to your office as Appendix D to the "Soil and Ground Water Investigations and Remedial Action Plan," June 1987, prepared by Geoscience Consultants, Ltd. Laboratory analysis sheets for all of Giant's 1989 quarterly sampling will soon follow.

Sincerely,



Edmund H. Kendrick

EHK:gr:41

Enclosure

File #8361-85-09

bcc: Kim H. Bullerdick, Esq. (w/o encls.)
Mr. Timothy A. Kinney (w/o encls.)
Mr. Martin Nee (w/o encls.)

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0930	Date 5/23/90
---	-----------------------------------	-----------	--------------

Originating Party

Other Parties

Tim Kinney - Giant Bloomfield Refinery

Bill Ober - OCD Santa Fe

Subject

Giant Bloomfield

Discussion

Quarterly report will be in next week

Want to start drill for off site dissolved extent wells week of June 18, 1990 but still working on access problems with county

Batching operation for air stripper approx 60% complete
Highway Dept has not given them access for using a culvert for piping because of problem in clearing, I suggest that they tell Highway Dept Giant will clean culvert in exchange for access

Conclusions or Agreements

Proposal for dissolved phase extent of contamination will be to OCD in approx. 2 weeks

Distribution

Offsite file
D.P. file

Signed

Bill Ober

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0920	Date 5/23/90
---	-----------------------------------	-----------	--------------

<u>Originating Party</u>	<u>Other Parties</u>
Nick Kendrick - Montgomery & Andrews	Bill Ober - OCD Santa Fe

Subject
Giant Bloomfield Refinery

Discussion
Quarterly report will be in to OCD by Next week
Proposal on extent of off site dissolved phase contribution
in approximately 2 weeks

Conclusions or Agreements

Distribution
off site file
D.P. file

Signed *Bill Ober*

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0800	Date 4/23/90
---	-----------------------------------	--------------	-----------------

<u>Originating Party</u>	<u>Other Parties</u>
--------------------------	----------------------

Steve SLA - Organics Section	Bill Olson - OCP
---------------------------------	------------------

Subject
Giant Bloomfield Well Samples

Discussion Verbal report on initial results:

GBR-48 : 00 TCE = 33.7 ppb Chloroform = 5.6 ppb Cis 1,2 Dichloroethane ≈ 214 ppb 1,1 Dichloroethane = 12.3	GBR-32 : TCE = 10.9 ppb PCE ≈ 10 ppb Cis 1,2 Dichloroethane ≈ 147 ppb
--	---

GBR-49 : TCE = 7.2 ppb
PCE = 10 ppb
Cis 1,2 Dichloroethane = 116 ppb

Conclusions or Agreements

Report on results should be out in 2 weeks

<u>Distribution</u> file	Signed Bill Olson
-----------------------------	----------------------



OIL CONSERVATION DIVISION
RECEIVED

'91 MAY 22 PM 2 33

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

May 14, 1991

Mr. William Olson
Hydrogeologist
Oil Conservation Division
Environmental Bureau
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Bill:

RE: Giant Bloomfield Refinery Remediation
Quarterly Report
First Quarter, 1991

Enclosed is the Quarterly Remediation Data Report referencing the first quarter of 1991 for Giant's Bloomfield Refinery.

Please contact me with any questions or comments that may arise.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Remediation

/dm

Enclosure
cc w/enc.:

- Carl Shook-Giant
- Kim Bullerdick-Giant
- Tom Gryp-Giant
- Bill Baggett-SJC
- William Murphy-BLM
- Dale Doremus-EID
- Chris Shuey-SWRIC
- T. B. Darby-USF&G
- Gary Barton-AIG
- Monte Hensley-Frontier
- William Charles-Alexander & Alexander
- Charlotte Toler-Firemans Fund



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

file copy

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 11, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-114

Mr. Edmund H. Kendrick
Montgomery & Andrews
P. O. Box 2307
Santa Fe, New Mexico 87504-2307

RE: Giant Bloomfield Refinery Operations Update and Controlled Flooding Application

Dear Mr. Kendrick:

On March 29, 1990, the New Mexico Oil Conservation Division (NMOCD) and representatives of Giant Refining Company met to discuss NMOCD's comprehensive review of Giant's October 20, 1989 "CONTROLLED FLOODING APPLICATION OF WATER TO REMEDIATE HYDROCARBON IN SOIL AT THE GIANT BLOOMFIELD REFINERY" and Giant's March 8, 1990 "OPERATIONS UPDATE AT GIANT'S BLOOMFIELD REFINERY:.. These documents propose amendments to the current Giant Bloomfield Refinery Discharge Plan GW-40.

During this meeting many agreements were reached regarding the requests contained in these documents. Each of these documents are discussed separately below.

I. Controlled Flooding Application

The NMOCD approves of Giant's request to perform a test of the controlled flooding application in Area I, as designated on Figure 3-1 of the application, to determine the aquifer response conditioned upon the following agreements:

1. The area will be graded level and then disked or raked to facilitate infiltration of the applied water.
2. All water applied will be circulated through the air stripper twice prior to application to ensure that the effluent meets New Mexico Water Quality Control Commission (WQCC) standards. Effluent above WQCC standards will not be applied.
3. Water will be applied such that ponding does not exceed a few inches at any one time.

4. Monitoring of product thickness will also include monitor well GBR-6.
5. Giant will supply NMOCD with a copy of the 1986 report by Daniel B. Stephens titled "FINAL DATA REPORT ON LABORATORY ANALYSIS OF SOIL HYDRAULIC PROPERTIES" referenced in Appendix A.
6. Giant will supply NMOCD with a report containing the results of the test application within 6 weeks of completion of the test.

II. Operations Update

The NMOCD approves of Giant's request to discontinue quarterly sampling of monitor wells GBR-6, GBR-8, and GBR-13 for dissolved phase hydrocarbons due to the presence of floating hydrocarbons. Monitor wells GRW-3, GRW-4 and GRW-6 will replace these well in future quarterly sampling.

The NMOCD also approves of Giant's request to change from regular quarterly sampling to annual sampling of the monitor wells for polynuclear aromatic hydrocarbon, except for monitor wells GBR-31, GBR-33, GRW-3, GRW-4 and GRW-6. In the future, Giant may request that these wells be changed from quarterly to annual sampling if successive quarterly sampling indicates that the concentrations of polynuclear aromatic hydrocarbons from these wells are negligible.

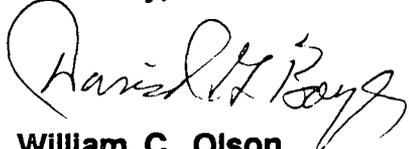
In addition NMOCD and Giant also reached the following agreements:

1. Giant will include the laboratory analysis sheets in all future quarterly reports. Giant will also provide NMOCD with laboratory analysis sheets for all of Giant's 1989 quarterly sampling.
2. Giant will measure water levels and product thicknesses in all monitor wells on a monthly basis.
3. Giant will submit quarterly reports within 6 weeks of sampling events.
4. Giant will begin batching water through the air stripper twice, beginning early in the summer, to reduce the chance that effluent above WQCC standards is discharged.
5. Giant will notify NMOCD of effluent exceeding WQCC standards within 24 hours of knowledge of exceedance.
6. Giant will submit air stripper maintenance procedures, including a cleaning schedule, cleaning procedures and disposition of cleaning fluids, to be included in the Operations Update Appendices.

Mr. Edmund H. Kendrick
April 11, 1990
Page -3-

We thank you for your patience in working out these agreements. We request that Giant contact NMOCD two weeks prior to sampling events so that NMOCD may be given the opportunity to participate. If you have any questions or if problems arise in meeting the agreed schedules, please contact me at (505) 827-5885.

Sincerely,



50) William C. Olson
Hydrogeologist

WCO/si

- cc: Frank Chavez, NMOCD Aztec District Office
- Timothy Kinney, Giant Refining Co.
- Dale Doremus, EID Superfund
- Chris Shuey, Southwest Research and Information Center
- Richard Mitzelfelt, EID Director
- David Tomko, NMEID, Farmington
- William Murphy, Albuquerque, BLM



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 3, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-150

Mr. Edmund H. Kendrick
Montgomery & Andrews
P. O. Box 2307
Santa Fe, New Mexico 87504-2307

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the March 8, 1990 revised "SPILL/LEAKAGE PREVENTION AND EMERGENCY RESPONSE PLAN, GIANT BLOOMFIELD REFINERY" listing operational changes in the Giant Bloomfield ground water remediation system.

The NMOCD notes the following changes to the original plan:

1. Timothy Kinney is now replacing Robert L. McClenahan Jr. as the Giant Refining Company contact for the Giant Bloomfield Refinery.
2. Tank #24 has been removed from service and has been replaced with Tank #21 and Tank #35.
3. Additional fail-safe devices have been installed to initiate a total system shut down of the water recovery, treatment and discharge process in the case of an abnormal event.

The NMOCD hereby approves the above referenced plan for inclusion in the approved Giant Bloomfield Refinery Discharge Plan GW-40. Please be advised that approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

If you have any questions or comments, please contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist

WCO/si

cc: NMOCD Aztec District Office

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 9:15 am

Date 3/28/90

Originating Party

Other Parties

Bill Olson - OCP Environmental Review

Tom Kinney, Giant Retiring
632-3306

Subject

Giant Bloomfield Retiring

Discussion

Returned his call of 3/27

Conclusions or Agreements

Meeting b/w OCP and Giant finalized for 3/29/90
at 1330 hrs.

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 1341	Date 3/26/90
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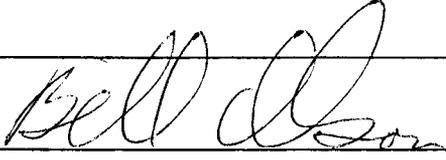
<u>Originating Party</u> Bill Olson - OCP	<u>Other Parties</u> Tim Kinney - Giant Refining 632-3306
--	---

Subject
Giant Bloomfield Refinery

Discussion
He has not been able to reach Ned Kendrick at this time
He will be driving in from Farmington and would prefer an afternoon meeting time

Conclusions or Agreements
Tentative meeting set for 3/29/90 at 1:30 pm

Distribution file

Signed 

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 0930	Date 3/23/90
---	-----------	--------------

<u>Originating Party</u>	<u>Other Parties</u>
Bill Olson - OCD	Tim Kinney - Giant Refinery 632-3306

Subject
Giant Bloomfield Refinery

Discussion
Discussed changing quarterly sampling from M/L's with product to those without product (sampling for dissolved phase constituents)
Also want to discuss Flooding application and effluent investigation. I told him OCD would like to discuss these at a meeting in Santa Fe next week.
He agreed to a meeting next week as long as OCD doesn't mind quarterly sampling being put off

~~Bill Olson~~
Conclusions or Agreements
OCD agrees to put off quarterly sampling until a meeting to discuss above issues. I will call him on Monday to finalize a meeting date for next week.

Distribution

Signed Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time
Noon

Date
3/14/90

Originating Party

Ned Kendrick
987-3873

Other Parties

David Boyer

Subject
Giant Bloomfield Refinery

Discussion

Ned called to see if Giant could postpone quarterly sampling until week of 3/26. He would have time to review the proposed sampling changes (mainly PAH costs)

Conclusions or Agreements

Told him OK, and said for him to call that week for progress in review

Distribution

Giant - Bloomfield

Signed

David Boyer

DIVISION
MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

90 MAR 20 AM 8 46

March 16, 1990

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Victor R. Ortega	Galen M. Buller
Jeffrey R. Brannen	Edmund H. Kendrick
John B. Pound	Jay R. Hone
Gary R. Kilpatric	Deborah J. Van Vleck
Thomas W. Olson	Gary P. Kaplan
William C. Madison	Anne B. Hemenway
Walter J. Melendres	Anne B. Tallmadge
Bruce Herr	Kenneth B. Baca
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Stephen S. Hamilton	R. Michael Shickich
Michael H. Harbour	Janet W. Cordova
Katherine W. Hall	Martin R. Esquivel
Robert J. Mroz	Scott K. Atkinson
Richard L. Puglisi	Catherine E. Pope

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: Fourth Quarter 1989: Data From Giant's Bloomfield
Refinery

Dear Mr. Boyer:

In accordance with monitoring and reporting requirements in
Giant's Discharge Plan (GW-40), I am enclosing a quarterly data
report for Giant's Bloomfield Refinery. The report covers data
collected during October, November and December 1989.

Sincerely,



Edmund H. Kendrick

EHK:gr:57
Enclosure
File #8361-85-09
cc: Dennis McQuillan, EID (w/encl.)
William J. Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
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Nancy A. Taylor
Rod D. Baker
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova
Martin R. Esquivel
Scott K. Atkinson
Catherine E. Pope

March 9, 1990

HAND-DELIVERED

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
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Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: Giant's Discharge Plan (GW-40): (1) Operations Update
and (2) Revised Spill Prevention Control and
Countermeasure ("SPCC") Plan

Dear Mr. Boyer:

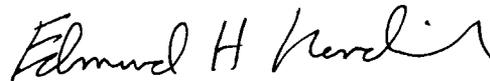
On behalf of Giant Industries Arizona, Inc., I am enclosing three copies of the referenced documents, dated March 8, 1990. The purpose of the Operations Update is twofold. First, Giant wishes to report several operational changes in Giant's ground water remediation system that have occurred since the discharge plan was approved in December, 1988. These changes, which are incorporated in the revised SPCC Plan, involve personnel and the refinery tanks used for ground water storage. Second, Geoscience Consultants has advised Giant that some aspects of data collection under the discharge plan, such as the particular wells to be sampled and the analysis of polynuclear aromatic hydrocarbons, may no longer be useful. Giant requests your approval of these changed data collection procedures at the earliest possible time, because the next round of quarterly sampling is scheduled to begin on March 12, 1990.

