

GW - 55

**GENERAL
CORRESPONDENCE**

YEAR(S):
2005-1996

**RECEIVED**
GW055

May 9, 2005

Mr. William Olson
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

MAY 11 2005

Oil Conservation Division
Environmental Bureau

Mr. Denny Foust
New Mexico Oil Conservation Division
District 3 Office
1000 Rio Brazos Road
Aztec, New Mexico 87410

**RE: Annual Groundwater Monitoring and Sampling Report for the Thriftway
Refinery, 626 CR 5500, Bloomfield, New Mexico**

Dear Sirs:

Enclosed please find the Annual Groundwater Monitoring and Sampling Report prepared by Animas Environmental Services, LLC (AES) on behalf of Thriftway Marketing Corporation (Thriftway) for the Thriftway Refinery, located at 626 CR 5500, Bloomfield, San Juan County, New Mexico.

If you have any questions regarding this report, please do not hesitate to contact me at (505) 564-2281.

Sincerely,

Ross Kennemer
Project Manager

Cc: Terry Griffin
BioTech Remediation
501 Airport Drive, Suite 104
Farmington, NM 87401

Enclosure: Annual Groundwater Monitoring and Sampling Report



Billings & Associates, Inc.

6808 Academy Parkway E. N. E.
Albuquerque, New Mexico 87109
Tel 505.345.1116
Fax 505.345.1756

email bradbillings@billingsandassociates.com

April 9, 2003

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APR 12 2004

Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

Mr. Wayne Price
Petroleum Engineering Specialist
New Mexico Energy, Minerals and Natural Resources Dpt.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Thriftway Bloomfield Refinery
2003 Annual Groundwater Monitor Report

Dear Mr. Price,

Enclosed please find a copy of the Report entitled "2003 Annual Groundwater Monitor Report" for the above mentioned site.

If you have any questions please do not hesitate to contact me at 505.345.1116.

Sincerely,

Brad Billings
Billings & Associates, Inc.

Enclosure

Cc: Ms. Terry Griffin/BioTech/Thriftway
Mr. Denny Foust, Aztec Office, NM Oil Conservation Division



Billings & Associates, Inc.

6808 Academy Parkway E. N. E.
Albuquerque, New Mexico 87109
Tel 505.345.1116
Fax 505.345.1756

email: bradbillings@billingsandassociates.com

April 1, 2003

RECEIVED
APR 07 2003
Environmental Bureau
Oil Conservation Division

Mr. Wayne Price
Petroleum Engineering Specialist
New Mexico Energy, Minerals and Natural Resources Dpt.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Thriftway Bloomfield Refinery
2002 Annual Groundwater Monitor Report

Dear Mr. Price,

Enclosed please find a copy of the Report entitled "2002 Annual Groundwater Monitor Report" for the above mentioned site.

If you have any questions please do not hesitate to contact me at 505.345.1116.

Sincerely,



Brad Billings
Billings & Associates, Inc.

Enclosure

Cc: Ms. Terry Griffin/BioTech/Thriftway
Mr. Denny Foust, Aztec Office, NM Oil Conservation Division

THRIFTWAY REFINERY
626 Road 5500
Bloomfield, New Mexico

March 2003

Prepared by
BILLINGS & ASSOCIATES, INC



2002 ANNUAL GROUNDWATER MONITOR REPORT

Prepared for
NEW MEXICO OIL CONSERVATION DIVISION
Mr. Wayne Price, Project Manager, Santa Fe Office
&
Mr. Denny Foust, Aztec, Office

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APR 07 2003
Environmental Bureau
Oil Conservation Division

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(all sample events for this reporting period) MONITOR WELLS
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1.0 INTRODUCTION

Pursuant to and in compliance with the requirements of the New Mexico Oil Conservation Division (NMOCD), Billings & Associates, Inc. (BAI) is pleased to submit the following 2002 Annual Monitoring and Sampling Report for the Thriftway Bloomfield Refinery, located in Bloomfield, N.M. Site is located at 626 County Road 5500. Operated under Discharge Plan GW-055

Submitted report details the monitoring and sampling data activities on refinery property. Water table elevations in monitor wells were collected on select wells in July and November 2002. All wells that could be found and which contained sufficient ground water for measurement were assessed for depth to water. New influent and effluent water samples from the on site air stripper were collected generally monthly throughout 2002.

2.0 MONITORING/SAMPLING ACTIVITIES

BioTech personnel engaged in monitoring and sampling requirements for the Thriftway Bloomfield Refinery located in Bloomfield, New Mexico. Ground water gauging events detailed in this report occurred during July and November 2002.

Air stripper influent and effluent samples from operating tower were collected for later laboratory analysis by EPA Method SW 8021B on a nominally monthly basis in 2002. Influent and effluent samples collected in July and November 2002 were analyzed for the full suite of Methodologies as outlined below in section 2.2(2.2A). Hard copy of all laboratory data sheets, attendant chain of custody information and Quality Control Data are found in **Appendix A**.

Appendix B contains this same grouping of information on the monitor wells sampled for laboratory analyses in July and November 2002. Ground water samples were analyzed by EPA Method SW 8021B.

2.1 Ground Water Measurement

At each gauging event, depth to ground water measurements were made and recorded for available monitor wells. A Solonist Probe was used to measure from the survey point at top of casing to identified ground water level. Data was generated to the nearest 100th of a foot. **Table 1A** displays most recent groundwater table information. Historic ground water elevation data has been supplied in previous reports. Ground water measurements were collected in fourteen (14) monitor wells for July 2002 sampling and twelve (12) for the November 2002 sampling event.

Field data have been corrected to measured elevations, where available, and were used to generate a potentiometric surface (as of the 11/2002 sample dates). This information is found on **Figure 1**.

2.2 Water Sample Collection

During transfer of water (influent and effluent) to sample container, care is taken to ensure that no head space or air bubbles remain in sample container and that a meniscus is created at top of sample container. Following closure of sample container, the sample was rotated and agitated, further ensuring that the sample container was void of free air.

During the November 2002 ground water sampling event, monitor well locations were sampled for later laboratory analysis following appropriate purge of bore volumes and rebound time allotment. Samples were analyzed for and by the following methods: Alkalinity, Total (method M2320B), Anions by Ion Chromatography (method E300), Aromatic Volatiles by GC/PID (method SW8021B), Conductivity @ 25C (method E120.1), Hardness, Total (method M2340B), ICP Metals, Dissolved (method SW6010B), ICP Metals, Total (method SW6010B), Mercury, total (method SW7470), pH (method E150.1), Polynuclear Aromatic Hydrocarbons (method SW8270C), Total Dissolved Solids (method CALC) and Total Dissolved Solids (method E160.1). All samples were collected as per accepted New Mexico protocol/regulation.

During July and November sampling events, influent and effluent samples were analyzed via the above methods.

Monthly samples collected at influent and effluent ports at the air stripper were assessed by methods 8021B.

2.3 Sample Preservation/Handling

All sample containers were appropriate for required testing and preserved as necessary for the requested analyses. All samples were handled/delivered as per accepted protocols.

2.4 Sample Transport

Following sample collection, each sample container was labeled for origin, time/date of collection, sample type, identification of sampler, preservative used and the requested laboratory analysis. Each sample was then logged for Chain of Custody data sheets. Samples requiring temperature reduction for shipping/transport were then placed in iced cooler.

2.5 Data Base

Historic laboratory data have been presented in previous reports. **Table 2A** details data collected concerning the reporting dates covered in this report. Laboratory data from influent and effluent samples of ICP metals total, mercury, anions, ICP metals dissolved, alkalinity, conductivity, hardness, pH, total dissolved solids (both calculated and in residue) PAH's and volatile organic compounds are found in **Appendix A**. This appendix also contains copies of QA/QC statements and chain of custody information. **Appendix A also** contains laboratory results, QA/QC and chain of custody (COC) information on monitor wells/ground water samples.

3.0 EQUIPMENT DECONTAMINATION

To prevent cross-contamination and ensure valid data, BioTech personnel used strict decontamination protocol. For all monitor well measurement and sample collection, the following method for decontaminating equipment was employed:

- Wash with Alconox and distilled water
- Rinse with distilled water
- Wash with Alconox and distilled water
- Double rinse with distilled water

4.0 DISCUSSION AND RECOMMENDATIONS

Developed ground water flow direction indicates sufficient capture of the ground water contamination is being maintained by the currently operating ground water treatment system. This is in general agreement with historical data.

Figure 2 represents a ground water contour of dissolved benzene as of the November 2002 sampling event. **Figure 3** displays the MTBE ground water contour for the same sampling event. **Figures 4, 4A, 4B**, in mapped format, indicate the values for conductivity, chlorides and TDS as of the November 2002 sampling event.

Ground water flow is nominally to the west/northwest at an approximate gradient of 0.05 ft/ft.

Of the monitor wells sampled, the highest benzene value found was at MW-12 at 12 parts per billion (ppb). Current value is approximately 50% lower than the previous year. The highest MTBE value assessed during the same monitoring event was found at well MW-20 at 350 ppb. Again, this is about 50% less than last year in this well.

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Environmental Bureau
Oil Conservation Division

Most recent influent and effluent water samples revealed the following: Influent was assessed at 340 ppb benzene (down from >800 ppb last year). Effluent was assessed at <0.5 ppb benzene.

These data indicate an adequately functional stripper system.

BAI believes the currently operating ground water recovery system is maintaining adequate hydraulic capture.

Overall dissolved ground water contamination data indicates site wide reduction in dissolved organic contaminant levels as of the November 2002 sampling date.

It is BAI's recommendation, based on current and historical data review, no additional work effort is needed beyond continued sampling by BioTech based on approved schedules.

Relative to points defined by NMOCD's letter dated November 19, 2001, the following is presented:

- Lagoon liners have been inspected by BioTech personnel.
- Below grade sumps at Tank #11 and Tank #12 have been cleaned out.
- Soils on North side of property were sampled and have been removed. Worked was accomplished by Empire Tech and EnviroTech. Bill of lading from soil removed at this location and near/at valve on Tank #23 is located in Appendix C. Laboratory data for soils is located in Appendix D.

Brad Billings

President

Billings & Associates, Inc.

Price, Wayne

From: Price, Wayne
Sent: Friday, March '14, 2003 2:08 PM
To: Price, Wayne; 'terry@redmesa.com'
Cc: Foust, Denny; Kieling, Martyne
Subject: RE: Thriftway Refinery waste

Dear Terry: Pursuant to our telephone conversation at approximately 1:30 pm today OCD hereby approves of this waste going to Safety Clean-Resource Recovery Technology located in Phonix Az. This approval expires April 15, 2003.

-----Original Message-----

From: Price, Wayne
Sent: Friday, March 14, 2003 10:37 AM
To: 'terry@redmesa.com'
Cc: Foust, Denny; Kieling, Martyne
Subject: Thriftway Refinery waste

Terry: We have been trying to get in touch with you by phone or E-mail. Please respond before you ship any waste off-site. You must ship the waste to an OCD approved site. You must use the C-138 process if going to an OCD permitted site. Please let us know where you are shipping the waste. Failure to do so may result in a Notice of Violation. Please be aware that the approval issued last year was under the understanding that you were using an OCD permitted site.

Sincerely:

<< OLE Object: Picture (Metafile) >>

Wayne Price

New Mexico Oil Conservation Division

1220 S. Saint Francis Drive

Santa Fe, NM 87505

505-476-3487

fax: 505-476-3462

E-mail: WPRICE@state.nm.us

Tracking:

Recipient

Price, Wayne

'terry@redmesa.com'

Foust, Denny

Kieling, Martyne

Read

Read: 3/14/2003 2:09 PM

Read: 3/17/2003 7:38 AM

Read: 3/14/2003 2:42 PM

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/84

MAR 04 2002

Environmental Bureau
Oil Conservation Division

Submit Original
Plus 1 Copy
to appropriate
District Office

Env. JN: 62008-001

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

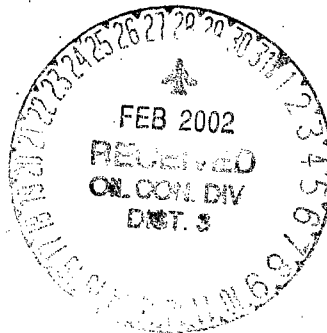
1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>THURFTWAY Corp.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>THURFTWAY Refractory</u>
2. Management Facility Destination <u>Envirotech Soil Remediation Facility Landfarm #2</u>	6. Transporter <u>Envirotech</u>
3. Address of Facility Operator <u>5796 US Highway 64 Farmington, NM 87401</u>	8. State <u>New Mexico</u>
7. Location of Material (Street Address or ULSTR)	<u>County Route 5500 Bloomfield NM.</u>
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Bottom sludge at Evaporation ponds/Lagoons

TCLP ATTACHED.

*Denied
Subject to Santa Fe
review 2/28/02*



Estimated Volume 100 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Harlan M. Brown TITLE: Landfarm Manager DATE: 2-28-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Harlan M. Brown TELEPHONE NO. 505-632-0615

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

Matthew J. Kelly
TITLE: Environmental Geologist DATE: 6/11/02

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/81

RECEIVED
MAR 04 2002
Environmental Bureau
Oil Conservation Division

Submit Original
Plus 1 Copy
to appropriate
District Office

Env. JN: 02008

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>THRIFTWAY Corp.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>THRIFTWAY Refinery</u>
2. Management Facility Destination <u>Envirotech Soil Remediation Facility Landfarm #2</u>	6. Transporter <u>Envirotech</u>
3. Address of Facility Operator <u>5796 US Highway 64 Farmington, NM 87401</u>	8. State <u>New Mexico</u>
7. Location of Material (Street Address or ULSTR)	<u>County Road 5500 Bloomfield NM</u>
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Sludge & water at crude Tank Sumps.

Denied
Subject to Santa Fe
review 2/28/02

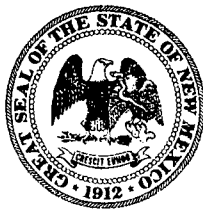


Estimated Volume 20 bbl cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Harlan M. Brown TITLE: Landfarm Manager DATE: 2-28-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Harlan M. Brown TELEPHONE NO. 505-632-0615

(This space for State Use)

APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 6/11/02



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us



PETER MAGGIORE
SECRETARY

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

RECEIVED

JUN 04 2002

Environmental Bureau
Oil Conservation Division

May 31, 2002

EnviroTech Inc.
5796 U.S. Highway 64
Farmington, New Mexico 87401

**SUBJECT: WASTE STATUS DETERMINATION
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO
TR-02-001 (NMOCD DISCHARGE PLAN NUMBER GW-055)**

Attention: Mr. Harlan Brown
Mr. Morris Young

The New Mexico Environment Department (NMED) Hazardous Waste Bureau has reviewed the information regarding the disposal history of the surface impoundments and crude oil storage tank sump waste provided in your letter dated May 3, 2002. Based on the information provided in the attached letter from BioTech Remediation, dated April 10, 2002, the residual sludge was deposited in the surface impoundments prior to the May 1991 listing of petroleum refinery primary and secondary oil/water/solids separation sludge and is not considered to be listed as F037 and F038 waste under 20.4.1.200 NMAC (incorporating 40 CFR 261.31). In addition, information provided by you during our February 14, 2002 site meeting at the refinery facility indicated that the wastewater was not treated in an API separator prior to discharge to the surface impoundments; therefore, the sludge also does not contain K051 waste under 20.4.1.200 NMAC (incorporating 40 CFR 261.32).

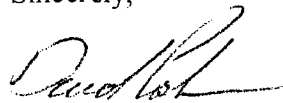
The BioTech Remediation letter also states that the crude oil tanks and sumps have not been used since December 1998. Based on the information provided in the letter, the sludge in the sumps was deposited prior to the February 1999 listing of crude oil storage tank sediment from refining operations and is not considered to be K169 listed waste under 20.4.1.200 NMAC (incorporating 40 CFR 261.32). The waste from the sumps and surface impoundments must be handled as hazardous waste if chemical analysis indicates any characteristic of hazardous waste as defined in 20.4.1.200 NMAC (incorporating 40 CFR 261 Subpart D). In addition, waste disposal activities

EnviroTech, Inc.
May 31, 2002
Page 2

must comply with all New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division requirements for waste handling, treatment and disposal.

Please call this office at (505) 428-2553 if you have questions regarding this determination or if conditions change that might affect the status of the waste.

Sincerely,



Dave Cobrain, R.P.G.
Geologist
Permits Management Program
Hazardous Waste Bureau

DWC

cc: James Bearzi, HWB
John Kieling, HWB
Debby Brinkerhoff, HWB
~~Martynne Kieling, OCD~~
Terry Griffin, BioTech Remediation
Pam Allen, HWB

Tracking: Blue File, 2002, Waste Determination, Thriftway Bloomfield Refinery.

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

May 3, 2002

New Mexico Environment Department
Hazardous Waste Bureau
Attn: Dave Cobrain, Waster Resource Specialist
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, New Mexico 87505

505-428-2541
Fax 505-428-2567

Re: Revised letter for waste determination for the former Thriftway Refinery near Bloomfield,
New Mexico

Dear Mr. Cobrain:

Biotech Remediation has provided a revised letter describing the work they have proposed at the former Thriftway Refinery located near Bloomfield, New Mexico. The letter is attached to this correspondence. Please note that the scope of work has been modified to include cleanup of spills and leaks around several tanks located at the east end of the facility.

If you have further questions regarding this project or if we can be of further service please feel free to contact us at 505-632-0615.

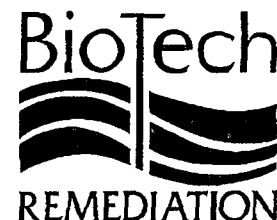
Sincerely,
Envirotech Inc.



Harlan M. Brown
Geologist / Hydrogeologist
New Mexico Certified Scientist #083

cc:
Bitotech Remediation; Ms. Terry Griffin, 501 Airport Drive Suite 504, Farmington, NM 87401
NMOCD, Martyne Kieling, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505

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501 Airport Drive - Suite 104

Farmington, New Mexico 87401

Off: (505) 327-4965

Fax: (505) 564-3604

April 10, 2002

Morris Young
Envirotech Inc.
5796 US Hwy 64
Farmington, New Mexico 87401

Re: Thriftway Bloomfield Refinery

Dear Morris:

Thriftway is planning to clean several areas at the Bloomfield Refinery for inspection per the current Discharge Renewal Plan. In order to complete the inspection, the sumps and stained soils around several tanks within the tank farm and two lined lagoons will need to be cleaned and the sludge will need to be disposed of in an appropriate manner. It is our understanding that characterization of the waste streams for disposal is dependent on when the storage areas were last used. A Site Plan of the tanks and lagoon liners is attached.

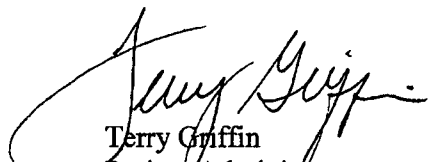
There are several crude oil storage tanks located at the east side of the refinery. A couple of the tanks have concrete sumps (6' x 10' x 5') adjacent to them that were used to catch condensed water drawn off the bottom of the tanks, the other tanks had valves which leaked and stained soil needs to be removed. All tanks and associated sumps were last used when they were rented to Giant Industries. The tanks and sumps have not been used since December 1998.

We also need to clean and inspect the lined evaporation lagoons located west of the refinery process unit. To the best of our knowledge the refinery ceased refining operations in December 1990. Process water from the plant has not been added to the evaporation lagoons since refinery operations stopped.

Morris Young
April 10, 2002
Page 2

Thank you for your assistance. If you need further information, please contact me at 505-327-4965.

Respectfully,



Terry Griffin
Project Administrator

hmb/TG

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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MAR 06 2002

Environmental Bureau
Oil Conservation Division

March 5, 2002

New Mexico Environment Department
Hazardous Waste Bureau
Attn: Dave Cobrain, Waster Resource Specialist
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, New Mexico 87505

505-428-2541
Fax 505-428-2567

Re: Waste determination for the former Thriftway Refinery near Bloomfield, New Mexico


Dear Mr. Cobrain:

Biotech Environmental and the Thriftway Corporation have contracted Envirotech to clean sediments and sludge from lined evaporation ponds at the west end of the facility and concrete sumps at the east end of the facility to facilitate inspection. We are aware that some refinery wastes have been "Listed" as "F" or "K" wastes in recent changes to the Code of Federal Regulations. Ms. Terry Griffin has provided a letter (attached) indicating when the subject sumps and ponds were last in service. Based on her submittal and your inspection of the ponds and sumps on February 14, 2002 we would appreciate your determination as to the status of the waste streams at each of the process areas.

Decisions regarding waste disposal or remediation will be based on whether the waste is listed, characteristic, or non-exempt with no hazardous characteristics. We also request that you copy your determination to Biotech Remediation and to Martyne Kieling of the New Mexico Oil Conservation Division (NMOCD).

If you have further questions regarding this project or if we can be of further service please feel free to contact us at 505-632-0615.

Sincerely,
Envirotech Inc.



Harlan M. Brown
Geologist / Hydrogeologist
New Mexico Certified Scientist #083

cc:

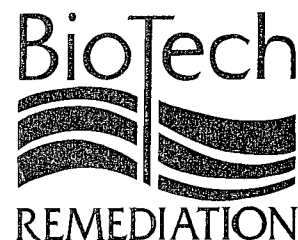
Bitotech Remediation; Ms. Terry Griffin, 501 Airport Drive Suite 504, Farmington, NM 87401
NMOCD, Martyne Kieling, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505

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RECEIVED MAR 4 2002

MAR 06 2002

Environmental Bureau
Oil Conservation Division



501 Airport Drive - Suite 104

Farmington, New Mexico 87401
Off: (505) 327-4965
Fax: (505) 564-3604

February 25, 2002

Morris Young
Envirotech, Inc.
5796 U.S. Hwy 64-3014
Farmington, NM 87401

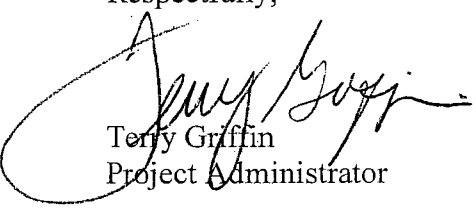
RE: Thriftway Bloomfield Refinery

Dear Morris:

Just a brief note to let you know that Giant's last active use of the tanks at the above-referenced facility was in December of 1998. To the best of my knowledge, the refinery began discontinuing operations in December 1990 and January 1991.

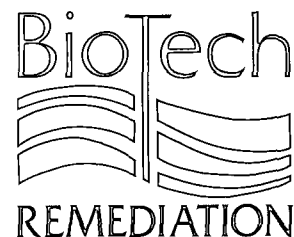
Thank you for your assistance. If you need any other information, please contact me at 505-327-4965.

Respectfully,



Terry Griffin
Project Administrator

Cc: File



501 Airport Drive – Suite 104

Farmington, New Mexico 87401
Off: (505) 327-4965
Fax: (505) 564-3604

February 25, 2002

Wayne Price
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Discharge Plan GW-055 Renewal
Thriftway Bloomfield Refinery

Dear Wayne:

Based on the Oil Conservation Division's ("OCD") letter of February 12, 2002, please find enclosed a check for \$8,400.00 for the above-referenced discharge plan renewal.

If you have any questions, please give me a call at 505-327-4965.

Respectfully,

A handwritten signature in black ink, appearing to read "Terry Griffin".

Terry Griffin
Project Administrator

Cc: File

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. 6442 dated 2/26/2002
or cash received on _____ in the amount of \$ 8400.00
from BIOTECH REMEDIATION INC.
for THREEWAY-BLAINFIELD REFINERY GW-055
Submitted by: WAYNE PRICE (Family Name) Date: 2/28/02 (DP No.)
Submitted to ASD by: [Signature] Date: 11
Received in ASD by: _____ Date: _____
Filing Fee _____ New Facility _____ Renewal ☒
Modification _____ Other _____
Organization Code 521.07 Applicable FY 2002
To be deposited in the Water Quality Management Fund.
Full Payment ☒ or Annual Increment _____

BIOTECH REMEDIATION INC.

710 E 20TH STREET
FARMINGTON, NM 87401
(505) 326-5571

WELLS FARGO BANK
95-219/1070

6442

DATE 02/26/2002 AMOUNT \$8,400.00

PAY

Eight Thousand Four Hundred Dollars And 00 Cents

TO THE
ORDER
OF

Oil Conservation Division
1220 South Francis Drive
Santa Fe N.M. 87505-0000

[Signature]
AUTHORIZED SIGNATURE

⑈006442⑈ ⑆107002192⑆9810153641⑈



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

February 12, 2002

Lori Wrotenbery

Director

Oil Conservation Division

CERTIFIED MAIL

RETURN RECEIPT NO. 5357 7201

Ms. Terry Griffin
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM, 87401

Re: Discharge Plan GW-055 Renewal
Thriftway Marketing Corporation-Formal Bloomfield Refinery

Dear Ms. Griffin:

The New Mexico Oil Conservation Division (OCD) is in receipt of BioTech Remediation's letter dated November 19, 2001 and Billings & Associates, Inc.'s "Review of Data and Recommendations on Remedial Options: Discharge Plan GW-055 Renewal (Thriftway Marketing-Bloomfield Refinery)" on behalf of Thriftway Marketing Corporation.

It is OCD's understanding that Thriftway Marketing Corporation proposes to retain the option to re-activate the refinery and continue the groundwater remediation efforts under the discharge plan. The proposal requests the vadose zone investigation be deferred until after the groundwater quality has met the WQCC groundwater standards.

If this is Thriftway Marketing Corporation's intent, then OCD is prepared to issue the discharge plan as a renewal of the existing permit with a discharge plan fee of \$8400 for a period of five years. OCD approval conditions will require Thriftway Marketing Corporation to submit a discharge plan modification upon refinery re-activation or de-commissioning.

Please submit written comments by March 15, 2002 if Thriftway Marketing Corporation wishes to provide further clarification, otherwise the discharge plan will be renewed as discussed above.

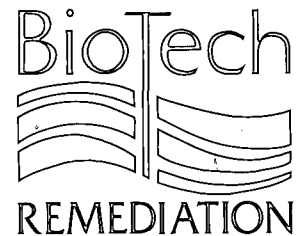
If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail WPRICE@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/lwp

xc: OCD Aztec Office



November 19, 2001

710 E. 20th Street, Suite 400
Farmington, New Mexico 87401
Off: (505) 327-4965
Fax: (505) 564-3604

Mr. Wayne Price
Petroleum Engineering Specialist
New Mexico Energy, Minerals and Natural Resources Dpt.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, N M 87505

RE: Discharge Plan Renewal GW-055
Thriftway Bloomfield Refinery

RECEIVED
DEC 10 2001
Environmental Bureau
Oil Conservation Division

Dear Mr. Price:

Thriftway has contracted with BioTech Remediation Inc., to prepare and submit all necessary documentation required for approval for the Thriftway Bloomfield Refinery Discharge Plan GW-55.

The following text addresses the issues noted in your letter of September 26, 2001. The items will be addressed in the same order as presented in the reference letter.

1. The below grade sumps which contain oily waste at Tank #11 and Tank #12 will be cleaned out at the December 2001 Sampling and Monitoring event.
2. The soils located on the north side of the property will be sampled at the year end Quarterly Sampling and Monitoring event and the results will be published within the annual report. If the soils remain above regulatory limits, the soils will be removed to an approval land farm.
3. The on-site production well belongs to Arrington Oil out of Midland, Texas. Any work that is required there should be directed to Arrington Oil.
4. The valve on Tank #23 (reference in your letter as Tank #184), which was leaking, has been repaired and the stained soils will be sampled at the Quarterly Sampling and Monitoring event in December and will be removed and transported to an approved land farm upon receipt of analysis.
5. BioTech is in the process of contracting with The Snow Company, out of Albuquerque, New Mexico, to inspect the lagoon liners. Schedules permitting, the inspection should take place shortly after the first of the year and results will be published within the required Annual Report.

November 19, 2001
Mr. Wayne Price
Page 2

Enclosed also is a letter which Brad Billings, with Billings and Associates, Inc., has prepared reviewing the most current data for the refinery with recommendations for remedial options for this discharge permit renewal.

I have also enclosed a check for \$50.00 to satisfy the ground water permit fee. I believe that with this submittal, the permit application is complete. However, if you find that additional information is required, please contact me at 505-327-4965.

Respectfully,



Terry Griffin
Project Administrator

Enclosures (2)

CC: File
Thriftway Company
Brad Billings, Billings and Associates



November 9, 2001

Wayne Price (Pet.Engr.Spec.)
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (OCD)
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Review of Data and Recommendations on Remedial Options: Discharge Plan GW-055
Renewal (Thriftway Marketing-Bloomfield Refinery)

Dear Mr. Price,

Billings & Associates, Inc. (BAI), has been requested, by Thriftway Marketing, to review current and historical data regarding the identified Bloomfield Refinery, and offer recommendations on current remedial efforts, and/or need for additional remedial efforts. Reviewed data include free product information, benzene water quality data and hydrologic control. Included is a discussion of vadose zone investigation and/or active remediation.

Additionally, a cursory review of human health risk relative to the site is made. Current United States Environmental Protection Agency stance on source control and monitored natural attenuation is offered as well.

FREE PRODUCT

Analysis of free product aspects is as follows:

Overall product thickness trends in those wells having contained or still containing free product reveal a distinct reduction in available recoverable product.

Product recovery system has removed over 8,900 gallons of free phase product as of 1/17/01.

Contour maps developed by BioTech (see free product contours from June, September and December 2000 in Appendix A) indicate adequate capture and control for prevention of product migration.

DISSOLVED BENZENE - GROUND WATER

Analysis of dissolved benzene in ground water is as follows:

Appendix B contains contour maps of benzene in ground water from April, June, September and December 2000. These figures indicate an adequately controlled plume.

Analysis of ground water benzene trends indicates those wells currently without free product, and above detection limits in benzene should be at or below New Mexico ground water standards for this chemical within a reasonable time frame (as recently defined by the State of New Mexico and the EPA).

Several wells which historically contained free product have recently become devoid of measurable levels. These wells have a short history (less than one year in most cases) of benzene evaluation however, the same benzene reduction trend identified in other monitor wells should follow.

HYDROLOGIC CONTROL

Contour maps of potentiometric surfaces derived from April, June, September and December 2000 by BioTech (see Appendix C) indicate adequate hydrologic control of ground water movement is being maintained by the system currently operating.

VADOSE ZONE

BAI does not feel vadose zone remediation/evaluation is warranted at this time for the following reasons:

Evaluation of the ground water considerations discussed previously reveals a controlled contaminant environment.

Free product thickness trends are downward (reducing).

Ground water benzene trends are also decreasing, and will likely achieve or fall below New Mexico ground water standards within a reasonable time frame.

Natural attenuation processes in the vadose zone (ie. bacterial degradation/destruction) are well documented on fuel related hydrocarbons by the United States Environmental Protection Agency (USEPA). These processes, in all likelihood, are occurring at this site on a continual basis.

RISK CONSIDERATION

Based on the following reasons, the site should be considered a low human health risk.

- 1)Geographical location of the refinery.
- 2)Refinery is not currently in operation.
- 3)No closely surrounding home or business.
- 4)No surface water impacts.
- 5)On going active and productive remedial system for ground water and product recovery.

SOURCE CONTROL

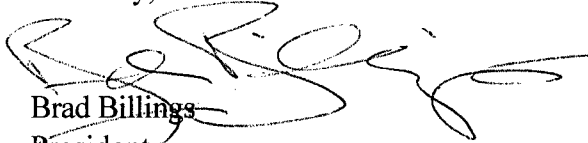
The USEPA has stated in Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action (EPA/530/R-01/015, September 2001) that if source control is in place, and if contaminant plume(s) are stable or shrinking (as is currently the case at the refinery) then monitored (as is occurring at the refinery) natural attenuation may be a viable remedial option.

When free phase product is no longer found, and when all water quality data indicates standards or less for chemicals of concern, the vadose zone should be evaluated. In all probability the vadose zone may be at or below state soil standards for chemicals of concern by the time the ground water has attained or bested state standards. If other remedial concerns are raised at the time of vadose examination, options to complete remediation on site should be considered.

RECOMMENDATIONS

It is our recommendation the OCD should approve a renewal of the discharge permit to continue current remedial operations at the refinery. This recommendation is based on review of current data, trend analysis of water quality and free phase product thickness reductions, contaminant plume(s) control, and low human health risk of contaminants on site.

Sincerely,



Brad Billings

President

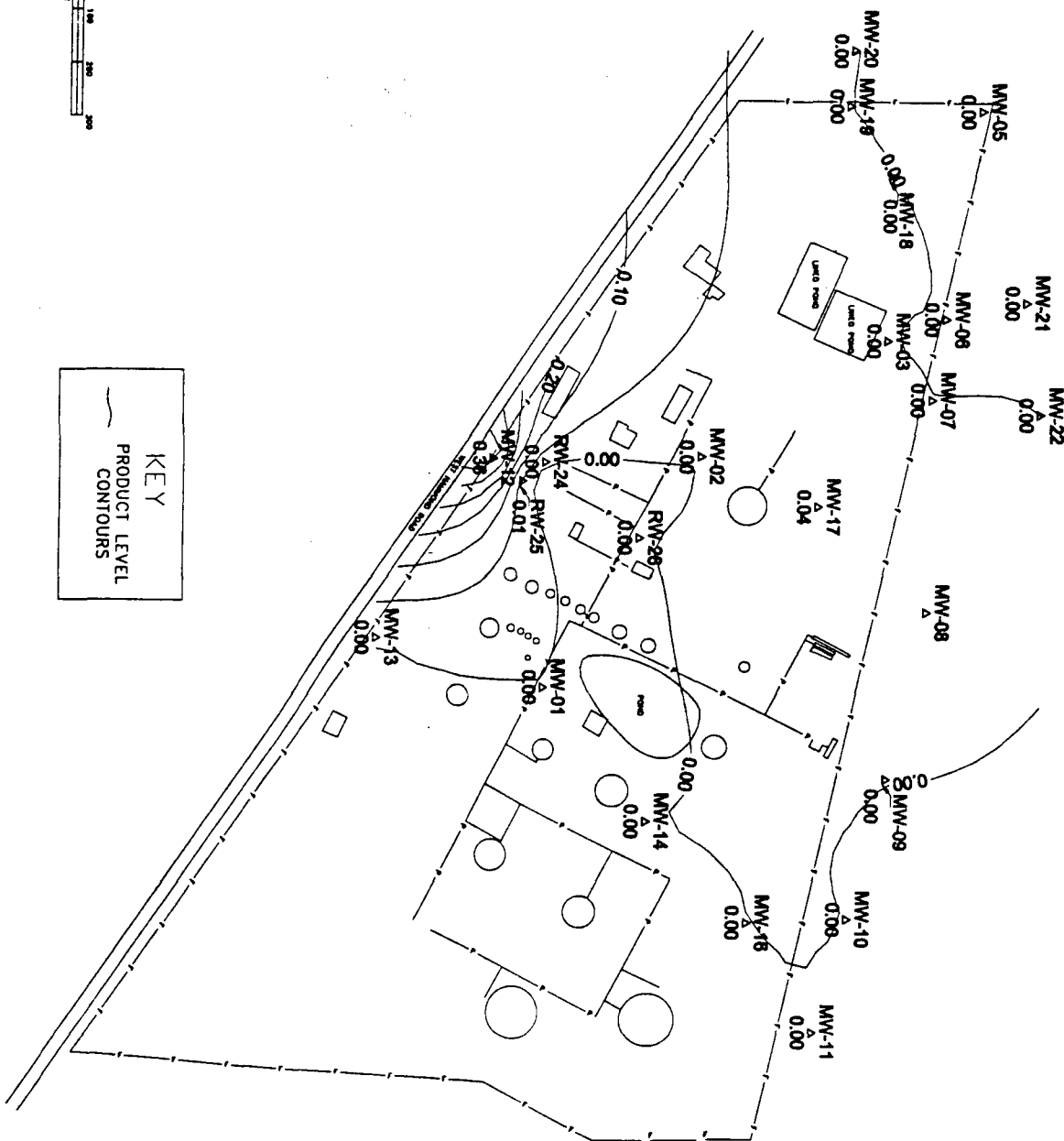
Billings & Associates, Inc.

cc: Terry Griffin (Thriftway) w/appendices
File w/appendices

Appendix A



KEY
— PRODUCT LEVEL
CONTOURS



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

810\040300.pl

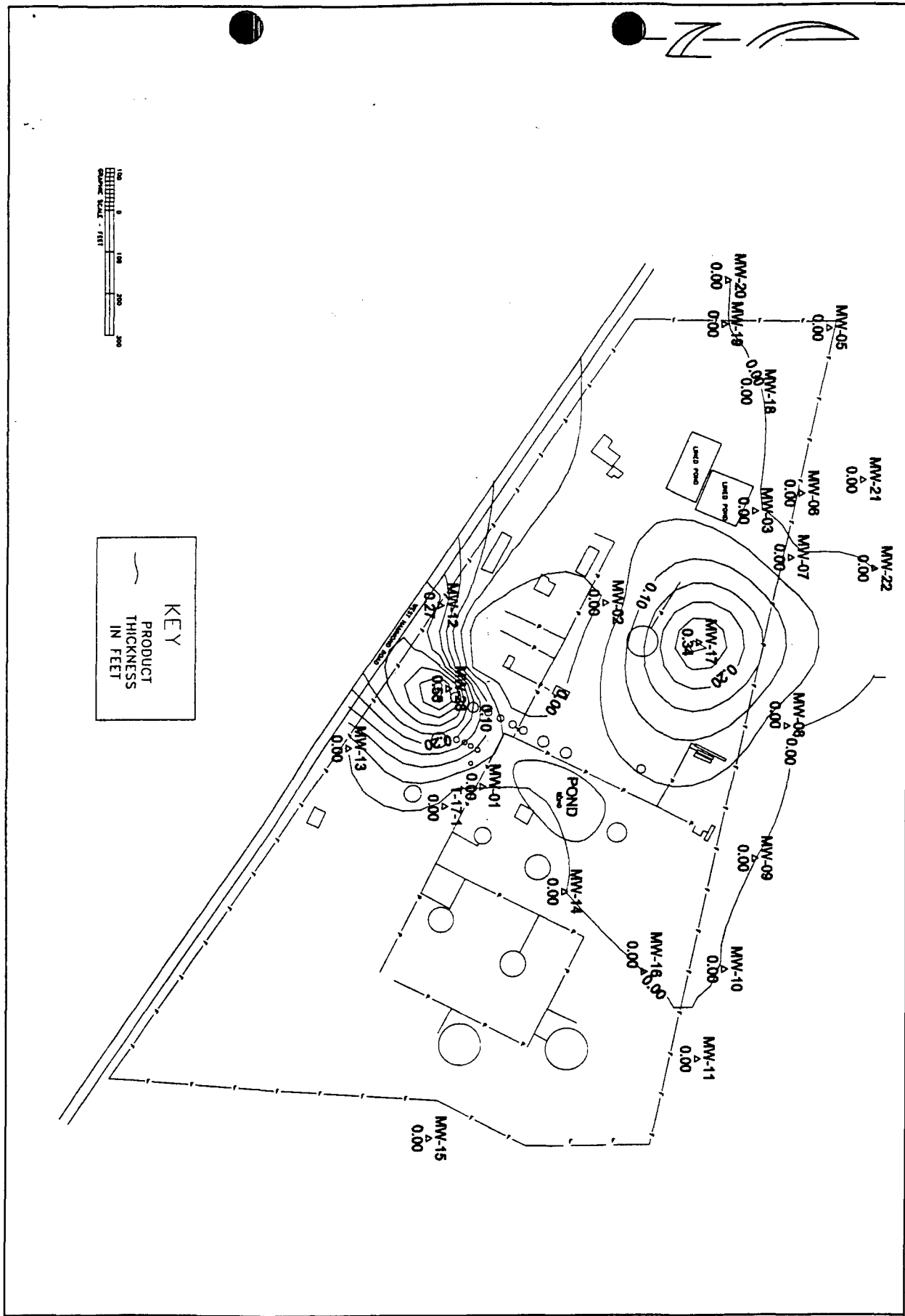
DRAWN BY: K. SINKS

FIGURE 4A PRODUCT
LEVEL CONTOUR MAP

APRIL 3, 2000

BioTech
REMEDATION

710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4965
FAX 505-364-3804



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

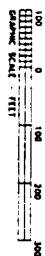
DRAWN BY: K. SINKS

FIGURE 4B PRODUCT
THICKNESS MAP

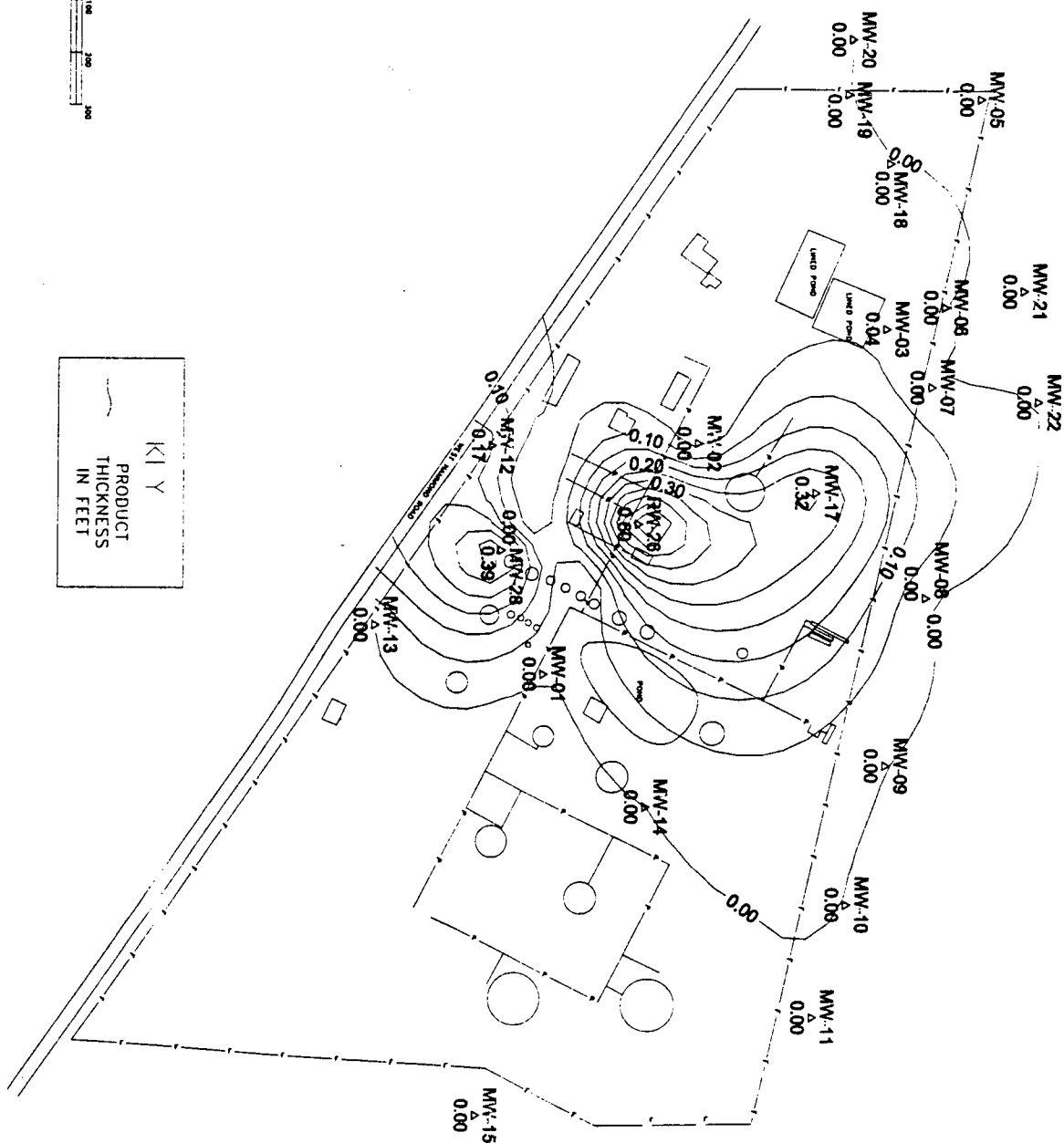
JUNE 8, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4985
FAX 505-564-3604



K | Y
PRODUCT
THICKNESS
IN FEET



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

#10/090700PL

DRAWN BY: K. SINKS

FIGURE 4C PRODUCT
THICKNESS MAP

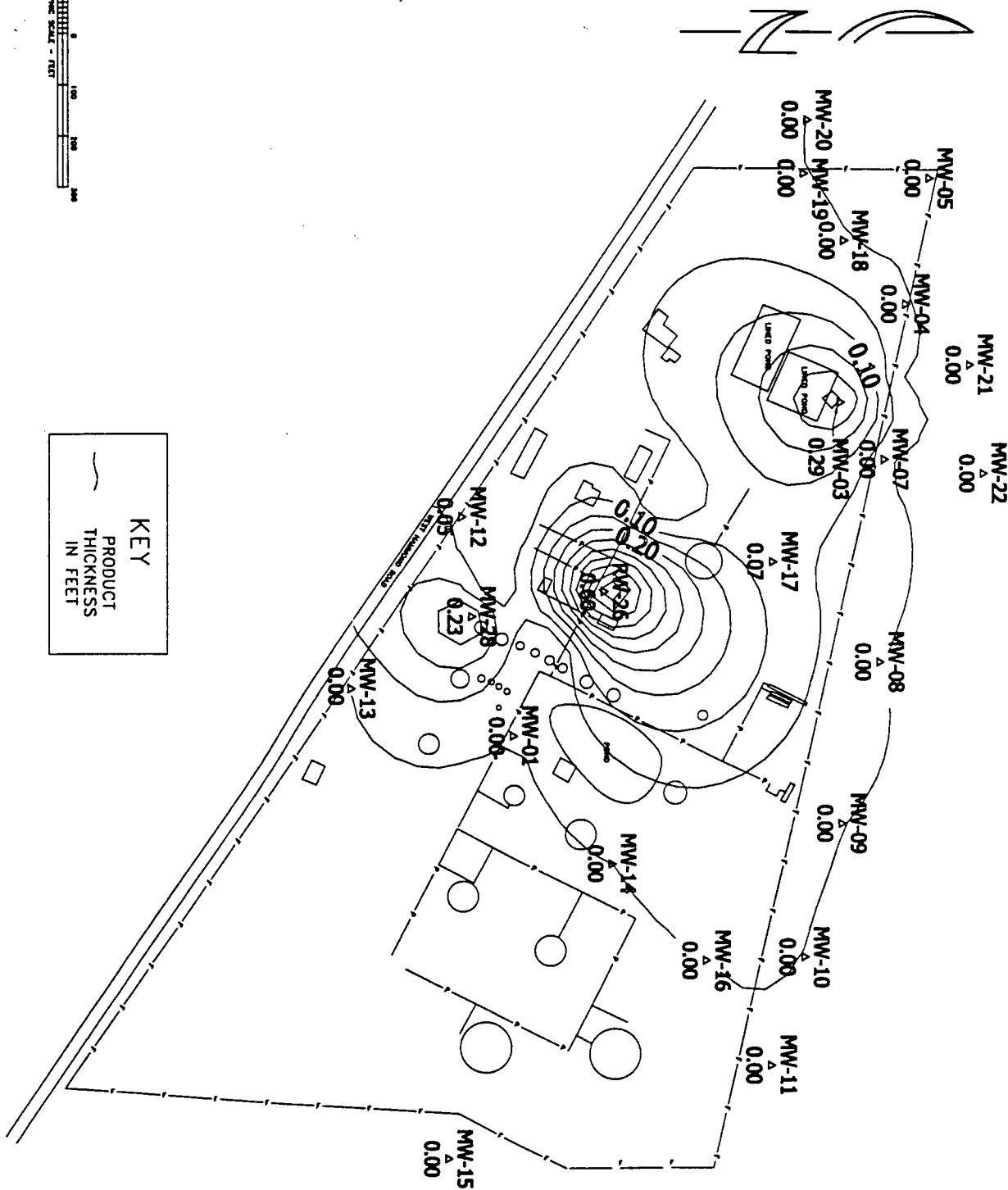
SEPTEMBER 7, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4965
FAX 505-364-3604



KEY
PRODUCT
THICKNESS
IN FEET



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

810,121100PL

DRAWN BY: K. SINKS

FIGURE 4D PRODUCT
THICKNESS MAP

DECEMBER 11, 2000

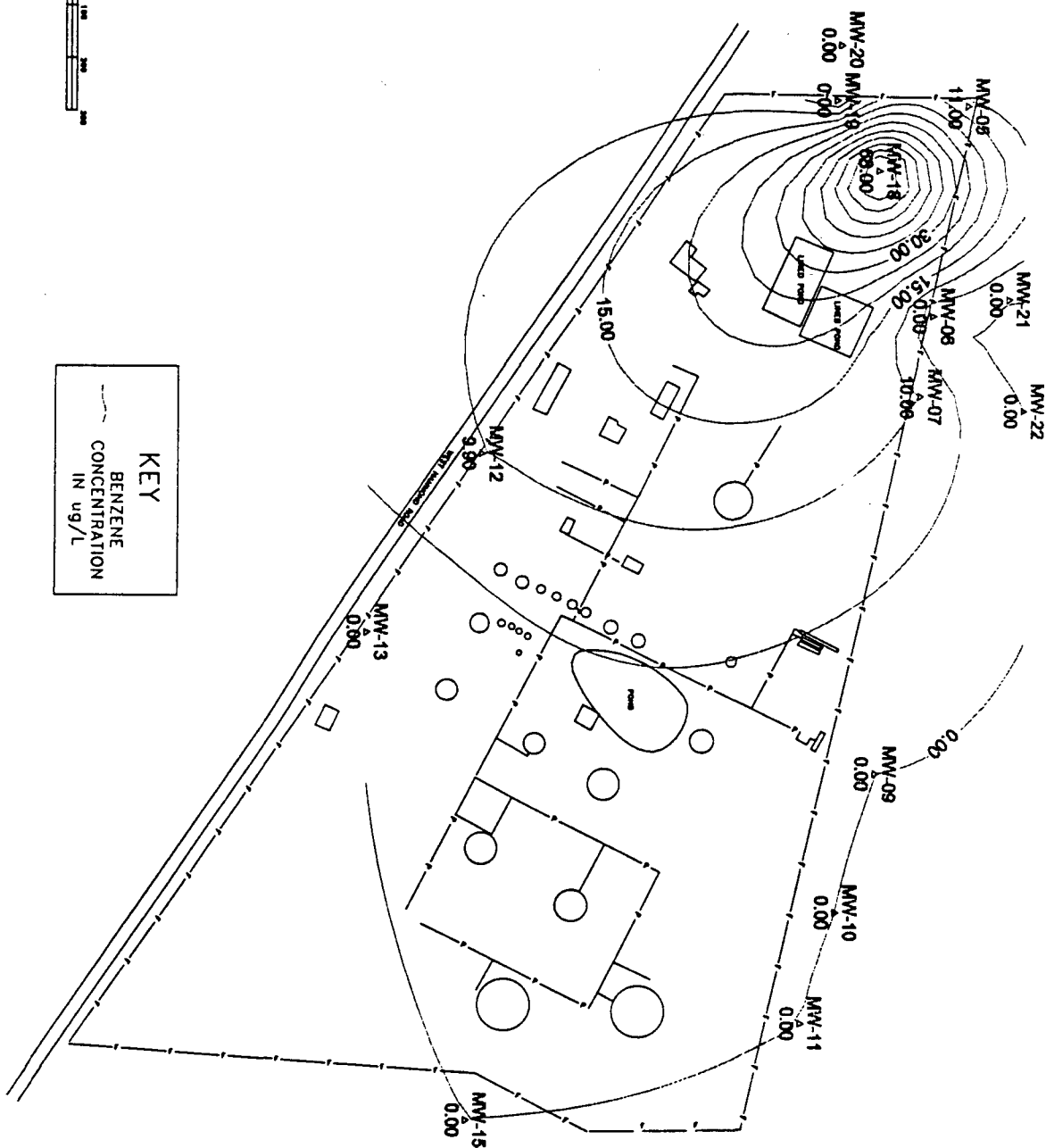


710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4885
FAX 505-584-3804

Appendix B



KEY
 --- BENZENE
 CONCENTRATION
 IN ug/L



THRIFTWAY REFINERY
 626 RD 5500
 BLOOMFIELD, NM

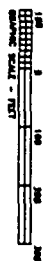
DRAWN BY: K. SINKS

FIGURE 2A BENZENE
 CONCENTRATION MAP

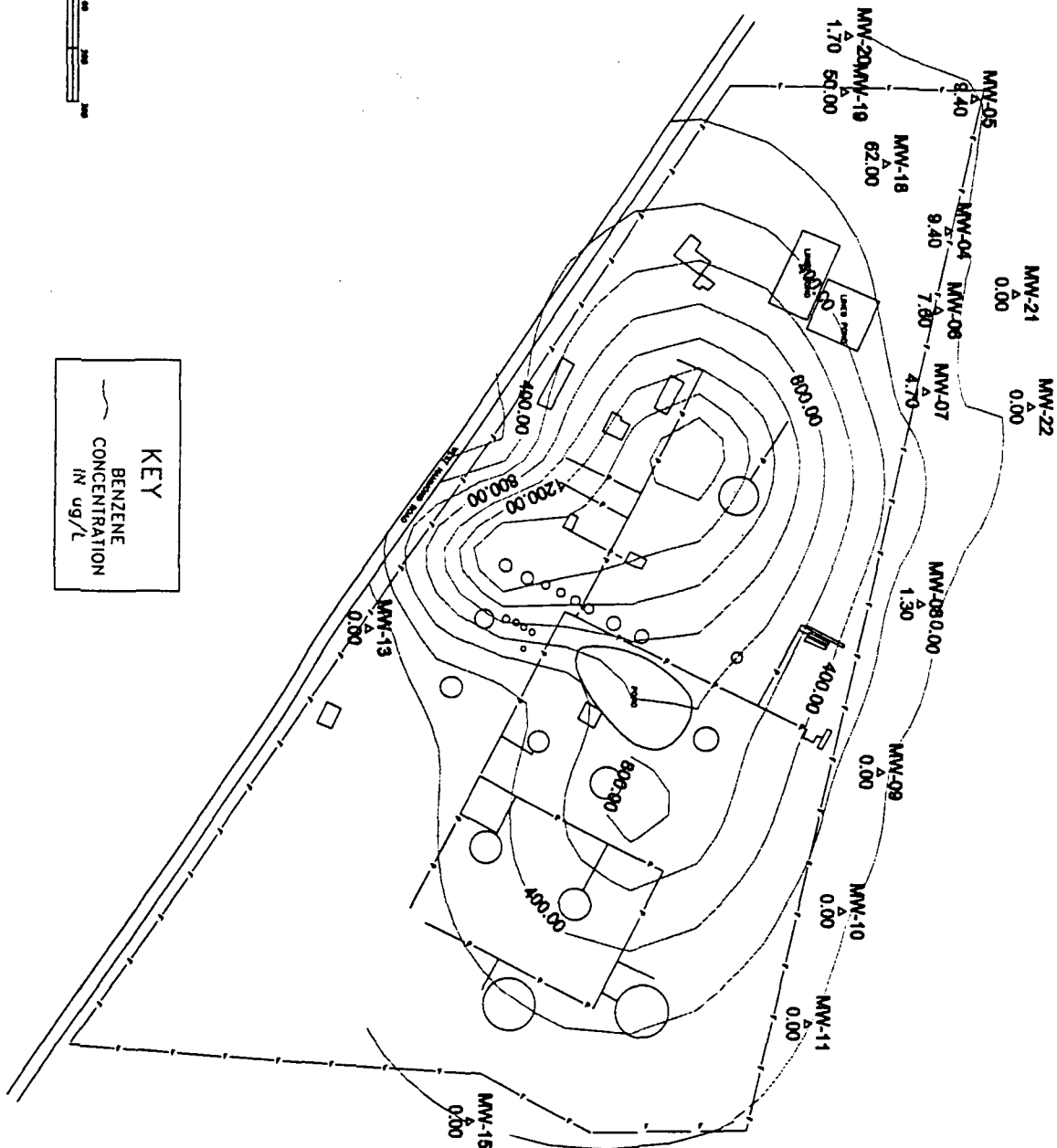
APRIL 3, 2000



710 EAST 20TH STREET, SUITE 400
 FARMINGTON, NEW MEXICO 87401
 PHONE 505-327-4883
 FAX 505-364-3604



KEY
BENZENE
CONCENTRATION
IN ug/L



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

816/00000002

DRAWN BY: K. SINKS

FIGURE 2B
BENZENE
CONCENTRATION
MAP

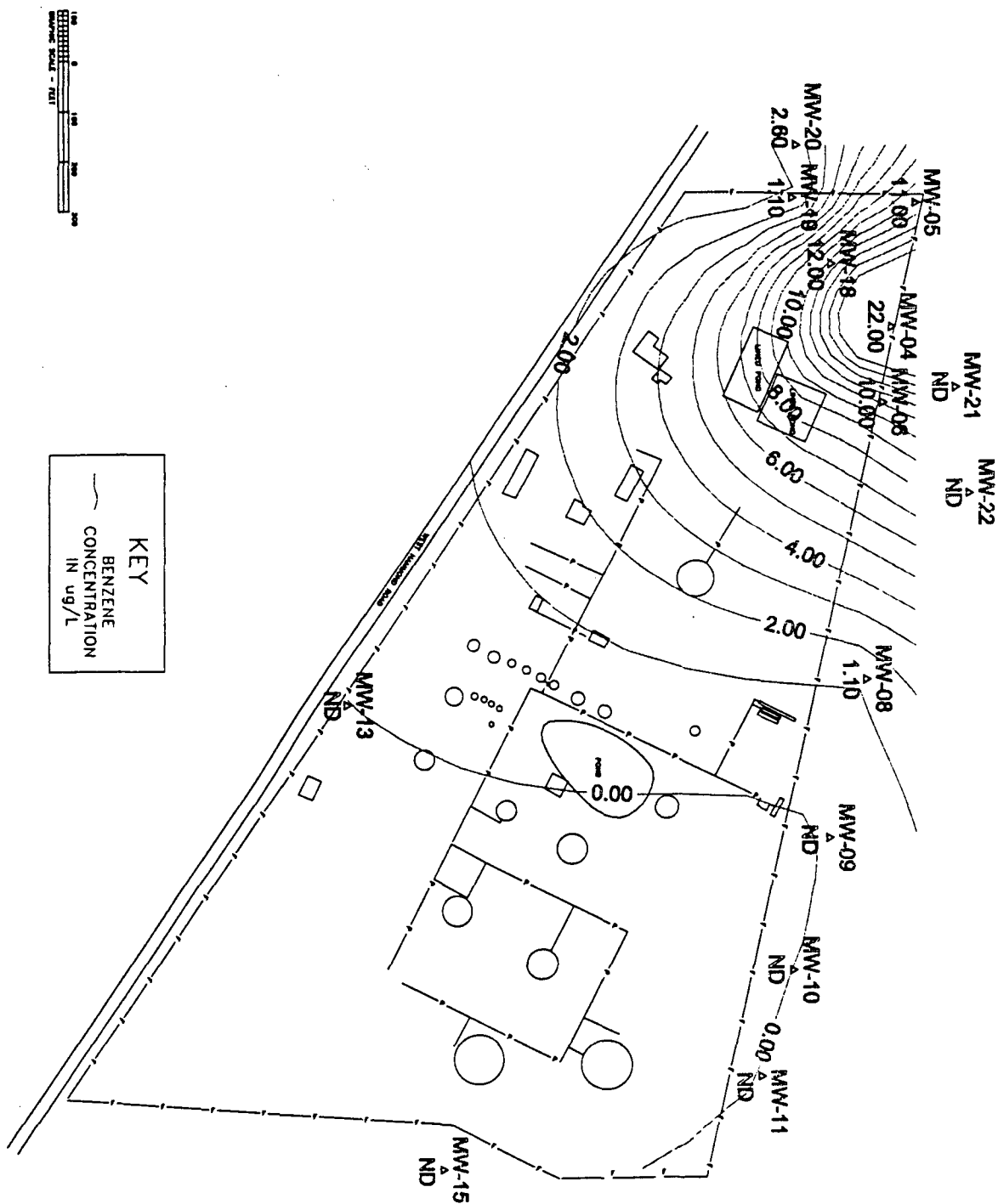
JUNE 8, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401

