GW - 40

GENERAL CORRESPONDENCE

YEAR(S):
1989

OF COUNSEL
William R. Federici

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

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

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

December 12, 1989

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

Re: Giant Industries Bloomfield Refinery;
Permission of off-site landowners to conduct remediation

Dear Mr. Boyer:

Thank you for your letter to Mrs. Anita Eskra dated November 28, 1989. Mrs. Eskra has given Giant Industries permission to drill boreholes on her property in the Suburban Heights Subdivision.

However, Giant Industries continues to seek from Ms. Evelyn Benton permission to locate a monitor well on her property. After numerous unanswered telephone calls and letters, Giant Industries has yet to receive a response from Ms. Benton regarding the matter. We do not know whether she is receiving mail and failing to respond, or if she simply is not receiving mail.

Giant Industries wishes to make one final attempt to obtain a response from Ms. Benton. If she indeed is receiving her mail, I believe a letter from you would be beneficial to break this "log jam." Accordingly, would you please send a letter to Ms. Benton, similar to the letter which you previously sent to Mrs. Eskra? I have enclosed for your reference a proposed form of letter, which contains Ms. Benton's address. This letter is

substantially the same as the letter you previously sent to Mrs. Eskra.

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

Yours truly,

Rod D. Baker

RDB:ls:7
8361-89-12
Enclosure
cc: Kim Bullerdick, Esq. (w/enclosure)
Timothy Kinney (w/enclosure)

November 28, 1989

Ms. Evelyn Benton
Landowner in 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. Within the next few weeks, 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 if you have any questions.

Sincerely,

David G. Boyer, Chief
Environmental Bureau

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

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) 242-9677

WRITER'S DIRECT DIAL NUMBER:

November 28, 1989

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

RE: Giant Industries Bloomfield Refinery; off-site remediation

We are using this informal note, rather than a formal letter, to give you quicker service.

___ The enclosed material is for your information.

_xx Message:

Here is the proposed form of letter, subject of your conversation with Mr. Tim Kinney this morning, which we would like you to send to Mrs. Iskra.

Rod D. Baker

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

November 28, 1989

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

Mrs. Anita Iskra
Landowner, Suburban Heights Subdivision
809 Highland Avenue
Post Office Box 912
Bloomfield, New Mexico 87413

RE: GIANT INDUSTRIES' REQUIRED MONITOR WELLS

Dear Mrs. Iskra:

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 week of November 27, or shortly thereafter, Giant would like to install two or three monitor wells 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 827-5812 if you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

cc: Giant Industries
Rod Baker, Montgomery & Andrews

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)

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

October 20, 1989

Hand-Delivered

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:

I am enclosing for your review Giant's first report, dated October 20, 1989, on its off-site hydrogeologic investigation. If you find the report and its recommendations to be acceptable, Giant plans to install the proposed seven boreholes during the month of November. Three of the boreholes would be completed as monitor wells and one borehole would be completed as a recovery well. Giant again would appreciate your assistance in obtaining approvals from landowners for the installation of boreholes and wells.

In view of the time needed for your review of the enclosed report, landowner approvals, borehole and well installation, sampling in December to coincide with BLM's quarterly sampling, and laboratory analysis of samples, we propose that the second progress report be submitted to you by February 23, 1990, rather than on December 15, 1989 as originally proposed.

Please contact me as soon as you have had an opportunity to review the enclosed report.

Sincerely,

Edmund H. Kendrick

EHK:gr:95
Enclosure
File #8361-89-12

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)

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

September 15, 1989

RECEIVED

SEP 18 1989

OIL CONSERVATION DIV.
SANTA FE

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:

I am writing to confirm our conversation today in which you agreed that it would be acceptable for Giant to submit its first letter report by October 20, 1989, rather than on September 22, 1989 as provided in Giant's proposal for an off-site investigation. More time is needed because Giant did not anticipate that BLM wells south of the highway would not be available for sampling until early September. Giant will submit the report as soon as possible after receiving analytical results from the September sampling of wells south of the highway.

Thank your for your consideration in this matter.

Sincerely,

Edmund H. Kendrick

EHK:gr:47
File #8361-89-12
cc: Dennis McQuillan, EID
William J. Murphy, BLM

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)

Seth D. Montgomery
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
Mack E. With
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
Cynthia S. Murray
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

August 21, 1989

HAND-DELIVERED

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:

By letter dated July 20, 1989, you provided comments on Giant's proposal for an off-site investigation. You also requested that Giant acknowledge receipt of these comments and incorporate them into the plan of investigation. In accordance with your request, Giant's response to each comment is noted below:

1. Noted.

2. According to records filed with the San Juan County Clerk's Office, Suburban Heights Subdivision is the name of the residential area where the investigation will take place. The subdivision is part of the Lee Acres Community. To be as precise as possible and to avoid confusion, Giant will refer to the subdivision as part of the Lee Acres Community in all future submissions.

3. Noted.

4. Accepted. Giant appreciates OCD's prompt action in submitting letters to property owners in connection with the soil vapor survey.

5. Accepted.

6. Accepted.

Please let me know if you have any questions concerning our responses. We will keep you informed of Giant's progress with the off-site investigation.

Sincerely,

Edmund H. Kendrick

EHK:gr:31
File #8361-89-12
cc: Kim H. Bullerdick, Esq.
Robert L. McClenahan, Jr.

County of San Juan
State of New Mexico
112 South Mesa Verde
Aztec, New Mexico 87410

Charlie and Anita Iskra
Post Office Box 912
Bloomfield, New Mexico 87413

Douglas and Dixie Harmon
~~Post Office Box 2432~~
Post Office Box 7142
Lee Acres
Farmington, New Mexico 87499

Evelyn Benton
Post Office Box 1624
Hereford, Texas 79045

Jimmy and Earlene Hughes
613 Highway 64
Farmington, New Mexico 87401

~~Michael Duggins~~

Michael and Phyllis Duggins
CPO Box 1771
Lee Acres
Farmington, New Mexico 87401

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, 1989

Charlie and Anita Iskra
P. O. Box 912
Bloomfield, New Mexico 87413

RE: Investigation of Subsurface Water Chemistry

Dear Mr. and Mrs. Iskra:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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, 1989

Ms. Evelyn Benton
P. O. Box 1624
Hereford, Texas 79045

RE: Investigation of Subsurface Water Chemistry

Dear Mrs. Benton:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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, 1989

Douglas and Dixie Harmon
P. O. Box 7142
Lee Acres
Farmington, New Mexico 87499

RE: Investigation of Subsurface Water Chemistry

Dear Mr. and Mrs. Harmon:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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, 1989

Jimmy and Earlene Hughes
613 Highway 64
Farmington, New Mexico 87401

RE: Investigation of Subsurface Water Chemistry

Dear Mr. and Mrs. Hughes:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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, 1989

Michael and Phyllis Duggins
P.O. Box 1771
Farmington, New Mexico 87401

RE: Investigation of Subsurface Water Chemistry

Dear Mr. and Mrs. Duggins:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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, 1989

County Manager
San Juan County
112 South Mesa Verde
Aztec, New Mexico 87410

RE: Investigation of Subsurface Water Chemistry

Dear Sir:

Giant Industries, Inc. has begun an investigation of subsurface water chemistry in the Lee Acres area. A soil vapor survey is the next step in the investigation. The purpose of the survey is to provide additional information and to assist in the location of any future borings or ground water monitor wells. The survey is conducted by hammering a one-inch diameter probe into the ground to obtain gas samples. The probe is then removed and no evidence of the sampling remains. Furthermore, there is no need to drive vehicles on private property to conduct the survey. The study should yield useful information about subsurface conditions.

The New Mexico Oil Conservation Division has approved Giant's plan of investigation and wants to see it completed as soon as possible. During the week of August 14, 1989, or shortly thereafter, Giant would like to obtain a sample of soil vapor from your property. A representative of Giant will attempt to contact you to let you know the exact date of the sampling.

As a landowner in Lee Acres/Suburban Heights Subdivision we ask your cooperation with this investigation by allowing Giant access to your property. Please do not hesitate to contact me at 827-5812 in Santa Fe should you have any questions.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: NMEID - Santa Fe
BLM - Albuquerque
Giant Industries - Scottsdale, AZ

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)

Seth D. Montgomery
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
Mack E. With
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
Cynthia S. Murray
Rod D. Baker
Scott F. Doering
Shella Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

August 7, 1989

HAND DELIVERED

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

Re: Giant's Bloomfield Refinery: Off-Site Hydrogeologic Investigation

Dear Mr. Boyer:

For your consideration please find enclosed a draft letter to Lee Acres property owners requesting their cooperation in connection with Giant's off-site investigation. Please give me a call if you have any questions.

Sincerely,

for

Edmund H. Kendrick

EHK:RDB:cs/88
8361-89-12
Enclosure

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

July 20, 1989

GARREY CARRUTHERS
GOVERNOR

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

CERTIFIED MAIL
RETURN RECEIPT No. P-106 675 311

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

RE: Giant Bloomfield Refinery;
Off-Site Hydrogeologic
Investigation

Dear Mr. Kendrick:

The Oil Conservation Division has received and completed review of the above proposed work plan dated July 7, 1989. The report was prepared in response to our letter of May 19, 1989, which directed Giant to being investigation of petroleum product occurrence south of the refinery.

As presented in the report, the purpose, scope and proposed investigation schedule are satisfactory to the OCD. With the exception of the several comments provided below, the technical details of the proposal are also acceptable.

(1) Page 5. All data collected by EID on the Lee Acres area is public and available for access. BLM has submitted sampling results to EID and this is also public.

(2) Page 5. For consistency and to avoid confusion, I request that the subdivision south of Highway 64 be referred to as "Lee Acres" since that is the common name used in all EID and BLM reports to date.

(3) Page 6. The USGS may also have recent water level data for the wells of interest.

(4) Page 7. A soil vapor survey conducted with locations limited to public roadways is unlikely to provide useful information since the edge of the petroleum hydrocarbon contamination is south of Highway 64 and between the subdivision's north/south public roads. Giant must contact the property owners to attempt to gain access. To assist Giant in the soil vapor survey and later investigation, OCD will send letters to the property owners requesting their cooperation by granting Giant access to conduct the OCD-required investigation. OCD will send the letters upon receipt of the names and addresses of the property owners where access is desired.

(5) Page 8. Prior to conducting the proposed slug tests on additional monitor wells proposed for Task 5, provide OCD with a description of the test along with information on what effect any floating hydrocarbon products would have on the test methodology.

(6) Appendix A and B. If petroleum contaminated soil or water is encountered during drilling, developing or purging of the new monitor wells, it must receive proper disposal. Contaminated soil or cuttings should be placed with other hydrocarbon stained soil in the bermed area in the upper refinery, while water should be contained for transfer to the air stripper storage tanks.

You are requested to acknowledge receipt of these comments and to incorporate action items into the work plan. Upon incorporation of these comments into the work plan, it is acceptable to OCD and Giant may proceed with the work as outlined in the proposal schedule.

If you have any questions or if modifications to the plan become necessary, please contact me at 827-5812.

Sincerely,

David G. Boyer
Environmental Bureau Chief
Hydrogeologist

DGB/ag

cc: Oil Conservation Division - Aztec
NM Environmental Improvement Division - Farmington
Dale Doremus, NM Environmental Improvement Division
Robert L. McClenahan, Jr. - Giant
Kim Bullerdick - Giant

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO

TELECOPIER TRANSMITTAL SHEET

DATE: 7/20/89

TO: Ned Kendrick

FROM: David Boyer

PHONE NUMBER: 827-5812

NUMBER OF PAGES (INCLUDING TRANSMITTAL SHEET): 3

IF YOU HAVE ANY PROBLEMS WITH THE TRANSMISSION, PLEASE CALL (505) 827-5806.

Hard copy w/return receipt mailed 7/20.

DRB

FAX NUMBER: (505) 827-5741

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi
Galen M. Buller

Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Arturo Rodriguez
Anne B. Hemenway
Joan M. Waters
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Joseph E. Whitley
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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) 242-9677

REPLY TO SANTA FE OFFICE

July 7, 1989

HAND-DELIVERED

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

Re: Giant's Bloomfield Refinery: Off-Site Hydrogeologic Investigation

Dear Mr. Boyer:

In accordance with your letter of May 19, 1989 to Bob McClenahan, I am enclosing a proposal prepared by Geoscience Consultants, Ltd. for a hydrogeologic investigation of the area south of Giant's Bloomfield Refinery. We look forward to meeting with you at your convenience to discuss the proposal.

Sincerely,

Edmund H. Kendrick

EHK:gr:93
Enclosure
File #8361-89-12
cc: Kim H. Bullerdick, Esq. (w/o encl.)
Robert L. McClenahan, Jr. (w/o encl.)

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

May 19, 1989

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-031

Mr. Robert L. McClenahan, Jr.
Environmental Coordinator
Giant Industries, Inc.
Route 3, Box 7
Gallup, New Mexico 87301

RE: Investigation of Petroleum Product Occurrence South of Bloomfield Refinery

Dear Mr. McClenahan:

This letter is to notify you of the necessity to begin an investigation of petroleum product occurrence south of your Bloomfield Refinery. During the February, 1989, sampling of the newly installed monitor well BLM-37, a 2.6 feet-thick layer of floating hydrocarbon was found in the well by Bureau of Land Management's (BLM) consultant, R. F. Weston.

The well is located across U.S. Highway 64 from the refinery on Highway Department right-of-way, and is directly south of the refinery area where Giant is currently conducting product recovery operations. A copy of Weston's letter (with map) notifying BLM of the discovery is enclosed.

In previous letters dated February 25, 1987 and November 20, 1987, the Oil Conservation Division (OCD) discussed the finding of dissolved petroleum product constituents in two domestic wells south of the refinery and of the need for Giant to investigate the problem further. At that time it was hoped a coordinated effort by Giant and the BLM could be undertaken to investigate the contamination. However, the detection of floating product between your current product recovery area and the domestic wells shows that further investigation and initiation of recovery efforts cannot wait until post-1990 issuance of BLM's Lee Acres Environmental Impact Statement.

Within 45-days from receipt of this letter, Giant is hereby required to provide the OCD with a proposal for a hydrogeological investigation including the method of investigation, a schedule for conducting it, and a schedule for initiation of containment. During this time the OCD will meet with Giant to discuss and formulate a "Settlement Agreement" that will define and establish

the responsibilities of both Giant and OCD in this complex matter. OCD is currently preparing a generic "Settlement Agreement" document similar to that approved by the Water Quality Control Commission for use by EID. A draft copy of technical requirements is enclosed as an example.

Because of the complexity and seriousness of this matter, we will appreciate the cooperation of Giant Industries in trying to resolve the technical and legal issues related to this ground water contamination problem. If you have any questions, please contact David Boyer at 827-5812.

Sincerely,

Victor 2. Lyon

for William J. LeMay
Director

DGB/sl

Enclosures

cc: Edmund H. Kendrick, Montgomery & Andrews
Richard Mitzelfelt, Director, NMEID
Larry Woodard, State Director, BLM

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 8:00 a	Date 2/21/89
Originating Party		**Other Parties**
Dave Schafersman - BLM.		Bill Olson - EID/GW

Subject

BLM - Lea Acres new wells

Discussion

During drilling Weston hit product in the well south of the Highway. They will do a product Id and send to us when available

Conclusions or Agreements

Distribution
file
OMQ
Dela Bremns
Dave Boyer (OCD)

Signed Bill Olson

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO

TELECOPIER TRANSMITTAL SHEET

DATE: 4/3/89

TO: Chip Goodrich, R.P./Ko & Assoc

FROM: David Boyer 827-5812

PHONE NUMBER: (818) 716-9450

NUMBER OF PAGES (INCLUDING TRANSMITTAL SHEET): 6

IF YOU HAVE ANY PROBLEMS WITH THE TRANSMISSION, PLEASE CALL (505) 827-5806.

FAX NUMBER: (505) 827-5741

WESTON
MANAGERS DESIGNERS/CONSULTANTS
215 UNION BOULEVARD
SUITE 600
LAKEWOOD, CO 80228
PHONE: (303) 980-6800

21 February 1989

Mr. Bill Murphy
Bureau of Land Management
435 Montano Road NE
Albuquerque, New Mexico 87107

RE: Lee Acres Landfill Accelerated Drilling Program
Contract No. YA 551CT8-340069
Work Order No. 2878-04-01-0004

Dear Mr. Murphy:

Per your request, enclosed are figures depicting the approximate well locations and actual well constructions for wells BLM-33, 34, 35, and 37 which were installed during the Accelerated Drilling Program at the Lee Acres Landfill site in January 1989. Figure 1 presents the approximate well locations. As is shown in Figure 2, wells BLM-33 and BLM-34 were screened in the first saturated zone encountered during drilling. The screened intervals in these wells were approved by Bill Olson of the New Mexico Environmental Improvement Division in the field prior to well installation. The cross section presented in Figure 2 illustrates the extent and thickness of the confining siltstone/claystone layer at the top of bedrock in the southern portion of the landfill property. As is depicted, the water levels in wells BLM-33, 34, and 35 rose approximately twenty feet above the top of the saturated sandstone.

Well BLM-37 was installed immediately south of Highway 64, on the State Highway Department right-of-way, and across the street from the Hughes residence. Two wells were planned for this location; only one was installed. Well BLM-37 serves the function of both proposed wells at this location. The screened interval monitors the base of the alluvium from the bedrock contact up, and also monitors the contact between saturated and unsaturated alluvium. As is depicted in Figure 3, during drilling, hydrocarbon stained soils were encountered at a depth of 33.5 feet below the ground surface. During the February 1989 ground-water sampling period, floating hydrocarbon was measured from 36.60 to 39.25 feet below the ground surface. Water was encountered in the well from 39.25 to 39.30 feet (measured depth of the well). As

WESTON

the floating hydrocarbon was sampled, increasing amounts of water were removed with the bailer, confirming the soil descriptions which indicate that groundwater-saturated alluvium is present above the bedrock contact.

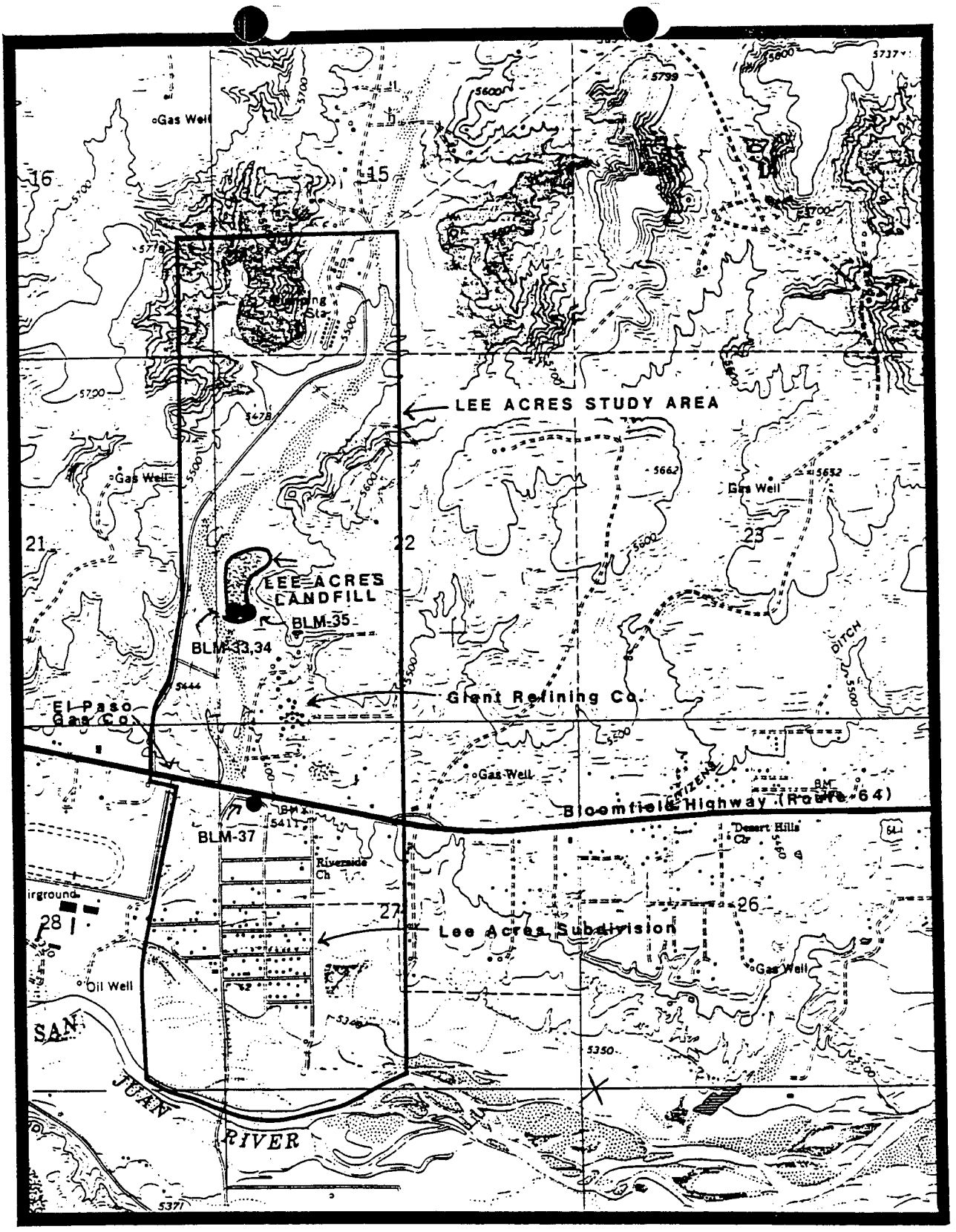
If you have any questions regarding the enclosed information, please contact Laurie Gregory-Frost at (303)980-6800 or myself at (505)255-1445.