Mr. David G. Boyer
March 9, 1990
Page 2

It should be noted that the SPCC Plan contains a revised site location map, attached as Plate 1. The aerial photograph, upon which site information is imposed, was taken in February 1988.

If you have any questions concerning the enclosed submissions, please contact me.

Sincerely,



Edmund H. Kendrick

EHK:gr:38
Enclosures
File #8361-85-09

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 11:30 AM

Date 3/12/90

Originating Party

Other Parties

Ned Kendrick - Mang & Andrews
982-3853

Dave Boyer

Subject

Giant Bloomfield Refinery

Discussion

I talked to Ned about several issues:

(1) Change in wells monitored and parameters at recovery wells - Not enough time to review 3/9/90 letter for decision by 3/12 - Tell Ned to either stick with current sampling schedule or do both new and existing wells samplings

(2) OSSite investigation reports - Bill Olson reviewing - Giant wants to drill new wells week of April 9
Told Ned ^{to} should complete review by 3/26 and discuss 2/23/90 report that week.

Conclusions or Agreements

(3) Controlled Flooding Application of B/M 10/9/89 - Told Ned under review and should be ready to discuss week of 3/26.

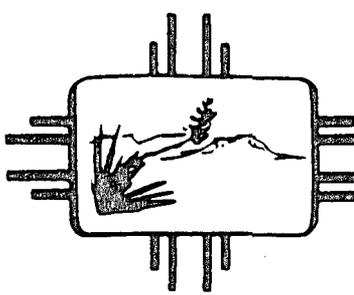
Distribution

Bill Olson
Giant Bloomfield file
Giant OSSite file

Signed

Dave Boyer

New Mexico Health and Environment Department



RECEIVED
'90 FEB 2 AM 9 14

GARREY CARRUTHERS
Governor

DENNIS BOYD
Secretary

MICHAEL J. BURKHART
Deputy Secretary

RICHARD MITZELFELT
Director

January 30, 1990

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, NM 87499

RE: REMEDIATION OF CONTAMINATION CAUSED BY A LEAKING UNDERGROUND STORAGE TANK AT THE GIANT BLOOMFIELD REFINERY

Dear Mr. Kinney:

The New Mexico Environmental Improvement Division (EID) has received Giant Refining Company's (Giant's) letter of January 16, 1990 regarding the remediation of contamination caused by a leaking underground storage tank (UST) at the Giant Bloomfield Refinery. Giant states that this cleanup project is being conducted as part of a broader site remediation plan which is being directed by the Oil Conservation Division (OCD). OCD has confirmed this to EID. Consequently, EID does not require further investigative or remedial action specifically for the UST contamination incident at this time. EID reserves the right to require additional work should information arise that human health or the environment are being endangered by the UST release, or that the UST contaminant plume is not being contained and remediated by the general site remediation project.

A copy of this letter is being forwarded to Dave Boyer of OCD to inform him of EID's role in the case. Please contact me at 827-0158 if you have any questions concerning this matter.

Sincerely,

Reid S. Allan
Geologist
Underground Storage Tank Bureau

cc: ~~Dave Boyer, Oil Conservation Division~~
EID Farmington Field Office
EID District II Office

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

'90 JAN 30 AM 9 13

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

January 26, 1990

Victor R. Ortega	Edmund H. Kendrick
Jeffrey R. Brannen	Jay R. Hone
John B. Pound	Deborah J. Van Vleck
Gary R. Kilpatric	Gary P. Kaplan
Thomas W. Olson	Anne B. Hemenway
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REPLY TO SANTA FE OFFICE

Mr. William J. Murphy
Bureau of Land Management
Albuquerque District Office
435 Montano Rd., N.E.
Albuquerque, New Mexico 87107

Re: BLM's Request for Installation of Well Clusters and
Boreholes on Giant's Refinery Property

Dear Mr. Murphy:

I am writing on behalf of Giant in response to Mr. Keshian's letter of January 15, 1990 requesting permission to install well clusters and additional boreholes on Giant's refinery property. Giant is willing to cooperate with this investigation and give you permission as further discussed below.

It will be necessary for Giant and BLM to execute an agreement defining the scope of BLM's proposed investigation on Giant's property. The document would be similar to the agreement of December 15, 1989 between Giant and BLM in connection with the cone penetrometer/hydropunch investigation. In addition, the agreement would include terms addressing future access to the wells completed on Giant's property.

Giant will want to know more about the purpose of each borehole and well before executing the agreement. It must be emphasized that Giant's permission to install well clusters and boreholes on its property does not indicate approval of or participation in BLM's investigative or remedial activity. Giant is merely trying to be as cooperative as possible in allowing BLM to take whatever steps BLM believes is appropriate.

Mr. William J. Murphy
January 26, 1990
Page 2

Mr. Keshian noted in his letter that the proposed well clusters would be located in the old arroyo channel. Giant's consultant, Geoscience Consultants, Ltd. ("GCL"), has indicated that certain precautions should be taken to prevent any proposed wells from interfering with the operation of GBR-32. Also GCL believes that the proposed wells are not optimally located if their purpose is to characterize the stratigraphy and ground water in the old arroyo channel. Both of these comments are noted in the enclosed Attachment 1. GCL's concern with the protection of the integrity of GBR-32 will be incorporated in the proposed agreement. GCL's comment about the thickness of the old arroyo channel is merely for the consideration of Weston, BLM and EID. The actual decision on well and borehole placement is, of course, solely a decision for Weston, BLM and EID.

At our meeting on December 14, 1989, Mr. Keshian also expressed interest in taking soil samples from Giant's former fire water pond. Although he stated that he had no particular reason to expect to find contamination there, he apparently would like to reach closure on that issue. Giant has no problem with Weston taking these samples so long as Giant is given sufficient notice to arrange for collecting soil samples at the same time and an appropriate written agreement is executed.

Please give me a call if you have any questions concerning the foregoing. In the meantime, I will begin drafting an agreement to cover the proposed installation of well clusters and boreholes.

Sincerely,



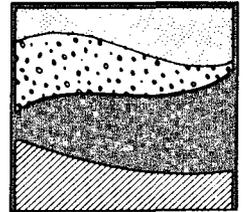
Edmund H. Kendrick

EHK/gr:2
Enclosure
File #8361-88-11
cc: (w/encl.)
D. Boyer, OCD ✓
K. Bullerdick, Giant
D. Doremus, EID
R. Hicks, GCL
B. Keshian, Weston
T. Kinney, Giant
D. McQuillan, EID

Geoscience Consultants, Ltd.

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595

GCL



January 26, 1990

Mr. Ned Kendrick
Montgomery & Andrews
P.O. Box 2307
Santa Fe, New Mexico 87504-2307

RE: COMMENTS ON PROPOSED DRILLING PLAN OF BLM

Dear Mr. Kendrick:

GCL has evaluated the BLM proposal to drill borings and install wells on Giant property. We have the following comments for your consideration:

1. BLM has proposed to install a well cluster east of GBR-48. GCL attempted to install a monitor well in this same location. No free water was encountered in the alluvium. The borehole was abandoned upon refusal of the hollow stem auger in claystone/shale bedrock. No attempt was made to penetrate below the bedrock horizon. Enclosed for your information is a field log of the borehole. The present location of GBR-48 was chosen as an alternative. Free water was encountered in the alluvium at this second location and GBR-48 was completed as an alluvial aquifer monitor well.
2. BLM has proposed to install a well cluster immediately east of GBR-32. No details were provided in the proposal concerning drilling or completion techniques for this proposed well cluster. We have a concern that drilling operations immediately adjacent to GBR-32 have the potential of compromising the integrity of the well. More than two years of monthly water level data and periodic sample analysis data exist for GBR-32. We recommend that Giant restrict drilling activities up-gradient from and within 25 feet of GBR-32. BLM must demonstrate that a proper seal will be placed between the alluvial aquifer and underlying aquifers to ensure that pressurized water from deeper units do not influence GBR-32.

Attachment 1

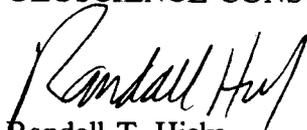
Mr. Ned Kendrick
January 26, 1990
Page 2

3. It is our understanding that the purpose of the proposed boring and well installation program is to better characterize the flow regime directly south of the landfill. The hydropunch survey was designed to span the width of the active arroyo south of the landfill. GCL data show that the saturated alluvial aquifer thickens to the west. If Giant requested GCL to perform a characterization of this portion of the alluvial aquifer, we would place a well cluster west of GBR-32, GBR-48 and GBR-49. The most logical place for such a well cluster would be the southern tip of the "island" in the arroyo, west of GBR-32.

Please interpret comment #1 as a point of information which may be of use to the BLM in final design of their investigation. Comment #2 is a serious concern which should be addressed in any agreement made between Giant and BLM. Comment #3 may reflect our lack of understanding of the purpose of the well installation and boring program.

If you should have any questions concerning this matter, please do not hesitate to contact me.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.



Randall T. Hicks
Senior Vice President
Technical Services

RTH/11b/0348/BLMRVW.DOC

OIL CONSERVATION DIVISION
RECEIVED

'90 JAN 17 AM 8 41



PO. Box 256
Farmington, New Mexico
87499

505
632-3306

January 16, 1990

Susan Meyers
Underground Storage Tank Bureau
New Mexico Environmental Improvement Division
1190 St. Francis Drive
Santa Fe, New Mexico 87505

Re: Underground storage tank removal at the Giant Bloomfield
Refinery

Dear Susan

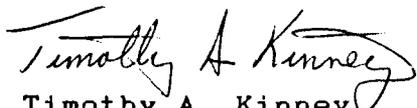
As you are aware, the two underground storage tanks located at the Giant Bloomfield Refinery are scheduled to be removed in the near future. One of the tanks was a diesel storage tank, and the other an unleaded gasoline tank. Diesel fuel has been detected around the diesel tank, but no gasoline is evident around the gasoline tank. We have contracted for the removal and destruction of the tanks in accordance with State regulations. However, since the refinery is undergoing general remediation under the direction of the OCD, and the area around the diesel storage tank is specifically addressed by the remediation project, we would like to avoid expending additional funds to reinvestigate and remediate the tank excavations. To this end, I have prepared the following summary of remediation efforts here at the refinery as related to the underground storage tanks. This brief summary should inform you as to the progress to date. The information presented was gleaned from reports previously submitted to both the EID and OCD. For a more detailed review of remediation efforts at the refinery see the report titled "SOIL AND GROUND WATER INVESTIGATIONS AND REMEDIAL ACTION PLAN" dated June of 1987 prepared by Geoscience Consultants, Ltd ("GCL").

In 1986, several thousand gallons of diesel fuel was released in the area around the underground diesel storage tank. This area is sometimes referred to as the Truck Fueling Area. To characterize the area, five exploratory boreholes were drilled. Three of these holes were completed as 2" observation wells and designated as GBR-33, GBR-34, and GBR-35. See the enclosed drawing #1013 for an overview of the area. Earlier test pumping in the adjacent Diesel Spill Area demonstrated a very low hydraulic conductivity, indicating that water is not migrating rapidly, and further, that pumping from a properly placed recovery well would recover degraded

ground water from the Truck Fueling Area. Consequently, a 6" recovery well was installed downgradient and designated as GBR-36 (also referred to as GRW-10). The well continues to be pumped, along with water from other recovery wells, through the onsite water treatment and discharge facility. It will continue to be pumped until completion of the remediation project. It should be noted that GCL has informed Giant that there is no reason to believe that diesel fuel is migrating past GBR-36. Please see the enclosed drawings depicting the location of the tanks and wells, and the onsite water treatment facility.

In summary, since the UST site is under remediation we request that no additional investigation and remediation be required as the tanks are removed. In all other respects, the tanks will be removed and destroyed, and reports made in accordance with the applicable UST regulations.