PHONE 505-327-4863

FAX 505-364-3604



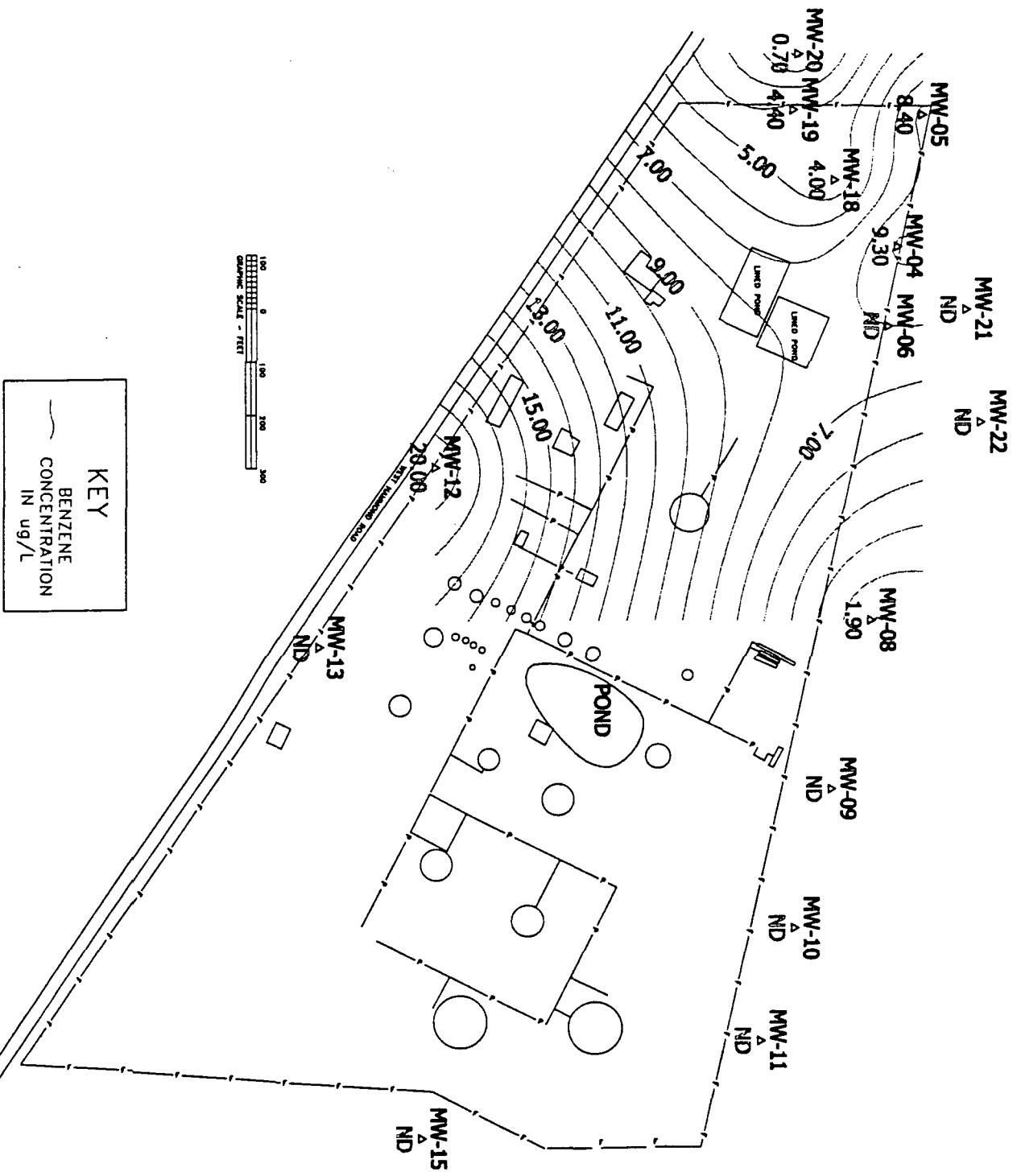
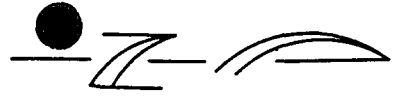
THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

816\00030082

DRAWN BY: K. SINKS
FIGURE 2C
BENZENE CONCENTRATION
MAP
SEPTEMBER 5, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4885
FAX 505-564-3604



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

DRAWN BY: K. SINKS
FIGURE 2D
BENZENE CONCENTRATION
MAP
DECEMBER 11, 2000

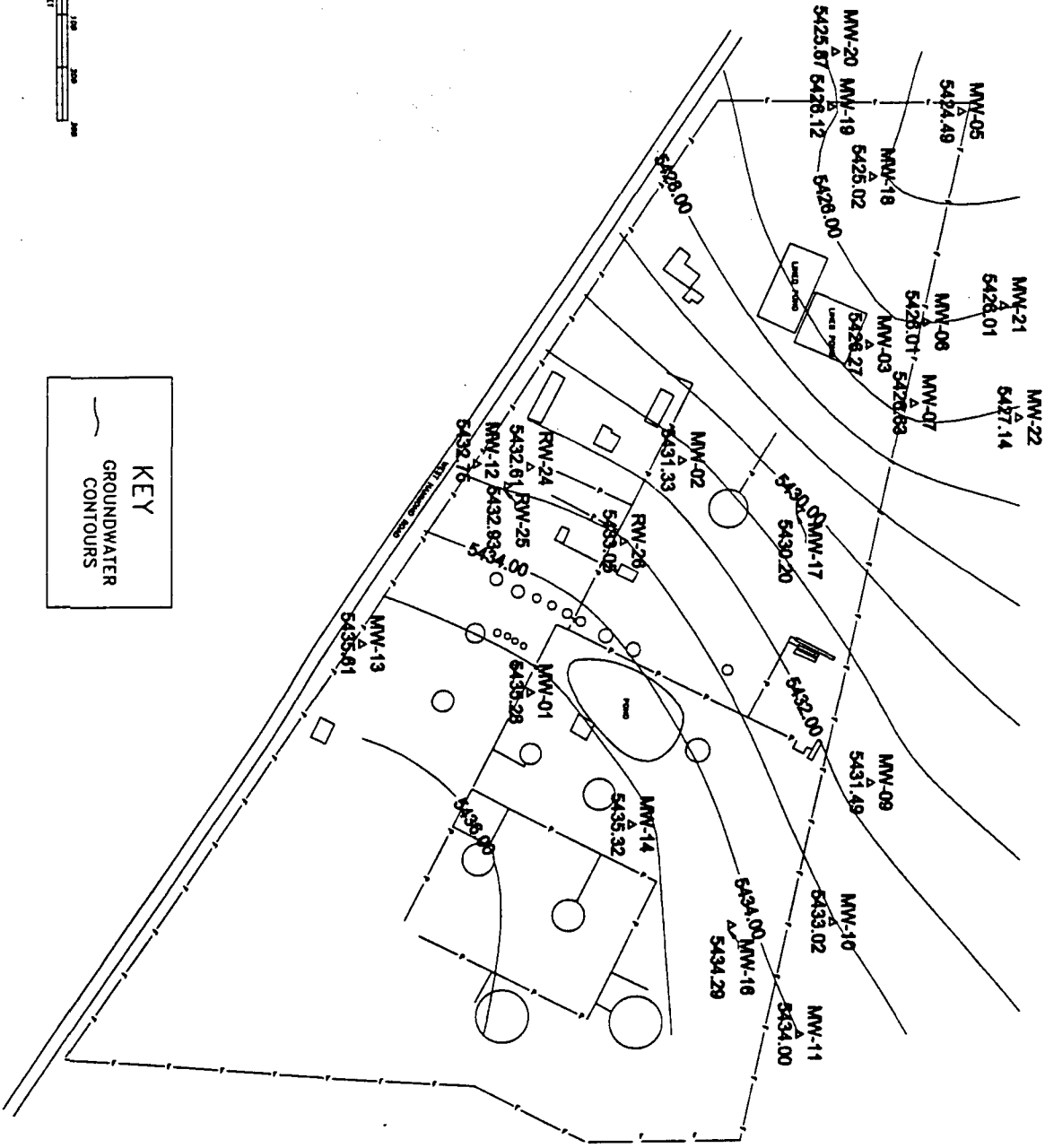


710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4985
FAX 505-564-3604

Appendix C



KEY
— GROUNDWATER
CONTOURS



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

818\040300ML

DRAWN BY: K. SINKS

FIGURE 1A
WATER LEVEL
CONTOUR MAP

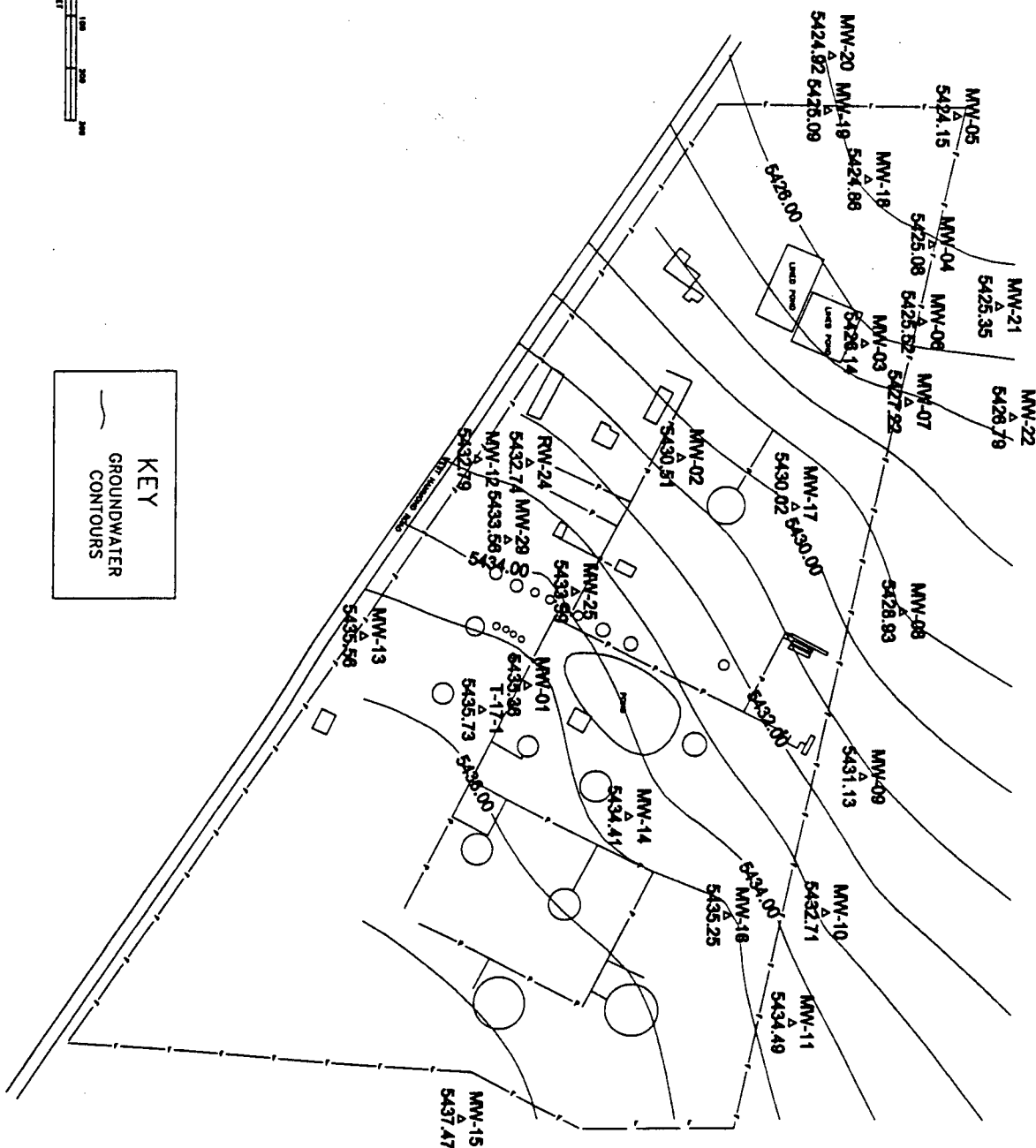
APRIL 3, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4985
FAX 505-564-3604



KEY
—
GROUNDWATER
CONTOURS



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

DRAWN BY: K. SINKS

FIGURE 1B
WATER LEVEL
CONTOUR MAP

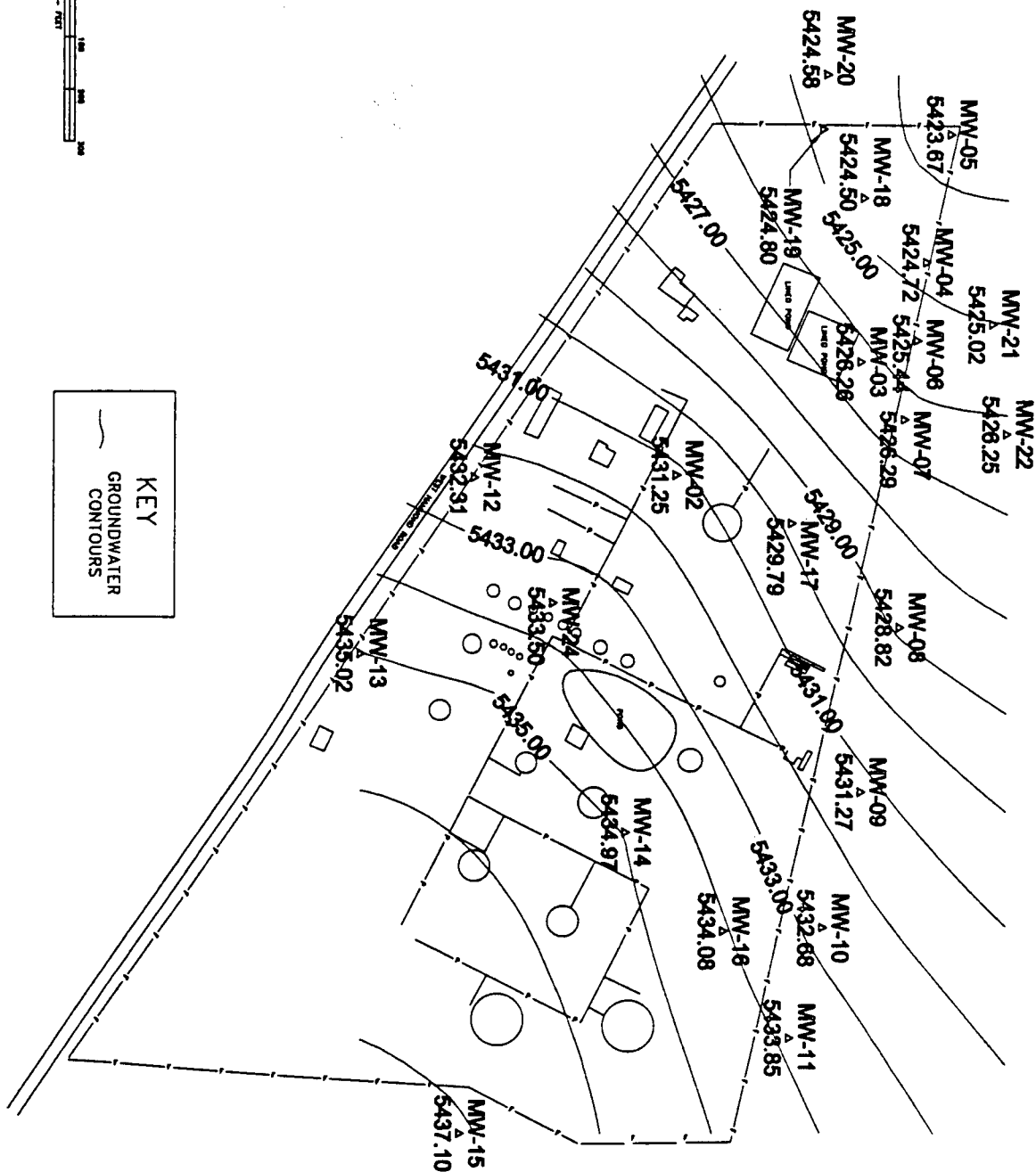
JUNE 8, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4865
FAX 505-364-3604



KEY
GROUNDWATER
CONTOURS



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

818/0807000L

DRAWN BY: K. SINKS

FIGURE 1C
WATER LEVEL
CONTOUR MAP

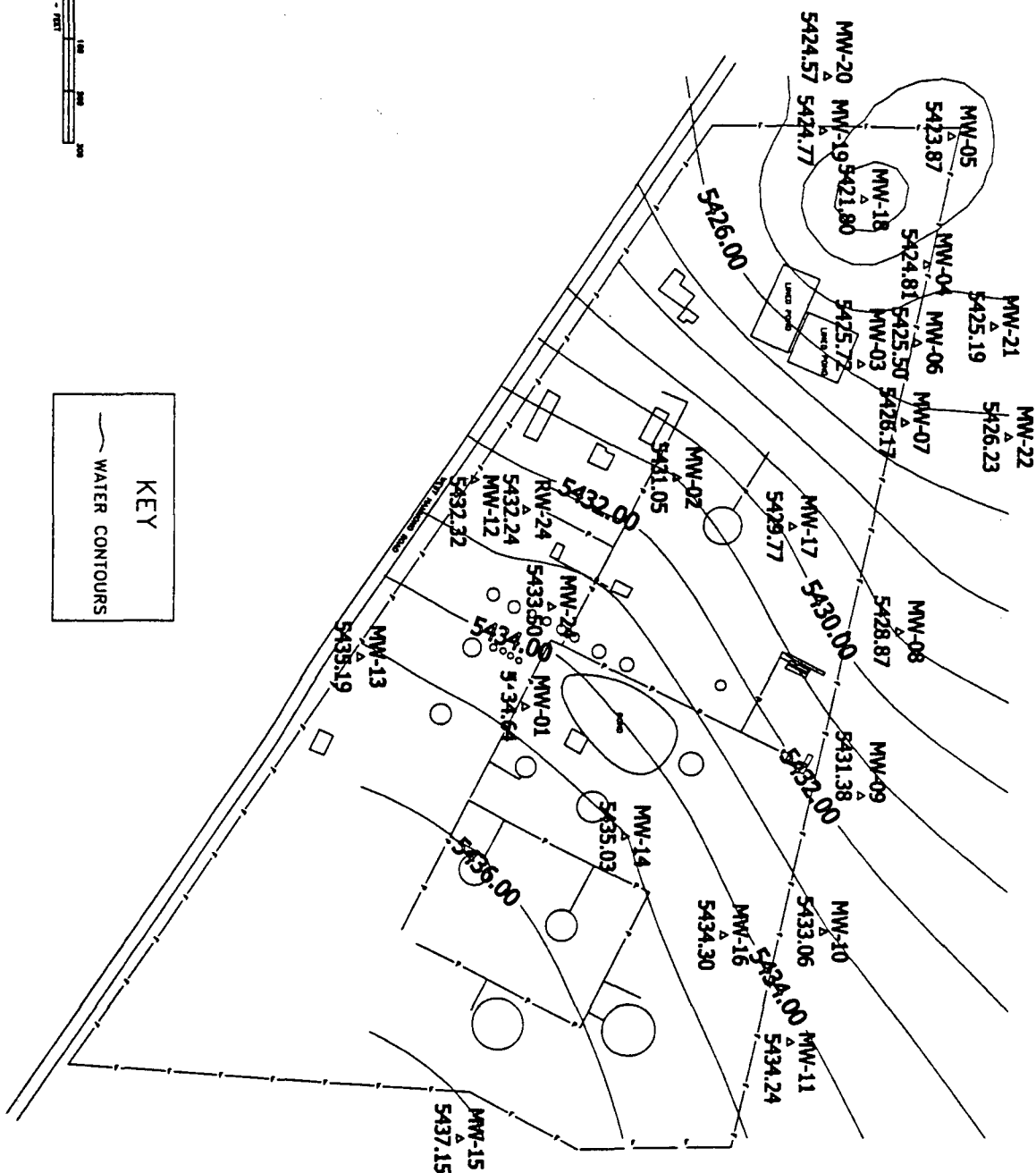
SEPTEMBER 7, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4865
FAX 505-564-3604



KEY
— WATER CONTOURS



THRIFTWAY REFINERY
626 RD 5500
BLOOMFIELD, NM

010/121100W

DRAWN BY: K. SINKS

FIGURE 1D
WATER LEVEL CONTOUR
MAP

DECEMBER 11, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4963
FAX 505-564-3804

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. 6299 dated 11/19/01
or cash received on _____ in the amount of \$ 50.00
from BIOTECH REMEDIATION
for ~~STATE~~ ~~ENVIRONMENTAL~~ ~~WATER~~ ~~PROTECTION~~ ~~DEPT~~ ~~OF~~ ~~NEW~~ ~~JERSEY~~ GW-055
Submitted by: 214410 PRICE Date: 12/10/01
Submitted to ASD by: W Date: _____
Received in ASD by: _____ Date: _____
Filing Fee ☒ New Facility _____ Renewal ☒
Modification _____ Other _____
Organization Code 521.07 Applicable FY 2001
To be deposited in the Water Quality Management Fund.
Full Payment _____ or Annual Increment _____

BIOTECH REMEDIATION INC.
710 E 20TH STREET
FARMINGTON, NM 87401
(505) 326-5571

WELLS FARGO BANK
95-219/1070

6299

11/19/2001

DATE

AMOUNT
\$50.00

PAY

Fifty Dollars And 00 Cents

TO THE
ORDER
OF

NM Oil Conservation Division

GW-055

David Price

AUTHORIZED SIGNATURE

⑈006299⑈ ⑆107002192⑆9810153641⑈



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

September 26, 2001

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 7591

Ms. Terry Griffin
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM, 87401

Re: Discharge Plan GW-055 Renewal
Thriftway Marketing Corporation-Formal Bloomfield Refinery

Dear Ms. Griffin:

The New Mexico Oil Conservation Division (OCD) conducted a discharge plan inspection on June 29, 2001 for the above captioned facility. Per your request, the results of the inspection is enclosed and OCD requires Thriftway Marketing Corporation to address the following issues before discharge plan renewal:

1. Below-grade sumps were noted to contain oily waste (see pictures #3,4 and #10).
2. The old land farm located on the north side of the property (see pictures #5).
3. The on-site producing well water tank was full and requires emptying (see pictures #6 and #7).
4. Tank # 184 was leaking (see pictures 12 and 13) and valve seals on tank #14 were leaking. Tank #19 was noted to have oily trash around it.
5. Please demonstrate the integrity of the wastewater ponds. (See picture #9).

OCD may require additional actions to be taken along with additional operating conditions in the discharge plan. Also, Thriftway Marketing Corporation is hereby required to submit a completed discharge plan for OCD review by November 26, 2001.

If you have any questions please do not hesitate to contact me at 505-476-3487.

Sincerely,

Wayne Price-Pet. Engr. Spec.
cc: OCD Aztec Office

Attachments-1

Price, Wayne

From: Terry Griffin [terry@redmesa.com]
Sent: Tuesday, September 25, 2001 12:49 PM
To: Wayne Price
Subject: Discharge Plan GW-055, Thriftway Marketing Corp., Bloomfield
Wayne,

This is a follow-up to our telephone conversation earlier today. BioTech Remediation, Inc., on behalf of Thriftway will provide the OCD with a written proposal within 60-days. The proposal will address several options/technologies for removal of all potential sources for subsurface contamination at the refinery. With this extension of time, the proposal is due November 26, 2001.

I would also like to request a written followup to OCD's site visit of June 29, 2001, specifically any house keeping requirements, necessary repairs, etc.

If you have any questions, or need additional information, or this does not meet with your understanding, please contact me as soon as possible.

Thanks, Terry

9/26/01

Price, Wayne

From: Price, Wayne
Sent: Saturday, August 25, 2001 11:33 AM
To: Price, Wayne; 'terry@redmesa.com'
Cc: Foust, Denny
Subject: RE: Discharge Plan GW-055 Thriftway Marketing Corporation-Formal Bloomfield Refinery

Dear Ms. Griffin:

The OCD is in the process of evaluating the discharge plan for the above captioned facility. After reviewing your situation with the OCD staff it has been determined that Thriftway has the following two options:

1. Permit the site as an active refinery with a condition that Thriftway provide a closure bond approved by OCD; or
2. Re-new the facility as a discharge plan (abatement/remediation @fee \$2600.00) with a condition that Thriftway would supply for OCD approval a closure plan and schedule for the entire site.

Please feel free to call me 476-3487 or Roger Anderson 476-3490 to discuss this issue. Please respond within 10 days.

Thank You!

-----Original Message-----

From: Price, Wayne
Sent: Friday, August 17, 2001 3:04 PM
To: 'terry@redmesa.com'
Subject: Closure Plan

Dear Ms. Griffin:

WQCC regulations require closure of all permitted facilities after cessation of operations. If the facility has not been closed then the discharge plan permit shall remain active. See WQCC regulations 20 nmac 6.2.3107 A.(11)

Price, Wayne

From: Terry Griffin [terry@redmesa.com]

Sent: Tuesday, September 11, 2001 2:03 PM

To: Wayne Price

Cc: Denny Foust

Subject: Disposal of Light Crude/Diesel -- Thriftway Refinery, Bloomfield

Wayne,

We have contacted Safety Kleen to removed the Light Crude/Diesel from the Thriftway Bloomfield Refinery. The removal of this product will begin later this week or early next week.

Thanks,

Terry

GW-055

9/12/01

Price, Wayne

From: Price, Wayne
Sent: Wednesday, August 01, 2001 11:48 AM
To: 'terry@redmesa.com'
Cc: Anderson, Roger; Olson, William
Subject: Thriftway Refinery GW-055 Discharge Plan Renewal

Attention: Terry Griffin:

Dear Terry:

Pursuant to our telephone conversation today OCD understands that you wish to renew the Discharge Plan as an active refinery with a DP fee of \$8400 for a period of five years. OCD will be sending your DP approval with conditions to be signed and returned to OCD.

Thank you, if you have any questions please do not hesitate to contact me concerning this issue.

OCD ENVIRONMENTAL BUREAU

SITE INSPECTION SHEET

DATE: 6/29/01 Time: 10:14 AM

Type of Facility: Refinery ☒ Gas Plant ☐ Compressor St. ☐ Brine St. ☐ Oilfield Service Co. ☐
Surface Waste Mgt. Facility ☐ E&P Site ☐ Crude Oil Pump Station ☐
Other ☐ _____

Discharge Plan: No ☐ Yes ☒ DP# 55

FACILITY NAME: THRIFTWAY REFINERY

PHYSICAL LOCATION: 628 COUNTY ROAD 5500

Legal: QTR _____ QTR _____ Sec _____ TS _____ R _____ County SAN JUAN

OWNER/OPERATOR (NAME) THRIFTWAY MARKETING CORP

Contact Person: TERRY GRIFFIN Tele:# _____

MAILING

ADDRESS: 710 E 20th ST FARMINGTON State NM ZIP 87401

Owner/Operator Rep's: _____

OCD INSPECTORS: W PRICE

1. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

2. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

NORTH REMEDIATION SOIL AREA - Pic # 5

Pic # 6 - BURIED TANK Pic # 7 SIGN PRODUCING WELL WEST SIDE OF REFINERY

3. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

NORTH 50K BBL TK - PIC # 4 SUMP + SLUDGE
PIC # 12 + 13 ACTIVE TANK # 184 LEAKING LOOKING WEST (18).
TANK # 2 SUMP HAS SLUDGE REMAINING PIC # 3
EAST TANK FARM - E. MOST TK 50K BBL

4. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

5. Labeling: All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

6. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

OLD PLANT WASTE WATER PONDS - PIC # 8⁹ LOOKING NORTH
OLD SUMP HAS OIL IN IT - PIC # 9/10

7. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

8. Onsite/Offsite Waste Disposal and Storage Practices: Are all wastes properly characterized and disposed of correctly? Does the facility have an EPA hazardous waste number? Yes No

ARE ALL WASTE CHARACTERIZED AND DISPOSED OF PROPERLY? YES ☐ NO ☐ IF NO DETAIL BELOW.

9. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. All Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Closure of Class V wells must be in accordance with a plan approved by the Division's Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, the environment and groundwater as defined by the WQCC, and are cost effective. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

ANY CLASS V WELLS NO ☐ YES ☐ IF YES DESCRIBE BELOW ! Undetermined ☐

10. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

11. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the proper OCD District Office.

12. Does the facility have any other potential environmental concerns/issues?

PIC # 11 RW-24 - SOUTH SINK - MUDLINE RETINERY
ON-going GROUNDWATER CONTAMINATION
PIC # 8 AIR STRIPPER

13. Does the facility have any other environmental permits - i.e. SPCC, Stormwater Plan, etc.?

14. ANY WATER WELLS ON SITE ? NO ☐ YES ☐ IF YES, HOW IS IT BEING USED ?

Miscellaneous Comments:

DEWY COMMENTS: • TK # 14 HALF BBL PORTABLE CATCHMENT
WITH OIL • VALVE SEALS LEAKING W-NW SIDE
• TK 19 SOAKED GLOVES, ETC.

Number of Photos taken at this site: PIC # 1 - Looking WEST

attachments-

2 - 4 NORTH

OCD Inspection by Wayne Price June 29, 2001 10 am
Thriftway Refinery- Bloomfield NM GW-55
Page 1



Pic #1 - Entrance area looking west



Pic #4- Far north 50000 bbl tank sump and sludge.



Pic #2 - Entrance Area Looking North.



Pic #5- North side of plant old landfarm area.



Pic #3- 50,000 bbl storage tanks have sludge remaining in sumps.



Pic #6- Buried produced water tank for on-site producing well.



Pic #7- On-site producing well



Pic #8- Far west side of plant area- Groundwater stripper tower.



Pic # 9- Old plant waste water ponds and possible leak detectors.



Pic #10 - Old plant main wastewater drain sump- Sump was noted to have fresh oil in it.



Pic # 11- Recovery well (RW-24)



Pic # 12- Tank # 184 (or 18?). This tank was observed to have hydrocarbon product leaking from a valve and possibly under the tank.

OCD Inspection by Wayne Price June 29, 2001 10 am
Thriftway Refinery- Bloomfield NM GW-55
Page 3



Pic #13- same as 12- Looking west.

Price, Wayne

From: Price, Wayne
Sent: Tuesday, April 10, 2001 8:37 AM
To: 'Terry Griffin'
Subject: RE: Thriftway Refinery GW-055

Yes! New Fees were effective on Jan 15, 2001.

From: Terry Griffin[SMTP:terry@redmesa.com]
Sent: Tuesday, April 10, 2001 8:49 AM
To: Price, Wayne
Subject: Re: Thriftway Refinery GW-055

I am not sure that I follow you??? We already have a remediation plan in effect -- and have for 10+ years. Are these new fees?

Terry

----- Original Message -----

From: "Price, Wayne" <WPrice@state.nm.us>
To: <terry@redmesa.com>
Sent: Tuesday, April 10, 2001 8:26 AM
Subject: Thriftway Refinery GW-055

> Dear Terry:

>

> Please review the following options concerning how OCD permits the site.

>

> 1. The discharge plan will consist of a remediation plan (abatement)

Price, Wayne

From: Price, Wayne
Sent: Tuesday, April 10, 2001 8:26 AM
To: 'terry@redmesa.com'
Subject: Thriftway Refinery GW-055

Dear Terry:

Please review the following options concerning how OCD permits the site.

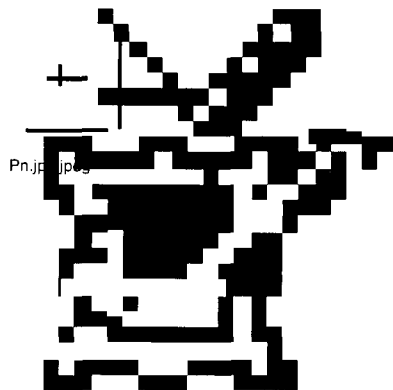
1. The discharge plan will consist of a remediation plan (abatement) for groundwater contamination. This plan will include a refinery Abatement 5 year period.
2. Permit as a refinery with no de-commission plan. Cost \$8400 for total cost \$11,000. 5 year period.
3. Permit as a remediation site (\$2600) including a refinery de-storage tanks & pumps. Total \$3800.
4. Permit as #1 above, Giant takes over the crude oil tanks & pump Discharge plan for crude oil pump station (\$1200) and be r
5. Other??

Price, Wayne

From: Price, Wayne
Sent: Monday, April 09, 2001 4:22 PM
To: 'terry@redmesa.com'
Subject: Public Notice for Thriftway Refinery

Dear Terry:

Please send an addition \$50 the new filing fee is \$100.00



NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications has been submitted to the Director of the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-55) - Thriftway Marketing Corporation, Ms. Terry Griffin, (505)-327-4965, 710 East 20th Street, Farmington, NM, 87401, has submitted a Discharge Plan Renewal Application for the former Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth from 5 to 30 feet with a total dissolved solids concentration of approximately 4,300 mg/L. The discharge plan consists of a leak, spill and stormwater contingency plan, soil and groundwater remediation, sampling and monitoring program to be conducted until the groundwater meets standards as contained in 20 NMAC 6.2.3103 of the New Mexico Water Quality Control Commission (WQCC) Regulations.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of April, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



for LORI WROTENBERY, Director

S E A L

NOTICE OF PUBLICATION

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

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of April, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



for LORI WROTENBERY, Director

S E A L

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. 5915 dated 2/09/2001
or cash received on _____ in the amount of \$ 50⁰⁰
from BIOTECH REMEDIATION
for THREEWAY REFINERY GL-055
Submitted by: WAYNE PRICE (Family Name) Date: 2/16/01 (DP No.)
Submitted to ASD by: [Signature] Date: 2/16/01
Received in ASD by: _____ Date: _____

Filing Fee ☒ New Facility _____ Renewal _____

Modification _____ Other _____
(Specify)

Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

BIOTECH REMEDIATION INC.

710 E. 20TH STREET
FARMINGTON, NM 87401
(505) 326-5571

FIRST NATIONAL BANK
FARMINGTON, NEW MEXICO

95-54/1022

5915

DATE

02/09/2001

AMOUNT

\$50.00

PAY Fifty Dollars And 00 Cents

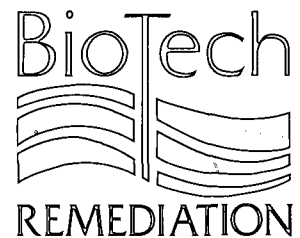
TO THE NM Oil Conservation Division
ORDER
OF

[Signature]
R. J. Dally MP

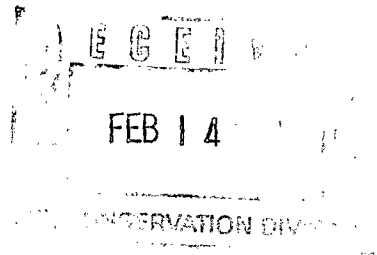
⑈005915⑈ ⑆102200546⑆ 010153641⑈

VENDOR I.D.	NAME	PAYMENT NUMBER	CHECK DATE				
19191	NM Oil Conservation Divis	00000000000000610	02/09/2001				
OUR VOUCHER NUMBER	YOUR VOUCHER NUMBER	DATE	AMOUNT	AMOUNT PAID	DISCOUNT	WRITE-OFF	NET
00000000000000742	PERMIT FEE GW-055	02/08/2001	\$50.00	\$50.00	\$0.00	\$0.00	\$50.00
			\$50.00	\$50.00	\$0.00	\$0.00	\$50.00

COMMENT



February 7, 2001



710 E. 20th Street, Suite 400
Farmington, New Mexico 87401
Off: (505) 327-4965
Fax: (505) 564-3604

State of New Mexico
Oil Conservation Division
Mr. Wayne Price
Hydrologist
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Groundwater Renewal Permit Application for the Thriftway Refinery located at 626 Road 5500 in Bloomfield, New Mexico.

Dear Mr. Price:

Enclosed is Groundwater Renewal Permit Application for the Thriftway Refinery located at 626 Road 5500 in Bloomfield, New Mexico. The application answers the questions in the order presented in the attached DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS, REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS.

BioTech submits this application on behalf of Thriftway Refining. If you have any questions or comments please call me at (505) 327-4965.

Respectfully,


Terry Griffin
Project Administrator

TG/ks

Attachments

CC: Mr. Denny Foust, OCD Aztec District Office

810\Groundwater Renewal Permit 2001

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87504

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87504

Revised January 24, 2001

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New

☒ Renewal

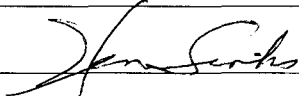
☐ Modification

1. Type: Discharge Plan #GW-055
2. Operator: Thriftway Refinery
Address: 710 East 20th Street Farmington, New Mexico 87401
Contact Person: Terry Griffin Phone: 505-327-4965
3. Location: SEE ATTACHED 4 /4 Section Township Range
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

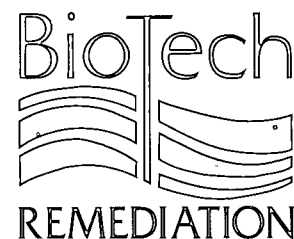
14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Ken Sinks

Title: Project Manager

Signature: 

Date: 02-07-01



THRIFTWAY REFINERY GROUNDWATER
DISCHARGE PLAN RENEWAL GW-055
710 EAST 20TH STREET
FARMINGTON, NEW MEXICO 87401

710 E. 20th Street, Suite 400
Farmington, New Mexico 87401
Off: (505) 327-4965
Fax: (505) 564-3604

Prepared for the

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Prepared by

BIOTECH REMEDIATION, INC.
710 E. 20th STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401

January 15, 2001

Prepared by:

A handwritten signature in black ink, appearing to read "Ken Sinks", written over a horizontal line.

Ken Sinks
Project Manager

810\Groundwater Renewal Permit 2001

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,
REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS

This application is for the renewal of an existing Groundwater Discharge Plan.

1. Type: **Discharge Plan # GW-055**
2. Operator: **Thriftway Refinery**
Address: **710 East 20th Street, Farmington, New Mexico 87401**
Contact person: **Terry Griffin** Phone: **505-327-4965**
3. Location: **Thriftway Refinery**
626 RD. 5500
Bloomfield, New Mexico 87413

Refinery property located in SE/4 Sec. 32 SW/2 SW/4 Sec. 33 Township 29N Range 11 W and 7.35 acres in the N.E./4 NE/4 Sec. 9 Township 28 North Range 11 West N.M. P.M., San Juan County, New Mexico. The attached copy of the Horn Canyon, N. Mex., topographical map has a paste up of the refinery showing its location as described above (See Attachment A).

4. Attach the name, telephone number and address of the landowner of the facility site.

Thriftway Refinery
710 East 20th Street
Farmington, NM 87401
505-327-4965
Contact – Terry Griffin

5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.

The accompanying site plan (Figure 1) shows the existing fence lines, dike locations and other land marks at the refinery.

This facility is a small oil refinery, which in the past processed light sweet San Juan Basin crude oil. The facility hasn't operated as a refinery for several years but remains semi-active as a crude oil storage facility that is currently leased to Giant Industries.

6. Attach a description of all materials stored or used at the facility.

Process materials stored consist of Crude Oil, when Giant Industries is preparing to enter a turnaround, although, this has not occurred in several years; otherwise the tankage is empty.

Chemicals used: Consist of 22 BE hydrochloric acid. This is used to control the pH of the water in the Air Stripper.

7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of wastewater must be included.

This is a zero discharge facility. There are no solid wastes produced and no process waste water discharged.

All of the storm water lines from the process area are blind flanged or cemented off. This was done to reduce the amount of rainwater going to the evaporation ponds. Any rainfall falling onto the process area backs up onto the process pads and evaporates.

8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.

There are no solid wastes produced and no process waste water discharged.

9. Attach a description of current liquid and solid waste collection/treatment/disposal systems.

There are no changes currently in the planning stages for the system.

10. Attach a routine inspection and maintenance plan to ensure permit compliance.

In Attachment B, there is the daily log sheet for inspection of the air stripper.

Although there is no direct mention in the log sheet, the technician checks the stripper as defined in the log sheet then drives around the perimeter of the refinery and checks the transfer line from the stripper building to the fire water pond to insure there are no leaks surfacing.

The technician also checks the buildings to insure they are secure and the fence line for evidence of damage from vandalism or erosion.

Any irregularities are noted on the log sheet and the supervisor over that area is notified.

11. Attach a contingency plan for reporting and cleanup of spills or releases.

See the SPCC plan in Attachment D for all contingency plans.

12. Attach geological/hydro-geological information for the facility. Depth to and quality of ground water must be included.

Water fluctuations over time are recorded in the Annual Year-End Report Tables - See Attachment E - Table 1. This table gives the reader a good database for depth to water.

Water quality is measured and different parameters tested for. Table 2 gives BTEX and MTBE information on selected monitor wells. Table 3 gives laboratory results for major cations and anions, Table 4 gives the values for Polynuclear Aromatic Hydrocarbons, Table 5 gives the metals results. Table 2,

3, 4, and 5 can be found in Attachment F.

The hydrologic features of the site are unique. Kutz Wash borders the refinery site to the north of the property line. This wash is normally dry and runs only with storm runoff. Kutz Wash discharges into the San Juan River approximately 1½ miles Northwest of the refinery property. Attached as Figure 1D is a copy of the latest groundwater contour map and Figure 2D is of the latest ground water analysis. The groundwater slopes to the northwest.

Thriftway used to have two (2) shallow water wells on the refinery property. These wells produced such poor quality water that the water could only be used to charge the fire water reserve pond. The high TDS and Sulfide content rendered the water unusable for process or domestic use.

The well located south of the LPG storage tanks has been plugged and is no longer in service. The well near the boiler house is still tied into the firewater pond. The well has not been used for over 10 years. Thriftway drilled the two-(2) wells to 350 feet. The Ojo Alamo is the top aquifer at the site. The Ojo Alamo is a sandstone aquifer.

The water going to the firewater reserve pond now comes from the groundwater air stripper facility. This system operates to capture all water from the refinery subsurface flow.

The water is air stripped to insure it meets NMWQCC standards. The water is monitored several times a week to insure the stripper is operating properly. The effluent from the stripper is sampled monthly for BTEX and MTBE.

Site soils are reported as silty light brown fine to medium grain sands. This sand extends to at least 14 feet, which is the depth of observation pits dug by Envirotech, Inc., during the original site investigation.

13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

The facility is currently semi-active as a crude oil storage facility. Crude oil has not been stored at the facility for several years, although the lease is currently held by Giant Industries.

There is no facility closure plan for this site.

No other information has been requested by the OCD. The facility is in compliance with all known directives from the OCD.

14. Certification I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

See Application



KEY

810\121100WL

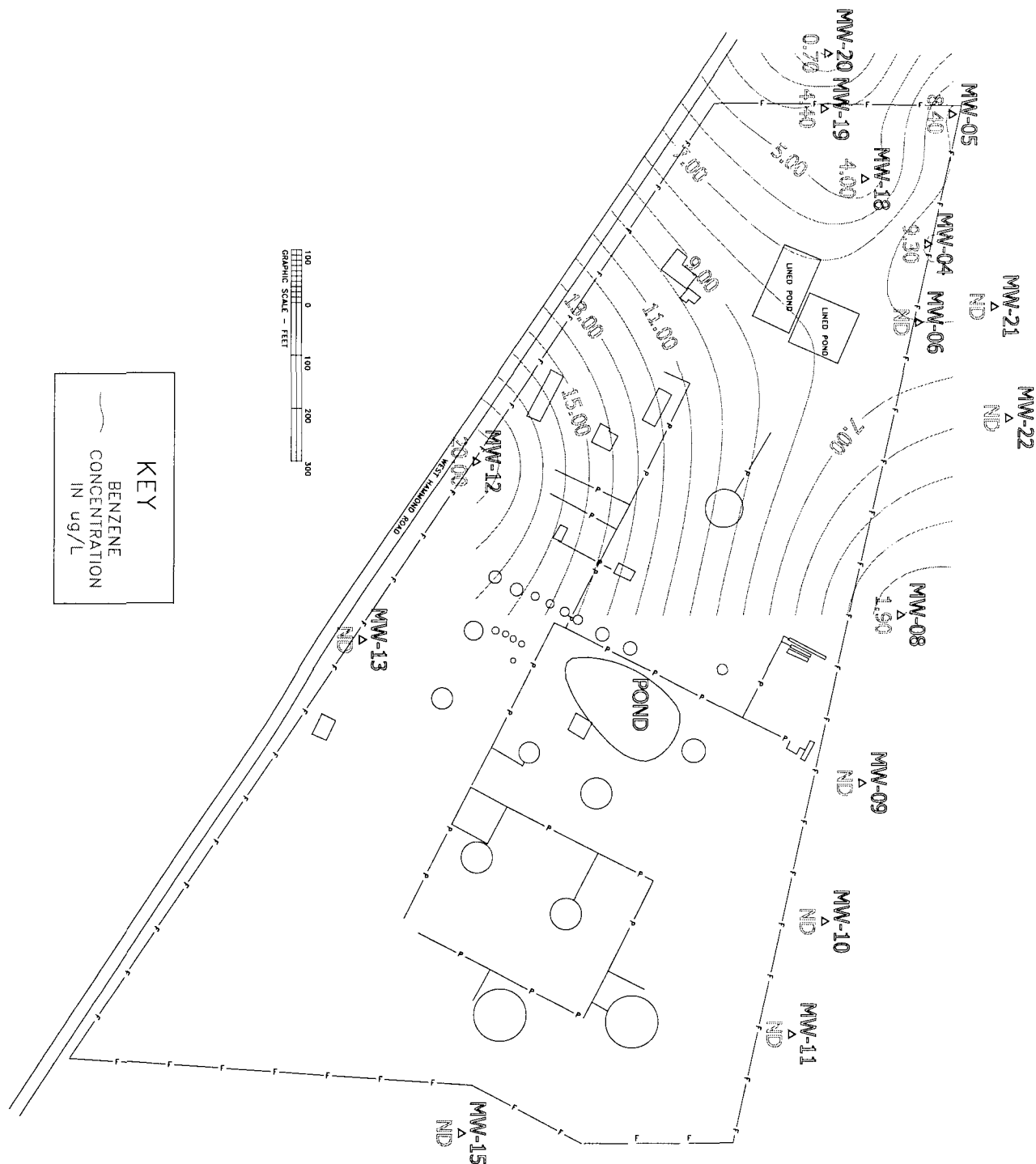
DRAWN BY: K. SINKS

FIGURE 1D
WATER LEVEL CONTOUR
MAP

DECEMBER 11, 2000



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
PHONE 505-327-4965
FAX 505-564-3604



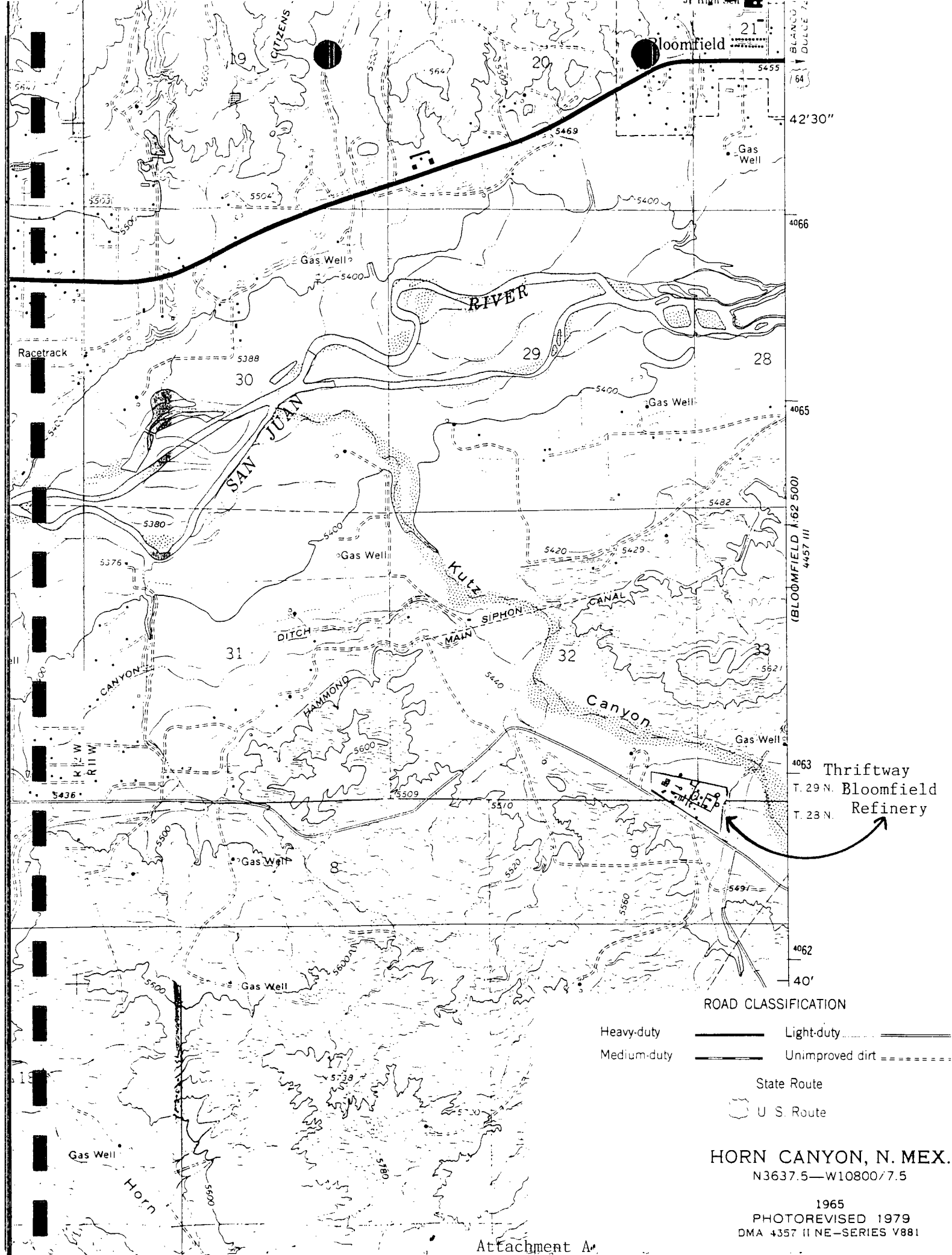
THRIFTWAY REFINERY
 626 RD 5500
 BLOOMFIELD, NM

810\121101bz

DRAWN BY: K. SINKS
 FIGURE 2D
 BENZENE CONCENTRATION
 MAP
 DECEMBER 11, 2001



710 EAST 20TH STREET, SUITE 400
 FARMINGTON, NEW MEXICO 87401
 PHONE 505-327-4965
 FAX 505-564-3604



THRIFTWAY REFINERY
DAILY MONITORING SHEET
FOR AIR STRIPPER FLOWS

Initials	DATE	TIME	pH	BLOWER "H2O	FLOW TO INJ. SYS. READING	UST LIQ. DEPTH INCHES	ACID PUMP SETTING	ELECT. METER HOURS	PROD. DEPTH FEET	PUMP DISCHG. PRESS	SMP ?	GAL. OIL REC.	GPM
KS	12-20-00	1147	0.4	17.5			82sec	Seal on pump - 10-	Seal on pump - 10-	20psi	NO	-	6+
MS	12-21-00	0825	4.4	18.0	3422.97	48.5	"	74758	-	20psi	-	-	6+
MS	12-22-00	0820	4.4	18.0	3481.55	53.5	"	74826	-	20psi	-	-	6+
MS	12-22-00	1033	5.4	18.5	3723.95	48.5	"	75141	0.8'	20psi	-	-	6+
KS	12-22-00	1712	4.4	18.0	3793.02	49.5	80sec	75232	1.0'	22psi	NO	none	6+
KS	12-28-00	1848	8.0	18.0	3861.78	49.0	80sec	75312	1.0'	20psi	NO	-	6+
KS	12-29-00	1035	7.0	18.5	3913.07	50.5	90sec	75373	1.0'	18	NO	-	5.5+
MS	1-02-01	0824											
MS	1-03-01	1536											
MS	1-5-01	1638	4.4	18.0	4315.46	49"	90sec	75623	-	20psi	NO	-	6+
MS	1-8-01	0736	5.4	19.0	4481.07	49.5"	90sec	76018	0.8'	20psi	-	-	6+

For End of 2000 use 415367 on flow to inj system.

TABLE 6
THRIFTWAY REFINERY AIR STRIPPER
2000 ON-STREAM RECORD

MONTH	DAYS IN MONTH	DAYS ON-LINE	ENDING 160455	GALLONS PROCESSED	AVERAGE PER DAY	ON-STREAM FACTOR	COMMENTS
JANUARY	31	28.5	52229	212,684	7,463	91.94%	Piping from the lift pump was corroded and allowed oil to enter the air stripper. New piping was installed, the system cleaned and brought back on line. Total lost time 2.5 days.
FEBRUARY	29	23.5	202918	150,689	6,412	81.03%	Electrical problems due to moisture in the air stripper building. The motor control switch and the 1/3 hp transfer pump motor were replaced. The water leaks at the transfer pump and the stripper lid were repaired. Total lost time 5.5 days.
MARCH	31	28	342667	139,749	4,991	90.32%	The system operated very well all month except for a minor float switch repair.
APRIL	30	29	483208	140,541	4,846	96.67%	Inland trucking pulled 800 gallons of product from the UST. The stripper picked up oil from UST before removal of product. The stripper was properly cleaned. Total lost time 1 day.
MAY	31	28	7608	157,594	5,628	90.32%	Internal damage of baffles were repaired on May 26, 2000. The water meter failed on May 26th. A temporary flow meter was used until a new flow meter was ordered. Total lost time 3 days.
JUNE	30	24.5	175609	168,001	6,857	81.67%	Air stripper tank leak noted at the SW corner. The leaks were repaired. Total lost time 5.5 days.
JULY	31	30.5	352609	177,000	5,803	98.39%	The system operated relatively trouble free. Minor leaks around the lid of the stripper were repaired and the building was cleaned and disinfected. Total lost time 0.5 days.
AUGUST	31	31	533,257	180,648	5,827	100.00%	A reconditioned flow meter was installed on August 1, 2000. Approximately 9" of product (1,000 gallons) was removed from the UST on August 7, 2000. No Down Time
SEPTEMBER	30	23	882050	348,793	15,165	76.67%	The unit was shutdown September 5, 2000 due to corrosion of the discharge pipe from the UST sump pump. The system was placed back on line September 12, 2000. On September 29, 2000 the sump pump was replaced. Total lost time 7 days.
OCTOBER	31	21	21333	139,283	6,633	67.74%	The acid injection is now being tracked using time of injection/(ten minute cycle) instead of the numerical dial setting. Transfer pump failure on 10/20/2000. Stripper back on line 10/30/2000. Total lost time 10 days.
NOVEMBER	30	30	222110	200,777	6,693	100.00%	New pump is operating with a pinched discharge to help prevent pump cavitation. No Down Time.
DECEMBER	31	31	415367	193,257	6,234	100.00%	The stripper was acidized. No Down Time.

THE AVERAGE ON STREAM FACTOR
FOR 2000 WAS 89.62%

TOTAL GALLONS OF WATER PROCESSED IN 2000
WAS: 2,209,016

Dimensions of the UST are 8' Dia. And 27' long.



**SPILL PREVENTION CONTROL
AND COUNTERMEASURE PLAN**

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
~~Field Office: (505) 630-2266~~
~~Fax: (505) 630-0850~~

Telephone (505) 327-4965
Facsimile (505) 564-3604

FACILITY:
THRIFTWAY COMPANY
BLOOMFILED REFINERY
626 COUNTY ROAD 5500
BLOOMFIELD, SAN JUAN COUNTY, NEW MEXICO

OWNER:
THRIFTWAY COMPANY
710 E. 20th Street
Farmington, NM 87401

SEPTEMBER 20, 1998

PREPARED BY:
BioTech Remediation, Inc.
710 East 20th Street, Suite 400
Farmington, New Mexico

810/spcc/1998

I. CERTIFICATION INFORMATION

- A. **FACILITY:** Bloomfield Refinery, Bloomfield, New Mexico
- B. **TYPE OF FACILITY:** Petroleum Refinery. Currently, the process area of the refinery is not in operation, but some of the facility storage tanks, the waste water treatment system and the unload/load locations are in use. The storage tanks and associated unload/load locations are used by Giant Industries for crude oil storage, and the wastewater system is used by Thriftway for stormwater collection and evaporation. Although not in full operation, the most current facility Spill Prevention Control and Countermeasure (SPCC) Plan was prepared and is presented as if the refinery were in full operation.

The Bloomfield Refinery is a crude oil refinery that can process light, sweet San Juan Basin crude oil. Principle processes include crude oil fractionation, naphtha reformation, heavy oil hydrocracking, light naphtha stabilization and C3/C4 fractionation.

Light sweet crude oil can be received from the surrounding oil fields of the San Juan Basin. This crude oil is routed to the Crude Fractionating Plant where it is heated and distilled into light gasoline, heavy gasoline, diesel and fuel oil fractions. The light gasoline is routed to a stabilizer tower and then to storage for subsequent blending. Heavy gasoline is routed to the reformer where it is contacted with platinum catalyst under controlled heat, temperature and pressure conditions.

The reformer causes the long chain paraffins to be catalytically rearranged into cyclic and branched chained hydrocarbons with higher octane characteristics. The reformer product (reformatted) is blended with light gasoline etc., to create gasoline which meets New Mexico State octane requirements.

The fuel oil fraction from the crude unit is routed to the hydrocracking unit and contacted with a cobalt/nickel catalyst where it is fractured or "cracked" into gasoline or diesel range hydrocarbons. A small stream of heavy fuel oil is not "cracked" and is withdrawn as residual fuel oil.

- C. **FACILITY LOCATION:** 626 County Road 5500, Bloomfield, San Juan County, New Mexico

Legal description of facility is SE/4 Section 32, and SW/2, SW/4 Section 33, T29N, R11W and 7.35 acres in the NE/4, NE/4, Section 9, T28N, R11W, NMPM, San Juan County, New Mexico.

D. NAME AND ADDRESS OF OWNER:

Thriftway Company
710 20th Street
Farmington, NM 87401

E. FACILITY DESCRIPTION:

The accompanying **Topographic Map** and **Site Plans** indicate the property boundaries, existing fence lines, pit locations, bermed areas, tank locations and groundwater monitoring well locations. Discharge locations, storage facilities, disposal facilities, processing facilities and other relevant areas, including drum storage, have also been noted.

F. DESIGNATED PERSON RESPONSIBLE FOR SPILL PREVENTION:

Ross Kennemer
BioTech Remediation, Inc.
710 East 20th Street, Suite 400
Farmington, NM 87401
Phone (505) 327-4965 Fax (505) 564-3604

G. SPILL HISTORY: Based on available records, this facility has experienced five spill events.

1. August, 1992 – An unknown quantity of tank bottoms and water was spilled near tank #30.
2. June 4, 1993 - 10,000 gallons of finished gasoline (premium unleaded) was released from the water draw on the finished gasoline tank.
3. November, 1996 – 3,000 gallons of gasoline, diesel, and contaminated water originating from a product recovery system were spilled when a valve on the transport tanker in which the mixture was being stored froze and burst.
4. November, 1995 – approximately 250 gallons of gasoline, diesel, crude oil and water originating from the product recovery system were spilt when a relief valve on an oil water separator malfunctioned.
5. September 12, 1997 – approximately 50 gallons of gasoline, diesel, crude oil, and water originating from a product recovery system were spilled when the UST in which the mixture was being stored flooded with rainwater.

- H. **Management Approval:** Management extends Full Approval at a level with authority to commit the necessary resources.


R.J. Dalley
Thriftway Company

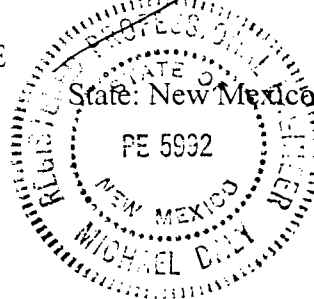
- I. **CERTIFICATION:** I hereby certify that I am personally familiar with the facility. To the best of my knowledge and belief, this SPCC plan has been prepared in accordance with good engineering practices and pursuant to the provisions of 40 CFR-112.

SIGNATURE



Name: Michael Daly, PE
Registration No.: PE-5992

Date: 9-25-98



II. SPCC RESPONSE ACTION LIST

FACILITY MANAGERS

Ken Sinks
Day 505-327-4965

SPCC COORDINATOR

Ross Kennemer
Day 505-327-4965
Night 505-564-2281

BLOOMFIELD FIRE DEPARTMENT

Emergency Number 911 or
505-334-6622

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

505-827-7131

STATE OF NEW MEXICO ENVIRONMET DEPATMENT

505-827-2791

USEPA REGION VI

1-800-887-6063 or
1-214-665-7101

NATIONAL RESPONSE CENTER

1-800-424-8802

SPCC CONTACT

Ross Kennemer
505-327-4965

III. SPCC PLAN

The location and positioning of this facility is such that if a spill were to occur, the product that had been spilled could possibly reach navigable waters of the United States. Potential spill scenarios and estimated direction of flow are provided below.

SOURCE	PRODUCT	QUANTITY (gallons)	FLOW DIRECTION
Storage Tanks, Vessels, Process Area	Crude Fractions, Gasoline, Diesel, Process Water	-	North
Pipelines	Crude Fractions, Gasoline, Diesel, Process Water	-	North

A. POTENTIAL FAILURES

1. **TANKS** A failure resulting in a spill could occur from the following:

- Structure seam failure
- Structure fitting failure
- Valve failure
- Structure foundation failure
- Corrosion
- Destructive vandalism
- Periodic water draw-off

2. **PROCESS AREA** A failure resulting in a spill could occur from the following:

- Structure seam failure
- Structure fitting failure
- Valve failure
- Structure foundation failure
- Corrosion
- Destructive vandalism
- Operator error

**3. WASTE WATER
TREATMENT
AREA**

A failure resulting in a spill could occur from the following:

- Structure seam failure
- Structure fitting failure
- Valve failure
- Structure foundation failure
- Destructive vandalism
- Operator error

**3. TRANSPORT
UNLOADING
AREA**

A failure resulting in a spill could occur from the following:

- Structure seam failure
- Structure fitting failure
- Valve failure
- Structure foundation failure
- Destructive vandalism
- Operator error

**B. SOURCES, QUANTITIES AND QUALITIES OF EFFLUENT AND WASTE
SOLIDS**

1. SOURCES AND QUANTITIES

a. SEPARATORS AND STORAGE TANKS (Produced Water)

Crude oil is received by the refinery containing less than 10% bottom sediment and water. The water separates from the crude oil in the storage tank and is drawn-off as shown in **Sheet A-4**, entitled "**WATER DRAIN SPILL CONTAINMENT SYSTEM**".

The produced water is transported from the receiving tank via vacuum truck to the waste water evaporation pond. The separators in the process area separate the produced water and condensed steam from the hydrocarbon stream. The water is trucked to the waste water separator tank at the evaporation containment lagoons. This stream has averaged 350 gallons per day and has been high in total dissolved solids (TDS),

sodium chloride (NaCl) and hydrocarbons.

b. Boilers

The refinery utilizes two small boilers, 100hp and 40hp, to provide steam for stripping, heat tracing, etc. Boiler blow down is routed to the containment lagoons for evaporation. The stream has been estimated to be approximately 125 gallons per day and high in TDS. A phosphate-based boiler treatment compound has been used to prevent boiler system corrosion.

c. Engine Cooling Waters

The refinery does not generate engine cooling waters.

d. Cooling Tower

A 450 ton per day capacity Marley updraft cooling tower provides process cooling waters for plant operation. Small amounts of biocide and phosphates are used to inhibit corrosion. A small stream is purged to prevent high TDS. This stream has averaged 600 to 800 gallons per day and is high in TDS.

e. Sewage (No Co-Mingling)

The refinery has three restroom facilities. Each facility is served by a separate septic tank and leach field. There is no co-mingling of this sewage with other outfall streams.

f. Other Sources

Process floor drainage and miscellaneous cleaning activities have contributed an estimated 50 to 100 gallons per day to the process drain system. These wastes can contain hydrocarbons.