Sincerely,

ROY F. WESTON, INC.

Berg Keshian, Ph.D., P.E.
Project Manager

BK/lag
Enclosures (3)
cc: Laurie Gregory-Frost



Scale

0 1000 2000 feet

● Accelerated Drilling Program Well Locations

Source: USGS Quadrangle
Horn Canyon 7.5 Minute Quadrangle
New Mexico

FIGURE 1

SITE LOCATION MAP

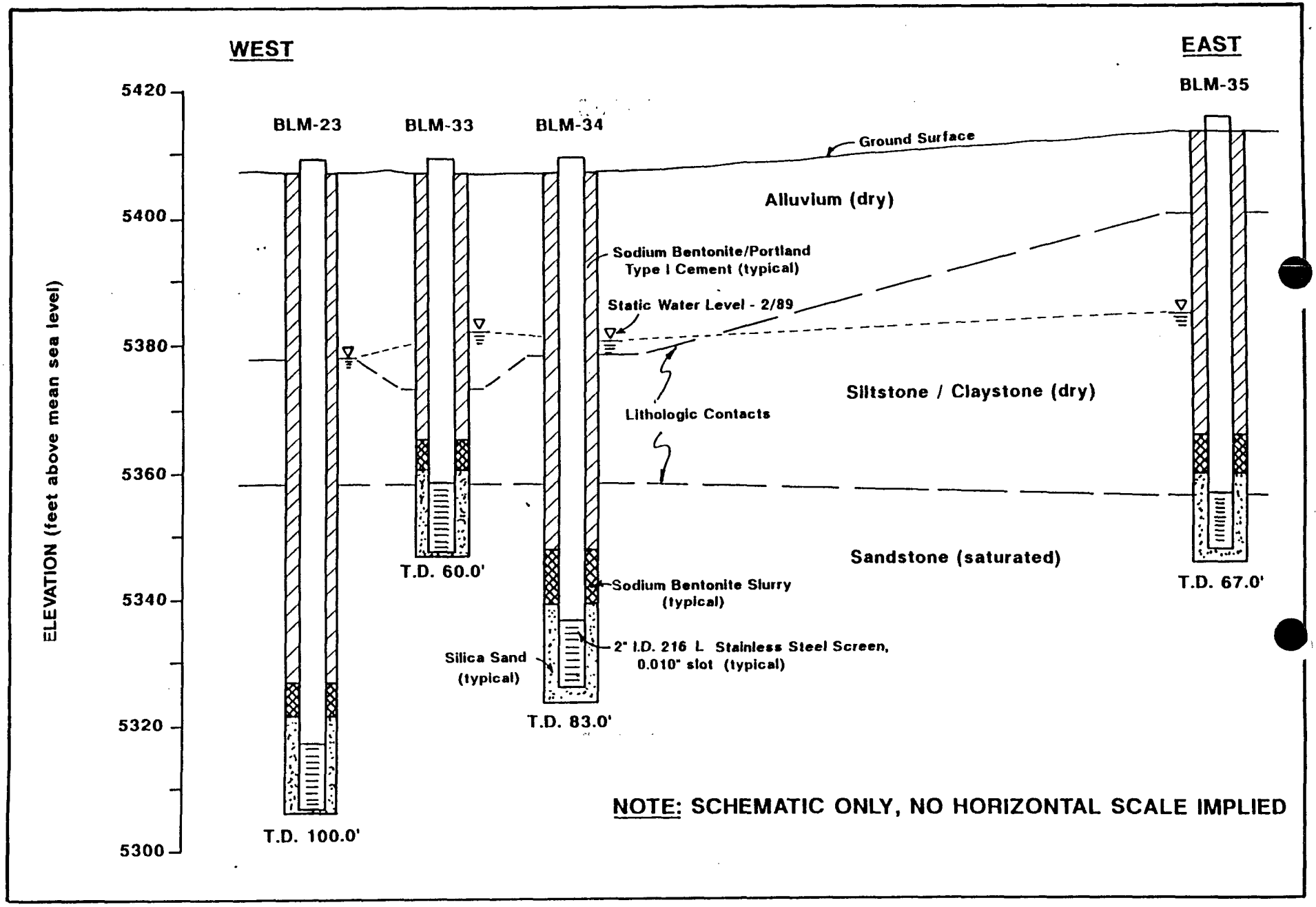


Figure 2: SCHEMATIC CROSS-SECTION - Lee Acres Landfill, Farmington, N.M.

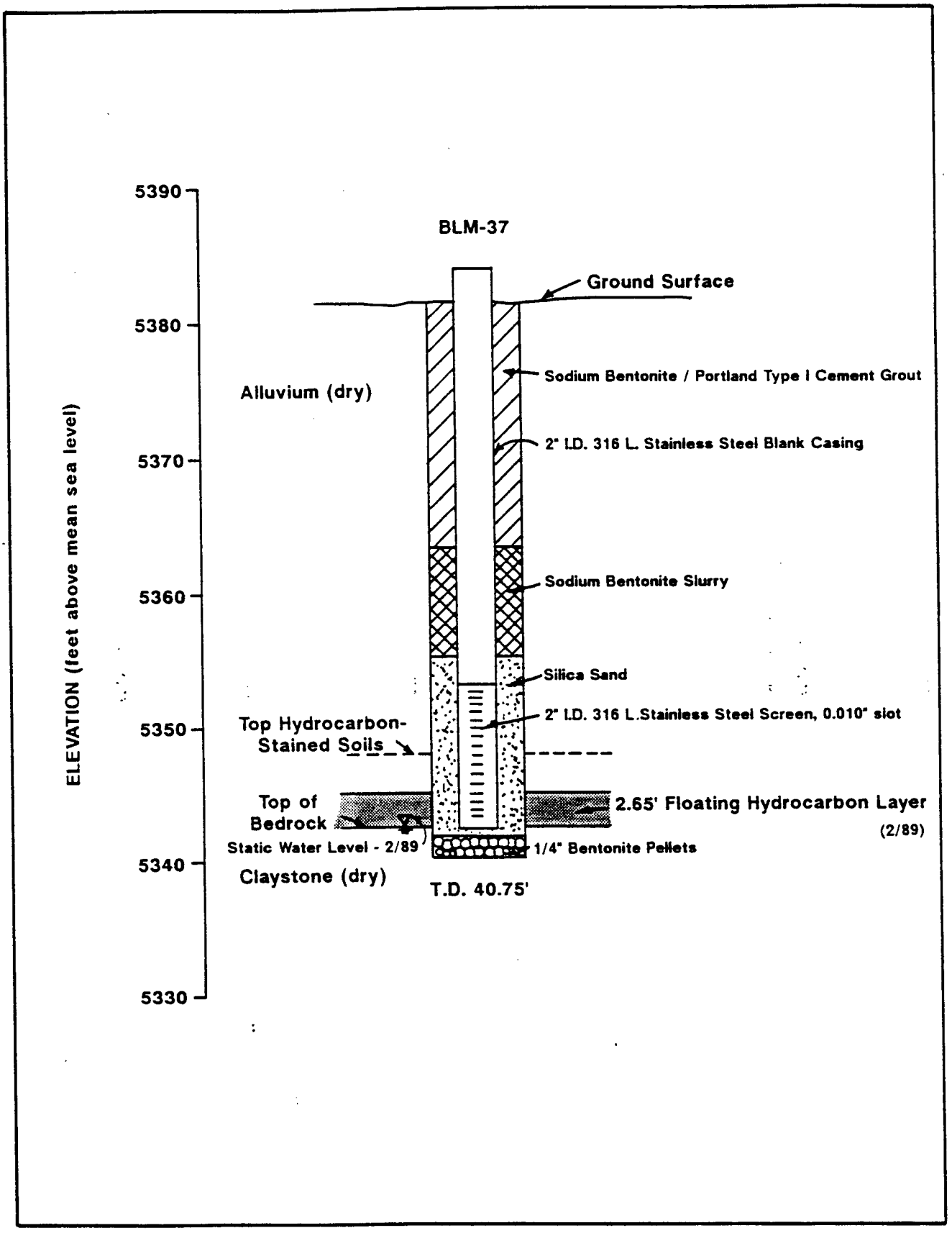


Figure 3: SCHEMATIC OF BLM-37 WELL CONSTRUCTION -
Lee Acres Landfill, Farmington, N.M.

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

November 20, 1987

Mr. W. Perry Pearce, Attorney
Montgomery & Andrews, PA
P. O. Box 2307
Santa Fe, New Mexico 87504-2307

Re: Giant Industries, Inc./Bloomfield Refinery

Dear Mr. Pearce:

The Oil Conservation Division has completed a comprehensive review of the report entitled "Soil and Ground Water Investigations and Remedial Action Plan, Giant Industries, Inc., Bloomfield Refinery, Bloomfield, New Mexico" dated June, 1987. The report was prepared by Geoscience Consultants, Ltd. of Albuquerque. Specific comments are provided in the material enclosed with this letter. I hope these comments will be of assistance as Giant completes preparation of its discharge plan.

Because of our small staff and heavy work load, the Oil Conservation Division did not comment immediately on the report in writing. Since a discharge plan application is being prepared by Giant for this site, report sections that are relative to the proposed application were planned to be discussed by Oil Conservation Division in our discharge plan response. Our comments on the application would be provided within the 60-day regulatory response period for discharge plans allowed under Water Quality Control Commission (WQCC) Regulations. However, because of a misunderstanding between the Environmental Bureau and GCL, Oil Conservation Division agreed to provide complete comments on the June report.

In a February 25, 1987, letter to Robert L. McClenahan, Jr., of Giant Industries, Oil Conservation Division commented on earlier GCL reports. Several issues mentioned in that letter (items 6, 7, and 8) remain to be addressed, or information provided with the discharge plan. A copy of this letter is also attached.

As mentioned in Item 10 of the February 25 letter, all proposed discharges to the subsurface will need to be addressed in the discharge plan. New discharges planned to begin prior to discharge plan approval can receive approval for up to 120-days under WQCC Regulations.

Finally, the issue of off-site contamination will need to be addressed, though not necessarily in the currently proposed discharge plan. As mentioned in Item 10 of the February 25 letter, a formalized settlement agreement between all parties is

the Oil Conservation Division's preferred way to proceed. Until that time Giant's remedial action to contain and recover hydrocarbons on the property will need to continue.

Please contact me at 827-5812 if you have any questions on this matter.

Sincerely,

David Boyer
Hydrogeologist
Environmental Bureau Chief

Enc.

DB:sl

cc: Carlos A. Guerra, Giant Industries, Phoenix
Robert L. McClenahan, Giant Refinery, Gallup
Albert A. Gutierrez, Geoscience Consultants, Ltd., Albuquerque

PS Form 3811, July 1983 447-845 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.
3. Article Addressed to:

Mr. W. Perry Pearce
Montgomery and Andrews, PA
P.O. Box 2307
Santa Fe, New Mexico 87504-2307

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 612 458 756

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
NOV 23 1987

8. Addressee's Address (ONLY if requested and fee paid)

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

February 25, 1987

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert L. McClenahan, Jr.
Environmental Coordinator
Giant Industries, Inc.
Route 3, Box 7
Gallup, New Mexico 87301

Re: Ground Water Investigation at the Giant Industries, Inc. Bloomfield Refinery, Bloomfield, New Mexico.

Dear Mr. McClenahan:

The purpose of this letter is to provide Oil Conservation Division (OCD) comments on the progress to date of Giant's investigation and remedial action at the Bloomfield Refinery. These comments are based on the investigation reports by Geoscience Consultants, Ltd., provided OCD by Giant (dated May 23, 1986 and December 1, 1986), and by field visits to the refinery by OCD staff on June 5, July 8, and November 20-21, 1986; and on January 21 and 29, 1987. All sampling results from these visits have been previously provided to Giant and their consultants. These comments will also serve to provide guidance as you move into planning additional remedial work, and prepare for submittal of the discharge plan.

Today, Giant is the only party that has undertaken subsurface investigation to determine current water quality conditions. As you know, BLM has installed several piezometers within the past several weeks, but they are to be used only for water level determinations. Giant is to be commended for the promptness in drilling new wells and installing hydrocarbon recovery systems in response to discovery of contamination.

The status of the EID-BLM lawsuit is that the case is in Federal District Court and BLM has responded to EID's complaint. No meetings that may lead to a negotiated settlement between the parties have been scheduled. Copies of the pleadings to date are being sent under separate cover to Giant and their attorneys.

The comments provided below do not include all the comments of OCD staff on the reports, but instead address only major areas or issues that we believe need discussion or attention. We do have some questions about other material in the reports that we would like to discuss at a convenient time. Page numbers shown below reference the May (M) or December (D), 1986 report.

1. The information available to date indicates that in the areas where Giant has undertaken subsurface investigation, a considerable area of ground water degradation has occurred. Review of Giant and OCD analyses of the monitor and recovery wells shows that free product and/or refinery type waste exist in ground water from the southern end of the refinery at Highway 64 north at least 1000 feet to the area of well GBR-24. Based on this information, I disagree with the report's contention (D, p. 1, 2, 30) that Giant's contamination is localized and insignificant when compared to that from Lee Acres. The wells closest to the arroyo (including upgradient well GBR-17) also show halogenated hydrocarbons and increased levels of chlorides which are not characteristic of Giant's refinery waste and likely have migrated from the Lee Acres landfill.

2. In addition to hydrocarbon spills in the truck loading/ fueling area, the May report indicates that an unlined "slop pit" with a capacity of between 67,000 and 101,000 gallons received all refinery wastes between 1973 and 1978, and that an unlined evaporation pond was in use from 1980 to 1982 (M, p. 3-4). Also production area losses were not controlled by catchment drains until 1979, and hydrocarbon losses prior to then were caught by the storm water containment areas (M, p. 5-6). Excavation in both areas showed oil-stained soil at depth indicating that wastewater and oil had migrated to at least that level and likely further downward. Wells located at the south end of the storm water area (especially GBR-5) have shown free product. No wells have been drilled near the site of the "slop pit" and evaporation pond. There is a high likelihood of free oil being present in the subsurface in this area. Giant will need to address this issue in future submittals since recovery operations in the southern refinery area will not be effective if free product exists beneath the "slop pit" area and is available to migrate.

3. Contrary to assertions made in both reports (M, p. 2, 9; D, p.2, 11) at least one major chlorinated solvent has been identified by OCD as having its source at the refinery. 1, 2-dichloroethane, commonly known as "EDC",

has been found in samples from the burn pit seep which is a perched water source recognized by both Giant and OCD as not being connected with landfill leachate. EDC was also found in numerous refinery monitor/recovery wells, especially those having high dissolved levels of benzene, toluene, and xylene (GBR 10, 11, 27).

EDC has been commonly used as an additive to leaded gasoline and has been found by the Environmental Improvement Division in ground water contaminated by leaky underground storage tanks at service stations. EDC has several physical and chemical properties that are of concern in evaluating its effect on ground water quality. Compared to other aromatic and halogenated organic volatiles it is very soluble (8,690 mg/l vs. 1,780 for benzene), has a higher specific gravity (1.25 vs. 0.88 for benzene), and is less likely to be sorbed on soils (Kow [Octanol/Water Partition Coefficient] 18 vs. 135 for benzene). In essence this means that compared to dissolved benzene, more EDC is likely to be carried further in ground water at greater depths.

EDC at 3 ppb was found this past autumn by EID and OCD in two samples taken a month apart for a domestic well (Mulliken) close to the arroyo at a distance of about 2500 feet from the southern end of the refinery and about 5500 feet from the landfill lagoons. These results (and location map) are enclosed and show no other organics.

4. With the exception of EDC no verified organic contamination of the type associated with chlorinated solvents or refinery waste has been found in wells south of the Reynolds/Duggins wells. Additionally, chloride concentrations, which may be indicative of landfill leachate, are anomalously high in Lee Acres only in the area of the Reynolds/Duggins wells. Therefore the figure in the December report (D, p. 28) showing the estimated extent of the Lee Acres leachate plume is incorrect and the area of contamination is greatly over estimated. This is based on available data including sampling of many subdivision wells, some not shown on the enclosed figure. The plume, however, is moving. The Duggins well, which had 40 mg/l chloride and no organics detected at 1 ppb in 1985, had over 200 mg/l chloride in 1986 with numerous organics characteristic of both landfill and refinery wastes.

5. Within the Diesel Spill Area additional wells other than those shown in Figure 4-2 (D, p. 25) have free product.

GBR-26 and 30 have product as indicated in Table 4-1 (D, p.18). These recent results were not reflected in the figure, and the plume of free product is slightly larger than shown in Figures 4-2 and 5-1 (D, p. 31). Based on this information and the report's criteria for drilling new exploratory wells (D, p.31), at least one additional well (x-1a) is required. The location of the well is dependent on the slope of the water table (potentiometric gradient) in that area which was not shown on any of the plates. Such a water table map (or maps) would be useful since complete water levels are available for at least May, August, and October 1986. It would be useful to see changes in area water levels due to the effect of arroyo runoff from summer rainfall.

6. Both reports discuss spray application of untreated water recovered from the wells to soils stored in the bermed area northeast of the refinery process area (M, p.31; D, p.7, 40). These soils were removed from several pits and have various levels of hydrocarbons. At this time the OCD is not requiring and does not expect to require that these soils be treated other than by natural degradation processes. At their current location, they do not pose a risk to water supplies, and the location is not accessible to the public. If contaminated water containing BTX and/or chlorinated hydrocarbons is applied to the site, a very good operational plan will be needed to be prepared and approved by OCD prior to such application. While a treatment schedule such as that shown in Table 5-1 (D, p. 41) is useful, actual conditions may preclude following the schedule exactly. For example, last summer several days of extremely heavy rainfall occurred in the area. Such events will need to be factored into any operational plan by considering such things as actual rainfall, evaporation rate, antecedent moisture conditions, etc. Tensiometers or other in situ moisture measurements might be necessary. A small, well-controlled pilot operation using a liner or tank may be useful to determine final contaminant concentrations for any leachate that migrates downward. Giant should work and consult with OCD so as not to proceed with work that may not be necessary. Giant should also be aware that disposal of chlorinated solvents in that manner may subject you to RCRA requirements not under OCD's control.

7. An abandoned water well was shown as being sampled as part of the January, 1986, reconnaissance sampling (M, p. 14). Please provide information on the location of

the well, basic data (if available) on construction, depth, use, etc., and the analysis results. This well is not shown in either of the recent state and USGS ground water reports for the area.