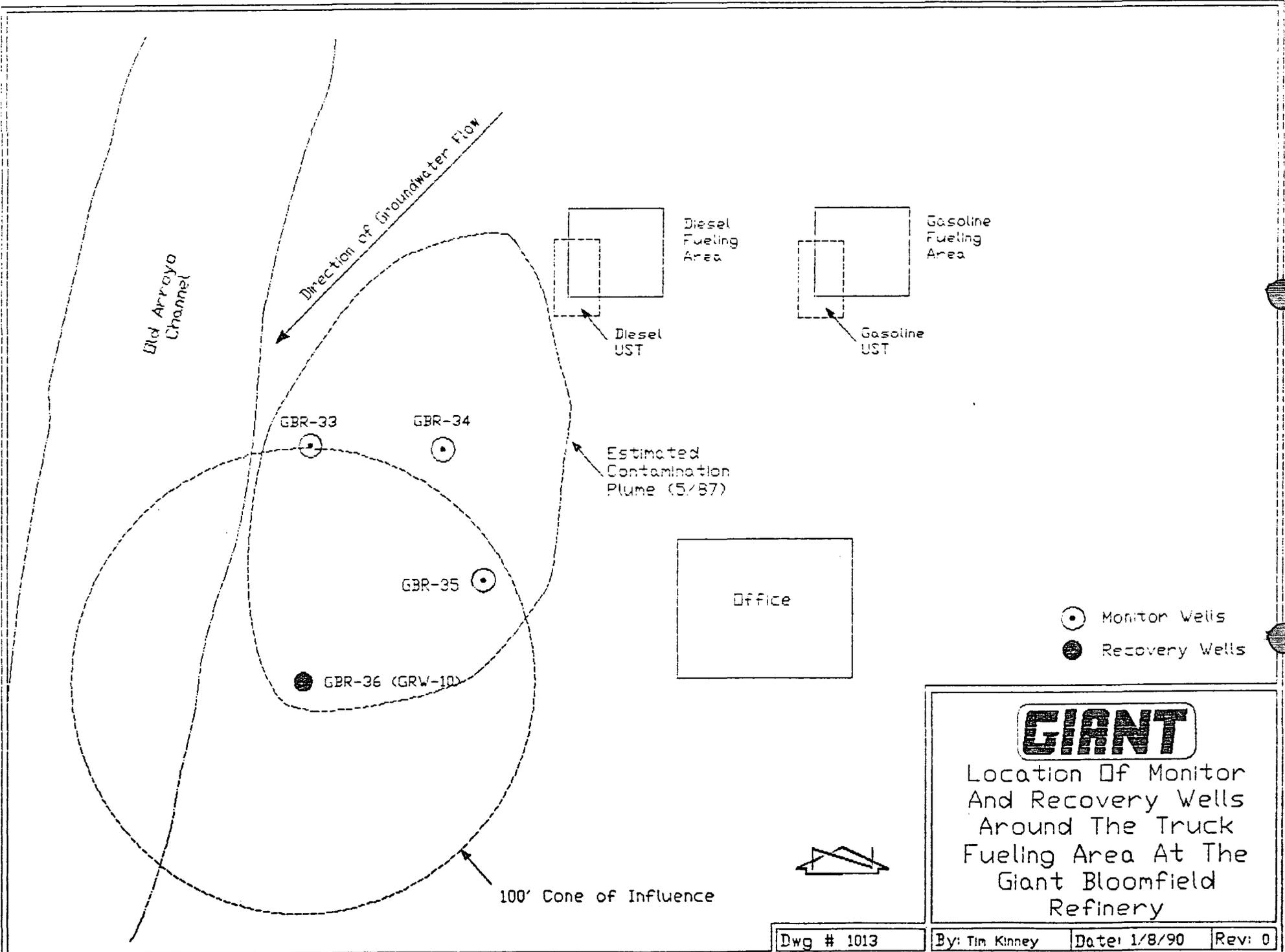
Sincerely,



Timothy A. Kinney
Project Manager

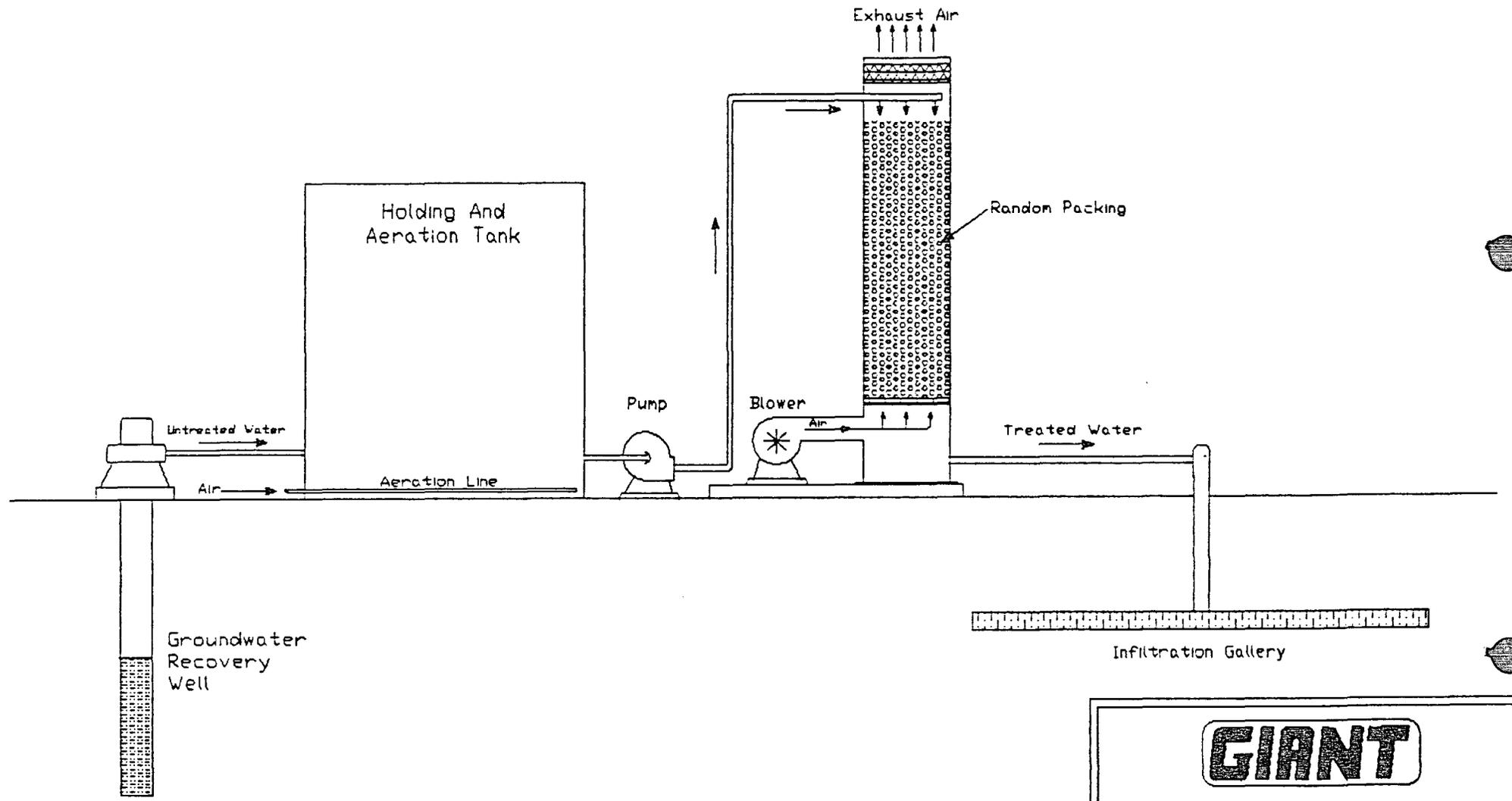
cc w/encl:

Dave Boyer, OCD
Kim Bullerdick, Giant Industries
Ned Kendrick, Montgomery and Andrews
Carl Shook, Giant Industries



GIANT

Location of Monitor
 And Recovery Wells
 Around The Truck
 Fueling Area At The
 Giant Bloomfield
 Refinery



GIANT

Simplified Pictorial
Representation Of The
Water Recovery, Cleanup,
And Reintroduction Process



5301 CENTRAL AVENUE, N.E.
SUITE 1000
ALBUQUERQUE, NM 87108
PHONE: (505) 255-1445

D. Boyer ocd
OIL CONSERVATION DIVISION
RECEIVED

'90 JAN 17 AM 8 34

January 15, 1990

Montgomery & Andrews
Attention: Mr. Ned Kendrick
325 Paseo de Peralta
Santa Fe, New Mexico 87504-2307

RE: Additional drilling and
well installation on
Giant Refinery property
RFW WO# 2878-04-01

Dear Mr. Kendrick:

Based on the results of the recent cone penetrometer and hydrocone work on Giant Refinery property south of the Lee Acres Landfill, the BLM and WESTON request that additional boreholes and well clusters be installed, as shown on the attached figure.

The results of the two lines of cone penetrometer work on Giant's property were that all hit a stiff clay layer before intercepting groundwater, with the exception of a few west of the access road. At this time it is not known if this clay layer is the start of bedrock or an alluvial clay layer that we were unable to push through. Therefore, in order to confirm the stratigraphy and determine the depth to groundwater and bedrock, we are requesting to drill four (4) boreholes at the locations shown on the attached figure. One of the boreholes will also determine if there is an old stream channel coming from the landfill which could be carrying contaminants.

Additionally, we are requesting to install 3 well clusters of 3 wells each within the old arroyo channel, as shown on the attached figure. The wells would be screened as follows:

- One across the top of the alluvial groundwater.
- One at the base of the alluvial groundwater.
- One in the first zone of saturated bedrock.

Based on our present schedule, we would be prepared to start this work on January 30, 1990 and the work would take approximately until March 2, 1990, to complete. Once completed, we would then be ready for the next round of sampling of all new and existing wells. At that time, we would be willing to do splits on any of the BLM wells and would like to do splits with Giant on Giant wells GBR 18, 32, 48, 49, and 50.

By performing this additional work we will be able to better understand the hydrology of the area south of the landfill and hopefully be able to determine why we see some of the anomalies we are presently seeing.



Attention: Mr. Kendrick

-2-

January 15, 1990

A complete set of data from the work which has been completed has been given to GCL. If additional data is needed please identify the data and we will provide you with copies. Due to the tight schedule for completion of the existing and proposed additional work, we would like to set up a meeting in our Albuquerque office between Giant, GCL, BLM, WESTON, EID, and OCD on January 23, 1990, to discuss the proposed locations. If this date is agreeable to you, please contact me directly to set up a time agreeable to all parties involved.

Sincerely,

ROY F. WESTON, INC.

A handwritten signature in cursive script, appearing to read "Berg Keshian, Jr.".

Berg Keshian, Jr. P.E.
Project Manager

BK/jem

Attachments

pc/encls: B. Murphy-BLM
K. Bullerdick-Giant
R. Hicks-GCL
D. Doremus-EID
D. Boyer-OCD
D. McQuillan-EID

addnbore



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

January 6, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Ms. Evelyn Benton
Landowner, Suburban Heights Subdivision
Post Office Box 1624
Hereford, Texas 79045

RE: GIANT INDUSTRIES' REQUIRED MONITOR WELLS

Dear Ms. Benton:

Giant Industries is about to begin the installation of a number of boreholes in the Lee Acres area. The purpose of these boreholes is to test further the subsurface water chemistry of the area. These boreholes will consist of holes approximately four inches in diameter and fifty feet deep. Some of these borings will then be lined with a metal pipe and fitted with a cap at ground surface level. These lined borings will then serve as monitoring wells. These wells will be used exclusively for obtaining small water samples for testing. The length of time they will be in use is indeterminate at present, but when their use is finished Giant will be required to properly plug them.

The New Mexico Oil Conservation Division has approved Giant's plan of operation. During the month of January, or shortly thereafter, Giant would like to install a monitor well on your property in the Suburban Heights Subdivision.

We urge you to cooperate with this activity, which will permit Giant to acquire additional information about subsurface conditions. Please feel free to contact me at (505) 827-5812 if you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

cc: Giant Industries
Rod Baker, Montgomery & Andrews

OIL CONSERVATION DIVISION
MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

'90 JAN 2 AM 10 11

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

December 29, 1989

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500

Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Victor R. Ortega	Edmund H. Kendrick
Jeffrey R. Brannen	Jay R. Hone
John B. Pound	Deborah J. Van Vleck
Gary R. Kilpatric	Gary P. Kaplan
Thomas W. Olson	Anne B. Hemenway
William C. Madison	Deborah S. Dungan
Walter J. Melendres	Anne B. Tallmadge
Bruce Herr	Kenneth B. Baca
Robert P. Worcester	Robert A. Bassett
John B. Draper	Susan Andrews
Nancy Anderson King	Paula G. Maynes
Janet McL. McKay	Neils L. Thompson
Joseph E. Earnest	Nancy A. Taylor
W. Perry Pearce	Rod D. Baker
Sarah M. Singleton	Sheila Scott Harris
Stephen S. Hamilton	Elizabeth A. Jaffe
Michael H. Harbour	R. Michael Shickich
Mack E. With	Janet W. Cordova
Katherine W. Hall	Martin R. Esquivel
Robert J. Mroz	Scott K. Atkinson
Richard L. Puglisi	Catherine E. Pope
Galen M. Buller	

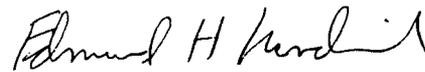
Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: Third Quarter 1989: Data From Giant's Bloomfield
Refinery

Dear Mr. Boyer:

In accordance with monitoring and reporting requirements in
Giant's Discharge Plan (GW-40), I am enclosing a quarterly data
report for Giant's Bloomfield Refinery. The report covers data
collected during July, August and September 1989.

Sincerely,



Edmund H. Kendrick

EHK:gr:32

Enclosure

File #8361-85-09

cc: Dennis McQuillan, EID (w/encl.)
William J. Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)

OIL CONSERVATION DIVISION
OF COUNSEL
William R. Federici

MONTGOMERY & ANDREWS
RECEIVED
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

89 FEB 18 AM 8 52
J. O. Sefton (1888-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
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December 15, 1989

ALBUQUERQUE OFFICE
707 Broadway, N.E.
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Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
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Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

David G. Boyer, Chief
Environmental Bureau
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Groundwater discharge plan No. GW-40

Dear Mr. Boyer:

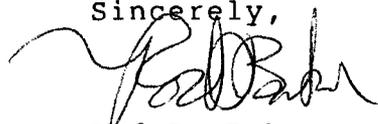
On November 15, 1989, I informed you that Discharge Plan No. GW-40 was in the name of Giant Refining Company, and I inquired whether the name change of Giant Refining's parent corporation, Giant Industries, Inc., required any formal action pertaining to the Plan. You stated that Giant Industries' name change would not obligate Giant Refining to give any written notice or to amend its permit.