2. QUALITY CHARACTERISTICS OF CO-MINGLED WASTE STREAMS

All waste water effluent streams are co-mingled within the plant. Waste streams are routed through the process drain system and through an oil/water separator to the evaporation lagoons. The evaporation lagoons are double lined and equipped with leak detection devices to prevent contact with the groundwater. Analysis of the co-mingled stream was performed in 1990 and is included in the appendices. The

samples were collected from the commingled stream and transported to the InterMountain Laboratory facility in Farmington, New Mexico, for analysis as indicated on the accompanying Chain of Custody. Each sample was delivered to the laboratory within two hours of sampling. The stream met WQCC standards for a non-hazardous classification. PCB, pesticide and radioactive element analyses were not performed because PCBs, pesticides and radioactive elements above natural background levels have never been introduced into the refinery.

C. TRANSFER AND STORAGE OF PROCESS FLUIDS AND EFFLUENTS

1. Effluent Flow Schematics

The Process Oil Collection System is shown on the **Site Plans and Process Oil Collection System Sheet, A-2**. This system is used to prevent hydrocarbon spills during sampling of the process streams or purging of process vessels. Hydrocarbons generated during this process are transported to the crude tank via vacuum truck.

The final source of effluent is the produced water that is entrained in the incoming crude oil or is entrained in the refinery products. Entrained water which breaks out of hydrocarbon fluids upon standing in storage tanks is suppressed by mixers installed on the tanks.

Each crude tank is equipped with a water draw located near the tank bottom. The water is drawn manually and is routed to an underground cement vault or an externally lined steel tank. Any water drawn is then transported via vacuum truck to the oil/water separator prior to being discharged to the waste water evaporation lagoons.

Produced water and/or other fluids collected from the spill collection pad basins around the storage tanks are picked up with a vacuum truck and transported to the oil/water separator prior to the water being released into the evaporation lagoons.

2. Potential Discharge To Surface Or Subsurface

Fluids which are collected in the steel and cement collection tanks are removed via vacuum truck and transferred to either the oil/water separator or to the crude storage tank.

Except for drain piping, all piping is located above ground on pipe racks where any leak would be immediately visible.

Process areas and load/unload areas are located within concrete pad and berm areas.

While operating, plant personnel inspected the process and storage areas of the refinery on a daily basis. If a leak were to be present it would be noted and immediately addressed.

3. UNDERGROUND PIPE LINES

The only underground pipe lines present at the refinery are those associated with wastewater and spill collection systems. Construction of these lines consist of schedule 40 standard butt weld steel pipe, laid in a sand bed.

The process oil collection system was originally installed in 1980 and was partially replaced with the installation of a steel collection tank in March, 1990.

The current process water system collects all water within the process area. The floor drains are routed directly to the oil/water separator.

IV. SPILL/LEAK PREVENTION and SOLID WASTE DISPOSAL

Any spill that may occur in the process unit would drain to the collection basins and would then be routed to the oil/water separator. Skimmed oil would be routed back to the crude oil tank for reprocessing, and the water is air stripped and then discharged to the double-lined evaporation lagoons.

A. Off-Process Area Spill/Leaks

Potential spill/leak areas consist of the product transfer lines and storage tanks. Each storage tank is bermed, and process and loading areas are located on curbed concrete pads and are well drained.

When in operation, personnel are assigned to continuously inspect the storage tanks and associated piping. Upon notice of a leak/spill, appropriate actions would immediately be taken to ensure that no further leak/spill would occur, and the problem would be corrected.

If such a leak/spill were greater than 25 gallons, the OCD would be notified within 24 hours or by the next business day.

V. EFFLUENT DISPOSAL

A. On-Site Operations

1. On-Site Facilities

Fluids are collected from the process area through a system of catch basins located in the process unit floors. Following catchment, fluids are routed to the oil/water separator where separated oil is transferred back to the crude storage tank.

Produced water separated from the storage tanks is routed to the influent of the oil/water separator where it is co-mingled with the process water stream.

Underflow effluent water is routed to a double-lined evaporation lagoon system, as indicated on the **Process Water System Layout Sheet A-1**.

The lagoons are sized with an engineering safety factor of two and consist of a primary liner of 35 mil polyester reinforced XR-5 resin which is resistant to both hydrocarbons and damage from the sun. The secondary liner consist of 35 mil oil resistant PVC. The liners are separated with 100 mil oil resistant Geotextile felt liners which provide an easy transport of any liquid to the leak detection laterals.

The containment berms route storm runoff away from the lagoons. The inside slope of the berm sides is 1:2 and the outside is 1:3. The lagoon has a total elevation of six-foot and is operated with a minimum of two-foot freeboard.

The lagoon system design is indicated in the **Lagoon Profile Sheet A-3** and the **Process Oil Collection System Sheet A-2**.

No other method of disposal is undertaken at the refinery site.

2. Other Discharge(s) to Groundwater

This plan has been developed to allow positive containment of both hydrocarbons and operational effluents and to prevent any discharge to contact the groundwater.

Groundwater north of the lagoon system has been impacted by hydrocarbons. A pump and treat remediation system has been installed to contain the contamination and to prevent off-site migration. A free phase product recovery program has been implemented and is active. Attached is the latest Annual Groundwater Monitoring Report. This report summarizes the residual groundwater contamination present at the subject site to date.

3. Off Site Disposal

No off site disposal of effluent or sludge has occurred.

B. PROPOSED MODIFICATIONS

There are no proposed modifications.

VI. SITE CHARACTERISTICS

A. Hydrologic Features

The Kutz Canyon Wash borders the discharge site on the north proper boundary. The wash drains to the northwest, feeding the San Juan River which is approximately 1.9 miles down gradient of the site. The Kutz wash is ephemeral and runs only during occasions of excessive storm runoff. An additional small arroyo, on the east property boundary, drains north to the Kutz Wash.

The Ojo Alamo is the uppermost aquifer at the site. Groundwater quality studies conducted at the discharge site report the groundwater contains high TDS and sulfides, rendering the water useless for process or domestic purposes.

B. Geologic Description of Discharge Site

The discharge site is situated in the San Juan Basin of the Colorado Plateau. The basin is a structural depression containing deep Tertiary fill, covering rocks of the Late Cretaceous age. The local geomorphology is generally classified as alluvial fan and flood plains in the San Juan River drainage. Site soils consist of silty light brown fine to medium grain sands extending to at least 14-feet below the ground surface.

C. Flood Protection

The Kutz Wash serves as a channel for storm runoff. Any flood waters would be routed away from the discharge site via the wash.

All storage tanks are diked and the evaporation lagoons are bermed.

VII. SPCC PLAN IMPLEMENTATION

1. **Facility Personnel Training-** When operating, all facility personnel will be briefed on the SPCC plan and will be expected to be familiar with spill prevention practices. Currently, the SPCC Coordinator, SPCC Contact, and Facility Managers are familiar with the SPCC plan and visit the facility on a regular basis. In the event a spill does occur, facility personnel will be aware of the necessary actions to be taken and what contacts must be made. The manager of the facility will discuss the contents of the SPCC Plan with other facility employees on a frequent basis. The manager of the facility is responsible for and expected to train other facility employees in spill prevention practices. Annual briefings are scheduled to refresh employee awareness of spill prevention and clean up.
2. **Spill Response -** In the event of a spill:
 - a. Take immediate action to contain the spill, utilizing sorbent material or earthen berms.
 - b. The SPCC Coordinator will immediately notify the following:
 - Fire Department 911 or (505) 334-6622
 - EPA (24 hours) (800) 887-6063
 - State Environ. Dept. (505) 827-2782
 - c. The SPCC Coordinator will notify the owner, once the contacts listed above are made.
 - d. In the event that the spill exceeds the capabilities of facility personnel present at the scene, additional personnel will be dispatched.
8. **Amendments-** This SPCC Plan will be amended in the event of a change facility design. A review of the SPCC Plan will be conducted at least every three years. Minor changes shall be attached to the original plan.
9. **Facility Records-** When operating, the following records are maintained at the facility or will be provided upon request:
 - a. Pollution Prevention Plan
 - b. Spill Event Record
 - c. SPCC Plan and Review Record
 - d. Groundwater Discharge Plan

VII. ADDITIONAL INFORMATION

This SPCC Plan is designed to prevent spills at the facility, and if unpreventable, to properly contain the spill. The Thriftway Refinery is a zero discharge facility.

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	O/W	Product	Prod Elev	ater Elev	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
8" rec well MW-01	09/23/98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5449.08	15.68	15.68	0.00	5433.40	5433.40	5433.40	1.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5449.08	15.62	15.62	0.00	5433.46	5433.46	5433.46	1.66	NM	NM	1.90	4.73	NM	NM	NM	NM	NM	NM
	03/19/97	5449.08	15.65	15.65	0.00	5433.43	5433.43	5433.43	1.66	NM	NM	NM	4.70	NM	NM	NM	NM	NM	NM
	06/18/97	5449.08	15.37	15.37	0.00	5433.71	5433.71	5433.71	1.66	NM	NM	0.18	4.67	NM	NM	NM	NM	NM	NM
	09/24/97	5449.08	15.08	15.08	0.00	5434.00	5434.00	5434.00	1.66	NM	NM	0.06	4.59	NM	NM	NM	NM	NM	NM
	12/29/97	5449.08	15.08	15.08	0.00	5434.00	5434.00	5434.00	1.66	NM	NM	NM	4.63	NM	NM	NM	NM	NM	NM
	04/08/98	5449.08	14.72	14.72	0.00	5434.36	5434.36	5434.36	1.66	NM	NM	0.11	4.62	NM	NM	NM	NM	NM	NM
	06/24/98	5449.08	14.97	14.97	0.00	5434.11	5434.11	5434.11	1.66	NM	7.35	0.22	4.99	NM	NM	NM	NM	NM	NM
	09/23/98	5449.08	15.52	15.52	0.00	5433.56	5433.56	5433.56	1.66	16.6	7.10	0.18	4.53	NM	NM	NM	NM	NM	NM
	12/30/98	5449.08	15.00	15.00	0.00	5434.08	5434.08	5434.08	1.66	15.0	7.10	0.28	4.99	NM	NM	NM	NM	NM	NM
	04/14/99	5449.08	14.75	14.75	0.00	5434.33	5434.33	5434.33	1.66	15.0	7.00	0.42	4.46	2.24	NM	NM	NM	NM	NM
	06/03/99	5449.08	14.39	14.39	0.00	5434.69	5434.69	5434.69	1.66	15.5	7.20	0.20	4.30	NM	NM	NM	NM	NM	NM
	09/09/99	5449.08	14.37	14.37	0.00	5434.71	5434.71	5434.71	1.66	NM	7.60	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/99	5449.08	14.23	14.23	0.00	5434.85	5434.85	5434.85	1.66	NM	7.00	NM	NM	NM	NM	NM	NM	3.50	NM
	04/05/00	5449.08	13.80	13.80	0.00	5435.28	5435.28	5435.28	1.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/08/00	5449.08	13.72	13.72	0.00	5435.36	5435.36	5435.36	1.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5449.08	14.47	14.47	0.00	5434.61	5434.61	5434.61	1.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5449.08	14.44	14.44	0.00	5434.64	5434.64	5434.64	1.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-02	10/09/96	5442.65	12.16	13.50	1.34	5430.49	5429.15	5430.09	0.20	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5442.65	12.35	12.54	0.19	5430.30	5430.11	5430.24	0.35	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5442.65	12.18	12.37	0.19	5430.47	5430.28	5430.41	0.37	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5442.65	12.11	12.14	0.03	5430.54	5430.51	5430.53	0.43	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/97	5442.65	11.86	11.98	0.12	5430.79	5430.67	5430.75	0.43	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5442.65	11.64	11.69	0.05	5431.01	5430.96	5431.00	0.43	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5442.65	11.75	11.77	0.02	5430.90	5430.88	5430.89	0.44	15.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/22/98	5442.65	11.74	11.78	0.04	5430.91	5430.87	5430.90	0.45	15.0	7.35	NM	3.48	NM	NM	NM	NM	NM	NM
	09/23/98	5442.65	12.04	12.04	0.00	5430.61	5430.61	5430.61	0.45	16.8	7.00	0.15	3.32	NM	NM	NM	NM	NM	NM
	12/30/98	5442.65	11.60	11.61	0.01	5431.05	5431.04	5431.05	0.45	16.8	7.00	0.15	3.32	NM	NM	NM	NM	NM	NM
	04/14/99	5442.65	11.59	11.60	0.01	5431.06	5431.05	5431.06	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/03/99	5442.65	11.54	11.54	0.00	5431.11	5431.11	5431.11	0.45	NM	7.60	NM	3.00	NM	NM	NM	NM	NM	NM
	09/09/99	5442.65	11.31	11.32	0.01	5431.34	5431.33	5431.34	0.45	NM	7.00	NM	NM	NM	NM	NM	NM	4.75	NM
	12/30/99	5442.65	11.40	11.40	0.00	5431.25	5431.25	5431.25	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5442.65	11.32	11.32	0.00	5431.33	5431.33	5431.33	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5442.65	12.14	12.14	0.00	5430.51	5430.51	5430.51	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5442.65	11.40	11.40	0.00	5431.25	5431.25	5431.25	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5442.65	11.60	11.60	0.00	5431.05	5431.05	5431.05	0.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/09/96	5431.43	5.17	5.17	0.00	5426.26	5426.26	5426.26	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5431.43	4.60	4.72	0.12	5426.83	5426.71	5426.79	0.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5431.43	3.44	3.44	0.00	5427.99	5427.99	5427.99	0.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5431.43	3.38	3.38	0.00	5428.05	5428.05	5428.05	0.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5431.43	5.15	5.18	0.03	5426.28	5426.25	5426.27	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5431.43	3.42	3.42	0.00	5428.01	5428.01	5428.01	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5431.43	4.47	4.47	0.00	5426.96	5426.96	5426.96	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/24/98	5431.43	4.30	4.30	0.00	5427.13	5427.13	5427.13	0.02	NM	7.16	0.09	6.08	NM	NM	NM	NM	NM	NM
	09/22/98	5431.43	NM	NM	NM	NM	NM	NM	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/98	5431.43	3.57	3.57	0.00	5427.86	5427.86	5427.86	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	O/W	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Solimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-04	04/13/99	5431.43	5.08	5.08	0.00	5426.35	5426.35	5426.35	0.02	12.1	7.10	0.37	4.63	2.37	NM	NM	NM	NM	NM
	06/03/99	5431.43	NM	NM	NM	NM	NM	NM	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5431.43	5.16	5.16	0.00	5426.27	5426.27	5426.27	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/08/00	5431.43	5.29	5.29	0.00	5426.14	5426.14	5426.14	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5431.43	5.16	5.20	0.04	5426.27	5426.23	5426.26	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5431.43	5.42	5.71	0.29	5426.01	5425.72	5425.92	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5430.12	5.18	5.18	0.00	5424.94	5424.94	5424.94	0.00	NM	NM	2.70	4.27	NM	NM	NM	NM	NM	NM
	03/19/97	5430.12	4.29	4.29	0.00	5425.83	5425.83	5425.83	0.00	NM	NM	NM	4.45	NM	NM	NM	NM	NM	NM
	06/17/97	5430.12	4.08	4.08	0.00	5426.04	5426.04	5426.04	0.00	NM	NM	0.08	5.15	NM	NM	NM	NM	NM	NM
	09/24/97	5430.12	4.19	4.19	0.00	5425.93	5425.93	5425.93	0.00	NM	NM	0.19	4.17	NM	NM	NM	NM	NM	NM
	12/22/97	5430.12	4.31	4.31	0.00	5425.81	5425.81	5425.81	0.00	NM	NM	0.13	3.26	NM	NM	NM	NM	NM	NM
	04/29/98																		
WELL DESTROYED																			
WELL LOCATED IT WILL BE SAMPLED THE NEXT QUARTERLY SAMPLING EVENT IN JUNE 2000																			
MW-05	04/17/00																		
	06/08/00	5430.12	5.04	5.04	0.00	5425.08	5425.08	5425.08	0.00	15.7	NM	0.09	NM	NM	NM	NM	NM	NM	NM
	09/05/00	5430.12	5.40	5.40	0.00	5424.72	5424.72	5424.72	0.00	20.6	NM	0.25	NM	NM	NM	NM	NM	4.50	NM
	12/06/00	5430.12	5.31	5.31	0.00	5424.81	5424.81	5424.81	0.00	20.6	NM	0.25	NM	NM	NM	NM	NM	4.75	NM
	10/09/96	5428.97	5.55	5.55	0.00	5423.42	5423.42	5423.42	0.00	NM	NM	NM	3.26	NM	NM	NM	NM	NM	NM
	12/31/96	5428.97	5.19	5.19	0.00	5423.78	5423.78	5423.78	0.00	NM	NM	1.90	3.26	NM	NM	NM	NM	NM	NM
	03/19/97	5428.97	4.63	4.63	0.00	5424.34	5424.34	5424.34	0.00	NM	NM	NM	3.26	NM	NM	NM	NM	NM	NM
	06/17/97	5428.97	4.41	4.41	0.00	5424.56	5424.56	5424.56	0.00	NM	NM	0.30	3.26	NM	NM	NM	NM	NM	NM
	09/24/97	5428.97	3.77	3.77	0.00	5425.20	5425.20	5425.20	0.00	NM	NM	0.09	3.26	NM	NM	NM	NM	NM	NM
	12/19/97	5428.97	4.37	4.37	0.00	5424.60	5424.60	5424.60	0.00	NM	NM	0.06	3.26	NM	NM	NM	NM	NM	NM
	04/27/98	5428.97	4.47	4.47	0.00	5424.50	5424.50	5424.50	0.00	NM	NM	0.07	3.26	NM	NM	NM	NM	NM	NM
	06/24/98	5428.97	4.78	4.78	0.00	5424.19	5424.19	5424.19	0.00	NM	8.56	0.09	3.26	NM	NM	NM	NM	NM	NM
MW-06	09/24/98	5428.97	5.22	5.22	0.00	5423.75	5423.75	5423.75	0.00	19.9	8.00	0.09	3.26	NM	NM	NM	NM	NM	NM
	12/29/98	5428.97	4.11	4.11	0.00	5424.86	5424.86	5424.86	0.00	13.4	8.10	0.12	3.26	NM	NM	NM	NM	NM	NM
	04/12/99	5428.97	4.19	4.19	0.00	5424.78	5424.78	5424.78	0.00	12.9	8.20	0.10	5.63	2.83	NM	NM	NM	NM	NM
	06/02/99	5428.97	4.45	4.45	0.00	5424.52	5424.52	5424.52	0.00	13.6	8.20	0.13	1.00	NM	NM	NM	NM	NM	NM
	09/08/99	5428.97	4.52	4.52	0.00	5424.45	5424.45	5424.45	0.00	13.5	8.00	0.27	NM	NM	NM	NM	NM	3.50	NM
	12/29/99	5428.97	4.82	4.82	0.00	5424.15	5424.15	5424.15	0.00	11.4	NM	0.40	NM	NM	NM	NM	NM	5.25	NM
	04/03/00	5428.97	4.48	4.48	0.00	5424.49	5424.49	5424.49	0.00	14.5	8.60	0.08	1.40	NM	NM	NM	NM	6.00	NM
	06/08/00	5428.97	4.82	4.82	0.00	5424.15	5424.15	5424.15	0.00	17.3	NM	0.17	NM	NM	NM	NM	NM	4.25	NM
	09/05/00	5428.97	5.30	5.30	0.00	5423.67	5423.67	5423.67	0.00	17.3	NM	0.17	NM	NM	NM	NM	NM	5.00	NM
	12/06/00	5428.97	5.10	5.10	0.00	5423.87	5423.87	5423.87	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/09/96	5430.70	5.28	5.28	0.00	5425.42	5425.42	5425.42	0.00	NM	NM	4.70	4.23	NM	NM	NM	NM	NM	NM
	12/31/96	5430.70	4.65	4.65	0.00	5426.05	5426.05	5426.05	0.00	NM	NM	NM	4.07	NM	NM	NM	NM	NM	NM
MW-06	03/19/97	5430.70	3.65	3.65	0.00	5427.05	5427.05	5427.05	0.00	NM	NM	1.71	4.25	NM	NM	NM	NM	NM	NM
	06/17/97	5430.70	3.62	3.62	0.00	5427.08	5427.08	5427.08	0.00	NM	NM	0.21	4.10	NM	NM	NM	NM	NM	NM
	09/24/97	5430.70	4.58	4.58	0.00	5426.12	5426.12	5426.12	0.00	NM	NM	0.14	3.87	NM	NM	NM	NM	NM	NM
	12/19/97	5430.70	4.23	4.23	0.00	5426.47	5426.47	5426.47	0.00	NM	NM	0.14	3.99	NM	NM	NM	NM	NM	NM
	04/27/98	5430.70	1.14	1.14	0.00	5429.56	5429.56	5429.56	0.00	NM	NM	0.12	3.84	NM	NM	NM	NM	NM	NM
	06/24/98	5430.70	4.53	4.53	0.00	5426.17	5426.17	5426.17	0.00	18.8	7.30	0.19	3.65	NM	NM	NM	NM	NM	NM
	09/22/98	5430.70	4.55	4.55	0.00	5426.15	5426.15	5426.15	0.00	13.5	7.60	0.62	3.60	1.81	NM	NM	NM	NM	NM
	12/30/98	5430.70	3.72	3.72	0.00	5426.98	5426.98	5426.98	0.00	12.6	7.60	0.35	3.30	NM	NM	NM	NM	NM	NM
	04/13/99	5430.70	4.67	4.67	0.00	5426.03	5426.03	5426.03	0.00	13.9	7.80	0.12	NM	NM	NM	NM	NM	NM	NM
	06/03/99	5430.70	4.92	4.92	0.00	5425.78	5425.78	5425.78	0.00	NM	7.60	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5430.70	4.62	4.62	0.00	5426.08	5426.08	5426.08	0.00	NM	7.60	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	O/W	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-07	12/29/99	5430.70	5.09	5.09	0.00	5425.61	5425.61	5425.61	0.00	13.2	7.10	2.07	NM	NM	NM	NM	NM	5.75	NM
	04/03/00	5430.70	4.69	4.69	0.00	5426.01	5426.01	5426.01	0.00	12.3	NM	1.04	NM	NM	NM	NM	NM	4.50	NM
	06/08/00	5430.70	5.18	5.18	0.00	5425.52	5425.52	5425.52	0.00	15.1	7.60	0.21	3.60	NM	NM	NM	NM	4.50	NM
	09/05/00	5430.70	5.26	5.26	0.00	5425.44	5425.44	5425.44	0.00	20.1	NM	0.25	NM	NM	NM	NM	NM	3.50	NM
	12/06/00	5430.70	5.20	5.20	0.00	5425.50	5425.50	5425.50	0.00	20.1	NM	0.25	NM	NM	NM	NM	NM	6.50	NM
	10/07/96	5434.34	8.50	8.50	0.21	5426.05	5425.84	5425.99	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5434.34	7.54	7.54	0.00	5426.80	5426.80	5426.80	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5434.34	6.55	6.55	0.00	5427.79	5427.79	5427.79	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5434.34	6.47	6.47	0.00	5427.87	5427.87	5427.87	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5434.34	8.01	8.01	0.00	5426.33	5426.33	5426.33	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5434.34	6.61	6.61	0.00	5427.73	5427.73	5427.73	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5434.34	7.65	7.65	0.00	5426.69	5426.69	5426.69	0.27	NM	NM	0.01	4.70	NM	NM	NM	NM	NM	NM
	06/24/98	5434.34	7.54	7.54	0.00	5426.80	5426.80	5426.80	0.27	NM	7.51	0.14	4.77	NM	NM	NM	NM	NM	NM
	09/23/98	5434.34	7.52	7.53	0.01	5426.82	5426.81	5426.82	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/98	5434.34	6.57	6.57	0.00	5427.77	5427.77	5427.77	0.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-08	04/14/99	5434.34	7.98	7.98	0.00	5426.36	5426.36	5426.36	0.27	NM	7.40	NM	5.22	2.63	NM	NM	NM	NM	NM
	06/03/99	5434.34	8.05	8.07	0.02	5426.29	5426.27	5426.28	0.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5434.34	8.03	8.08	0.05	5426.31	5426.26	5426.30	0.30	NM	NM	NM	NM	NM	NM	NM	NM	2.50	NM
	12/30/99	5434.34	8.05	8.05	0.00	5426.29	5426.29	5426.29	0.30	NM	7.10	NM	NM	NM	NM	NM	NM	5.00	NM
	04/05/00	5434.34	7.71	7.71	0.00	5426.63	5426.63	5426.63	0.30	NM	NM	NM	NM	NM	NM	NM	NM	5.00	NM
	06/08/00	5435.28	8.06	8.06	0.00	5427.22	5427.22	5427.22	0.30	15.0	7.50	0.09	5.50	NM	NM	NM	NM	5.00	NM
	09/07/00	5435.28	8.99	8.99	0.00	5426.29	5426.29	5426.29	0.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5435.28	9.11	9.11	0.00	5426.17	5426.17	5426.17	0.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/08/96	5432.09	Silted in		NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5432.09	3.14	3.14	0.00	5428.95	5428.95	5428.95	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/18/97	5432.09	2.93	2.93	0.00	5429.16	5429.16	5429.16	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/97	5432.09	3.00	3.00	0.00	5429.09	5429.09	5429.09	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/25/97	5432.09	2.68	2.68	0.00	5429.41	5429.41	5429.41	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/22/97	5432.09	3.15	3.15	0.00	5428.94	5428.94	5428.94	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/28/98	5432.09	3.27	3.27	0.00	5428.82	5428.82	5428.82	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/23/98	5432.09	DRY	DRY	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/22/98	5432.09	DRY	DRY	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-09	12/29/98	5432.09	SILTED IN						0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/17/00								0.00	12.8	7.40	0.07	5.00	NM	NM	NM	NM	6.00	NM
	06/08/00	5433.04	4.11	4.11	0.00	5428.93	5428.93	5428.93	0.00	NM	NM	NM	NM	NM	NM	NM	NM	2.00	NM
	09/06/00	5433.04	4.22	4.22	0.00	5428.82	5428.82	5428.82	0.00	NM	NM	NM	NM	NM	NM	NM	NM	4.50	NM
	12/07/00	5433.04	4.17	4.17	0.00	5428.87	5428.87	5428.87	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/08/96	5435.19	4.25	4.25	0.00	5430.94	5430.94	5430.94	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5435.19	4.10	4.10	0.00	5431.09	5431.09	5431.09	0.00	NM	NM	6.40	7.51	NM	NM	NM	NM	NM	NM
	03/18/97	5435.19	4.17	4.17	0.00	5431.02	5431.02	5431.02	0.00	NM	NM	NM	7.27	NM	NM	NM	NM	NM	NM
	06/16/97	5435.19	4.27	4.27	0.00	5430.92	5430.92	5430.92	0.00	NM	NM	1.85	7.45	NM	NM	NM	NM	NM	NM
	09/25/97	5435.19	3.68	3.68	0.00	5431.51	5431.51	5431.51	0.00	NM	NM	2.02	8.49	NM	NM	NM	NM	NM	NM
	12/22/97	5435.19	4.05	4.05	0.00	5431.14	5431.14	5431.14	0.00	NM	NM	1.00	7.15	NM	NM	NM	NM	NM	NM
	04/28/98	5435.19	4.28	4.28	0.00	5430.91	5430.91	5430.91	0.00	NM	NM	0.88	7.45	NM	NM	NM	NM	NM	NM
	06/23/98	5435.19	4.53	4.53	0.00	5430.66	5430.66	5430.66	0.00	NM	7.60	0.19	7.32	NM	NM	NM	NM	NM	NM
	09/22/98	5435.19	4.55	4.55	0.00	5430.64	5430.64	5430.64	0.00	17.1	7.40	0.18	7.15	NM	NM	NM	NM	NM	NM
	12/29/98	5435.19	3.75	3.75	0.00	5431.44	5431.44	5431.44	0.00	11.9	7.60	4.45	7.84	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	Q/W	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-10	04/12/99	5435.19	3.94	3.94	0.00	5431.25	5431.25	5431.25	0.00	10.8	7.70	0.20	7.37	3.36	NM	NM	NM	NM	NM
	06/02/99	5435.19	4.05	4.05	0.00	5431.14	5431.14	5431.14	0.00	13.1	7.80	0.30	6.60	NM	NM	NM	NM	NM	NM
	09/07/99	5435.19	4.10	4.10	0.00	5431.09	5431.09	5431.09	0.00	16.6	7.20	0.37	4.67	2.34	NM	NM	NM	NM	NM
	12/28/99	5435.19	3.77	3.77	0.00	5431.42	5431.42	5431.42	0.00	NM	7.30	NM	NM	NM	NM	NM	NM	4.25	NM
	04/04/00	5435.19	3.70	3.70	0.00	5431.49	5431.49	5431.49	0.00	10.7	NM	3.08	NM	NM	NM	NM	NM	3.75	NM
	06/08/00	5436.69	5.56	5.56	0.00	5431.13	5431.13	5431.13	0.00	13.2	7.60	0.16	7.40	NM	NM	NM	NM	3.50	NM
	09/05/00	5436.69	5.42	5.42	0.00	5431.27	5431.27	5431.27	0.00	17.5	NM	0.28	NM	NM	NM	NM	NM	2.00	NM
	12/07/00	5436.69	5.31	5.31	0.00	5431.38	5431.38	5431.38	0.00	17.5	NM	0.28	NM	NM	NM	NM	NM	5.00	NM
	10/08/96	5436.56	4.21	4.21	0.00	5432.35	5432.35	5432.35	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5436.56	4.01	4.01	0.00	5432.55	5432.55	5432.55	0.00	NM	NM	3.90	7.48	NM	NM	NM	NM	NM	NM
	03/18/97	5436.56	4.09	4.09	0.00	5432.47	5432.47	5432.47	0.00	NM	NM	NM	7.46	NM	NM	NM	NM	NM	NM
	06/16/97	5436.56	4.10	4.10	0.00	5432.46	5432.46	5432.46	0.00	NM	NM	0.69	7.45	NM	NM	NM	NM	NM	NM
MW-11	09/25/97	5436.56	3.81	3.81	0.00	5432.75	5432.75	5432.75	0.00	NM	NM	11.15	7.41	NM	NM	NM	NM	NM	NM
	12/22/97	5436.56	3.98	3.98	0.00	5432.58	5432.58	5432.58	0.00	NM	NM	0.61	7.17	NM	NM	NM	NM	NM	NM
	04/28/98	5436.56	4.24	4.24	0.00	5432.32	5432.32	5432.32	0.00	NM	NM	0.22	7.34	NM	NM	NM	NM	NM	NM
	06/23/98	5436.56	4.49	4.49	0.00	5432.07	5432.07	5432.07	0.00	NM	7.48	0.16	7.24	NM	NM	NM	NM	NM	NM
	09/22/98	5436.56	4.54	4.54	0.00	5432.02	5432.02	5432.02	0.00	17.4	7.40	0.16	7.15	NM	NM	NM	NM	NM	NM
	12/29/98	5436.56	3.84	3.84	0.00	5432.72	5432.72	5432.72	0.00	13.2	7.50	0.40	7.44	NM	NM	NM	NM	NM	NM
	04/12/99	5436.56	3.90	3.90	0.00	5432.66	5432.66	5432.66	0.00	11.0	7.40	0.60	7.06	3.50	NM	NM	NM	NM	NM
	06/02/99	5436.56	3.98	3.98	0.00	5432.58	5432.58	5432.58	0.00	12.3	7.60	0.30	6.60	NM	NM	NM	NM	NM	NM
	09/07/99	5436.56	3.90	3.90	0.00	5432.66	5432.66	5432.66	0.00	16.9	7.20	0.26	6.61	3.31	NM	NM	NM	NM	NM
	12/28/99	5436.56	3.57	3.57	0.00	5432.99	5432.99	5432.99	0.00	NM	7.10	NM	NM	NM	NM	NM	NM	3.75	NM
	04/03/00	5436.56	3.54	3.54	0.00	5433.02	5433.02	5433.02	0.00	10.4	NM	1.16	NM	NM	NM	NM	NM	2.50	NM
	06/08/00	5437.78	5.07	5.07	0.00	5432.71	5432.71	5432.71	0.00	13.3	7.70	0.11	7.30	NM	NM	NM	NM	5.50	NM
MW-12	09/05/00	5437.78	5.10	5.10	0.00	5432.68	5432.68	5432.68	0.00	19.1	NM	0.27	NM	NM	NM	NM	NM	3.00	NM
	12/07/00	5437.78	4.72	4.72	0.00	5433.06	5433.06	5433.06	0.00	19.1	NM	0.27	NM	NM	NM	NM	NM	2.00	NM
	10/08/96	5438.65	5.27	5.27	0.00	5433.38	5433.38	5433.38	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5438.65	5.02	5.02	0.00	5433.63	5433.63	5433.63	0.00	NM	NM	NM	6.97	NM	NM	NM	NM	NM	NM
	03/18/97	5438.65	5.01	5.01	0.00	5433.64	5433.64	5433.64	0.00	NM	NM	NM	6.87	NM	NM	NM	NM	NM	NM
	06/16/97	5438.65	5.05	5.05	0.00	5433.60	5433.60	5433.60	0.00	NM	NM	NM	6.90	NM	NM	NM	NM	NM	NM
	09/25/97	5438.65	4.96	4.96	0.00	5433.69	5433.69	5433.69	0.00	NM	NM	NM	6.89	NM	NM	NM	NM	NM	NM
	12/22/97	5438.65	4.91	4.91	0.00	5433.74	5433.74	5433.74	0.00	NM	NM	0.30	6.90	NM	NM	NM	NM	NM	NM
	04/28/98	5438.65	4.97	4.97	0.00	5433.68	5433.68	5433.68	0.00	NM	NM	0.26	6.90	NM	NM	NM	NM	NM	NM
	06/23/98	5438.65	5.23	5.23	0.00	5433.42	5433.42	5433.42	0.00	NM	7.73	0.26	6.73	NM	NM	NM	NM	NM	NM
	09/22/98	5438.65	5.37	5.37	0.00	5433.28	5433.28	5433.28	0.00	16.0	7.40	0.18	6.76	NM	NM	NM	NM	NM	NM
	12/29/98	5438.65	4.83	4.83	0.00	5433.82	5433.82	5433.82	0.00	12.7	7.50	0.31	6.70	NM	NM	NM	NM	NM	NM
MW-12	04/12/99	5438.65	4.83	4.83	0.00	5433.82	5433.82	5433.82	0.00	11.3	7.70	0.17	6.68	3.35	NM	NM	NM	NM	NM
	06/02/99	5438.65	4.82	4.82	0.00	5433.83	5433.83	5433.83	0.00	12.5	7.20	0.32	6.10	NM	NM	NM	NM	NM	NM
	09/07/99	5438.65	4.99	4.99	0.00	5433.66	5433.66	5433.66	0.00	16.0	7.30	0.32	6.32	3.16	NM	NM	NM	NM	NM
	12/28/99	5438.65	4.42	4.42	0.00	5434.23	5434.23	5434.23	0.00	NM	7.30	NM	NM	NM	NM	NM	NM	5.00	NM
	04/03/00	5438.65	4.65	4.65	0.00	5434.00	5434.00	5434.00	0.00	11.3	NM	0.13	NM	NM	NM	NM	NM	5.25	NM
	06/08/00	5439.67	5.18	5.18	0.00	5434.49	5434.49	5434.49	0.00	13.3	7.70	0.18	6.50	NM	NM	NM	NM	4.50	NM
	09/06/00	5439.67	5.82	5.82	0.00	5433.85	5433.85	5433.85	0.00	16.1	NM	0.22	NM	NM	NM	NM	NM	2.00	NM
	12/07/00	5439.67	5.43	5.43	0.00	5434.24	5434.24	5434.24	0.00	16.1	NM	0.22	NM	NM	NM	NM	NM	3.00	NM
	10/07/96	5446.09	14.15	15.62	1.47	5431.94	5430.47	5431.50	28.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5446.09	14.20	15.60	1.40	5431.89	5430.49	5431.47	29.34	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5446.09	14.14	15.39	1.25	5431.95	5430.70	5431.58	29.56	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-13	06/18/97	5446.09	14.23	14.98	0.75	5431.86	5431.11	5431.64	30.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5446.09	13.98	14.53	0.55	5432.11	5431.56	5431.95	30.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5446.09	13.87	14.39	0.52	5432.22	5431.70	5432.06	30.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5446.09	13.73	14.15	0.42	5432.36	5431.94	5432.23	31.20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/22/98	5446.09	13.89	14.21	0.32	5432.20	5431.88	5432.10	31.77	NM	7.01	NM	7.06	NM	NM	NM	NM	NM	NM
	09/23/98	5446.09	14.18	15.22	1.04	5431.91	5430.87	5431.60	31.99	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5446.09	13.94	14.43	0.49	5432.15	5431.66	5432.00	32.18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5446.09	13.78	13.94	0.16	5432.31	5432.15	5432.26	32.18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5446.09	13.68	13.88	0.20	5432.41	5432.21	5432.35	32.22	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5446.09	13.65	13.83	0.18	5432.44	5432.26	5432.39	32.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/99	5446.09	13.49	13.77	0.28	5432.60	5432.32	5432.52	32.25	NM	NM	NM	NM	NM	NM	NM	NM	0.00	NM
	04/05/00	5446.09	13.23	13.59	0.36	5432.86	5432.50	5432.75	32.29	NM	NM	NM	NM	NM	NM	NM	NM	1.50	NM
	06/07/00	5446.09	13.22	13.49	0.27	5432.87	5432.60	5432.79	32.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5446.09	13.72	13.90	0.17	5432.36	5432.19	5432.31	32.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/08/00	5446.09	13.72	13.77	0.05	5432.37	5432.32	5432.36	32.32	NM	NM	NM	NM	NM	NM	NM	NM	5	NM
	10/08/96	5452.12	18.11	18.11	0.00	5434.01	5434.01	5434.01	0.00	NM	NM	NM	6.26	NM	NM	NM	NM	NM	NM
	12/30/96	5452.12	18.04	18.04	0.00	5434.08	5434.08	5434.08	0.00	NM	NM	5.20	6.14	NM	NM	NM	NM	NM	NM
	03/18/97	5452.12	17.98	17.98	0.00	5434.14	5434.14	5434.14	0.00	NM	NM	NM	6.26	NM	NM	NM	NM	NM	NM
	06/16/97	5452.12	17.93	17.93	0.00	5434.19	5434.19	5434.19	0.00	NM	NM	0.19	6.35	NM	NM	NM	NM	NM	NM
MW-14	09/23/97	5452.12	17.81	17.81	0.00	5434.31	5434.31	5434.31	0.00	NM	NM	0.28	6.26	NM	NM	NM	NM	NM	NM
	12/19/97	5452.12	17.48	17.48	0.00	5434.64	5434.64	5434.64	0.00	NM	NM	0.09	6.26	NM	NM	NM	NM	NM	NM
	04/24/98	5452.12	17.22	17.22	0.00	5434.90	5434.90	5434.90	0.00	NM	NM	0.24	6.26	NM	NM	NM	NM	NM	NM
	06/23/98	5452.12	17.48	17.48	0.00	5434.64	5434.64	5434.64	0.00	NM	7.27	0.19	6.26	NM	NM	NM	NM	NM	NM
	09/24/98	5452.12	17.92	17.92	0.00	5434.20	5434.20	5434.20	0.00	15.9	7.10	0.28	6.30	NM	NM	NM	NM	NM	NM
	12/29/98	5452.12	17.52	17.52	0.00	5434.60	5434.60	5434.60	0.00	15.7	6.90	0.22	6.30	NM	NM	NM	NM	NM	NM
	04/12/99	5452.12	17.24	17.24	0.00	5434.88	5434.88	5434.88	0.00	15.1	7.00	0.25	6.17	3.04	NM	NM	NM	NM	NM
	06/02/99	5452.12	17.11	17.11	0.00	5435.01	5435.01	5435.01	0.00	15.5	7.10	0.22	6.00	NM	NM	NM	NM	NM	NM
	09/07/99	5452.12	17.12	17.12	0.00	5435.00	5435.00	5435.00	0.00	15.4	7.10	0.30	6.12	3.06	NM	NM	NM	NM	NM
	12/28/99	5452.12	16.83	16.83	0.00	5435.29	5435.29	5435.29	0.00	NM	7.20	NM	NM	NM	NM	NM	NM	5.00	NM
	04/03/00	5452.12	16.51	16.51	0.00	5435.61	5435.61	5435.61	0.00	15.3	NM	0.49	NM	NM	NM	NM	NM	5.50	NM
	06/08/00	5452.12	16.56	16.56	0.00	5435.56	5435.56	5435.56	0.00	15.6	7.40	0.45	3.15	NM	NM	NM	NM	6.00	NM
	09/05/00	5452.12	17.10	17.10	0.00	5435.02	5435.02	5435.02	0.00	16.0	NM	0.50	NM	NM	NM	NM	NM	3.50	NM
	12/07/00	5452.12	16.93	16.93	0.00	5435.19	5435.19	5435.19	0.00	16.0	NM	0.50	NM	NM	NM	NM	NM	5.50	NM
	10/07/96	5446.93	13.05	13.05	0.00	5433.88	5433.88	5433.88	3.10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5446.93	12.97	12.97	0.00	5433.96	5433.96	5433.96	3.10	NM	NM	1.60	6.07	NM	NM	NM	NM	NM	NM
	03/17/97	5446.93	12.73	13.50	0.77	5434.20	5433.43	5433.97	3.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5446.93	12.67	13.09	0.42	5434.26	5433.84	5434.13	3.58	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5446.93	12.46	12.63	0.17	5434.47	5434.30	5434.42	3.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5446.93	12.42	12.45	0.03	5434.51	5434.48	5434.50	3.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/28/98	5446.93	12.24	12.24	0.00	5434.69	5434.69	5434.69	3.59	NM	NM	0.07	5.62	NM	NM	NM	NM	NM	NM
	06/24/98	5446.93	12.37	12.37	0.00	5434.56	5434.56	5434.56	3.59	NM	7.25	0.08	7.95	NM	NM	NM	NM	NM	NM
	09/23/98	5446.93	12.78	12.78	0.00	5434.15	5434.15	5434.15	3.59	16.5	6.90	0.12	5.20	NM	NM	NM	NM	NM	NM
	12/30/98	5446.93	12.48	12.66	0.18	5434.45	5434.27	5434.40	3.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5446.93	12.14	12.24	0.10	5434.79	5434.69	5434.76	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/03/99	5446.93	12.02	12.06	0.04	5434.91	5434.87	5434.90	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5446.93	11.96	11.98	0.02	5434.97	5434.95	5434.96	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/99	5446.93	11.87	11.87	0.00	5435.06	5435.06	5435.06	3.78	NM	7.20	NM	NM	NM	NM	NM	NM	5.25	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-15	04/05/00	5446.93	11.61	11.61	0.00	5435.32	5435.32	5435.32	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/08/00	5446.93	12.52	12.52	0.00	5434.41	5434.41	5434.41	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5446.93	11.96	11.96	0.00	5434.97	5434.97	5434.97	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5446.93	11.90	11.90	0.00	5435.03	5435.03	5435.03	3.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/08/96	5449.51	13.86	13.86	0.00	5435.65	5435.65	5435.65	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5449.51	13.72	13.72	0.00	5435.79	5435.79	5435.79	0.00	NM	NM	6.80	4.85	NM	NM	NM	NM	NM	NM
	03/18/97	5449.51	13.49	13.49	0.00	5436.02	5436.02	5436.02	0.00	NM	NM	NM	4.81	NM	NM	NM	NM	NM	NM
	06/17/97	5449.51	13.28	13.28	0.00	5436.23	5436.23	5436.23	0.00	NM	NM	1.71	4.89	NM	NM	NM	NM	NM	NM
	09/26/97	5449.51	12.67	12.67	0.00	5436.84	5436.84	5436.84	0.00	NM	NM	0.55	5.05	NM	NM	NM	NM	NM	NM
	12/22/97	5449.51	12.98	12.98	0.00	5436.53	5436.53	5436.53	0.00	NM	NM	1.10	5.00	NM	NM	NM	NM	NM	NM
	04/24/98	5449.51	12.73	12.73	0.00	5436.78	5436.78	5436.78	0.00	NM	NM	2.39	4.92	NM	NM	NM	NM	NM	NM
	06/23/98	5449.51	12.94	12.94	0.00	5436.57	5436.57	5436.57	0.00	NM	7.73	0.93	4.50	NM	NM	NM	NM	NM	NM
	09/24/98	5449.51	13.34	13.34	0.00	5436.17	5436.17	5436.17	0.00	20.0	7.10	0.15	4.43	NM	NM	NM	NM	NM	NM
	12/28/98	5449.51	12.83	12.83	0.00	5436.68	5436.68	5436.68	0.00	13.9	7.30	1.50	4.80	NM	NM	NM	NM	NM	NM
	04/12/99	5449.51	12.50	12.50	0.00	5437.01	5437.01	5437.01	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-16	06/02/99	5449.51	12.51	12.51	0.00	5437.00	5437.00	5437.00	0.00	14.0	7.80	2.00	NM	NM	NM	NM	NM	NM	NM
	09/07/99	5449.51	12.41	12.41	0.00	5437.10	5437.10	5437.10	0.00	15.4	7.30	0.48	4.61	NM	NM	NM	NM	NM	NM
	12/28/99	5449.51	12.30	12.30	0.00	5437.21	5437.21	5437.21	0.00	NM	7.30	NM	NM	NM	NM	NM	NM	3.50	NM
	TOP OF WELL DESTROYED, NEEDS RESURVEYING																		
	06/08/00	5449.28	11.81	11.81	0.00	5437.47	5437.47	5437.47	0.00	12.9	NM	0.25	NM	NM	NM	NM	NM	2.50	NM
	09/08/00	5449.28	12.18	12.18	0.00	5437.10	5437.10	5437.10	0.00	13.7	7.80	0.30	5.70	NM	NM	NM	NM	4.50	NM
	12/08/00	5449.28	12.13	12.13	0.00	5437.15	5437.15	5437.15	0.00	NM	NM	NM	NM	NM	NM	NM	NM	2.00	NM
	10/08/96	5442.63	9.33	9.33	0.00	5433.30	5433.30	5433.30	0.00	NM	NM	NM	NM	NM	NM	NM	NM	3.50	NM
	12/30/96	5442.63	9.07	9.07	0.00	5433.56	5433.56	5433.56	0.00	NM	NM	3.80	7.51	NM	NM	NM	NM	NM	NM
	03/19/97	5442.63	8.98	8.98	0.00	5433.65	5433.65	5433.65	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5442.63	8.91	8.91	0.00	5433.72	5433.72	5433.72	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5442.63	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/22/97	5442.63	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5442.63	8.77	8.77	0.00	5433.86	5433.86	5433.86	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/24/98	5442.63	8.97	8.97	0.00	5433.66	5433.66	5433.66	0.00	NM	7.54	0.20	7.19	NM	NM	NM	NM	NM	NM
	09/23/98	5442.63	9.87	9.87	0.00	5432.76	5432.76	5432.76	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-17	12/28/98	5442.63	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/13/99	5442.63	8.61	8.61	0.00	5434.02	5434.02	5434.02	0.00	14.5	7.10	0.20	6.60	NM	NM	NM	NM	NM	NM
	06/02/99	5442.63	8.58	8.58	0.00	5434.05	5434.05	5434.05	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5442.63	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5442.63	8.34	8.34	0.00	5434.29	5434.29	5434.29	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/08/00	5442.63	7.38	7.38	0.00	5435.25	5435.25	5435.25	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5442.63	8.55	8.55	0.00	5434.08	5434.08	5434.08	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5442.63	8.33	8.33	0.00	5434.30	5434.30	5434.30	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5435.57	5.98	6.09	0.11	5429.59	5429.48	5429.56	5.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5435.57	5.91	6.30	0.39	5429.66	5429.27	5429.54	5.91	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5435.57	5.63	5.67	0.04	5429.94	5429.90	5429.93	5.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5435.57	5.59	5.59	0.00	5429.98	5429.98	5429.98	5.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5435.57	5.53	5.82	0.29	5430.04	5429.75	5429.95	5.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5435.57	5.54	5.78	0.24	5430.03	5429.79	5429.96	6.05	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5435.57	5.50	5.99	0.49	5430.07	5429.58	5429.92	6.36	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/24/98	5435.57	5.60	6.51	0.91	5429.97	5429.06	5429.70	7.62	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	alter Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-18	09/23/98	5435.57	5.74	6.68	0.94	5429.83	5428.89	5429.55	8.62	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/28/98	5435.57	5.39	5.71	0.32	5430.18	5429.86	5430.08	8.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5435.57	5.52	6.00	0.48	5430.05	5429.57	5429.91	9.97	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5435.57	5.49	6.19	0.70	5430.08	5429.38	5429.87	11.03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5435.57	5.38	5.97	0.59	5430.19	5429.60	5430.01	11.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/99	5435.57	5.53	5.86	0.33	5430.04	5429.71	5429.94	11.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5435.57	5.36	5.40	0.04	5430.21	5430.17	5430.20	11.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5435.57	5.45	5.79	0.34	5430.12	5429.78	5430.02	11.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5435.57	5.68	6.00	0.32	5429.89	5429.57	5429.79	11.83	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/08/00	5435.57	5.73	5.80	0.07	5429.84	5429.77	5429.82	11.83	NM	NM	NM	NM	NM	NM	NM	NM	5.00	NM
	10/09/96	5429.10	4.24	4.24	0.00	5424.86	5424.86	5424.86	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5429.10	4.06	4.06	0.00	5425.04	5425.04	5425.04	0.00	NM	NM	2.50	4.82	NM	NM	NM	NM	NM	NM
	03/19/97	5429.10	3.26	3.26	0.00	5425.84	5425.84	5425.84	0.00	NM	NM	NM	4.86	NM	NM	NM	NM	NM	NM
	06/18/97	5429.10	3.00	3.00	0.00	5426.10	5426.10	5426.10	0.00	NM	NM	2.03	4.67	NM	NM	NM	NM	NM	NM
	09/24/97	5429.10	2.50	2.50	0.00	5426.60	5426.60	5426.60	0.00	NM	NM	0.76	3.33	NM	NM	NM	NM	NM	NM
MW-19	12/23/97	5429.10	3.29	3.29	0.00	5425.81	5425.81	5425.81	0.00	NM	NM	NM	2.31	NM	NM	NM	NM	NM	NM
	04/28/98	5429.10	3.42	3.42	0.00	5425.68	5425.68	5425.68	0.00	NM	NM	0.15	4.45	NM	NM	NM	NM	NM	NM
	06/24/98	5429.10	3.72	3.72	0.00	5425.38	5425.38	5425.38	0.00	NM	7.51	0.10	4.57	NM	NM	NM	NM	NM	NM
	09/23/98	5429.10	3.94	3.94	0.00	5425.16	5425.16	5425.16	0.00	17.7	7.10	0.15	4.44	NM	NM	NM	NM	NM	NM
	12/29/98	5429.10	3.19	3.19	0.00	5425.91	5425.91	5425.91	0.00	11.9	7.70	0.20	3.26	NM	NM	NM	NM	NM	NM
	04/13/99	5429.10	3.68	3.68	0.00	5425.42	5425.42	5425.42	0.00	11.7	7.60	0.09	4.68	2.32	NM	NM	NM	NM	NM
	06/03/99	5429.10	3.97	3.97	0.00	5425.13	5425.13	5425.13	0.00	13.5	7.90	0.10	4.20	NM	NM	NM	NM	NM	NM
	09/09/99	5429.10	3.81	3.81	0.00	5425.29	5425.29	5425.29	0.00	NM	8.00	NM	NM	NM	NM	NM	NM	NM	NM
	12/29/99	5429.10	4.39	4.39	0.00	5424.71	5424.71	5424.71	0.00	13.2	7.10	0.41	NM	NM	NM	NM	NM	3.15	NM
	04/05/00	5429.10	4.08	4.08	0.00	5425.02	5425.02	5425.02	0.00	NM	NM	NM	NM	NM	NM	NM	NM	3.00	NM
	06/08/00	5429.10	4.24	4.24	0.00	5424.86	5424.86	5424.86	0.00	13.8	7.90	0.10	3.70	NM	NM	NM	NM	2.25	NM
	09/09/00	5429.10	4.60	4.60	0.00	5424.50	5424.50	5424.50	0.00	18.7	NM	0.16	NM	NM	NM	NM	NM	2.00	NM
	12/06/00	5429.10	7.30	7.30	0.00	5421.80	5421.80	5421.80	0.00	18.7	NM	0.16	NM	NM	NM	NM	NM	4.00	NM
	10/09/96	5428.69	3.70	3.70	0.00	5424.99	5424.99	5424.99	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5428.69	3.77	3.77	0.00	5424.92	5424.92	5424.92	0.00	NM	NM	3.90	6.45	NM	NM	NM	NM	NM	NM
	03/19/97	5428.69	3.32	3.32	0.00	5425.37	5425.37	5425.37	0.00	NM	NM	NM	6.30	NM	NM	NM	NM	NM	NM
MW-20	06/17/97	5428.69	3.12	3.12	0.00	5425.57	5425.57	5425.57	0.00	NM	NM	0.81	4.57	NM	NM	NM	NM	NM	NM
	09/26/97	5428.69	2.36	2.36	0.00	5426.33	5426.33	5426.33	0.00	NM	NM	0.15	1.71	NM	NM	NM	NM	NM	NM
	12/23/97	5428.69	2.91	2.91	0.00	5425.78	5425.78	5425.78	0.00	NM	NM	0.07	6.24	NM	NM	NM	NM	NM	NM
	04/28/98	5428.69	2.99	2.99	0.00	5425.70	5425.70	5425.70	0.00	NM	NM	0.19	6.21	NM	NM	NM	NM	NM	NM
	06/23/98	5428.69	3.38	3.38	0.00	5425.31	5425.31	5425.31	0.00	NM	7.57	0.19	5.91	NM	NM	NM	NM	NM	NM
	09/22/98	5428.69	3.57	3.57	0.00	5425.12	5425.12	5425.12	0.00	18.1	7.80	0.15	7.40	NM	NM	NM	NM	NM	NM
	12/29/98	5428.69	3.19	3.19	0.00	5425.50	5425.50	5425.50	0.00	9.7	8.00	0.10	3.25	NM	NM	NM	NM	NM	NM
	04/13/99	5428.69	3.08	3.08	0.00	5425.61	5425.61	5425.61	0.00	12.1	7.60	0.10	4.57	2.31	NM	NM	NM	NM	NM
	06/03/99	5428.69	3.24	3.24	0.00	5425.45	5425.45	5425.45	0.00	NM	7.50	NM	3.60	NM	NM	NM	NM	NM	NM
	09/09/99	5428.69	3.01	3.01	0.00	5425.68	5425.68	5425.68	0.00	NM	6.90	NM	NM	NM	NM	NM	NM	NM	NM
	12/29/99	5428.69	3.47	3.47	0.00	5425.22	5425.22	5425.22	0.00	10.9	7.30	0.35	NM	NM	NM	NM	NM	3.25	NM
	04/04/00	5428.69	2.57	2.57	0.00	5426.12	5426.12	5426.12	0.00	10.0	NM	0.65	NM	NM	NM	NM	NM	5.00	NM
	06/08/00	5428.69	3.60	3.60	0.00	5425.09	5425.09	5425.09	0.00	13.3	7.70	0.17	5.70	NM	NM	NM	NM	3.50	NM
	09/06/00	5428.69	3.89	3.89	0.00	5424.80	5424.80	5424.80	0.00	19.6	NM	0.20	NM	NM	NM	NM	NM	1.00	NM
	12/06/00	5428.69	3.92	3.92	0.00	5424.77	5424.77	5424.77	0.00	19.6	NM	0.20	NM	NM	NM	NM	NM	3.00	NM
	10/08/96	5430.36	5.72	5.72	0.00	5424.64	5424.64	5424.64	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	ater Ele	dJWL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-21	12/31/96	5430.36	5.74	5.74	0.00	5424.62	5424.62	5424.62	0.00	NM	NM	0.90	5.33	NM	NM	NM	NM	NM	NM
	03/18/97	5430.36	5.39	5.39	0.00	5424.97	5424.97	5424.97	0.00	NM	NM	NM	6.26	NM	NM	NM	NM	NM	NM
	06/16/97	5430.36	5.21	5.21	0.00	5425.15	5425.15	5425.15	0.00	NM	NM	0.26	5.73	NM	NM	NM	NM	NM	NM
	09/24/97	5430.36	4.41	4.41	0.00	5425.95	5425.95	5425.95	0.00	NM	NM	0.27	3.50	NM	NM	NM	NM	NM	NM
	12/22/97	5430.36	4.90	4.90	0.00	5425.46	5425.46	5425.46	0.00	NM	NM	0.22	6.52	NM	NM	NM	NM	NM	NM
	04/27/98	5430.36	5.02	5.02	0.00	5425.34	5425.34	5425.34	0.00	NM	NM	0.31	6.54	NM	NM	NM	NM	NM	NM
	06/23/98	5430.36	5.35	5.35	0.00	5425.01	5425.01	5425.01	0.00	NM	7.18	0.08	6.54	NM	NM	NM	NM	NM	NM
	09/22/98	5430.36	5.67	5.67	0.00	5424.69	5424.69	5424.69	0.00	17.3	7.00	0.15	5.64	NM	NM	NM	NM	NM	NM
	12/28/98	5430.36	5.02	5.02	0.00	5425.34	5425.34	5425.34	0.00	8.4	7.00	0.10	5.29	NM	NM	NM	NM	NM	NM
	04/12/99	5430.36	5.02	5.02	0.00	5425.34	5425.34	5425.34	0.00	11.0	7.30	0.03	7.74	3.90	NM	NM	NM	NM	NM
	06/02/99	5430.36	5.19	5.19	0.00	5425.17	5425.17	5425.17	0.00	NM	7.30	NM	3.00	NM	NM	NM	NM	NM	NM
	09/08/99	5430.36	4.90	4.90	0.00	5425.46	5425.46	5425.46	0.00	NM	7.10	NM	1.85	0.92	NM	NM	NM	NM	NM
	12/29/99	5430.36	5.36	5.36	0.00	5425.00	5425.00	5425.00	0.00	10.3	7.10	0.15	NM	NM	NM	NM	NM	4.25	NM
	04/04/00	5430.36	4.49	4.49	0.00	5425.87	5425.87	5425.87	0.00	9.0	NM	0.29	NM	NM	NM	NM	NM	5.00	NM
	06/08/00	5430.45	5.53	5.53	0.00	5424.92	5424.92	5424.92	0.00	12.9	7.40	0.12	5.70	NM	NM	NM	NM	4.50	NM
	09/06/00	5430.45	5.87	5.87	0.00	5424.58	5424.58	5424.58	0.00	18.1	NM	0.12	NM	NM	NM	NM	NM	1.00	NM
MW-22	12/08/00	5430.45	5.88	5.88	0.00	5424.57	5424.57	5424.57	0.00	18.1	NM	0.12	NM	NM	NM	NM	NM	2.50	NM
	12/31/96	5428.62	3.56	3.56	0.00	5425.06	5425.06	5425.06	0.00	NM	NM	1.20	5.07	NM	NM	NM	NM	NM	NM
	03/18/97	5428.62	2.76	2.76	0.00	5425.86	5425.86	5425.86	0.00	NM	NM	NM	6.27	NM	NM	NM	NM	NM	NM
	06/17/97	5428.62	2.93	2.93	0.00	5425.69	5425.69	5425.69	0.00	NM	NM	0.23	7.50	NM	NM	NM	NM	NM	NM
	09/25/97	5428.62	3.03	3.03	0.00	5425.59	5425.59	5425.59	0.00	NM	NM	0.09	6.05	NM	NM	NM	NM	NM	NM
	12/22/97	5428.62	3.07	3.07	0.00	5425.55	5425.55	5425.55	0.00	NM	NM	0.40	4.96	NM	NM	NM	NM	NM	NM
	04/27/98	5428.62	3.16	3.16	0.00	5425.46	5425.46	5425.46	0.00	NM	NM	0.07	5.40	NM	NM	NM	NM	NM	NM
	06/23/98	5428.62	3.72	3.72	0.00	5424.90	5424.90	5424.90	0.00	20.0	7.06	0.07	4.79	NM	NM	NM	NM	NM	NM
	09/24/98	5428.62	3.81	3.81	0.00	5424.81	5424.81	5424.81	0.00	20.0	7.10	0.15	4.43	NM	NM	NM	NM	NM	NM
	12/28/98	5428.62	2.66	2.66	0.00	5425.96	5425.96	5425.96	0.00	8.1	7.00	0.31	7.19	NM	NM	NM	NM	NM	NM
	04/12/99	5428.62	2.90	2.90	0.00	5425.72	5425.72	5425.72	0.00	11.0	7.10	0.25	7.04	3.55	NM	NM	NM	NM	NM
	06/02/99	5428.62	3.24	3.24	0.00	5425.38	5425.38	5425.38	0.00	14.0	7.10	0.09	5.10	NM	NM	NM	NM	NM	NM
	09/08/99	5428.62	3.18	3.18	0.00	5425.44	5425.44	5425.44	0.00	19.7	6.70	0.24	6.76	3.38	NM	NM	NM	3.75	NM
	12/29/99	5428.62	3.30	3.30	0.00	5425.32	5425.32	5425.32	0.00	9.0	6.70	0.16	NM	NM	NM	NM	NM	NM	NM
	04/04/00	5428.62	2.61	2.61	0.00	5426.01	5426.01	5426.01	0.00	9.6	NM	0.08	NM	NM	NM	NM	NM	5.00	NM
	06/08/00	5428.62	3.27	3.27	0.00	5425.35	5425.35	5425.35	0.00	17.5	7.30	0.07	9.10	NM	NM	NM	NM	3.00	NM
MW-22	09/06/00	5428.62	3.60	3.60	0.00	5425.02	5425.02	5425.02	0.00	21.3	NM	0.28	NM	NM	NM	NM	NM	1.00	NM
	12/08/00	5428.62	3.43	3.43	0.00	5425.19	5425.19	5425.19	0.00	21.3	NM	0.28	NM	NM	NM	NM	NM	3.00	NM
	10/08/96	5430.75	5.35	5.35	0.00	5425.40	5425.40	5425.40	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5430.75	4.64	4.64	0.00	5426.11	5426.11	5426.11	0.00	NM	NM	1.80	6.66	NM	NM	NM	NM	NM	NM
	03/18/97	5430.75	3.88	3.88	0.00	5426.87	5426.87	5426.87	0.00	NM	NM	NM	6.49	NM	NM	NM	NM	NM	NM
	06/16/97	5430.75	4.15	4.15	0.00	5426.60	5426.60	5426.60	0.00	NM	NM	0.21	7.25	NM	NM	NM	NM	NM	NM
	09/26/97	5430.75	4.36	4.36	0.00	5426.39	5426.39	5426.39	0.00	NM	NM	0.32	7.97	NM	NM	NM	NM	NM	NM
	12/22/97	5430.75	4.25	4.25	0.00	5426.50	5426.50	5426.50	0.00	NM	NM	1.27	8.69	NM	NM	NM	NM	NM	NM
	04/27/98	5430.75	4.31	4.31	0.00	5426.44	5426.44	5426.44	0.00	NM	NM	1.54	8.91	NM	NM	NM	NM	NM	NM
	06/23/98	5430.75	4.97	4.97	0.00	5425.78	5425.78	5425.78	0.00	NM	7.26	0.27	9.06	NM	NM	NM	NM	NM	NM
	09/24/98	5430.75	5.03	5.03	0.00	5425.72	5425.72	5425.72	0.00	19.4	7.10	0.11	8.46	NM	NM	NM	NM	NM	NM
	12/28/98	5430.75	3.83	3.83	0.00	5426.92	5426.92	5426.92	0.00	8.1	7.60	0.84	9.16	NM	NM	NM	NM	NM	NM
	04/12/99	5430.75	4.31	4.31	0.00	5426.44	5426.44	5426.44	0.00	10.2	7.30	0.22	10.55	5.30	NM	NM	NM	NM	NM
	06/02/99	5430.75	4.53	4.53	0.00	5426.22	5426.22	5426.22	0.00	13.4	6.90	0.20	6.90	NM	NM	NM	NM	NM	NM
	09/08/99	5430.75	4.28	4.28	0.00	5426.47	5426.47	5426.47	0.00	18.7	7.20	0.33	12.63	6.31	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU"s	% Salinity	Purged	DEPTH
MW-23	12/29/99	5430.75	4.12	4.12	0.00	5426.63	5426.63	5426.63	0.00	10.0	6.80	0.41	NM	NM	NM	NM	NM	3.00	NM
	04/04/00	5430.75	3.61	3.61	0.00	5427.14	5427.14	5427.14	0.00	9.3	NM	0.39	NM	NM	NM	NM	NM	5.00	NM
	06/08/00	5430.75	3.96	3.96	0.00	5426.79	5426.79	5426.79	0.00	13.7	7.70	0.08	5.60	NM	NM	NM	NM	2.75	NM
	09/06/00	5430.75	4.50	4.50	0.00	5426.25	5426.25	5426.25	0.00	18.9	NM	0.15	NM	NM	NM	NM	NM	2.00	NM
	12/08/00	5430.75	4.52	4.52	0.00	5426.23	5426.23	5426.23	0.00	18.9	NM	0.15	NM	NM	NM	NM	NM	2.50	NM
	10/07/96	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5448.32	NM	NM	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5448.32	NM	NM	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5448.32	NM	NM	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-24	04/27/98	5448.32	NM	NM	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5448.32	NM	NM	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	05/14/00	5448.32	DRY	DRY	NM	NM	NM	NM	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5449.34	DRY	DRY	DRY	DRY	DRY	DRY	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5449.34	DRY	DRY	DRY	DRY	DRY	DRY	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5449.34	DRY	DRY	DRY	DRY	DRY	DRY	0.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5447.53	15.00	15.00	0.00	5432.53	5432.53	5432.53	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-25	03/19/97	5447.53	15.01	15.01	0.00	5432.52	5432.52	5432.52	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5447.53	14.40	14.40	0.00	5433.13	5433.13	5433.13	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5447.53	DRY	DRY	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5447.53	13.96	13.96	0.00	5433.57	5433.57	5433.57	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5447.53	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	05/14/00	5447.53	13.40	13.40	0.00	5434.13	5434.13	5434.13	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-25	06/16/00	5449.23	15.09	15.09	0.00	5434.14	5434.14	5434.14	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5449.23	15.73	15.73	0.00	5433.50	5433.50	5433.50	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5449.23	15.73	15.73	0.00	5433.50	5433.50	5433.50	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5447.62	14.70	14.70	0.00	5432.92	5432.92	5432.92	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5447.62	DRY	DRY	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5447.62	DRY	DRY	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5447.62	14.92	14.92	0.00	5432.70	5432.70	5432.70	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	O/W	Product	Prod Elev	ater Ele	df WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
MW-26	12/31/98	5447.62	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5447.62	14.81	14.81	0.00	5432.81	5432.81	5432.81	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5447.62	14.73	14.73	0.00	5432.89	5432.89	5432.89	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	05/14/00	5447.62	14.18	14.18	0.00	5433.44	5433.44	5433.44	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5448.74	15.15	15.15	0.00	5433.59	5433.59	5433.59	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5448.74	15.07	15.07	0.00	5433.67	5433.67	5433.67	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5448.74	15.11	15.11	0.00	5433.63	5433.63	5433.63	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5447.26	DRY	DRY	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5447.26	WELL COVERED																
	10/07/96	5448.04	DRY	DRY	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-27	12/31/96	5448.04	DRY	DRY	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5448.04	DRY	DRY	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5448.04	NM	NM	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5448.04	NM	NM	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5448.04	NM	NM	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5448.04	NM	NM	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5448.04	NM	NM	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5448.04	DRY	DRY	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5448.04	DRY	DRY	NM	NM	NM	NM	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	05/14/00	5448.04	14.02	14.02	0.00	5434.02	5434.02	5434.02	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-28	06/16/00	5449.01	DRY	DRY	DRY	DRY	DRY	DRY	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5449.01	DRY	DRY	DRY	DRY	DRY	DRY	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5449.01	DRY	DRY	DRY	DRY	DRY	DRY	8.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5448.06	14.98	14.98	0.00	5433.08	5433.08	5433.08	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5448.06	14.97	14.97	0.00	5433.09	5433.09	5433.09	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5448.06	14.96	14.96	0.00	5433.10	5433.10	5433.10	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5448.06	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5448.06	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5448.06	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/28/98	5448.06	14.74	14.74	0.00	5433.32	5433.32	5433.32	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-29	06/24/98	5448.06	14.87	14.87	0.00	5433.19	5433.19	5433.19	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5448.06	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5448.06	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5448.06	14.76	14.76	0.00	5433.30	5433.30	5433.30	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5448.06	14.55	14.55	0.00	5433.51	5433.51	5433.51	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5449.07	15.02	15.07	0.55	5434.05	5433.50	5433.89	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5449.07	15.53	15.92	0.39	5433.54	5433.15	5433.42	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5449.07	15.53	15.76	0.23	5433.54	5433.31	5433.47	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5446.90	14.59	14.82	0.23	5432.31	5432.08	5432.24	7.10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/96	5446.90	14.65	14.78	0.13	5432.25	5432.12	5432.21	7.11	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5446.90	14.61	14.69	0.08	5432.29	5432.21	5432.27	7.11	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5446.90	14.50	14.52	0.02	5432.40	5432.38	5432.39	7.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5446.90	14.36	14.40	0.04	5432.54	5432.50	5432.53	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5446.90	14.36	14.40	0.04	5432.54	5432.50	5432.53	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5446.90	NM	NM	NM	NM	NM	NM	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/24/98	5446.90	14.09	14.09	0.00	5432.81	5432.81	5432.81	7.14	NM	7.17	0.20	5.73	NM	NM	NM	NM	NM	NM
	09/24/98	5446.90	NM	NM	NM	NM	NM	NM	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	ater Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Scimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
POND	12/31/98	5446.90	NM	NM	NM	NM	NM	NM	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5446.90	14.00	14.00	0.00	5432.90	5432.90	5432.90	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5446.90	13.84	13.84	0.00	5433.06	5433.06	5433.06	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5447.94	14.38	14.38	0.00	5433.56	5433.56	5433.56	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5447.94	14.87	14.87	0.00	5433.07	5433.07	5433.07	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5447.94	14.91	14.91	0.00	5433.03	5433.03	5433.03	7.14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/02/99		NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	NM	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5445.72	13.87	15.34	1.47	5431.85	5430.38	5431.41	103.52	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5445.72	13.94	15.34	1.40	5431.78	5430.38	5431.36	104.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
RW-24	03/17/97	5445.72	13.90	14.94	1.04	5431.82	5430.78	5431.51	104.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5445.72	13.77	14.52	0.75	5431.95	5431.20	5431.73	104.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5445.72	13.73	14.25	0.52	5431.99	5431.47	5431.83	104.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5445.72	13.72	14.21	0.49	5432.00	5431.51	5431.85	104.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5445.72	13.55	13.75	0.20	5432.17	5431.97	5432.11	104.99	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/22/98	5445.72	13.63	14.04	0.41	5432.09	5431.68	5431.97	105.03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/23/98	5445.72	13.88	14.88	1.00	5431.84	5430.84	5431.54	105.16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5445.72	13.80	14.42	0.62	5431.92	5431.30	5431.73	105.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5445.72	13.63	13.83	0.20	5432.09	5431.89	5432.03	105.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5445.72	13.45	13.57	0.12	5432.27	5432.15	5432.23	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
RW-25	09/09/99	5445.72	13.37	13.43	0.06	5432.35	5432.29	5432.33	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5445.72	13.11	13.11	0.00	5432.61	5432.61	5432.61	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5447.73	14.99	14.99	0.00	5432.74	5432.74	5432.74	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5447.73	15.46	15.46	0.00	5432.27	5432.27	5432.27	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5447.73	15.49	15.49	0.00	5432.24	5432.24	5432.24	105.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/07/96	5446.67	14.84	15.01	0.17	5431.83	5431.66	5431.78	49.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5446.67	14.89	15.02	0.13	5431.78	5431.65	5431.74	49.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5446.67	14.77	15.02	0.25	5431.90	5431.65	5431.83	14.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5446.67	14.50	15.29	0.79	5432.17	5431.38	5431.93	49.54	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5446.67	14.48	14.97	0.48	5432.18	5431.70	5432.04	49.60	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
RW-26	12/18/97	5446.67	14.39	14.54	0.15	5432.28	5432.13	5432.24	49.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5446.67	13.25	13.25	0.00	5433.42	5433.42	5433.42	49.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/22/98	5446.67	14.36	14.38	0.02	5432.31	5432.29	5432.30	49.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/23/98	5446.67	14.66	15.42	0.76	5432.01	5431.25	5431.78	49.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5446.67	14.44	14.86	0.42	5432.23	5431.81	5432.10	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5446.67	14.28	14.31	0.03	5432.39	5432.36	5432.38	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/04/99	5446.67	14.16	14.18	0.02	5432.51	5432.49	5432.50	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5446.67	13.10	13.11	0.01	5433.57	5433.56	5433.57	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5446.67	13.74	13.75	0.01	5432.93	5432.92	5432.93	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5448.68	15.69	15.69	0.00	5432.99	5432.99	5432.99	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
RW-26	09/07/00	5448.68	16.17	16.17	0.00	5432.51	5432.51	5432.51	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5448.68	16.16	16.16	0.00	5432.52	5432.52	5432.52	49.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5443.98	12.97	13.70	0.73	5431.01	5430.28	5430.79	0.70	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/17/97	5443.98	12.00	12.56	0.56	5431.98	5431.42	5431.81	0.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5443.98	11.60	12.35	0.75	5432.38	5431.63	5432.16	2.44	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5443.98	11.64	11.77	0.13	5432.34	5432.21	5432.30	2.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5443.98	11.63	11.64	0.01	5432.35	5432.34	5432.35	2.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	OW	Product	Prod Elev	after Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
T-17-1	04/29/98	5443.98	11.47	11.47	0.00	5432.51	5432.51	5432.51	2.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/22/98	5443.98	11.59	11.59	0.00	5432.39	5432.39	5432.39	2.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5443.98	NM	NM	NM	NM	NM	NM	2.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5443.98	11.65	11.75	0.10	5432.33	5432.23	5432.30	2.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5443.98	11.50	11.50	0.00	5432.48	5432.48	5432.48	2.53	NM	6.90	NM	3.80	NM	NM	NM	NM	NM	NM
	06/03/99	5443.98	11.29	11.29	0.00	5432.69	5432.69	5432.69	2.53	NM	6.90	NM	3.80	NM	NM	NM	NM	NM	NM
	09/09/99	5443.98	NM	NM	NM	NM	NM	NM	2.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/05/00	5443.98	10.93	10.93	0.00	5433.05	5433.05	5433.05	2.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/08/00	NM	NM	NM	NM	NM	NM	NM	2.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00		13.73	14.33	0.60				3.09	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00		13.78	14.38	0.60				3.09	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/10/96	5452.41	18.05	18.11	0.06	5434.36	5434.30	5434.34	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5452.41	DRY	DRY	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5452.41	DRY	DRY	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5452.41	DRY	DRY	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5452.41	NM	NM	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
T-17-2	12/18/97	5452.41	NM	NM	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5452.41	NM	NM	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5452.41	17.52	17.94	0.42	5434.89	5434.47	5434.76	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5452.41	NM	NM	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5452.41	NM	NM	NM	NM	NM	NM	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5452.41	16.35	16.35	0.00	5436.06	5436.06	5436.06	6.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/03/99	5452.41	17.30	17.34	0.04	5435.11	5435.07	5435.10	6.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/09/99	5452.41	NM	NM	NM	NM	NM	NM	6.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5452.41	16.68	16.68	0.00	5435.73	5435.73	5435.73	6.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5452.41	17.25	17.25	0.00	5435.16	5435.16	5435.16	6.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/00	5452.41	17.20	17.20	0.00	5435.21	5435.21	5435.21	6.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/10/96	5453.51	17.35	17.35	0.00	5436.16	5436.16	5436.16	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5453.51	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5453.51	19.74	19.74	0.00	5433.77	5433.77	5433.77	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5453.51	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5453.51	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5453.51	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
T-17-3	04/29/98	5453.51	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5453.51	WELL DESTROYED																
	10/10/96	5450.98	19.85	19.90	0.05	5431.13	5431.08	5431.12	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/30/96	5450.98	17.16	17.16	0.00	5433.82	5433.82	5433.82	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03/19/97	5450.98	17.20	17.20	0.00	5433.78	5433.78	5433.78	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/18/97	5450.98	17.38	17.38	0.00	5433.60	5433.60	5433.60	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/29/97	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/18/97	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/29/98	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/25/98	5450.98	16.39	16.39	0.00	5434.59	5434.59	5434.59	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/24/98	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/31/98	5450.98	16.70	16.70	0.00	5434.28	5434.28	5434.28	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	04/14/99	5450.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/03/99	5450.98	16.10	16.10	0.00	5434.88	5434.88	5434.88	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 1
THRIFTWAY REFINERY
SUMMARY OF GROUNDWATER MONITOR DATA