8. Provide formal as-built plans for the fluid recovery system at the burn pit seep. Also please provide an additional copy of Plate 1 (Site Location Map) for the May report.

9. The raw water pond appears to be leaking severely. Seepage water can be seen on the surface at the bottom of the bermed area on the south and west sides of the pond. A slumped area of earth and a fracture are present north of the southwest corner. Although the quality of the pond water is good (Cl = 8 mg/l, SO_4=86, TDS=253), white salts indicative of evaporation can be seen at the seepage areas. Water in GBR-18, immediately southwest of the pond, shows Cl=240 mg/l, SO_4=2800 and TDS=4900 mg/l. This water entering the shallow alluvial system both degrades the inorganic water quality and will likely cause the existing contaminant plume to move faster and further than would otherwise occur. It will also complicate cleanup efforts if, as expected, some cleanup of inorganics (especially chlorides from the landfill area) is required.

10. OCD concurs with the generalized goals of regional remedial action at the Lee Acres/Giant site that were presented in the December report (D, p. 42). It is OCD's preference to have such action formalized in a settlement agreement between all parties under the New Mexico Water Quality Control Commission Regulations. These Regulations include numerical ground water standards to which ground water must be restored unless naturally occurring background is higher, or unless it can be demonstrated, after some period of effort, that such standards cannot be met due to technological incapability when using the technology approved in a final reclamation plan. Until negotiations toward a settlement agreement are initiated, Giant should continue remedial action as instituted, and should initiate such further action as might be necessary to contain and recover hydrocarbon liquids and/or dissolved constituents. Prior to drilling of new monitor/recovery wells, or the installation of major treatment units, or below ground systems (e.g. infiltration galleries), Giant should contact and consult with OCD regarding such

systems, their location and operation. With respect to any systems for spray application or reinjection of water, such discharges will need to be included under the pending discharge plan.

If you have any questions on this matter, please contact me at 827-5812, or at the address given above.

Sincerely,

DAVID G. BOYER
Hydrogeologist/Environmental
Bureau Chief

enc.

cc: Carlos A. Guerra, Giant Industries
Mark F. Sheridan, Montgomery and Andrews
Alberto A. Gutierrez, GCL
Jennifer Pruett, NMEID

PS Form 3811, July 1983 447-845

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. X ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. Robert L. McClenahan, Jr.
Giant Industries Inc.
Route 3, Box 7
Gallup, New Mexico 87301

4. Type of Service:
☐ Registered ☐ Insured
XX Certified ☐ COD
☐ Express Mail

Article Number

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Jay Steward

7. Date of Delivery 3.2.87

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

EID/GWH-86/1

WATER-QUALITY INVESTIGATIONS AT THE LEE ACRES LANDFILL AND VICINITY SAN JUAN COUNTY, NEW MEXICO

Prepared
Dennis McQuillan and Patrick Longmire

February 1986

Environmental Improvement Division
Ground Water/Hazardous Waste Bureau
P.O. Box 968
Santa Fe, NM 87504
(505) 827-2912

Denise Fort, Director
Environmental Improvement Division

Ernest C. Rebuck, Chief
Ground Water/Hazardous Waste Bureau

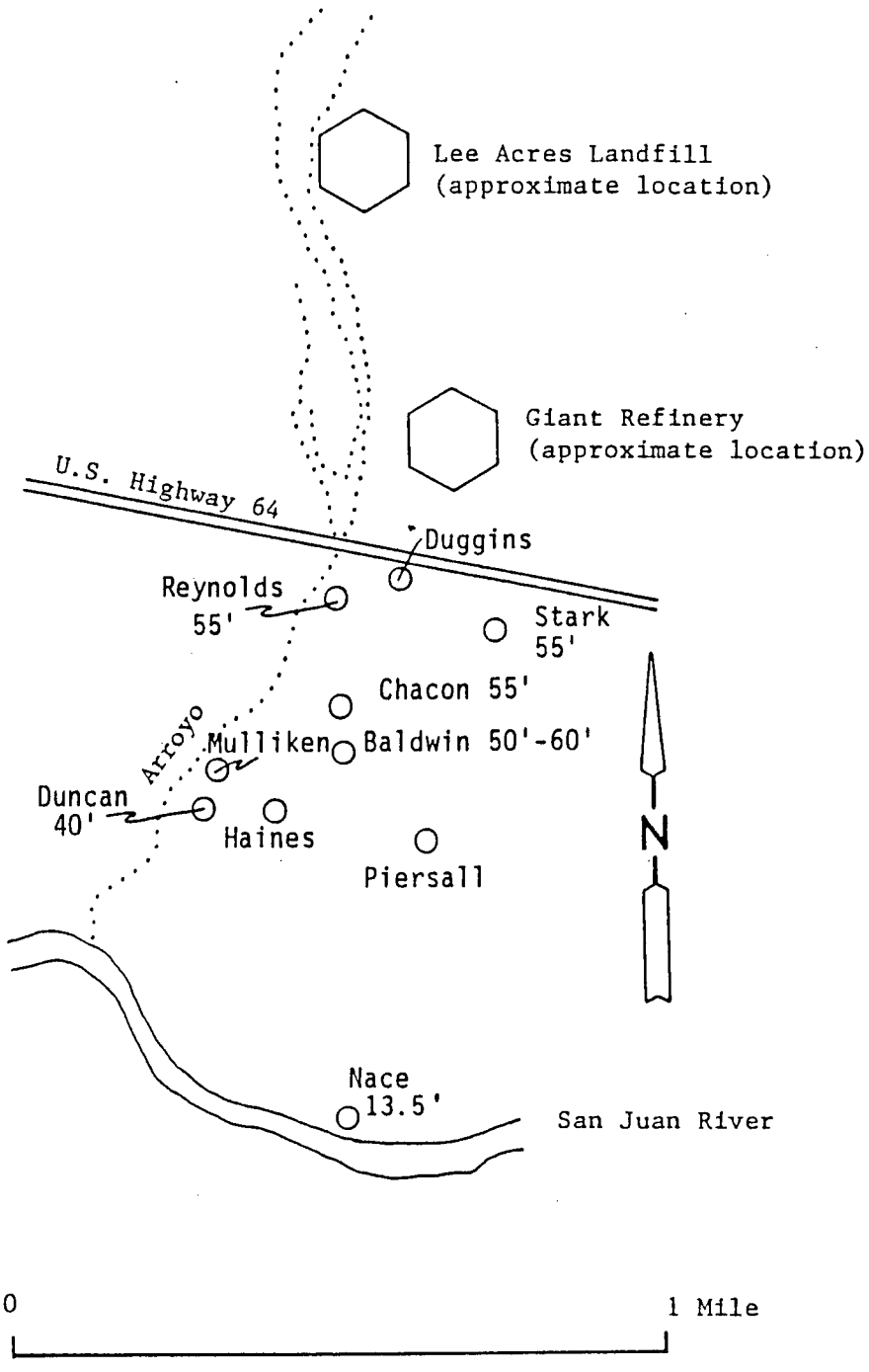


Figure 6. Locations and Reported Depths of Wells Sampled.

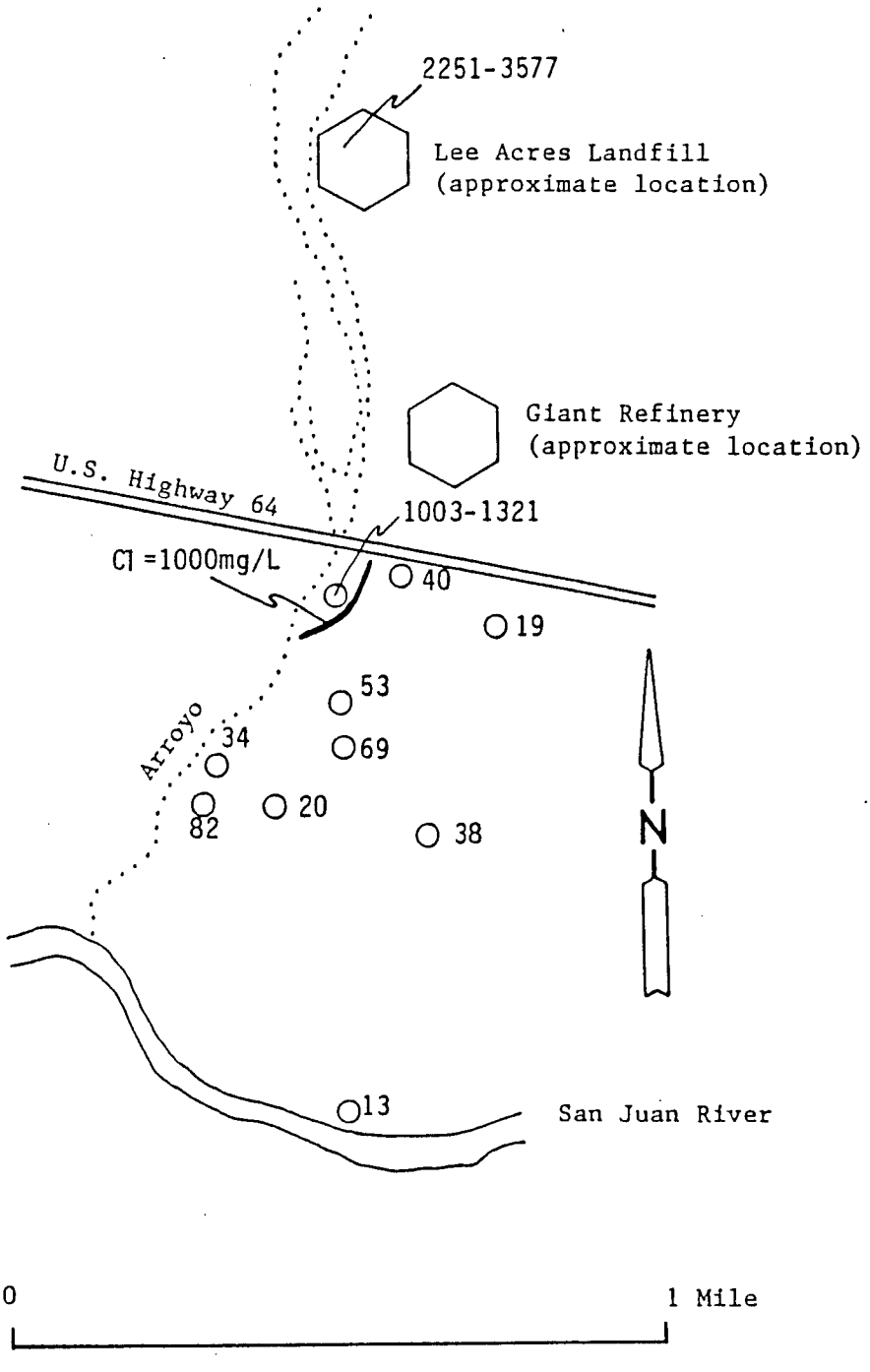


Figure 15. Chloride Concentrations of Well Waters and Lagoon Water in mg/L. Contour interval is 1000mg/L.

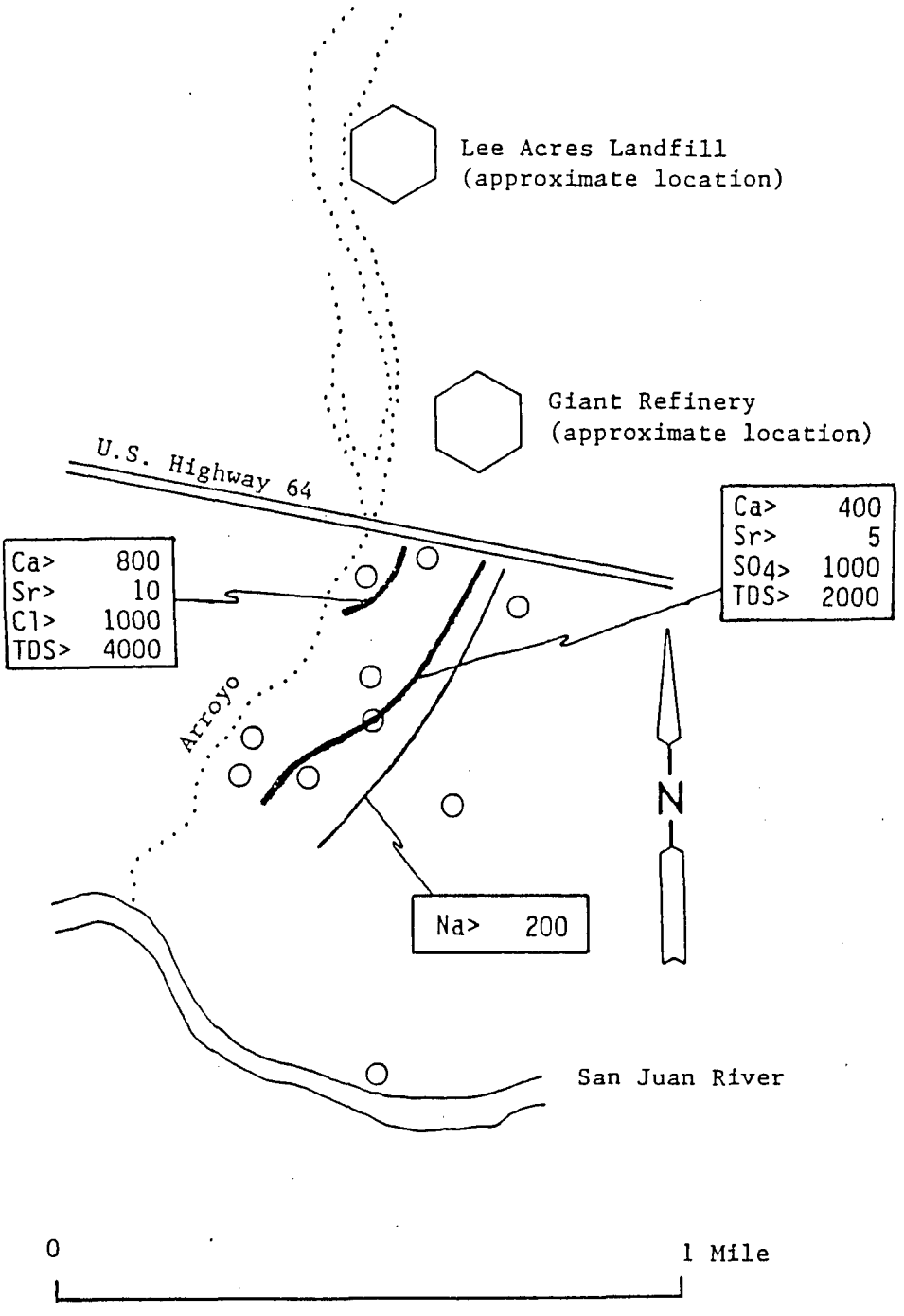


Figure 17. Summary of Water Quality Data for the Alluvial Aquifer. All concentrations are mg/L.

86-1378-C

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

HEALTH ENVIRONMENT — STATE OF NEW MEXICO

REPORT TO: David Boyer
N.M. Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87504-2088
PHONE(S): 827-5812

S.L.D. No. OR- 1378 A,B
DATE REC. 11-26-86
PRIORITY 2
USER CODE: 82235
SUBMITTER: David Boyer
CODE: 2610

SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 861121131021DBB

SAMPLE TYPE: WATER [X], SOIL [ ], FOOD [ ], OTHER: _____ CODE: _____

COUNTY: San Juan ; CITY: Los Arcos CODE: _____

LOCATION CODE: (Township-Range-Section-Tracts) 29N+12W+28+4211 (10N06E24342)

ANALYSES REQUESTED: Please check the appropriate box(es) below to indicate the type of analytical screens required. Whenever possible list specific compounds suspected or required.

PURGEABLE SCREENS

- [ ] (753) Aliphatic Purgeables (1-3 Carbons)
- [X] (754) Aromatic & Halogenated Purgeables
- [ ] (765) Mass Spectrometer Purgeables
- [ ] (766) Trihalomethanes

Other Specific Compounds or Classes

- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____

EXTRACTABLE SCREENS

- [ ] (751) Aliphatic Hydrocarbons
- [ ] (760) Organochlorine Pesticides
- [ ] (755) Base/Neutral Extractables
- [ ] (758) Herbicides, Chlorophenoxy acid
- [ ] (759) Herbicides, Triazines
- [ ] (760) Organochlorine Pesticides
- [ ] (761) Organophosphate Pesticides
- [ ] (767) Polychlorinated Biphenyls (PCB's)
- [ ] (764) Polynuclear Aromatic Hydrocarbons
- [ ] (762) SDWA Pesticides & Herbicides

Remarks: _____

FIELD DATA:

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____mg/l

Dissolved Oxygen=_____mg/l; Alkalinity=_____mg/l; Flow Rate_____ ____/____

Depth to water _____ft.; Depth of well_____ft.; Perforation Interval _____-_____ft.; Casing:_____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

M Mulliken - Bloomfield Sanitation, Black Sediment
Sample from B. Yard Top mesh well

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities.(signature collector): D K Boyer Method of Shipment to the Lab: Hand Carried

This form accompanies 2 Septum Vials, ____ Glass Jugs, and/or ____ _____

Samples were preserved as follows:

- [ ] NP: No Preservation; Sample stored at room temperature.
- [X] P-Ice Sample stored in an ice bath (Not Frozen).
- [ ] P-$Na_2S_2O_3$ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

CHAIN OF CUSTODY

I certify that this sample was transferred from Willie Olsen to Mary C. Ellis

at (location) HED/SLD on 11/26/86 - 2:00 PM and that the statements in this block are correct. Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [X] No [ ]

Signatures Willie Olsen Mary C. Ellis

For OCD Use: Date Owner Notified _____ Phone or Letter?_____ Initials _____

ANALYSES PERFORMED LAB. NO. OR- 1378

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s) checked below:

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
- ☒ (754) Aromatic & Halogenated Purgeables
- ☐ (765) Mass Spectrometer Purgeables
- ☐ (766) Trihalomethanes

Other Specific Compounds or Classes

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
- ☐ (760) Organochlorine Pesticides
- ☐ (755) Base/Neutral Extractables
- ☐ (758) Herbicides, Chlorophenoxy acid
- ☐ (759) Herbicides, Triazines
- ☐ (760) Organochlorine Pesticides
- ☐ (761) Organophosphate Pesticides
- ☐ (767) Polychlorinated Biphenyls (PCB's)
- ☐ (764) Polynuclear Aromatic Hydrocarbons
- ☐ (762) SDWA Pesticides & Herbicides

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
aromatic purgeables	ND		
1,2-dichloroethane	3		
* DETECTION LIMIT *	1 ppb	+ DETECTION LIMIT +	

ABBREVIATIONS USED:

N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT

T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED)

[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION

LABORATORY REMARKS: _____

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☒ No ☐. Seal(s) broken by: _____ date: 12-2-86

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 2 Dec 86. Analyst's signature: _____

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block.

Reviewers signature: _____

86- 1309-C

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

NEW MEXICO ENVIRONMENT

REPORT TO: Dennis McQuillan
EID - Ground Water
P.O. Box 968
Santa Fe, N.M. 87504-0968
PHONE(S): 827-2912

S.L.D. No. OR- 1309
DATE REC. 12-17-86
PRIORITY 3
USER CODE: 59300

SUBMITTER: McQuillan CODE: MCQ

SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 861028104515 MCQ

SAMPLE TYPE: WATER ☒, SOIL ☐, FOOD ☐, OTHER: _____ CODE: _____

COUNTY: San Juan ; CITY: Lee Acres CODE: _____

LOCATION CODE: (Township-Range-Section-Tracts) 29N+12W+28+421 (10N06E24342)

ANALYSES REQUESTED: Please check the appropriate box(es) below to indicate the type of analytical screens required. Whenever possible list specific compounds suspected or required.