Discharge Plan GW-40, however, is in the name of Giant Industries, Inc., not in the name of Giant Refining Company as I mistakenly indicated. Per the December 13, 1989, recommendation of Mr. David Englert, this letter notifies you that Giant Industries, Inc., has changed its name to Giant Industries Arizona, Inc. The name change does not reflect a change in ownership, and the activities at the Bloomfield Refinery facility are unaffected.

David G. Boyer, Chief
December 15, 1989
Page 2

If you have any questions or concerns, please give me a call.

Sincerely,

A handwritten signature in black ink, appearing to read "Rod Baker", written in a cursive style.

Rod D. Baker

RDB:ls:33
8361-89-17
cc: Kim H. Bullerdick, Esq.



OIL CONSERVATION DIVISION
RECEIVED

P.O. Box 256
Farmington, New Mexico
87499

July 31, 1990

'90 AUG 7 AM 8 44

505
632-3306

Mr. Bill Olson
Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: Further Offsite Investigation

Dear Mr. Olson

Pursuant to our meeting with the OCD on July 19, 1990 we are submitting a work plan outlining the approach for further investigation south of the refinery.

Soil Boring

A boring program to further investigate subsurface conditions south of Giant's Bloomfield Refinery will be initiated. Borings, utilizing a 6 7/8" hollow stem auger, will be advanced to beneath the ground water surface. At at least five foot intervals, soil will be collected using a split spoon sampler. A headspace analysis utilizing a photoionization (HNU) meter will be conducted on-site to determine the presence of hydrocarbon vapor in each sample. The hollow stem augers will be steam cleaned after completion of each borehole. The split spoon sampler will be cleaned after each soil sample is obtained.

The first borehole will be completed directly down gradient of monitor well SHS-11 along Meadow Lane. If significant hydrocarbon is identified in the borehole, the boring program will be moved to Sage Street which is the next county road to the south. If significant hydrocarbon is indicated in this borehole also, the boring program will be moved again, one county road further to the south. Additional boreholes will be installed 100 feet to the east and west of the first borehole that shows no significant indication of hydrocarbon. This procedure of moving borehole locations 100 feet east and west will continue until eight borings have been performed. The western most borehole will be located at the intersection of County Road 5500 (River Road). If, while drilling the line of eight boreholes, hydrocarbon is detected in a borehole, the remaining holes will not be drilled in that line and the borehole project will be moved further south. Boreholes will be abandoned by filling with sand to above the water table, installing a bentonite plug, and backfilling the hole with cuttings. Excess cuttings will be landfarmed in the refinery's landfarm area in one lift not to exceed 6" in depth.

Monitor Wells

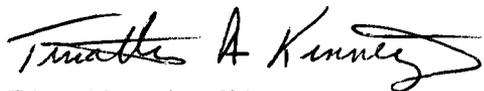
If no significant hydrocarbon is detected in a line of eight borings, three monitor wells will be installed in selected boring locations along the same line. Four inch, flush jointed, precleaned and prepackaged PVC screen and pipe will comprise the monitor well casing. The casing will be installed by connecting individual sections as they are lowered into the borehole through the hollow center of the auger column. A 15 foot section of screen will be placed at the air/water interface, with five feet above and 10 feet below the static water level. After the well casing has been installed, the auger flights will be retrieved in 5 foot intervals. Precleaned and prepackaged 10-20 grade silica sand will be poured down the auger annulus to fill the void left as the auger flights are removed. This sand, combined with a small amount of formation sand that may slough into the borehole, will comprise the filter pack for the well screen. Sand will be placed to a level of 2 to 3 feet above the well screen where a bentonite seal will be installed to form an impervious barrier to downward moisture migration. The remainder of the well annulus will be grouted with a neat cement slurry containing 5% bentonite. All auger flights will be removed before the grout is poured. The wells will be set in a flush to grade watertight steel vault. Wells will be located on the extreme northern boundary of the county road right-of-way. Cuttings will be disposed of in the same manner as excess cuttings from the soil borings.

Sampling

During boring, if hydrocarbon is indicated by the HNU meter, a soil sample will be gathered from just above the soil water interface for laboratory EPA 601 and 602 analysis. Upon completion and development of monitor wells, water samples will be collected from the wells and analyzed for EPA 601, EPA 602, metals, and general water chemistry. Procedures for development and sample gathering are noted in our report submitted May 23, 1990.

We plan to commence work the week of August 13, 1990. A report of the investigation, including the previous installation and sampling of SHS-10,11,12, should be complete by October 1st. Please call if you have any questions or comments.

Sincerely,



Timothy A. Kinney
Project Manager
Bloomfield Refinery Remediation

cc:

Carl Shook - Giant
Kim Bullerdick - Giant
Alvis Moore - Giant
Martin Nee - GCL
Bill Baggett - San Juan County Attorney
William Murphy - BLM
Chris Shuey - SWRIC
William McDonald - EID
Dale Doremus - EID



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

July 31, 1990

Mr. Bill Baggett
San Juan County Attorney
112 South Mesa Verde
Aztec, New Mexico 87410

Re: Soil Boring and Monitor Wells in the Suburban Heights
Subdivision

Dear Mr. Baggett

I appreciate the time you spent with me today discussing our continuing investigation south of Highway 64. San Juan County's cooperation in our investigation is very much appreciated.

Enclosed is a copy of the work plan submitted to the OCD. It outlines the details of our further investigation.

We appreciate the County's concerns regarding the borings and wells, and are willing to enter into an agreement similar to the previous one addressing access, abandonment and liability issues. Our current schedule is to begin drilling the week of August 13, 1990.

I will look forward to hearing from you and can provide additional information as you may require. Again, thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Timothy A. Kinney".

Timothy A. Kinney
Remediation Project Manager

Carl Shook - Giant
Kim Bullerdick - Giant
Bill Olson - OCD
Martin Nee - GCL



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

July 24, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-336

Timothy A. Kinney
Giant Refining Co.
P.O. Box 256
Farmington, New Mexico 87499

RE: GIANT BLOOMFIELD REFINERY OFF-SITE HYDROGEOLOGIC INVESTIGATION

Dear Mr. Kinney:

On July 19, 1990 the New Mexico Oil Conservation Division (OCD) met with representatives of the Giant Refining Company and Giant's consultant Geoscience Consultants, Ltd. (GCL) to discuss the preliminary results following Giant's installation of offsite monitoring wells SHS-10, SHS-11 and SHS-12. This letter will serve to summarize the presentations, requests and the agreements for additional work regarding the definition of the limit of petroleum contaminants migrating offsite from the Giant Bloomfield Refinery:

A) PRESENTATIONS

- 1) GCL presented the preliminary analytical results of ground water sampling of the recently installed monitor wells SHS-10, SHS-11 and SHS-12. Ethylbenzene and xylene were observed in SHS-10 at levels below New Mexico Water Quality Control Commission standards. Approximately one foot of floating product was found in SHS-11. No detectable dissolved petroleum related constituents were observed in SHS-12.
- 2) GCL presented a water table elevation map showing a predominantly southerly ground water flow across the area of investigation.

- 3) Giant presented a 1962 aerial map of the refinery, the Lee Acres landfill and the Lee Acres subdivision area showing the traces of relic arroyo channels. The relic channels were shown interfingering through the current residential area due south of the refinery.

B) REQUESTS

- 1) Giant requested OCD permission to continue investigation of the extent of contamination with a soil boring program prior to installing monitor wells. Because of problems with access for drilling Giant proposed that borings be conducted along the county right of way of Meadow Lane, the next east-west county road due south of wells SHS-10, SHS-11 and SHS-12.
- 2) Giant requested that the submission of the August 24, 1990 report on the offsite investigation be delayed so that a more comprehensive report could be prepared. Such a report would include the results of soil borings and any additional monitor wells required.
- 3) Giant requested OCD permission to landfarm cuttings from monitor wells SHS-10, SHS-11 and SHS-12 in the landfarm area on refinery property.

C) AGREEMENTS

- 1) The OCD approved of Giant's proposal to continue to define the extent of offsite petroleum-related contamination of ground water by performing a soil boring program to determine the optimum location of future monitoring wells.

It was agreed that soil vapor measurements will be taken every five feet during drilling using standard procedures employed in the last investigation. One saturated insitu soil sample will also be taken at the water table for laboratory analysis of aromatic and halogenated volatile organics using appropriate EPA laboratory methods.

It was agreed that soil borings would be performed on 100 foot intervals along the county right of way starting from the corner of River Road and Meadow Lane extending east to the area of the right of way due south of BLM-30 and BLM-31.

- 2) The OCD agreed to defer submission of the August 24, 1990 report until the soil boring program has been completed. A final report on the investigation will be submitted to

OCD within 6 weeks of the final sampling event.

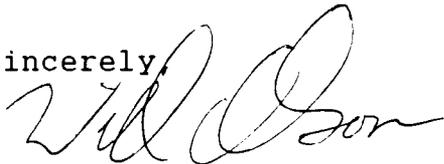
Giant will submit well logs, including soil vapor measurements with depth and copies of the analytical results of water quality sampling for SHS-10, SHS-11 and SHS-12 when the analyses are finalized.

- 3) The OCD approved of Giant's request to landfarm the cuttings from monitor wells SHS-10, SHS-11 and SHS-12 in the refineries landfarm area provided that the cuttings are spread in one lift not to exceed six inches.

The OCD understands that soil borings will proceed as soon as a drill rig can be mobilized for the investigation. Please notify the OCD in advance of initiation of the soil borings so that OCD may have the opportunity to observe the investigation activities. The OCD looks forward to the submission of a report on the investigation.

Please be advised that OCD approval does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

WCO

xc : Frank Chavez, OCD Aztec District Office
Martin Nee, Geoscience Consultants Ltd.
Richard Mitzelfelt, EID Director
Dale Doremus, EID Superfund
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information Center
William Murphy, BLM Albuquerque

OCD, Giant, GCL Meeting - Santa Fe
7/19/90 10:30 am

presented water table map and aerial photos

Do borings on 100' spacing from road south
at SHS-11, 12 etc. Log to HAW readings
to determine MHW locations

1' product in SHS-11
EX in SHS-10 below WACL str.
SHS-12 clean for petro related (BTEX, etc)

Put out August 24th Report and 1 info
on borings and potential additional MHW's
based on borings info
Want to landform cuttings from SHS-10, 11, 12

Do borings and additional MHW's before Sept 25th

File with EPA for interim status

Lee Avenue streets

Circle Dr

Meadow Lane

Sage St.

Participant

Dave Boyer - OCD

Bill Olson - OCD

Tim Kinney - Giant

Martin Nee - GCL

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1000	Date 7/16/90
---	-----------------------------------	-----------	--------------

Originating Party

Other Parties

Tim Kinney - Giant Refining Co

Bill Olson - OCD Santa Fe

Subject

Giant Bloomfield Refinery ODF Site Investigation

Discussion

GBR and GCL went to meet with OCD to discuss recent ODF-site investigations

GBR has begun automatic operation of the batching system. Water is being run for the first batching on water stored in the tanks

Conclusions or Agreements

OCD will meet with GBR + GCL on 7/19/90 at 10:30 am

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1015

Date 6/26/90

Originating Party

Other Parties

Tim Kinney - Giant Refining Co.

Bill Olson - OCA Santa Fe

Subject

Giant Bloomfield Offsite Investigation

Discussion

Giant completed three additional wells along the county right of way east of the Reynolds.

① Approximately 1' of product in the middle well, West well appeared clean (no odors), East well had positive H₂S readings.

Giant still having problems with right of way access for piping, recovery fluid through the culvert.

I suggested hauling product from product wells on an interim basis if they recover slowly.

Conclusions or Agreements

Distribution

~~File~~
Dave Bayer

Signed

Bill Olson



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

June 13, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-311

Edmund H. Kendrick
Montgomery and Andrews
P.O. Box 2307
Santa Fe, New Mexico 87504-2307

RE: GIANT BLOOMFIELD REFINERY OFF-SITE HYDROGEOLOGIC INVESTIGATION

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (OCD) has completed review of the May 23, 1990 "TECHNICAL APPROACH FOR FURTHER OFF-SITE INVESTIGATION" for the Giant Bloomfield Refinery.

On June 13, 1990, the OCD discussed their review of the document with you and Mr. Timothy Kinney of the Giant Refining Company. During this conversation, the OCD made recommendations on the locations and sampling of the additional monitor wells and Giant Refining Company agreed with OCD's recommendations.

The OCD approves of Giant's May 23, 1990 "TECHNICAL APPROACH FOR FURTHER OFF-SITE INVESTIGATION" to define the extent of dissolved phase petroleum-related contaminants in ground water conditioned upon the following agreements:

- 1) The location of monitor well SHS-10 will be moved 50 feet west of its proposed location and monitor well SHS-9 will be moved 100 feet west of its proposed location as shown on figure 1-1 (see attachment) providing a 150 foot spacing between monitor wells.
- 2) Giant will sample all off-site monitor wells for aromatic and halogenated volatile organics (EPA 601 and 602) and general water chemistry (cations and anions).
- 3) Giant will also sample monitor wells SHS-3, SHS-4, SHS-9, SHS-10 and SHS-11 for polynuclear aromatic hydrocarbons (EPA 610) and heavy metals. If monitor wells SHS-3 and SHS-4 have previously been sampled for

these constituents, those results may be submitted in lieu of sampling at this time.

- 4) Drill cuttings from the monitor wells will be stored in drums until the presence of any contaminants have been determined.