Well #	Date	TOC elev	A/O	O/W	Product	Prod Elev	Water Ele	dj WL Ele	Accum Pro	Deg. C	pH	DO mg/l	Seimen/m	TDS	ORP	NTU's	% Salinity	Purged	DEPTH
UST	09/09/99	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06/16/00	5450.98	NM	NM	NM	NM	NM	NM	0.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09/07/00	5452.41	Well is covered need relocating.																
	04/21/95	GALLONS RECOVERED THIS QUARTER																	
	06/16/95	GALLONS RECOVERED THIS QUARTER																	
	08/25/95	GALLONS RECOVERED THIS QUARTER																	
	11/12/95	GALLONS RECOVERED THIS QUARTER																	
	03/05/96	GALLONS RECOVERED THIS QUARTER																	
UST	06/04/96	GALLONS RECOVERED THIS QUARTER																	
	10/10/96	GALLONS RECOVERED THIS QUARTER																	
	12/30/96	NO GALLONS RECOVERED THIS QUARTER																	
	03/19/97	NO GALLONS RECOVERED THIS QUARTER																	
	06/18/97	NO GALLONS RECOVERED THIS QUARTER																	
	07/09/97	NO GALLONS RECOVERED THIS QUARTER																	
	10/01/97	GALLONS RECOVERED THIS QUARTER																	
	12/18/97	NO GALLONS RECOVERED THIS QUARTER																	
	04/29/98	GALLONS RECOVERED THIS QUARTER																	
	06/25/98	GALLONS RECOVERED THIS QUARTER																	
	09/24/98	NO GALLONS RECOVERED THIS QUARTER																	
	12/31/98	NO GALLONS RECOVERED THIS QUARTER																	
	04/12/99	NO GALLONS RECOVERED THIS QUARTER																	
	06/03/99	GALLONS RECOVERED THIS QUARTER																	
	09/09/99	NO GALLONS RECOVERED THIS QUARTER																	
	12/30/99	NO GALLONS RECOVERED THIS QUARTER																	
	04/05/00	GALLONS RECOVERED THIS QUARTER																	
	06/08/00	GALLONS RECOVERED THIS QUARTER																	
	09/07/00	GALLONS RECOVERED THIS QUARTER																	
	12/12/00	GALLONS RECOVERED THIS QUARTER																	
	01/17/01	GALLONS RECOVERED THIS QUARTER																	

NOTE: NM SIGNIFIES NOT MEASURED
TOTAL PRODUCT RECOVERED TO 9174.35 GALLONS

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
EFFLUENT	EFFLUENT	06/22/94		SYSTEM SHUT DOWN			
	EFFLUENT	09/20/94	ND	9.3	0.9	ND	0.7
	EFFLUENT	01/20/95	NS	NS	NS	NS	NS
	EFFLUENT	04/12/95	7.5	97.5	363.0	278.0	2638.0
	EFFLUENT	11/12/95	3.2	33.9	12.3	8.9	48.1
	EFFLUENT	03/05/96	7.0	50.0	21.2	7.1	43.4
	EFFLUENT	06/04/96	3.5	2.4	0.7	0.9	3.8
	EFFLUENT	07/18/96	7.4	62.6	43.7	13.1	88.9
	EFFLUENT	10/09/96	1.2	3.7	ND	1.4	4.4
	EFFLUENT	12/31/96		SYSTEM SHUT DOWN			
	EFFLUENT	03/20/97		AIR STRIPPER MODIFIED			
	EFFLUENT	03/24/97	NM	3.4	1.9	0.9	2.7
	EFFLUENT	03/28/97	NM	18.7	10.5	5.3	16.0
	EFFLUENT	04/02/97	NM	5.4	2.6	1.4	4.8
	EFFLUENT	04/03/97	NM	ND	ND	ND	ND
	EFFLUENT	04/04/97	NM	ND	ND	ND	0.1
	EFFLUENT	04/10/97	NM	0.5	0.3	0.2	1.2
	EFFLUENT	04/18/97	4.8	4.0	0.4	0.4	1.2
	EFFLUENT	05/30/97		LARGER BLOWER INSTALLED			
	EFFLUENT	06/09/97	NM	ND	ND	0.5	0.5
	EFFLUENT	06/27/97	NM	ND	0.2	0.2	0.4
	EFFLUENT	07/25/97	NM	ND	ND	ND	ND
	EFFLUENT	07/31/97	NM	ND	ND	ND	ND
	EFFLUENT	09/03/97	NM	0.8	0.5	1.1	6.2
	EFFLUENT	12/22/97	NM	122.6	97.2	44.5	131.9
EFFLUENT	EFFLUENT	02/09/98	5.9	77.5	115.5	47.1	134.1
	EFFLUENT	02/19/98	10.0	110.0	110.0	46.0	171.0
	EFFLUENT	02/20/98	5.6	83.0	96.0	46.0	209.0
	EFFLUENT	02/23/98	13.0	200.0	160.0	81.0	289.0
	EFFLUENT	03/03/98	30.0	220.0	140.0	84.0	243.0
	EFFLUENT	03/04/98	22.0	200.0	140.0	80.0	247.0
	EFFLUENT	03/05/98	17.0	130.0	94.0	56.0	176.0
	EFFLUENT	03/05/98		SYSTEM SHUT DOWN FOR CLEANING			
	EFFLUENT	04/24/98	54.0	310.0	410.0	230.0	970.0
	EFFLUENT	04/28/98	42.0	770.0	350.0	280.0	580.0
	EFFLUENT	04/28/98		SYSTEM SHUT DOWN FOR TRAY REPAIRS			
	EFFLUENT	06/11/98		117.0			
	EFFLUENT	06/12/98		270.0			
	EFFLUENT	06/15/98		200.0			
	EFFLUENT	06/17/98		NEW STRIPPER INSTALLATION			
	EFFLUENT	06/24/98		NEW STRIPPER INSTALLATION			
	EFFLUENT	09/24/98	6.2	2.6	1.6	ND	2.7
	EFFLUENT	10/21/98	ND	2.6	1.6	ND	2.7

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	EFFLUENT	11/16/98	ND	ND	ND	ND	2.0
	EFFLUENT	12/31/98	71.0	9.6	7.7	5.8	21.4
EFFLUENT	EFFLUENT	02/16/99	4.8	1.0	2.6	2.3	8.2
	EFFLUENT	03/02/99	12.0	2.2	1.5	1.9	6.0
	EFFLUENT	03/05/99	13.0	2.0	1.3	1.9	5.5
	EFFLUENT	03/12/99	5.7	1.0	1.9	1.5	7.0
	EFFLUENT	03/19/99	4.8	1.6	1.4	1.4	5.4
	EFFLUENT	03/26/99	14.0	2.1	1.1	0.6	6.6
	EFFLUENT	04/13/99	34.0	50.0	130.0	14.0	81.0
	EFFLUENT	05/04/99	16.0	0.7	3.6	1.0	4.0
	EFFLUENT	06/02/99	21.0	2.3	3.8	2.3	10.4
	EFFLUENT	07/07/99	14.0	1.9	5.4	0.6	3.5
	EFFLUENT	08/09/99	ND	ND	1.0	ND	1.2
	EFFLUENT	09/02/99	ND	0.9	2.6	1.1	4.7
	EFFLUENT	09/09/99	ND	1.8	9.6	2.6	12.1
	EFFLUENT	10/04/99	ND	2.8	2.5	1.3	5.7
	EFFLUENT	11/01/99	2.9	2.6	1.9	2.1	10.3
	EFFLUENT	12/17/99	11.0	5.5	7.2	3.5	17.0
	EFFLUENT	12/28/99	6.8	1.9	2.6	2.1	9.5
	EFFLUENT	02/08/00	8.7	3.3	1.3	1.3	5.7
	EFFLUENT	04/03/00	20.0	6.2	1.8	2.6	11.4
	EFFLUENT	04/17/00	22.0	19.0	4.2	9.0	40.3
	EFFLUENT	05/08/00	460.0	3100.0	3200.0	660.0	2840.0
	EFFLUENT	05/08/00	System shut down for cleaning oil found in outlet				
	EFFLUENT	05/22/00	39.0	26.0	19.0	6.4	32.0
	EFFLUENT	05/22/00	System shut down for cleaning found broken baffels.				
	EFFLUENT	05/26/00	System shut down for repairs.				
	EFFLUENT	05/31/00	4.1	1.7	ND	1.2	2.8
	EFFLUENT	06/05/00	10.0	3.0	2.1	0.7	4.4
	EFFLUENT	06/29/00	2.9	1.5	1.8	ND	3.4
	EFFLUENT	08/03/00	16.0	0.8	0.6	ND	1.6
	EFFLUENT	09/14/00	ND	ND	ND	ND	1.7
	EFFLUENT	10/09/00	22.0	0.7	ND	ND	1.5
	EFFLUENT	11/08/00	12.0	6.1	1.9	4.1	17.5
	EFFLUENT	12/07/00	31.0	6.1	ND	ND	1.5
EFFLUENT DUP	EFFLUENT DUP	02/09/98	5.9	77.5	97.2	44.5	131.9
EFFLUENT DUP	EFFLUENT DUP	02/16/99	ND	0.6	2.2	0.8	3.6
INFLUENT	INFLUENT	06/22/94	SYSTEM SHUT DOWN				
	INFLUENT	09/20/94	50.0	9670.0	754.0	158.0	633.0
	INFLUENT	01/20/95	NS	NS	NS	NS	NS
	INFLUENT	04/12/95	24.5	2060.0	987.0	246.0	1689.0
	INFLUENT	03/05/96	155.0	6990.0	3570.0	1300.0	6680.0
	INFLUENT	06/04/96	95.0	4607.7	1794.7	523.8	2254.0

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	INFLUENT	10/09/96	13.2	3116.0	1332.2	504.2	1588.0
	INFLUENT	12/31/96		SYSTEM SHUT DOWN			
	INFLUENT	03/24/97	NM	2110.0	1011.0	47.0	1279.0
	INFLUENT	03/28/97	NM	1827.0	850.0	40.6	1146.0
	INFLUENT	04/02/97	NM	1436.0	650.0	361.0	1279.0
	INFLUENT	07/31/97	NM	4641.0	4939.0	1128.0	4708.0
	INFLUENT	09/24/97	NM	1600.0	923.0	660.0	1529.0
	INFLUENT	12/22/97	NM	2078.0	1610.0	729.0	2053.0
	INFLUENT	02/09/98	37.0	1761.0	2542.0	963.0	461.0
	INFLUENT	06/23/98		SYSTEM SHUT DOWN			
	INFLUENT	12/31/98	440.0	1200.0	860.0	760.0	1800.0
	INFLUENT	02/16/99	40.0	120.0	270.0	230.0	1000.0
	INFLUENT	03/02/99	100.0	650.0	250.0	470.0	890.0
	INFLUENT	03/05/99	120.0	760.0	280.0	530.0	1000.0
	INFLUENT	03/12/99	140.0	370.0	370.0	440.0	1520.0
	INFLUENT	03/19/99	170.0	1100.0	460.0	750.0	1760.0
	INFLUENT	03/26/99	140.0	980.0	430.0	710.0	1900.0
	INFLUENT	04/13/99	ND	6400.0	16000.0	1600.0	6800.0
	INFLUENT	05/04/99	190.0	1200.0	2700.0	860.0	2720.0
	INFLUENT	06/02/99	200.0	1200.0	1800.0	900.0	3190.0
	INFLUENT	07/07/99	960.0	2600.0	6700.0	1000.0	3230.0
	INFLUENT	08/09/99	150.0	840.0	1800.0	670.0	1740.0
	INFLUENT	09/02/99	350.0	1300.0	2500.0	720.0	2080.0
	INFLUENT	09/09/99	360.0	1800.0	5900.0	1200.0	5000.0
	INFLUENT	10/04/99	370.0	2000.0	1600.0	820.0	2960.0
	INFLUENT	11/01/99	270.0	1800.0	1000.0	790.0	3300.0
	INFLUENT	12/17/99	220.0	1500.0	1700.0	820.0	3560.0
	INFLUENT	12/28/99	230.0	1500.0	1300.0	800.0	3400.0
	INFLUENT	02/08/00	190.0	1800.0	540.0	640.0	2230.0
	INFLUENT	04/03/00	250.0	1900.0	410.0	660.0	2530.0
	INFLUENT	04/17/00	230.0	2100.0	440.0	660.0	2440.0
	INFLUENT	05/22/00	220.0	2400.0	1800.0	600.0	2460.0
	INFLUENT	05/31/00	100.0	1200.0	500.0	530.0	1180.0
	INFLUENT	06/05/00	260.0	2400.0	2400.0	680.0	2640.0
	INFLUENT	06/29/00	190.0	2200.0	2300.0	760.0	2980.0
	INFLUENT	08/03/00	ND	1600.0	740.0	610.0	1870.0
	INFLUENT	09/14/00	140.0	1100.0	290.0	530.0	1460.0
	INFLUENT	10/09/00	210.0	1600.0	280.0	610.0	2220.0
	INFLUENT	11/08/00	180.0	840.0	170.0	520.0	1790.0
	INFLUENT	12/07/00	1400.0	1700.0	890.0	560.0	2220.0
MW-01	MW-01	03/05/96	FREE PRODUCT FOUND IN WELL				
	MW-01	05/31/96	FREE PRODUCT FOUND IN WELL				
	MW-01	10/07/96	244.6	255.1	10.9	36.5	192.8

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-01	12/31/96	219.6	164.0	5.3	9.8	176.6
	MW-01	03/19/97	NM	45.6	1.3	5.1	39.8
	MW-01	06/18/97	NM	26.7	0.7	3.8	39.7
	MW-01	09/24/97	NM	134.9	5.9	15.8	94.7
	MW-01	12/23/97	NM	58.7	1.6	4.9	94.7
	MW-01	04/28/98	79.0	58.0	2.8	4.9	21.1
	MW-01	06/24/98	59.0	14.0	ND	1.4	1.8
	MW-01	09/23/98	71.0	15.0	ND	1.8	ND
	MW-01	12/30/98	120.0	120.0	1.4	7.5	25.0
	MW-01	04/14/99	140.0	190.0	0.8	5.3	4.4
	MW-01	06/03/99	78.0	29.0	ND	1.1	ND
	MW-01	09/09/99	73.0	560.0	1.0	21.0	6.7
	MW-01	12/30/99	46.0	320.0	ND	18.0	5.2
MW-01 DUP	MW-01 DUP	06/03/99	80.0	27.0	ND	1.0	ND
MW-02	MW-02	03/05/96	664.0	3120.0	53.5	484.0	519.8
	MW-02	10/09/96	FREE PRODUCT FOUND IN WELL				
	MW-02	12/31/96	FREE PRODUCT FOUND IN WELL				
	MW-02	03/19/97	FREE PRODUCT FOUND IN WELL				
	MW-02	06/17/97	FREE PRODUCT FOUND IN WELL				
	MW-02	09/24/97	FREE PRODUCT FOUND IN WELL				
	MW-02	12/23/97	FREE PRODUCT FOUND IN WELL				
	MW-02	04/28/98	FREE PRODUCT FOUND IN WELL				
	MW-02	06/22/98	FREE PRODUCT FOUND IN WELL				
	MW-02	09/23/98	150.0	2000.0	40.0	610.0	1120.0
	MW-02	12/30/98	Product	Product	Product	Product	Product
	MW-02	04/14/99	Product	Product	Product	Product	Product
	MW-02	06/03/99	160.0	2000.0	31.0	650.0	1070.0
	MW-02	09/09/99	Product	Product	Product	Product	Product
	MW-02	12/30/99	110.0	1900.0	5.6	620.0	670.0
MW-2 DUP	MW-02 DUP	09/23/98	160.0	2000.0	42.0	630.0	1280.0
MW-03	MW-03	03/05/96	298.0	117.0	5.9	28.2	16.9
	MW-03	06/04/96	NOT SAMPLED				
	MW-03	10/09/96	224.7	41.7	4.0	5.8	4.3
	MW-03	12/31/96	NS	NS	NS	NS	NS
	MW-03	03/19/97	NS	NS	NS	NS	NS
	MW-03	06/17/97	NS	NS	NS	NS	NS
	MW-03	09/24/97	FREE PRODUCT FOUND IN WELL				
	MW-03	12/23/97	FREE PRODUCT FOUND IN WELL				
	MW-03	04/28/98	FREE PRODUCT FOUND IN WELL				
	MW-03	06/24/98	200.0	120.0	ND	8.2	ND
	MW-03	09/22/98	NS	NS	NS	NS	NS
	MW-03	12/30/98	NS	NS	NS	NS	NS
	MW-03	04/13/99	180.0	170.0	1.4	23.0	4.2

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-03	06/03/99	NS	NS	NS	NS	NS
MW-04	MW-04	03/05/96	31.5	50.0	5.6	ND	8.3
	MW-04	06/04/96	35.0	1.0	3.3	3.3	7.0
	MW-04	10/09/96	33.0	0.9	2.1	2.2	1.2
	MW-04	12/31/96	27.0	3.5	1.4	1.7	1.6
	MW-04	03/19/97	NM	21.7	0.5	2.6	2.3
	MW-04	06/17/97	NM	8.4	1.6	2.2	1.4
	MW-04	09/24/97	NM	3.7	3.0	5.1	2.0
	MW-04	12/22/97	NM	3.8	3.1	3.0	1.3
	MW-04	04/28/98	WELL BURIED BY AZTEC WELL SERVICE				
	MW-04	06/05/00	20.0	9.4	ND	2.7	ND
	MW-04	09/05/00	20.0	22.0	ND	3.6	0.6
	MW-04	12/06/00	36.0	9.3	ND	ND	ND
MW-05	MW-05	03/05/96	52.9	2.0	0.4	0.6	1.2
	MW-05	06/04/96	47.2	0.3	ND	0.2	ND
	MW-05	10/09/96	48.6	0.6	ND	ND	ND
	MW-05	12/31/96	47.9	4.8	ND	0.2	1.1
	MW-05	03/19/97	NM	5.8	ND	0.4	0.2
	MW-05	06/17/97	NM	6.7	0.3	0.5	0.2
	MW-05	09/24/97	NM	9.6	9.6	9.6	9.6
	MW-05	12/19/97	NM	8.6	0.3	0.4	ND
	MW-05	04/27/98	56.0	9.2	ND	ND	ND
	MW-05	06/24/98	56.0	10.0	ND	0.6	ND
	MW-05	09/21/98	56.0	11.0	ND	ND	ND
	MW-05	12/29/98	52.0	12.0	ND	0.7	ND
	MW-05	04/12/99	43.0	6.7	ND	0.5	ND
	MW-05	06/02/99	56.0	12.0	ND	0.8	ND
	MW-05	09/08/99	54.0	12.0	0.5	ND	ND
	MW-05	12/29/99	49.0	10.0	ND	0.6	ND
	MW-05	04/03/00	51.0	11.0	ND	0.6	ND
	MW-05	06/05/00	46.0	9.4	ND	ND	ND
	MW-05	09/05/00	59.0	11.0	ND	0.6	ND
	MW-05	12/06/00	44.0	8.4	ND	ND	ND
MW-05 DUP	MW-05 DUP	06/02/99	57.0	13.0	ND	0.7	ND
	MW-05 DUP	12/29/99	49.0	10.0	ND	0.6	ND
	MW-05 DUP	06/07/00	35.0	6.5	ND	ND	ND
MW-06	MW-06	03/05/96	0.9	0.2	ND	ND	ND
	MW-06	06/04/96	8.3	1.0	2.5	0.2	0.8
	MW-06	10/09/96	33.5	1.9	3.7	3.2	1.3
	MW-06	12/31/96	0.9	0.3	5.4	0.9	1.1
	MW-06	03/19/97	NM	0.6	0.8	0.8	4.0
	MW-06	06/17/97	NM	19.1	3.3	2.4	0.3
	MW-06	09/24/97	NM	20.3	6.2	4.5	1.9

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-06	12/23/97	NM	ND	ND	ND	ND
	MW-06	04/27/98	3.7	6.3	0.6	ND	ND
	MW-06	06/24/98	36.0	20.0	4.8	3.3	ND
	MW-06	09/22/98	47.0	8.5	1.8	4.5	3.6
	MW-06	12/30/98	2.8	ND	ND	ND	ND
	MW-06	04/13/99	4.4	5.6	ND	ND	ND
	MW-06	06/03/99	47.0	29.0	0.5	2.9	1.2
	MW-06	09/09/99	64.0	24.0	0.8	4.3	1.9
	MW-06	12/29/99	1.3	ND	ND	ND	ND
	MW-06	04/03/00	1.6	ND	ND	ND	ND
	MW-06	06/06/00	33.0	7.6	ND	1.9	ND
	MW-06	09/05/00	59.0	10.0	ND	2.7	1.9
	MW-06	12/06/00	1.8	ND	ND	ND	ND
MW-07	MW-07	03/05/96	FREE PRODUCT FOUND IN WELL				
	MW-07	05/31/96	FREE PRODUCT FOUND IN WELL				
	MW-07	10/09/96	FREE PRODUCT FOUND IN WELL				
	MW-07	12/31/96	FREE PRODUCT FOUND IN WELL				
	MW-07	03/19/97	NOT SAMPLED				
	MW-07	06/17/97	NOT SAMPLED				
	MW-07	09/24/97	NOT SAMPLED				
	MW-07	12/23/97	NOT SAMPLED				
	MW-07	04/28/98	NOT SAMPLED				
	MW-07	06/24/98	190.0	240.0	1.1	444.0	97.4
	MW-07	09/24/98	Sheen	Sheen	Sheen	Sheen	Sheen
	MW-07	12/30/98	Sheen	Sheen	Sheen	Sheen	Sheen
	MW-07	04/14/99	260.0	30.0	6.8	24.0	162.0
	MW-07	06/03/99	Product	Product	Product	Product	Product
	MW-07	09/09/99	Product	Product	Product	Product	Product
	MW-07	12/30/99	300.0	9.3	ND	16.0	101.7
	MW-07	04/05/00	320.0	10.0	ND	7.2	44.9
	MW-07	06/06/00	310.0	4.7	ND	7.9	28.0
	MW-07	12/06/00	NOT SAMPLED				
MW-07 DUP	MW-07 DUP	12/30/99	300.0	13.0	ND	22.0	162.0
MW-08	MW-08	03/05/96		DRY			
	MW-08	06/03/96	SILTED IN TO 3.8 FEET BELOW GRADE				
	MW-08	10/09/96	SILTED IN TO 3.8 FEET BELOW GRADE				
	MW-08	12/31/96	35.8	ND	ND	ND	ND
	MW-08	03/18/97	NM	NM	NM	NM	NM
	MW-08	06/16/97	SILTED IN TO 3.6 FEET BELOW GRADE				
	MW-08	09/25/97	NM	ND	ND	ND	ND
	MW-08	12/22/97	NM	1.2	ND	ND	ND
	MW-08	04/28/98	42.0	3.6	0.6	0.6	ND
	MW-08	06/23/98		DRY			

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-08	09/22/98		DRY			
	MW-08	12/29/98	SILTED IN TO 1.5 FEET BELOW GRADE				
	MW-08	06/06/00	190.0	1.3	ND	ND	ND
	MW-08	09/06/00	250.0	1.1	ND	ND	ND
	MW-08	12/07/00	240.0	1.9	ND	ND	ND
MW-09	MW-09	03/05/96	16.8	0.8	0.3	1.1	1.3
	MW-09	06/03/96	15.8	0.4	ND	ND	ND
	MW-09	10/09/96	16.5	ND	ND	ND	ND
	MW-09	12/31/96	7.2	ND	ND	ND	ND
	MW-09	03/18/97	NM	ND	ND	ND	0.3
	MW-09	06/16/97	NM	ND	ND	ND	ND
	MW-09	09/25/97	NM	ND	ND	ND	ND
	MW-09	12/22/97	NM	ND	ND	ND	ND
	MW-09	04/28/98	ND	ND	ND	ND	ND
	MW-09	06/23/98	11.0	ND	ND	ND	ND
	MW-09	09/22/98	19.0	ND	ND	ND	ND
	MW-09	12/29/98	3.8	ND	ND	ND	ND
	MW-09	04/12/99	3.0	ND	ND	ND	ND
	MW-09	06/02/99	4.0	ND	ND	ND	ND
	MW-09	09/07/99	18.0	ND	ND	ND	ND
	MW-09	12/28/99	14.0	ND	ND	ND	ND
	MW-09	04/04/00	5.3	ND	ND	ND	ND
	MW-09	06/06/00	5.6	ND	ND	ND	ND
	MW-09	09/05/00	9.0	ND	ND	ND	ND
	MW-09	12/07/00	ND	ND	ND	ND	ND
MW-09 DUP	MW-09 DUP	06/07/00	6.9	ND	ND	ND	ND
MW-10	MW-10	03/05/96	ND	1.0	ND	0.9	0.4
	MW-10	06/03/96	ND	ND	ND	ND	ND
	MW-10	10/09/96	ND	ND	ND	ND	ND
	MW-10	12/31/96	ND	ND	ND	ND	ND
	MW-10	03/18/97	NM	ND	ND	ND	ND
	MW-10	06/16/97	NM	ND	ND	ND	ND
	MW-10	09/25/97	NM	ND	ND	ND	ND
	MW-10	12/22/97	NM	ND	ND	ND	ND
	MW-10	04/28/98	ND	ND	ND	ND	ND
	MW-10	06/23/98	ND	ND	ND	ND	ND
	MW-10	09/22/98	ND	ND	ND	ND	ND
	MW-10	12/29/98	ND	ND	ND	ND	ND
	MW-10	04/12/99	ND	ND	ND	ND	ND
	MW-10	06/02/99	ND	ND	ND	ND	ND
	MW-10	09/07/99	ND	ND	ND	ND	ND
	MW-10	12/28/99	ND	ND	ND	ND	ND
	MW-10	04/03/00	ND	ND	ND	ND	ND

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-10	06/06/00	ND	ND	ND	ND	ND
	MW-10	09/05/00	ND	ND	ND	ND	ND
	MW-10	12/07/00	ND	ND	ND	ND	ND
MW-11	MW-11	03/05/96	ND	ND	ND	ND	0.3
	MW-11	06/03/96	ND	ND	ND	ND	ND
	MW-11	10/09/96	ND	ND	ND	ND	ND
	MW-11	12/31/96	ND	ND	ND	ND	ND
	MW-11	03/18/97	NM	ND	ND	ND	ND
	MW-11	06/16/97	NM	ND	ND	ND	ND
	MW-11	09/25/97	NM	ND	ND	ND	ND
	MW-11	12/22/97	NM	ND	ND	ND	ND
	MW-11	04/28/98	ND	ND	ND	ND	ND
	MW-11	06/23/98	ND	ND	ND	ND	ND
	MW-11	09/22/98	ND	ND	ND	ND	ND
	MW-11	12/29/98	ND	ND	ND	ND	ND
	MW-11	04/12/99	ND	ND	ND	ND	ND
	MW-11	06/02/99	ND	ND	ND	ND	ND
	MW-11	09/07/99	ND	ND	ND	ND	ND
	MW-11	12/28/99	ND	ND	ND	ND	ND
	MW-11	04/03/00	ND	ND	ND	ND	ND
	MW-11	06/06/00	ND	ND	ND	ND	ND
	MW-11	09/06/00	ND	ND	ND	ND	ND
	MW-11	12/07/00	ND	ND	ND	ND	ND
MW-12	MW-12	03/05/96	FREE PRODUCT FOUND IN WELL				
	MW-12	05/31/96	FREE PRODUCT FOUND IN WELL				
	MW-12	10/09/96	FREE PRODUCT FOUND IN WELL				
	MW-12	12/31/96	FREE PRODUCT FOUND IN WELL				
	MW-12	03/18/97	FREE PRODUCT FOUND IN WELL				
	MW-12	06/18/97	FREE PRODUCT FOUND IN WELL				
	MW-12	09/25/97	FREE PRODUCT FOUND IN WELL				
	MW-12	12/22/97	FREE PRODUCT FOUND IN WELL				
	MW-12	04/28/98	FREE PRODUCT FOUND IN WELL				
	MW-12	06/24/98	FREE PRODUCT FOUND IN WELL				
	MW-12	09/23/98	Product	Product	Product	Product	Product
	MW-12	12/30/98	Product	Product	Product	Product	Product
	MW-12	04/12/99	Product	Product	Product	Product	Product
	MW-12	06/02/99	Product	Product	Product	Product	Product
	MW-12	04/05/00	180.0	9.9	0.6	50.0	114.5
	MW-12	12/08/00	150.0	20.0	1.0	35.0	72.4
MW-13	MW-13	03/05/96	ND	ND	ND	ND	0.5
	MW-13	06/04/96	ND	ND	ND	ND	ND
	MW-13	10/09/96	ND	ND	ND	ND	ND
	MW-13	12/30/96	ND	ND	ND	ND	ND

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-13	03/18/97	NM	ND	ND	ND	ND
	MW-13	06/16/97	NM	ND	ND	ND	ND
	MW-13	09/23/97	NM	ND	ND	ND	ND
	MW-13	12/19/97	NM	ND	ND	ND	ND
	MW-13	04/24/98	ND	ND	ND	ND	ND
	MW-13	06/23/98	ND	ND	ND	ND	ND
	MW-13	09/21/98	ND	ND	ND	ND	ND
	MW-13	12/29/98	ND	ND	ND	ND	ND
	MW-13	04/12/99	ND	ND	ND	ND	ND
	MW-13	06/02/99	ND	ND	ND	ND	ND
	MW-13	09/07/99	ND	ND	ND	ND	ND
	MW-13	12/28/99	ND	ND	ND	ND	ND
	MW-13	04/03/00	ND	ND	ND	ND	ND
	MW-13	06/05/00	ND	ND	ND	ND	ND
	MW-13	09/05/00	ND	ND	ND	ND	ND
	MW-13	12/07/00	ND	ND	ND	ND	ND
MW-14	MW-14	03/05/96	FREE PRODUCT FOUND IN WELL				
	MW-14	05/31/96	FREE PRODUCT FOUND IN WELL				
	MW-14	10/09/96	103.7	7698.8	361.7	2107.7	2917.8
	MW-14	12/30/96	94.8	6673.5	179.4	857.3	940.5
	MW-14	03/19/97	NOT SAMPLED				
	MW-14	06/18/97	NOT SAMPLED				
	MW-14	09/23/97	NOT SAMPLED				
	MW-14	12/19/97	NOT SAMPLED				
	MW-14	04/28/98	69.0	2900.0	800.0	1100.0	1940.0
	MW-14	06/24/98	89.0	2000.0	150.0	1100.0	360.0
	MW-14	09/23/98	87.0	950.0	91.0	780.0	256.0
	MW-14	12/30/98	Product	Product	Product	Product	Product
	MW-14	04/12/99	Product	Product	Product	Product	Product
	MW-14	06/02/99	Product	Product	Product	Product	Product
	MW-14	09/09/99	Product	Product	Product	Product	Product
	MW-14	12/30/99	85.0	780.0	470.0	1600.0	1660.0
MW-15	MW-15	03/05/96	ND	1.6	0.4	3.8	3.5
	MW-15	06/03/96	ND	ND	ND	ND	ND
	MW-15	10/09/96	ND	ND	ND	ND	ND
	MW-15	12/30/96	ND	ND	ND	ND	ND
	MW-15	03/18/97	NM	ND	ND	ND	ND
	MW-15	06/17/97	NM	ND	ND	ND	ND
	MW-15	09/26/97	NM	ND	ND	ND	ND
	MW-15	12/22/97	NM	ND	ND	ND	ND
	MW-15	04/24/98	ND	ND	ND	ND	ND
	MW-15	06/23/98	ND	ND	ND	ND	ND
	MW-15	09/21/98	ND	ND	ND	ND	ND

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-15	12/28/98	ND	ND	ND	ND	ND
	MW-15	04/12/99	ND	ND	ND	ND	ND
	MW-15	06/02/99	ND	ND	ND	ND	ND
	MW-15	09/07/99	ND	ND	ND	ND	ND
	MW-15	12/28/99	ND	ND	ND	ND	ND
	MW-15	04/04/00	ND	ND	ND	ND	ND
	MW-15	06/07/00	ND	ND	ND	ND	ND
	MW-15	09/06/00	ND	ND	ND	ND	ND
	MW-15	12/08/00	ND	ND	ND	ND	ND
MW-16	MW-16	03/05/96	ND	ND	ND	ND	ND
	MW-16	06/04/96	NOT SAMPLED				
	MW-16	10/09/96	ND	ND	ND	ND	ND
	MW-16	12/30/96	ND	ND	ND	ND	ND
	MW-16	03/19/97	NOT SAMPLED				
	MW-16	06/18/97	NOT SAMPLED				
	MW-16	09/23/97	NOT SAMPLED				
	MW-16	12/19/97	NOT SAMPLED				
	MW-16	06/24/98	ND	ND	ND	ND	ND
	MW-16	09/23/98	NS	NS	NS	NS	NS
	MW-16	12/30/98	ND	ND	ND	ND	ND
	MW-16	04/12/99	NS	NS	NS	NS	NS
	MW-16	06/03/99	ND	ND	ND	ND	ND
	MW-16	09/09/99	NS	NS	NS	NS	NS
	MW-16	12/30/99	NS	NS	NS	NS	NS
MW-16 DUP	MW-16 DUP	12/30/98	ND	ND	ND	ND	ND
MW-17	MW-17	03/05/96	FREE PRODUCT FOUND IN WELL				
	MW-17	06/04/96	FREE PRODUCT FOUND IN WELL				
	MW-17	10/09/96	FREE PRODUCT FOUND IN WELL				
	MW-17	12/30/96	FREE PRODUCT FOUND IN WELL				
	MW-17	03/18/97	FREE PRODUCT FOUND IN WELL				
	MW-17	06/18/97	FREE PRODUCT FOUND IN WELL				
	MW-17	09/23/97	FREE PRODUCT FOUND IN WELL				
	MW-17	12/22/97	FREE PRODUCT FOUND IN WELL				
	MW-17	04/28/98	FREE PRODUCT FOUND IN WELL				
	MW-17	06/23/98	FREE PRODUCT FOUND IN WELL				
	MW-17	09/23/98	FREE PRODUCT FOUND IN WELL				
	MW-17	12/29/98	Product	Product	Product	Product	Product
	MW-17	04/12/99	Product	Product	Product	Product	Product
	MW-17	06/03/99	Product	Product	Product	Product	Product
	MW-17	09/09/99	Product	Product	Product	Product	Product
	MW-17	12/30/99	Product	Product	Product	Product	Product
	MW-17	04/05/00	Product	Product	Product	Product	Product
	MW-17	06/16/00	Product	Product	Product	Product	Product

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
MW-18	MW-18	03/05/96	53.0	6.8	2.4	1.8	14.1
	MW-18	06/04/96	36.8	136.4	2.5	6.6	4.7
	MW-18	10/09/96	31.9	60.1	1.1	1.5	0.7
	MW-18	12/31/96	43.1	176.0	1.9	1.3	0.7
	MW-18	03/19/97	NM	150.9	2.4	0.6	2.1
	MW-18	06/18/97	NM	34.0	2.1	1.2	0.2
	MW-18	09/24/97	NM	33.2	2.3	3.4	1.4
	MW-18	12/23/97	NM	63.8	1.2	4.2	0.8
	MW-18	04/28/98	56.0	68.0	3.9	6.8	2.2
	MW-18	06/24/98	60.0	150.0	0.8	13.0	2.1
	MW-18	09/22/98	74.0	76.0	3.6	12.0	2.5
	MW-18	12/29/98	56.0	31.0	1.2	5.1	1.0
	MW-18	04/13/99	35.0	27.0	0.6	3.1	ND
	MW-18	06/03/99	80.0	36.0	0.9	4.2	1.2
	MW-18	09/09/99	10.0	12.0	ND	2.3	ND
	MW-18	12/29/99	42.0	30.0	0.5	2.6	ND
	MW-18	04/05/00	41.0	68.0	0.7	4.2	1.2
	MW-18	06/07/00	69.0	62.0	ND	6.7	ND
	MW-18	09/06/00	18.0	12.0	0.6	0.5	ND
	MW-18	12/06/00	16.0	4.0	ND	ND	ND
MW-18 DUP	MW-18 DUP	09/09/99	10.0	13.0	ND	2.5	ND
MW-19	MW-19	03/05/96	80.6	6.1	2.8	24.9	55.3
	MW-19	06/04/96	80.5	15.3	2.8	92.9	150.5
	MW-19	10/09/96	11.1	1.4	3.0	39.5	58.0
	MW-19	12/30/96	65.7	17.9	3.5	43.0	62.5
	MW-19	03/19/97	NM	24.6	4.1	164.1	352.2
	MW-19	06/17/97	NM	8.1	2.4	96.7	160.5
	MW-19	09/26/97	NM	0.8	1.8	11.7	11.0
	MW-19	12/23/97	NM	36.9	3.8	244.0	357.4
	MW-19	04/28/98	98.0	44.0	3.4	190.0	280.8
	MW-19	06/23/98	130.0	60.0	7.0	280.0	341.9
	MW-19	09/22/98	46.0	13.0	2.2	31.0	4.0
	MW-19	12/29/98	37.0	14.0	ND	43.0	23.0
	MW-19	04/13/99	36.0	0.7	ND	1.7	ND
	MW-19	06/03/99	45.0	7.6	0.9	35.0	16.2
	MW-19	09/09/99	1.7	ND	ND	0.6	ND
	MW-19	12/29/99	170.0	39.0	0.5	110.0	55.0
	MW-19	04/04/00	ND	ND	ND	1.2	1.7
	MW-19	06/06/00	200.0	50.0	ND	83.0	24.0
	MW-19	09/06/00	74.0	1.1	ND	1.8	ND
	MW-19	12/06/00	110.0	4.4	ND	10.0	6.3
MW-20	MW-20	03/05/96	133.4	3.6	16.8	3.3	21.8
	MW-20	06/03/96	106.3	11.4	3.8	0.8	1.4

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-20	10/09/96	73.3	2.5	11.5	7.5	4.4
	MW-20	12/31/96	53.3	2.7	14.3	9.5	5.7
	MW-20	03/18/97	NM	2.3	2.2	4.4	3.2
	MW-20	06/16/97	NM	1.4	4.4	4.0	4.2
	MW-20	09/24/97	NM	1.7	4.5	3.8	2.4
	MW-20	12/22/97	NM	4.5	6.7	9.3	6.8
	MW-20	04/27/98	83.0	6.8	9.4	18.0	20.1
	MW-20	06/23/98	91.0	4.8	7.5	7.0	3.6
	MW-20	09/22/98	60.0	2.6	ND	5.8	ND
	MW-20	12/28/98	71.0	4.0	ND	1.7	ND
	MW-20	04/12/99	80.0	7.8	ND	2.4	1.9
	MW-20	06/02/99	86.0	5.8	4.7	3.7	ND
	MW-20	09/08/99	20.0	1.1	ND	ND	ND
	MW-20	12/29/99	95.0	5.7	ND	2.5	ND
	MW-20	04/04/00	12.0	ND	ND	ND	ND
	MW-20	06/07/00	120.0	1.7	ND	1.9	1.1
	MW-20	09/06/00	59.0	2.6	ND	16.0	7.6
	MW-20	12/08/00	120.0	0.7	ND	ND	ND
DUPLICATE	MW-20	12/08/00	110.0	0.6	ND	ND	ND
MW-21	MW-21	03/05/96	82.0	6.0	2.0	29.3	6.1
	MW-21	06/03/96	82.1	0.4	0.3	1.1	0.9
	MW-21	10/09/96	46.0	0.7	ND	0.5	0.3
	MW-21	12/31/96	51.3	ND	ND	0.5	0.2
	MW-21	03/18/97	NM	0.3	ND	0.4	ND
	MW-21	06/17/97	NM	ND	ND	0.2	ND
	MW-21	09/25/97	NM	ND	0.4	0.9	0.4
	MW-21	12/22/97	NM	1.3	1.5	2.4	0.8
	MW-21	04/27/98	49.0	2.1	1.4	ND	ND
	MW-21	06/23/98	80.0	ND	ND	1.8	0.5
	MW-21	09/21/98	91.0	ND	ND	ND	ND
	MW-21	12/28/98	81.0	ND	ND	1.1	ND
	MW-21	04/12/99	92.0	ND	ND	ND	ND
	MW-21	06/02/99	120.0	2.6	ND	0.6	ND
	MW-21	09/08/99	100.0	ND	ND	ND	ND
	MW-21	12/29/99	64.0	ND	ND	ND	ND
	MW-21	04/04/00	44.0	ND	ND	ND	ND
	MW-21	06/06/00	37.0	ND	ND	ND	ND
	MW-21	09/06/00	36.0	ND	ND	ND	ND
	MW-21	12/08/00	32.0	ND	ND	ND	ND
MW-21 DUP	MW-21 DUP	09/08/99	98.0	ND	ND	ND	ND
	MW-21 DUP	04/04/00	45.0	ND	ND	ND	ND
MW-22	MW-22	03/05/96	36.7	ND	ND	0.2	0.4
	MW-22	06/03/96	25.3	ND	ND	ND	0.4

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-22	10/09/96	22.9	ND	ND	ND	ND
	MW-22	12/31/96	22.1	ND	ND	ND	ND
	MW-22	03/18/97	NM	ND	ND	ND	ND
	MW-22	06/16/97	NM	ND	ND	ND	ND
	MW-22	09/26/97	NM	ND	ND	ND	ND
	MW-22	12/22/97	NM	ND	ND	ND	ND
	MW-22	04/27/98	18.0	ND	ND	ND	ND
	MW-22	06/23/98	24.0	ND	ND	ND	ND
	MW-22	09/21/98	28.0	ND	ND	ND	ND
	MW-22	12/28/98	28.0	ND	ND	ND	ND
	MW-22	04/12/99	27.0	ND	ND	ND	ND
	MW-22	06/02/99	29.0	ND	ND	ND	ND
	MW-22	09/08/99	24.0	ND	ND	ND	ND
	MW-22	12/29/99	19.0	ND	ND	ND	ND
	MW-22	04/04/00	10.0	ND	ND	ND	ND
	MW-22	06/06/00	4.9	ND	ND	ND	ND
	MW-22	09/06/00	5.3	ND	ND	ND	ND
	MW-22	12/08/00	5.4	ND	ND	ND	ND
MW-23	MW-23	03/05/96	DRY	DRY	DRY	DRY	DRY
	MW-23	06/04/96	NS	NS	NS	NS	NS
	MW-23	10/09/96	NS	NS	NS	NS	NS
	MW-23	12/31/96	NS	NS	NS	NS	NS
	MW-23	03/18/97	NS	NS	NS	NS	NS
	MW-23	06/18/97	NS	NS	NS	NS	NS
	MW-23	09/25/97	NS	NS	NS	NS	NS
	MW-23	12/19/97	NS	NS	NS	NS	NS
	MW-23	04/27/98	NS	NS	NS	NS	NS
	MW-23	06/23/98	NS	NS	NS	NS	NS
	MW-23	09/22/98	NS	NS	NS	NS	NS
	MW-23	12/30/98	NS	NS	NS	NS	NS
	MW-23	06/02/99	NS	NS	NS	NS	NS
	MW-23	06/08/99	NS	NS	NS	NS	NS
	MW-23	05/14/00	NS	NS	NS	NS	NS
	MW-23	12/07/00	NS	NS	NS	NS	NS
MW-24	MW-24	10/09/96	25.6	231.7	144.1	122.5	988.8
	MW-24	12/31/96	NS	NS	NS	NS	NS
	MW-24	03/18/97	NS	NS	NS	NS	NS
	MW-24	06/18/97	NS	NS	NS	NS	NS
	MW-24	09/25/97	NS	NS	NS	NS	NS
	MW-24	12/19/97	NS	NS	NS	NS	NS
	MW-24	04/27/98	NS	NS	NS	NS	NS
	MW-24	06/25/98	84.0	640.0	65.0	130.0	820.0
	MW-24	09/22/98	NS	NS	NS	NS	NS

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	MW-24	12/30/98	NS	NS	NS	NS	NS
	MW-24	04/12/99	NS	NS	NS	NS	NS
	MW-24	06/02/99	NS	NS	NS	NS	NS
	MW-24	09/09/99	NS	NS	NS	NS	NS
	MW-24	04/04/00	NS	NS	NS	NS	NS
	MW-24	12/07/00	NS	NS	NS	NS	NS
MW-25	MW-25	03/05/96	DRY	DRY	DRY	DRY	DRY
	MW-25	06/04/96	NS	NS	NS	NS	NS
	MW-25	10/09/96	1.0	39.9	11.3	7.4	14.3
	MW-25	12/31/96	NS	NS	NS	NS	NS
	MW-25	03/18/97	NS	NS	NS	NS	NS
	MW-25	06/18/97	NS	NS	NS	NS	NS
	MW-25	09/25/97	NS	NS	NS	NS	NS
	MW-25	12/19/97	NS	NS	NS	NS	NS
	MW-25	06/25/98	3.2	32.0	58.0	8.5	91.0
	MW-25	09/22/98	NS	NS	NS	NS	NS
	MW-25	12/30/98	NS	NS	NS	NS	NS
	MW-25	04/12/99	NS	NS	NS	NS	NS
	MW-25	06/02/99	NS	NS	NS	NS	NS
	MW-25	04/04/00	NS	NS	NS	NS	NS
	MW-25	12/07/00	NS	NS	NS	NS	NS
MW-29	MW-29	09/24/98	NS	NS	NS	NS	NS
	MW-29	12/31/98	NS	NS	NS	NS	NS
	MW-29	04/14/99	NS	NS	NS	NS	NS
	MW-29	06/02/99	NS	NS	NS	NS	NS
	MW-29	12/07/00	NS	NS	NS	NS	NS
POND	POND	04/13/99	5.0	ND	ND	0.6	ND
	POND	06/02/99	4.6	ND	ND	ND	ND
	POND	09/09/99	ND	ND	ND	ND	ND
	POND	12/28/99	5.7	2.1	2.5	3.5	12.1
	POND	12/07/00	NS	NS	NS	NS	NS
RW-26	RW-26	06/03/99	520.0	2500.0	470.0	190.0	1350.0
RW-26	RW-26	12/07/00	NS	NS	NS	NS	NS
T-17-3	T-17-3	06/25/98	670.0	3300.0	150.0	220.0	510.0
	T-17-3	09/22/98	NS	NS	NS	NS	NS
	T-17-3	12/30/98	NS	NS	NS	NS	NS
	T-17-3	04/12/99	NS	NS	NS	NS	NS
	T-17-3	06/02/99	NS	NS	NS	NS	NS
	T-17-3	12/07/00	NS	NS	NS	NS	NS

TABLE 2
SUMMARY OF MTBE AND BTEX LABORATORY ANALYSIS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in ug/L)

Well #	Well A #	Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes

NOTE: NM SIGNIFIES NOT MEASURED
 NS SIGNIFIES NOT SAMPLED

TABLE 3
SUMMARY OF LABORATORY ANALYSIS DATA
MAJOR CATIONS AND ANIONS, TDS AND pH
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in mg/L)