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
- ☒ (754) Aromatic & Halogenated Purgeables
- ☐ (765) Mass Spectrometer Purgeables
- ☐ (766) Trihalomethanes

Other Specific Compounds or Classes

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
- ☐ (760) Organochlorine Pesticides
- ☐ (755) Base/Neutral Extractables
- ☐ (758) Herbicides, Chlorophenoxy acid
- ☐ (759) Herbicides, Triazines
- ☐ (760) Organochlorine Pesticides
- ☐ (761) Organophosphate Pesticides
- ☐ (767) Polychlorinated Biphenyls (PCB's)
- ☐ (764) Polynuclear Aromatic Hydrocarbons
- ☐ (762) SDWA Pesticides & Herbicides

Remarks: _____

RECEIVED
DEC 17 1986
SOLID WASTE/GROUND WATER SURVEILLANCE

FIELD DATA:

pH= _____; Conductivity= 2550 umho/cm at 17.5 °C; Chlorine Residual= _____ mg/l

Dissolved Oxygen= _____ mg/l; Alkalinity= _____ mg/l; Flow Rate _____ ____/____

Depth to water _____ ft.; Depth of well _____ ft.; Perforation Interval ____-____ ft.; Casing: _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

Mulliten Well, sampled at backyard tap

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities.(signature collector): Dennis McQuillan Method of Shipment to the Lab: air, auto

This form accompanies 2 Septum Vials, ____ Glass Jugs, and/or ____ _____

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
- ☒ P-Ice Sample stored in an ice bath (Not Frozen).
- ☐ P-$Na_2S_2O_3$ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

CHAIN OF CUSTODY

I certify that this sample was transferred from _____ to _____

at (location) _____ on ____/____/____ - ____:____ and that the statements in this block are correct. Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐

Signatures _____ _____

ANALYSES PERFORMED LAB. # OR- 1309

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s) checked below:

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
- ☒ (754) Aromatic & Halogenated Purgeables
- ☐ (765) Mass Spectrometer Purgeables
- ☐ (766) Trihalomethanes

Other Specific Compounds or Classes

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
- ☐ (760) Organochlorine Pesticides
- ☐ (755) Base/Neutral Extractables
- ☐ (758) Herbicides, Chlorophenoxy acid
- ☐ (759) Herbicides, Triazines
- ☐ (760) Organochlorine Pesticides
- ☐ (761) Organophosphate Pesticides
- ☐ (767) Polychlorinated Biphenyls (PCB's)
- ☐ (764) Polynuclear Aromatic Hydrocarbons
- ☐ (762) SDWA Pesticides & Herbicides

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
aromatic purgeables	N.D.		
halogenated purgeables			
1,2 Dichloroethane (EDC)	3		
* DETECTION LIMIT * ✳	1 ug/L	+ DETECTION LIMIT + +	

ABBREVIATIONS USED:

N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT

T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED)

[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION

LABORATORY REMARKS: _____

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☑ No ☐. Seal(s) broken by: Mary C. Eden date: 11/26/86

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 11/26/86. Analyst's signature: Mary C. Eden

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block.

Reviewers signature: _____

REP 85-0383 Environmental Improvement Division LABORATORY
& Environment Department
P.O. Box 968 - Crown Building LAB NUMBER
Santa Fe, New Mexico 87504-0968
ATTENTION: Longmire
BUREAU: GW/HW SLD Users Code No. 57300

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water ☒ Soil ☐ Other

Water Supply and/or Code No. James Mulliken

City & County Lee Acres SPO Box-E, San Juan Co. 87401

Collected (date & time) 8504300925 By (name) Longmire/Earp - EID

pH= 7.21 ; Conductivity= 2490 umho/cm at 14.6 °C; Chlorine Residual=

Dissolved Oxygen= mg/T; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

Spigot, strong sulfide odor

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES 2 septum vials with teflon-lined discs identified as:
specimen ; duplicate ; triplicate ; blank(s) ,
and amber glass jug(s) with teflon-lined cap(s) identified as ,
and other container(s) (describe) identified as .
Containers are marked as follows to indicate preservation (circle):
NP: No preservation; sample stored at room temperature (~20°C).
P-ICE: Sample stored in an ice bath.
P-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from to
at (location) on
(date & time) and that the statements in this block are correct.
Disposition of Sample . Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)

RECEIVED
JUN 24 1985
LIQUID WASTE/GROUNDWATER SURVEILLANCE

I (we) certify that this sample was transferred from to
at (location) on
(date & time) and that the statements in this block are correct.
Disposition of Sample . Seal(s) Intact: Yes ☐ No ☐ .
Signature(s)

ANALYSES REQUESTED

LAB. NO. 583

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTATIVE	PURGEABLE SCREEN	QUALITATIVE	QUANTATIVE	EXTRACTABLES SCREEN
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
		AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
		HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
	X	GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	CONC-ENTRATION	COMPOUND	CONC-ENTRATIC
com. purg. screen	none detected		
hal. purg. screen	none detected		
		* DETECTION LIMIT	1 ug/ml

REMARKS: A trace of one halogenated compound was detected that was not identified, but it is consistent with 1,2-dichloroethane.

CETRIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes (No) . Seal(s) Broken by _____ date _____

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis 8 July 85 & 16 Jan 85. Analysts signature _____

Icertify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers Signature: L Mayerhen

BENZENE CONCENTRATIONS MONITORED AT THE AIR STRIPPER

GIANT BLOOMFIELD REFINERY

DATE	INFLOW (ppb)	EFFLUENT (ppb)
1/16/89	440	42**
2/2/89	280	ND
3/14/89	2314	219**
4/25/89	363	10.1**
5/12/89	390	9.8
6/13/89	82.3	5.5
7/12/89	33	0.51
8/17/89	140	58**
9/13/89	1800	1200**
9/29/89	78++	9.2++
10/19/89	129	12.43**
11/15/89	23.6	ND
12/12/89	110	3.3

** - Exceeds New Mexico WQCC Ground Water Standards

++ - Concentrations After Repair Of The Air Stripper

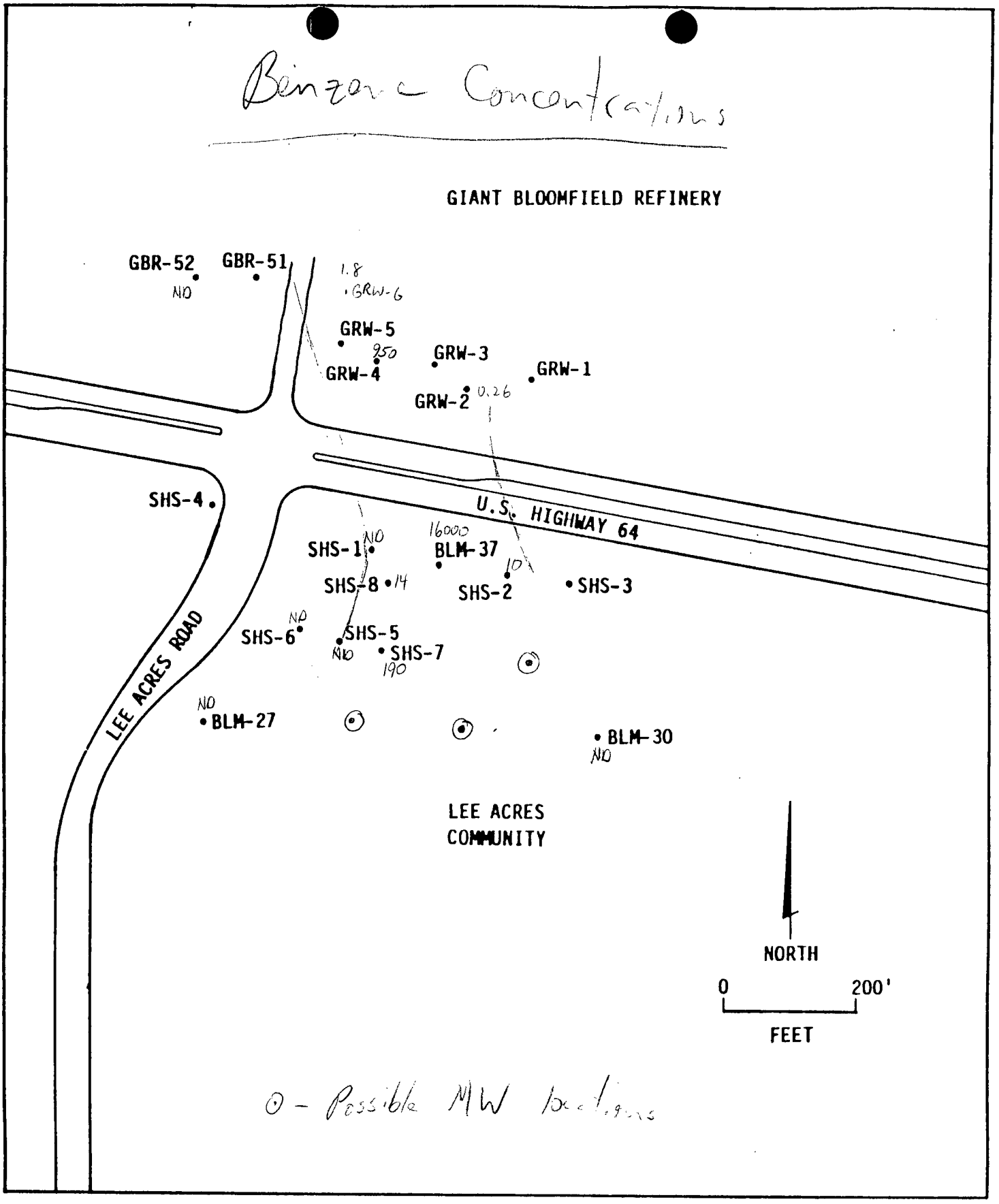


FIGURE 1-1
MONITOR WELL LOCATION MAP

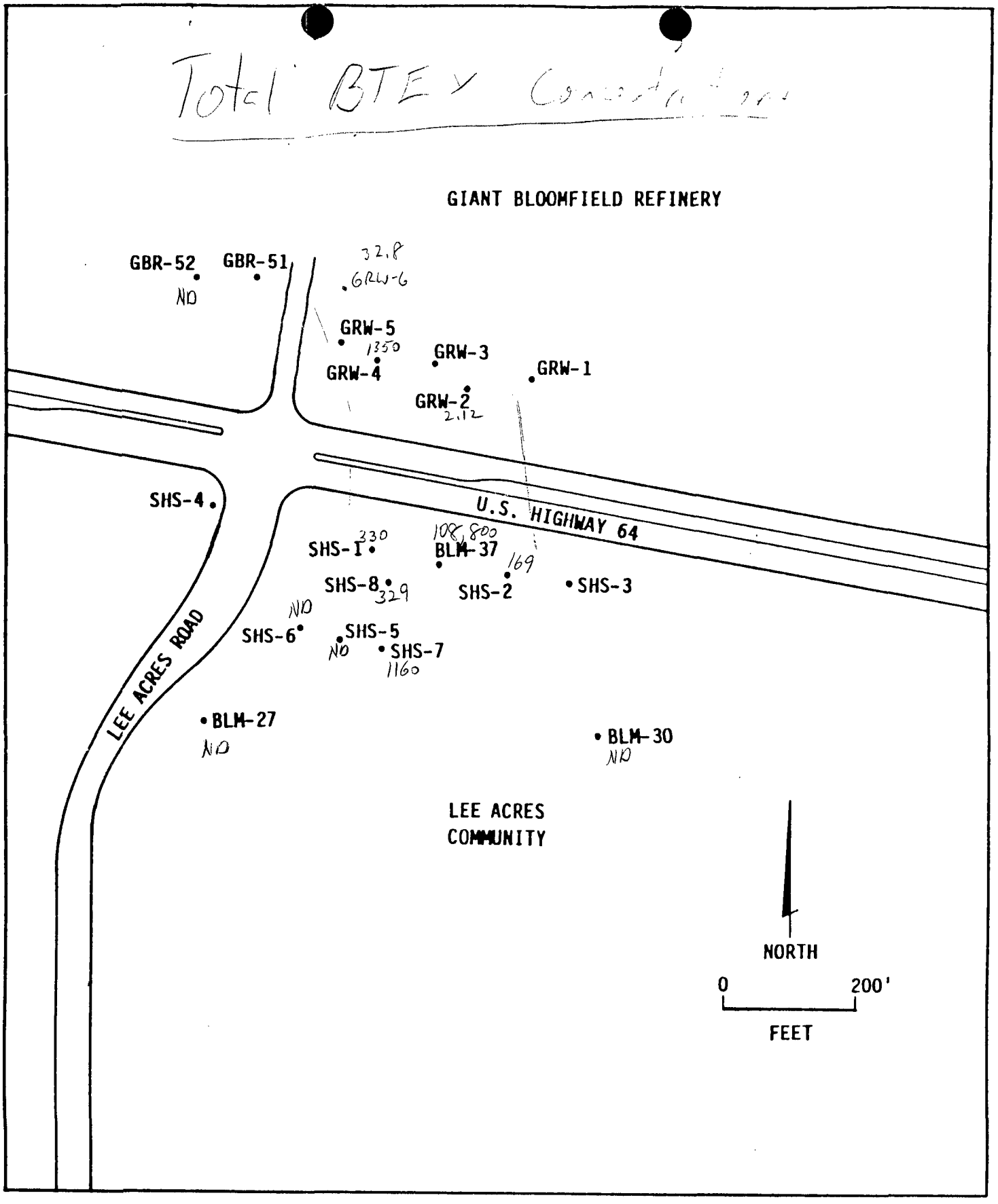


FIGURE 1-1
MONITOR WELL LOCATION MAP

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)

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
Mack E. With
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
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova
Martin R. Esquivel
Scott K. Atkinson
Catherine E. Pope

November 20, 1989

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

David G. Boyer, Chief
Environmental Bureau
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Re: Groundwater Discharge Plans Nos. GW-32 and GW-40

Dear Mr. Boyer:

Giant Refining Company, the permittee under the above referenced discharge plans, is an operating division of Giant Industries, Inc. This letter confirms our telephone conversation of November 15, 1989, in which I notified you that Giant Industries, Inc. has changed its name to Giant Industries Arizona, Inc. In our conversation, you stated that Giant Refining Company is not required to amend its discharge plan or otherwise take formal action to reflect the name change of the permittee's parent corporation.

Yours truly,

Rod D. Baker

RDB:ls:43
8361-89-17
cc: Kim H. Bullerdick, Esq.

NEW MEXICO OIL CONSERVATION COMMISSION

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

OIL CONSERVATION DIVISION

RECEIVED
'89 NOV 13 AM 11 11

NAME OF OPERATOR Giant Refining Company					ADDRESS P. O. Box 256 Farmington, NM 87499		
REPORT OF	FIRE	BREAK	SPILL X	LEAK	BLOWOUT	OTHER	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY X	OTHER*
NAME OF FACILITY Giant's Farmington Refinery							
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC.	TWP.	RGE. / COUNTY
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK ½ mile N. of Lee Acres							
DATE AND HOUR OF OCCURENCE 10-30-89 2:30 to 3:00 p.m.					DATE AND HOUR OF DISCOVERY 10-30-89 3:00 p.m.		
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT REQUIRED		IF YES, TO WHOM Dave Englert		
BY WHOM Tim Kinney					DATE AND HOUR		
TYPE OF FLUID LOST Recovered water					QUANTITY OF LOSS 40 barrels	VOLUME RECOVERED None	
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

A pipeline carrying water to the upper storage area in the refinery froze and broke. It will be repaired and freeze protected before it is put back in service.

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

Water ran downgradient along the western edge of the refinery's gravel pad. The water was absorbed by the ground before any recovery could be accomplished.

DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER* Inactive refinery			
SURFACE CONDITIONS	SANDY X	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

Temperature - 40° F
No precipitation

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED Timothy A. Kinney TITLE Remediation Project Manager DATE 10-31-89

Timothy A. Kinney

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

RECEIVED
NOV 01 1989
OIL CON. DIV
DIST. 3

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)

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

October 24, 1989

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

Re: Bureau of Land Management's Request for Data

Dear Mr. Murphy:

On behalf of Giant Industries, Inc. ("Giant"), we transmitted to you, by letter dated September 15, 1989, information related to Giant's investigation south of Highway 64. As indicated in that letter, we are now providing further data requested in your letter of August 29, 1989. Each of your requests is addressed below.

1. Investigation South of Highway 64

Copies of Giant's proposed investigation and the approval of the New Mexico Oil Conservation Division ("OCD") have been provided to you. As future data and reports are generated and submitted to the OCD, copies will be transmitted to you.

2. Split Samples from Giant's Two New Wells South of Highway 64

We understand that you have already obtained split samples from these wells in early September.

3. Chemical Analysis Data from Wells and Soil Samples

A. Documents Sent to Both OCD and BLM

Our records indicate that we have sent the BLM copies of the following data and reports that we provided to the OCD on the dates indicated:

1) December 14, 1987 - Three volume report by Geoscience Consultants Ltd. ("GCL") dated June 1987, titled "Soil and Ground Water Investigations and Remedial Action Plan, Giant Industries, Inc., Bloomfield Refinery, Bloomfield, New Mexico";

2) November 9, 1988 - Analyses by Analytical Technologies, Inc. of water samples taken by Roy F. Weston, Inc. from GBR-9, 17, 18, 19, 24D, 31 and 32 and BLM-17 and 18 on August 24, 25, 1988;

3) January 25, 1989 - Analyses of water samples taken by GCL from GBR-32, 48, 49 and 50 on November 8, 1988;

4) June 16, 1989 - Analyses of various water samples taken by GCL during 1988;

5) June 21, 1989 - Data Report for the Northern Refinery Area by GCL dated June 7, 1989;

6) July 5, 1989 - Quarterly Data Report by GCL for data collected in the first quarter of 1989 under the Discharge Plan; and

7) September 21, 1989 - Quarterly Data Report by GCL for data collected in the second quarter of 1989 under the Discharge Plan.

B. Documents Sent to OCD and Available to BLM

Some data and reports were sent to the OCD before we routinely sent copies to the BLM. Although we understand that you already have obtained copies of these data and reports from the OCD, we will provide you with another copy upon request. Our records indicate that we have transmitted to the OCD the following data and reports on the dates indicated:

1) May 23, 1986 - GCL report dated May 23, 1986 titled "Report on Environmental Investigations at Giant Industries, Inc., Bloomfield Refinery, Bloomfield, New Mexico";

2) December 3, 1986 - GCL report dated December 1, 1986 titled "Preliminary Report on Ground Water Investigations at the Giant Industries, Inc., Bloomfield Refinery, Bloomfield, New Mexico";

3) March 1, 1988 - Discharge Plan Application prepared by GCL, as supplemented by later submissions and exchanges of correspondence with the OCD;

4) April 20, 1988 - GCL data compilation dated April 20, 1988 titled "Chemical Analyses - Giant Bloomfield Refinery, Bloomfield, New Mexico" covering data from 1985 through 1987; and

5) June 1, 1988 - Analyses of water samples taken by Groundwater Technology, Inc. ("GTI") from GBR-17, 19, 31 and 32 on April 20, 1988.

C. Other Well and Soil Data

A review of our records indicates that we may not have provided the OCD or BLM with analyses of water samples collected by GTI from GBR-17, 24D, 30 and 31 on June 1 and 2, 1988. To correct this possible oversight, copies of these analyses are enclosed as Attachment 1 and are also being transmitted to the OCD and the New Mexico Environmental Improvement Division ("EID") by copy of this letter.

The only other well and soil data that have not been provided to the OCD or BLM relate to an investigation conducted by GTI. Presently, Giant is reviewing the GTI information and plans to collect supplemental data in the near future. When the investigation is completed, the results will be provided to the OCD, with copies to the EID and BLM.

4. Borehole Logs for All Wells

We understand that the BLM has probably received copies of almost all borehole logs either directly from Giant or through the OCD. For example, logs for GBR-1 through 40 (except for 39)

were included in Giant's discharge plan application; logs for GBR-41 through 46 were included in a supplement to that application; and logs for GBR-48, 49 and 50 were included in the Data Report for the Northern Refinery Area. Nevertheless, for your convenience a complete set of GCL's borehole logs, i.e., for GBR-1 through 52 (except for 39) and SHS-1 and 2, is enclosed as Attachment 2. There is no borehole log for GBR-39, also known as the "steel well," because GCL completed that well in an existing casing.