The OCD understands that monitor well drilling will begin on Monday June 18, 1990 and will attempt to have a representative visit the site during drilling. The OCD looks forward to the August 24, 1990 submission of a report on the investigation.

Please be advised that approval of this work plan does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability under other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

WCO

Enclosure

xc w/enclosure: William J. Lemay, OCD Director
Frank Chavez, OCD Aztec District Office
Timothy Kinney, Giant Refining Co.
Richard Mitzelfelt, EID Director
Dale Doremus, EID Superfund
Dave Tomko, EID Farmington Office
Chris Shuey, Southwest Research and Information
Center
William Murphy, BLM Albuquerque

GIANT BLOOMFIELD REFINERY

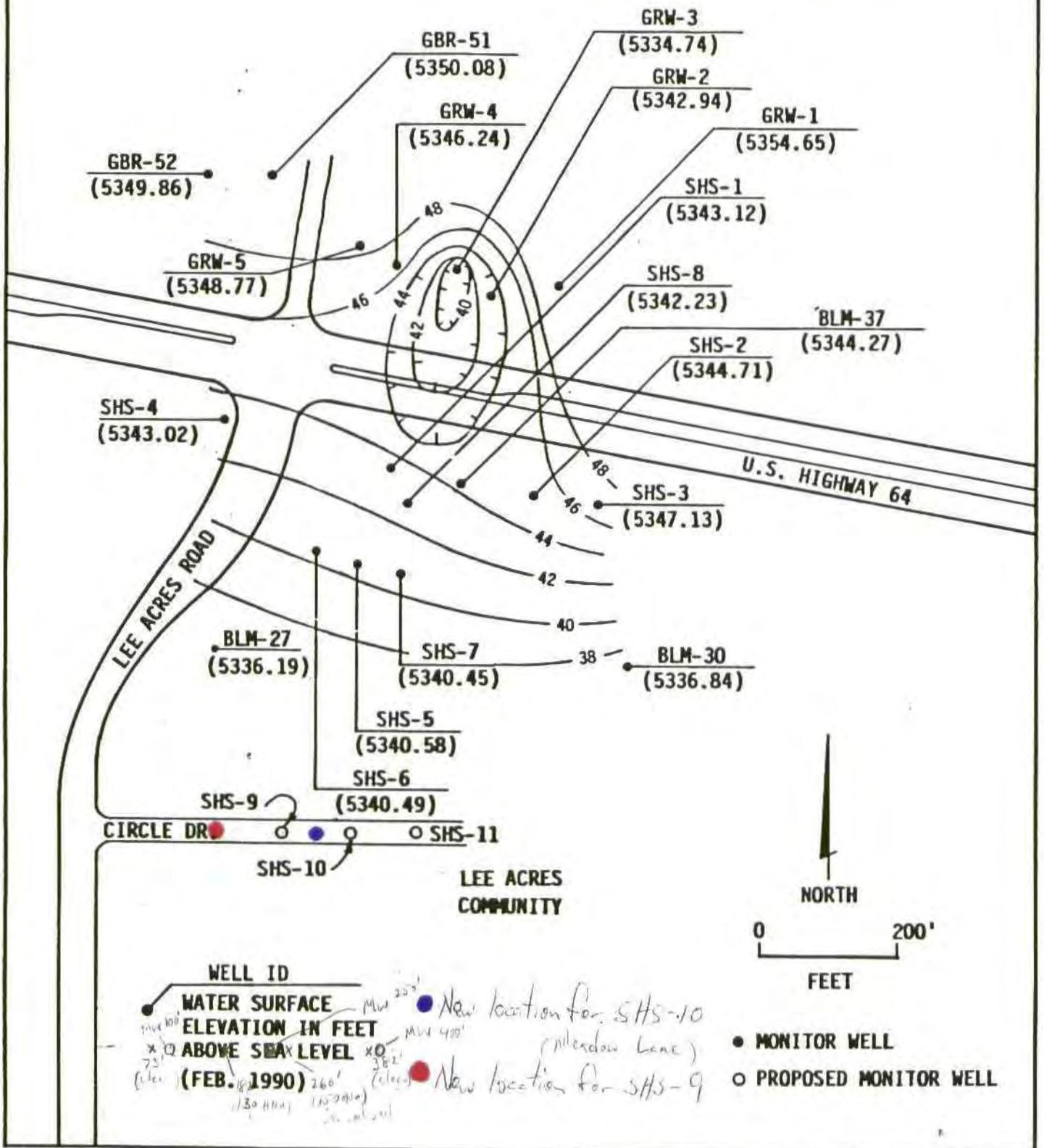


FIGURE 1-1

PROPOSED MONITOR WELL LOCATIONS

(Sage Plots)

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1322

Date 6/13/90

Originating Party

Other Parties

Tim Kinney - Great Reclaiming Co

Bill Olson - OCD Santa Fe

Subject

Sampling of off-site wells.

Discussion

He asked if water quality analyses from the current off site wells (SHS-1-8) could omit heavy metal and PAH's parameters since these were tested in the last sampling.

Conclusions or Agreements

OK to omit heavy metals and PAH's from wells SHS 1,2,5,6,7,8
but OCD wants metals and PAH's on the new wells
and SHS-3,4

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1020	Date 6/13/90
---	-----------------------------------	--------------	-----------------

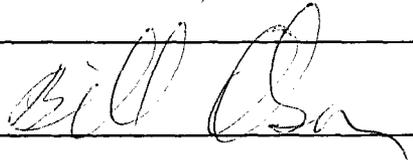
<u>Originating Party</u> Bill Olson - OCD Santa Fe	<u>Other Parties</u> Tim Kinney - Giant Refining Co. 632-3306
---	---

Subject
Giant Bloomfield Refinery off-site Proposal

Discussion
OCD has reviewed GBR's 5/20/90 5/22/90 "Technical Approach For Further Off-site Investigation"
OCD recommends that wells SHS-9, SHS-10 be spaced on 150 foot intervals (instead of 100 ft.) west of ~~SHS~~ proposed SHS-11 location
OCD also requests that GBR sample all off-site wells instead of just the ~~re~~ 3 new wells.

Conclusions or Agreements
GBR agreed with OCD's above recommendations and requests
OCD will send out approval letter conditioned upon above agreements tomorrow

Distribution file

Signed 



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

RECEIVED
DIVISION
'90 JUN 14 AM 9 01

June 12, 1990

Mr. Bill Olson
Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

Re: Disposition of well cuttings

Dear Mr. Olson

As noted in our May 23, 1990 report titled "Technical Approach For Further Off-Site Investigation" additional drilling is planned for the week of June 18, 1990. We request your permission to dispose of the resulting well cuttings within the bermed soil storage area in the refinery.

Please call if you need additional information.

Sincerely,

Timothy A. Kinney
Remediation Project Manager

cc: Martin Nee, GCL
Ned Kendrick, M&A
Kim Bullerdick, Giant
Carl Shook, Giant

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

June 11, 1990

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

REPLY TO SANTA FE OFFICE

Victor R. Ortega	Galen M. Buller
Jeffrey R. Brannen	Edmund H. Kendrick
John B. Pound	Jay R. Hone
Gary R. Kilpatrick	Deborah J. Van Vleck
Thomas W. Olson	Gary P. Kaplan
William C. Madison	Anne B. Hemenway
Walter J. Melendres	Kenneth B. Baca
Bruce Herr	Robert A. Bassett
Robert P. Worcester	Susan Andrews
John B. Draper	Paula G. Maynes
Nancy Anderson King	Neils L. Thompson
Janet McL. McKay	Nancy A. Taylor
Joseph E. Earnest	Rod D. Baker
W. Perry Pearce	R. Michael Shickich
Sarah M. Singleton	Janet W. Cordova
Stephen S. Hamilton	M. Eliza Stewart
Michael H. Harbour	Scott K. Atkinson
Katherine W. Hall	Martin R. Esquivel
Robert J. Mroz	Catherine E. Pope
Richard L. Puglisi	Phyllis S. Lynn

RECEIVED

JUN 13 1990

OIL CONSERVATION DIV.
SANTA FE

Mr. William C. Olson
Environmental Bureau
Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Giant's Bloomfield Refinery: Off-Site Hydrogeologic
Investigation

Dear Mr. Olson:

In accordance with your letter of April 10, 1990, I am enclosing a revised well log from SHS-8 showing the bottom eight feet of the well. This borehole log replaces the log appearing in Appendix A of the Second Report of Off-Site Investigations dated February 23, 1990 prepared by Geoscience Consultants, Ltd.

Sincerely,



Edmund H. Kendrick

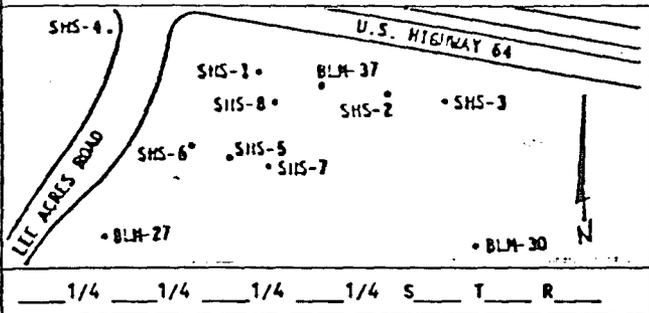
EHK:gr:13

Enclosure

File #8361-89-12

cc: Dennis McQuillan, EID (w/encl.)
William J. Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)

BOREHOLE LOG (SOIL)



SITE ID: OFFSITE GIANT LOCATION ID: SHS-8
 SITE COORDINATES (ft.): _____
 N _____ E _____
 GROUND ELEVATION (ft. MSL): _____
 STATE: NEW MEXICO COUNTY: SAN JUAN
 DRILLING METHOD: HOLLOW STEM AUGER
 DRILLING CONTR.: WESTERN TECHNOLOGIES INC.
 DATE STARTED: 01/09/90 DATE COMPLETED: 01/09/90
 FIELD REP.: LINLEY
 COMMENTS: _____

LOCATION DESCRIPTION:

DEPTH	LITH.	REC	S A M	RUN			SAMPLE		USCS	VISUAL CLASSIFICATION
				#	FROM	TO	I.D.	TYPE		
0		60%	1	1	0	4'			SM	0-6' SANDY SILT: Dk yelsh orange (10 YR 6/6) v fn to fn grained uncons, mod sorted, sbang to sbrnrd, rootlets.
5		80%	2	2	4	9'			SW	6-15' SAND: Mod yelsh brn (10 YR 5/4) fn to med crs, poorly sorted, uncons sbang to sbrnrd, Grv at =8' BGL and =1' thick, up to 1-2" diam, sbrnrd to sbang, rootlets.
10		70%	3	3	9	14'				
15		30%	4	4	14	19'			SM	15-17' SANDY SILT: Pale yelsh brn (10 YR 6/2) v fn to med fn grained, poorly sorted semi to uncons, sbang to sbrnrd.
20		60%	5	5	19	24'			SW	17-37' SAND: Mod yelsh brn (10 YR 5/4) fn to med crs, poorly sorted, uncons, sbang to sbrnrd, moist, at =37' BGL noted blk stain in cuttings w/HC odor.
25		50%	6	6	24	29'				
30		70%	7	7	29	34'				
35		100%	8	8	34	39'				
40		70%	9	9	39	41'			SM	37-39' SILTY SAND: Dk gnsh gry (5 GY 4/1) to grysh blk (N 2) (HC staining ?) v fn to med fn sand, semi to uncons, mod poorly sorted, sbang to sbrnrd, v moist, HC odor w/staining, M _{Nu} = 120, LEL = 74%.
45		0%	10	10	41	45'			SW	39-41' SAND: Dk gnsh gry (5 GY 4/1) fn to med grained, poorly sorted, uncons, sbang to sbrnrd, sat.
45		10%	11	11	45	50'				
50		20%	12	12	50	53'			SM	41-53' SANDY SILT: Gnsh gry (5 GY 6/1) v fn to fn grained, mod poorly sorted, semi to uncons, sbang to sbrnrd, sat.

RECEIVED

JUN 13 1990

OIL CONSERVATION DIV.
 SANTA FE

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
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William R. Federici

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SANTA FE OFFICE
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May 30, 1990

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Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
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Robert J. Mroz	Catherine E. Pope
Richard L. Puglisi	Phyllis S. Lynn

Mr. William C. Olson
Environmental Bureau
Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Giant's Bloomfield Refinery: Off-Site Hydrogeologic
Investigation

Dear Mr. Olson:

In accordance with your letter of April 10, 1990, I am
enclosing the following for your review:

1. Giant's proposed "Technical Approach for
Further Off-Site Investigation" dated
May 23, 1990; and
2. Laboratory analysis sheets for past
water quality analyses bound in a volume
entitled "Analytical Results for
Off-Site Wells, 1989."

Please contact me as soon as you have had an opportunity to
review the enclosed proposal.

Sincerely,



Edmund H. Kendrick

EHK:gr:37

Enclosures

File #8361-89-12

cc: Dennis McQuillan, EID (w/encls.)
William J. Murphy, BLM (w/encls.)
Chris Shuey, SWRIC (w/encls.)



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

90 MAY 31 AM 8 48

May 29, 1990

Mr. Bill Baggett
San Juan County Attorney
112 South Mesa Verde
Aztec, New Mexico 87410

Re: Monitor wells in the Suburban Heights Subdivision

Dear Mr. Baggett

I appreciate the time you spent with me today discussing our monitor well installation plans. San Juan County's cooperation in our investigation is very much appreciated.