Well No.	Location	Date	Calcium	Potassium	Magnesium	Sodium	HCO ₃ as CaCO ₃			OH as CaCO ₃			TOTAL Alkalinity	Chloride	Conductivity @ 25° C			Dried at 180 C		Calculated TDS		
							Bicarbonate	Carbonate	Hydroxide	CO ₂ as CaCO ₃	Carbonate	Hydroxide			Specific Conductance	Hardness	pH	Sulfate	TDS			
EFFLUENT	EFFLUENT	12/22/97	274	6.60	31.6	732	278	<1	<1	<1	278	648.0	730	110.0	4,470	814	7.57	1,401	3,416	3,371	TDS	
	EFFLUENT	12/31/98	220	8.60	48.0	780	730	ND	NS	ND	730	110.0	730	110.0	3,800	NS	7.98	1,600	3,500	NS	NS	
	EFFLUENT	12/28/99	320	8.50	45.0	815	130	ND	ND	ND	130	680.0	815	130	4,870	NS	7.97	1,500	3,620	3,490	NS	
	EFFLUENT	04/03/00	270	6.00	48.0	830	640	ND	ND	ND	640	320.0	830	320.0	4,420	880	8.79	1,530	3,370	3,400	NS	
INFLUENT	EFFLUENT	06/05/00	750	8.70	47.0	810	ND	ND	ND	ND	ND	3,810.0	810	3,810.0	7,300	2,070	3.03	1,420	5,060	6,880	NS	
	EFFLUENT	09/13/00	160	8.80	42.0	700	680	ND	ND	ND	680	200.0	700	200.0	2,600	590	7.89	1,320	2,980	2,840	NS	
	EFFLUENT	12/07/00	240	6.30	48.0	880	680	ND	ND	ND	680	300.0	880	300.0	3,240	787	8.04	1,460	3,400	3,350	NS	
	INFLUENT	12/22/97	272	6.60	31.2	728	86	<1	<1	<1	86	766.0	728	86	4,530	808	5.47	1,414	3,410	3,304	NS	
	INFLUENT	12/31/98	240	8.70	47.0	790	800	ND	NS	ND	800	110.0	790	110.0	3,700	NS	7.14	1,600	3,600	NS	NS	
	INFLUENT	12/28/99	310	8.50	45.0	775	890	ND	ND	ND	890	160.0	775	160.0	4,380	NS	7.19	1,520	3,480	3,700	NS	
	INFLUENT	04/03/00	320	6.00	49.0	810	930	ND	ND	ND	930	170.0	810	170.0	4,360	1,000	7.27	1,500	3,430	3,470	NS	
	INFLUENT	06/05/00	320	8.80	46.0	810	970	ND	ND	ND	970	160.0	810	160.0	4,400	1,000	7.26	1,500	3,440	3,430	NS	
	INFLUENT	09/13/00	320	8.45	43.0	780	1000	ND	ND	ND	1000	170.0	780	170.0	3,100	980	7.18	1,320	3,370	3,260	NS	
	MW-01	INFLUENT	12/07/00	310	6.10	48.0	790	960	ND	ND	ND	960	200.0	790	200.0	3,080	981	7.20	1,460	3,500	3,390	NS
		MW-01	03/19/97	482	5.50	44.0	646	336	<1	<1	<1	336	47.6	646	47.6	4,470	1,385	7.05	2,518	4,166	4,079	NS
		MW-01	12/23/97	458	5.20	34.0	645	289	<1	<1	<1	289	47.2	645	47.2	4,290	1,284	7.06	2,495	4,024	3,973	NS
MW-01		12/30/98	370	5.60	52.0	64	290	ND	NS	NS	3,800	39.0	290	39.0	4,000	3,800	7.04	2,400	3,800	NS	NS	
MW-02	MW-01	12/30/99	460	5.60	47.0	578	290	ND	ND	ND	290	32.0	578	32.0	4,050	NS	7.16	2,250	3,640	3,670	NS	
	MW-02	12/30/99	46	4.80	14.0	800	1700	ND	ND	ND	1,700	130.0	800	130.0	3,300	NS	7.21	33	2,290	2,050	NS	
	MW-04	03/19/97	199	8.60	19.6	866	863	<1	<1	<1	863	196.0	866	196.0	4,250	578	7.31	1,332	3,276	3,484	NS	
	MW-04	12/22/97	96	6.70	31.0	648	914	<1	<1	<1	367	116.0	914	116.0	3,270	367	7.29	875	2,458	2,687	NS	
MW-05	MW-04	12/30/98	Well destroyed																		NS	
	MW-04	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	120.0	NS	120.0	NS	NS	NS	NS	NS	NS	NS	
	MW-04	12/06/00	180	6.50	23.0	660	880	ND	ND	ND	880	150.0	880	150.0	2,700	539	7.26	1,160	2,870	2,710	NS	
	MW-05	03/19/97	44	7.50	10.6	1,282	864	2.66	<1	<1	867	478.0	864	478.0	5,610	153	8.33	1,518	4,022	4,204	NS	
MW-05 DUP	MW-05	12/19/97	37	7.00	7.2	1,325	868	<1	<1	<1	868	385.0	868	385.0	5,690	123	8.39	1,798	4,132	4,428	NS	
	MW-05	12/29/98	120	11.00	34.0	1,600	750	ND	NS	NS	750	240.0	750	240.0	6,400	NS	7.83	2,700	5,500	NS	NS	
	MW-05	12/29/99	160	10.50	30.0	1,110	740	ND	ND	ND	740	140.0	740	140.0	5,100	NS	7.79	1,970	3,990	4,170	NS	
	MW-05	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	120.0	NS	120.0	NS	NS	NS	NS	NS	NS	NS	
	MW-05	12/06/00	40	5.60	14.0	1,180	820	ND	ND	ND	820	200.0	820	200.0	3,940	157	8.02	1,730	3,680	3,670	NS	
	MW-05 DUP	12/29/99	160	10.20	31.0	1,100	730	ND	ND	ND	730	140.0	730	140.0	5,090	NS	7.74	2,000	3,980	4,170	NS	
	MW-06	03/19/97	192	9.20	25.0	793	691	<1	<1	<1	691	100.5	691	100.5	4,010	582	7.79	1,495	3,142	3,306	NS	
	MW-06	12/23/97	106	7.50	15.5	762	772	<1	<1	<1	762	94.4	762	94.4	3,730	329	7.69	1,314	2,744	3,071	NS	
	MW-06	12/30/98	88	8.40	27.0	740	760	ND	NS	NS	760	94.0	760	94.0	3,200	NS	7.60	1,000	2,800	NS	NS	
	MW-06	12/29/99	140	9.20	26.0	784	800	ND	ND	ND	800	100.0	800	100.0	3,670	NS	7.63	1,160	2,740	3,020	NS	
	MW-07	MW-06	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	73.0	NS	73.0	NS	NS	NS	NS	NS	NS	NS
		MW-06	12/06/00	170	6.70	27.0	730	850	ND	ND	ND	850	76.0	850	76.0	2,660	540	7.56	1,270	2,890	2,790	NS
MW-07		12/30/99	290	11.40	36.0	990	510	ND	ND	ND	510	52.0	990	52.0	5,090	NS	7.31	2,480	4,250	4,370	NS	
MW-07 DUP		12/30/99	290	10.80	36.0	980	510	ND	ND	ND	510	42.0	980	42.0	5,060	NS	7.25	2,440	4,200	4,300	NS	
MW-08	MW-08	12/22/97	INSUFFICIENT SAMPLE FOR THESE TESTS																			
	MW-08	12/29/98	WELL SILENT IN																			
	MW-08	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	68.0	NS	68.0	NS	NS	NS	NS	NS	NS	NS	
	MW-08	12/07/00	400	7.20	54.0	740	580	ND	ND	ND	580	98.0	580	98.0	3,190	1,220	7.15	2,170	3,950	3,820	NS	
MW-09	MW-09	03/18/97	395	9.40	42.4	1,528	330	<1	<1	<1	330	89.5	330	89.5	7,020	1,161	7.62	3,761	6,164	6,155	NS	
	MW-09	12/22/97	326	6.40	28.4	1,510	365	<1	<1	<1	365	65.1	365	65.1	7,040	931	7.71	3,936	6,398	6,237	NS	
	MW-09	12/29/98	320	7.80	66.0	1,700	370	ND	NS	NS	370	54.0	370	54.0	6,200	NS	7.51	4,100	6,600	NS	NS	

TABLE 3
SUMMARY OF LABORATORY ANALYSIS DATA
MAJOR CATIONS AND ANIONS, TDS AND pH
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in mg/L)

Well No.	Location	Date	Calcium	Potassium	Magnesium	Sodium	HCO ₃ as CaCO ₃		CO ₃ as CaCO ₃	OH as CaCO ₃	TOTAL Alkalinity	Chloride	Conductivity @ 25° C		TOTAL Hardness	pH	Sulfate	Dried at 180° C	
							Bicarbonate	Carbonate					Specific Conductance	TDS				Calculated TDS	
MW-10	MW-09	12/28/99	380	7.80	54.0	1,430	400	ND	ND	NS	400	53.0	6,860	NS	7.42	3,740	6,050	6,060	Calculated
	MW-09	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	46.0	NS	NS	NS	NS	NS	NS	
	MW-09	12/07/00	360	5.20	62.0	1,400	340	ND	ND	NS	340	56.0	4,660	1,160	7.67	3,860	6,090	5,950	
	MW-10	03/18/97	365	10.60	36.6	1,522	313	<1	<1	<1	313	52.4	7,190	1,062	7.40	3,868	6,062	6,168	
	MW-10	12/22/97	318	6.30	19.5	1,455	326	<1	<1	<1	326	50.6	6,740	874	7.45	3,747	5,970	5,922	
	MW-10	12/29/98	290	8.20	50.0	1,600	320	ND	NS	NS	320	54.0	6,300	NS	7.39	3,900	6,200	NS	
MW-11	MW-10	12/28/99	370	9.10	46.0	1,360	310	ND	NS	NS	310	56.0	6,600	NS	7.29	3,640	5,840	5,800	Calculated
	MW-10	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	72.0	NS	NS	NS	NS	NS	NS	
	MW-10	12/07/00	340	5.20	56.0	1,240	300	ND	ND	NS	300	98.0	4,580	1,070	7.50	3,660	5,690	5,480	
	MW-11	03/18/97	421	15.00	36.4	1,315	244	<1	<1	<1	244	29.4	6,670	1,201	7.41	3,875	5,900	5,936	
	MW-11	12/22/97	420	11.00	19.5	1,290	241	<1	<1	<1	241	17.8	6,470	1,129	7.41	3,902	6,018	5,901	
	MW-11	12/29/98	350	14.00	42.0	1,300	230	ND	NS	NS	230	20.0	5,600	NS	7.30	3,600	5,600	NS	
MW-12 MW-13	MW-11	12/28/99	420	12.60	38.0	1,230	230	ND	ND	NS	230	24.0	6,270	NS	7.32	3,630	5,650	5,590	Calculated
	MW-11	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	26.0	NS	NS	NS	NS	NS	NS	
	MW-11	12/07/00	390	8.20	34.0	1,080	230	ND	ND	NS	230	38.0	4,370	1,120	7.43	3,400	5,290	5,100	
	MW-12	12/08/00	380	5.70	78.0	1,480	1,140	ND	ND	NS	1,140	360.0	6,100	1,260	6.59	3,380	6,280	6,360	
	MW-13	03/18/97	432	11.40	41.8	1,126	288	<1	<1	<1	288	119.0	6,210	1,251	7.28	3,378	5,488	5,396	
	MW-13	12/19/97	416	7.90	31.0	1,155	300	<1	<1	<1	300	125.0	5,980	1,166	7.28	3,437	5,456	5,472	
MW-14 MW-15	MW-13	12/29/98	360	9.60	56.0	1,200	270	ND	NS	NS	270	110.0	5,500	NS	7.20	3,200	5,200	NS	Calculated
	MW-13	12/28/99	450	10.30	59.0	1,160	260	ND	ND	NS	260	78.0	5,950	NS	7.02	3,500	5,520	5,520	
	MW-13	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	93.0	NS	NS	NS	NS	NS	NS	
	MW-13	12/07/00	420	7.20	59.0	1,140	530	ND	ND	NS	530	69.0	4,080	1,290	6.74	3,460	5,540	5,470	
	MW-14	12/30/99	440	6.80	51.0	808	530	ND	ND	NS	530	29.0	5,020	NS	6.92	2,610	4,400	4,480	
	MW-15	03/18/97	381	8.80	36.8	776	200	<1	<1	<1	200	48.1	4,610	1,103	7.60	2,568	4,066	4,019	
MW-18	MW-15	12/22/97	375	6.80	21.4	825	204	<1	<1	<1	204	78.5	4,640	1,025	7.62	2,696	4,258	4,207	Calculated
	MW-15	12/29/98	390	8.60	44.0	840	180	ND	NS	NS	180	140.0	4,800	NS	7.38	2,600	4,200	NS	
	MW-15	12/28/99	440	6.00	64.0	1,300	220	ND	ND	NS	220	130.0	6,630	NS	7.39	3,740	6,010	5,900	
	MW-15	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	160.0	NS	NS	NS	NS	NS	NS	
	MW-15	12/08/00	410	4.20	59.0	1,220	220	ND	ND	NS	220	200.0	4,510	1,270	7.33	3,530	5,840	5,560	
	MW-18	03/19/97	198	9.10	25.8	882	757	<1	<1	<1	757	91.3	4,470	601	7.28	1,720	3,532	3,683	
MW-19	MW-18	12/23/97	93	4.90	10.6	565	597	<1	<1	<1	597	65.0	2,830	276	7.59	928	2,008	2,263	Calculated
	MW-18	12/29/98	76	4.60	14.0	430	500	ND	NS	NS	500	73.0	2,100	NS	7.40	620	1,700	NS	
	MW-18	12/29/99	140	9.10	26.0	734	920	ND	ND	NS	920	82.0	3,630	NS	7.03	1,080	2,700	3,000	
	MW-18	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	110.0	NS	NS	NS	NS	NS	NS	
	MW-18	12/06/00	55	6.10	12.0	620	710	ND	ND	NS	710	97.0	1,920	186	7.53	500	1,650	1,620	
	MW-19	03/19/97	196	6.00	45.8	1,335	995	<1	<1	<1	995	273.0	6,060	678	7.63	2,390	4,850	5,241	
MW-20	MW-19	12/23/97	118	4.60	30.6	1,215	1,228	<1	<1	<1	1,228	264.0	5,560	421	7.41	1,880	4,238	4,740	Calculated
	MW-19	12/29/98	82	3.40	24.0	470	540	ND	NS	NS	540	66.0	2,200	NS	7.68	680	1,800	NS	
	MW-19	12/29/99	260	9.20	59.0	960	1,130	ND	ND	NS	1,130	130.0	4,950	NS	7.48	1,760	3,880	4,310	
	MW-19	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	230.0	NS	NS	NS	NS	NS	NS	
	MW-19	12/06/00	420	7.80	96.0	1,180	840	ND	ND	NS	840	170.0	3,930	1,430	7.32	3,060	5,480	5,450	
	MW-20	03/18/97	464	8.10	52.4	969	836	<1	<1	<1	836	115.0	5,590	1,374	7.00	2,649	4,892	5,094	
MW-20	MW-20	12/22/97	500	6.30	42.6	1,060	756	<1	<1	<1	756	222.0	5,860	1,424	7.02	2,796	5,218	5,363	Calculated
	MW-20	12/28/98	370	8.10	66.0	970	670	ND	NS	NS	670	150.0	4,900	NS	6.98	2,500	4,700	NS	
	MW-20	12/29/99	530	10.40	79.0	1,180	900	ND	ND	NS	900	210.0	6,650	NS	7.07	3,150	5,870	6,060	
	MW-20	06/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	130.0	NS	NS	NS	NS	NS	NS	

TABLE 3
SUMMARY OF LABORATORY ANALYSIS DATA
MAJOR CATIONS AND ANIONS, TDS AND pH
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO
(concentrations in mg/L)

[illegible]

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Oil Conservation Div.
Environmental Bureau
2040 S. Pacheco
Santa Fe, NM 87505

Telephone X left message
Personal _____
E-Mail _____
FAX: X **505-564-3604**

Originating Party: Wayne Price-OCD

Subject: Discharge Plan Renewal Notice for the following Facilities:

GW- 055	Thriftway Refinery	expires	May 09, 2001
GW-___	Name	expires	
GW-___	Name	expires	
GW-___	Name	expires	

WQCC 3106.F. If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

Discussion: Discussed WQCC 3106F and gave notice to submit Discharge Plan renewal application with \$50.00 filing fee for the above listed facilities.

Conclusions or Agreements:

Signed: _____

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505
(505) 827-7133
Fax: (505) 827-8177



(PLEASE DELIVER THIS FAX)

To: TERRY GRIFFIN - BIO TECH

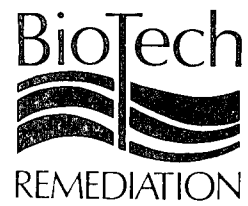
From: OCD -

Date: 12/12/00

Number of Pages (Includes Cover Sheet) 2

Message: _____

If you have any trouble receiving this, please call:
(505) 827-7133



SEP 22 1998

September 21, 1998

Mr. Mark Ashley, Geologist
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 622-2265

Fax: (505) 622-9850
Telephone (505) 327-4965
Facsimile (505) 564-3604

**RE: Fire Water Pond Sediment Sampling and Analysis GW-55 Bloomfield
Refinery, Thriftway Company**

Dear Mr. Ashley:

Pursuant to your letter of January 7, 1998, soil sediments within the fire water pond were sampled on July 13, 1998. BioTech Remediation, Inc. (BioTech), had originally planned to collect the samples at an earlier date, but due to the presence of water in the pond, the samples could not be collected until mid-summer when the pond had dried out. The following sections detail the method of sample collection, sample analyses, and equipment decontamination utilized during the pond sampling.

SAMPLE COLLECTION

Soil samples were collected from six discreet locations within the pond (see Figure 1). At each sampling location, a clean shovel was used to remove soils to a depth of approximately 1 ft. below the surface. Samples were then collected and placed in sample jars, packing each jar to allow no headspace. Following collection, each vile was properly labeled, logged onto a chain-of-custody record and placed within an insulated cooler containing ice.

SAMPLE ANALYSES

Following collection, the samples were transported to On-Site Technologies Laboratory located in Farmington, New Mexico, where they were relinquished. Samples were analyzed for total petroleum hydrocarbons (TPH) per method E418.1; diesel and gasoline range organics (DRO and GRO) per method SW8015; semivolatile organics per method SW 8270; benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl tert-butyl ether (MTBE) per method SW8020A; total RCRA metals per method SW6010A; and corrosivity per method SW9045B.

ANALYSES RESULTS

Results of the pond sediment sampling indicated the presence of hydrocarbon contaminants, which exceed maximum concentration levels (MCLs) from sample location #6. Detected concentrations appear to be associated with heavier hydrocarbons. No BTEX or GRO were detected. Concentrations of barium at or slightly exceeding the MCL were detected at all sampling locations. Concentrations of other analyzed contaminants were non-detect or below their respective MCL. Results of the laboratory analyses are summarized in Tables 1 through 3, which are attached. Laboratory reports, QA/QC data and chain-of-custody record are also provided.

CONCLUSIONS AND RECOMMENDATIONS

Based on the six discreet sediment samples collected from the fire water pond, there does not appear to be any significant contaminant impact except for the area from which sample #6 was collected. Hydrocarbon concentrations well above the MCL were detected in this area and should be addressed through a remedial method.

BioTech proposes to excavate the impacted soils and dispose of them at the Envirotech, Inc. landfarm. Soil samples will be collected from the excavation and field and laboratory analyzed. Excavation will continue until field samples indicate hydrocarbon concentrations that are less than the MCL. Laboratory samples will then be collected for confirmation. The excavation will be backfilled with clean fill dirt; however, no backfilling will occur prior to the receipt of satisfactory laboratory analysis results.

In summary, it appears that the detected contaminants are limited to a small area of the fire water pond and could easily be removed. If any additional information is needed regarding the pond sampling or in considering the proposed excavation, please call me or Ms. Terry Griffin, Project Administrator, at (505) 327-4965.

Respectfully,

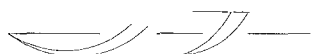


Ross Kennemer
Project Manager

810/fwpsamrep

attachments: Figure 1.
Tables 1 through 3
Laboratory Reports

cc: OCD Aztec District Office w/ attachments



POND WATER
INLET



POND

FIRE WATER
PUMP HOUSE

KEY

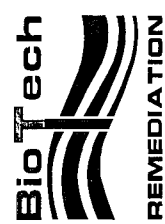
● #2 SAMPLE POINT

THRIFTWAY REFINERY
626 COUNTY ROAD 5500
BLOOMFIELD, NEW MEXICO

810\PNDSAMPL.SKD

SCIENTIST: R. KENNEMER
DRAWN BY: K. SINKS
FIGURE 1 POND SAMPLE
POINTS

APRIL 25, 1996



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
OFFICE: (505) 327-4965
FAX: (505) 564-3604

TABLE 1
FIRE WATER POND SEDIMENT SAMPLES
HYDROCARBONS

Sample Number	Date	TPH, T/R (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	MTBE (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Total Xylene (ug/kg)
1	07/13/98	49	ND	ND	ND	ND	ND	ND	ND
2	07/13/98	ND	ND	ND	ND	ND	ND	ND	ND
3	07/13/98	31	ND	ND	ND	ND	ND	ND	ND
4	07/13/98	67	ND	ND	ND	ND	ND	ND	ND
5	07/13/98	ND	ND	ND	ND	ND	ND	ND	ND
6	07/13/98	2900	260	ND	ND	ND	ND	ND	ND

TABLE 2
FIRE WATER POND SEDIMENT SAMPLES
METALS and pH

Sample Number	Date	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Selenium mg/kg	Silver mg/kg	Mercury mg/kg	pH std. Units
1	07/13/98	U	99.6	U	5.42	U	U	U	U	7.24
2	07/13/98	U	100	U	4 B	U	U	U	U	7.38
3	07/13/98	U	87	U	3 B	U	U	2.82	U	7.07
4	07/13/98	U	108	U	4 B	U	U	U	U	8.33
5	07/13/98	U	88.3	U	4 B	6 B	U	0.6 B	U	8
6	07/13/98	U	100	U	5.07	6 B	U	U	0.088 B	7.95

Notes: TPH, T/R Analyzed per EPA 418.1
DRO (Diesel Range Organics) Analyzed per SW8015
GRO (Gasoline Range Organics) Analyzed per SW8015
BTEX/MTBE Analyzed per SW8020A
Metals Analyzed per SW846 6010A
pH Analyzed per SW846 9045C

810/pondsedsam

ND - Not Detected
U - ND at Method Detection Limit
J - Detected Below Limit of Quantification
B - Detected Below Limit of Quantification,
but above the method detection limit

TABLE 3.
FIRE WATER POND SEDIMENT SAMPLES
SEMI-VOLATILES (ug/L)

SAMPLE NUMBER	DATE	Acenaphthene	Acenaphthylene	Anthracene	Benidine	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Chloroethoxy)methane	bis(2-Chloroethyl)ether	bis(2-Chloroisopropyl)ether	bis(2-Ethylhexyl)phthalate	4-Bromophenyl phenyl ether	Butylbenzyl phthalate	2-Chloronaphthalene	4-Chlorophenyl phenyl ether
1	07/14/98	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2	07/14/98	U	U	U	U	U	U	U	U	U	U	U	U	165 J	U	U	U	U
3	07/14/98	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4	07/14/98	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
5	07/14/98	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
6	07/14/98	U	U	U	U	371 J	350 J	176 J	U	U	U	U	U	U	U	U	U	U

U - Not detected at the Method Detection Limit.

J - Compound Detected below the limit of Quantification.

B - Detected, below limit of quantification but above the method detection limit.

TABLE 3.
FIRE WATER POND SEDIMENT SAMPLES
SEMI-VOLATILES (ug/L)

BioTech Remediation, Inc.
710 E. 20th Street, Suite 400
Farmington, NM 87401
505-327-4965

.....
facsimile transmittal

To: Will Olsen & Denny Foust Fax: 505-827-8177 & 334-6170
From: Ken Sinks Date: 11/30/00
Re: Annual Sampling Pages: 1
CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

.....

Notes: This is to notify you of the upcoming Annual Sampling and Monitoring events in December, 2000.

During the week of December 4 – 8, 2000 I will be conducting the annual sampling and monitoring at the Thriftway Refinery – Site 810 in Bloomfield, NM.

On December 11, 2000 I will be conducting the annual sampling and monitoring of the Thomas #1 well located at the Clayton Farm in Bloomfield, NM.

File:\810\Fax Coversheet December 2000 Sampling

.....

710 East 20th Street, Suite 400
Farmington, NM 87401
Office: 505-327-4965
Fax: 505-564-3604

BioTech Remediation Inc.

Fax

To: Mr. Will Olsen / Denny Foust **From:** Ken Sinks

Fax: 505-827-8177 / 505-334-6170 **Pages:** 1

Phone: 505-827-7154 **Date:** 08/28/00

Re: Sampling of the Thriftway Refinery **CC:**

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☒ **Please Reply** ☐ **Please Recycle**

Thriftway Refinery: The quarterly sampling of the Thriftway Refinery will begin Tuesday September 5, 2000.

File:Refinery\Fax Coversheet September 2000 Sampling

OFF: (505) 325-5667



LAB: (505) 325-1556

August 13, 1998

Terry Griffin
BioTech Remediation, Inc.
710 E. 20th, Suite 400
Farmington, NM 87401
TEL: (505) 632-3365
FAX (505) 632-0030



RE: Thriftway Refinery

Order No.: 9807036

Dear Terry Griffin,

On Site Technologies, LTD. received 6 samples on 7/14/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

BTEX (SW8020A)
CORROSIVITY by pH (SW9045B)
Diesel Range Organics (SW8015)
Gasoline Range Organics (SW8015)
ICP METALS-RCRA, Total (SW6010A)
SEMIVOLATILE ORGANICS (SW8270A)
TPH, T/R Soil (E418.1)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,


David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Project: Thriftway Refinery

Lab Order: 9807036

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT**Date:** 13-Aug-98

Client:	BioTech Remediation, Inc.	Client Sample Info:	Fire Water Pond
Work Order:	9807036	Client Sample ID:	Sample #1
Lab ID:	9807036-01A	Matrix:	SOIL
Project:	Thriftway Refinery	Collection Date:	7/13/98 3:00:00 PM
		COC Record:	5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	49	24		mg/Kg	1	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/20/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	10		µg/Kg	1	7/16/98
Benzene	ND	1		µg/Kg	1	7/16/98
Toluene	ND	2		µg/Kg	1	7/16/98
Ethylbenzene	ND	1		µg/Kg	1	7/16/98
m,p-Xylene	ND	2		µg/Kg	1	7/16/98
o-Xylene	ND	1		µg/Kg	1	7/16/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Aug-98

Client: BioTech Remediation, Inc.
Work Order: 9807036
Lab ID: 9807036-02A **Matrix:** SOIL
Project: Thriftway Refinery

Client Sample Info: Fire Water Pond
Client Sample ID: Sample #2
Collection Date: 7/13/98 3:28:00 PM
COC Record: 5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	ND	24		mg/Kg	1	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/20/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	10		µg/Kg	1	7/16/98
Benzene	ND	1		µg/Kg	1	7/16/98
Toluene	ND	2		µg/Kg	1	7/16/98
Ethylbenzene	ND	1		µg/Kg	1	7/16/98
m,p-Xylene	ND	2		µg/Kg	1	7/16/98
o-Xylene	ND	1		µg/Kg	1	7/16/98

Qualifiers: PQL - Practical Quantitation Limit
 ND - Not Detected at Practical Quantitation Limit
 J - Analyte detected below Practical Quantitation Limit
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 Surrogate - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Aug-98

Client:	BioTech Remediation, Inc.	Client Sample Info:	Fire Water Pond
Work Order:	9807036	Client Sample ID:	Sample #3
Lab ID:	9807036-03A	Matrix:	SOIL
Project:	Thriftway Refinery	Collection Date:	7/13/98 3:45:00 PM
		COC Record:	5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	31	26		mg/Kg	1	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/21/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	10		µg/Kg	1	7/16/98
Benzene	ND	1		µg/Kg	1	7/16/98
Toluene	ND	2		µg/Kg	1	7/16/98
Ethylbenzene	ND	1		µg/Kg	1	7/16/98
m,p-Xylene	ND	2		µg/Kg	1	7/16/98
o-Xylene	ND	1		µg/Kg	1	7/16/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surrogate - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT**Date:** 13-Aug-98

Client:	BioTech Remediation, Inc.	Client Sample Info:	Fire Water Pond
Work Order:	9807036	Client Sample ID:	Sample #4
Lab ID:	9807036-04A	Matrix:	SOIL
Project:	Thriftway Refinery	Collection Date:	7/13/98 4:12:00 PM
		COC Record:	5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	67	24		mg/Kg	1	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/21/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	10		µg/Kg	1	7/16/98
Benzene	ND	1		µg/Kg	1	7/16/98
Toluene	ND	2		µg/Kg	1	7/16/98
Ethylbenzene	ND	1		µg/Kg	1	7/16/98
m,p-Xylene	ND	2		µg/Kg	1	7/16/98
o-Xylene	ND	1		µg/Kg	1	7/16/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Aug-98

Client:	BioTech Remediation, Inc.	Client Sample Info:	Fire Water Pond
Work Order:	9807036	Client Sample ID:	Sample #5
Lab ID:	9807036-05A	Matrix:	SOIL
Project:	Thriftway Refinery	Collection Date:	7/13/98 4:30:00 PM
		COC Record:	5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	ND	24		mg/Kg	1	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/21/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	10		µg/Kg	1	7/16/98
Benzene	ND	1		µg/Kg	1	7/16/98
Toluene	ND	2		µg/Kg	1	7/16/98
Ethylbenzene	ND	1		µg/Kg	1	7/16/98
m,p-Xylene	ND	2		µg/Kg	1	7/16/98
o-Xylene	ND	1		µg/Kg	1	7/16/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT**Date:** 13-Aug-98

Client:	BioTech Remediation, Inc.	Client Sample Info:	Fire Water Pond
Work Order:	9807036	Client Sample ID:	Sample #6
Lab ID:	9807036-06A	Matrix:	SOIL
Project:	Thriftway Refinery	Collection Date:	7/13/98 4:55:00 PM
		COC Record:	5177

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R SOIL		E418.1				Analyst: HR
Petroleum Hydrocarbons, T/R	2900	260		mg/Kg	10	7/21/98
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	260	25		mg/Kg	1	7/21/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98
BTEX		SW8020A				Analyst: DC
Methyl tert-Butyl Ether	ND	20		µg/Kg	2	7/16/98
Benzene	ND	2		µg/Kg	2	7/16/98
Toluene	ND	4		µg/Kg	2	7/16/98
Ethylbenzene	ND	2		µg/Kg	2	7/16/98
m,p-Xylene	ND	4		µg/Kg	2	7/16/98
o-Xylene	ND	2		µg/Kg	2	7/16/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sur: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Method Blank

Sample ID: MB-34	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID:	9807036	Run ID: TPH 1_980721B		SeqNo: 4790	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Petroleum Hydrocarbons, T/R	ND				
				RPD Ref Val	%RPD
				HighLimit	RPDLimit
				LowLimit	Qual

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

Date: 13-Aug-98

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 9807036-01AD	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID: Sample #1	9807036	Run ID: TPH 1_980721B		SeqNo: 4799	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Petroleum Hydrocarbons, T/R	44.12	24	0	0	0.0%
				LowLimit	HighLimit
				0	0
				RPD Ref Val	%RPD
				49.02	10.5%
					RPDLimit
					16

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

Date: 13-Aug-98

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 9807036-03AMS	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98		Prep Date: 7/21/98					
Client ID: Sample #3	9807036	Run ID: TPH 1_980721B		SeqNo: 4800							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, T/R	872.5	24	852.9	31	98.7%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-34	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID:	9807036	Run ID: TPH 1_980721B		SeqNo: 4792	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Petroleum Hydrocarbons, T/R	895	25	870	0	102.9%
				89	111
				HighLimit	RPD Ref Val
				LowLimit	%RPD
				RPDLimit	Qual

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

Date: 13-Aug-98

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	TPH 1_980721B	SeqNo: 4791	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	136	25	130	0	104.6% 80 120
Sample ID: CCV2	Batch ID: 34	Test Code: E418.1	Units: mg/Kg	Analysis Date 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	TPH 1_980721B	SeqNo: 4801	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	135	25	130	0	103.8% 80 120

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/20/98	Prep Date: 7/20/98
Client ID:	9807036	Run ID: GC-2_980720A		SeqNo: 4802	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28	ND				25

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 9807040-04AD	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID: 9807036	Run ID: GC-2_980720A	SeqNo: 4826			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	56.56	25	0	0	0.0%
				RPD Ref Val	%RPD
				50.26	11.8%
				HighLimit	RPDLimit
				0	15
				LowLimit	
				0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 9807041-03AMS	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98				Prep Date: 7/21/98			
Client ID:	9807036	Run ID: GC-2_980720A		SeqNo: 4825							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	434.3	25	502	0	86.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

Date: 13-Aug-98

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS Soil	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/20/98	Prep Date: 7/20/98
Client ID:	9807036	Run ID: GC-2_980720A		SeqNo: 4804	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	452.1	25	502	0	90.1%
				LowLimit	HighLimit
				70	130
				RPD Ref Val	%RPD
					RPDLimit
					Qual

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0602	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date: 7/20/98	Prep Date:
Client ID:	9807036	Run ID:	GC-2_980720A	SeqNo: 4803	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	531.4	25	502	0	105.9%
				85	115

Sample ID: CCV2 QC0602	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date: 7/20/98	Prep Date:
Client ID:	9807036	Run ID:	GC-2_980720A	SeqNo: 4827	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	516.2	25	502	0	102.8%
				85	115

Sample ID: CCV3 QC0602	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date: 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	GC-2_980720A	SeqNo: 4828	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	545.6	25	502	0	108.7%
				85	115

Sample ID: CCV4 QC0602	Batch ID: GC-2_980720	Test Code: SW8015	Units: mg/Kg	Analysis Date: 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	GC-2_980720A	SeqNo: 4829	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C10-C28	547.8	25	502	0	109.1%
				85	115

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID:	9807036	Run ID: GC-1_980721A		SeqNo: 4830	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10	.0718				0.18 J

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9807036-02AMS	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID: Sample #2	Run ID: 9807036	PQL	GC-1_980721A	SeqNo: 4844	
Analyte	Result	%REC	SPK value	LowLimit	HighLimit
T/R Hydrocarbons: C6-C10	1.7	94.4%	1.801	52	123
			0		

Sample ID: 9807036-02AMSD	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID: Sample #2	Run ID: 9807036	PQL	GC-1_980721A	SeqNo: 4845	
Analyte	Result	%REC	SPK value	LowLimit	HighLimit
T/R Hydrocarbons: C6-C10	1.665	92.5%	1.801	52	123
			0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS Soil	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date: 7/21/98
Client ID:	9807036	Run ID: GC-1_980721A		SeqNo: 4832	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
T/R Hydrocarbons: C6-C10	2.007	0.18	1.801	0.0718	107.5%
				LowLimit	HighLimit
				52	123
				%RPD	RPDLimit
					Qual

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0593	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	GC-1_980721A	SeqNo: 4831	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10	2.03	0.18	1.801	0	112.7% 85 115
Trifluorotoluene	.0895	0	0.09	0	99.4% 70 130

Sample ID: CCV2 QC0593	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	GC-1_980721A	SeqNo: 4846	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10	2.103	0.18	1.801	0	116.8% 85 115
Trifluorotoluene	.09	0	0.09	0	100.0% 70 130

Sample ID: CCV3 QC0593	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/21/98	Prep Date:
Client ID:	9807036	Run ID:	GC-1_980721A	SeqNo: 4847	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10	2.056	0.18	1.801	0	114.1% 85 115
Trifluorotoluene	.0951	0	0.09	0	105.7% 70 130

Sample ID: CCV4 QC0593	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/22/98	Prep Date:
Client ID:	9807036	Run ID:	GC-1_980721A	SeqNo: 4848	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10	1.602	0.18	1.801	0	89.0% 85 115
Trifluorotoluene	.0781	0	0.09	0	86.8% 70 130

Qualifiers:

NID - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV5 QC0593	Batch ID: GC-1_980721	Test Code: SW8015	Units: mg/Kg	Analysis Date 7/22/98	Prep Date:
Client ID: 9807036	Run ID: GC-1_980721A	PQL	SPK value	SeqNo: 4849	
Analyte	Result	%REC	SPK Ref Val	LowLimit	HighLimit
T/R Hydrocarbons: C6-C10	1.942	107.8%	0	85	115
Trifluorotoluene	.0871	96.8%	0	70	130
				RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980716	Test Code: SW8020A	Units: µg/Kg	Analysis Date: 7/16/98	Prep Date:
Client ID:	9807036	Run ID: GC-1_980716A		SeqNo: 4630	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	ND	1			
Ethylbenzene	ND	1			
m,p-Xylene	ND	2			
Methyl tert-Butyl Ether	ND	10			
o-Xylene	ND	1			
Toluene	ND	2			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9807036-02AMS		Batch ID: GC-1_980716		Test Code: SW8020A		Units: µg/Kg		Analysis Date 7/16/98		Prep Date:	
Client ID: Sample #2		9807036		Run ID: GC-1_980716A				SeqNo: 4631			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	63.18	1	60	0	105.3%	71	116				
Ethylbenzene	64.12	1	60	0	106.9%	68	120				
m,p-Xylene	122.5	2	120	0	102.1%	60	121				
Methyl tert-Butyl Ether	59.34	10	60	0	98.9%	70	130				
o-Xylene	63.89	1	60	0	106.5%	69	124				
Toluene	63.75	2	60	0	106.3%	62	128				

Sample ID: 9807036-02AMSD		Batch ID: GC-1_980716		Test Code: SW8020A		Units: µg/Kg		Analysis Date 7/16/98		Prep Date:	
Client ID: Sample #2		9807036		Run ID: GC-1_980716A				SeqNo: 4632			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	60.86	1	60	0	101.4%	71	116	63.18	3.7%	15	
Ethylbenzene	61.62	1	60	0	102.7%	68	120	64.12	4.0%	15	
m,p-Xylene	117.4	2	120	0	97.9%	60	121	122.5	4.2%	15	
Methyl tert-Butyl Ether	57.67	10	60	0	96.1%	70	130	59.34	2.9%	15	
o-Xylene	61.47	1	60	0	102.4%	69	124	63.89	3.9%	15	
Toluene	61.37	2	60	0	102.3%	62	128	63.75	3.8%	15	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS SOIL		Batch ID: GC-1_980716	Test Code: SW8020A	Units: µg/Kg	Analysis Date 7/16/98		Prep Date:				
Client ID:	9807036	Run ID:	GC-1_980716A		SeqNo:	4629					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	65.14	1	60	0	108.6%	71	116				
Ethylbenzene	64.95	1	60	0	108.2%	68	120				
m,p-Xylene	126.3	2	120	0	105.2%	60	121				
Methyl tert-Butyl Ether	60.79	10	60	0	101.3%	70	130				
o-Xylene	66.55	1	60	0	110.9%	69	124				
Toluene	64.34	2	60	0	107.2%	62	128				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_980716		Test Code: SW8020A		Units: µg/Kg		Analysis Date: 7/16/98		Prep Date:	
Client ID: 9807036		Run ID: GC-1_980716A		PQL		SPK value		SeqNo: 4627			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	65.4	1	60	0	109.0%	85	115				
Ethylbenzene	66.32	1	60	0	110.5%	85	115				
m,p-Xylene	127.9	2	120	0	106.6%	85	115				
Methyl tert-Butyl Ether	69.47	10	60	0	115.8%	85	115				
o-Xylene	67.11	1	60	0	111.9%	85	115				
Toluene	65.84	2	60	0	109.7%	85	115				
1,4-Difluorobenzene	90.43	0	90	0	100.5%	70	130				
4-Bromochlorobenzene	97.63	0	90	0	108.5%	68	131				
Fluorobenzene	89.27	0	90	0	99.2%	70	130				

SV 6/13/98
WJL 8/13/98

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_980716		Test Code: SW8020A		Units: µg/Kg		Analysis Date: 7/16/98		Prep Date:	
Client ID: 9807036		Run ID: GC-1_980716A		PQL		SPK value		SeqNo: 4626			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	60.5	1	60	0	100.8%	85	115				
Ethylbenzene	63.04	1	60	0	105.1%	85	115				
m,p-Xylene	118.6	2	120	0	98.9%	85	115				
Methyl tert-Butyl Ether	62.65	10	60	0	104.4%	85	115				
o-Xylene	62.12	1	60	0	103.5%	85	115				
Toluene	61.48	2	60	0	102.5%	85	115				
1,4-Difluorobenzene	90.41	0	90	0	100.5%	70	130				
4-Bromochlorobenzene	104.5	0	90	0	116.1%	68	131				
Fluorobenzene	89.31	0	90	0	99.2%	70	130				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: BioTech Remediation, Inc.

Work Order: 9807036

Project: Thriftway Refinery

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07		Batch ID: GC-1_980716		Test Code: SW8020A		Units: µg/Kg		Analysis Date 7/16/98			Prep Date:	
Client ID:		9807036		Run ID: GC-1_980716A				SeqNo: 4628				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	64.6	1	60	0	107.7%	85	115					
Ethylbenzene	66.09	1	60	0	110.2%	85	115					
m,p-Xylene	127.1	2	120	0	105.9%	85	115					
Methyl tert-Butyl Ether	67.19	10	60	0	112.0%	85	115					
o-Xylene	66.43	1	60	0	110.7%	85	115					
Toluene	65.75	2	60	0	109.6%	85	115					
1,4-Difluorobenzene	90.63	0	90	0	100.7%	70	130					
4-Bromochlorobenzene	97.21	0	90	0	108.0%	68	131					
Fluorobenzene	89.45	0	90	0	99.4%	70	130					

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Aug-98

CLIENT: BioTech Remediation, Inc.
Work Order: 9807036
Project: Thriftway Refinery
Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9807016-02A	102	126	101
9807016-03A	104	185 *	101
9807023-02A	101	119	101
9807036-01A	103	118	103
9807036-02A	103	118	103
9807036-02AMS	100	101	99
9807036-02AMSD	100	99.3	98.8
9807036-03A	102	111	102
9807036-04A	101	105	100
9807036-05A	102	114	102
9807036-06A	102	113	101
CCV1 QC0606/07	100	108	99.2
CCV2 QC0606/07	100	116	99.2
CCV3 QC0606/07	101	108	99.4
LCS SOIL	100	101	98.3
MB1	103	117	102

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	68-131
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits

On Site Technologies, LTD.

612 E. Murray Drive
Farmington, NM 87401
(505) 325-2432

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Subcontractor:

Mountain States Analytical, Inc.
1645 West 2200 South

TEL: (800) 973-6724
FAX: (801) 972-6278

Salt Lake City, UT 84119

Acct #:

14-Jul-98

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests		
				SW6010A	SW8270A	SW9045B
9807036-01B	Soil	7/13/98 3:00:00 PM	4OZG	1	1	1
9807036-02B	Soil	7/13/98 3:28:00 PM	4OZG	1	1	1
9807036-03B	Soil	7/13/98 3:45:00 PM	4OZG	1	1	1
9807036-04B	Soil	7/13/98 4:12:00 PM	4OZG	1	1	1
9807036-05B	Soil	7/13/98 4:30:00 PM	4OZG	1	1	1
9807036-06B	Soil	7/13/98 4:55:00 PM	4OZG	1	1	1

Comments:

Please analyze six (6) soil samples for RCRA Metals, pH and Semi-Volatiles (to include Polynuclear Aromatic Hydrocarbons).

Relinquished by:

7/15/98 1600

Received by:

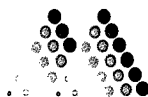
07/16/98
1030

Relinquished by:

Received by:

Date/Time

RECEIVED AUG 12 1998



Mountain States Analytical, Inc.

The Quality Solution

August 6, 1998

Mr. David Cox
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Reference:

Project: Soil Samples
MSAI Group: 23234

Dear Mr. Cox:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

9807036-01B	9807036-02B	9807036-03B
9807036-04B	9807036-05B	9807036-06B

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the associated invoice and forward it for payment.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

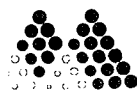
Rolf E. Larsen
Project Manager

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Corporate Office
1645 West 2200 South, Salt Lake City, Utah 84119
801-973-0050 • 1-800-973-6724(MSAI) • FAX 801-972-6278
e-mail: service@msailabs.com

Southwest States Region
6223 Bayonne, Spring, Texas 77389
281-320-2842 • FAX 281-320-0989
e-mail: gbrewer@msailabs.com





Mountain States Analytical, Inc.

The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

Sample ID: 9807036-01B

Matrix: Soil

MSAI Sample: 83146
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Thriftway Refinery Fire Water Pond Sample #1 *re*

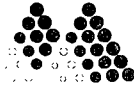
Test	Analysis	Results as Received	Units	Limit of Quantitation
0390I	Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408	Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000	Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
	Arsenic	U	mg/kg	18
	Barium	99.6	mg/kg	1.5
	Cadmium	U	mg/kg	2.00
	Chromium	5.42	mg/kg	5.00
	Lead	U	mg/kg	25
	Selenium	U	mg/kg	30
	Silver	U	mg/kg	2.00
1522	Mercury by CVAA, sw, 7471A Method: SW-846 7471A	U	mg/kg	0.37
0394	pH, sw, 9045C Method: SW-846 9045C	7.24	Std. Units	0.05
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Acenaphthene	U	ug/kg	330
	Acenaphthylene	U	ug/kg	330
	Anthracene	U	ug/kg	330
	Benidine	U	ug/kg	1,800
	Benz(a)anthracene	U	ug/kg	330
	Benzo(a)pyrene	U	ug/kg	830
	Benzo(b)fluoranthene	U	ug/kg	330
	Benzo(ghi)perylene	U	ug/kg	330

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Page 2

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MSAI Sample: 83146

MSAI Group: 23234

Sample ID: 9807036-01B

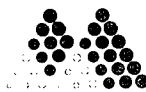
Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, SW Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	330
	bis(2-Chloroethoxy)methane	U	ug/kg	330
	bis(2-Chloroethyl)ether	U	ug/kg	330
	bis(2-Chloroisopropyl)ether	U	ug/kg	330
	bis(2-Ethylhexyl)phthalate	U	ug/kg	330
	4-Bromophenyl-phenyl ether	U	ug/kg	330
	Butylbenzyl phthalate	U	ug/kg	830
	2-Chloronaphthalene	U	ug/kg	330
	4-Chlorophenyl-phenyl ether	U	ug/kg	330
	Chrysene	U	ug/kg	330
	Dibenz(a,h)anthracene	U	ug/kg	330
	1,2-Dichlorobenzene	U	ug/kg	330
	1,3-Dichlorobenzene	U	ug/kg	330
	1,4-Dichlorobenzene	U	ug/kg	330
	3,3'-Dichlorobenzidine	U	ug/kg	330
	Diethyl phthalate	U	ug/kg	330
	Dimethyl phthalate	U	ug/kg	330
	Di-N-butyl phthalate	U	ug/kg	830
	2,4-Dinitrotoluene	U	ug/kg	330
	2,6-Dinitrotoluene	U	ug/kg	330
	Di-N-octyl phthalate	141 J	ug/kg	330
	1,2-Diphenylhydrazine	U	ug/kg	330
	Fluoranthene	U	ug/kg	330
	Fluorene	U	ug/kg	330
	Hexachlorobenzene	U	ug/kg	330
	Hexachlorobutadiene	U	ug/kg	330
	Hexachlorocyclopentadiene	U	ug/kg	330
	Hexachloroethane	U	ug/kg	330
	Indeno(1,2,3-cd)pyrene	U	ug/kg	330
	Isophorone	U	ug/kg	330
	Naphthalene	U	ug/kg	330
	Nitrobenzene	U	ug/kg	330
	N-Nitrosodimethylamine	U	ug/kg	330
	N-Nitrosodi-N-propylamine	U	ug/kg	330
	N-Nitrosodiphenylamine	U	ug/kg	330
	Phenanthrene	U	ug/kg	330
	Pyrene	U	ug/kg	330

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Page 3

On Site Technologies, Ltd.

The Quality Solution

MSAI Sample: 83146

MSAI Group: 23234

Sample ID: 9807036-01B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	330
	2-Chlorophenol	U	ug/kg	830
	2,4-Dichlorophenol	U	ug/kg	830
	2,4-Dimethylphenol	U	ug/kg	830
	4,6-Dinitro-2-methylphenol	U	ug/kg	830
	2,4-Dinitrophenol	U	ug/kg	830
	2-Nitrophenol	U	ug/kg	830
	4-Nitrophenol	U	ug/kg	830
	4-Chloro-3-methylphenol	U	ug/kg	830
	Pentachlorophenol	U	ug/kg	830
	Phenol	U	ug/kg	830
	2,4,6-Trichlorophenol	U	ug/kg	830
	2-Methylphenol (o-Cresol)	U	ug/kg	830
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

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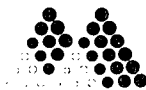
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e-mail: gbrewer@msailabs.com

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Mountain States Analytical, Inc.

The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

MSAI Sample: 83147
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9807036-02B

Matrix: Soil

Thriftway Refinery Fire Water Pond Sample #2 ^{DC}

Test	Analysis	Results as Received	Units	Limit of Quantitation
0390I	Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408	Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000	Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
	Arsenic	U	mg/kg	18
	Barium	100	mg/kg	1.5
	Cadmium	U	mg/kg	2.00
	Chromium	4 B	mg/kg	5.00
	Lead	U	mg/kg	25
	Selenium	U	mg/kg	30
	Silver	U	mg/kg	2.00
1522	Mercury by CVAA, sw, 7471A Method: SW-846 7471A	U	mg/kg	0.37
0394	pH, sw, 9045C Method: SW-846 9045C	7.38	Std. Units	0.05
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Acenaphthene	U	ug/kg	330
	Acenaphthylene	U	ug/kg	330
	Anthracene	U	ug/kg	330
	Benzidine	U	ug/kg	1,800
	Benz(a)anthracene	U	ug/kg	330
	Benzo(a)pyrene	U	ug/kg	830
	Benzo(b)fluoranthene	U	ug/kg	330
	Benzo(ghi)perylene	U	ug/kg	330

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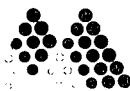
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Page 2

On Site Technologies, Ltd.

The Quality Solution

MSAI Sample: 83147

MSAI Group: 23234

Sample ID: 9807036-02B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	330
	bis(2-Chloroethoxy)methane	U	ug/kg	330
	bis(2-Chloroethyl)ether	U	ug/kg	330
	bis(2-Chloroisopropyl)ether	U	ug/kg	330
	bis(2-Ethylhexyl)phthalate	165 J	ug/kg	330
	4-Bromophenyl-phenyl ether	U	ug/kg	330
	Butylbenzyl phthalate	U	ug/kg	830
	2-Chloronaphthalene	U	ug/kg	330
	4-Chlorophenyl-phenyl ether	U	ug/kg	330
	Chrysene	U	ug/kg	330
	Dibenz(a,h)anthracene	U	ug/kg	330
	1,2-Dichlorobenzene	U	ug/kg	330
	1,3-Dichlorobenzene	U	ug/kg	330
	1,4-Dichlorobenzene	U	ug/kg	330
	3,3'-Dichlorobenzidine	U	ug/kg	330
	Diethyl phthalate	U	ug/kg	330
	Dimethyl phthalate	U	ug/kg	330
	Di-N-butyl phthalate	U	ug/kg	830
	2,4-Dinitrotoluene	U	ug/kg	330
	2,6-Dinitrotoluene	U	ug/kg	330
	Di-N-octyl phthalate	U	ug/kg	330
	1,2-Diphenylhydrazine	U	ug/kg	330
	Fluoranthene	U	ug/kg	330
	Fluorene	U	ug/kg	330
	Hexachlorobenzene	U	ug/kg	330
	Hexachlorobutadiene	U	ug/kg	330
	Hexachlorocyclopentadiene	U	ug/kg	330
	Hexachloroethane	U	ug/kg	330
	Indeno(1,2,3-cd)pyrene	U	ug/kg	330
	Isophorone	U	ug/kg	330
	Naphthalene	U	ug/kg	330
	Nitrobenzene	U	ug/kg	330
	N-Nitrosodimethylamine	U	ug/kg	330
	N-Nitrosodi-N-propylamine	U	ug/kg	330
	N-Nitrosodiphenylamine	U	ug/kg	330
	Phenanthrene	U	ug/kg	330
	Pyrene	U	ug/kg	330

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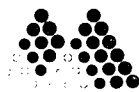
Corporate Office

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On Site Technologies, Ltd.

Page 3

MSAI Sample: 83147

MSAI Group: 23234

Sample ID: 9807036-02B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	330
	2-Chlorophenol	U	ug/kg	830
	2,4-Dichlorophenol	U	ug/kg	830
	2,4-Dimethylphenol	U	ug/kg	830
	4,6-Dinitro-2-methylphenol	U	ug/kg	830
	2,4-Dinitrophenol	U	ug/kg	830
	2-Nitrophenol	U	ug/kg	830
	4-Nitrophenol	U	ug/kg	830
	4-Chloro-3-methylphenol	U	ug/kg	830
	Pentachlorophenol	U	ug/kg	830
	Phenol	U	ug/kg	830
	2,4,6-Trichlorophenol	U	ug/kg	830
	2-Methylphenol (o-Cresol)	U	ug/kg	830
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

B - Detected, below limit of quantitation but above the method detection limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

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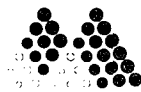
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e-mail: gbrewer@msailabs.com

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Mountain States Analytical, Inc.

The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

MSAI Sample: 83148
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9807036-03B

Matrix: Soil

Thriftway Refinery Fire Water Pond Sample #3 (nc)

Test Analysis	Results as Received	Units	Limit of Quantitation
0390I Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408 Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000 Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
Arsenic	U	mg/kg	18
Barium	87.0	mg/kg	1.5
Cadmium	U	mg/kg	2.00
Chromium	3 B	mg/kg	5.00
Lead	U	mg/kg	25
Selenium	U	mg/kg	30
Silver	2.82	mg/kg	2.00
1522 Mercury by CVAA, sw, 7471A Method: SW-846 7471A	U	mg/kg	0.37
0394 pH, sw, 9045C Method: SW-846 9045C	7.07	Std. Units	0.05
1198 Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
Acenaphthene	U	ug/kg	330
Acenaphthylene	U	ug/kg	330
Anthracene	U	ug/kg	330
Benzidine	U	ug/kg	1,800
Benz(a)anthracene	U	ug/kg	330
Benzo(a)pyrene	U	ug/kg	830
Benzo(b)fluoranthene	U	ug/kg	330
Benzo(ghi)perylene	U	ug/kg	330

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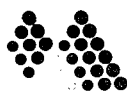
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The Quality Solution

Page 2

Sample ID: 9807036-03B

MSAI Sample: 83148

MSAI Group: 23234

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	330
	bis(2-Chloroethoxy)methane	U	ug/kg	330
	bis(2-Chloroethyl)ether	U	ug/kg	330
	bis(2-Chloroisopropyl)ether	U	ug/kg	330
	bis(2-Ethylhexyl)phthalate	U	ug/kg	330
	4-Bromophenyl-phenyl ether	U	ug/kg	330
	Butylbenzyl phthalate	U	ug/kg	830
	2-Chloronaphthalene	U	ug/kg	330
	4-Chlorophenyl-phenyl ether	U	ug/kg	330
	Chrysene	U	ug/kg	330
	Dibenz(a,h)anthracene	U	ug/kg	330
	1,2-Dichlorobenzene	U	ug/kg	330
	1,3-Dichlorobenzene	U	ug/kg	330
	1,4-Dichlorobenzene	U	ug/kg	330
	3,3'-Dichlorobenzidine	U	ug/kg	330
	Diethyl phthalate	U	ug/kg	330
	Dimethyl phthalate	U	ug/kg	330
	Di-N-butyl phthalate	U	ug/kg	830
	2,4-Dinitrotoluene	U	ug/kg	330
	2,6-Dinitrotoluene	U	ug/kg	330
	Di-N-octyl phthalate	154 J	ug/kg	330
	1,2-Diphenylhydrazine	U	ug/kg	330
	Fluoranthene	U	ug/kg	330
	Fluorene	U	ug/kg	330
	Hexachlorobenzene	U	ug/kg	330
	Hexachlorobutadiene	U	ug/kg	330
	Hexachlorocyclopentadiene	U	ug/kg	330
	Hexachloroethane	U	ug/kg	330
	Indeno(1,2,3-cd)pyrene	U	ug/kg	330
	Isophorone	U	ug/kg	330
	Naphthalene	U	ug/kg	330
	Nitrobenzene	U	ug/kg	330
	N-Nitrosodimethylamine	U	ug/kg	330
	N-Nitrosodi-N-propylamine	U	ug/kg	330
	N-Nitrosodiphenylamine	U	ug/kg	330
	Phenanthrene	U	ug/kg	330
	Pyrene	U	ug/kg	330

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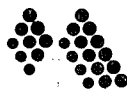
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MSAI Sample: 83148

MSAI Group: 23234

Sample ID: 9807036-03B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	330
	2-Chlorophenol	U	ug/kg	830
	2,4-Dichlorophenol	U	ug/kg	830
	2,4-Dimethylphenol	U	ug/kg	830
	4,6-Dinitro-2-methylphenol	U	ug/kg	830
	2,4-Dinitrophenol	U	ug/kg	830
	2-Nitrophenol	U	ug/kg	830
	4-Nitrophenol	U	ug/kg	830
	4-Chloro-3-methylphenol	U	ug/kg	830
	Pentachlorophenol	U	ug/kg	830
	Phenol	U	ug/kg	830
	2,4,6-Trichlorophenol	U	ug/kg	830
	2-Methylphenol (o-Cresol)	U	ug/kg	830
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

B - Detected, below limit of quantitation but above the method detection limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

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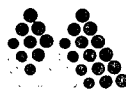
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e-mail: gbrewer@msailabs.com

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The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

MSAI Sample: 83149
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9807036-04B

Matrix: Soil

Thriftway Refinery Fire Water Pond Sample #4 *(ne)*

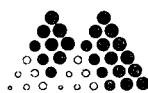
Test Analysis	Results as Received	Units	Limit of Quantitation
0390I Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408 Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000 Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
Arsenic	U	mg/kg	18
Barium	108	mg/kg	1.5
Cadmium	U	mg/kg	2.00
Chromium	4 B	mg/kg	5.00
Lead	U	mg/kg	25
Selenium	U	mg/kg	30
Silver	U	mg/kg	2.00
1522 Mercury by CVAA, sw, 7471A Method: SW-846 7471A	U	mg/kg	0.37
0394 pH, sw, 9045C Method: SW-846 9045C	8.33	Std. Units	0.05
1198 Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
Acenaphthene	U	ug/kg	330
Acenaphthylene	U	ug/kg	330
Anthracene	U	ug/kg	330
Benzidine	U	ug/kg	1,800
Benz(a)anthracene	U	ug/kg	330
Benzo(a)pyrene	U	ug/kg	830
Benzo(b)fluoranthene	U	ug/kg	330
Benzo(ghi)perylene	U	ug/kg	330

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MSAI Sample: 83149

MSAI Group: 23234

Sample ID: 9807036-04B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, SW Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	330
	bis(2-Chloroethoxy)methane	U	ug/kg	330
	bis(2-Chloroethyl)ether	U	ug/kg	330
	bis(2-Chloroisopropyl)ether	U	ug/kg	330
	bis(2-Ethylhexyl)phthalate	U	ug/kg	330
	4-Bromophenyl-phenyl ether	U	ug/kg	330
	Butylbenzyl phthalate	U	ug/kg	830
	2-Chloronaphthalene	U	ug/kg	330
	4-Chlorophenyl-phenyl ether	U	ug/kg	330
	Chrysene	U	ug/kg	330
	Dibenz(a,h)anthracene	U	ug/kg	330
	1,2-Dichlorobenzene	U	ug/kg	330
	1,3-Dichlorobenzene	U	ug/kg	330
	1,4-Dichlorobenzene	U	ug/kg	330
	3,3'-Dichlorobenzidine	U	ug/kg	330
	Diethyl phthalate	U	ug/kg	330
	Dimethyl phthalate	U	ug/kg	330
	Di-N-butyl phthalate	U	ug/kg	830
	2,4-Dinitrotoluene	U	ug/kg	330
	2,6-Dinitrotoluene	U	ug/kg	330
	Di-N-octyl phthalate	U	ug/kg	330
	1,2-Diphenylhydrazine	U	ug/kg	330
	Fluoranthene	U	ug/kg	330
	Fluorene	U	ug/kg	330
	Hexachlorobenzene	U	ug/kg	330
	Hexachlorobutadiene	U	ug/kg	330
	Hexachlorocyclopentadiene	U	ug/kg	330
	Hexachloroethane	U	ug/kg	330
	Indeno(1,2,3-cd)pyrene	U	ug/kg	330
	Isophorone	U	ug/kg	330
	Naphthalene	U	ug/kg	330
	Nitrobenzene	U	ug/kg	330
	N-Nitrosodimethylamine	U	ug/kg	330
	N-Nitrosodi-N-propylamine	U	ug/kg	330
	N-Nitrosodiphenylamine	U	ug/kg	330
	Phenanthrene	U	ug/kg	330
	Pyrene	U	ug/kg	330

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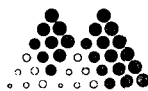
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The Quality Solution

MSAI Sample: 83149

MSAI Group: 23234

Sample ID: 9807036-04B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	330
	2-Chlorophenol	U	ug/kg	830
	2,4-Dichlorophenol	U	ug/kg	830
	2,4-Dimethylphenol	U	ug/kg	830
	4,6-Dinitro-2-methylphenol	U	ug/kg	830
	2,4-Dinitrophenol	U	ug/kg	830
	2-Nitrophenol	U	ug/kg	830
	4-Nitrophenol	U	ug/kg	830
	4-Chloro-3-methylphenol	U	ug/kg	830
	Pentachlorophenol	U	ug/kg	830
	Phenol	U	ug/kg	830
	2,4,6-Trichlorophenol	U	ug/kg	830
	2-Methylphenol (o-Cresol)	U	ug/kg	830
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

B - Detected, below limit of quantitation but above the method detection limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

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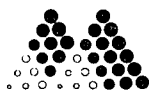
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On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

MSAI Sample: 83150
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9807036-05B

Matrix: Soil

Thriftway Refinery Fire Water Pond Sample #5 (12)

Test	Analysis	Results as Received	Units	Limit of Quantitation
0390I	Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408	Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000	Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
	Arsenic	U	mg/kg	18
	Barium	88.3	mg/kg	1.5
	Cadmium	U	mg/kg	2.00
	Chromium	4 B	mg/kg	5.00
	Lead	6 B	mg/kg	25
	Selenium	U	mg/kg	30
	Silver	0.6 B	mg/kg	2.00
1522	Mercury by CVAA, sw, 7471A Method: SW-846 7471A	U	mg/kg	0.37
0394	pH, sw, 9045C Method: SW-846 9045C	8.00	Std. Units	0.05
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Acenaphthene	U	ug/kg	330
	Acenaphthylene	U	ug/kg	330
	Anthracene	U	ug/kg	330
	Benzidine	U	ug/kg	1,800
	Benz(a)anthracene	U	ug/kg	330
	Benzo(a)pyrene	U	ug/kg	830
	Benzo(b)fluoranthene	U	ug/kg	330
	Benzo(ghi)perylene	U	ug/kg	330

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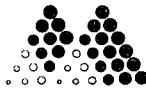
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The Quality Solution

MSAI Sample: 83150

MSAI Group: 23234

Sample ID: 9807036-05B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	330
	bis(2-Chloroethoxy)methane	U	ug/kg	330
	bis(2-Chloroethyl)ether	U	ug/kg	330
	bis(2-Chloroisopropyl)ether	U	ug/kg	330
	bis(2-Ethylhexyl)phthalate	U	ug/kg	330
	4-Bromophenyl-phenyl ether	U	ug/kg	330
	Butylbenzyl phthalate	U	ug/kg	830
	2-Chloronaphthalene	U	ug/kg	330
	4-Chlorophenyl-phenyl ether	U	ug/kg	330
	Chrysene	U	ug/kg	330
	Dibenz(a,h)anthracene	U	ug/kg	330
	1,2-Dichlorobenzene	U	ug/kg	330
	1,3-Dichlorobenzene	U	ug/kg	330
	1,4-Dichlorobenzene	U	ug/kg	330
	3,3'-Dichlorobenzidine	U	ug/kg	330
	Diethyl phthalate	U	ug/kg	330
	Dimethyl phthalate	U	ug/kg	330
	Di-N-butyl phthalate	U	ug/kg	830
	2,4-Dinitrotoluene	U	ug/kg	330
	2,6-Dinitrotoluene	U	ug/kg	330
	Di-N-octyl phthalate	U	ug/kg	330
	1,2-Diphenylhydrazine	U	ug/kg	330
	Fluoranthene	U	ug/kg	330
	Fluorene	U	ug/kg	330
	Hexachlorobenzene	U	ug/kg	330
	Hexachlorobutadiene	U	ug/kg	330
	Hexachlorocyclopentadiene	U	ug/kg	330
	Hexachloroethane	U	ug/kg	330
	Indeno(1,2,3-cd)pyrene	U	ug/kg	330
	Isophorone	U	ug/kg	330
	Naphthalene	U	ug/kg	330
	Nitrobenzene	U	ug/kg	330
	N-Nitrosodimethylamine	U	ug/kg	330
	N-Nitrosodi-N-propylamine	U	ug/kg	330
	N-Nitrosodiphenylamine	U	ug/kg	330
	Phenanthrene	U	ug/kg	330
	Pyrene	U	ug/kg	330

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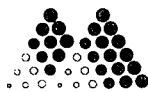
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The Quality Solution

MSAI Sample: 83150

MSAI Group: 23234

Sample ID: 9807036-05B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	330
	2-Chlorophenol	U	ug/kg	830
	2,4-Dichlorophenol	U	ug/kg	830
	2,4-Dimethylphenol	U	ug/kg	830
	4,6-Dinitro-2-methylphenol	U	ug/kg	830
	2,4-Dinitrophenol	U	ug/kg	830
	2-Nitrophenol	U	ug/kg	830
	4-Nitrophenol	U	ug/kg	830
	4-Chloro-3-methylphenol	U	ug/kg	830
	Pentachlorophenol	U	ug/kg	830
	Phenol	U	ug/kg	830
	2,4,6-Trichlorophenol	U	ug/kg	830
	2-Methylphenol (o-Cresol)	U	ug/kg	830
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

B - Detected, below limit of quantitation but above the method detection limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

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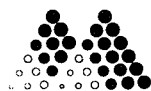
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e-mail: service@msailabs.com

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e-mail: gbrewer@msailabs.com





Mountain States Analytical, Inc.