5. Installation Logs for Wells (Other than GRR-1 through 40)

The copies of the borehole logs provided also contain information on how the wells were completed. With the exception of GBR-51 and 52 and SHS-1 and 2, GCL did not develop separate installation logs for the wells it completed. Completion diagrams for those four wells and for GBR-39 are enclosed as Attachment 3.

6. Hydrogeologic Data

All hydrogeologic data was transmitted to the OCD in GCL's reports or discharge plan materials noted above. Much of the data is found in the following portions of those documents:

A. GCL Report Dated June 1987

Section 4.0	Hydrogeology of the site
Appendix C	Aquifer Hydrogeologic Analysis at the Giant Bloomfield Refinery
Appendix D	Soil Hydraulic Analysis

B. Discharge Plan Application dated March 1, 1988

Section 5.3	Site Hydrogeology
Appendix D	Aquifer Analysis at the Giant Bloomfield Refinery

7. Coordinates of Wells (Other than GBR-1 through GBR-40)

We understand that on July 18, 1989, GCL provided Berg Keshian of Weston with coordinates for all of Giant's wells.

8. BLM Sampling of Two Former Firewater Storage Ponds

In view of the fact that the two former firewater storage ponds have been drained, we understand that the BLM would like to take soil samples from these locations. Giant is interested in cooperating in this regard, but does not understand why the

sampling is necessary. I would like to discuss this matter with you before arrangments are made to take samples.

As indicated throughout this letter, Giant will continue to send you copies of data and reports provided to the OCD in the course of Giant's investigative and remedial activities.

Sincerely,

Edmund H. Kendrick

EHK:gr:91
Enclosures
File #8361-88-11
cc: David G. Boyer, OCD (w/encls.)
Dennis McQuillan, EID (w/encls.)
Chris Shuey, SWRIC (w/encls.)

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY X	OTHER*
NAME OF FACILITY	Giant Farmington Refinery						
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC.	TWP.	RGE. / COUNTY San Juan
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK	1/2 mile North of Lee Acres						
DATE AND HOUR OF OCCURENCE	Between 5:00 p.m. on 9-20-89 and 9:00 a.m. on 9-21-89				DATE AND HOUR OF DISCOVERY	9:00 a.m. 9-21-89	
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT REQUIRED		IF YES, TO WHOM	Dave Boyer	
BY WHOM	Tim Kinney				DATE AND HOUR	9-26-89	
TYPE OF FLUID LOST	Recovered Ground Water				QUANTITY OF LOSS	3 BO / 410 BW	VOLUME RECOVERED 2.5 BO / 400 BW
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**
A leaking closed valve caused a tank to run over the top. The water was contained in a tank berm. The valve is no longer used to prevent filling of the tank.

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**
A vacuum truck was used to skim oil off of the surface of the water and pump water from the bermed tank area to another tank.

DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER* Inactive Refinery			
SURFACE CONDITIONS	SANDY X	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**
No precipitation - 50° to 80°F Ambient conditions.

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED Timothy J. Kinney TITLE Clean-up Project Manager DATE 10-2-89

*SPECIFY Tim Kinney **ATTACH ADDITIONAL SHEETS IF NECESSARY

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)

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

September 21, 1989

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

Re: Second 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 April, May and June 1989.

Sincerely,

Ned Kendrick

Edmund H. Kendrick

EHK:gr:65
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
ATTORNEYS AND COUNSELORS AT LAW

OF COUNSEL
William R. Federici

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

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
Mack E. With
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
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Sheila Scott Harris
Elizabeth A. Jaffe
R. Michael Shickich
Janet W. Cordova

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

September 15, 1989

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

Re: Bureau of Land Management's Request for Data

Dear Mr. Murphy:

In response to your letter of August 29, 1989, I am enclosing copies of the following:

1. Off-Site Hydrogeologic Investigation, dated July 7, 1989, prepared by Geoscience Consultants, Ltd.;

2. letter from the New Mexico Oil Conservation Division ("OCD") to Montgomery & Andrews dated July 20, 1989, approving and commenting on the proposed investigation; and

3. letter from Montgomery & Andrews to OCD dated August 21, 1989 acknowledging OCD's comments.

As we discussed in our telephone conversation of September 1, 1989, the other data that you have requested are extensive. We will be addressing your remaining data requests in the near future. You should note, however, that Giant has

routinely transmitted to BLM copies of ground water data submitted to OCD and has split samples with BLM from wells on refinery property at BLM's request.

I understand that last week BLM and Giant split samples from both BLM and Giant wells south of the highway. We look forward to other cooperative efforts of this kind in the future.

Sincerely,

Edmund H Kendrick

Edmund H. Kendrick

EHK:gr:30
Enclosures
File #8361-88-11
cc: David G. Boyer (w/o encls.)
Dennis McQuillan (w/encls.)

FILE COPY

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW

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

OF COUNSEL
William R. Federici

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

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi

Galen M. Buller
Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Anne B. Hemenway
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

July 14, 1989

FEDERAL EXPRESS

Stephen Lingle
Director, Hazardous Site Evaluation Division
Attn: NPL Staff
Office of Emergency and Remedial Response
WH-548A
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Recent Letters from the New Mexico Environmental Improvement Division Concerning Inclusion of Lee Acres Landfill on the National Priorities List

Dear Mr. Lingle:

Giant Industries, Inc. ("Giant") recently received copies of two letters from the New Mexico Environmental Improvement Division ("EID") addressed to your office concerning the inclusion of Lee Acres Landfill on the National Priorities List ("NPL"). The first letter, dated May 15, 1989, was replaced by a second letter dated June 2, 1989. The second letter contained the same points as the first letter with slight differences in tone and emphasis. In these letters, EID requests that the Environmental Protection Agency ("EPA") change the name of the site to Lee Acres Subdivision and that EPA finalize the site, but not as a federal facility.

Giant believes it must respond to a number of points made by EID in support of its request. Giant continues to believe that EPA should carefully review the calculation of its Hazard Ranking System score for the Lee Acres Landfill. If EPA is then still inclined to add the landfill to the NPL, an expansion of the site to include Giant's property would be inappropriate for the reasons discussed in our letter to you of September 14, 1988, a copy of which is attached hereto as Exhibit A.

Giant would like to clarify its position regarding statements made by EID in connection with: (1) the petroleum exclusion under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"); (2) the impacts of landfill wastes on Giant's remedial action; (3) the lack of access of the Bureau of Land Management ("BLM") to Giant's wells and data; and (4) the quality of BLM's Remedial Investigation/ Feasibility Study ("RI/FS"). These four points are more fully explained below.

1. Petroleum Exclusion

EID states that "Giant's contamination may be excluded from CERCLA". Giant agrees. Any releases of crude oil or refined petroleum products on Giant's property do not justify expanding the boundaries of the proposed NPL site to include this property. A discussion of the petroleum exclusion was included in our letter to you on behalf of Giant dated September 14, 1988. See Exhibit A.

2. Impacts of Landfill Wastes on Giant's Remedial Action

Giant has been treating recovered ground water with an air stripping system and discharging treated water into an infiltration gallery. In the process of recovering and treating ground water on its site, Giant has been preventing any refinery-related contamination from migrating off Giant's property. EID asserts that Giant's cleanup may have to be halted due to the adverse impacts of landfill contamination. So far, however, the presence of landfill wastes in ground water has not interfered with Giant's treatment system or the containment of refinery-related contamination. Nor does Giant anticipate any such problem. However, Giant's property necessarily will not be free of contamination so long as landfill wastes continue to migrate southward from the landfill. Giant is anxious to see the BLM contain all landfill contamination on the landfill site so as not to further contaminate Giant's property.

3. BLM's Access to Giant's Wells and Data

EID's second letter states that "BLM has not thoroughly investigated the landfill problem in part because it has not gained access to Giant property." Giant strenuously objects to any implication that it has hindered the BLM's investigations. Early in 1987, Giant's consultants met with representatives of the United States Geological Survey ("USGS"), which was serving as a consultant to the BLM at the time, and provided a tour of Giant's Bloomfield Refinery, monitor wells and recovery wells. In the course of its investigations, the USGS conducted geophysical studies on Giant's property. When Giant has

submitted data to the New Mexico Oil Conservation Division ("OCD") in the course of investigating the site, developing a remedial action plan and developing a discharge plan, it has routinely provided copies of the data to the BLM. When the BLM requested the opportunity to collect samples from certain of Giant's wells, Giant complied and allowed consultants of the BLM to enter Giant's site to collect these samples in August, 1988. On May 12, 1989, at the BLM's request, Giant and the BLM coordinated the taking of water level measurements in their respective wells and plan to exchange the data.

Giant believes that any lack of attention by the BLM to data generated from the refinery site cannot be attributed to lack of access to that data. The BLM has in its possession large amounts of data voluntarily supplied by Giant and has been permitted to enter Giant's property to collect data.

4. Quality of BLM's RI/FS

Giant shares the EID's concern that a thorough and objective RI/FS be conducted. Like the EID, Giant is concerned that the BLM has failed to consider all relevant chemical and hydrological data and has devoted considerable resources in attempts to prove that the landfill is not a significant source of regional ground water problems. Giant has taken opportunities available in the RI/FS process to communicate some of these concerns to the BLM. These letters are dated December 2, 1988 and April 21, 1989, copies of which are attached hereto as Exhibits B and C, respectively.

In conclusion, the EID's letters to your office raise a number of issues of significance to Giant. I trust the foregoing clarifies for you Giant's position on these issues. Please include this letter and attachments in the formal docket for comments regarding the proposed inclusion of Lee acres Landfill on the NPL.

Very truly yours,

Edmund H. Kendrick

EHK/gr:89
Enclosures
File #8361-89-11
cc: (w/enclosures)
Sabrina Wells, EPA Region VI
Richard Mitzelfelt, Director, EID
Dennis McQuillan, EID
Steve Cary, EID

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)

Seth D. Montgomery
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
James C. Compton
John B. Draper
Nancy Anderson King
Alison K. Schuler
Janet McL. McKay
Jean-Nikole Wells
Joseph E. Earnest
Stephen S. Hamilton
W. Perry Pearce
Brad V. Coryell
Michael H. Harbour
Robert J. Mroz
Sarah M. Singleton
Jay R. Hone
Charles W. N. Thompson, Jr.
John M. Hickey
Mack E. With
Galen M. Buller
Katherine W. Hall
Edmund H. Kendrick
Helen C. Sturm
Richard L. Puglisi
Arturo Rodriguez
Joan M. Waters
James C. Murphy
James R. Jurgens
Ann M. Maloney
Deborah J. Van Vleck
Anne B. Hemenway
Roger L. Prucino
Deborah S. Dungan
Helen L. Stirling
Rosalise Olson
William P. Slattery
Kenneth B. Baca
Daniel E. Gershon
Anne B. Tallmadge
Michael R. Roybal
Robert A. Bassett
Paula G. Maynes
Neils L. Thompson
Susan Andrews
Joseph E. Whitley
David L. Skinner
Elizabeth A. Glenn

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

Telephone (505) 242-9677

LOS ALAMOS OFFICE
Suite 120
901 18th Street
Los Alamos, New Mexico 87544

Telephone (505) 662-0005

REPLY TO SANTA FE OFFICE

September 14, 1988

FEDERAL EXPRESS

Stephen Lingle, Director
Hazardous Site Evaluation Division
Attn: NPL Staff
Office of Emergency and Remedial Response
WH-548A
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Additional Comments of Giant Industries, Inc. on Proposed Inclusion of the Lee Acres Landfill on the National Priorities List

Dear Mr. Lingle:

By letter dated August 22, 1988, Giant Industries, Inc. ("Giant") provided comments to the Environmental Protection Agency ("EPA") on EPA's June 24, 1988 proposal to add the Lee Acres Landfill to the National Priorities List ("NPL"). On September 7, 1988, Giant received a copy of comments dated August 23, 1988 that the Bureau of Land Management ("BLM") filed with EPA concerning the possible inclusion of the landfill on the NPL. Giant now wishes to respond to BLM's suggestion, made repeatedly in its comments, that NPL site boundaries be expanded to include Giant's property because of releases to ground water from the refinery.

Giant requests that this response be included in EPA's administrative record. We understand from Ms. Deborah Vaughn-Wright of EPA Region 6 that EPA will make every effort to consider our responsive comments and include them in the

EXHIBIT A

administrative record, notwithstanding their receipt by EPA after the close of the comment period.

BLM's primary position is that listing of the landfill on the NPL is not warranted. BLM asserts in the alternative that if its rescoring request is rejected, the Giant Refinery must be included in the site because of prior releases to ground water. Apparently, BLM believes that the releases of crude oil and refined products documented in Giant's submissions to the New Mexico Oil Conservation Division ("NMOCD") justify site inclusion. Any spills or leaks of such substances, however, are not covered by the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). Releases of these substances, therefore, cannot serve as the basis for site inclusion. Further, Giant would like to point out that it has been working closely with NMOCD in connection with releases on its property. These two points are more fully explained below.

1. Petroleum Exclusion

Giant operated a petroleum refinery on its property downgradient of the landfill for approximately eight (8) years, ceasing operations in 1982. Until recently, Giant also operated a truck fueling area and stored diesel fuel on the property. During the history of these operations, spills and leaks of crude oil and refined petroleum products have occurred. CERCLA, however, does not apply to releases of petroleum. Rather, CERCLA applies only to the release or threatened release of a "hazardous substance", 42 U.S.C. §§ 9604, 9607, or of a "pollutant or contaminant", 42 U.S.C. § 9604, each of which is defined to exclude "petroleum, including crude oil or any fraction thereof." 42 U.S.C. § 9601(14) and (33). Consequently, releases of crude oil or refined petroleum products on Giant's property do not justify expanding the boundaries of the proposed NPL site to include this property.

2. Remedial Action

Giant has drilled and completed numerous monitoring and recovery wells to investigate and contain any contamination on its property. Giant has worked closely in this effort with NMOCD, the New Mexico agency charged with responsibility for overseeing the cleanup of contamination at petroleum refineries. Giant has also kept the New Mexico Environmental Improvement Division informed of its investigative and remedial actions. In June 1988, Giant began treating recovered ground water with an air stripping system and discharging treated water into an infiltration gallery. NMOCD has granted Giant temporary authorization for the operation of this system pending final approval of Giant's discharge plan.

In summary, as discussed in its August 22, 1988 comments, Giant urges EPA to carefully review the calculation of its Hazard Ranking System score for the Lee Acres landfill. If EPA is then still inclined to add the landfill to the NPL, an expansion of the site to include Giant's property on the basis of releases of crude oil and refined petroleum products would be inappropriate for the foregoing reasons.

Very truly yours,

Edmund H Kendrick

Edmund H. Kendrick

EHK/sjs/112
File #8361-85-09
cc: Ms. Deborah Vaughn-Wright, EPA Region 6

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi

Galen M. Buller
Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Anne B. Hemenway
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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

July 5, 1989

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

Re: First 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 January, February and March 1989.

Sincerely,

Edmund H. Kendrick

EHK:gr:90
Enclosure
File #8361-85-09
cc: Dennis McQuillan, EID (w/encl.)
Bill Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)

RECEIVED
JUL - 6 1989
OIL CONSERVATION DIV.
SANTA FE

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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

NAME OF OPERATOR	Giant Industries				ADDRESS	Route 3 Box 7, Gallup, NM 87301	
REPORT OF	FIRE	BREAK	SPILL X	LEAK	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY X	OTHER*
NAME OF FACILITY	Giant's Bloomfield Refinery						
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC.	TWP.	RGE. / COUNTY
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK	7 miles East of Farmington on US 64						
DATE AND HOUR OF OCCURENCE	Between 2:00 PM 6/16 (Fri) and Monday morning				DATE AND HOUR OF DISCOVERY	8:30 AM 6/19/89	
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT REQUIRED		IF YES, TO WHOM	David English	
BY WHOM	Bob McClenahan, Jr.				DATE AND HOUR	6/21/89 PM	
TYPE OF FLUID LOST	Water				QUANTITY OF LOSS	- BO / 360 BW	VOLUME RECOVERED - BO / 0 BW
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

See Attached Sheet

JUN 30 1989
OIL CONSERVATION DIV.
SANTA FE

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

Tank Dike #24, water soaked into ground almost immediately so no water was recovered.

DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER* Refinery property			
SURFACE CONDITIONS	SANDY X & cobble	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

Dry, Daytime temperatures in 80's

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED Robert J. McClenahan Jr. TITLE Environmental Coordinator, Giant Refining Co. DATE 6/27/89

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

GIANT BLOOMFIELD REFINERY 6/27/89

Caust of Problem and Remedial Action Taken:

The week of June 12, 1989, Geoscience Consultants, Ltd. was on site to conduct routine sampling and integrity testing of water and petroleum lines.

During the course of testing the line between Tank 102, the Air Stripper feed tank, and Tank 32, a line plug located within Tank 24's dike was blown off. The plug was held in place by a dresser sleeve coupling. Geoscience personnel reinstalled the plug on Thursday, 6/15. The line was inspected by Giant's contractor at 2:00 PM on Friday, 6/16. There was no evidence of leakage at that time. When she returned on Monday, 6/19, she discovered the leak and took measures to stop the flow through that line. I was notified and requested Intermountain Labs to sample the water from the line for EPA methods 601 and 602 and TDS. The results of those analyses are attached.

Giant will be taking steps to see that occurences such as this do not reoccur. The refinery recovery system will be included on the Ciniza Pipeline's weekend duty man's schedule. This will provide oversite during the weekends and minimize the duration of any future problems. Secondly, all dresser sleeve couplings will be replaced with welded sections. This will upgrade the above ground lines between the treatment area and the upper refinery storage tanks. There are no other temporary couplings being used at the facility.

62732

Inter·Mountain
Laboratories, Inc.

2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

22 June 1989

Giant Refining Company
Route 3, Box 7
Gallup, NM 87301

Bob McClenehan,

These are the 8020, 602, and TDS results for the sample I took on 19 June. The BTEX results are slightly different than I reported on the telephone because my later quality control checks revealded a minor problem. I've reported everything on one sheet of paper; I'll gladly switch back to a separate sheet for each analysis if you prefer.

Sincerely,

C. Neal Schaeffer
Senior chemist

Inter-Mountain
Laboratories, Inc.

2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

Client:	Giant Refining Company		
Sample Site:	Giant Refinery	Report Date:	06/22/89
Sample ID:	Inline bleeder	Date Sampled:	06/19/89
Laboratory Number:	F1629	Date Received	06/19/89
Analysis Requested:	Purgeables, TDS	Date Extracted:	NA
Sample Matrix:	Water	Date Analyzed	06/22/89

Parameter	Concentration	Units
BENZENE	41.0 (0.2)	ug/l
TOLUENE	1.2 (0.2)	ug/l
ETHYLBENZENE	2.3 (0.2)	ug/l
m,p-XYLENE	16.8 (0.2)	ug/l
o-XYLENE	14.2 (0.2)	ug/l
CHLOROMETHANE	ND (1.0)	ug/l
BROMOMETHANE	ND (1.0)	ug/l
DICHLORODIFLUOROMETHANE	ND (1.0)	ug/l
VINYL CHLORIDE	ND (1.0)	ug/l
CHLOROETHANE	ND (1.0)	ug/l
METHYLENE CHLORIDE	ND (1.0)	ug/l
TRICHLOROFLUOROMETHANE	ND (1.0)	ug/l
1,1-DICHLOROETHENE	ND (1.0)	ug/l
1,1-DICHLOROETHANE	2.4 (1.0)	ug/l
TRANS-1,2-DICHLOROETHENE	ND (1.0)	ug/l
CHLOROFORM	ND (1.0)	ug/l
1,2-DICHLOROETHANE	2.3 (1.0)	ug/l
1,1,1-TRICHLOROETHANE	ND (1.0)	ug/l
CARBON TETRACHLORIDE	ND (1.0)	ug/l
BROMODICHLOROMETHANE	ND (1.0)	ug/l
1,2-DICHLOROPROPANE	ND (1.0)	ug/l
CIS-1,3-DICHLOROPROPENE	ND (1.0)	ug/l
TRICHLOROETHENE	1.3 (1.0)	ug/l
DIBROMOCHLOROETHENE	ND (1.0)	ug/l
1,1,2-TRICHLOROETHANE	ND (1.0)	ug/l
TRANS-1,3-DICHLOROPROPENE	ND (1.0)	ug/l
2-CHLOROETHYLVINYL ETHER	ND (1.0)	ug/l
BROMOFORM	ND (1.0)	ug/l
1,1,2,2-TETRACHLOROETHANE	ND (1.0)	ug/l
TETRACHLOROETHENE	ND (1.0)	ug/l
CHLOROBENZENE	ND (1.0)	ug/l
1,3-DICHLOROBENZENE	ND (1.0)	ug/l
1,2-DICHLOROBENZENE	ND (1.0)	ug/l
1,4-DICHLOROBENZENE	ND (1.0)	ug/l

Methods: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)
601 Purgeable Halocarbons, 40 CFR Part 136, USEPA (1984).