As noted on the attached well location drawing (Fig. 1), we plan to install three wells along the north edge of Circle Drive in the Suburban Heights Subdivision. The purpose of the wells is to monitor the quality of groundwater in the aquifer. Depending on the geology, the wells will be 40 to 60 feet deep. The well casing will consist of PVC pipe with the lower 10 to 20 feet screened for water infiltration. The wells will be completed subsurface with a bolted manhole cover at grade. The well casing itself will be capped and kept locked. Details of the well completion are illustrated on Figure 2 which is attached.

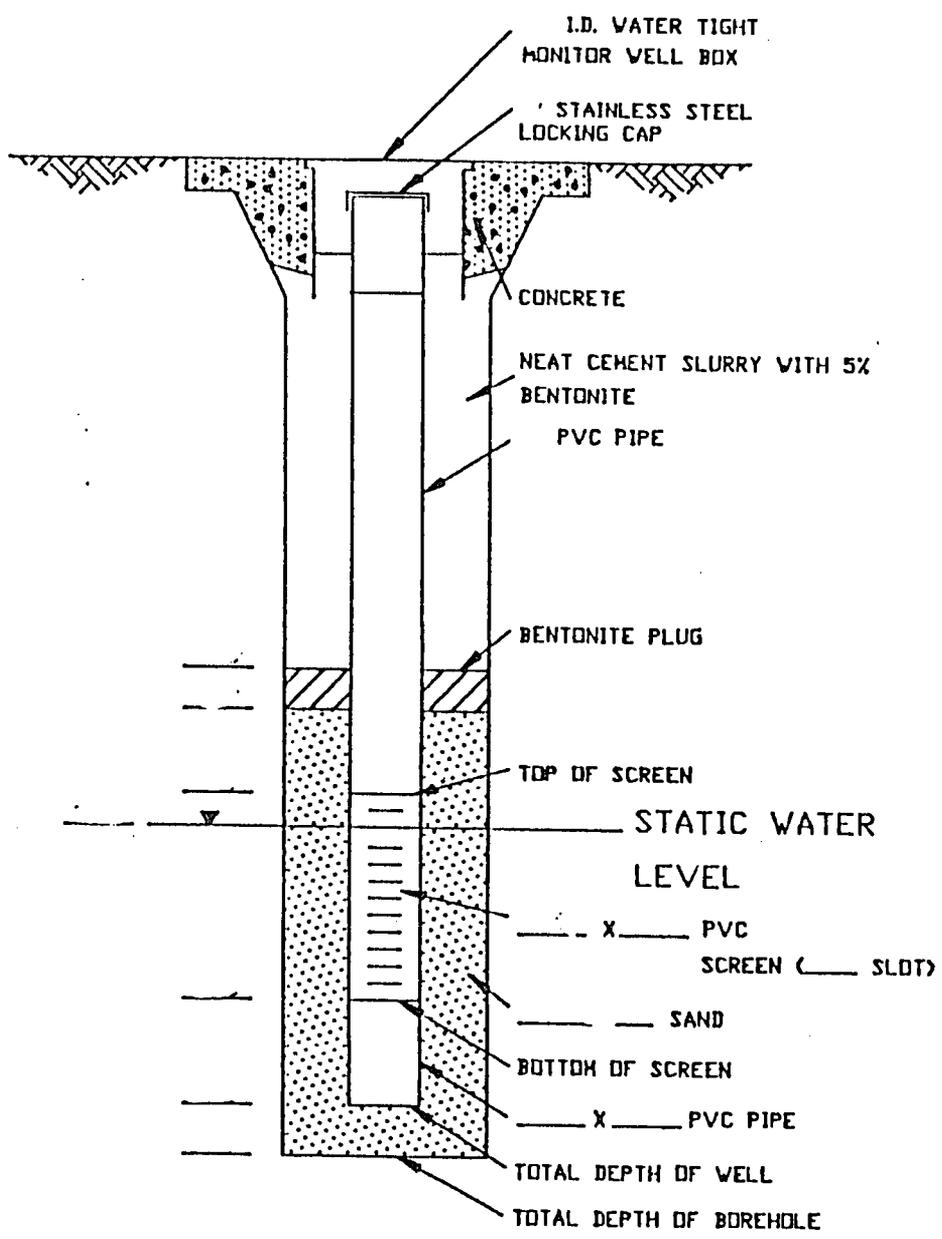
We appreciate the County's concerns regarding the wells, and are willing to enter into a reasonable agreement addressing access, abandonment and liability issues. Our current schedule is to begin drilling the week of June 18, 1990. In the short interim, I trust that we can work out details of the agreement.

I will look forward to hearing from you and can provide additional information as you may require. Again, thank you for your consideration.

Sincerely,

Timothy A. Kinney
Remediation Project Manager

Carl Shook - Giant
Kim Bullerdick - Giant
Ned Kendrick - Montgomery and Andrews
Bill Olson - OCD



MONITOR WELL
 Figure 2

GIANT BLOOMFIELD REFINERY

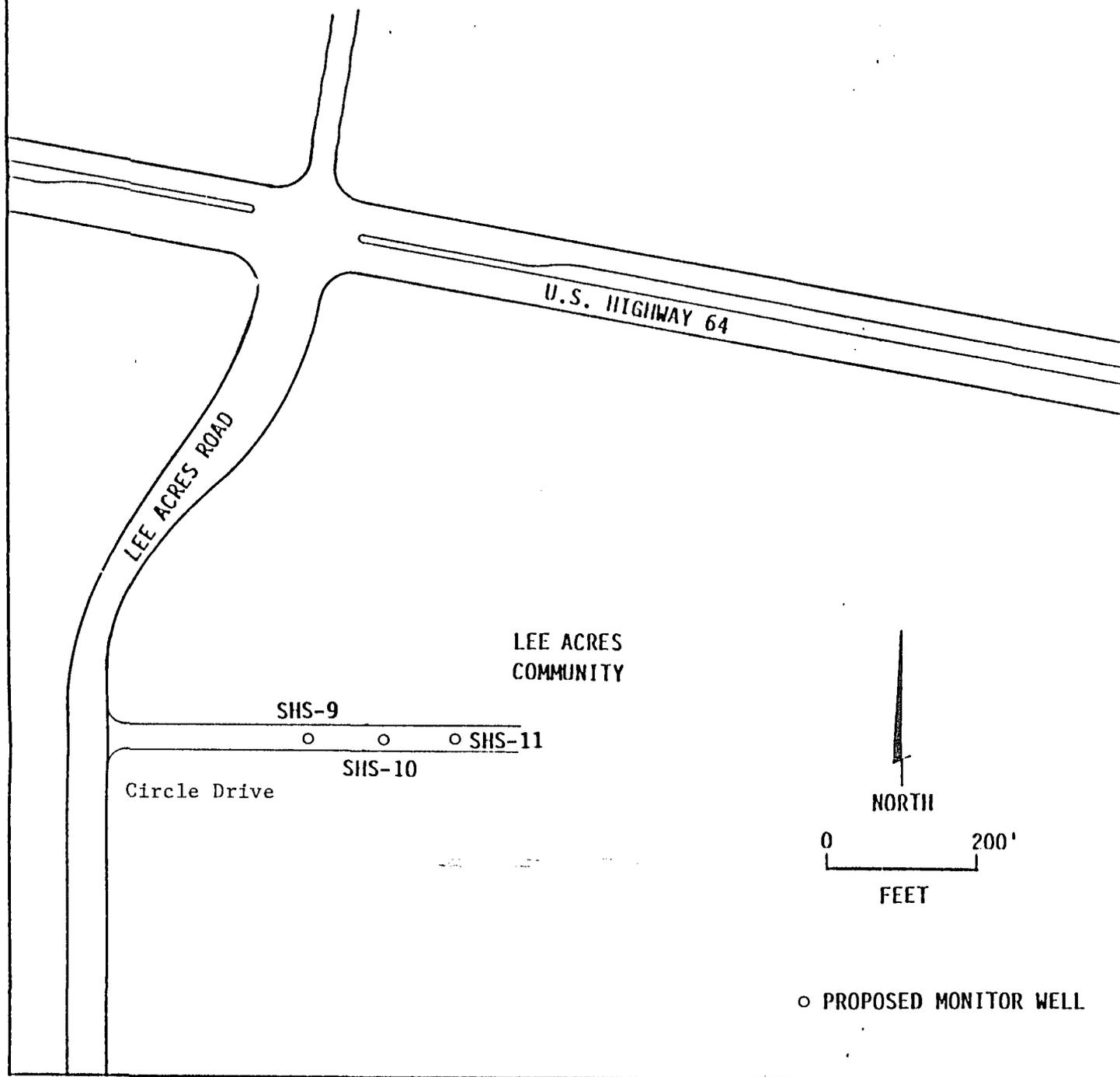


FIGURE 1
PROPOSED MONITOR WELL LOCATION MAP



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

May 29, 1990

RECEIVED
DIVISION
JUN 1 AM 8 44

Mr Frank Martinez
New Mexico State Highway
and Transportation Department
District #5 Permit Unit
Post Office Box 4127
Santa Fe, New Mexico 87502

Dear Mr. Martinez

As per our recent phone conversation, I am submitting a revised application for installation of utilities under Highway 64 in Farmington. Attached is the application, a revised sketch of the proposed installation and my original letter of application.

We propose to install electric and water utilities through the existing 30" concrete culvert, as noted in our previous application. However, they will be installed inside a 6" steel pipe. In addition, we propose to install a 1" schedule 80 PVC compressed air line in the same 6" pipe. The location of the culvert is mile marker 6 on State Highway 64. The attached sketch illustrates the installation details.

When we spoke recently, concerns regarding cleaning of the culvert, and problems that obstacles within the culvert present to cleaning, were discussed. To address these issues, we propose to take the responsibility of cleaning the culvert during the life of the remediation project, and, to remove the utilities when they are no longer needed. As sediment and debris accumulate, or as the State may require, we will clean the culvert. The condition of the culvert will dictate the frequency of cleaning.

Please give our proposal favorable consideration. As we seek to clean up the groundwater, prudent use of limited resources becomes a key issue. The cost savings for utilizing the culvert are considerable, and since the project is temporary, we hope that the State will see this as a reasonable alternative to a soil boring under the highway. Thank you for your consideration. Please contact me if any questions arise.

Sincerely,

Timothy A. Kinney
Remediation Project Manager

cc: Carl Shook - Giant
Kim Bullerdick - Giant
Ned Kendrick - Montgomery and Andrews
Bill Olson - OCD ✓

APPLICATION FOR PERMIT TO INSTALL UTILITY FACILITIES
WITHIN PUBLIC RIGHT OF WAY

TO: NEW MEXICO STATE HIGHWAY DEPARTMENT
P. O. BOX 1149
SANTA FE, NEW MEXICO 87503

Permit No. _____
 New Installation
 Renewal Permit
 Relocation
 Remain in Place

1. Pursuant to New Mexico Statutes Annotated, 1953 Compilation, Sections 55-7-19 and 55-2-7, the undersigned
Giant Refining Company

Address: 606 U. S. Hwy. 64 P. O. Box 256 Farmington, NM 87401

herein makes application to use highway rights of way to install: 1-1" Sch 80 PVC Air Line
Size and Type of Facility 1-1" Sch 80 PVC Water Line 1-1" Galvanized Steel Conduit

in the following location: N. M. Project No. _____, S. R. No. 64

Hwy. Station _____ to Hwy. Station at mile marker 6

County, Section San Juan, Sec. 29, Township 29N, Range 12W

2. For the purpose of this application "within" shall be construed as meaning "on, over, under, across or along."

a. "Engineer" shall be construed as meaning the District Highway Engineer of the New Mexico State Highway Department or his representative.

b. "Applicant" shall be construed as meaning the individual, firm, corporation, association, governmental subdivision, or other organization making application, or the successors of any of the above.

c. "Facility" shall be construed as meaning, but not limited to, and publicly, privately, cooperatively, municipally or governmentally owned facility used for carriage, distribution or transmission of water, gas or electricity, oil and products derived therefrom, sewage, steam or other projects carried by means of pipelines, conduits, wires, culverts, ditches, conveyors or other methods.

d. If application is for a parallel installation, justification as to why private right may not be utilized must be furnished.

3. Applicant proposes to relocate, install or leave facility 150 feet within the width of the right of way line. The proposed installation shall be:

Crossing Subsurface *Through Culvert
(Crossing or Parallel) (Subsurface or Overhead) (Boring, Jacking or Pavement Cut)

a. If Applicant requests installation by pavement cut, complete justification therefore shall be submitted by attachment.

b. Where application for pavement cut is justified, the application may be held in abeyance pending receipt of cash bond in an amount to be fixed by the Engineer.

4. There is attached hereto a diagrammatic dimensioned drawing showing the location of existing and/or proposed installation referenced to roadway and rights of way, right of way lines, any access control lines, distance of proposed installation above or below grade, highway stationing, identification of materials to be used and any other pertinent data. If application is for parallel installation, nature of adjacent land use shall be shown. Proposed installations on or in bridges or other structures, or for the installation of any structures, will require detailed structural drawings.

5. Applicant desires this permit to be in affect for 5 years. Permit will not be issued for a period longer than 25 years, must be renewed upon expiration and the burden of timely renewal is on the Applicant. The Applicant shall formally notify the engineer of actual commencement and completion of construction of the installation. The Applicant shall also formally notify the Engineer of removal or abandonment of the facility, or relinquishment of the permit.

6. The signing of the application by the Engineer and returning it to the Applicant shall validate this application as a permit. The granting of this permit shall not be construed as granting any easement or property right.