The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Soil Samples

Sample ID: 9807036-06B

Matrix: Soil

MSAI Sample: 83151
MSAI Group: 23234
Date Reported: 08/06/98
Discard Date: 09/05/98
Date Submitted: 07/16/98
Date Sampled: 07/13/98
Collected by:
Purchase Order:
Project No.:

Thriftway Refinery Fire Water Pond Sample #6 (a)

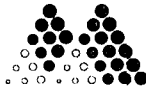
Test Analysis	Results as Received	Units	Limit of Quantitation
03901 Flame/ICP Prep, sw, 3050A Method: SW-846 3050A	Batch. s437		
0408 Mercury Prep CVAA, sw, 7471A Method: SW-846 7471A	Batch. s031		
13000 Metals by ICP, 6010A, s/sw Method: SW-846 6010A			
Arsenic	U	mg/kg	18
Barium	100	mg/kg	1.5
Cadmium	U	mg/kg	2.00
Chromium	5.07	mg/kg	5.00
Lead	6 B	mg/kg	25
Selenium	U	mg/kg	30
Silver	U	mg/kg	2.00
1522 Mercury by CVAA, sw, 7471A Method: SW-846 7471A	0.088 B	mg/kg	0.37
0394 pH, sw, 9045C Method: SW-846 9045C	7.95	Std. Units	0.05
1198 Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
Acenaphthene	U	ug/kg	(1) 1,700
Acenaphthylene	U	ug/kg	1,700
Anthracene	U	ug/kg	1,700
Benzidine	U	ug/kg	9,000
Benz(a)anthracene	371 J	ug/kg	1,700
Benzo(a)pyrene	350 J	ug/kg	4,200
Benzo(b)fluoranthene	176 J	ug/kg	1,700
Benzo(ghi)perylene	U	ug/kg	1,700

10
Years of
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Mountain States Analytical, Inc.

Page 2

On Site Technologies, Ltd.

The Quality Solution

MSAI Sample: 83151

MSAI Group: 23234

Sample ID: 9807036-06B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	Benzo(k)fluoranthene	U	ug/kg	1,700
	bis(2-Chloroethoxy)methane	U	ug/kg	1,700
	bis(2-Chloroethyl)ether	U	ug/kg	1,700
	bis(2-Chloroisopropyl)ether	U	ug/kg	1,700
	bis(2-Ethylhexyl)phthalate	U	ug/kg	1,700
	4-Bromophenyl-phenyl ether	U	ug/kg	1,700
	Butylbenzyl phthalate	U	ug/kg	4,200
	2-Chloronaphthalene	U	ug/kg	1,700
	4-Chlorophenyl-phenyl ether	U	ug/kg	1,700
	Chrysene	1,300 J	ug/kg	1,700
	Dibenz(a,h)anthracene	U	ug/kg	1,700
	1,2-Dichlorobenzene	U	ug/kg	1,700
	1,3-Dichlorobenzene	U	ug/kg	1,700
	1,4-Dichlorobenzene	U	ug/kg	1,700
	3,3'-Dichlorobenzidine	U	ug/kg	1,700
	Diethyl phthalate	U	ug/kg	1,700
	Dimethyl phthalate	U	ug/kg	1,700
	Di-N-butyl phthalate	U	ug/kg	4,200
	2,4-Dinitrotoluene	U	ug/kg	1,700
	2,6-Dinitrotoluene	U	ug/kg	1,700
	Di-N-octyl phthalate	U	ug/kg	1,700
	1,2-Diphenylhydrazine	U	ug/kg	1,700
	Fluoranthene	U	ug/kg	1,700
	Fluorene	U	ug/kg	1,700
	Hexachlorobenzene	U	ug/kg	1,700
	Hexachlorobutadiene	U	ug/kg	1,700
	Hexachlorocyclopentadiene	U	ug/kg	1,700
	Hexachloroethane	U	ug/kg	1,700
	Indeno(1,2,3-cd)pyrene	U	ug/kg	1,700
	Isophorone	U	ug/kg	1,700
	Naphthalene	U	ug/kg	1,700
	Nitrobenzene	U	ug/kg	1,700
	N-Nitrosodimethylamine	U	ug/kg	1,700
	N-Nitrosodi-N-propylamine	U	ug/kg	1,700
	N-Nitrosodiphenylamine	U	ug/kg	1,700
	Phenanthrene	U	ug/kg	1,700
	Pyrene	888 J	ug/kg	1,700

10
Years of
Quality
Service

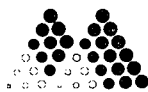
Corporate Office

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Mountain States Analytical, Inc.

Page 3

On Site Technologies, Ltd.

The Quality Solution

MSAI Sample: 83151

MSAI Group: 23234

Sample ID: 9807036-06B

Test	Analysis	Results as Received	Units	Limit of Quantitation
1198	Semi-VOA, PPL, 8270A, sw Method: SW-846 8270A			
	1,2,4-Trichlorobenzene	U	ug/kg	1,700
	2-Chlorophenol	U	ug/kg	4,200
	2,4-Dichlorophenol	U	ug/kg	4,200
	2,4-Dimethylphenol	U	ug/kg	4,200
	4,6-Dinitro-2-methylphenol	U	ug/kg	4,200
	2,4-Dinitrophenol	U	ug/kg	4,200
	2-Nitrophenol	U	ug/kg	4,200
	4-Nitrophenol	U	ug/kg	4,200
	4-Chloro-3-methylphenol	U	ug/kg	4,200
	Pentachlorophenol	U	ug/kg	4,200
	Phenol	U	ug/kg	4,200
	2,4,6-Trichlorophenol	U	ug/kg	4,200
	2-Methylphenol (o-Cresol)	U	ug/kg	4,200
3005	SVOA Extraction, s/sw Method: SW-846 3550A	Complete	ug/kg	

(1) Sample 83151 was diluted by a factor of five due to the dark color and high viscosity of the sample extract. The LOQs were adjusted accordingly.

U - Not detected at the Method Detection Limit.

J - Compound Detected below the Limit of Quantitation.

B - Detected, below limit of quantitation but above the method detection limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

10
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Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

08/06/98
15:50:46
Group: 23234

Analysis Batch Number: 1522 -07/23/98-107 -1

Test Identification : 1522 -Mercury by CVAA, sw, 7471A

Sequence : 1522 -1

Number of Samples : 8

Batch Data-Date/Time : 07/23/98 / 16:44:33

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBS1-031	Mercury	ND	0.1000

SPIKE		QC LIMITS				
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER UPPER
23173-82928	Mercury	0.4150	10.2470	10.0260	-53.3(2k)	80.0 120.0

MSD		QC LIMITS						
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER UPPER	RPD #	LIMIT
23173-82928	Mercury	0.4150	10.2470	10.0210	-54.5(2k)	80.0 120.0	0.0	20.0

DUPLICATE						
SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
23173-82928	Mercury	10.2470	10.0360	2.1	20.0	10.00

CONTROL		QC LIMITS			
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER UPPER
LCSS-031	Mercury	2.9230	3.2300	90.5	47.9 182.3

		QC LIMITS			
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER UPPER
ICV-	Mercury	3.0000	3.0690	102.3	90.0 110.0
CCV--2	Mercury	5.0000	5.1170	102.3	80.0 120.0
CCV--3	Mercury	5.0000	5.0100	100.2	80.0 120.0
CCV--4	Mercury	5.0000	4.9560	99.1	80.0 120.0
CCV--5	Mercury	5.0000	4.9580	99.2	80.0 120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000

----- Result Footnotes -----

(2k) - Sample concentration >4X spk added. Serial dilution was recovered within 10% limits.

Groups & Samples

23138-82845 23173-82928 23234-83146 23234-83147 23234-83148 23234-83149 23234-83150 23234-83151

Analysis Batch Number: ICPSO-07/30/98-118 -3

Test Identification : ICPSO-*Metal Soils by ICP

Sequence : DATA211

Number of Samples : 14

Batch Data-Date/Time : 08/03/98 / 11:35:11

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBS1-437	Aluminum	0.0744(XX)	0.0500
	Arsenic	ND	0.0300
	Barium	0.0012	0.0030
	Beryllium	0.0003	0.0003
	Calcium	0.1327	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0025	0.0100
	Copper	0.0105(1d)	0.0100
	Nickel	0.0117	0.0200
	Lead	ND	0.0400
	Antimony	0.0593	0.1000
	Selenium	0.0068	0.0700
	Thallium	0.0537	0.1000
	Vanadium	0.0010	0.0030
	Zinc	0.0446(XX)	0.0250
PBS2-437-2	Aluminum	0.0882(XX)	0.0500
	Arsenic	ND	0.0300
	Barium	0.0011	0.0030
	Beryllium	0.0002	0.0003
	Calcium	0.1030	0.4000
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	0.0054	0.0100
	Nickel	ND	0.0200
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0042	0.0700
	Thallium	0.0136	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0579(XX)	0.0250

SPIKE						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
23226-83123	Aluminum	200.0000	3291.2910	3555.4119	132.1(XX)	80.0	120.0
	Arsenic	200.0000	6.0750	188.1901	91.1	80.0	120.0
	Barium	200.0000	57.0710	233.6000	88.3	80.0	120.0
	Beryllium	5.0000	0.7790	5.2218	88.9	80.0	120.0
	Calcium	100.0000	26666.8060	25066.5525	***** (B)	80.0	120.0
	Cadmium	5.0000	1.1490	6.3307	103.6	80.0	120.0
	Chromium	20.0000	112.8210	120.0010	35.9(2h)	80.0	120.0
	Copper	25.0000	68.1610	103.7446	142.3(2c)	80.0	120.0
	Nickel	50.0000	25.0670	75.3495	100.6	80.0	120.0
	Lead	50.0000	4398.7710	4174.8555	-447.8(2h)	80.0	120.0
	Antimony	100.0000	9.1780	62.9426	53.8(2c)	80.0	120.0
	Selenium	200.0000	7.9620	182.2733	87.2	80.0	120.0
	Thallium	200.0000	-1.5310	175.5624	88.5	80.0	120.0
	Vanadium	50.0000	35.4570	83.1723	95.4	80.0	120.0
	Zinc	50.0000	230.2700	228.8188	-2.9(XX)	80.0	120.0

Analysis Batch Number: ICPSO-07/30/98-118 -3
 Test Identification : ICPSO-*Metal Soils by ICP
 Number of Samples : 14
 Batch Data-Date/Time : 08/03/98 / 11:35:11

Sequence : DATA211

MSD		QC LIMITS							
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
23226-83123	Aluminum	200.0000	3291.2910	3862.3210	285.5(XX)	80.0	120.0	8.3	20.0
	Arsenic	200.0000	6.0750	196.5010	95.2	80.0	120.0	4.3	20.0
	Barium	200.0000	57.0710	252.6320	97.8	80.0	120.0	7.8	20.0
	Beryllium	5.0000	0.7790	5.5790	96.0	80.0	120.0	6.6	20.0
	Calcium	100.0000	26666.8060	27264.2240	597.4(B)	80.0	120.0	8.4	20.0
	Cadmium	5.0000	1.1490	7.1630	120.3(B)	80.0	120.0	12.3	20.0
	Chromium	20.0000	112.8210	169.2590	282.2(2h)	80.0	120.0	34.1(2h)	20.0
	Copper	25.0000	68.1610	98.2970	120.5(2c)	80.0	120.0	5.4	20.0
	Nickel	50.0000	25.0670	68.1240	86.1	80.0	120.0	10.1	20.0
	Lead	50.0000	4398.7710	6786.3540	4775.2(2h)	80.0	120.0	47.6(2h)	20.0
	Antimony	100.0000	9.1780	83.2250	74.0(2c)	80.0	120.0	27.8(2c)	20.0
	Selenium	200.0000	7.9620	199.9810	96.0	80.0	120.0	9.3	20.0
	Thallium	200.0000	-1.5310	182.3660	91.9	80.0	120.0	3.8	20.0
	Vanadium	50.0000	35.4570	82.5240	94.1	80.0	120.0	0.8	20.0
	Zinc	50.0000	230.2700	273.3000	86.1	80.0	120.0	17.7	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
23226-83123	Aluminum	3291.2910	2405.6390	31.1(XX)	20.0	1.00
	Arsenic	6.0750	6.5960	8.2	20.0	1.00
	Barium	57.0710	38.5960	38.6(B)	20.0	1.00
	Beryllium	0.7790	0.5320	37.7(B)	20.0	1.00
	Calcium	26666.8060	19559.3580	30.8(B)	20.0	1.00
	Cadmium	1.1490	0.9690	17.0	20.0	1.00
	Chromium	112.8210	84.1050	29.2(B)	20.0	1.00
	Copper	68.1610	38.7500	55.0(B)	20.0	1.00
	Nickel	25.0670	13.3860	60.8(B)	20.0	1.00
	Lead	4398.7710	3909.5440	11.8	20.0	1.00
	Antimony	0.0918	0.0793	14.6	20.0	1.00
	Selenium	0.0796	0.0433	59.1(5a)	20.0	1.00
	Thallium	-1.5310	0.0000	200.0(5a)	20.0	1.00
	Vanadium	35.4570	23.5600	40.3(B)	20.0	1.00
	Zinc	230.2700	162.4730	34.5(B)	20.0	1.00

CONTROL

		QC LIMITS			
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER UPPER
LC5W-437	Aluminum	2.1454	2.0000	107.3	80.0 120.0
	Arsenic	1.9373	2.0000	96.9	80.0 120.0
	Barium	1.9797	2.0000	99.0	80.0 120.0
	Beryllium	0.0494	0.0500	98.8	80.0 120.0
	Calcium	2.3125	2.0000	115.6	80.0 120.0
	Cadmium	0.0483	0.0500	96.7	80.0 120.0
	Chromium	0.2048	0.2000	102.4	80.0 120.0
	Copper	0.2492	0.2500	99.7	80.0 120.0
	Nickel	0.4997	0.5000	99.9	80.0 120.0
	Lead	0.4874	0.5000	97.5	80.0 120.0
	Antimony	0.9542	9.0000	10.6	0.0 200.0
	Selenium	1.9440	19.9000	9.8	4.2 196.0
	Thallium	2.0383	2.4200	84.2	19.0 180.0

Analysis Batch Number: ICPSO-07/30/98-118 -3

Test Identification : ICPSO-*Metal Soils by ICP

Sequence : DATA211

Number of Samples : 14

Batch Data-Date/Time : 08/03/98 / 11:35:11

CONTROL		QC LIMITS				
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
LCSW-437	Vanadium	0.5044	0.5000	100.9	80.0	120.0
	Zinc	0.6006	0.5000	120.1(XX)	80.0	120.0
LCSS-437-2	Aluminum	17134.5257	15333.0000	111.7	75.3	124.7
	Arsenic	8.4307	6.9100	122.0	44.9	154.8
	Barium	1318.1654	852.9000	154.6	11.4	188.5
	Beryllium	0.7723	0.6100	126.6	24.6	175.4
	Calcium	130204.7871	119477.0000	109.0	81.0	119.0
	Cadmium	15.8654	13.7000	115.8	78.8	121.2
	Chromium	47.3277	41.3000	114.6	72.6	127.1
	Copper	543.8594	465.4000	116.9	82.1	118.0
	Nickel	29.5960	26.0000	113.8	65.0	135.4
	Lead	100.6109	89.2000	112.8	70.5	128.9
	Antimony	0.0000	9.0000	0.0	0.0	200.0
	Selenium	39.3584	19.9000	197.8(H)	4.2	196.0
	Thallium	3.0852	2.4200	127.5	19.0	180.0
	Vanadium	121.9366	108.7000	112.2	79.9	119.6
	Zinc	739.0624	625.2000	118.2	74.9	125.2

		QC LIMITS				
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
ICV-	Aluminum	20.0000	21.0755	105.4	90.0	110.0
	Arsenic	1.6000	1.6239	101.5	90.0	110.0
	Barium	4.0000	3.9908	99.8	90.0	110.0
	Beryllium	0.4000	0.4049	101.2	90.0	110.0
	Calcium	40.0000	41.4178	103.5	90.0	110.0
	Cadmium	4.0000	4.0595	101.5	90.0	110.0
	Chromium	4.0000	4.1212	103.0	90.0	110.0
	Copper	4.0000	3.9994	100.0	90.0	110.0
	Nickel	8.0000	8.1416	101.8	90.0	110.0
	Lead	20.0000	20.0298	100.1	90.0	110.0
	Antimony	4.0000	4.2052	105.1	90.0	110.0
	Selenium	1.6000	1.6147	100.9	90.0	110.0
	Thallium	4.0000	4.0146	100.4	90.0	110.0
	Vanadium	1.6000	1.6112	100.7	90.0	110.0
	Zinc	4.0000	4.0621	101.6	90.0	110.0
CCV1--2	Aluminum	20.0000	21.2107	106.1	90.0	110.0
	Arsenic	1.6000	1.6439	102.7	90.0	110.0
	Barium	4.0000	3.9882	99.7	90.0	110.0
	Beryllium	0.4000	0.4082	102.1	90.0	110.0
	Calcium	40.0000	41.6332	104.1	90.0	110.0
	Cadmium	4.0000	4.0918	102.3	90.0	110.0
	Chromium	4.0000	4.1618	104.0	90.0	110.0
	Copper	4.0000	4.0169	100.4	90.0	110.0
	Nickel	8.0000	8.2356	102.9	90.0	110.0
	Lead	20.0000	20.2579	101.3	90.0	110.0
	Antimony	4.0000	4.1534	103.8	90.0	110.0
	Selenium	1.6000	1.6684	104.3	90.0	110.0
	Thallium	4.0000	4.1328	103.3	90.0	110.0
	Vanadium	1.6000	1.6218	101.4	90.0	110.0

Analysis Batch Number: ICPSO-07/30/98-118 -3

Test Identification : ICPSO-*Metal Soils by ICP

Sequence : DATA211

Number of Samples : 14

Batch Data-Date/Time : 08/03/98 / 11:35:11

CCV #	ANALYTE	QC LIMITS				
		TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
CCV1--2	Zinc	4.0000	4.0870	102.2	90.0	110.0
CCV2--3	Aluminum	20.0000	21.1617	105.8	90.0	110.0
	Arsenic	1.6000	1.6390	102.4	90.0	110.0
	Barium	4.0000	3.9916	99.8	90.0	110.0
	Beryllium	0.4000	0.4090	102.3	90.0	110.0
	Calcium	40.0000	41.4805	103.7	90.0	110.0
	Cadmium	4.0000	4.1021	102.6	90.0	110.0
	Chromium	4.0000	4.1718	104.3	90.0	110.0
	Copper	4.0000	4.0214	100.5	90.0	110.0
	Nickel	8.0000	8.2570	103.2	90.0	110.0
	Lead	20.0000	20.1816	100.9	90.0	110.0
	Antimony	4.0000	4.1811	104.5	90.0	110.0
	Selenium	1.6000	1.6624	103.9	90.0	110.0
	Thallium	4.0000	4.1251	103.1	90.0	110.0
	Vanadium	1.6000	1.6198	101.2	90.0	110.0
	Zinc	4.0000	4.0894	102.2	90.0	110.0
CCV3--4	Aluminum	20.0000	20.9995	105.0	90.0	110.0
	Arsenic	1.6000	1.6589	103.7	90.0	110.0
	Barium	4.0000	3.9816	99.5	90.0	110.0
	Beryllium	0.4000	0.4066	101.6	90.0	110.0
	Calcium	40.0000	41.4434	103.6	90.0	110.0
	Cadmium	4.0000	4.0896	102.2	90.0	110.0
	Chromium	4.0000	4.1508	103.8	90.0	110.0
	Copper	4.0000	4.0015	100.0	90.0	110.0
	Nickel	8.0000	8.2065	102.6	90.0	110.0
	Lead	20.0000	20.2384	101.2	90.0	110.0
	Antimony	4.0000	4.1708	104.3	90.0	110.0
	Selenium	1.6000	1.6541	103.4	90.0	110.0
	Thallium	4.0000	4.0475	101.2	90.0	110.0
	Vanadium	1.6000	1.6171	101.1	90.0	110.0
	Zinc	4.0000	4.0849	102.1	90.0	110.0
CCV4--5	Aluminum	20.0000	21.0120	105.1	90.0	110.0
	Arsenic	1.6000	1.6341	102.1	90.0	110.0
	Barium	4.0000	3.9876	99.7	90.0	110.0
	Beryllium	0.4000	0.4049	101.2	90.0	110.0
	Calcium	40.0000	41.1435	102.9	90.0	110.0
	Cadmium	4.0000	4.0724	101.8	90.0	110.0
	Chromium	4.0000	4.1409	103.5	90.0	110.0
	Copper	4.0000	3.9992	100.0	90.0	110.0
	Nickel	8.0000	8.1682	102.1	90.0	110.0
	Lead	20.0000	20.1946	101.0	90.0	110.0
	Antimony	4.0000	4.2274	105.7	90.0	110.0
	Selenium	1.6000	1.6740	104.6	90.0	110.0
	Thallium	4.0000	4.1161	102.9	90.0	110.0
	Vanadium	1.6000	1.6107	100.7	90.0	110.0
	Zinc	4.0000	4.0740	101.8	90.0	110.0

Analysis Batch Number: ICPSO-07/30/98-118 -3

Test Identification : ICPSO-*Metal Soils by ICP

Sequence : DATA211

Number of Samples : 14

Batch Data-Date/Time : 08/03/98 / 11:35:11

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Aluminum	0.0147	0.0500
	Arsenic	0.0055	0.0300
	Barium	0.0001	0.0030
	Beryllium	0.0002	0.0002
	Calcium	0.0178	0.4000
	Cadmium	0.0007	0.0040
	Chromium	0.0006	0.0100
	Copper	0.0026	0.0100
	Nickel	ND	0.0200
	Lead	ND	0.0400
	Antimony	0.0163	0.1000
	Selenium	0.0534	0.0700
	Thallium	ND	0.1000
	Vanadium	0.0003	0.0030
	Zinc	ND	0.0250
CCB1-	Aluminum	0.0176	0.0500
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Beryllium	0.0001	0.0002
	Calcium	0.0172	0.4000
	Cadmium	0.0004	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Nickel	ND	0.0200
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0162	0.0700
	Thallium	0.0159	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0250
CCB2-	Aluminum	0.0170	0.0500
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Beryllium	0.0001	0.0002
	Calcium	0.0266	0.4000
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Nickel	ND	0.0200
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0009	0.0700
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0250
CCB2-	Aluminum	0.0177	0.0500
	Arsenic	ND	0.0300
	Barium	0.0001	0.0030
	Beryllium	0.0001	0.0002
	Calcium	0.0279	0.4000

Analysis Batch Number: ICPSO-07/30/98-118 -3

Test Identification : ICPSO-*Metal Soils by ICP

Sequence : DATA211

Number of Samples : 14

Batch Data-Date/Time : 08/03/98 / 11:35:11

CCB#	ANALYTE	CONC. FOUND #	CONC. LIMIT
CCB2-	Cadmium	0.0001	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Nickel	0.0013	0.0200
	Lead	ND	0.0400
	Antimony	0.0052	0.1000
	Selenium	0.0199	0.0700
	Thallium	0.0050	0.1000
	Vanadium	0.0004	0.0030
	Zinc	ND	0.0250
CCB3-	Aluminum	0.0109	0.0500
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Beryllium	0.0001	0.0002
	Calcium	0.0207	0.4000
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Nickel	ND	0.0200
	Lead	0.0038	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Thallium	0.0185	0.1000
	Vanadium	0.0001	0.0030
	Zinc	ND	0.0250
CCB4-	Aluminum	0.0196	0.0500
	Arsenic	0.0040	0.0300
	Barium	0.0002	0.0030
	Beryllium	0.0001	0.0002
	Calcium	0.0454	0.4000
	Cadmium	0.0009	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Nickel	0.0005	0.0200
	Lead	ND	0.0400
	Antimony	0.0053	0.1000
	Selenium	0.0111	0.0700
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0250

----- Result Footnotes -----

(XX) - Analyte was not reported from this run

(1d) - The preparation blank concentration is less than 5% of the regulatory limit

(B) - Nonhomogeneous sample

(2h) - Sample concentration >4X spk added. PDS was recovered within limits.

(2c) - Spike result outside limits. PDS is within acceptance limits.

(5a) - Duplicates not evaluated: Results are <10x detection limit

(H) - LCS reference value below LOQ

Analysis Batch Number: ICPSO-07/30/98-118 -3
Test Identification : ICPSO-*Metal Soils by ICP
Number of Samples : 14
Batch Data-Date/Time : 08/03/98 / 11:35:11

Sequence : DATA211

Groups & Samples

23225-83115	23226-83123	23234-83146	23234-83147	23234-83148	23234-83149	23234-83150	23234-83151
23256-83260	23256-83261	23259-83275	23259-83276	23259-83277	23259-83278		

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting07/27/98
09:13:56
Group: 23234

Analysis Batch Number: 0394 -07/22/98-147 -1

Test Identification : 0394 -pH, sw, 9045C

Sequence :

Number of Samples : 7

Batch Data-Date/Time : 07/23/98 / 12:44:00

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
23234-83146	pH of soil slurry	7.2400	7.2100	0.4	1.4	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS	
					LOWER	UPPER
LCS-1	pH of soil slurry	3.9600	4.0000	99.0	97.1	104.1
LCS-2	pH of soil slurry	4.0200	4.0000	100.5	97.1	104.1

Groups & Samples

23234-83146	23234-83147	23234-83148	23234-83149	23234-83150	23234-83151
-------------	-------------	-------------	-------------	-------------	-------------

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK

Lab Name: MOUNTAIN STATES

Contract:

Lab Code: MSAI

Case No.:

SAS No.:

SDG No.: 980727C

Matrix: (soil/water) SOIL

Lab Sample ID: 980722SB

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: X4210

Level: (low/med) LOW

Date Received: _____

% Moisture: 0 decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 07/27/98

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

108-95-2-----	Phenol	830	U
111-44-4-----	bis(2-Chloroethyl) ether	330	U
95-57-8-----	2-Chlorophenol	830	U
541-73-1-----	1,3-Dichlorobenzene	330	U
106-46-7-----	1,4-Dichlorobenzene	330	U
95-50-1-----	1,2-Dichlorobenzene	330	U
95-48-7-----	2-Methylphenol (o-Cresol)	830	U
108-60-1-----	bis(2-Chloroisopropyl) ether	330	U
621-64-7-----	N-Nitrosodi-N-propylamine	330	U
67-72-1-----	Hexachloroethane	330	U
98-95-3-----	Nitrobenzene	330	U
78-59-1-----	Isophorone	330	U
105-67-9-----	2,4-Dimethylphenol	830	U
88-75-5-----	2-Nitrophenol	830	U
111-91-1-----	bis(2-Chloroethoxy) methane	330	U
120-83-2-----	2,4-Dichlorophenol	830	U
120-82-1-----	1,2,4-Trichlorobenzene	330	U
91-20-3-----	Naphthalene	330	U
87-68-3-----	Hexachlorobutadiene	330	U
59-50-7-----	4-Chloro-3-methylphenol	830	U
77-47-4-----	Hexachlorocyclopentadiene	670	U
88-06-2-----	2,4,6-Trichlorophenol	830	U
95-95-4-----	2,4,5-Trichlorophenol	830	U
91-58-7-----	2-Chloronaphthalene	330	U
131-11-3-----	Dimethyl phthalate	330	U
606-20-2-----	2,6-Dinitrotoluene	330	U
208-96-8-----	Acenaphthylene	330	U
51-28-5-----	2,4-Dinitrophenol	830	U
83-32-9-----	Acenaphthene	330	U
100-02-7-----	4-Nitrophenol	830	U
121-14-2-----	2,4-Dinitrotoluene	330	U
84-66-2-----	Diethyl phthalate	330	U
7005-72-3-----	4-Chlorophenyl-phenyl ether	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK

Lab Name: MOUNTAIN STATES

Contract:

Lab Code: MSAI

Case No.:

SAS No.:

SDG No.: 980727C

Matrix: (soil/water) SOIL

Lab Sample ID: 980722SB

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: X4210

Level: (low/med) LOW

Date Received: _____

% Moisture: 0 decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 07/27/98

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

86-73-7-----	Fluorene	330	U
534-52-1-----	4,6-Dinitro-2-methylphenol	830	U
86-30-6-----	N-Nitrosodiphenylamine (1)	330	U
101-55-3-----	4-Bromophenyl-phenyl ether	330	U
118-74-1-----	Hexachlorobenzene	330	U
87-86-5-----	Pentachlorophenol	830	U
85-01-8-----	Phenanthrene	330	U
120-12-7-----	Anthracene	330	U
84-74-2-----	Di-N-butylphthalate	330	U
206-44-0-----	Fluoranthene	330	U
129-00-0-----	Pyrene	330	U
85-68-7-----	Butylbenzyl phthalate	330	U
117-81-7-----	bis(2-Ethylhexyl)phthalate	330	U
91-94-1-----	3,3'-Dichlorobenzidine	330	U
56-55-3-----	Benz(a)anthracene	330	U
218-01-9-----	Chrysene	330	U
117-84-0-----	Di-N-octyl phthalate	330	U
205-99-2-----	Benzo(b)fluoranthene	330	U
207-08-9-----	Benzo(k)fluoranthene	330	U
50-32-8-----	Benzo(a)pyrene	330	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	330	U
53-70-3-----	Dibenz(a,h)anthracene	330	U
191-24-2-----	Benzo(ghi)perylene	330	U
122-66-7-----	1,2-Diphenylhydrazine	330	U
92-87-5-----	Benzidine	3300	U
10595-95-6-----	N-Nitrosomethylethylamine	330	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: MOUNTAIN STATES

Contract:

Lab Code: MSAI

Case No.:

SAS No.:

SDG No.: 980728C

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	MAPEP98S5	71	79	66	72	78	85			0
02	REPLICATE1	76	82	68	74	87	90			0
03	01B	69	80	60	71	74	99			0
04	02B	73	82	63	73	81	100			0
05	03B	72	83	63	73	89	100			0
06	04B	70	81	60	71	87	96			0
07	05B	64	74	55	63	80	85			0
08	06B	76	87	66	79	88	97			0
09										
10										
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30										

QC LIMITS

S1 (2FP) = 2-Fluorophenol (25-121)
 S2 (PHL) = Phenol-d6 (24-113)
 S3 (NBZ) = Nitrobenzene-d5 (23-120)
 S4 (FBP) = 2-Fluorobiphenyl (30-115)
 S5 (TBP) = 2,4,6-Tribromophenol (19-122)
 S6 (TPH) = Terphenyl-d14 (18-137)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MOUNTAIN STATES

Contract:

Lab Code: MSAI

Case No.:

SAS No.:

SDG No.: 980727C

Matrix Spike - EPA Sample No.: M2138

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	3330	4960	7910	88	5-112
2-Chlorophenol	3330	240	2700	74	23-134
1,4-Dichlorobenzene	3330	205	2600	72	20-124
N-Nitrosodi-N-propylami	3330	296	3060	83	1-230
1,2,4-Trichlorobenzene	3330	231	2820	78	44-142
4-Chloro-3-methylphenol	3330	558	3070	75	22-147
Acenaphthene	3330	478	3170	81	47-145
4-Nitrophenol	3330	482	1800	40	1-132
2,4-Dinitrotoluene	3330	493	3060	77	39-139
Pentachlorophenol	3330	417	1340	28	14-176
Pyrene	3330	648	3390	82	52-115

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	3330	9630	140*	46*	42	5-112
2-Chlorophenol	3330	2640	72	3	40	23-134
1,4-Dichlorobenzene	3330	2670	74	3	28	20-124
N-Nitrosodi-N-propylami	3330	2870	77	8	38	1-230
1,2,4-Trichlorobenzene	3330	2980	82	5	28	44-142
4-Chloro-3-methylphenol	3330	2960	72	4	42	22-147
Acenaphthene	3330	3280	84	4	31	47-145
4-Nitrophenol	3330	1840	41	2	50	1-132
2,4-Dinitrotoluene	3330	3100	78	1	38	39-139
Pentachlorophenol	3330	1280	26	7	50	14-176
Pyrene	3330	3310	80	2	31	52-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 11 outside limits

Spike Recovery: 1 out of 22 outside limits

COMMENTS:

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MOUNTAIN STATES

Contract:

Lab Code: MSAI

Case No.:

SAS No.:

SDG No.: 980727C

Matrix Spike - Sample No.: SBLK

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Phenol	3330	0.00	2420	73	5-112
2-Chlorophenol	3330	0.00	2290	69	23-134
1,4-Dichlorobenzene	3330	0.00	2240	67	20-124
N-Nitrosodi-N-propylami	3330	0.00	2550	76	1-230
1,2,4-Trichlorobenzene	3330	0.00	2390	72	44-142
4-Chloro-3-methylphenol	3330	0.00	2430	73	22-147
Acenaphthene	3330	0.00	2590	78	47-145
4-Nitrophenol	3330	0.00	2630	79	1-132
2,4-Dinitrotoluene	3330	0.00	2510	75	39-139
Pentachlorophenol	3330	0.00	2210	66	14-176
Pyrene	3330	0.00	2690	81	52-115

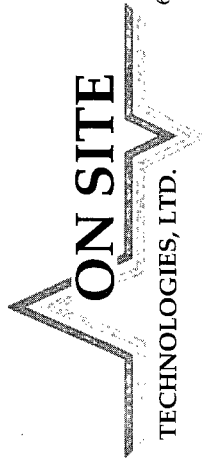
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:



CHAIN OF CUSTODY RECORD

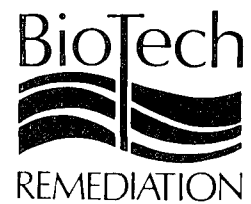
5177

Date: 7/14/93

Page 1 of 1

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.: 898-383		Job No.												
SEND INVOICE TO		Name												
Company		Company												
Address		Mailing Address												
City, State, Zip		City, State, Zip												
Sampling Location: Thantury Refinery Fire Water Pond 626 Rd 5500 Blomfield, NM 87413		Name: Terry Gaffin Company: Biotech Remediation Mailing Address: 710 E. 20th St, Suite 400 City, State, Zip: Farmington, NM 87401 Telephone No.: 327-4965 Telefax No.: 327-4965												
Sampler: Ken Smith		Title												
SAMPLE IDENTIFICATION		ANALYSIS REQUESTED												
SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	RESULTS TO									
					TPH, METAL	PH	DRO	GRO	RCR metallic	Scm. volatiles	PAH (11)	LAB ID		
7/13	1500	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	7E02071-01A/B	
7/13	1523	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	-02A/B	
7/13	1545	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	-03A/B	
7/13	1612	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	-04A/B	
7/13	1630	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	-05A/B	
7/13	1655	Soil	Soil	4	✓	✓	✓	✓	✓	✓	✓	✓	-06A/B	
Relinquished by: Ken Smith				Date/Time: 7/14/93 0830	Received by: [Signature] Date/Time: 7/14/93 0830									
Relinquished by:				Date/Time:	Received by:									Date/Time:
Relinquished by:				Date/Time:	Received by:									Date/Time:
Method of Shipment:				Rush	24-48 Hours		10 Working Days		Special Instructions:					
Authorized by: [Signature]				Date: 7/14/93	(Client Signature Must Accompany Request)									



RECEIVED

APR 01 1998

Environmental Bureau
Oil Conservation Division

710 East 20th Street, Suite 400
Farmington, New Mexico 87401

~~Field Office (505) 699-9365~~

~~Fax (505) 699-9365~~

Telephone (505) 327-4965

Facsimile (505) 564-3604

March 31, 1998

Will Olsen, Project Manager, Santa Fe Office
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

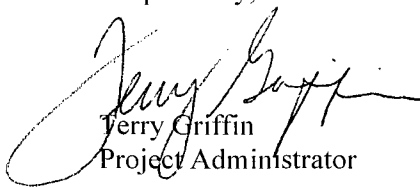
RE: Annual Ground Water Monitoring Report; Thriftway Refinery, Bloomfield, NM

Dear Mr. Olsen:

Enclosed, please find the Annual Ground Water Monitoring Report for the Thriftway Refinery, Bloomfield, New Mexico. This report is submitted in compliance with the Ground Water Discharge Plan GW-55 and pursuant to the requirements of the New Mexico Oil Conservation Division.

If you have any questions, please contact me at 505-327-4965.

Respectfully,


Terry Griffin
Project Administrator

TG/tjg

810\gc033198

cc: Denny Foust, OCD, Aztec Office



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

January 7, 1998

CERTIFIED MAIL

RETURN RECEIPT NO. P-288-259-004

Mr. Jim Ratcliffe
Transportation Director
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM 87401

**RE: Fire Water Pond Sediment Sampling and Analysis
GW-055 "Bloomfield Refinery"
Thriftway Marketing Corporation (TMC)**

Dear Mr. Ratcliffe:

The New Mexico Oil Conservation Division (OCD) has reviewed the modified work plan for the fire water pond. This document contains TMC's modified work plan for sediment sample collection and laboratory analysis of sediments in the fire water pond.

The above referenced modified work plan is approved with the following conditions:

1. Sampling and analysis will be pursuant to the approved discharge plan dated May 8, 1996.
2. The OCD Aztec District Office will be notified 72 hours prior to sampling.
3. TMC will submit a report on each investigation to the OCD by July 1, 1998. The report will contain:
 - A. A description of all investigation activities including conclusions and recommendations.
 - B. A summary of all laboratory analytical results of soil samples.
4. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Aztec District Office.


Please be advised that OCD approval does not relieve TMC of liability if contamination exists which is beyond the scope of the work plan or if the activities fail to adequately determine the extent of contamination related to TMC's activities. In addition, OCD approval does not relieve

Mr. Jim Ratcliffe
January 7, 1998
Page 2

TMC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7155.

Sincerely,



Mark Ashley
Geologist

xc: OCD Aztec District Office
Mr. Ross Kennemer - BioTech Remediation

P 288 259 004

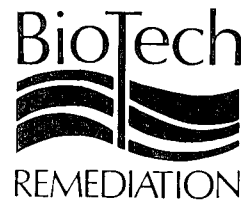
US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (*See reverse*)

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Street & Number	
Post Office, State, & ZIP Code	
Postage	\$
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Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1:45 pm	Date 1-5-98
<u>Originating Party</u>		<u>Other Parties</u>	
TERRY GRIFFIN - RETURNING		MARK ASHLEY	
MY HOME CALL OF 12-31-97, 2 PM.			
<u>Subject</u>			
TERRIFIN - FIREWATER POND SAMPLING. LETTER DATED 10-29-97 TO THE OED.			
<u>Discussion</u>			
OED NEEDS A DATE FOR SAMPLING, NOT AN APPROXIMATE LIKE "MIDSUMMER 1998."			
<u>Conclusions or Agreements</u>			
TERRY AGREED TO JULY 1, 1998			
<u>Distribution</u>		<u>Signed</u> Mark Ashley	



October 29, 1997

Pat Sanchez
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
~~Field Office: (505) 682-8866~~
~~Fax: (505) 682-8868~~
Telephone (505) 327-4965
Facsimile (505) 564-3604

Re: Work Plan for Fire Water Pond Sediment Sampling and Analyses, Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico

Dear Mr. Sanchez:

GW-055

Pursuant to the February 23, 1996 Discharge Plan Renewal Inspection Report and your Notice of Deficiency Letter of May 7, 1997, each regarding the above referenced site, BioTech Remediation, Inc. ("BioTech"), on behalf of Thriftway Marketing Corporation ("Thriftway"), submits the following work plan for sample collection and laboratory analyzing of sediments in the firewater pond:

Scope of Work

- 1) **Sediment Sample Collection** - Discharge from the ground water treatment system into the firewater pond has resulted in nearly filling the firewater pond. It is not expected that the firewater pond will be unable to accommodate the water being discharged, whereas recharge to the shallow underlying aquifer is sufficient; however, the area prescribed for sampling is approximately two feet below water at this time. Once the water level in the pond recedes past the intended sampling locations, probably by midsummer 1998, the appropriate samples will be collected and submitted for laboratory analyses.
- 2) **Reporting** - Following receipt of the laboratory samples a Project Report and Corrective Action Plan, if warranted, will be submitted for approval.

If you have any questions or comments regarding the aforementioned, please do not hesitate to call me or Ms. Terry Griffin at (505) 327-4965.

Respectfully,

A handwritten signature in cursive script, appearing to read "Ross Kennemer".

Ross Kennemer
Project Manager

810/gc/102097



JUL 22 1997

710 East 20th Street, Suite 400
Farmington, New Mexico 87401

~~Field Office: (505) 622-3265~~

~~Fax: (505) 622-0850~~

Telephone (505) 327-4965

Facsimile (505) 564-3604

RECEIVED

JUL 24 1997

Environmental Bureau
Oil Conservation Division

July 16, 1997

Dear Sir or Madam:

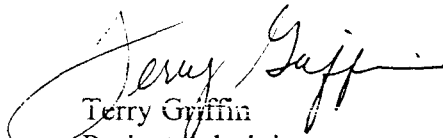
BioTech Remediation, Inc., has changed its telephone and fax numbers, although BioTech's address remains 710 E. 20th Street - Suite 400. The new numbers are:

Telephone **505-327-4965**

Facsimile **505-564-3604**

Please make note of this in your files for future reference. We apologize for any inconvenience which this may have caused.

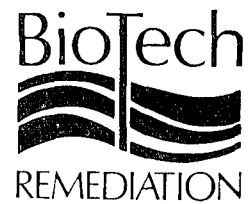
Sincerely yours,


Terry Griffin
Project Administrator

TG/tjg

8-8-97

Thriftway Bloomfield
GW-055,
Compliance
Referred to
Bill Olson.



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
~~Field Office: (505) 632-3365~~
Fax: (505) 632-9850
Telephone (505) 327-4965
Facsimile (505) 564-3604

RECEIVED

III 24 1997

Oil Conservation Division

July 16, 1997

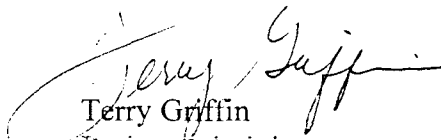
Dear Sir or Madam:

BioTech Remediation, Inc., has changed its telephone and fax numbers, although BioTech's address remains 710 E. 20th Street - Suite 400. The new numbers are:

Telephone	505-327-4965
Facsimile	505-564-3604

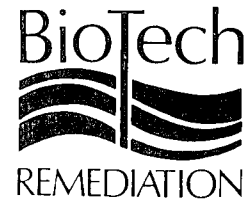
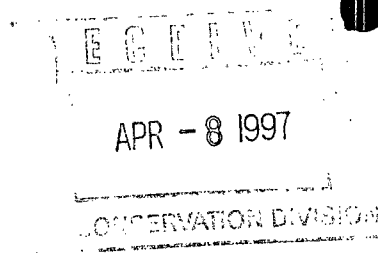
Please make note of this in your files for future reference. We apologize for any inconvenience which this may have caused.

Sincerely yours,


Terry Griffin
Project Administrator

TG/tjg

**SENT VIA FAX
AND CERTIFIED MAIL
P 468-883-519**



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

April 1, 1997

Bill Olsen
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Annual Ground Water Monitoring and Sampling Report

Dear Mr. Olsen:

Per our telephone conversation of this morning, BioTech Remediation Inc. ("BioTech"), will be submitting the Annual Ground Water Monitoring Report for the Thriftway Refinery on April 25, 1997.

As addressed in our conversation, the report was to be submitted by April 1, 1996 and the contents are to include the monitoring and sampling results for 1996. However, as I explained, BioTech was under the impression that the annual report was to include data up to April 1, 1997 and some of the samples collected at the end of March 1997 were destroyed at the laboratory prior to being analyzed and BioTech had to collect and resubmit those samples.

Based on a clearer understanding of the reporting schedule, as noted above, the Annual Ground Water Monitoring Report will be submitted to the OCD by April 25, 1997. I appreciate your understanding regarding this matter.

If you have any questions or comments, please contact me at (505) 632-3365.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ross Kennemer".

Ross Kennemer
Project Manager

810/amrl

c: Pat Sanchez, OCD Santa Fe

OIL CONSERVATION DIVISION
RECEIVED

'92 AUG 27 AM 8 57

Thrift way

710 East 20th Street
Farmington, New Mexico 87401

Office: (505) 326-5571
Refinery: (505) 632-3363
Fax: 505-327-3813

August 18, 1992

Mr. William C. Olson
Hydrologeologist
Environmental Bureau
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2068
State of Land Office Building
Santa Fe, NM 87504

Re: DISCHARGE PLAN GW-55 THRIFTWAY BLOOMFIELD REFINERY SAN JUAN
COUNTY, NEW MEXICO LETTER DATED JULY 28, 1992

Dear Mr. Olson:

I will address each of your questions and statements in the order you presented them in your July 28, 1992 letter.

1. Submission of quarterly ground water monitoring reports.

Thriftway is in the startup phase of its ground water remediation system. We will be submitting our first quarterly monitoring report for the quarter ending August 31, 1992 within the next 6 or 7 weeks. The actual sampling event for this quarter will take place August 31, 1992. We will notify you again on the 27th to confirm this date.

2. Operate the ground water remediation system such that the air stripper effluent meets or exceeds N.M. Water Quality Control Commission (WQCC) ground water standards.

Thriftway has implemented a recycle stream on the stripper and will continue to gather data and adjust the operation or revamp the system until the desired ppm hydrocarbon is attained. Our last sample showed less than 10 ppb benzene in the effluent, however, we will continue to monitor this on a weekly basis to insure stable operation over the next month.

The Tetrachloroethane and Trichloroethane found in the effluent from the stripper may have come from the epoxy paint used in the interior of the air stripper. We are checking with the supplier to find out whether this is the case or not. To date we have not been able to determine this. In any event, we will have the influent as well as the effluent to the stripper checked for these constituents during the quarterly sample analysis.

3. Investigate the full extent of ground water contamination related to refinery activities.

Monitoring well MW-12 showed the presence of chromium at twice the WQCC standard. We will retest this well for chromium and investigate why any chromium would be at such an isolated location. To date no reason has surfaced and our records show nothing.

Figure one attached, shows the proposed location for three additional monitoring wells to be installed the week of August 24th, 1992.

These wells are to be located as we discussed in your office August 14, 1992. Monitoring well MW-20 will be located 100 feet due west of MW-19. Monitoring well MW-21 will be located Northwest of MW-6 approximately 100 to 200 feet depending on data on soil analysis. Monitoring well MW-22 will be located on an isosceles triangle vertex about 150 feet on a side with MW-6 and MW-8 as base angle vertices. These monitoring wells will be installed and constructed as per previous approved monitoring well installation submissions.

4. Construct the remediation system pursuant to plans and specifications submitted by Thriftway and approved in the discharge plan.

The injection system was altered slightly to accommodate elevation changes and existing dikes. The injection area or trench was broken up into five sections. This was done to allow level installation of the injection line. The approved injection trench location crossed two dikes in the area of tank 29. Because of the additional work needed to tear down and later rebuild the dikes and the fact that there was the risk of breaking unknown buried lines, the decision was made to relocate the trench to the west of the dike where all the underground lines had been located during a previous project. See figure 2 for the location of the new injection system. The injection system was installed as part of the approved plan.

5. Storage of Petroleum contaminated soils.

Thriftway has had Envirotech sample the remaining stockpiled contaminated soils at the refinery. They will perform TCLP analysis and the results of the TCLP will be submitted to your office prior to disposal of the soil.

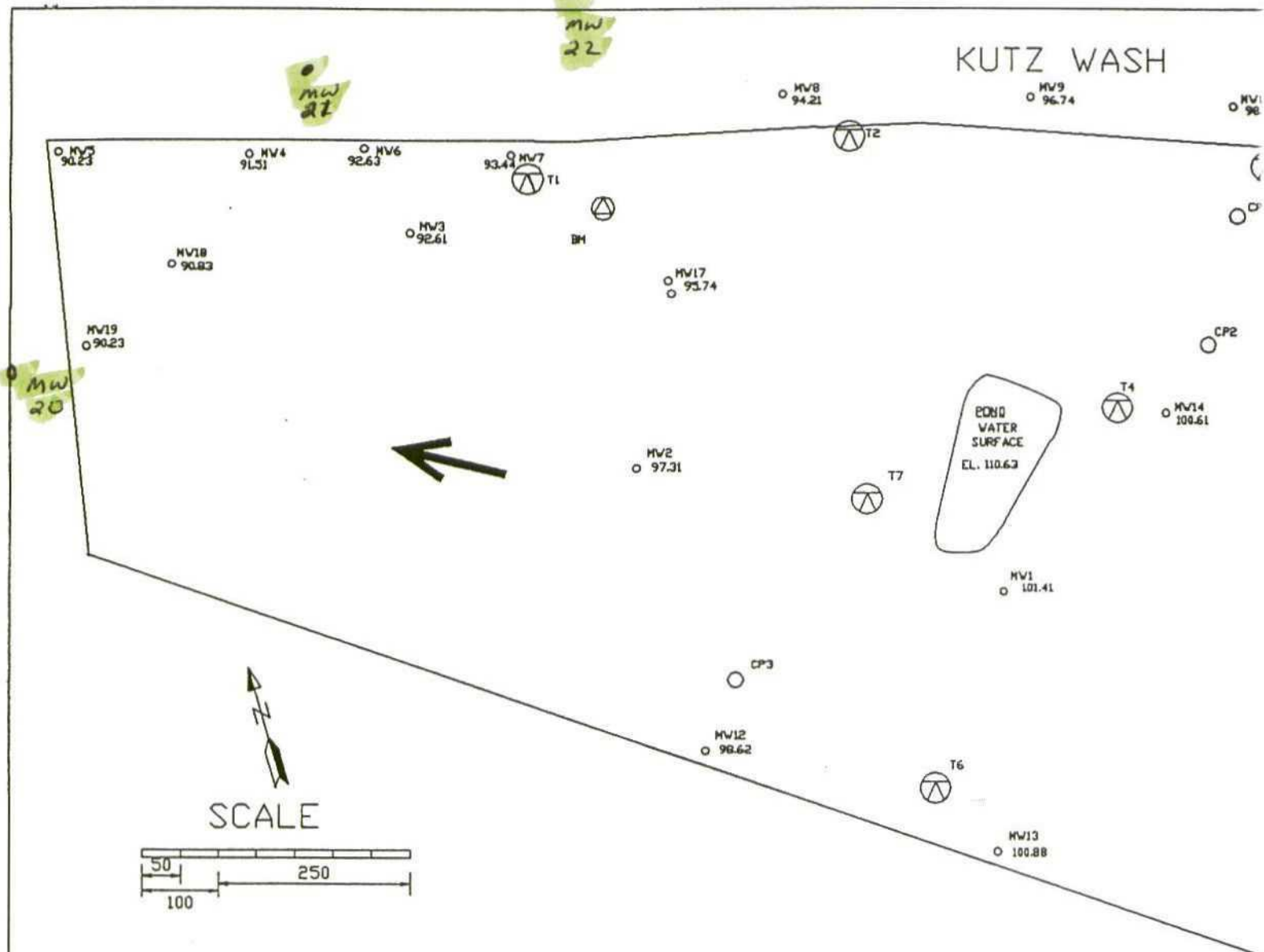
Sincerely,



Ken Sinks
Environmental Engineer

cc: R.J. Dalley, Mark Weidler, File GW-55
ks/as
docgw55

Proposed New Monitoring Well Locations



MW10 ◦ : APPROXIMATE MONITOR WELL LOCATION

⊙ BM: BENCH MARK LOCATED @ N. W. CORNER OF FUEL OIL LOADING, CONCRETE SPILL CONTAINMENT SLAB, RELATIVE ELEVATION 100'

← APPROXIMATE GROUNDWATER FLOW DIRECTION

THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20TH ST, FARMINGTON, NM, 87401

ENVIR

ENVIR
5796 U
FARMINGT
PHON

FIGURE 1

Injection Trench System

New Injection System

KUTZ WASH

PROPERTY LINE

EXISTING CULVERT

SURFACE WATER CONTAINMENT BERM

FLARE

PROCESS OIL COLLECTION TANK

FUEL OIL LOADING RACK

SPILL COLLECTION TANK

ESS
R
ORATION
IONS



OIL/WATER SEPERATOR & TREATMENT SYSTEM

SHOP

HYDROCRACKER
REFORMER

CONTROL BLDG

ELEC VAULT

SEPTIC TANK SYS

REFINERY OFFICE

CRUDE UNIT

FIRE WATER POND

29
28
27
26
25
24
23
22

21

19

18

17

DIESEL LOADING RACK

LIGHT CRUDE RECEIVING DOCK

GASOLINE LOADING RACK

SPILL COLLECTION TANK

15

14

12

11

SEPTIC TANK SYS

CO RD #5500

SEPTIC TANK SYS

DISPACH OFFICE

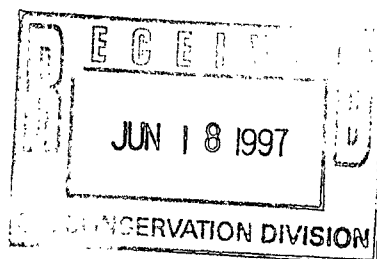


THRIFTWAY REFINERY
SITE PLAN SCALE 1" = 200FT

Figure 2

June 16, 1997

Mr. Roger C. Anderson
 Bureau Chief
 Environmental Bureau-OCD
 2040 S. Pacheco
 Santa Fe, NM 87505



710 East 20th Street, Suite 400
 Farmington, New Mexico 87401
 Field Office: (505) 632-3365
 Fax: (505) 632-9850

Dear Mr. Anderson:

On May 7, 1997, the New Mexico Oil Conservation Division (OCD) issued a Notice of Deficiency (NOD) for the GW-055 Thriftway Bloomfield Refinery Discharge Permit. Within the NOD, the OCD noted several items which required attention and requested that all items be submitted together as a single report. BioTech Remediation, Inc. (BioTech) has addressed the specific deficiencies outlined in the notice and presents the results in the following sections.

1. The BioTech report on behalf of Thriftway Marketing Corporation (TMC) "Fire Water Pond Sediment Sampling and Analyses, Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico" dated April 24, 1997, was found to be deficient.

On June 6, 1997, soil samples were taken from the soil in the fire water pond below the discharge pipe and tested for BTEX, TPH, and hazardous constituents. The results of the BTEX and TPH analyses are presented below in Table 1. Results for the hazardous constituents are pending and will be submitted to the OCD office upon receipt.

Table 1. Summary of Fire Water Pond Soil Analyses
 Thriftway Refinery, Bloomfield, NM

Parameter	Results (ug/kg)
TPH	8186
Benzene	ND
Toluene	55
Ethylbenzene	131
Total Xylene	151

Based on the analyses data, BioTech recommends and requests that the soils within the fire water pond, found to contain hydrocarbon contaminants, be excavated and thin spread on a bermed plastic liner, and then tilled on a periodic basis to promote remediation. Therefore, BioTech requests OCD comments regarding these actions.

2. Results of the below grade UST liner inspection are attached. In short, results indicate UST and liner soundness.

3. Refinery tank testing records were located and are attached.

4. Following a review of the refinery records and further grounds inspection, it was concluded that only one water well had been plugged. Plugging records were located and are attached. The additional noted well remains active, and the casing appears to be in sound condition.