Note: Method Detection Limit (MDL) is given in parentheses.
ND means analyte was not detected.

Total dissolved solids (160)..... 3740 mg/l
Method 160.2, USEPA 600/4-79-020.

C. Neal Schaeffer
Senior Organic Chemist

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi

Galen M. Buller
Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Anne B. Hemenway
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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

June 21, 1989

Mr. Dennis McQuillan
Environmental Improvement Division
Post Office Box 968
Santa Fe, New Mexico 87504-0968

Re: Data Report for the Northern Area of Giant's Bloomfield Refinery

Dear Dennis:

I understand that on May 19, 1989 Bob McClenahan of Giant Refining Company hand-delivered to you a report dated May 10, 1989 containing water level, chemical and lithologic data for the area in the arroyo upgradient of Giant's Bloomfield Refinery. Geoscience Consultants, Ltd. has informed me that the May 10, 1989 report contains some minor errors. Consequently, I am enclosing herewith a revised report dated June 7, 1989 which should be substituted for the May 10, 1989 report.

Sincerely,

Edmund H. Kendrick

EHK:gr:78
Enclosure
File #8361-85-09
cc: David G. Boyer, OCD (w/encl.)
Bill Murphy, BLM (w/encl.)
Chris Shuey, SWRIC (w/encl.)

Superceded by 6/21/89 Report

DATA REPORT FOR THE NORTHERN REFINERY AREA GIANT BLOOMFIELD REFINERY

May 10, 1989

Prepared for:

Mr. Ned Kendrick, Esq.
Montgomery & Andrews, P.A.
P.O. Box 2307
Santa Fe, NM 87504-2307

Prepared by:

GEOSCIENCE CONSULTANTS, LTD.

HEADQUARTERS
500 Copper Avenue, NW
Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001
FAX (505) 842-0595

WEST COAST REGIONAL OFFICE
1400 Quail Street
Suite 140
Newport Beach, CA 92660
(714) 724-0536
FAX (714) 724-0538

EASTERN REGIONAL OFFICE
1109 Spring Street
Suite 706
Silver Spring, Maryland 20910
(301) 587-2088
FAX (301) 587-3625

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi

Galen M. Buller
Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Anne B. Hemenway
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Scott F. Doering
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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

June 16, 1989

RECEIVED
JUN 19 1989
OIL CONSERVATION DIV.
SANTA FE

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

Re: Data from Giant's Bloomfield Refinery

Dear Mr. Boyer:

I am enclosing for your information copies of analyses of water samples taken from the refinery site last November and December. Also enclosed are analyses of water samples taken in January 1988, borehole logs for wells drilled in September 1988 and water level data for November and December 1988. The following is a more detailed list of the enclosed data:

1. Analyses of water samples taken from GBR-8, GBR-15 and Tank 37 on January 20, 1988;

2. Analyses of water samples taken from GBR-32, GBR-48, GBR-49, GBR-50, GBR-51, GBR-52, Tank 22, Tank 27, Tank 34, Tank 35, Tank 106, air stripper influent and air stripper effluent on November 8, 1988;

3. Analyses of water samples taken from GBR-6, GBR-8, GBR-13, GBR-14, GBR-15, GBR-17, GBR-24, GBR-30, GBR-31, GBR-33 and air stripper effluent on December 7, 1988;

4. Analyses of water samples taken from air stripper effluent on December 13, 1988;

5. Borehole logs for the drilling of GBR-51 and GBR-52 on September 13, 14, 1988; and

6. Water level data and elevation maps for November and December, 1988.

Some of the enclosed data may duplicate data previously sent to you. For instance, on January 25, 1989 I transmitted to you analyses of water samples taken from GBR-32, GBR-48, GBR-49 and GBR-50 on November 8, 1988.

I recognize that some of the copies are faint due to the manner in which the originals were printed. If any data of interest are not legible, please do not hesitate to contact directly either Randy Hicks or Martin Nee at Geoscience Consultants, Ltd. with your questions.

The first Quarterly Data Report (for January, February and March 1989) will be sent to you shortly.

Sincerely,

Ned Kendrick

Edmund H. Kendrick

EHK:gr:38
Enclosures
File #8361-85-09
cc: Dennis McQuillan, EID (w/enclosures)
Bill Murphy, BLM (w/enclosures)
Chris Shuey, SWRIC (w/enclosures)

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

May 19, 1989

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-031

Received
RZ McClenahan
5/19/89

Mr. Robert L. McClenahan, Jr.
Environmental Coordinator
Giant Industries, Inc.
Route 3, Box 7
Gallup, New Mexico 87301

RE: Investigation of Petroleum Product Occurrence South of Bloomfield Refinery

Dear Mr. McClenahan:

This letter is to notify you of the necessity to begin an investigation of petroleum product occurrence south of your Bloomfield Refinery. During the February, 1989, sampling of the newly installed monitor well BLM-37, a 2.6 feet-thick layer of floating hydrocarbon was found in the well by Bureau of Land Management's (BLM) consultant, R. F. Weston.

The well is located across U.S. Highway 64 from the refinery on Highway Department right-of-way, and is directly south of the refinery area where Giant is currently conducting product recovery operations. A copy of Weston's letter (with map) notifying BLM of the discovery is enclosed.

In previous letters dated February 25, 1987 and November 20, 1987, the Oil Conservation Division (OCD) discussed the finding of dissolved petroleum product constituents in two domestic wells south of the refinery and of the need for Giant to investigate the problem further. At that time it was hoped a coordinated effort by Giant and the BLM could be undertaken to investigate the contamination. However, the detection of floating product between your current product recovery area and the domestic wells shows that further investigation and initiation of recovery efforts cannot wait until post-1990 issuance of BLM's Lee Acres Environmental Impact Statement.

Within 45-days from receipt of this letter, Giant is hereby required to provide the OCD with a proposal for a hydrogeological investigation including the method of investigation, a schedule for conducting it, and a schedule for initiation of containment. During this time the OCD will meet with Giant to discuss and formulate a "Settlement Agreement" that will define and establish

the responsibilities of both Giant and OCD in this complex matter. OCD is currently preparing a generic "Settlement Agreement" document similar to that approved by the Water Quality Control Commission for use by EID. A draft copy of technical requirements is enclosed as an example.

Because of the complexity and seriousness of this matter, we will appreciate the cooperation of Giant Industries in trying to resolve the technical and legal issues related to this ground water contamination problem. If you have any questions, please contact David Boyer at 827-5812.

Sincerely,

Victor 2. Lyon

for William J. LeMay
Director

DGB/sl

Enclosures

cc: Edmund H. Kendrick, Montgomery & Andrews
Richard Mitzelfelt, Director, NMEID
Larry Woodard, State Director, BLM

New Mexico Health and Environment Department

MARALYN BUCKE
Acting Secretary

CARLA L. MUTH
Deputy Secretary

MICHAEL J. BURKHART
Deputy Secretary

RICHARD MITZELFELT
Director

May 16, 1989

Larry Woodard, State Director
Bureau of Land Management
P.O. Box 1449
Santa Fe, New Mexico 87501

MAY 19 1989

OIL CONSERVATION DIV.
SANTA FE

RE: Lee Acres Landfill

Dear Mr. Woodard:

The New Mexico Environmental Improvement Division (EID) has reviewed the Preliminary Investigation Report on the Lee Acres Landfill, submitted to this office by the Bureau of Land Management (BLM) on March 31, 1989. Attached are specific comments prepared by my technical staff on the data and interpretations presented in the Roy F. Weston report.

EID has reviewed data from all available sources including investigations by the Bureau of Land Management, Environmental Improvement Division, Giant Refining Co., El Paso Natural Gas, New Mexico Oil Conservation Division, and U.S. Geologic Survey. This data clearly indicates that Giant's Bloomfield Refinery and Lee Acres Landfill each have caused ground water contamination.

The sources of contamination at Giant are petroleum-related spills and line breaks associated with refinery operations. Therefore, Giant's contaminant plume consists primarily of aromatic hydrocarbons associated with petroleum. The landfill lagoons, on the other hand, contained fluids with high chlorides and several chlorinated solvents. The landfill plume comingles with Giant's plume as ground water moves south down the arroyo. There is no evidence that other sources of chlorinated solvents and elevated chlorides are present either on Giant's property or upgradient from the landfill. In fact, chemical data from monitor wells surrounding the landfill and from the BLM-sponsored soil gas survey clearly identify the lagoons as the source of these contaminants.

EID strongly opposes Weston's proposal to perform further investigation into other possible sources. The sources are known. Containment and remediation of contaminated groundwater are the appropriate next steps and should be pursued in the most efficient manner possible.

In order for BLM to meet the conditions of paragraphs 1, 1.d, and 5 of the Compliance Agreement of August 13, 1987 between EID and

BLM, an initial investigation and an acceptable final report were required to be submitted to EID by February of 1988. It is EID's position that the Weston report is not an acceptable final report in that it does not contain a thorough and objective analysis of all available data which is both reliable and reproducible.

We are deeply concerned about BLM's actions thus far and about the direction BLM is taking on the upcoming RI/FS/EIS. Weston places undue emphasis on sources or potential sources other than the landfill and Giant Refinery. With regard to the RI/FS/EIS, we are concerned that the uncontrolled contaminant plume from the Lee Acres Landfill may hinder Giant's voluntary cleanup. Containment of the Lee Acres Landfill plume should be accomplished as soon as possible.

I recommend that a meeting between EID and BLM be held in the near future to discuss these compliance and technical issues.

Sincerely,

Richard Mitzelfelt
Director

RM:KJ:DMD

Enclosure

cc: Hilton Frey, Enforcement Branch, EPA
Kirkland Jones, Deputy Director
Jon Thompson, Deputy Director
Stuart Castle, Ground Water Bureau
Steven Cary, Superfund Section
Tito Madrid, EID District I
Dennis McQuillan, Technical Support Section
David Boyer, N.M. Oil Conservation Division
Jack Ellvinger, Hazardous Waste Bureau
Louis Rose, Office of General Counsel

Summary of EID Comments on Weston Reports

May 10, 1989

A. General

During the past few weeks EID has received four documents regarding Lee Acres Landfill, prepared by Roy F. Weston, Inc.:

Weston, 1989a, Background Report for the Lee Acres Landfill RI/FS/EIS, RFW #2878-04-01-0002: 1 vol.

Weston, 1989b, Lee Acres Landfill, Farmington, NM, Preliminary Investigation Report: 3 vol.

Weston, 1989c, Response to Comments, N. M. Department of Health and Environment, Environmental Improvement Division, Santa Fe, N. M.: 4 pages.

Weston, 1989d, Data Quality Objectives/Applicable or Relevant and Appropriate Requirements for the Lee Acres Landfill RI/FS/EIS, Revision 1: 1 vol.

Some improvements have been made over the June 1988 draft Preliminary Investigation report, such as the explanation of the water level in well BLM-23. Nevertheless, several deficiencies mentioned in EID's May 25, 1988 and Septmeber 29, 1988 letters remain uncorrected. The most recent geotechnical reports (Weston 1989a, b)

- fail to consider large bodies of relevant site-specific information;
- utilize unreliable and unreproducible analytical data for interpretation; and
- propose conclusions based on this questionable data.

Weston (1989c) does not adequately address the concerns of EID's September 29, 1989, letter. Weston did not install wells south of the highway in a manner cosistent with EID's written request and with BLM's written agreement (letter of January 18, 1989). BLM agreed to drill one alluvial well and one bedrock well, but drilled only one well. A well monitoring the bedrock aquifer is still needed at this location.

Specific comments on submitted materials follow.

B. Use of All Relevant Information

Weston (1989b, p. 5-1) asserts that data from previous investigations are considered in analysis and development of conclusions. Yet, Weston fails to include, cite, or consider four years of water-quality data collected by EID and OCD. Weston also fails to consider certain data collected by other BLM contractors.

Weston fails to consider data from monitor wells on Giant Refinery property, data which EID believes has substantial value in understanding site conditions. Weston (1989c, p. 1) correctly points out that some of these wells may be completed in both alluvium and bedrock and, because the geochemistries of the two waters are different, that interpretation of sampling data from these wells is problematic. While it is true that bedrock waters generally contain higher TDS and sulfate,

neither unit contains naturally high chloride or chlorinated solvents. Moreover, the two units, as Weston states, "are in contact, and appear to be mixing," in any case. In EID's opinion, these wells clearly show the presence of contaminants (chloride and organic solvents) in ground water down-gradient from the landfill, although they cannot be used to identify which geologic units are contaminated. Data from these wells should be considered for what they offer; they should not be disregarded completely.

Further, in October 1988 three new monitor wells were drilled downgradient of the landfill, but upgradient from refinery contamination. Wells were completed so different geologic units were not connected. Chemical data from these wells show chlorinated solvents and chloride, as was found in well GBR-32. These data were sent to Weston in January 1989, but were not cited or used by Weston in its reports.

EID has repeatedly urged BLM and Weston to consider and address all pertinent data in order to generate an acceptable report. The present reports' failure to discuss or consider much relevant data is a serious omission which gives notice to reviewers that any subsequent conclusions are not based on all the evidence.

C. Laboratory Data

In lieu of the large body of reliable data presently available, Weston uses questionable and unreproducible laboratory data for interpretation.

Weston argues that ground water in the vicinity of well RES1 may have been contaminated by septic tank effluent, or common household sewage. This argument appears to be based solely on Weston's laboratory analysis of a sample from that well. EID finds the results from this sample to be of questionable value.

- the electrochemical charge balance is -76%, far in excess of the acceptable 5% tolerance;
- the sum of all individual ions measured is three times greater than the measured total, where they should be nearly equal;
- the reported nitrate concentration (discussed below), if accurate, would be the greatest concentration documented in drinking water anywhere in New Mexico.

These issues raised red flags for EID and should have earned the notice of Weston as well. Had Weston compared its data with the three-year sampling history of this well, Weston might have noted that nitrate had always been low in samples which met QA guidelines. Until the causes of the above problems are identified and addressed, Weston's ion results from RES1 do not add to site understanding and certainly do not support an argument of septic contamination.

Weston's nitrate-N analyses for residential wells deserve special scrutiny. EID's sampling of well RES1 on April 30, 1985 revealed only 1.39 mg/L nitrate-N, compared with Weston's reported value of 1330 mg/L. The detection limit for Weston's nitrate-N analysis is given as 50 mg/L; however, the drinking water standard is 10 mg/l and laboratories routinely report values down to 0.1 mg/L or less. Weston should carefully review its laboratory data for these analyses, paying special attention to possible errors in units, before attempting to render any conclusions from them.

Weston's chloride data for well GBR 18 are four times higher than those measured by EID or OCD during 3 years. Weston's charge balance of -17% for this sample

exceeds the tolerable limit of 5%. Weston uses its data alone to argue that the chloride contamination originated in Giant's raw water pond (discussed in Section D.2. below). This argument fails when unreliable data are discarded.

Weston's general explanation of its unacceptable charge balances (1989c) is unconvincing. EID and OCD have already tested for ions which could have had a significant impact on the balance, but those ions had negligible impact. These data were provided to Weston, but were not considered in the reports. Moreover, mismeasurement, not omission of ions, is suggested when the sum of all ions measured separately exceeds the measured total.

Weston (1989a, p. 1-3) alleges TCE contamination in upgradient well BLM-15 and implies that "the El Paso (Natural Gas) facility may be another source that must be investigated in depth." However, Weston agreed in our July 29, 1988, meeting that this TCE value would not be used because TCE was also found in Weston's travel blank. Absence of TCE from this well has been confirmed by more than one year of monthly resampling. Unless new information is available, please change the report to reflect this.

C. Source Analyses

1. Accidental Self-Contamination of Private Domestic Wells

Weston argues that ground water contamination with chlorides and chlorinated organic solvents in Lee Acres Subdivision may have resulted from domestic septic tank effluents. However, this supposition appears to be based on a few unreliable sample results, while a large body of data generated by other parties is not considered.

Weston found bacteria in samples obtained from residential wells and concluded that local ground water may be contaminated by septic tank wastes. First, Weston samples were collected with bailers from open holes; presence of coliform bacteria in such samples should be expected, but cannot be attributed solely to septic tanks. Second, even if coliform bacteria were in the ground water, it would say nothing about the presence of observed levels of chloride and organic solvents.

Nitrate-N concentrations reported by Weston in residential well waters are orders of magnitude higher than those obtained by EID in the same wells (see Section C above) and in other wells in the state where septic tank contamination exists. Septic tank effluent contains only about 60 mg/L total N on the average. EID finds the value of 1330 mg/L reported by Weston in well RES1 to be questionable and we request that Weston examine the laboratory results for possible errors.

Most of the other data also are inconsistent with septic tank contamination as the only source. Contaminant levels are too high to be explained solely by water cycling through a house. The mixture of chlorinated solvents suggests an industrial rather than a domestic source. Most importantly, high chlorides and chlorinated solvents occur persistently in monitor wells upgradient from Lee Acres Subdivision and from Giant Refinery. These contaminants are traceable in upgradient wells all the way to the landfill and are not present upgradient of the landfill. These data, although not considered by Weston in formulating conclusions, contain no evidence that septic tanks are the source of chloride or halogenated solvent contamination in private domestic wells.

2. Giant Refinery Raw Water Pond

Weston argues that Giant's pond is the source of chloride in well GBR-32 (1989a, p. 2-47). This conclusion is not supported by reliable chemical data or by hydraulic conditions at the site.

Weston provides no evidence that the pond ever contained high chloride waters. In fact, between about 1979 and 1985, Giant's pond contained surface water pumped from the San Juan River. Sample results show that this water contained very low chlorides (< 10 mg/L), low TDS, and no chlorinated solvents or aromatic hydrocarbons. Similarly, Weston provides no hydraulic evidence that ground water movement is or was in the direction of GBR-18 (discussed in Section E below). Thirdly, Weston's chloride data from GBR-18 are of questionable value (see Section c above). All available data do suggest that Giant's pond has caused increases in sulfate and TDS due to evapotranspiration and leaching of natural minerals, but there is no evidence that the pond is responsible for the excessive chloride in well GBR-32.

3. Potential Sources Upgradient of the Landfill

Monitoring conducted near El Paso Natural Gas revealed ground water contamination with trace levels of aromatic hydrocarbons. This contamination is far removed from Lee Acres Landfill and is separated by several clean monitor wells. Contaminants detected at El Paso Natural Gas are different from those at the landfill.

Weston argues that sources upgradient of the landfill may be important sources of contaminants found at the landfill. EID finds no support for such an argument. Weston's investigation clearly documents that no such sources exist. All reliable data, including Weston's, show no elevated chlorides upgradient of the landfill. All reliable data, including Weston's, show no halogenated organic compounds of the type found in the landfill lagoon upgradient of the landfill.

E. Hydraulic Interpretation

In several ways, hydraulic interpretations provided by Weston are not in agreement with information provided by the USGS, OCD, and EID. For example, the alluvial well potentiometric surface map extrapolates ground water contours into areas where no ground water exists. Automated contouring programs are very sensitive to input assumptions. EID requests a complete listing of the assumptions that were made and an explanation as to why Weston believes ground water is flowing toward areas with no ground water level data and no ground water.

Secondly, Giant Refinery has been removing free-floating product for about three years and has operated an air stripper for contaminated ground water for one year. Recent water level data collected by other parties indicate that these pumping systems are altering the direction of ground water flow toward the southeast. No such effect is apparent on Weston's maps, perhaps because of the large body of data which is not included in Weston's analysis.