7. Servicing of facilities will not be permitted within the access control lines on any controlled access project. Should an emergency occur, the Applicant shall notify the Engineer and shall provide such flagmen, flashers, warning or other safety devices as required by the Engineer. All routine maintenance shall be performed from outside any access control lines.

8. The relocation or installation of facilities within public right of way shall be in strict conformance with all provisions of this application, drawing and the Instructions for Utility Permits, as they may be modified by the Engineer, and no departure therefrom may be made without the written consent of the Engineer. All facilities shall be so placed that they will not interfere with nor endanger any roadway features nor other existing facilities. All construction of facilities shall be subject to the inspection and approval of the Engineer. All such work shall be performed so that danger, inconvenience and delay to the traveling public will be held to a minimum. Protection and handling of traffic during the installation are the responsibility of the Applicant and must be approved by the Engineer.

9. The Applicant will, except as otherwise ordered by the Engineer, restore the public right of way, and all bridges or other structures thereon or adjacent thereto which have been altered or affected by facility installation performed hereunder, in accordance with sound construction practices and the Engineer's specifications, and shall cause the work to be done in a workmanlike manner. If any damage is caused to the highway right of way or to any bridge, structure or improvement thereon or adjacent thereto by reason of the installation, maintenance, alteration or removal of such facilities or other appurtenances, the Applicant will reimburse the Engineer the full amount thereof promptly upon demand by the Engineer; provided, however, that the obligation imposed under this paragraph shall not apply in the event the damage resulted from causes beyond the control of

*There is an existing 8-10" line in the culvert already.

the Applicant. All such facilities located within the right of way shall at all times be kept in such repair so as not to damage the highway, inconvenience or endanger the traveling public and shall be kept free from advertisement, posters and the like.

10. The Applicant will at all times indemnify and save harmless the Engineer from any and all claims of every kind of character caused by or incident to the installation, alteration, removal or condition of these facilities in the right of way and will promptly reimburse the Engineer for any and all expenses incurred by the Engineer in resisting any such claim or claims. Nothing herein shall be construed to mean that the Applicant hereunder will indemnify and save harmless the Engineer from any claim caused by or incident to any neglect, carelessness or breach of duty on the part of the Engineer.

11. Should the Applicant at any time fail to promptly and fully perform any of the obligations imposed hereby and after thirty (30) days written notice thereof, the Engineer may, at his option (a) cause the obligations to be fully carried out and performed, and the Applicant will promptly reimburse the Engineer for all costs and expenses incident thereto, (b) may summarily order the removal of such facility and if the Applicant fails to comply within a reasonable time, the Engineer may direct the removal of the facility with all costs and expenses thereto to be borne by Applicant.

12. If by reason of any change in the location, construction, grade or by any other matter affecting the highway upon which any facility is located because of changing traffic conditions or otherwise, it shall become advisable in the opinion of the Engineer that said facility be removed, relocated or otherwise modified, the Applicant, upon written notice from the Engineer, shall remove, relocate or modify such facility without undue delay in such manner as the Engineer may direct or approve, at the Applicant's expense and at no cost to the Engineer. All facilities located on public right of way under the dual jurisdiction of the State and a subordinate governmental entity shall comply with all applicable rules and regulations of such entity properly and lawfully in force and including but not limited to provisions of local franchises not in conflict with the rules and regulations of the Engineer. The Engineer makes no warranty either express or implied as to the continued existence of any highway in any particular location and expressly assumes no obligation with regard to the facility upon change, vacation or abandonment of any highway or portions thereof.

13. Neither the making of this application nor anything herein contained shall constitute a waiver on the part of the Applicant of any rights or claims had or made by some with respect to the occupancy of the streets and highways under the Constitution and Laws of the State of New Mexico, nor shall anything herein contained in anywise prejudice or impair any rights or claims existing independent of this application with respect to the construction, operation and maintenance of the Applicant's facilities in the State of New Mexico

14. Each copy of the application must be signed by the Applicant as an individual owner or by any official designated to execute such documents.

This application is hereby granted subject to all provisions herein and to the following special provisions, changes or amendments:

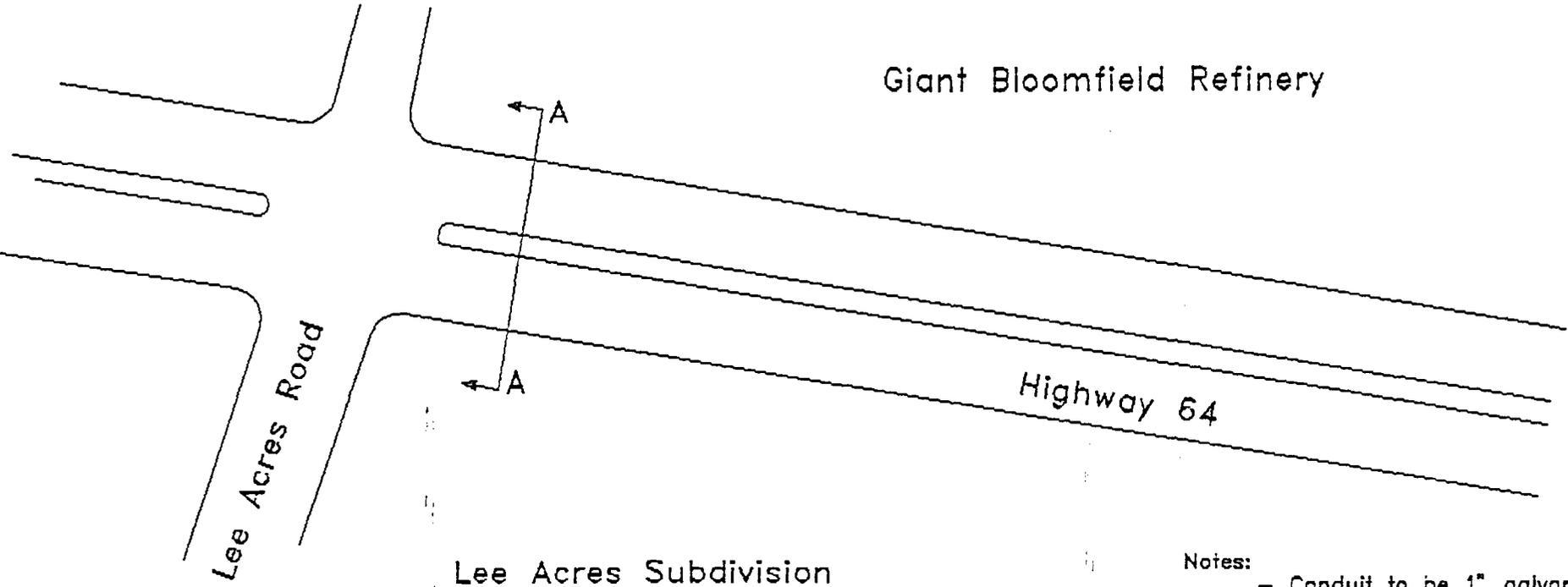
Applicant Giant Refining Company
By Tim Kester
Title Remediation Project Manager

Approval of this permit is hereby given this _____ day of _____, 19_____

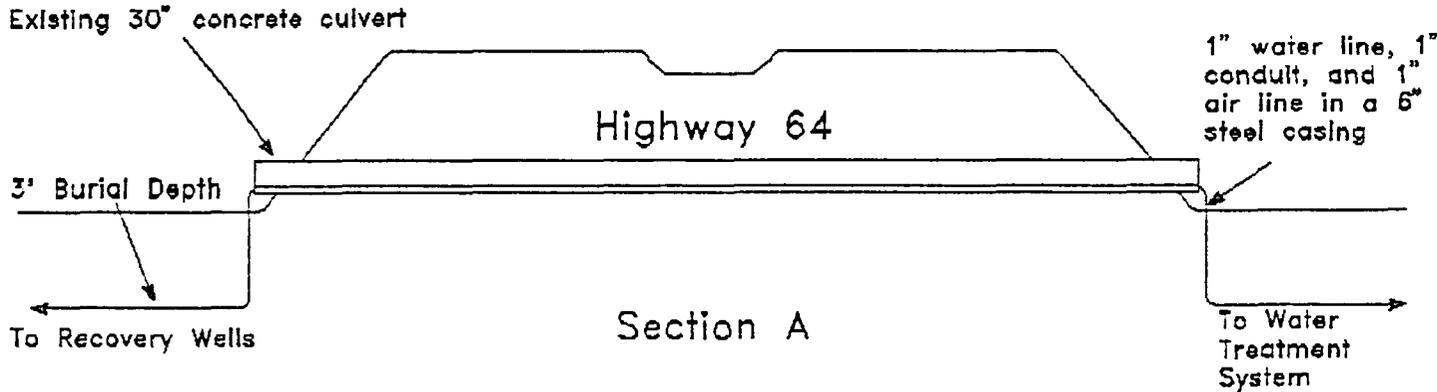
NEW MEXICO STATE HIGHWAY DEPARTMENT

By _____

Giant Bloomfield Refinery



- Notes:
- Conduit to be 1" galvanized steel
 - Water and air line to be 1" schedule 80 PVC
 - Electrical service to be 50 amp 120 VAC/1/60
 - Maximum water pressure to be 75 PSI
 - Maximum air pressure 125 PSI



Detail of Proposed Utility Crossing of State Highway 64 for Groundwater Remediation Project



P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

April 11, 1990

Mr. Frank R. Martinez
New Mexico State Highway
and Transportation Department
District #5 Permit Unit
P.O. Box 4127
Santa Fe, New Mexico 87502

Dear Mr. Martinez

As per our recent phone conversation, I am submitting an application for installation of utilities under Highway 64 in Farmington. Attached is the application and a sketch of the proposed installation.

Under the direction of the Oil Conservation Division, Giant is engaged in a groundwater remediation project in the Lee Acres area. Giant operates a groundwater processing facility in the old refinery north of the highway. South of the highway, new groundwater recovery wells are being drilled and recovered water will need to be processed in the refinery to facilitate remediation. The recovery system south of the highway will necessitate installation of electric and water utilities connecting with the refinery.

The electrical utility will consist of a single 1" galvanized conduit containing wire sufficient for 50 amp 120 VAC/160 service. The water utility will consist of 1" schedule 80 PVC pipe suitable for up to 20 GPM of water at 75 PSI. Both utilities will be installed at a 3' minimum depth by licensed contractors in accordance with local codes.

Pending approval, our current plan is to begin work in mid May of 1990. If additional information is needed, or if questions arise, please call me at 632-3306.

Sincerely,

Timothy A. Kinney
Refinery Remediation
Project Manager

cc: Carl Shook
Kim Bullerdick
Ned Kendrick

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

0930

Date

5/23/90

Originating Party

Other Parties

Tom Kinney - Giant Boomfield Quarry

Bill Olson - OCD Santa Fe

Subject

Giant Boomfield

Discussion

Quarterly report will be in next week

Want to start drill for offsite dissolved extent wells week
of June 18, 1990 but still working on access problems
with county

Batching operation for air stripper approx 60% complete
Highway Dept has not given them access for using a culvert for
piping because of problem in cleaning, I suggests that they tell Highway Dept
Giant will clean culvert in exchange for access

Conclusions or Agreements

Proposal for dissolved phase extent of contamination will be to
OCD in approx 2 weeks

Distribution

Offsite file
D.P. file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 0920

Date 5/23/90

Originating Party

Other Parties

Nick Kendrick - Montgomery & Andrews

Bill Olson - OCD Santa Fe

Subject

Coiant Bloomfield Refinery

Discussion

Quarterly report will be in to OCD by Next week

Proposal on extent of off site dissolved phase contamination
in approximately 2 weeks

Conclusions or Agreements

Distribution

off site file
D.P. file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1305	Date 4/24/89
---	-----------------------------------	-----------	--------------

Originating Party	Other Parties
Tim Kinney - GBR Martin Nee - GCL	Bill Olson

Subject
GBR off-site boreholes for location of free product leak, edge

Discussion Martin gave following info on the boreholes

BH-1 : 1/3 way toward BLM-37 from SHS-7, 40' to bedrock, set overnight
no water or product

BH-2 : 2/3 way toward BLM-37 from SHS-7, clay with small sand stringers, 44' to
bedrock, set overnight, no water or product

BH-3 : btw BLM-37 + SHS-8, 45.5' to bedrock, Water Level at 38.1', set overnight
0.02' product

BH-4 : midway btw BH-2 + BLM-37, set overnight, shown of product

They want to : 1.) complete recovery well at BH-3 with only 3' of screen above W.T., 2.) Set 5'
silt trap into Neocombs, 3.) Clean borehole above W.T., bentonite plug + clean backfill on all boreholes

Conclusions or Agreements
I gave OK on all 3 recommendations.

<u>Distribution</u> file	Signed Bill Olson
--------------------------	-------------------

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

File copy

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 10, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-113

Mr. Edmund H. Kendrick
Montgomery & Andrews
P. O. Box 2307
Santa Fe, New Mexico 87504-2307

RE: Giant Bloomfield Refinery Off-site Investigation

Dear Mr. Kendrick:

On March 29, 1990, the New Mexico Oil Conservation Division (NMOCD) and representatives of Giant Refining Company met to discuss NMOCD's comprehensive review of Giant's October 20, 1989 "FIRST REPORT OF OFF-SITE INVESTIGATION" and Giant's February 23, 1990 "SECOND REPORT OF OFF-SITE INVESTIGATION."