Respectfully submitted,



Ross Kennemer
Project Manager

810/61697nod

enclosures

c: Mr. Denny Foust - OCD Aztec Environmental Geologist
Mr. Jim Ratcliff - Thriftway Company

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Beth McNally*
Company: *BioTech Remediation*
Address: *710 E 20th Street, Suite 400*
City, State: *Farmington, NM 87401*

Date: *12-Jun-97*
COC No.: *6058*
Sample No.: *14887*
Job No.: *897-368*

Project Name: *Thriftway Refinery*
Project Location: *Fire Water Pond*
Sampled by: *RK/BM*
Analyzed by: *HR*
Sample Matrix: *Soil*

Date: *6-Jun-97* Time: *9:30*
Date: *10-Jun-97*

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
<i>Total Petroleum Hydrocarbons, TPH</i>	<i>8186</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report**Laboratory Fortified Blank/Spike Soil**

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>< 25</i>	<i>< 25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>880</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

Laboratory Identification	% RSD	Limit % RSD
<i>14887-6058</i>	<i>0.8</i>	<i>15.0</i>

Approved by: *[Signature]*
Date: *6/12/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Beth McNally*
Company: *BioTech Remediation*
Address: *710 E 20th Street, Suite 400*
City, State: *Farmington, NM 87401*

Date: *11-Jun-97*
COC No.: *6058*
Sample No.: *14887*
Job No.: *897-368*

Project Name: *Thriftway Refinery*
Project Location: *Fire Water Pond*
Sampled by: *RK/BM*
Analyzed by: *HR*
Sample Matrix: *Soil*

Date: *6-Jun-97* Time: *9:30*
Date: *9-Jun-97*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	1	ug/kg
<i>Toluene</i>	3	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	55	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	131	ug/kg	1	ug/kg
<i>o-Xylene</i>	20	ug/kg	1	ug/kg
	<i>TOTAL</i>	209		ug/kg

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *6/11/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

Date Analyzed: 9-Jun-97

Internal QC No.: 0527-STD

Surrogate QC No.: 0528-STD

Reference Standard QC No.: 0529/30-QC

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<1.0	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	20.7	3	15%
Toluene	ppb	20.0	21.2	6	15%
Ethylbenzene	ppb	20.0	21.4	7	15%
m,p-Xylene	ppb	40.0	40.4	1	15%
o-Xylene	ppb	20.0	21.0	5	15%

Matrix Spike

<i>Analyte</i>	<i>1 - Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Benzene</i>	54	56	(39-150)	3	20%
<i>Toluene</i>	58	56	(48-148)	2	20%
<i>Ethylbenzene</i>	61	60	(32-160)	2	20%
<i>m,p-Xylene</i>	45	38	(35-145)	12	20%
<i>o-Xylene</i>	65	60	(35-145)	6	20%

Surrogate Recoveries

[illegible]

6058

Page 1 of 1

Page 1 of 1

[illegible]

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Terry Griffin*
Company: *BioTech Remediation*
Address: *710 E 20th Street, Suite 400*
City, State: *Farmington, NM 87401*

Date: *26-Mar-97*
COC No.: *6028*
Sample No.: *13984*
Job No.: *B97-229*

Project Name: *Thriftway Refinery 626 CR 5500 Bloomfield, NM 87413*
Project Location: *UST Liner*
Sampled by: *KS* Date: *19-Mar-97* Time: *16:00*
Analyzed by: *DC* Date: *24-Mar-97*
Sample Matrix: *Liquid*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>1.7</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>1.0</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>2.7</i>	<i>ug/L</i>		

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved By: *[Signature]*
Date: *3/26/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Terry Griffin*
Company: *BioTech Remediation*
Address: *710 E 20th Street, Suite 400*
City, State: *Farmington, NM 87401*

Date: *26-Mar-97*
COC No.: *6028*
Sample No.: *14025*
Job No.: *B97-229*

Project Name: *Thriftway Refinery 626 CR 5500 Bloomfield, NM 87413*
Project Location: *Travel Blank*
Sampled by: *KS* Date: *19-Mar-97* Time: *NR*
Analyzed by: *DC* Date: *24-Mar-97*
Sample Matrix: *Liquid*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>0.2</i>	<i>ug/L</i>		

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved By: *[Signature]*
Date: *3/26/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 24-Mar-97

Internal QC No.: 0527-STD

Surrogate QC No.: 0528-STD

Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	18.6	7	15%
Toluene	ppb	20.0	19.4	3	15%
Ethylbenzene	ppb	20.0	19.8	1	15%
m,p-Xylene	ppb	40.0	38.2	4	15%
o-Xylene	ppb	20.0	19.5	2	15%

Matrix Spike

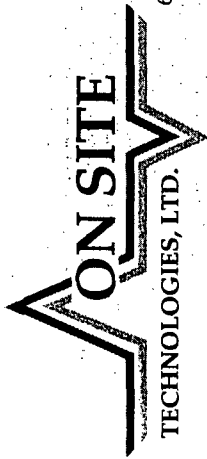
Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	89	88	(39-150)	1	20%
Toluene	92	92	(46-148)	0	20%
Ethylbenzene	94	94	(32-160)	0	20%
m,p-Xylene	90	90	(35-145)	0	20%
o-Xylene	93	93	(35-145)	0	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
13978-6028	94		13984-6028	96	
13979-6028	97		14025-6028	96	
13980-6028	96				
13981-6028	96				
13982-6028	90				
13983-6028	95				

S1: Fluorobenzene

Pr
3/26/97



657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

6028

Date: 3/19/97

Page _____ of _____

Purchase Order No.: 897-229		Job No.	
Name Same		Title	
Company Same		Company Bis Tech Remediation	
Address		Mailing Address 710 W 30th St, Suite 400	
City, State, Zip		City, State, Zip Farmington, NM 87401	
City, State, Zip		Telephone No. 632-3365 Telefax No. 632-9850	
SEND INVOICE TO		RESULTS TO	
Sampling Location: Theftway Refinery 626 Rd 5500 Blomfield, NM		ANALYSIS REQUESTED	
Sampler: Ken Sinks		LAB ID	
SAMPLE IDENTIFICATION		Number of Containers	
DATE		SAMPLE TIME	
DATE		PRES.	
MW-01		3/19 11:00 1420 1954 2237	
MW-04		11:05	
MW-05		11:11	
MW-06		11:11	
MW-14		11:11	
MW-19		11:11	
LAST LIVER		11:11	
TRAVEL BLANK		11:11	
Relinquished by: Ken Sinks		Received by: Heide Reese	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Method of Shipment:		Rush	
Authorized by:		Date	
(Client Signature <u>Must</u> Accompany Request)		Date	
Distribution: White On Site Yellow LAB Pink Sampler Gold Standard Client		Date/Time 3/20/97 0813	
Date/Time		Date/Time	
Date/Time		Date/Time	
10 Working Days		Special Instructions:	

THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS

Tank No. 11 Year built 1979 Inspected by K. Sinks Date 1992
 Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was found to be in good condition.

Bottom: (welded) yes (riveted) N/A Seams lap

Condition: Good condition based on visual inspection. No metal thickness measurements taken.

Vacuum test: Floor No Wall to floor Yes Lap seam Yes

If not tested, explain: The floor lap seams and wall to floor seams were vacuum tested.

Coatings: Type and condition There was no internal coatings except as noted in the following section concerning water draws.

Openings: Number, Location, Size (make drawing on next sheet) See attached drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain

The draws were visually checked, cleaned and epoxy coated to insure no leakage.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. N/A Seal N/A
 rating

Tank heater (Type, condition, BTU rating, internal or external): N/A

Gauge tape float: Yes Manufacturer Verec

Tank suction type: Fixed X Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Good

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 11

Roof: Inspect for condition of legs, rafters, etc. Okay

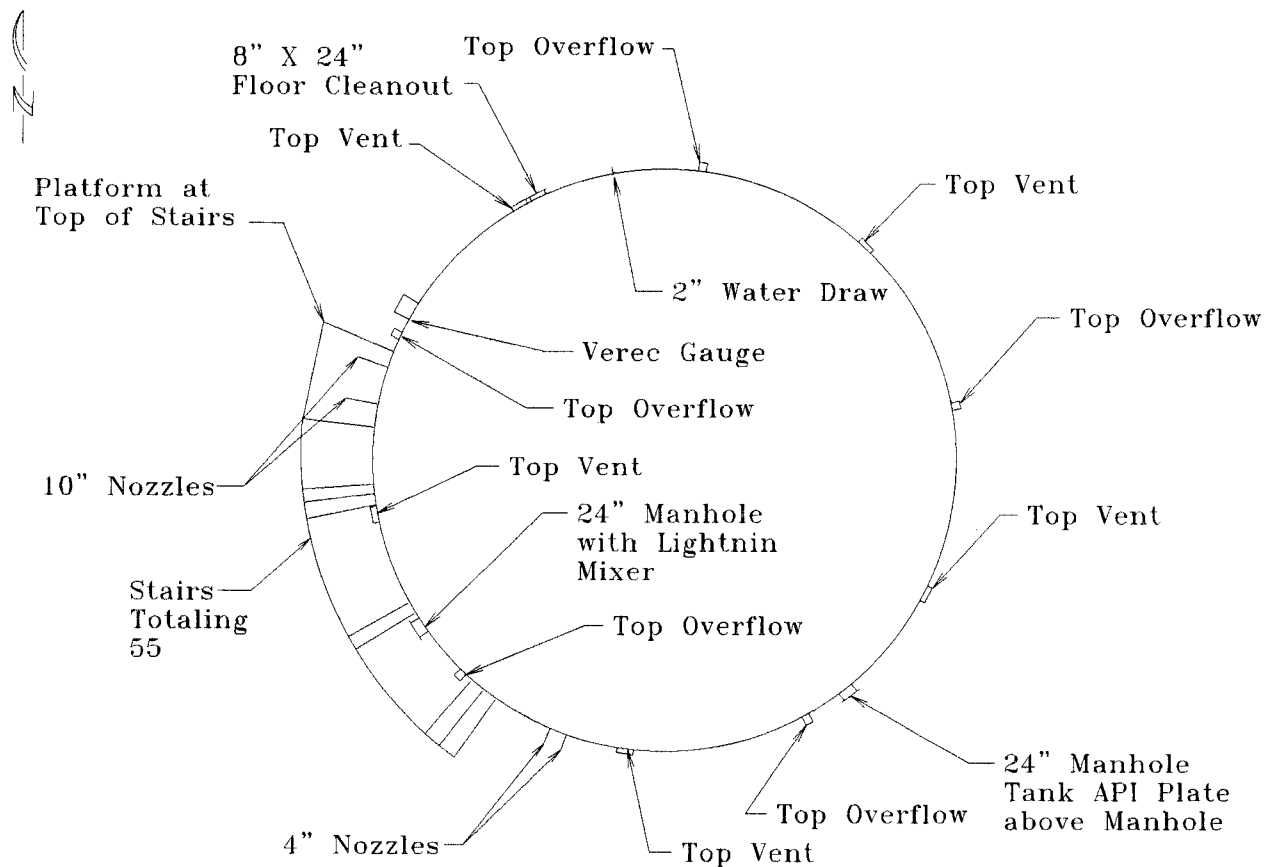
Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Condition appeared good. No thickness measurements were made.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	11	Year Built	1979	Inspected by	K. Sinks	Date	1992
Roof Replaced	N/A	Shell replaced (date)	N/A	Floor replaced (date)	N/A		
Shell: Type (riveted)	N/A	(welded)	Yes	No. of rivet leaks	N/A		
				No. of seam leaks	None		
Comments: Corrosion (if holes, give number, size and location)				None			

Paint condition	Slight corrosion where paint has peeled off. Over all paint condition is good.					
Stairway condition	Good					
Handrail condition	Good					
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A
Gage pipe flushing nozzle	N/A					
Valves & flanges (number and size of cast iron)	None					
Suction heater (model)	None					
Tank mixer	None					
Roof type: (riveted)	N/A	welded	Yes			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

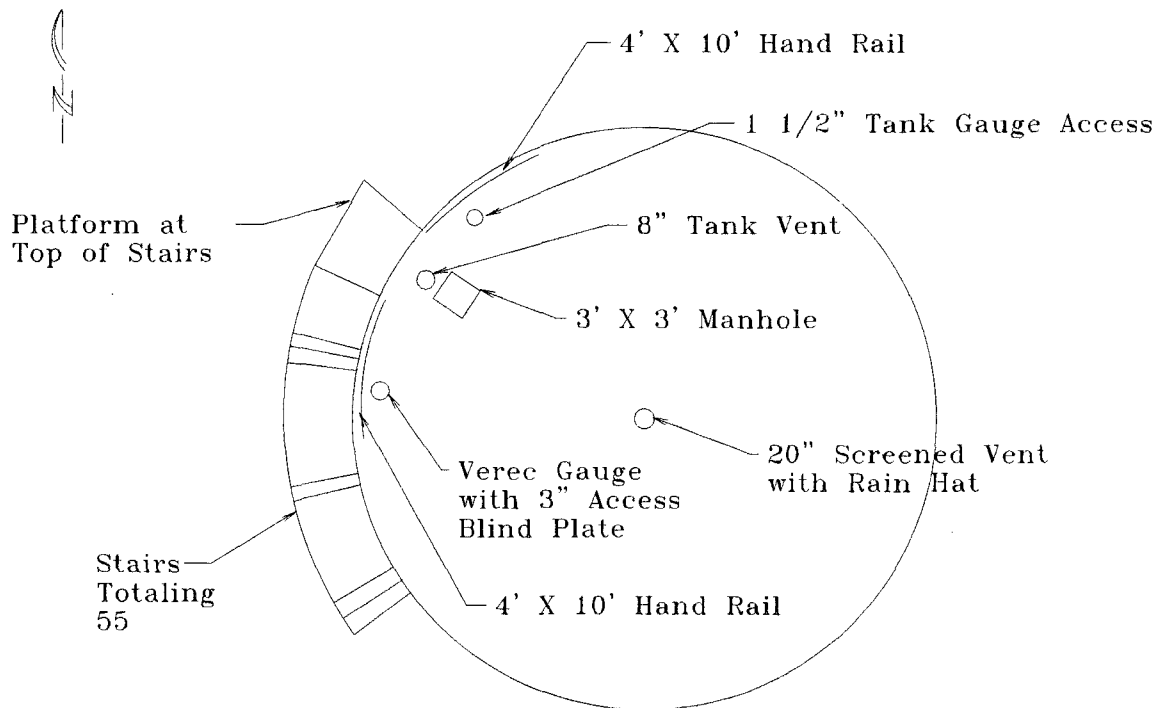
Not hammer tested.

Vents: Number, size and type (make drawing of location)	See drawing.		
Emergency vent - manhole (number, size and type)	See drawing.		
Gaging well: Box	Not Checked	Cover	Not checked
			Handrail
Scaffold ring:	Not Checked		
Gage tape: Sheaves	Not checked	Elbows	Not checked
			Roof opening
			Okay

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron flanges.**



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 12 Year built 1979 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was found to be in good condition.

Bottom: (welded) Yes (riveted) N/A Seams welded lap.

Condition: Good condition based on visual inspection. No metal thickness measurements taken.

Vacuum test: Floor No Wall to floor Yes Lap seam Yes

If not tested, explain: The floor lap seams and wall to floor seams were vacuum tested.

Coatings: Type and condition There was no internal coatings except as noted in the following section concerning water draws.

Openings: Number, Location, Size (make drawing on next sheet) See attached drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain

The draws were visually checked, cleaned and epoxy coated to insure no leakage.

Tank mixer: Manufacturer Lightnin

Style: internal impeller type Prop Size 10" Horsepower 10

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): N/A

Gauge tape float: Yes Manufacturer Verec

Tank suction type: Fixed X Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Good

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 12

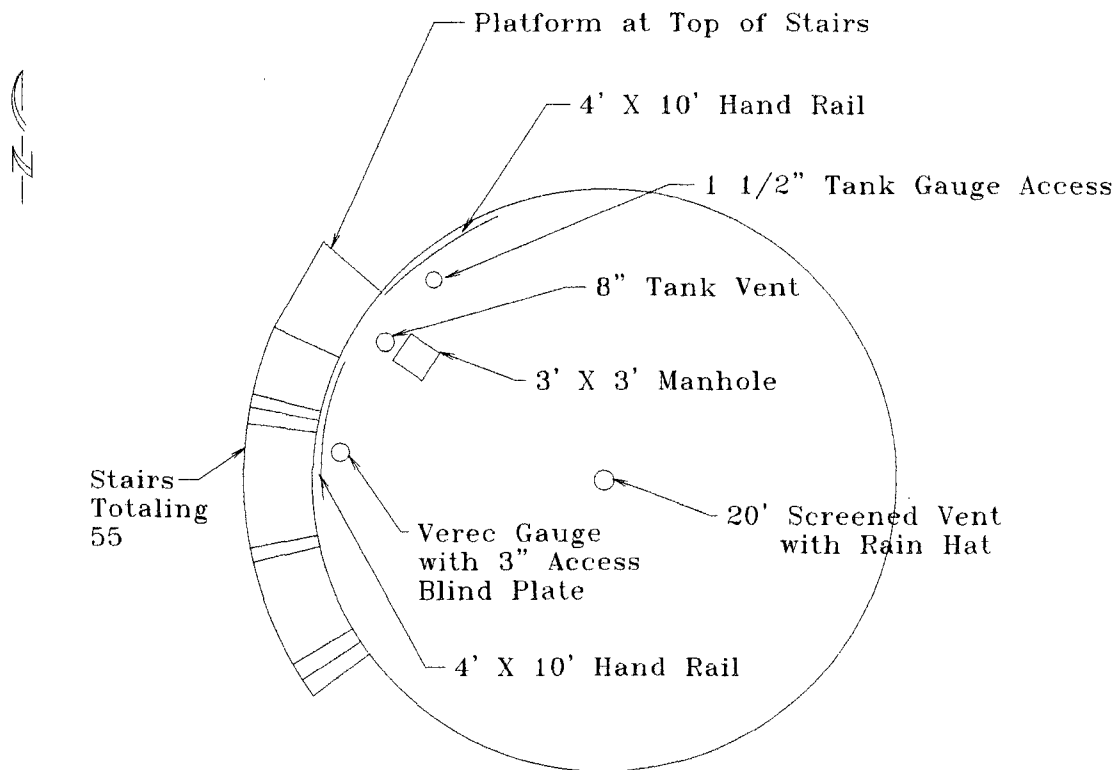
Roof: Inspect for condition of legs, rafters, etc. Okay

Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded
Condition and thickness Condition appeared good. No thickness measurements were made.

Coating type and condition None

Make drawing of shell and openings here:



THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK

(Use attached drawing to show location of all appurtenances)

Tank No.	12	Year Built	1979	Inspected by	K. Sinks	Date	1992
Roof Replaced	N/A	Shell replaced (date)	N/A	Floor replaced (date)	N/A		
Shell: Type	(riveted)	N/A	(welded)	Yes	No. of rivet leaks		N/A
					No. of seam leaks		None
Comments: Corrosion (if holes, give number, size and location)					None		

Paint condition	Slight corrosion where paint has peeled off. Over all paint condition is fair.						
Stairway condition	Good						
Handrail condition	Good						
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A	
Gage pipe flushing nozzle	N/A						
Valves & flanges (number and size of cast iron)	None						

Suction heater	(model)	N/A					
Tank mixer	Lightnin.						
Roof type:	(riveted)	N/A	welded	Yes			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

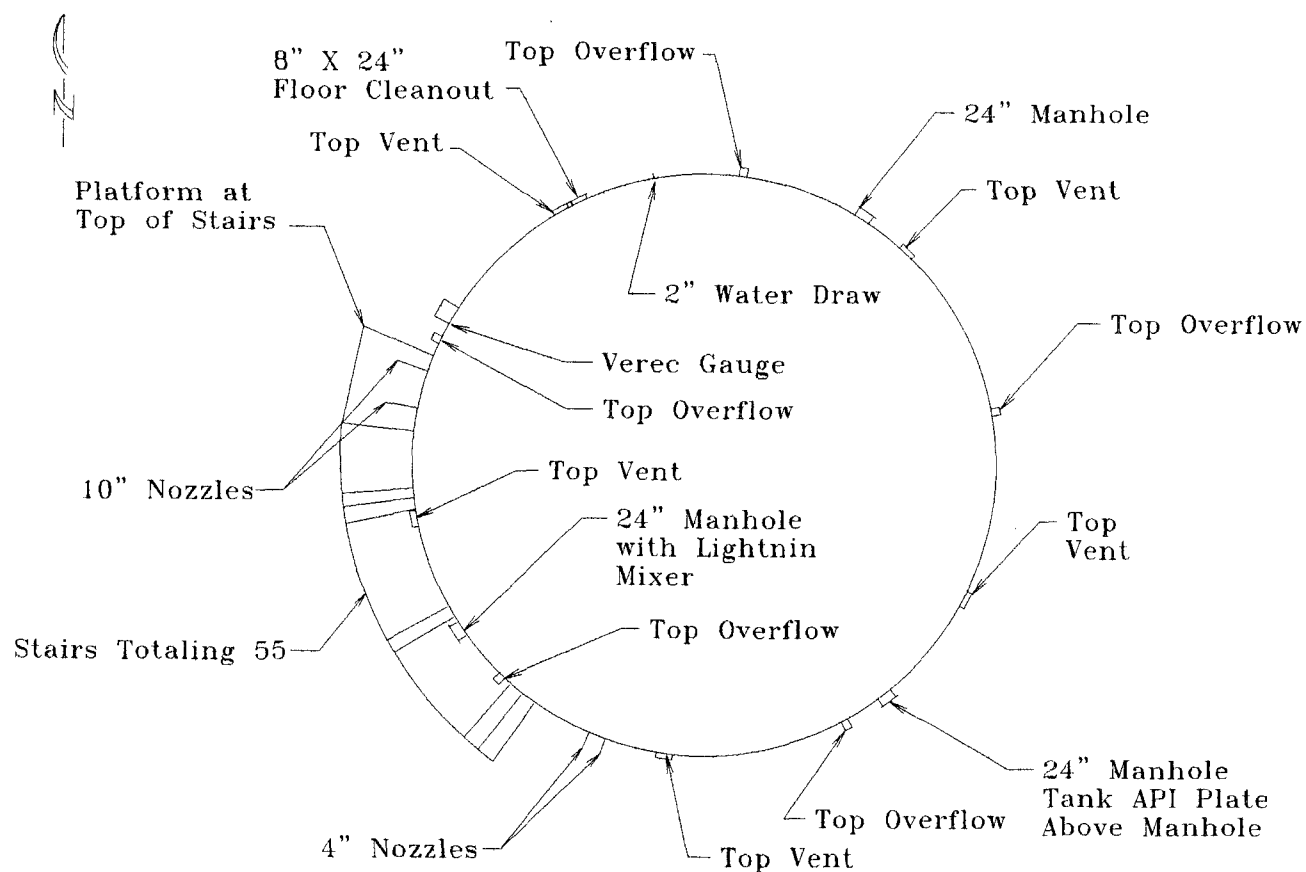
Not hammer tested.

Vents: Number, size and type (make drawing of location)	See attached Drawing.					
Emergency vent - manhole (number, size and type)	See attached Drawing.					
Gaging well: Box	Not Checked	Cover	Yes	Handrail	Yes	
Scaffold ring:	Not Checked					
Gage tape: Sheaves	Not checked	Elbows	Not checked	Roof opening	Okay	

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron flanges.**



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 13 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was found to be in good condition. Noted repairs were made to pontoons.

Bottom: (welded) Yes (riveted) N/A Seams lap

Condition: Good condition based on visual inspection. No metal thickness measurements taken.

Vacuum test: Floor No Wall to floor Yes Lap seam Yes

If not tested, explain: The floor lap seams and wall to floor seams were vacuum tested. The rest of the floor appeared in good condition and wasn't checked due to scheduling conflicts for the tank use.

Coatings: Type and condition There was no internal coatings except as noted in the following section concerning water draws.

Openings: Number, Location, Size (make drawing on next sheet) 6 openings: 1 - 2 1/4" east side; 2- 4" west side; 1 - 1" gauge line west side; 1 - 2' manhole (round) south side; 1 - 2' X 2' square manhole, rounded corners north side. See drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain

The draws were visually checked, cleaned and epoxy coated to insure no leakage.

Tank mixer: Manufacturer Part of an old Smith agitator was attached to the tank.

Style: internal impeller type Prop Size 6" Horsepower No Motor

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Verec

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Good

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 13

Roof: Inspect for condition of legs, rafters, etc. 3 Legs are bent; Rafters look okay; Two pontoons are bent; Three pontoons are dented; There are three leaks in the dented pontoons. These pontoons were removed and repaired.

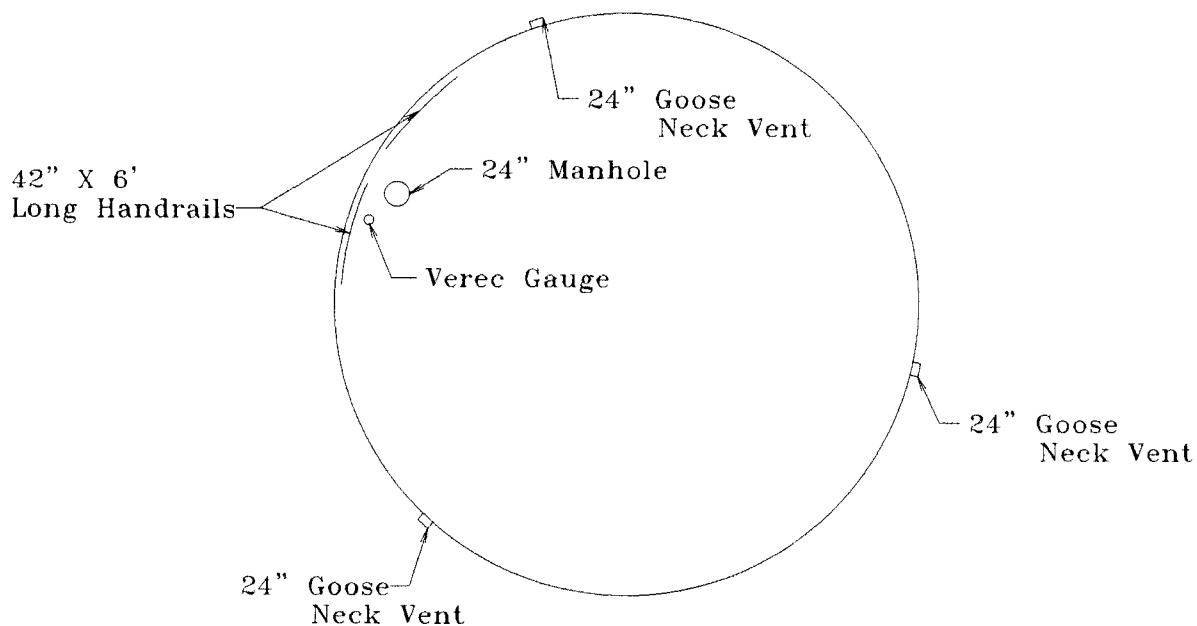
Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Condition appeared good. No thickness measurements were made.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No. <u>13</u>	Year Built <u>Before 1972</u>	Inspected by <u>K. Sinks</u>	Date <u>1992</u>
Roof Replaced <u>N/a</u>	Shell replaced (date) <u>N/A</u>	Floor replaced (date) <u>N/A</u>	
Shell: Type (riveted) <u>N/A</u>	(welded) <u>Yes</u>	No. of rivet leaks <u>N/A</u>	
		No. of seam leaks <u>None</u>	
Comments: Corrosion (if holes, give number, size and location) <u>None</u>			

Paint condition	<u>Heavy corrosion where paint has peeled off. Over all paint condition is fair.</u>		
Stairway condition	<u>Good, needs paint.</u>		
Handrail condition	<u>Good, needs paint.</u>		
Swing suction:	Cable <u>N/A</u>	Position Indicator <u>N/A</u>	Winch <u>N/A</u>
Gage pipe flushing nozzle	<u>N/A</u>		
Valves & flanges (number and size of cast iron)	<u>None</u>		
Suction heater (model)	<u>N/A</u>		
Tank mixer	<u>The internal prop and external pulleys were still on the tank, there was no motor.</u>		
Roof type: (riveted)	<u>N/A</u>	welded	<u>Yes</u>

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

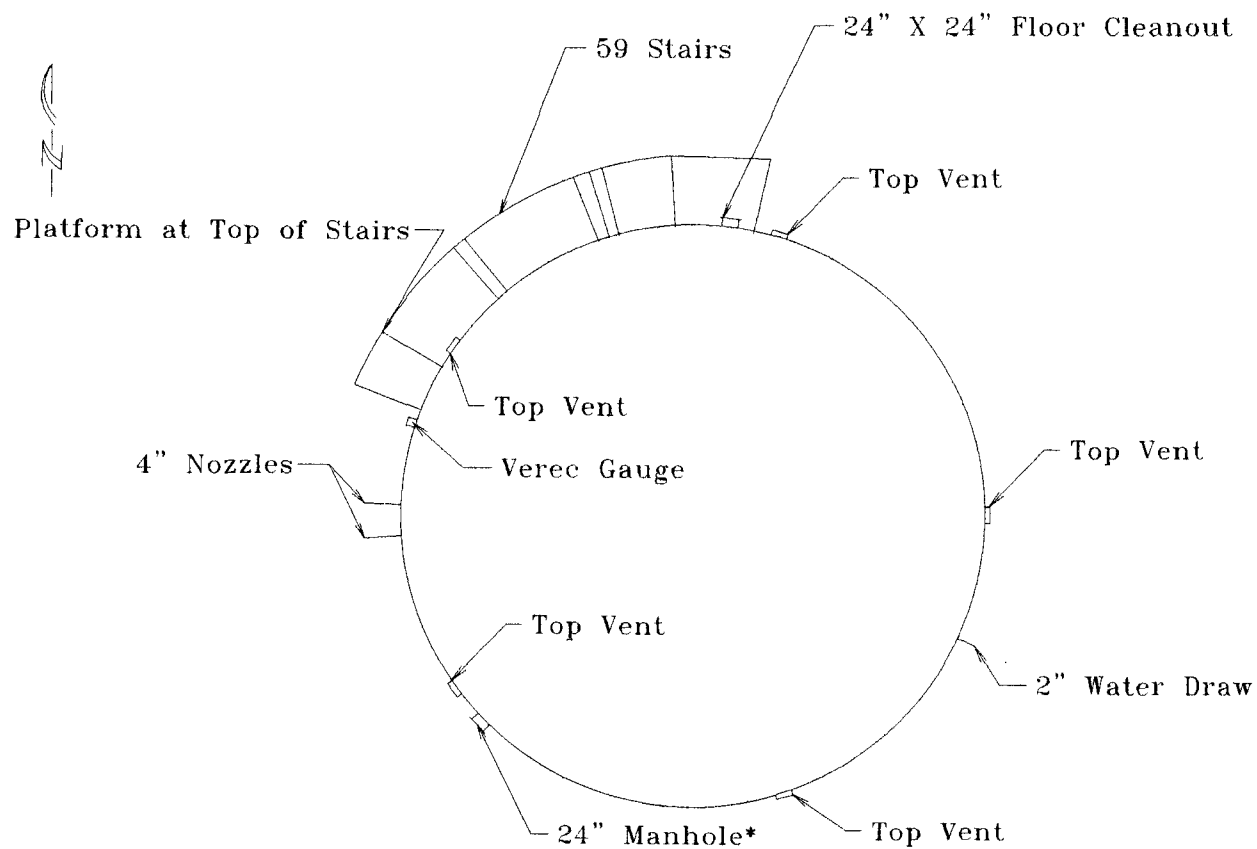
Not hammer tested. Paint condition fair. Roof sagging in places.

Vents: Number, size and type (make drawing of location)	<u>Three covered top vents.</u>
Emergency vent - manhole (number, size and type)	<u>Two 2' round and semi round.</u>
Gaging well: Box <u>Not Checked</u>	Cover <u>Opened</u>
Scaffold ring: <u>Not Checked</u>	Handrail <u>Yes</u>
Gage tape: Sheaves <u>Not checked</u>	Elbows <u>Not checked</u>
	Roof opening <u>Okay</u>

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron flanges.**



* Note: There is an old part of a Smith Agitator still attached to this Manhole.

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 14 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was found to be in good condition. One pontoon was replaced.
Bottom: (welded) yes (riveted) N/A Seams welded lap.
Condition: Good condition based on visual inspection. No metal thickness measurements taken.
Vacuum test: Floor No Wall to floor Yes Lap seam Yes

If not tested, explain: The floor lap seams and wall to floor seams were vacuum tested. The rest of the floor appeared in good condition.

Coatings: Type and condition There was no internal coatings except as noted in the following section concerning water draws.

Openings: Number, Location, Size (make drawing on next sheet) See attached drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch
Vacuum test of water draws Not vacuum tested. If not checked, explain The water draw was visually checked, cleaned and epoxy coated to insure no leakage.

Tank mixer: Manufacturer None
Style: internal impeller type N/A Size N/A Horsepower N/A
External circulation pump: G.P.M. rating N/A Seal N/A
Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Verec
Tank suction type: Fixed Yes Floating N/A Pull up N/A
Pull down N/A Size N/A Condition Good
Suction points up or down Down
Is there a vortex breaker over opening None
Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 14

Roof: Inspect for condition of legs, rafters, etc. Okay; there was one pontoon that was bent beyond repair. This was replaced with a new pontoon from Ultra Float - floating roof vendor.

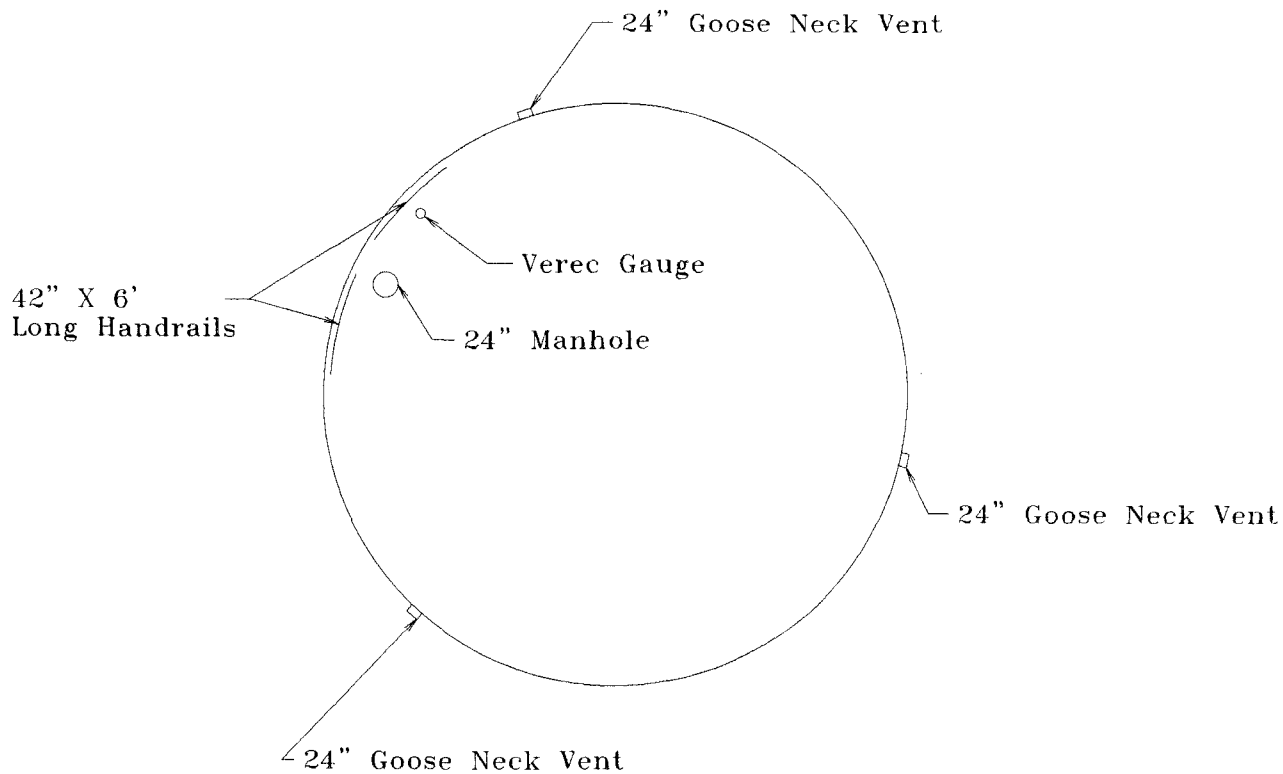
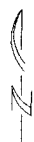
Coating type and condition _____ None

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness _____ Condition appeared good. No thickness measurements were made.

Coating type and condition _____ None

Make drawing of shell and openings here:



THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>14</u>	Year Built	<u>Before 1972</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>N/A</u>	Shell replaced (date)	<u>N/A</u>	Floor replaced (date)	<u>N/A</u>		
Shell: Type	<u>(riveted)</u>	<u>N/A</u>	<u>(welded)</u>	Yes	No. of rivet leaks		<u>N/A</u>
					No. of seam leaks		<u>None</u>
Comments: Corrosion (if holes, give number, size and location)					<u>None</u>		

Paint condition	<u>Slight corrosion where paint has peeled off. Over all paint condition is fair.</u>						
Stairway condition	<u>Good</u>						
Handrail condition	<u>Good</u>						
Swing suction:	Cable	<u>N/A</u>	Position Indicator	<u>N/A</u>	Winch	<u>N/A</u>	
Gage pipe flushing nozzle	<u>N/A</u>						
Valves & flanges (number and size of cast iron)	<u>None</u>						
Suction heater (model)	<u>None</u>						
Tank mixer	<u>None</u>						
Roof type:	<u>(riveted)</u>	<u>N/A</u>	<u>welded</u>	<u>Yes</u>			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

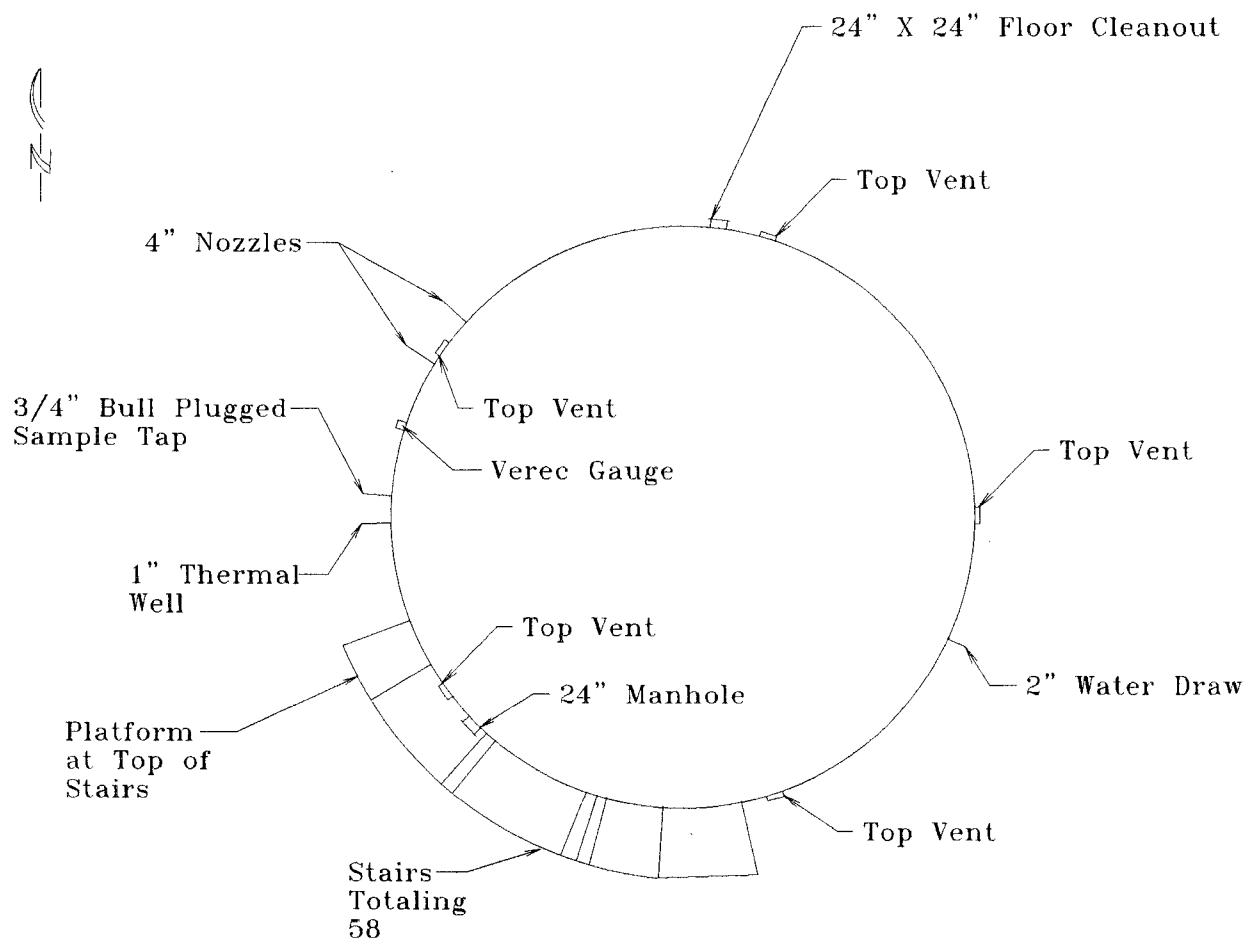
Not hammer tested.

Vents: Number, size and type (make drawing of location)	<u>See drawing</u>				
Emergency vent - manhole (number, size and type)	<u>See drawing</u>				
Gaging well: Box	<u>Not Checked</u>	Cover	<u>Yes</u>	Handrail	<u>Yes</u>
Scaffold ring:	<u>Not Checked</u>				
Gage tape: Sheaves	<u>Not checked</u>	Elbows	<u>Not checked</u>	Roof opening	<u>Okay</u>

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). No cast iron, all steel flanges.



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 17 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was not inspected internally.

Bottom:	(welded)	Yes	(riveted)	N/A	Seams	Lap
Condition:	Unknown					
Vacuum test:	Floor	No	Wall to floor	No	Lap seam	No

If not tested, explain: The tank was not out of service long enough to perform an internal inspection.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See drawing

Floor drains (ID's)	<u>2 inch</u>	Floor drains (OD's)	<u>2 1/2 inch</u>
Vacuum test of water draws	<u>Not vacuum tested.</u>	If not checked, explain	<u>Same as above.</u>

Tank mixer: Manufacturer	<u>Lightnin</u>	Horsepower	<u>10</u>
Style: internal impeller type	<u>Prop</u>	Size	<u>10"</u>
External circulation pump:	G.P.M. rating	Seal	<u>N/A</u>
Tank heater (Type, condition, BTU rating, internal or external):	<u>None</u>		

Gauge tape float:	Yes	Manufacturer	Kodata
Tank suction type: Fixed	Yes	Floating	<u>N/A</u>
Pull down	<u>N/A</u>	Size	<u>N/A</u>
Suction points up or down	Down		
Is there a vortex breaker over opening	None		
Inspector	<u>Ken Sinks</u>	Date	<u>1992</u>

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 17

Roof: Inspect for condition of legs, rafters, etc. Not inspected.

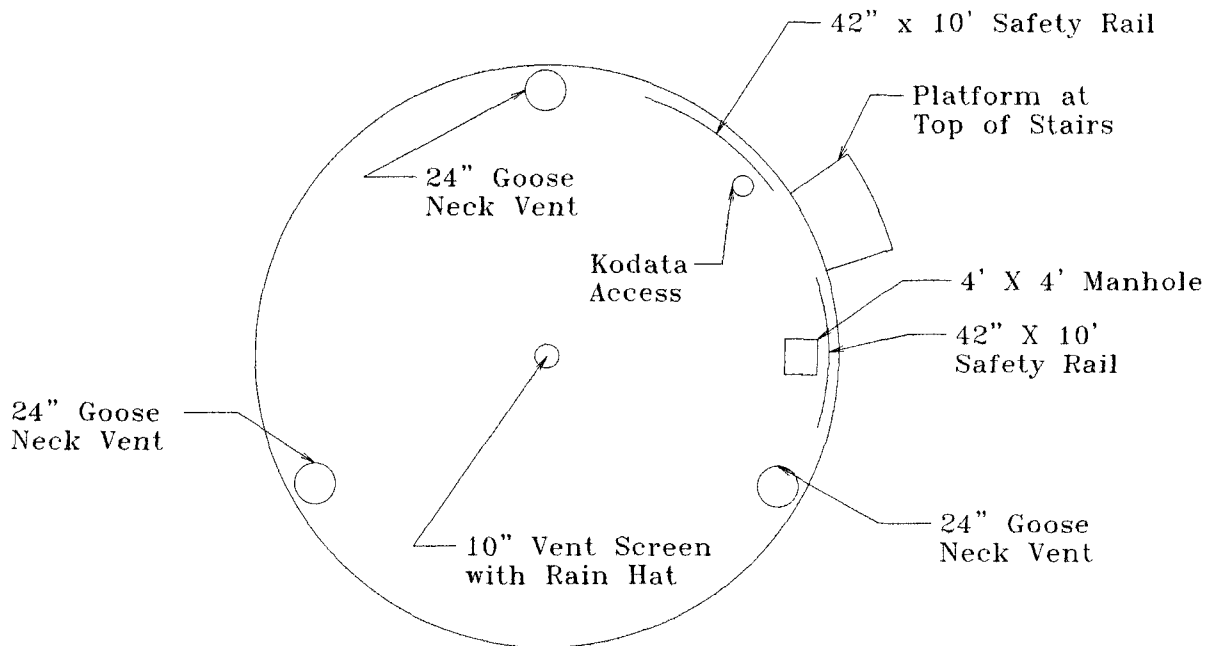
Coating type and condition None that is known of.

Shell: (welded) Yes (riveted) N/A Seams welded
Condition and thickness Not inspected.

Coating type and condition None that is known of.

Make drawing of shell and openings here:

2-2



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	17	Year Built	Before 1972	Inspected by	K. Sinks	Date	1992
Roof Replaced	N/A	Shell replaced (date)		N/A	Floor replaced (date)	N/A	
Shell: Type	(riveted)	N/A	(welded)	Yes	No. of rivet leaks	N/A	
					No. of seam leaks	None	
Comments: Corrosion (if holes, give number, size and location)					None		

Paint condition	Slight corrosion where paint has pealed off. Over all paint condition is good.						
Stairway condition	Good						
Handrail condition	Good						
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A	
Gage pipe flushing nozzle	N/A						
Valves & flanges (number and size of cast iron)	None						
Suction heater (model)	N/A						
Tank mixer	Lightnin						
Roof type: (riveted)	N/A		welded	Yes			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

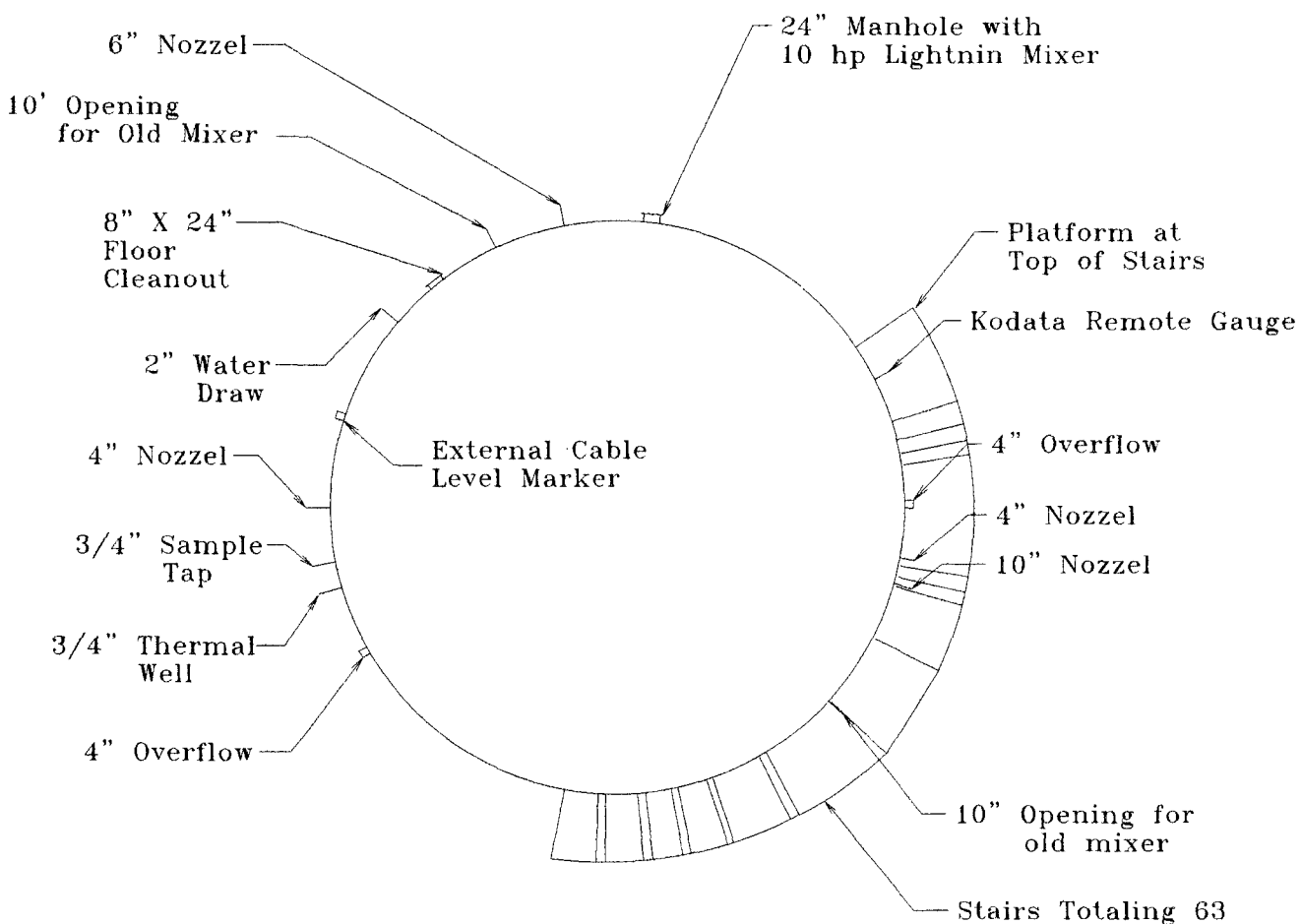
Not hammer tested.

Vents: Number, size and type (make drawing of location)	See drawing				
Emergency vent - manhole (number, size and type)	See drawing				
Gaging well: Box	Not Checked	Cover	Yes	Handrail	Yes
Scaffold ring:	Not Checked				
Gage tape: Sheaves	Not checked	Elbows	Not checked	Roof opening	Okay

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 18 Year built Unknown Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was not inspected internally.

Bottom: (welded) Yes (riveted) N/A Seams Welded lap.

Condition: Unknown

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: The tank was not out of service long enough to perform an internal inspection. NOTE: This tank does not have an internal floating roof.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain Same as above.

Tank mixer: Manufacturer None.

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. N/A Seal N/A
rating

Tank heater (Type, condition, BTU rating, internal or external): N/A

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Good

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 18

Roof: Inspect for condition of legs, rafters, etc. Not inspected.

Coating type and condition None that is known of.

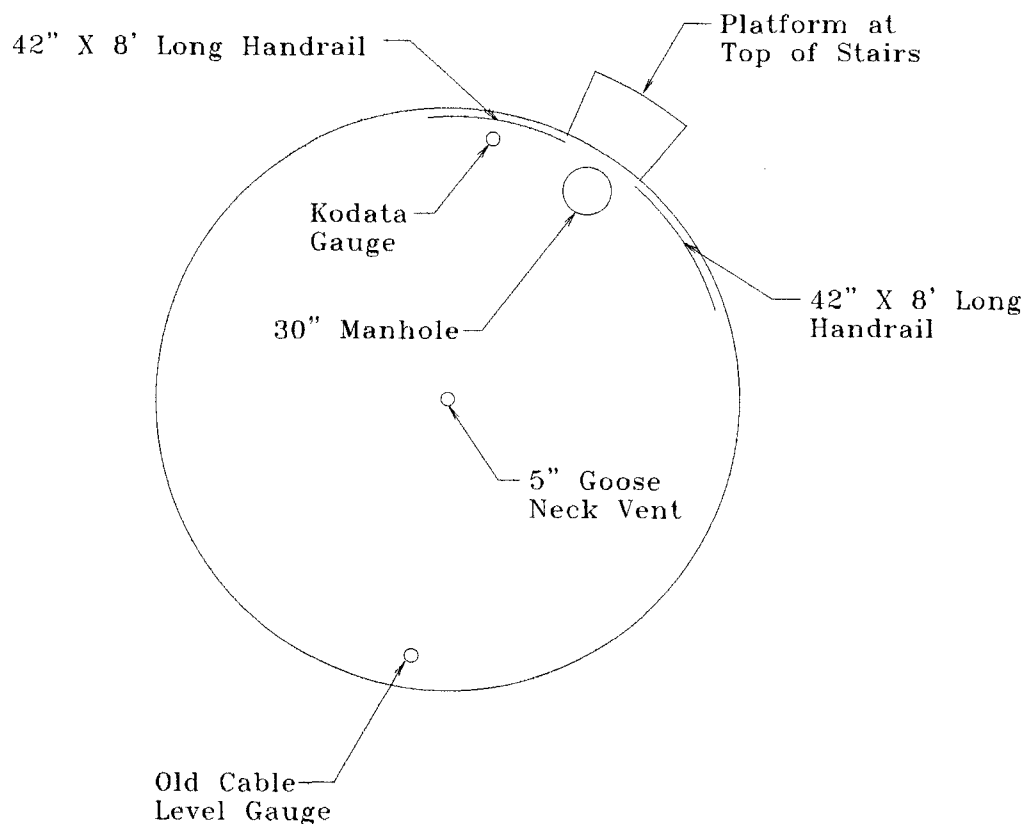
Shell: (welded) Yes (riveted) N/A Seams Welded

Condition and thickness Not inspected.

Coating type and condition None that is known of.

Make drawing of shell and openings here:

2-2



810/T18Einsp

THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>18</u>	Year Built	<u>Unknown</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>N/A</u>	Shell replaced (date)	<u>N/A</u>	Floor replaced (date)	<u>N/A</u>		<u>N/A</u>
Shell: Type (riveted)	<u>N/A</u>	(welded)	<u>Yes</u>	No. of rivet leaks			<u>N/A</u>
				No. of seam leaks			<u>None</u>
Comments: Corrosion (if holes, give number, size and location)				<u>None</u>			

Paint condition	<u>Slight corrosion where paint has peeled off. Over all paint condition is fair.</u>					
Stairway condition	<u>One stair not connected to handrail support.</u>					
Handrail condition	<u>One runner not connected to stair beneath. Not repaired as of date of inspection.</u>					
Swing suction:	Cable	<u>N/A</u>	Position Indicator	<u>N/A</u>	Winch	<u>N/A</u>
Gage pipe flushing nozzle	<u>N/A</u>					
Valves & flanges (number and size of cast iron)	<u>None</u>					

Suction heater (model)	<u>No Heater</u>					
Tank mixer	<u>None</u>					
Roof type: (riveted)	<u>N/A</u>	<u>welded</u>	<u>Yes</u>			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

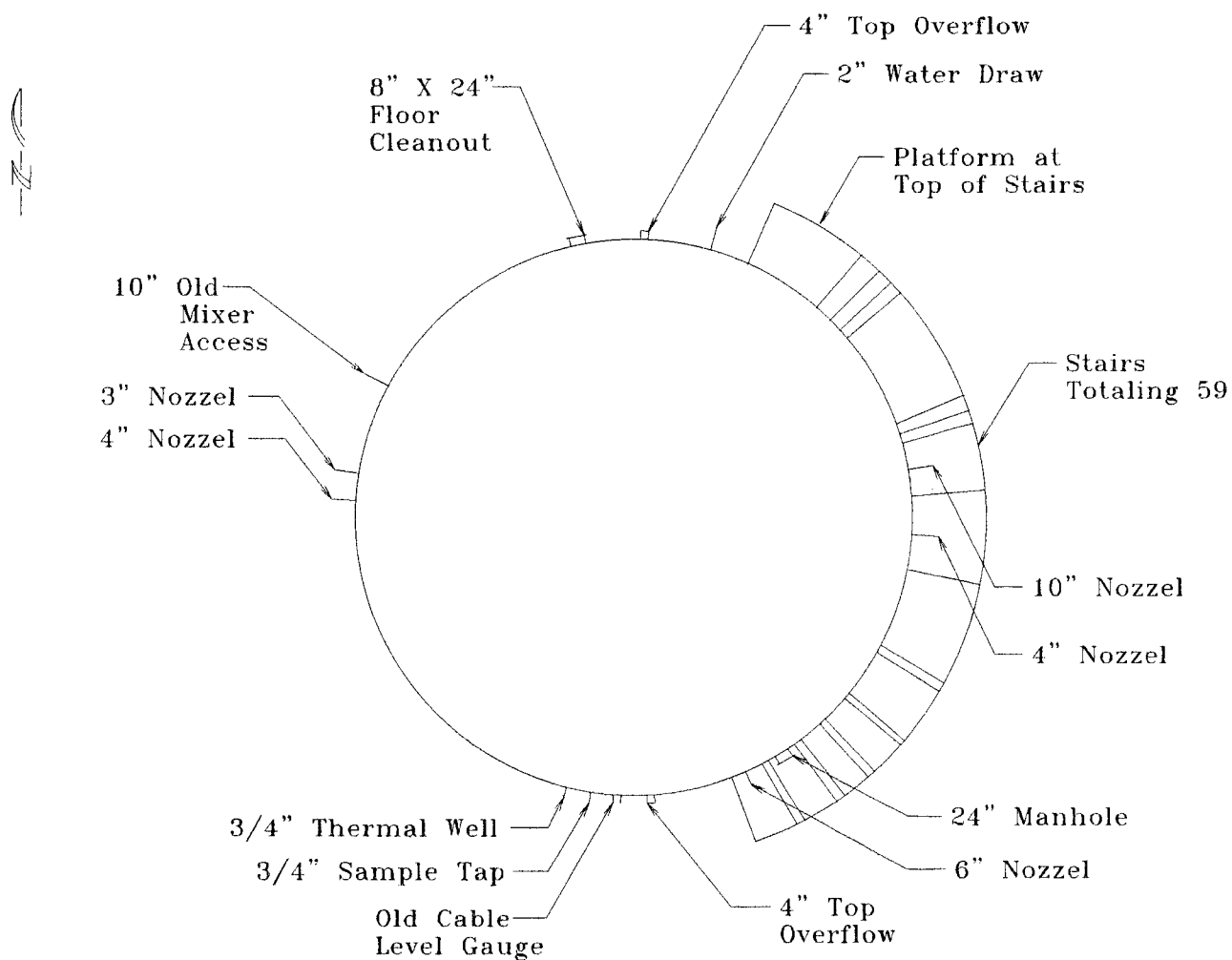
Not hammer tested.

Vents: Number, size and type (make drawing of location)	<u>See drawing.</u>					
Emergency vent - manhole (number, size and type)	<u>See drawing</u>					
Gaging well: Box	<u>Not Checked</u>	Cover	<u>Opened</u>	Handrail	<u>Yes</u>	
Scaffold ring:	<u>Not Checked</u>					
Gage tape: Sheaves	<u>Not checked</u>	Elbows	<u>Not checked</u>	Roof opening	<u>Okay</u>	

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



810VT18linsp

THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS

Tank No. 19 Year built Unknown Inspected by K. Sinks Date 1992
 Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The tank was not inspected internally.

Bottom: (welded) Unknown (riveted) Unknown Seams Unknown
 Condition: Unknown
 Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: The tank was not out of service long enough to perform an internal inspection.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch
 Vacuum test of water draws Not vacuum tested. If not checked, explain Same as above.

Tank mixer: Manufacturer None
 Style: internal impeller type N/A Size N/A Horsepower N/A
 External circulation pump: G.P.M. rating N/A Seal N/A
 Tank heater (Type, condition, BTU rating, internal or external): N/A

Gauge tape float: Yes Manufacturer Verec
 Tank suction type: Fixed Yes Floating N/A Pull up N/A
 Pull down N/A Size N/A Condition Unknown
 Suction points up or down Unknown
 Is there a vortex breaker over opening Unknown
 Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 19

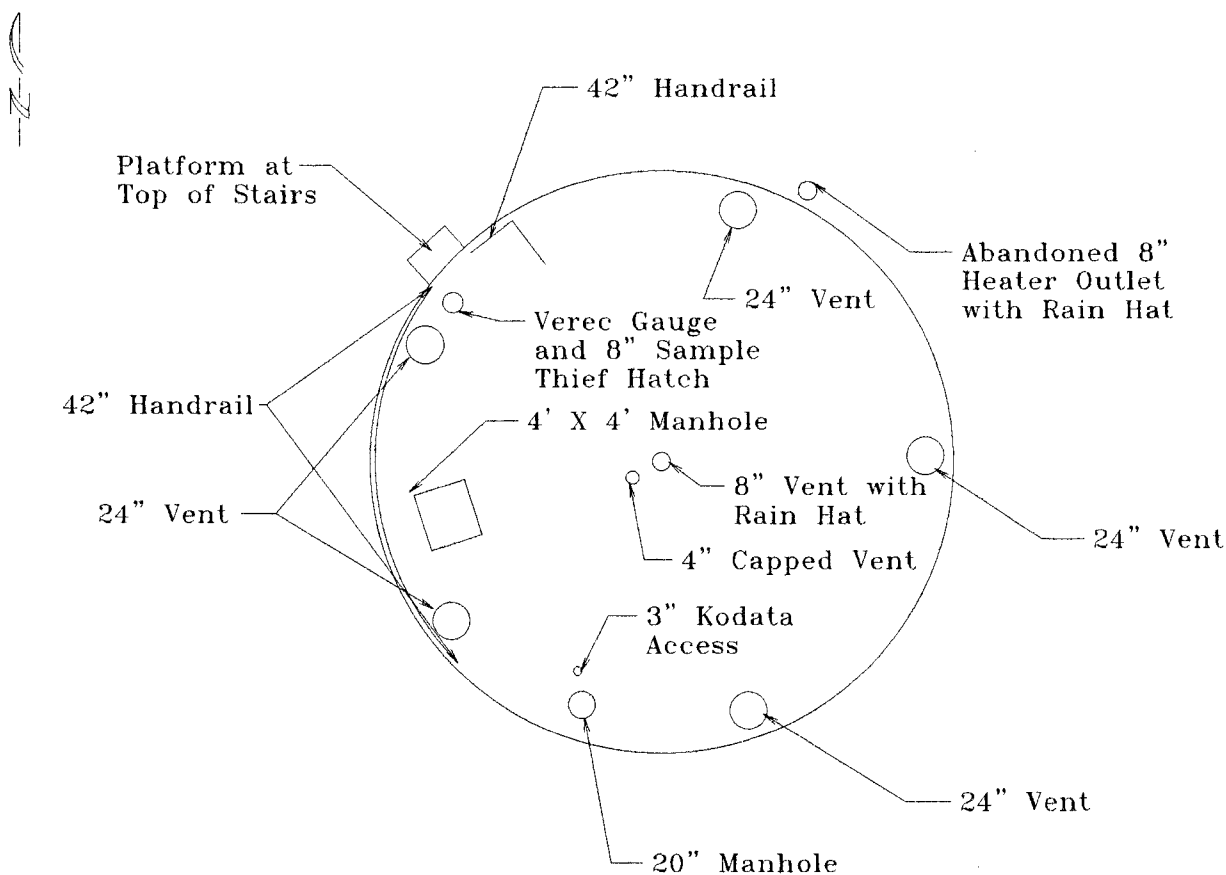
Roof: Inspect for condition of legs, rafters, etc. Not inspected. Same as above. Note: Some evidence of rivets
around manhole leaking.

Coating type and condition None that is known of.

Shell: (welded) Yes (riveted) Yes Seams Welded
Condition and thickness Not inspected.

Coating type and condition None that is known of.

Make drawing of shell and openings here:



THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>19</u>	Year Built	<u>Unknown</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>Ukn.</u>	Shell replaced (date)	<u>Ukn.</u>	Floor replaced (date)	<u>Ukn.</u>		
Shell: Type	<u>(riveted)</u>	<u>Partial</u>	<u>(welded)</u>	<u>Partial</u>	No. of rivet leaks	<u>Numerous</u>	
						No. of seam leaks	<u>None</u>

Comments: Corrosion (if holes, give number, size and location) Some leakage around manhole rivets. The roof shows signs of rafter failure, based on the number of low spots or sags.

Paint condition Corrosion where paint has peeled off. Over all paint condition is fair.

Stairway condition This tank has a inclined stairway from the north west area of the dike to the tank top.