Weston's argument that ground water flowing from beneath the landfill could not move toward residential wells to the south is not supported by their own data or by USGS, EID, OCD, and Giant data.

F. Conclusions of EID

Based upon review of the complete record for this case, we offer the following observations.

1. Lee Acres Landfill and Giant Refinery each have caused ground water contamination, but with chemically distinct plumes.

2. The contaminant plume from the landfill exceeds state or federal standards or health advisories for 1.1-dichlorethane, 1,1-dichloroethylene, 1,2-dichloroethylene, trichloroethylene, tetrachloroethylene, chloride and TDS.

3. Giant's contaminant plume exceeds state or federal standards for benzene, toluene, ethylbenzene, xylenes, 1,2-dichloroethane and naphthalenes.

4. The two separate plumes are migrating generally south and mix with each other prior to reaching Lee Acres Subdivision, where private wells are contaminated.

5. Neither high chlorides nor chlorinated solvents are found anywhere upgradient from the landfill and the landfill is known to have contained these substances; EID concludes that these contaminants originated at the landfill.

6. There are trace levels of aromatic, not chlorinated aliphatic, hydrocarbons in the vicinity of the El Paso Natural Gas facility. These contaminants are not associated in any way with Lee Acres Landfill or Giant Refinery.

7. Weston places undue emphasis on potential sources other than the landfill and Giant Refinery with regard to the RI/FS/EIS. Other sources are negligible or nonexistent and should not be investigated further.

8. Contamination from Lee Acres Landfill may interfere with Giant Refinery's voluntary cleanup operations.

9. Containment of the landfill plume should be accomplished as soon as possible.

10. BLM is in violation of Paragraph 1 of the Compliance Agreement because it has not delivered to EID an acceptable final report. Such report was due on February 29, 1988.

11. BLM is in violation of Paragraphs 1.d and 5 of the Compliance Agreement because its report does not include a thorough and objective analysis of all available data, including definition of identifiable contamination, rate and direction of movement, and projected impact on domestic wells in the residential area south of State Route 64.

New Mexico Health and Environment Department

CARLA L. MUTH
Secretary

MICHAEL J. BURKHA
Deputy Secretary

RICHARD MITZELFEL
Director

May 15, 1989

Steven Lingle, Director
Hazardous Site Evaluation Division
Attn: NPL Staff
Office of Emergency and Remedial Response (WA-548A)
U. S. Environmental Protection Agency
401 M. Street, SW
Washington, D. C. 20460

RE: Inclusion of Lee Acres Landfill on the NPL

Dear Mr. Lingle:

On June 24, 1988, Lee Acres Landfill, near Farmington, New Mexico was proposed for inclusion as a Federal Facility on the Superfund National Priorities List (NPL). The U. S. Environmental Protection Agency (EPA) is presently considering whether to finalize this site. If such decision is reached, EPA must also decide whether to make the site a Federal Facility. I respectfully request that EPA change the name to Lee Acres Subdivision and finalize the site, but not as a Federal Facility.

One reason for this request is the number and types of Potentially Responsible Parties (PRPs) which may be involved. The landfill is located on property owned by the U. S. Department of Interior's Bureau of Land Management (BLM). The landfill was leased and operated by San Juan County. At least one private firm placed materials in the landfill. Ground water flowing beneath the landfill becomes contaminated with CERCLA wastes, then mixes with a plume of petroleum contamination from Giant Refinery. Further downgradient, private wells in Lee Acres Subdivision are contaminated by substances from both sources. Giant's contamination may be excluded from CERCLA; however, the plumes are commingled and inseparable at some locations. Giant is cleaning up its problem under State authority and, inevitably, is pulling in CERCLA wastes from the landfill plume. Giant's cleanup may have to be halted due to adverse impacts of these CERCLA wastes.

Land ownership and access have hampered BLM's investigation to date. Immediately downgradient from the landfill is Giant Refinery. Consequently, much of the landfill plume lies beneath property owned by Giant. BLM has been unable to seriously investigate its own problem because, for unknown reasons, it has

not gained access to Giant property. A large amount of other data is available from the property in question, but BLM's consultant does not include these data in its evaluations. These circumstances crippled investigation work headed by BLM, and would prevent BLM from conducting an adequate Remedial Investigation and Feasibility Study (RI/FS) should that task be assigned to them.

Finally, EID has serious concerns about BLM's ability and desire to conduct a thorough and impartial RI/FS. In 1987 the New Mexico Environmental Improvement Division (EID) took enforcement action to require BLM to characterize the landfill problem and make progress toward containment. The attached correspondence demonstrates that BLM has invested much time and many resources denying, rather than investigating, the problem. In these efforts, BLM and its contractor continue to produce unsatisfactory work. General deficiencies include:

- failure to consider all relevant chemical and hydrological data, including data generated by BLM's own consultants such as the U. S. Geological Survey;

- failure to adhere to acceptable quality assurance and quality control procedures; and

- use of unreliable and unreproducible data to draw conclusions which are not supported by the large body of site knowledge.

When appropriate, Federal Facilities should bear the brunt of RI/FS costs. However, site circumstances and BLM's past performance each suggest to EID that the Lee Acres Subdivision should not be a Federal Facility. BLM alone cannot do the job because the plumes are commingled and because BLM lacks access to critical study areas. Furthermore, instead of taking a leadership role in site characterization and evaluation of containment and cleanup alternatives, BLM responded only when ordered by the court and still refuses to acknowledge its problem. To date, EPA has scrupulously avoided giving responsibility for a RI/FS to this type of PRP.

Please include this letter and attachments in the formal docket for comments regarding the proposed inclusion of the Lee Acres site on the NPL. Attachments also include recently acquired data from the site.

Sincerely,

Richard Mitzelfelt
Director

RM:SC:to

cc: John Miller, MITRE Corporation
Hilton Frey, EPA Region VI
Deborah Vaughn-Wright, EPA Region VI
Larry Woodard, BLM
Bob Sulenski, BLM

NO EIS/BLM

Letters in Grant

File more Recent

than 5/15/89

See "Lee Acres"

GIANT REFINING CO.

Route 3, Box 7
Gallup, New Mexico
87301

505
722-3833

April 21, 1989

Alan Hoffmeister, PAO
Bureau of Land Management
425 Montano N.E.
Albuquerque, NM 87107

RE: Preliminary Investigation Report on Lee Acres Landfill, March, 1989

Dear Mr. Hoffmeister:

Giant has reviewed the above referenced report by R.F. Weston, Inc., and subsequently discussed its content with Ms. Lori Gregory-Frost of Weston. Upon this initial review it becomes incumbent upon us to comment on specific technical issues raised in the report.

The first issue is that of the alluvial groundwater flow in the northwest portion of Giant's property (Plate 5). The only water level measurements taken in this section of Giant's property were at GBR-32 and GBR-17. Additional data obtained in the arroyo includes BLM-17 and 20. There was no water level elevation taken of the firewater storage pond. The report author "created" a water level value for that pond of 5440 feet, and based that value upon an aerial photograph taken prior to installation of the pond. There was no justification presented within the report for this value. Additionally, Plate 5 shows GBR-32 to be approximately 125 feet south of the southern edge of the pond, when in fact it is less than 75 feet south and nearly 470 feet west of the pond. (See attached photo). By utilizing the alluvial well data taken by Weston, which includes BLM-17, BLM-20, GBR-32 and GBR-17 to generate water contours, a significantly different view of the hydraulic gradient emerges. The water levels in BLM-17 and 20 were measured at 5.5 feet higher than GBR-32 and 15.8 feet higher than GBR-17. It would, therefore, seem logical that the hydraulic gradient is along the approximate line defined by these wells, which is also the approximate path of the historic arroyo channel.

The other portion of the report that we believe uses questionable information is that discussing the chloride concentration of GBR-18. Weston's chloride value was utilized to derive the chloride gradients in Plate 7 and is discussed in Section 4.3.1. Weston's laboratory results from the BLM/EID/Giant split sampling showed a chloride concentration of 1021 mg/l in GBR18 and 2110 mg/l in GBR-32. An attempt to reconcile the

anionic/cationic balance for GBR-18 shows 45% more anions (negative ions) than cations (positive ions) for Weston's data. This imbalance means that the analysis either overstates the anionic concentration or understates the cationic concentration in the sample. Further, Weston's value is inconsistent with historic data analyzed by EID, OCD and Giant, including the split of Weston's sample analyzed by the State lab, which consistently measures the chloride concentration of GBR-18 at 222 to 265 mg/l. These facts lead one to question the asserted chloride impact on GBR-32 by the firewater pond.

An objective review of the available information would suggest the following conclusions:

1. The alluvial hydraulic gradient in the NW segment of Giant's property with adjoining BLM land shows a flow from the area around BLM-20 towards GBR-17 through GBR-32.

2. Although mounding of water from the firewater pond, now drained and out of service, is believed to have affected GBR-18 and wells south of the pond, there is no evidence that it has affected the alluvial aquifer near GBR-32, nor that the approximate 250 mg/l chloride concentration in GBR-18 has contributed to the 2100 mg/l chloride levels in GBR-32.

3. Both the chloride and organic contamination affecting GBR-32 is emminating from a source north of GBR-32 and northeast of BLM wells 17 and 20.

Thank you for this opportunity to comment on the Preliminary Investigation Report.

Sincerely,

Robert L. McClenahan, Jr.
Environmental Coordinator
Giant Refining Company

RLM:ds

cc: Dennis McQuillen, NMEID
David Boyer, NMOCD
Kim Bullerdick, GI
Carl Shook, GI
Ned Kendrick, Montgomery & Andrews
Lary Woodard, State Director, BLM
Linda Findlay, Staff Assistant to Senator Dominici

BLM
17
BLM
20

Farmington Daily Times
April 6, 1989

Refinery's attorneys respond to report

By Bill Papich
Daily Times staff

Attorneys for Giant Refining Co. indicated Wednesday they don't believe the refinery is responsible for groundwater contamination in the Lee Acres residential area — directly south of the refinery.

That response contradicts results of a Bureau of Land Management preliminary investigation released last week that say groundwater contamination at Lee Acres may be coming from the refinery or other sources.

"Our focus is keeping any refinery materials from going off site," said Ned Kendrick, an attorney representing Giant Refining Co., who indicated the refinery may not be a source of the contamination.

Last week the BLM released results of a $450,000 preliminary investigation that stated "contaminants found to be present in residential wells may be the result of migration from the Giant-Bloomfield Refinery . . ."

Kendrick noted he hasn't seen the entire BLM report, but said Giant Refining generally agrees with criticisms of the report by a couple of spokesmen for the state's Environmental Improvement Division, who said some data was ignored.

Kendrick added that Giant has implemented its own program to keep refinery materials away from the residential area.

"Giant has (monitoring) wells on site and has been working with the state Oil Conservation Division to develop and implement a program to prevent refinery materials from moving off site," he said.

Before the BLM report, area residents had suspected the source of contaminants in their well water to be the Lee Acres Landfill. The landfill was closed in 1986 after residents discovered their water contained toxic chemicals.

They have since been provided piped water.

The landfill — owned by the BLM — is about 2,000 feet north of the residential area, and the refinery is between the landfill and the residential area.

The BLM is engaged in a multimillion dollar effort to determine the origin of the groundwater contamination and recommend how it might be removed.

Contamination is believed so extensive the Environmental Protection Agency has considered adding Lee Acres to its national Superfund priority cleanup list.

The BLM says it plans to spend $3 million during the next three years to further identify contaminant sources and recommend removal methods. All BLM investigations are being contracted to a company called Roy F. Weston Inc., the agency said.

Comments by Giant Refining Co. representatives were solicited after the state criticized the BLM preliminary investigation results earlier this week.

Two EID officials said the BLM report ignored contamination data collected by the EID and the groundwater division of the U.S. Geological Survey.

Dennis McQuillan, an EID geologist, called the BLM preliminary investigation results "illegitimate" and "spurious."

Bill Murphy, the BLM's hazardous waste coordinator for northern New Mexico, defended his agency's investigation, stating, "Our position is based on data we analyzed."

BUSINESS DIGEST ALB Journal 3/9/89

Eastern Firm To Evaluate Farmington Site

WEST CHESTER, Pa. — Roy F. Weston Inc. has been awarded a $2.9 million contract by the Bureau of Land Management to perform a remedial investigation and feasibility study and provide an environmental impact statement for the Lee Acres Site near Farmington.

The total contract value is approximately $2.9 million and will result in net revenues to Weston of $2.3 million over the next 30 months.

The study area is a 2,100-acre parcel of land with groundwater and water well contamination. Among the potential sources of contamination that will be investigated are a solid waste landfill, inactive oil and gas production wells, a natural gas pumping station, active septic tanks and a refinery.

The project will be managed from Weston's Albuquerque office.

Weston, based in West Chester, Pa., is a health and safety firm that provides analytical laboratory services, consulting and engineering,

WESTON
MANAGERS DESIGNERS/CONSULTANTS
215 UNION BOULEVARD
SUITE 600
LAKEWOOD, CO 80228
PHONE: (303) 980-6800

21 February 1989

Mr. Bill Murphy
Bureau of Land Management
435 Montano Road NE
Albuquerque, New Mexico 87107

RE: Lee Acres Landfill Accelerated Drilling Program
Contract No. YA 551CT8-340069
Work Order No. 2878-04-01-0004

Dear Mr. Murphy:

Per your request, enclosed are figures depicting the approximate well locations and actual well constructions for wells BLM-33, 34, 35, and 37 which were installed during the Accelerated Drilling Program at the Lee Acres Landfill site in January 1989. Figure 1 presents the approximate well locations. As is shown in Figure 2, wells BLM-33 and BLM-34 were screened in the first saturated zone encountered during drilling. The screened intervals in these wells were approved by Bill Olson of the New Mexico Environmental Improvement Division in the field prior to well installation. The cross section presented in Figure 2 illustrates the extent and thickness of the confining siltstone/claystone layer at the top of bedrock in the southern portion of the landfill property. As is depicted, the water levels in wells BLM-33, 34, and 35 rose approximately twenty feet above the top of the saturated sandstone.

Well BLM-37 was installed immediately south of Highway 64, on the State Highway Department right-of-way, and across the street from the Hughes residence. Two wells were planned for this location; only one was installed. Well BLM-37 serves the function of both proposed wells at this location. The screened interval monitors the base of the alluvium from the bedrock contact up, and also monitors the contact between saturated and unsaturated alluvium. As is depicted in Figure 3, during drilling, hydrocarbon stained soils were encountered at a depth of 33.5 feet below the ground surface. During the February 1989 ground-water sampling period, floating hydrocarbon was measured from 36.60 to 39.25 feet below the ground surface. Water was encountered in the well from 39.25 to 39.30 feet (measured depth of the well). As

WESTON

the floating hydrocarbon was sampled, increasing amounts of water were removed with the bailer, confirming the soil descriptions which indicate that groundwater-saturated alluvium is present above the bedrock contact.

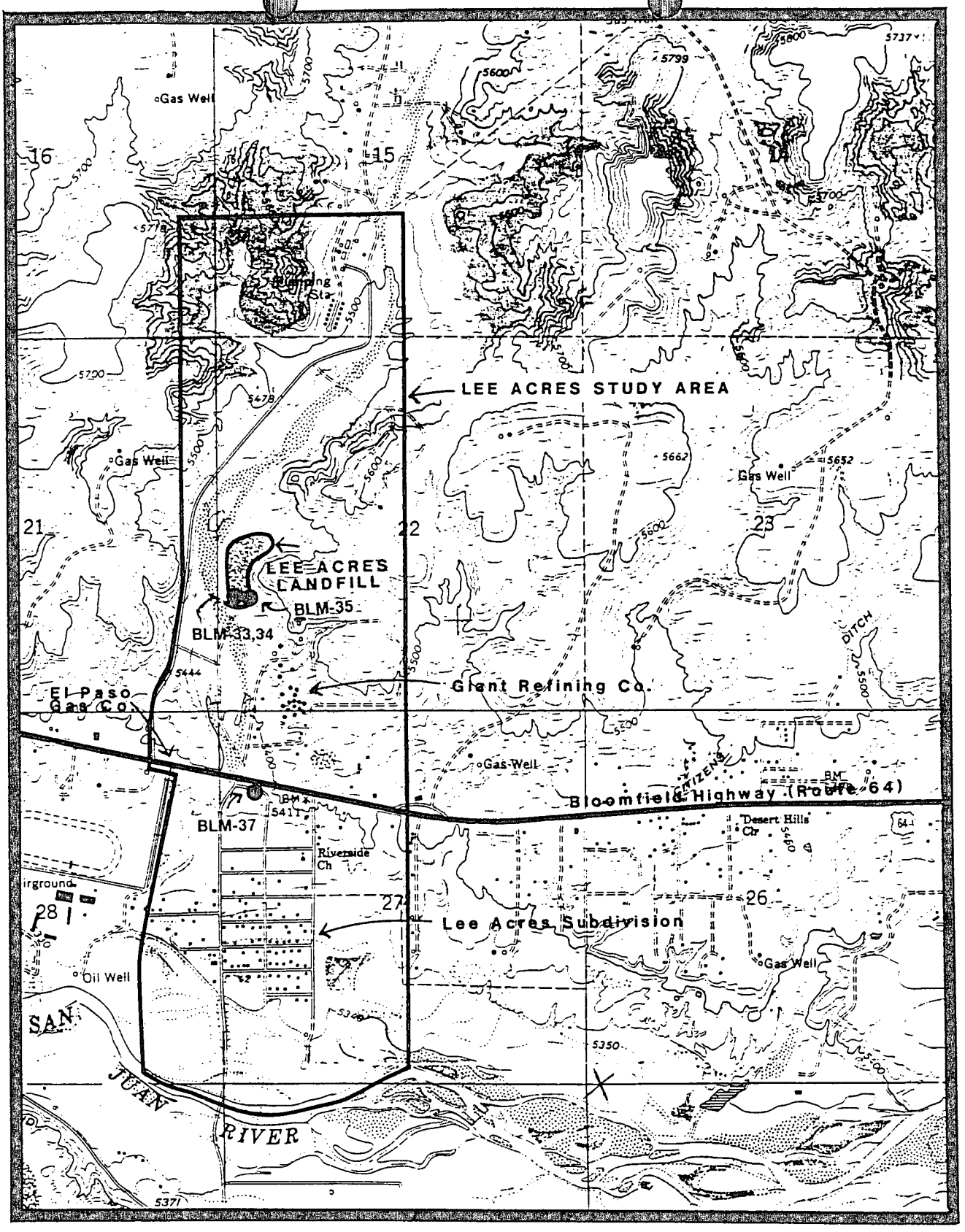
If you have any questions regarding the enclosed information, please contact Laurie Gregory-Frost at (303)980-6800 or myself at (505)255-1445.

Sincerely,

ROY F. WESTON, INC.