During this meeting several agreements were reached regarding information contained in the reports and Giant's recommendations for future work. In order to expedite initiation of off-site ground water remediation, the NMOCD approves Giant's recommendations in the "Second Report of Off-site Investigation" for installation of a recovery well to recover off-site free-phase hydrocarbons conditioned upon the following agreements:

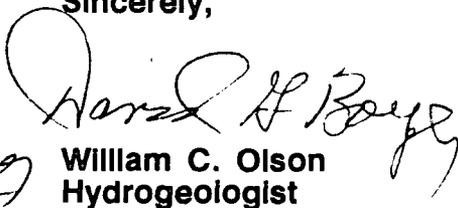
1. Giant will submit to NMOCD a work plan, within 60 days of receipt of this letter, detailing a program to delineate the extent of off-site dissolved phase ground water contamination related to the Giant Bloomfield Refinery.
2. Laboratory analysis sheets will be submitted to NMOCD for all past and future off-site water quality analyses.
3. Piezometers SHS-3 and SHS-4 shall be sampled to determine water quality parameters and will be included in future off-site water quality sampling.
4. Giant will supply NMOCD with the bottom 7 feet of the well log from SHS-8 which is missing from the second off-site report.
5. All future monitor wells will be completed with at least five feet of screen above the water table to allow any potential product to enter the monitor well in the event of fluctuations in the elevation of the water table.
6. Future reports will include a discussion of the presence of any refinery related heavy metals observed during water quality sampling.

On April 3, 1990, and April 4, 1990, NMOCD and Giant representatives, through telephone conversations, reviewed the above agreement, and found them acceptable. During these conversations, Giant stated their intention to begin remediating the off-site dissolved phase hydrocarbon plume by pumping ground water from well SHS-7 when product recovery from the off-site recovery well is minimal. NMOCD approves of initiating a recovery system at SHS-7 at such a time and appreciates Giant's concern for limiting downgradient migration of dissolved phase constituents. We commend you for taking the initiative in this matter.

The NMOCD requests that Giant contact NMOCD two weeks prior to drilling or sampling events so that NMOCD may be given the opportunity to participate.

Please be advised that approval of this work does not relieve you of liability under other laws or regulations. If you have any questions or comments, please contact me at (505) 827-5885.

Sincerely,


509 William C. Olson
Hydrogeologist

WCO/si

cc: Frank Chavez, NMOCD Aztec District Office
Timothy Kinney, Giant Refining Co.
Dale Doremus, EID Superfund
Chris Shuey, Southwest Research and Information Center
Richard Mitzelfelt, EID Director
David Tomko, NMEID, Farmington
William Murphy, Albuquerque, BLM

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time @ 1430	Date 4/3/90
---	----------------	----------------

<u>Originating Party</u> Tim Kinney - Giant Refining	<u>Other Parties</u> Bill Olson - OCD
---	--

Subject
Giant Bloomfield Refinery Off-Site Investigation

Discussion
Reviewed my draft letter to Giant listing agreements btw. OCD and Giant regarding the off-site investigation meeting on 3/29/90. Mr. Kinney believes that the agreements listed are correct. He stated that drilling of the recovery will begin approximately 4 weeks after receipt and approval. Initiation of recovery will depend on Giant access with Highway Dept for laying the recovery piping through the culvert under the highway. He also requests permission to include pumping dissolved phase BTEX contaminated water from SHS-7 with the recovery system proposed.

Conclusions or Agreements
Letter will not go out until next week after Boyer's review.
OCD OK's pumping of dissolved phase contaminated G.W. from SHS-7

<u>Distribution</u> file OGB	Signed Bill Olson
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Points for BLM, EIO, OCD Technical Working Group
Meeting of 3/27/90

- 1) High benzene levels found in GBR-32, GBR-49
GBR-32 Benzene = 96 (Dec. 1989 analyses)
GBR-49 " = 74
- 2) OCD meeting with Giant on Thurs. 3/29 to discuss:
 - Off site investigation work and additional work proposed
 - Proposed "Controlled Flooding Application" for soil remediation in the south refinery area btw GBR-41, GBR-20
 - Request to change wells being sampled ("Operations Update")
 - Air stripper exceeding stds and measures to prevent future occurrences
- 3) 1,1,1-Trichloroethane found above stds in GRW-4 in September 1989 as part of 1st Report of Off-site Investigation
- 4) Giant's air stripper is removing landfill related contaminants (low levels)
- 5) A nitrate = 124 mg/l found in BLM-37 on Sept. 1989 as part of 1st Report of Off Site Investigation. Did BLM sample this well for nitrates

BLM, EID, OCD TWG Meeting 3/27/90
10:00 am

participants

Dele Doremas - EID Superintendent
Joy Martin - Weston
Berg Keshian - "
Bill Murphy - BLM
Richard Hilbury

Status at Investigation

- B.K. - Presented maps (aerial) of site
Site boundary narrowed to landfill, Giant and Lee Acres
(Subdivision (based on hydrograph work) south
including the river
actually Study Area (720 Acres)
- Next presented Magnetic ~~data~~ anomaly maps of landfill
also shows EM anomalies
- * EM anomalies correspond with pit locations
- Presented map of historical landfill development based
on ~~old~~ air photos
Landfilling started just south of north pits moved south
then into eastern leg
Trenches are under lagoon

B.K. - presented map of old river channels San Juan
and arroyo. Old arroyo channels go
directly thru Reynolds + Puggin Harmon area

presented hydropanch and cone penetrometer map

5-8' at sledge found during trenching, in
lagoon area

Sampling will be conducted next couple of months
April, May, Aug 1990

Western samples (water) for VOC's are purged
the day prior to sampling

-BK - handed out to Dale a copy of final SAPP
which includes all comments
Mid July, RI Report Due (RI)

AGENDA

BLM/ WESTON/ EID MEETING
March 27, 1990
10 AM

- 1. Status of Remedial Investigation.**
- 2. Revised Sampling and Analysis Project Plan (SAPP).**
- 3. Set Schedule for final Background Report.**
- 4. Discuss disposal of onsite drums.**

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1100	Date 4/4/80
<u>Originating Party</u> Ned Kendrick - Montgomery & Andrews		<u>Other Parties</u> Bill Olson - OCD	
<u>Subject</u> OBR OFF-Site Investigation			
<u>Discussion</u> Reviewed agreements in draft off-site letter. He believes agreements are correct. We talked about Mr. Kinney's thought to pump SHS-7 dissolved phase contaminants when recovery operation begins. He expressed concern that pumping of SHS-7 may draw floating product further south.			
<u>Conclusions or Agreements</u> He will talk to Mr. Kinney and we will discuss SHS-7 pumping on 4/5			
<u>Distribution</u> file		<u>Signed</u> Bill Olson	



BLM OIL & GAS DIVISION
RECEIVED

'90 MAR 28 AM 8 34

P.O. Box 256
Farmington, New Mexico
87499

505
632-3306

March 22, 1990

Mr and Mrs Hughes
Lee Acres, New Mexico

Dear Mr and Mrs Hughes,

As you know, Giant is involved in the continuing effort to clean up groundwater in the Lee Acres area. We would like to enlist your help. Recent drilling on the property adjacent to yours indicates that a recovery well needs to be drilled somewhere between your lawn area and the existing BLM well immediately north of your property boundary. Contaminated fluid would be pumped from the well and treated in our groundwater cleanup facility in the refinery before being put back into the ground. In order to properly locate the well, soil borings need to be done in the dirt area on the north side of your lot. These soil borings would resemble wells, but would be filled back in after observing the groundwater. Information gathered from the soil borings would allow us to pick the best location for the recovery well. No more than three soil borings would be required. A submersible pump would be used to recover fluid from the well. To connect the pump, a trench would need to be dug for a water line and electrical conduit. Of course the trench would be filled in and the surface disturbance repaired. Once completed, a manhole cover would be the only evidence of the well. Any surface damage to your property will be repaired leaving it just as we found it. We would seek your permission before entering your property for well sampling or repair.

When the recovery process is completed the well and pump would become your property or, if you desire, we will remove the well completely.

With your permission we would like to begin work the week of April 23, 1990. Please call me at 632-3306, or drop by the office right across the road if you have any questions. I look forward to hearing from you.

Sincerely,

Timothy A. Kinney
Project Manager
Refinery Cleanup

cc: Dave Boyer - Oil Conservation Division

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 09:15 am	Date 3/28/90
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<u>Originating Party</u>	<u>Other Parties</u>
Bill Olson - OCP Environmental Bureau	John Kinney Giant Refining 632-3306

Subject
Giant Bloomfield Refinery

Discussion
Returned his call of 3/27

Conclusions or Agreements
Meeting b/w OCP and Giant finalized for 3/29/90
at 1330 hrs.

Distribution
file

Signed 

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1341

Date 3/26/90

Originating Party

Other Parties

Bill Olson - OCP

Tim Kinney - Giant Refining
632-3306

Subject

Giant Bloomfield Refinery

Discussion

He has not been able to reach Ned Kendrick at this
time
He will be driving in from Farmington and would prefer
an afternoon meeting time

Conclusions or Agreements

Tentative meeting set for 3/29/90 at 1:30 pm

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

 Telephone Personal

Time 0930

Date 3/23/90

Originating Party

Bill Olson - OCD

Other PartiesTim Kinney - Giant Refinery
632-3306Subject

Giant Bloomfield Refinery

Discussion

Discussed changing quarterly sampling from M/L's with product to those without product (sampling for dissolved phase constituents)

Also want to discuss flooding application and effluent investigation. I told him OCD would like to discuss these at a meeting in Santa Fe next week.

He agreed to a meeting next week as long as OCD doesn't mind quarterly sampling being put off.

Conclusions or Agreements

OCD agrees to not do quarterly sampling until a meeting to discuss above issues. I will call him on Monday to finalize a meeting date for next week.

Distribution

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 11:30AM

Date 3/2/90

Originating Party

Other Parties

Ned Kendrick - Mang & Andrews
982-3873

Dave Boyer

Subject Giant Bloomfield Refinery

Discussion

I talked to Ned about several issues:

(1) Change in wells monitored and parameters at recovery wells - Not enough time to review 3/9/90 letter for decision by 3/12 - Talk Ned to either stick with current sampling schedule or do both new and existing wells samplings

(2) Offsite investigation reports - Bill Olson reviewing - Giant wants to drill new wells week of April 9. Told Ned ^{as} should complete review by 3/26 and discuss 2/23/90 report that week.

Conclusions or Agreements

(3) Controlled Flooding Application of 10/9/89 - Told Ned under review and should be ready to discuss week of 3/26.

Distribution

Bill Olson
Giant Bloomfield file
Giant ~~file~~ file.

Signed

Dave Boyer

MONTGOMERY & ANDREWS

PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

J. O. Seth (1883-1963)
A. K. Montgomery (1903-1987)
Frank Andrews (1914-1981)

SANTA FE OFFICE
325 Paseo de Peralta
Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Telephone (505) 982-3873
Telecopy (505) 982-4289

February 23, 1990

ALBUQUERQUE OFFICE
707 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

Telephone (505) 242-9677
Telecopy (505) 243-4397

Hand-Delivered

REPLY TO SANTA FE OFFICE

90 FEB 23 PM 3 27
OIL CONSERVATION DIVISION
RECEIVED

Victor R. Ortega
Jeffrey R. Brannen
John B. Pound
Gary R. Kilpatric
Thomas W. Olson
William C. Madison
Walter J. Melendres
Bruce Herr
Robert P. Worcester
John B. Draper
Nancy Anderson King
Janet McL. McKay
Joseph E. Earnest
W. Perry Pearce
Sarah M. Singleton
Stephen S. Hamilton
Michael H. Harbour
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi
Galen M. Buller

Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
Gary P. Kaplan
Anne B. Hemenway
Deborah S. Dungan
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Nancy A. Taylor
Rod D. Baker
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova
Martin R. Esquivel
Scott K. Atkinson
Catherine E. Pope

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, New Mexico 87501

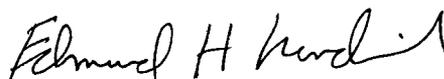
Re: Giant's Bloomfield Refinery: Off-Site Hydrogeologic
Investigation

Dear Mr. Boyer:

In accordance with our letter to you of October 20, 1989, I am enclosing for your review Giant's second report, dated February 23, 1990, on its off-site hydrogeologic investigation.

Please contact me as soon as you have had an opportunity to review the enclosed report.

Sincerely,



Edmund H. Kendrick

EHK:gr:16

Enclosure

File #8361-89-12

cc: Dennis McQuillan, EID (w/encl.)
William J. Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

January 6, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Ms. Evelyn Benton
Landowner, Suburban Heights Subdivision
Post Office Box 1624
Hereford, Texas 79045

RE: GIANT INDUSTRIES' REQUIRED MONITOR WELLS

Dear Ms. Benton:

Giant Industries is about to begin the installation of a number of boreholes in the Lee Acres area. The purpose of these boreholes is to test further the subsurface water chemistry of the area. These boreholes will consist of holes approximately four inches in diameter and fifty feet deep. Some of these borings will then be lined with a metal pipe and fitted with a cap at ground surface level. These lined borings will then serve as monitoring wells. These wells will be used exclusively for obtaining small water samples for testing. The length of time they will be in use is indeterminate at present, but when their use is finished Giant will be required to properly plug them.

The New Mexico Oil Conservation Division has approved Giant's plan of operation. During the month of January, or shortly thereafter, Giant would like to install a monitor well on your property in the Suburban Heights Subdivision.

We urge you to cooperate with this activity, which will permit Giant to acquire additional information about subsurface conditions. Please feel free to contact me at (505) 827-5812 if you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

cc: Giant Industries
Rod Baker, Montgomery & Andrews