Berg Keshian, Ph.D., P.E.
Project Manager

BK/lag
Enclosures (3)
cc: Laurie Gregory-Frost



Scale

0 1000 2000 feet

● Accelerated Drilling Program Well Locations

Source: USGS Quadrangle
Horn Canyon 7.5 Minute Quadrangle
New Mexico

FIGURE 1

SITE LOCATION MAP

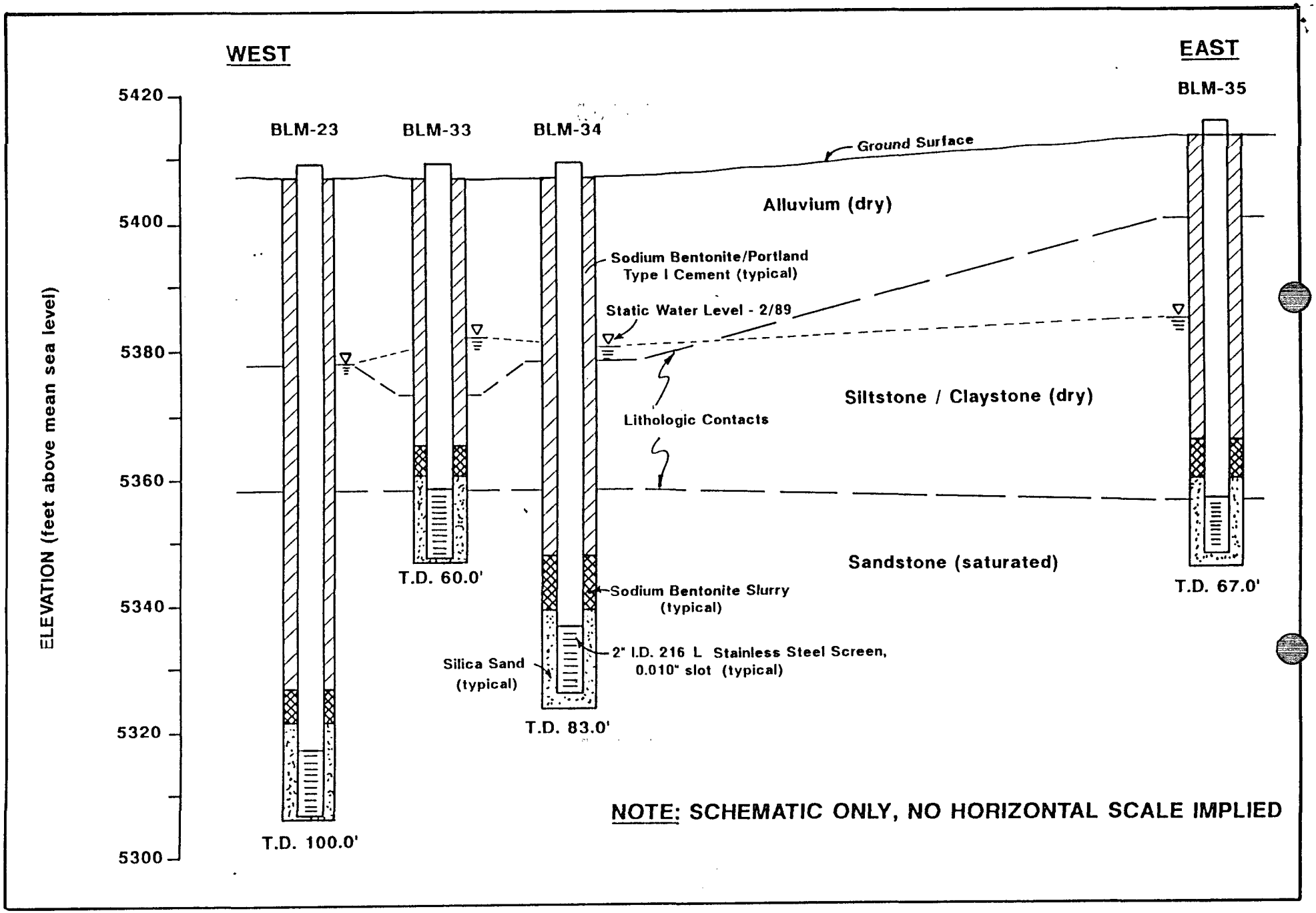


Figure 2: SCHEMATIC CROSS-SECTION - Lee Acres Landfill, Farmington, N.M.

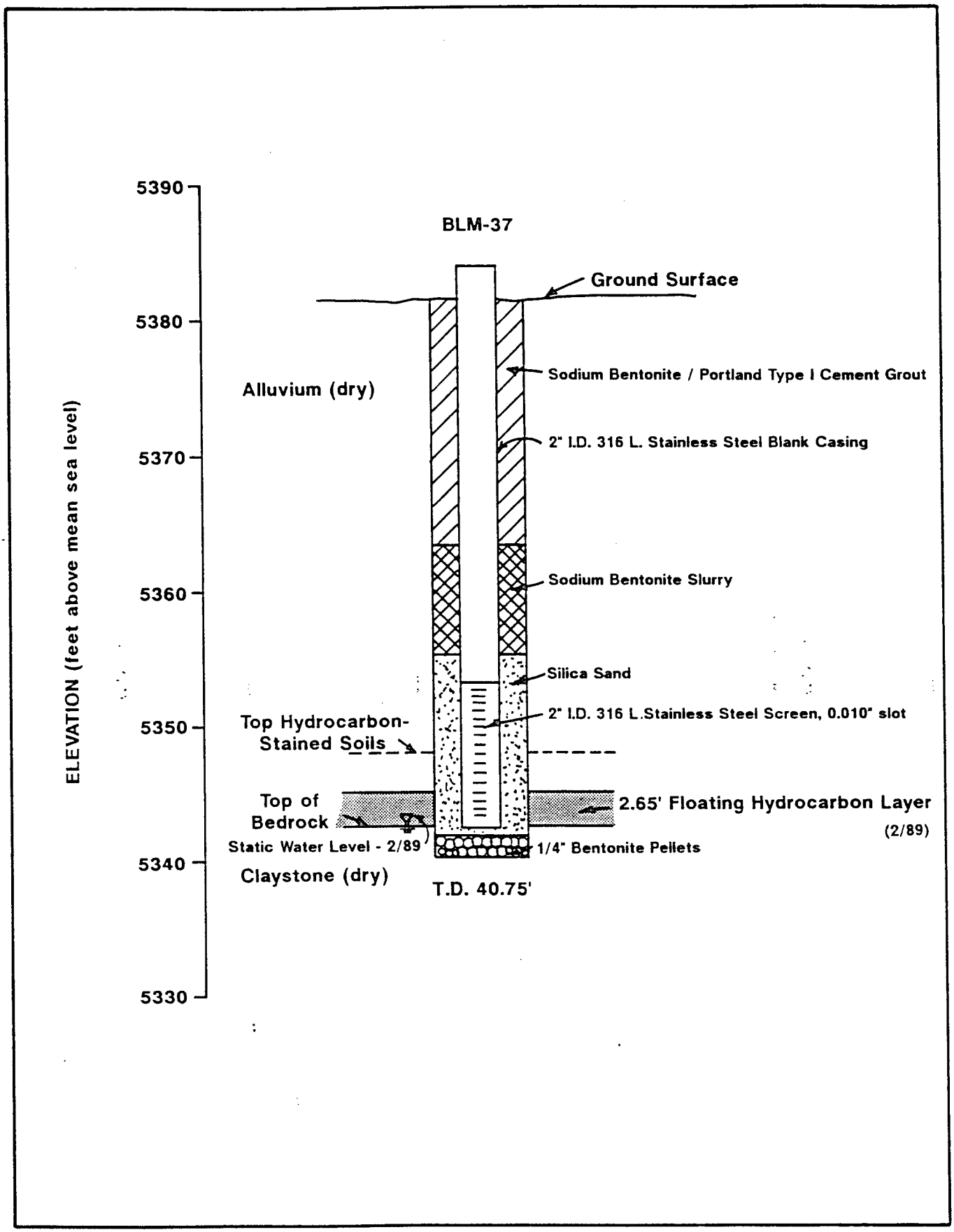


Figure 3: SCHEMATIC OF BLM-37 WELL CONSTRUCTION -

Lee Acres Landfill, Farmington, N.M.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 8:00 a.	Date 2/21/89
Originating Party		**Other Parties**
Dave Schafersman - BLM.		Bill Olson - EID/GW

Subject

BLM - Lea Acres new wells

Discussion

During drilling Weston hit product in the well south of the Highway. They will do a product Id and send to us when available

RECEIVED
FEB 22 1989
OIL CONSERVATION DIVISION
SANTA FE

Conclusions or Agreements

Distribution
file
OMD
Dale Bremner
Dave Boyer (OCD)

Signed Bill Olson

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi
Galen M. Buller

Edmund H. Kendrick
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Arturo Rodriguez
Anne B. Hemenway
Joan M. Waters
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Joseph E. Whitley
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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) 242-9677

REPLY TO SANTA FE OFFICE

January 25, 1989

Mr. David G. Boyer
Chief, Environmental Bureau
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

Re: Data from Monitor Wells (GBR-32, GBR-48, GBR-49 and GBR-50) at Giant's Bloomfield Refinery

Dear Mr. Boyer:

I am enclosing for your information copies of the following:

1. Map showing locations of the referenced wells; Copies in file
2. Borehole logs for the drilling of GBR-48, GBR-49 " " " and GBR-50 on October 17-19, 1988; and
3. Analyses of water samples taken from the Original in file referenced wells on November 8, 1988.

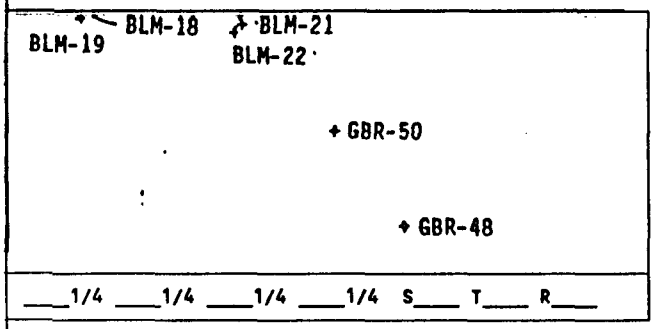
Sincerely,

Edmund H. Kendrick

EHK:dl;254
#8361-85-09
Enclosures
cc: Dennis McQuillan, EID (w/enclosures)
Bill Murphy, BLM (w/enclosures)
Chris Shuey, SWRIC (w/enclosures)


BLM-17
USGS
BLM-20
BLM-18
BLM-19
BLM-21
BLM-22
GBR-50
GBR-32
GBR-48
GBR-49
5420
5410
5400
11,000
SEE

BOREHOLE LOG (SOIL)



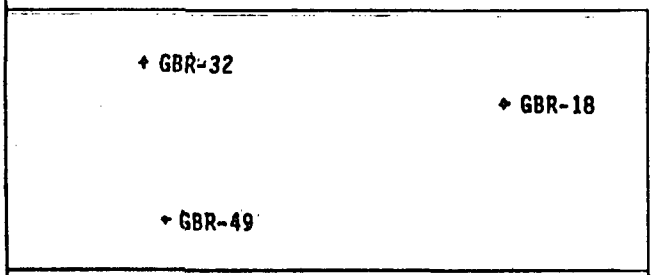
___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

Giant Bloomfield
SITE ID: Refinery LOCATION ID: GBR-48
SITE COORDINATES (ft.):
N 12159.02 E 11142.65
GROUND ELEVATION (ft. MSL): 5416.14
STATE: New Mexico COUNTY: San Juan
DRILLING METHOD: Hollow Stem Auger/Continuous Sampler
DRILLING CONTR.: Western Technologies
DATE STARTED: 17 Oct 1988 DATE COMPLETED: 18 Oct 1988
FIELD REP.: Martin Nee
COMMENTS:

LOCATION DESCRIPTION:

DEPTH	LITH.	REC	SAM	RUN #	RUN FROM	RUN TO	SAMPLE I.D.	SAMPLE TYPE	USCS	VISUAL CLASSIFICATION
0				1	0	3			SP	0'-23' Sand - Mod yelsh brn, 10 YR 5/4, v fn to crs sand, uncons, subangular to subrounded, well sorted moist from 13-14', v minor grv at 23'.
				2	3	8				
5										
				3	8	13				
10										
				4	13	18				
15										
				5	18	23				
20										
				6	23	28			SM	23'-26.5' Silty Sand - Mod yelsh brn, 10 YR 5/4, 75% v fn to med sand, 20% silt, 5% clay, uncons, subangular to subrounded, mod well sorted.
25										
				7	28	33			SC	26.5'-27.5' Clayey Sand - Mod yelsh brn, 10 YR 5/4, 70% v fn to med grained sand, 20% clay, 10% silt, uncons, subangular to subround, mod well sorted.
30									CL	27.5'-31' Silty Clay - Mod yelsh brn, 10 YR 5/4, 80% clay, 15% silt, 5% v fn sand.
				8	33	38			SP	31'-35' Sand - Mod yelsh brn, 10 YR 5/4, fn to coarse grained sand, uncons, mod well sorted, subangular to subrounded, minor gravel <3%.
35										
				9	38	43				35'-37' Cobbles/Gravel Refusal - No core.
40										37'-44' Shale - Light olive grey, 5 YR 2/2.
										TD = 44.0', 2" ss blank 43.6' to 38.4', ss 20 slot screen 38.4-28.4', 2" ss to 3' above surface, 10-20 sand to 23', bentonite to 17.5', grout w/5% bentonite to surface, 5"x6' cement filled steel guard pipe. 4'x4' concrete slab.
45										
50										

BOREHOLE LOG (SOIL)



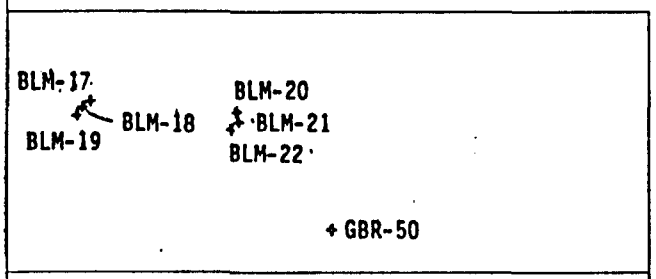
___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

Giant Bloomfield
SITE ID: Refinery LOCATION ID: GBR-49
SITE COORDINATES (ft.):
N 11908.13 E 11168.02
GROUND ELEVATION (ft. MSL): 5410.76
STATE: New Mexico COUNTY: San Juan
DRILLING METHOD: Hollow Stem Auger/Continuous Sampler
DRILLING CONTR.: Western Technologies
DATE STARTED: 17 Oct 1988 DATE COMPLETED: 17 Oct 1988
FIELD REP.: Martin Nee
COMMENTS:

LOCATION DESCRIPTION:

DEPTH	LITH.	REC	SAM	RUN #	RUN FROM	RUN TO	SAMPLE I.D.	SAMPLE TYPE	USCS	VISUAL CLASSIFICATION
0				1	0	3			SP	0'-22' Sand - Mod yelsh brn, 10 YR 5/4, v fn to coarse sand, uncons, sbang to sbrndd, minor slt.
				2	3	8				
5										7'-9' As above w/cobblers or boulders.
				3	8	13				
10										
				4	13	18				
15										15'-16' Same as 0-22 with 5% fn to med pebble gravel.
				5	18	23				
20										
				6	23	28			SM	22'-25' Silty Sand - Mod yelsh brn, 10 YR 5/4, 70% sand, v fn to coarse, moderately well sorted, uncons, sbang to sbrndd, 20% silt, 10% clay, minor, v fn to med pebble gravel.
25										
				7	28	33			SC	25'-33' Clayey Silty Sand - Silty sand and stringers (6") of silty clay, mod yelsh brn, 10 YR 5/4, v fn to med grained sand, uncons, sbang to sbrndd.
30										28' Appears moist.
									SM	33'-36.5' Silty Sand - Dk yelsh or, 10 YR 6/6, 80% sand, v fn to crs, uncons, sbang to sbrndd, well sorted, 20% silt, v minor clay.
35										
									SM	36.5'-40' Silty Sand - Lt olv brn, 5 YR 5/6, v fn to med grained sand, uncons, mod well sorted, sbang to sbrndd, 5% clay, 15% silt.
40									SC	40'-42.5' Clay - Lt blsh grey, 5B 7/11.
										TD = 42.5', 2" ss blank 38.5' to 36.3', ss 20 slot screen 36.3' to 25.9' 2" ss blank to 2.1' above surface, 10-20 sand to 21.0', bentonite to 16.45', grout with 5% bentonite to surface. 5"x6' cement filled steel guard pipe. 4'x4' concrete slab.
45										
50										

BOREHOLE LOG (SOIL)



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

Giant Bloomfield
SITE ID: Refinery LOCATION ID: GBR-50
SITE COORDINATES (ft.):
N 12257.74 E 11067.82
GROUND ELEVATION (ft. MSL): 5413.13
STATE: New Mexico COUNTY: San Juan
DRILLING METHOD: Hollow Stem Auger/Continuous Sampler
DRILLING CONTR.: Western Technologies/Continuous Sampler
DATE STARTED: 19 Oct 1988 DATE COMPLETED: 19 Oct 1988
FIELD REP.: Martin Nee
COMMENTS:

LOCATION DESCRIPTION:

DEPTH	LITH.	REC	SAM	RUN #	RUN FROM	RUN TO	SAMPLE I.D.	SAMPLE TYPE	USCS	VISUAL CLASSIFICATION
0				1	0	3			SM	0'-15' Silty Sand - Mod yelsh brn, 10 YR 5/4, v fn to coarse sand, <5% fn to med pebble gravel, approx 15% silt, uncons, well sorted, sbang to sbrndd.
				2	3	8				
5										
				3	8	13				
10										
				4	13	18				
15										15'-23' Same as 0-15 with no gravel.
				5	18	23				
20										
				6	23	28			CL	23'-31' Clayey Sand - Mod yelsh brn, 10 YR 5/4, 20% clay, 10% silt, v fn to coarse sand, uncons, well sorted, sbang to sbrndd.
25										
				7	28	33				
30										
									SP	31'-37' Sand - Mod yelsh brn, 10 YR 5/4, <5% silt, <5% gravel, fn to coarse sand, uncons, mod well sorted, sbang to sbrndd.
				8	33	38				
35										
										37'-43.0' Carbonaceou Shale - dusty yelsh brn, 10 YR 2/2, mod well cons, minor Fe staining, <2% gravel.
				9	38	42.5				
40										
										TD = 43.0', 2" ss blank 42.5' to 37.26', ss 20 slot screen 37.26' to 26.91' 2" ss blank to 4.14' above surface, 10-20 sand to 20.19', bentonite to 15.44', grout with 5% bentonite to surface, 5"x6' cement filled steel guard pipe, 4'x4' concrete slab.
45										
50										

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)

Seth D. Montgomery
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
Bradford V. Coryell
Michael H. Harbour
Mack E. With
Katherine W. Hall
Robert J. Mroz
Richard L. Puglisi
Galen M. Buller
Edmund H. Kendrick
Charles W. N. Thompson, Jr.
Jay R. Hone
Deborah J. Van Vleck
James C. Murphy
James R. Jurgens
Ann M. Maloney
Arturo Rodriguez
Anne B. Hemenway
Joan M. Waters
Deborah S. Dungan
Daniel E. Gershon
Anne B. Tallmadge
Kenneth B. Baca
Robert A. Bassett
Susan Andrews
Joseph E Whitley
Paula G. Maynes
Neils L. Thompson
Cynthia S. Murray
Nancy A. Taylor
Rod D. Baker
Joel P. Serra
James C. Brockmann
Sheila Scott Harris

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

January 10, 1989

ALBUQUERQUE OFFICE
7801 Broadway, N.E.
Suite 500
Post Office Box 26927
Albuquerque, New Mexico 87125-6927

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

REPLY TO SANTA FE OFFICE

Mr. David G. Boyer
Chief, Environmental Bureau
New Mexico Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87503

Re: Discharge Plan (GW-40)
Giant Industries, Inc./Bloomfield Refinery

Dear Mr. Boyer:

In your letter of December 9, 1988, you requested a revised map of quality similar to that of the map submitted with Giant's Discharge Plan Application dated March 1, 1988. I am enclosing three copies of such a map with revisions indicating the location of the air stripper, infiltration gallery, controlled water application area, and recently drilled wells. We trust this map will suit your needs.

Sincerely,

Edmund H. Kendrick

EHK:mp/246
#8361-85-09
cc: Kim H. Bullerdick, Esq. (w/enclosure)
Robert L. McClenahan, Jr. (w/enclosure)

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

January 9, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

RE: Spill Prevention Control and Countermeasure (SPCC) Plan
Discharge Plan GW-40
Giant Bloomfield Refinery

Dear Mr. Kendrick:

The Oil Conservation Division (OCD) has received and reviewed the above referenced SPCC Plan. The plan was requested by the OCD during review of the Discharge Plan application and is approved for inclusion in the approved Discharge Plan GW-40 with the following exception.

> All references to "high-level alarms" in the SPCC plan are superceded by high-level alarms with power interrupter panels for equipment shut-down. The addition of the power interrupters are proposed in the Ground Water Technology Inc., letter dated December 9, 1988.

Please be advised that the approval of this SPCC 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 there are any questions or comments, please contact me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Aztec Office