Handrail condition Okay

Swing suction: Cable N/A Position Indicator N/A Winch N/A

Gage pipe flushing nozzle N/A

Valves & flanges (number and size of cast iron) None

Suction heater (model) None

Tank mixer None

Roof type: (riveted) N/A welded Yes

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

Not hammer tested.

Vents: Number, size and type (make drawing of location) See drawing.

Emergency vent - manhole (number, size and type) See drawing.

Gaging well: Box Not Checked Cover Yes Handrail Yes

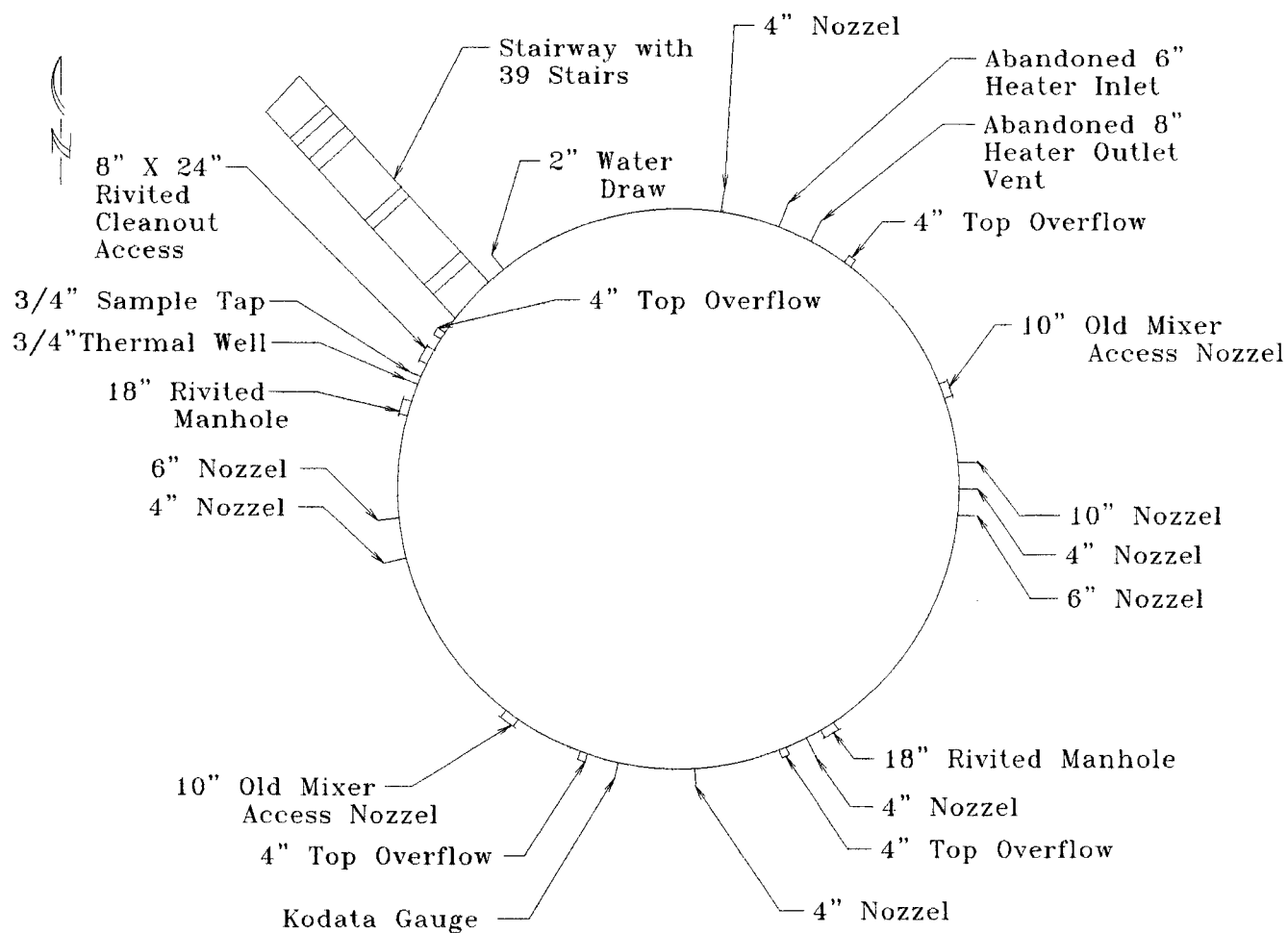
Scaffold ring: Not Checked

Gage tape: Sheaves Not checked Elbows Not checked Roof opening Okay

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



810\T19\insp

THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS

Tank No. 21 Year built 1977 Inspected by K. Sinks Date 1992
 Roof replaced (year) N/A Floor replaced (year) N/A

Condition: The internal floating roof seal needed repairs as did the pontoons. These were made and the tank was returned to service.

Bottom: (welded) yes (riveted) N/A Seams welded lap.

Condition: The bottom appeared to be in good condition.

Vacuum test: Floor No Wall to floor Yes Lap seam Yes

If not tested, explain: The floor was vacuum tested at the welds.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See attached drawing.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain

The well was cleaned and visually inspected. The welds were all epoxy coated.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): N/A

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Good

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

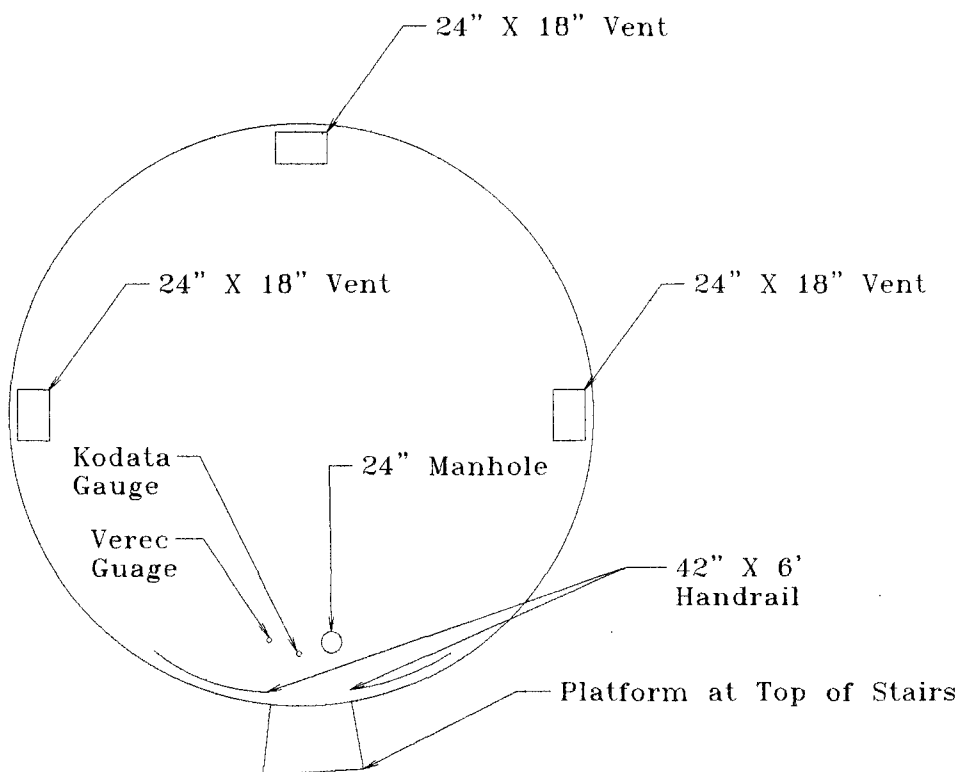
**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 21Roof: Inspect for condition of legs, rafters, etc. All okay.Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded
Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>21</u>	Year Built	<u>1977</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>N/A</u>	Shell replaced (date)	<u>N/A</u>	Floor replaced (date)	<u>N/A</u>		
Shell: Type (riveted)	<u>N/A</u>	(welded)	<u>Yes</u>	No. of rivet leaks	<u>N/A</u>		
				No. of seam leaks	<u>None</u>		

Comments: Corrosion (if holes, give number, size and location) None

Paint condition Slight corrosion where paint has peeled off. Over all paint condition is fair.

Stairway condition Vertical ladder - okay.

Handrail condition Cage backed ladder.

Swing suction: Cable N/A Position Indicator N/A Winch N/A

Gage pipe flushing nozzle N/A

Valves & flanges (number and size of cast iron) None

Suction heater (model) N/A

Tank mixer None

Roof type: (riveted) N/A welded Yes

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

Not hammer tested.

Vents: Number, size and type (make drawing of location) See drawing.

Emergency vent - manhole (number, size and type) See drawing.

Gaging well: Box Not Checked Cover Opened Handrail Yes

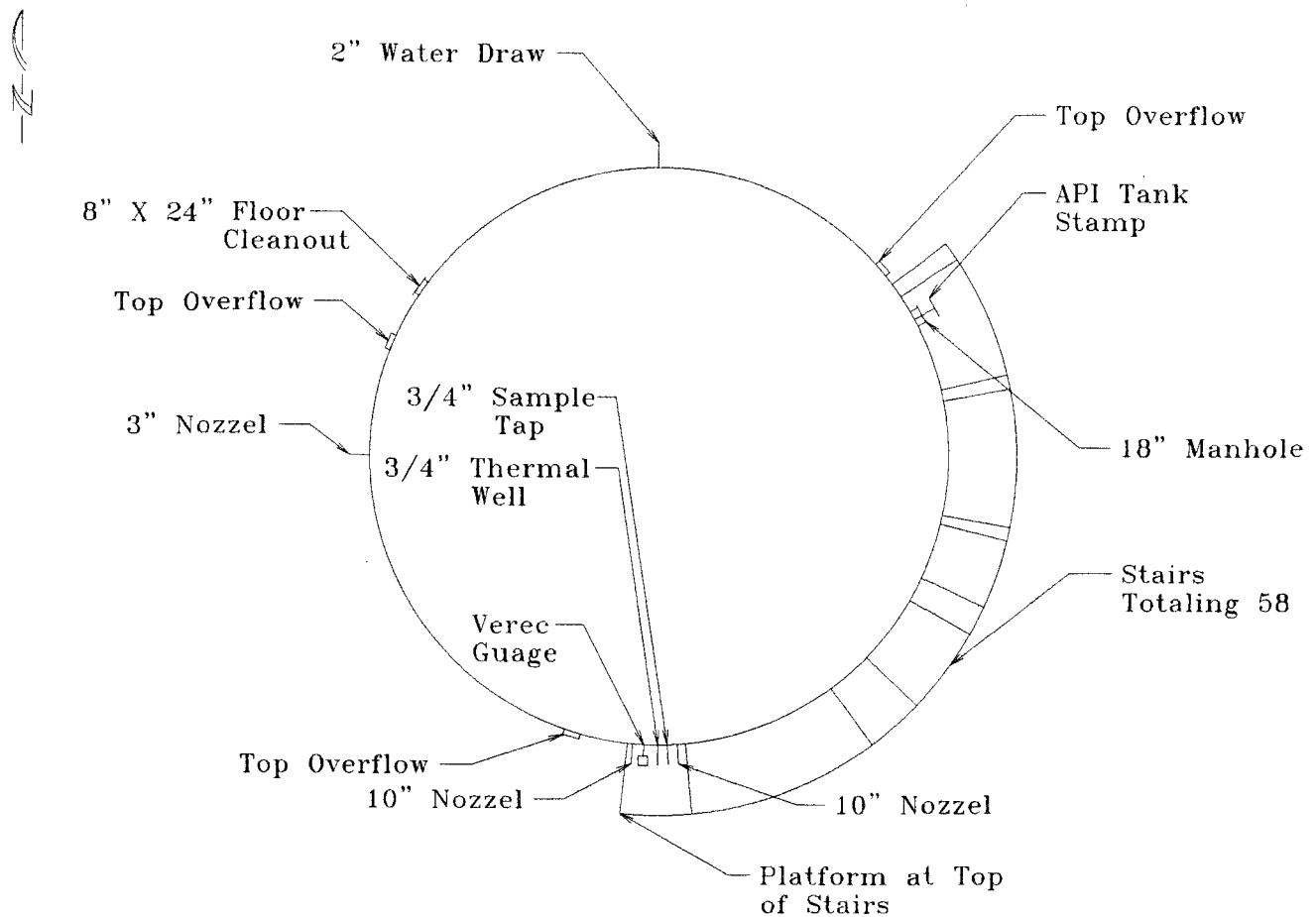
Scaffold ring: Not Checked

Gage tape: Sheaves Not checked Elbows Not checked Roof opening Okay

THRIFTWAY REFINING CO. TANK EXTERNAL INSPECTION FOR CONE ROOF TANKS

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 22 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) Yes (riveted) N/A Seams Welded lap.

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) There are eleven openings on this tank.

See the attached drawing for location and size.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain Currently the tank

is not in service. The tank will be inspected before returning to service.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down.

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 22

Roof: Inspect for condition of legs, rafters, etc. Unknown

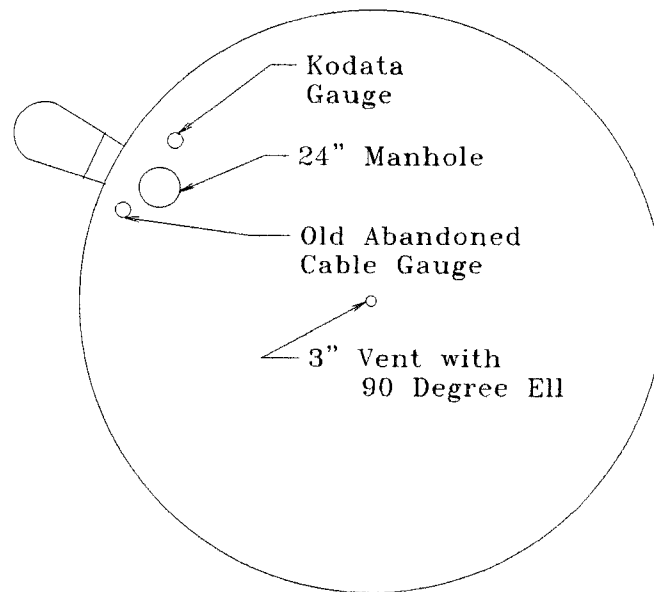
Coating type and condition None.

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>22</u>	Year Built	<u>1972</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>Unknown</u>	Shell replaced (date)	<u>Unknown</u>	Floor replaced (date)	<u>Unknown</u>		
Shell: Type	<u>(riveted)</u>	<u>N/A</u>	<u>(welded)</u>	<u>Yes</u>	No. of rivet leaks		<u>N/A</u>
					No. of seam leaks		<u>None</u>
Comments: Corrosion (if holes, give number, size and location)					<u>None</u>		

Paint condition	<u>Slight corrosion where paint has peeled off. Over all paint condition is fair.</u>						
Stairway condition	<u>Okay.</u>						
Handrail condition	<u>Okay</u>						
Swing suction:	Cable	<u>N/A</u>	Position Indicator	<u>N/A</u>	Winch	<u>N/A</u>	
Gage pipe flushing nozzle	<u>N/A</u>						
Valves & flanges (number and size of cast iron)	<u>None</u>						
Suction heater (model)	<u>N/A</u>						
Tank mixer	<u>None</u>						
Roof type:	<u>(riveted)</u>	<u>N/A</u>	<u>welded</u>	<u>Yes</u>			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

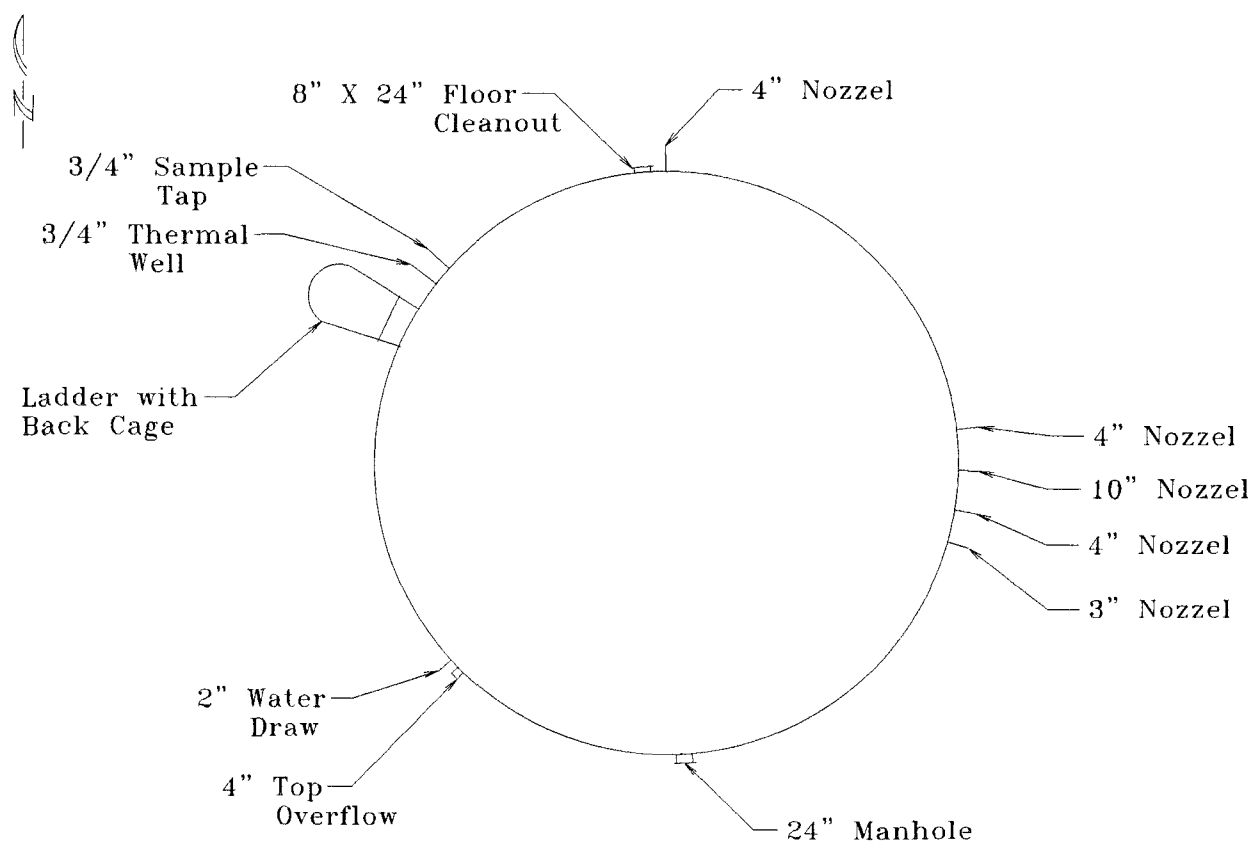
Not hammer tested.

Vents: Number, size and type (make drawing of location)	<u>See drawing</u>		
Emergency vent - manhole (number, size and type)	<u>See Drawing</u>		
Gaging well: Box	<u>Yes</u>	Cover	<u>Yes</u>
			<u>Handrail</u>
Scaffold ring:	<u>Not Checked</u>		
Gage tape: Sheaves	<u>Not checked</u>	Elbows	<u>Not checked</u>
			<u>Roof opening</u>
			<u>Okay</u>

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). No cast iron fittings.



THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS

Tank No. 23 Year built Before 1972 Inspected by K. Sinks Date 1992
 Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded lap.

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) There are eleven openings on this tank. See the attached drawing for location and size.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain The tank is out of service. The tank will be inspected before being placed in service again.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down.

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 23

Roof: Inspect for condition of legs, rafters, etc. Unknown

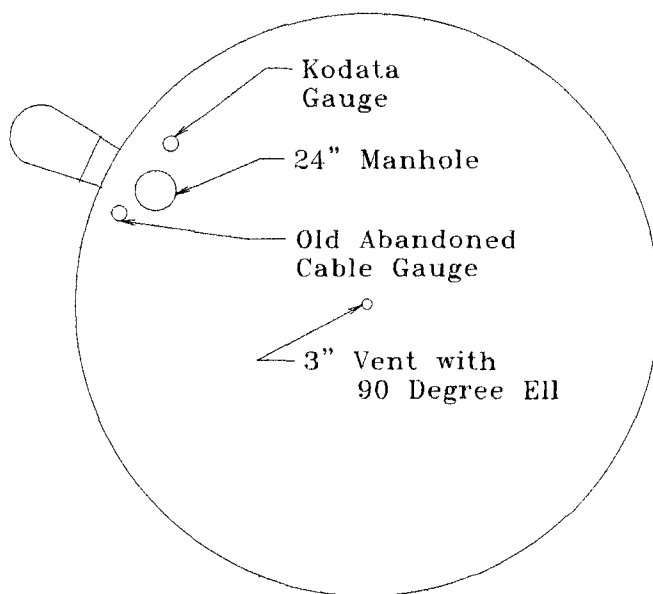
Coating type and condition None.

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK

(Use attached drawing to show location of all appurtenances)

Tank No.	23	Year Built	Before 1972	Inspected by	K. Sinks	Date	1992
Roof Replaced	Unknown	Shell replaced (date)		Unknown	Floor replaced (date)	Unknown	
Shell: Type	(riveted)	N/A	(welded)	Yes	No. of rivet leaks	N/A	
					No. of seam leaks	None	
Comments: Corrosion (if holes, give number, size and location)					None		

Paint condition	Slight corrosion where paint has peeled off. Overall paint condition is fair.					
Stairway condition	Okay.					
Handrail condition	Okay					
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A
Gage pipe flushing nozzle	N/A					
Valves & flanges (number and size of cast iron)	None					
Suction heater (model)	N/A					
Tank mixer	None					
Roof type: (riveted)	N/A		welded		Yes	

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

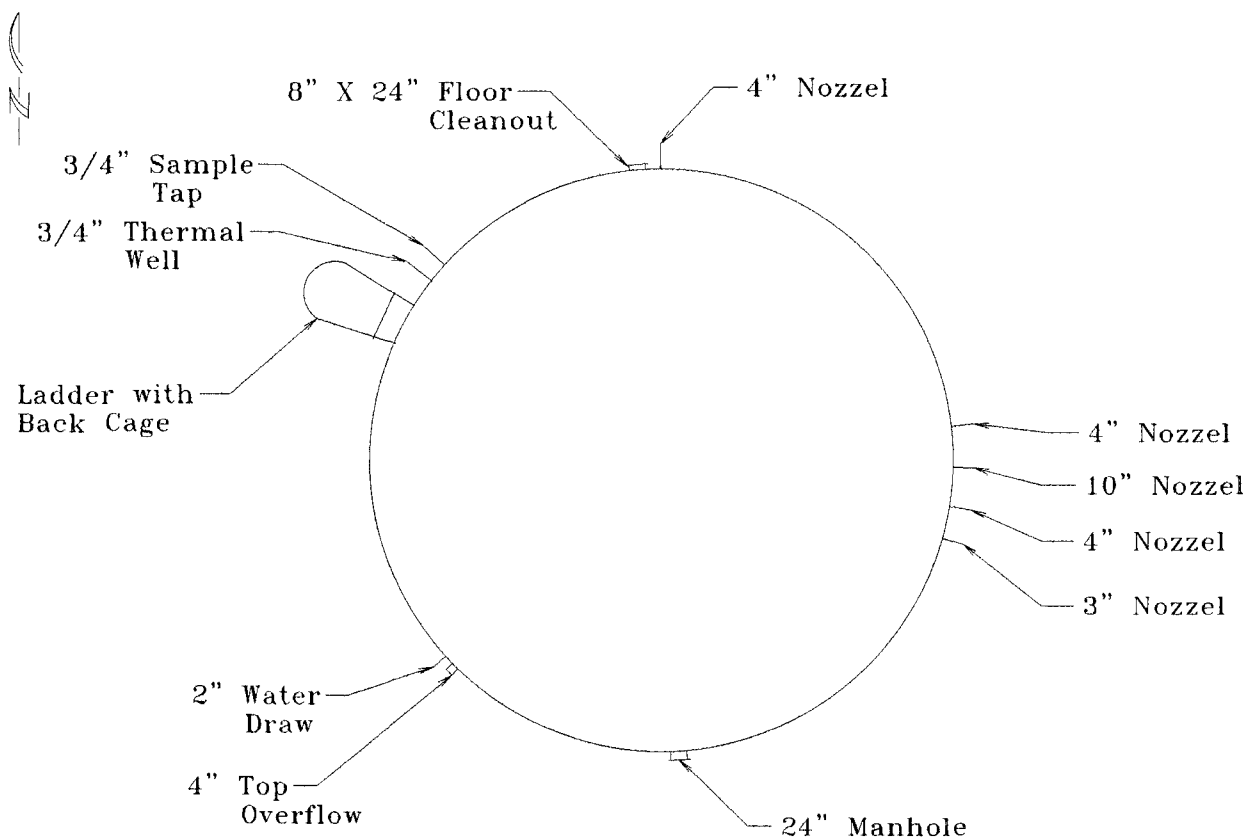
Not hammer tested.

Vents: Number, size and type (make drawing of location)	See drawing		
Emergency vent - manhole (number, size and type)	See Drawing		
Gaging well: Box	Yes	Cover	Yes
			Handrail
Scaffold ring:	Not Checked		
Gage tape: Sheaves	Not checked	Elbows	Not checked
			Roof opening
			Okay

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). No cast iron fittings.



THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS

Tank No. 27 Year built 1957 Inspected by K. Sinks Date 1992
 Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded.

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals were not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See the attached drawing for location and size.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain The tank is out of service. The tank will be inspected before being placed in service again.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 27

Roof: Inspect for condition of legs, rafters, etc. Unknown

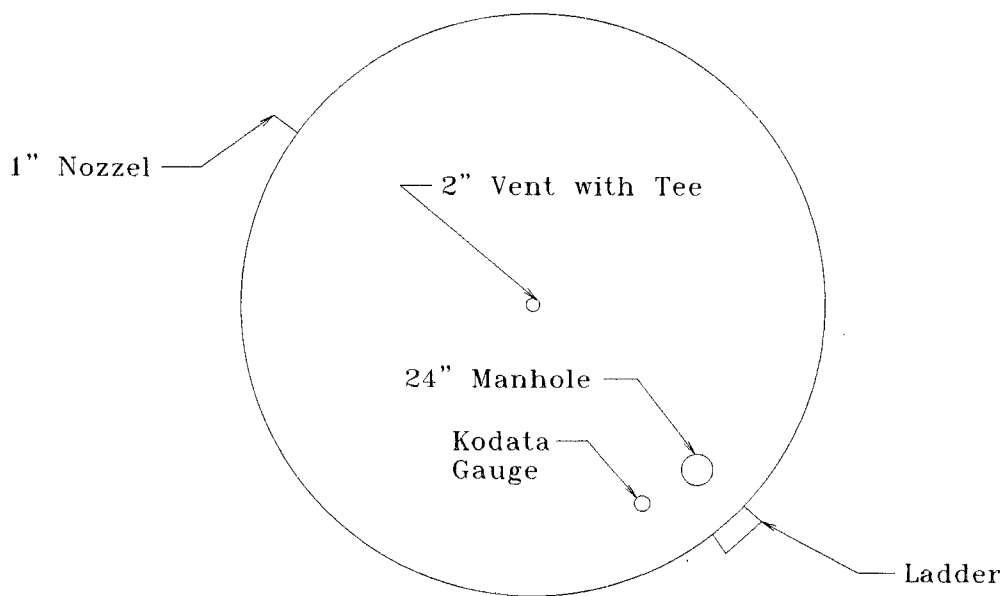
Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>27</u>	Year Built	<u>1957</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>Unknown</u>	Shell replaced (date)	<u>Unknown</u>	Floor replaced (date)	<u>Unknown</u>		
Shell: Type	<u>(riveted)</u>	<u>N/A</u>	<u>(welded)</u>	<u>Yes</u>	No. of rivet leaks	<u>N/A</u>	
					No. of seam leaks	<u>None</u>	

Comments: Corrosion (if holes, give number, size and location) None

Paint condition Slight corrosion where paint has peeled off. Over all paint condition is fair.

Stairway condition Okay.

Handrail condition Vertical ladder.

Swing suction: Cable N/A Position Indicator N/A Winch N/A

Gage pipe flushing nozzle N/A

Valves & flanges (number and size of cast iron) None

Suction heater (model) N/A

Tank mixer None

Roof type: (riveted) N/A welded Yes

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

Not hammer tested.

Vents: Number, size and type (make drawing of location) See Drawing

Emergency vent - manhole (number, size and type) See Drawing

Gaging well: Box Yes Cover Yes Handrail Yes

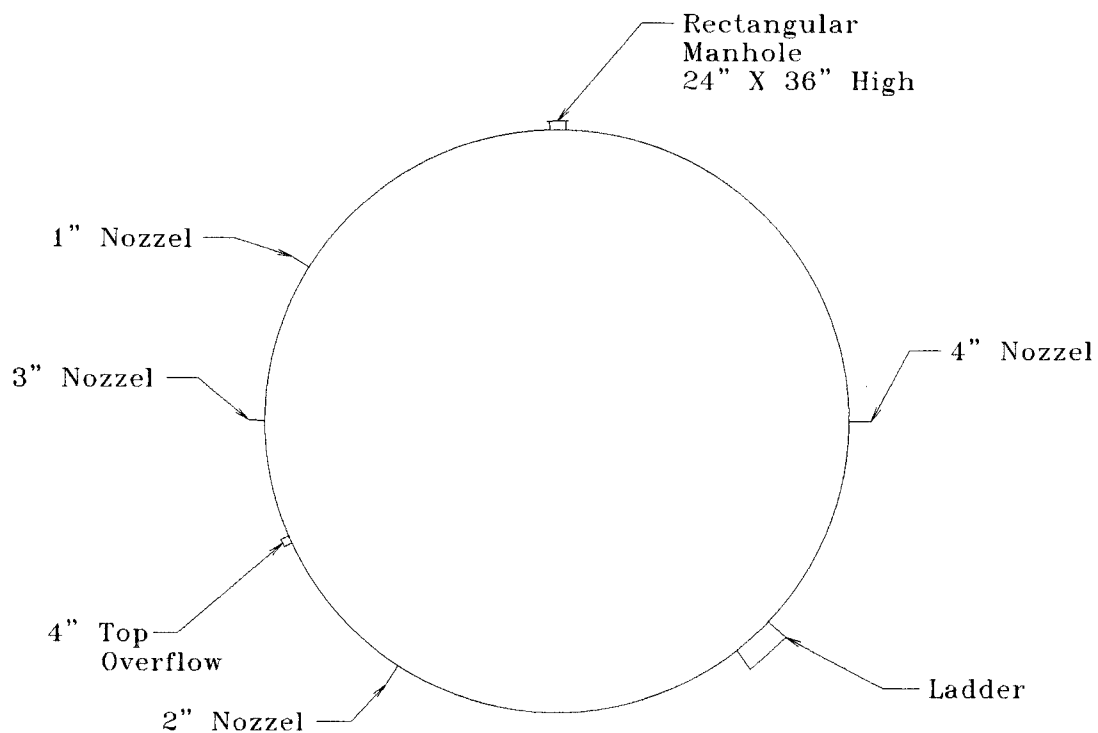
Scaffold ring: Not Checked

Gage tape: Sheaves Not checked Elbows Not checked Roof opening Okay

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 28 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See the attached drawing for location and size.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain The tank is out of service and will be inspected before being placed into service again.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 28

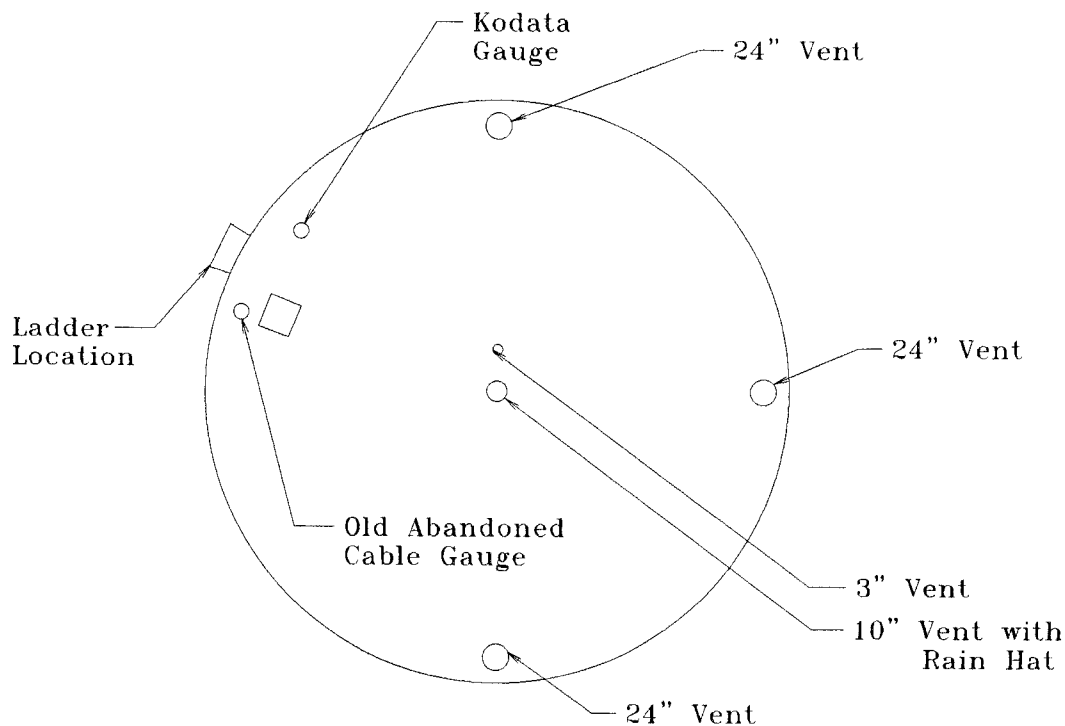
Roof: Inspect for condition of legs, rafters, etc. Unknown

Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded
Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	28	Year Built	1972	Inspected by	K. Sinks	Date	1992
Roof Replaced	Unknown	Shell replaced (date)		Unknown	Floor replaced (date)		Unknown
Shell: Type	(riveted)	N/A	(welded)	Yes	No. of rivet leaks		N/A
					No. of seam leaks		None
Comments: Corrosion (if holes, give number, size and location)					None		

Paint condition	Heavy corrosion where paint has peeled off. Over all paint condition is fair.						
Stairway condition	Okay.						
Handrail condition	Vertical ladder.						
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A	
Gage pipe flushing nozzle	N/A						
Valves & flanges (number and size of cast iron)	None						
Suction heater (model)	N/A						
Tank mixer	None						
Roof type:	(riveted)	N/A	welded	Yes			

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

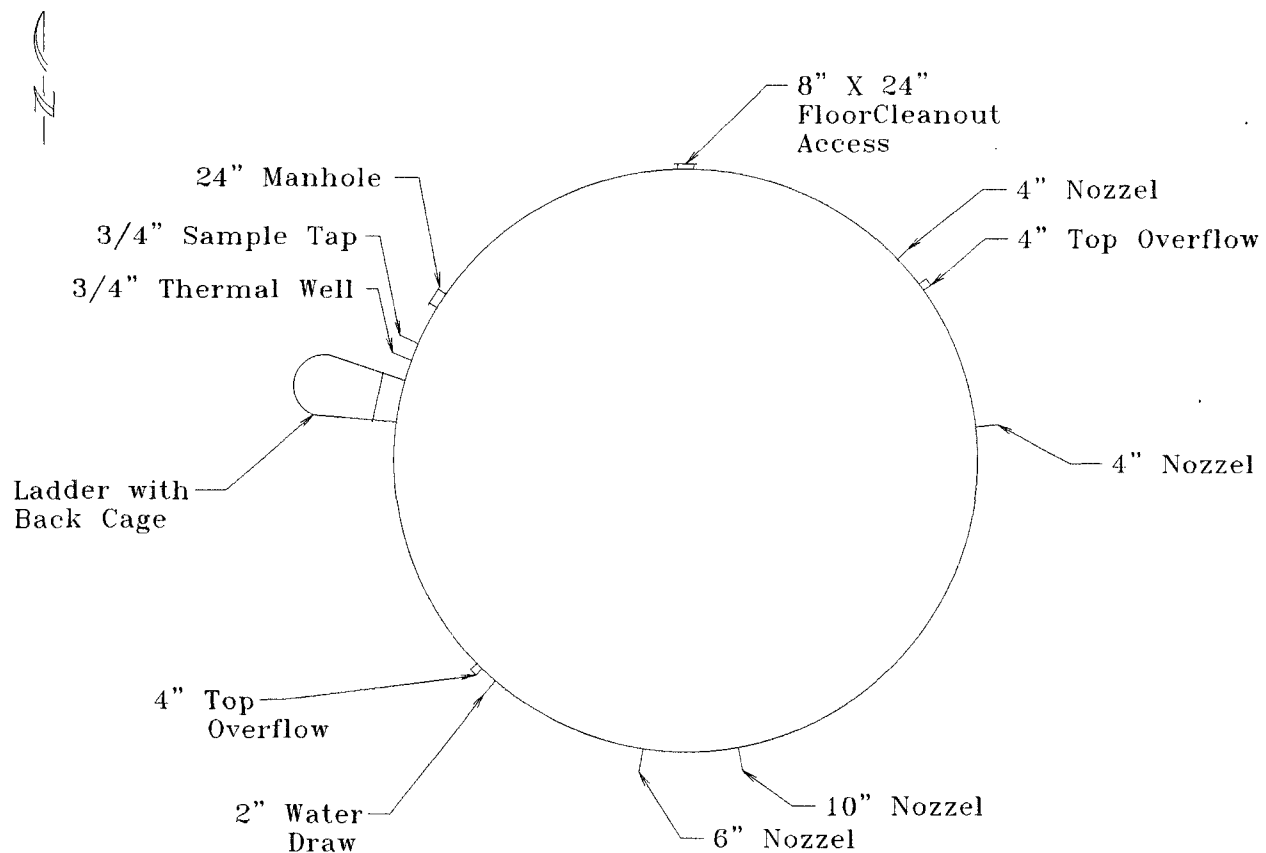
Not hammer tested.

Vents: Number, size and type (make drawing of location)	See drawing					
Emergency vent - manhole (number, size and type)	See Drawing					
Gaging well: Box	Yes	Cover	Yes	Handrail	Yes	
Scaffold ring:	Not Checked					
Gage tape: Sheaves	Not checked	Elbows	Not checked	Roof opening	Okay	

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on Drawing). **No cast iron, all steel flanges.**



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	29	Year Built	1972	Inspected by	K. Sinks	Date	1992
Roof Replaced	Ukn	Shell replaced (date)	Ukn	Floor replaced (date)	Ukn		
Shell: Type (riveted)	N/A	(welded)	Yes	No. of rivet leaks	N/A		
				No. of seam leaks	None		
Comments: Corrosion (if holes, give number, size and location)				None			

Paint condition	Heavy corrosion where paint has peeled off. Over all paint condition is fair.						
Stairway condition	Okay.						
Handrail condition	Vertical ladder.						
Swing suction:	Cable	N/A	Position Indicator	N/A	Winch	N/A	
Gage pipe flushing nozzle	N/A						
Valves & flanges (number and size of cast iron)	None						
Suction heater (model)	N/A						
Tank mixer	None						
Roof type: (riveted)	N/A		welded		Yes		

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

Not hammer tested.

Vents: Number, size and type (make drawing of location)	See drawing		
Emergency vent - manhole (number, size and type)	See Drawing		
Gaging well: Box	Yes	Cover	Yes
Scaffold ring:	Not Checked		
Gage tape: Sheaves	Not checked	Elbows	Not checked
			Roof opening
			Okay

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 29

Roof: Inspect for condition of legs, rafters, etc. Unknown

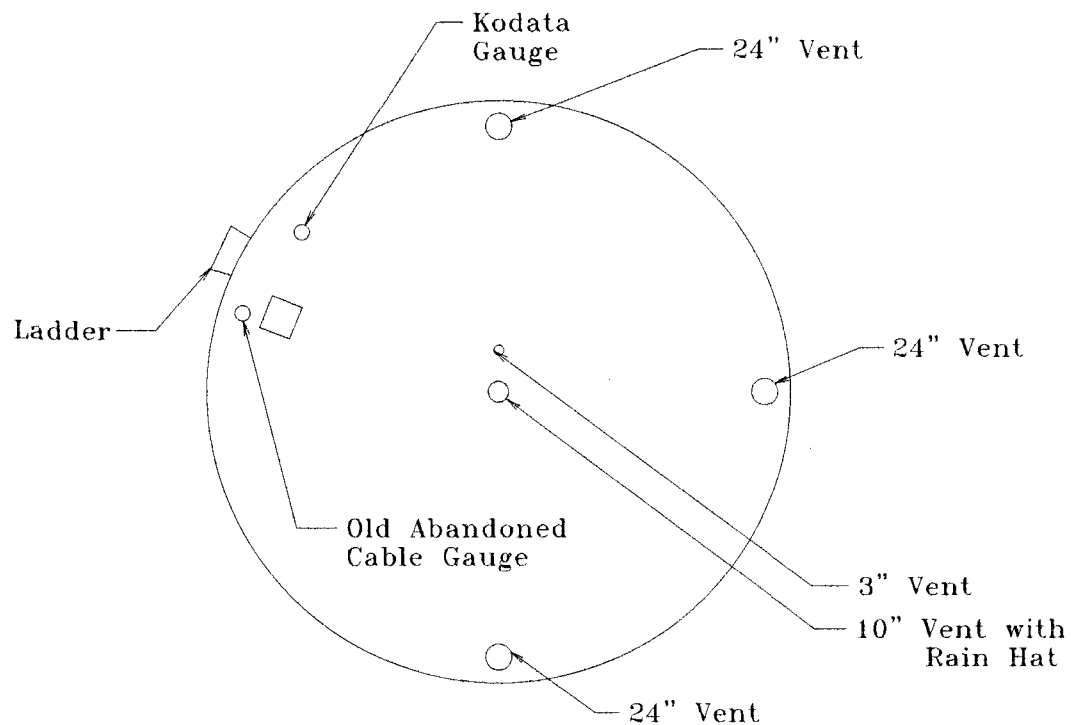
Coating type and condition None

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Good, thickness not measured.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 29 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See the attached drawing for location and size.

Floor drains (ID's) 2 inch Floor drains (OD's) 2 1/2 inch

Vacuum test of water draws Not vacuum tested. If not checked, explain The tank is out of service and will be inspected before being placed back into service again.

Tank mixer: Manufacturer None

Style: internal impeller type N/A Size N/A Horsepower N/A

External circulation pump: G.P.M. N/A Seal N/A
rating

Tank heater (Type, condition, BTU rating, internal or external): None

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down

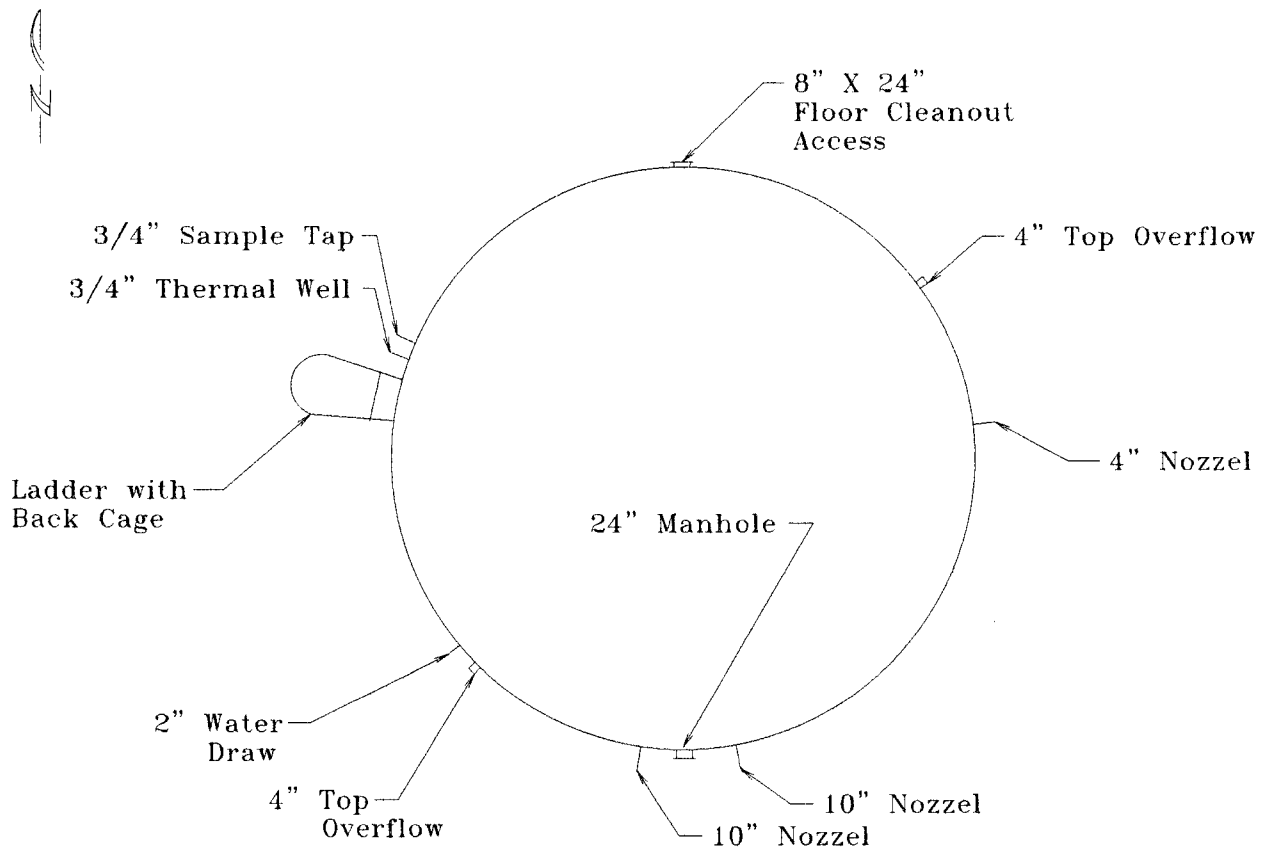
Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing).



**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 30 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See the attached drawing for location and size.

Floor drains (ID's) Unknown Floor drains (OD's) Unknown

Vacuum test of water draws Not vacuum tested. If not checked, explain Currently the tank

is not in service. The tank will be inspected before returning to service.

again.

Tank mixer: Manufacturer Smith agitator.

Style: internal impeller type Ukn Size Ukn Horsepower Ukn

External circulation pump: G.P.M. N/A Seal N/A
rating

Tank heater (Type, condition, BTU rating, internal or external): Power Flame Blower, Model

#CR1-GO-12, Natural gas or #2 heating oil. 300 MBTU's/Hr. to 1,357 MBTU's/Hr. Natural gas. 2.5 G.P.H to 9.7 G.P.H

2 heating oil.

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down.

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 30

Roof: Inspect for condition of legs, rafters, etc. Unknown

Coating type and condition None.

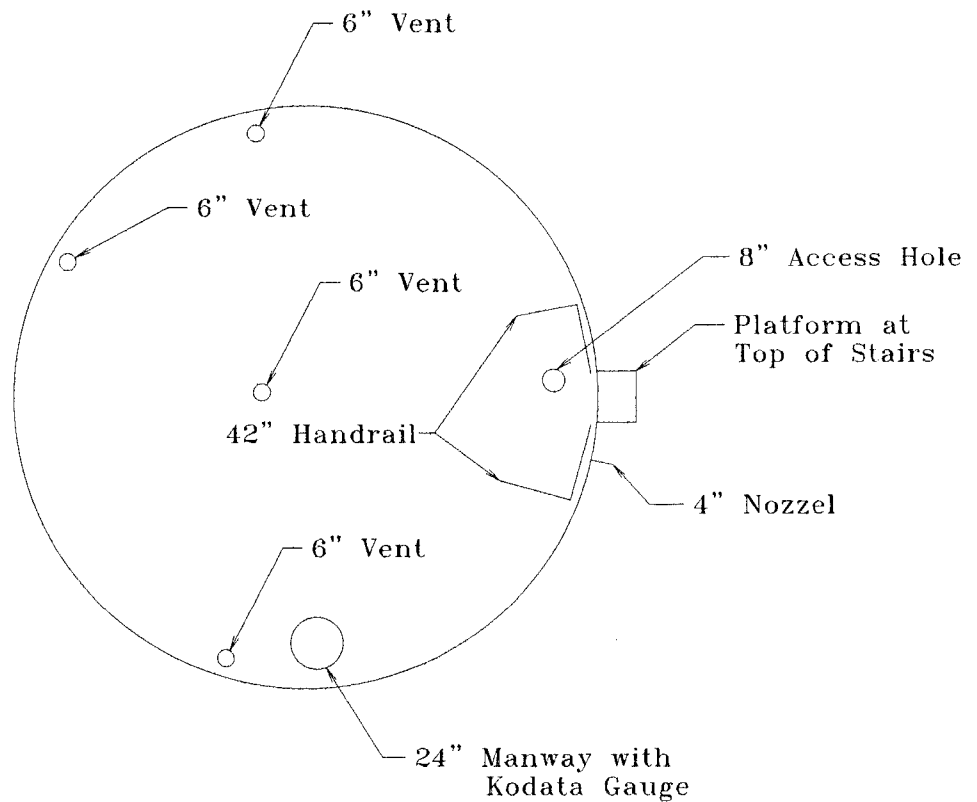
Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Evidence of shell weld leaks on outside of tank.

Coating type and condition None

Make drawing of shell and openings here:

2



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

Tank No.	<u>30</u>	Year Built	<u>Unknown</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
Roof Replaced	<u>Ukn</u>	Shell replaced (date)	<u>Ukn</u>	Floor replaced (date)	<u>Ukn</u>		
Shell: Type (riveted)	<u>N/A</u>	(welded)	<u>Yes</u>	No. of rivet leaks			<u>N/A</u>
				No. of seam leaks			<u>None</u>

Comments: Corrosion (if holes, give number, size and location) None

Paint condition Heavy corrosion where paint has peeled off. Over all paint condition is fair.

Stairway condition Okay.

Handrail condition Ramp type ladder.

Swing suction: Cable N/A Position Indicator N/A Winch N/A

Gage pipe flushing nozzle N/A

Valves & flanges (number and size of cast iron) None

Suction heater (model) N/A

Tank mixer Smith Agitator.

Roof type: (riveted) N/A welded Yes

Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:

Not hammer tested.

Vents: Number, size and type (make drawing of location) See drawing

Emergency vent - manhole (number, size and type) See Drawing

Gaging well: Box Yes Cover Yes Handrail Yes

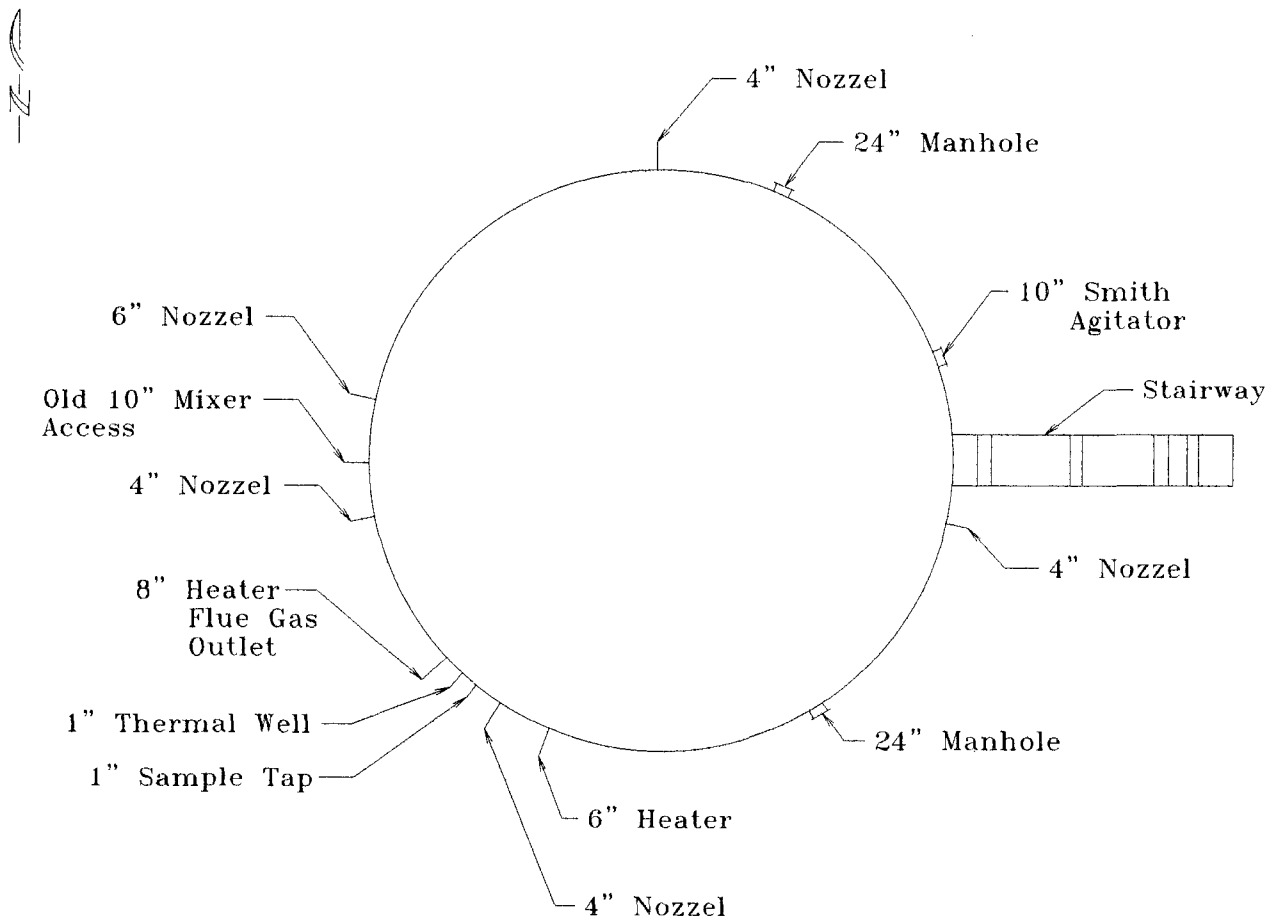
Scaffold ring: Not Checked

Gage tape: Sheaves Not checked Elbows Not checked Roof opening Okay

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**



810\T30\insp

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TANKS**

Tank No. 31 Year built Before 1972 Inspected by K. Sinks Date 1992
Roof replaced (year) N/A Floor replaced (year) N/A

Condition: This tank was cleaned in 1996 but not inspected internally.

Bottom: (welded) yes (riveted) N/A Seams welded

Condition: Not inspected.

Vacuum test: Floor No Wall to floor No Lap seam No

If not tested, explain: Tank internals not checked.

Coatings: Type and condition There are no known internal coatings.

Openings: Number, Location, Size (make drawing on next sheet) See the attached drawing for location and size.

Floor drains (ID's) Unknown Floor drains (OD's) Unknown

Vacuum test of water draws Not vacuum tested. If not checked, explain Currently the tank is not in service. The tank will be inspected before returning to service.

Tank mixer: Manufacturer None

Style: internal impeller type Ukn Size Ukn Horsepower Ukn

External circulation pump: G.P.M. rating N/A Seal N/A

Tank heater (Type, condition, BTU rating, internal or external): Heater burned up outside of tank.

Gauge tape float: Yes Manufacturer Kodata

Tank suction type: Fixed Yes Floating N/A Pull up N/A

Pull down N/A Size N/A Condition Unknown

Suction points up or down Down.

Is there a vortex breaker over opening None

Inspector Ken Sinks Date 1992

**THRIFTWAY REFINING CO.
TANK INTERNAL INSPECTION FORM
CONE ROOF TYPE**

Tank No. 31

Roof: Inspect for condition of legs, rafters, etc. Unknown

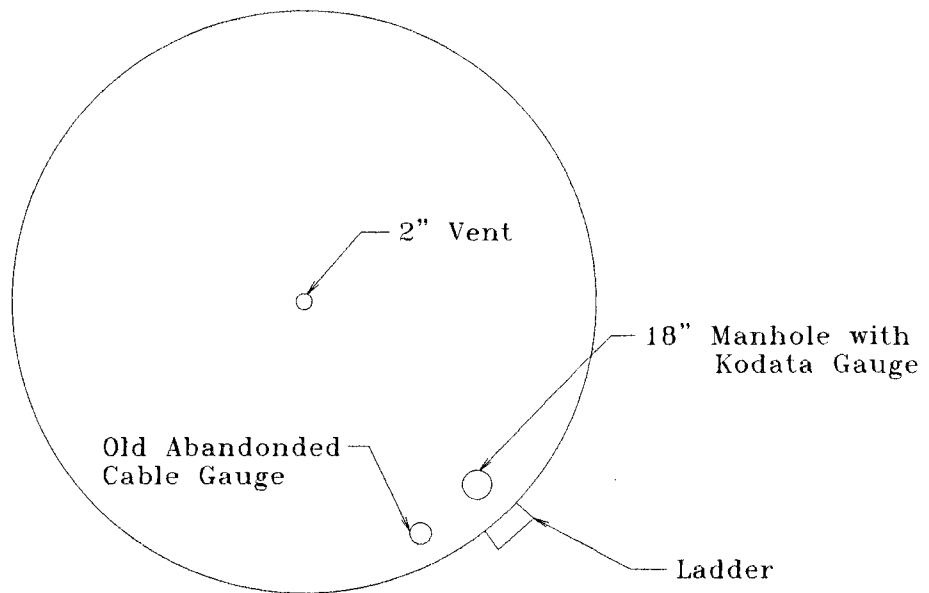
Coating type and condition None.

Shell: (welded) Yes (riveted) N/A Seams welded

Condition and thickness Not inspected internally.

Coating type and condition None

Make drawing of shell and openings here:



**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FORM
CONE ROOF TANK**

(Use attached drawing to show location of all appurtenances)

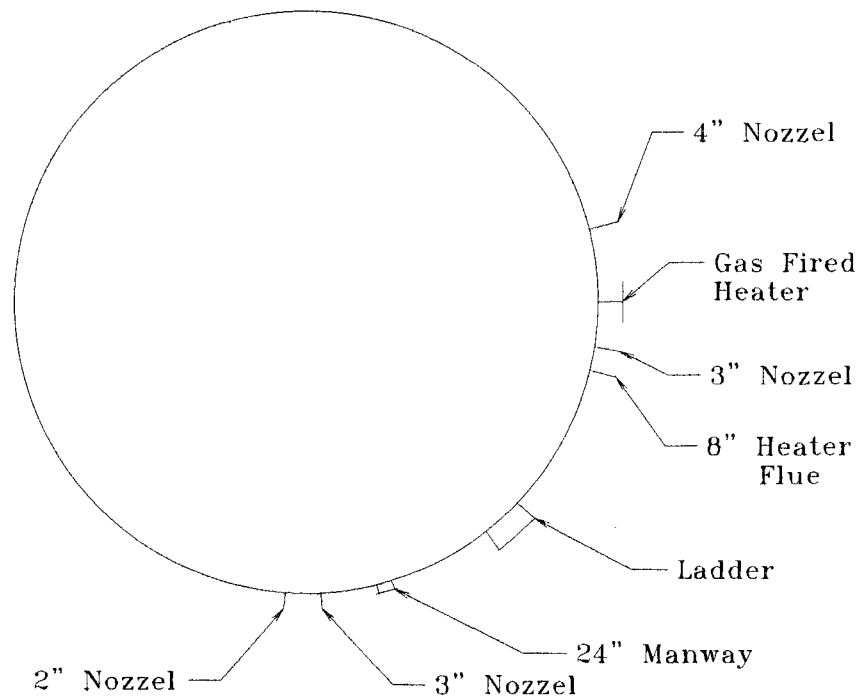
Tank No.	<u>31</u>	Year Built	<u>Unknown</u>	Inspected by	<u>K. Sinks</u>	Date	<u>1992</u>
	<u>Roof Replaced</u>	<u>Ukn</u>	<u>Shell replaced (date)</u>	<u>Ukn</u>	<u>Floor replaced (date)</u>		<u>Ukn</u>
Shell: Type	<u>(riveted)</u>	<u>N/A</u>	<u>(welded)</u>	<u>Yes</u>	No. of rivet leaks		<u>N/A</u>
					No. of seam leaks		<u>None</u>
Comments: Corrosion (if holes, give number, size and location)				<u>Tank insulated. No evidence of leakage.</u>			
Paint condition	<u>Tank insulated; could not check coating.</u>						
Stairway condition	<u>Okay.</u>						
Handrail condition	<u>Vertical ladder</u>						
Swing suction:	Cable	<u>N/A</u>	Position Indicator	<u>N/A</u>	Winch	<u>N/A</u>	
Gage pipe flushing nozzle	<u>N/A</u>						
Valves & flanges (number and size of cast iron)	<u>None</u>						
Suction heater	<u>(model)</u>	<u>Information not available.</u>					
Tank mixer	<u>None</u>						
Roof type:	<u>(riveted)</u>	<u>N/A</u>	<u>welded</u>	<u>Yes</u>			
Hammer test, give number size and location of holes, low spots, rivet and seam leaks, paint condition:							
<u>Not hammer tested.</u>							
Vents: Number, size and type (make drawing of location)				<u>See drawing</u>			
Emergency vent - manhole (number, size and type)				<u>See Drawing</u>			
Gaging well: Box	<u>Yes</u>	Cover	<u>Yes</u>	Handrail	<u>Yes</u>		
Scaffold ring:	<u>Not Checked</u>						
Gage tape: Sheaves	<u>Not checked</u>	Elbows	<u>Not checked</u>	Roof opening	<u>Okay</u>		

**THRIFTWAY REFINING CO.
TANK EXTERNAL INSPECTION FOR
CONE ROOF TANKS**

Draw in location of nozzles, etc. for shell and roof.

NOTE: Make drawing of all openings, bottom drains, doghouse clean out, valves and manholes for location (record size and if cast iron or steel on drawing). **No cast iron, all steel flanges.**

2-2





CEMENTERS, INC.

P. O. Box 302 • FARMINGTON, NE MEXICO 87499 • (505) 32-3683

DATE 3-18-94

CUSTOMER: Thriftway

WELL # Thriftway Plant

CEMENT USED: 955X 290cc/lz

DISPLACEMENT BARRELS: _____

CEMENT CIRCULATED: _____

DISPLACEMENT RATE: _____

CEMENT RATE: 2 BPM

DISPLACEMENT PRESSURE: _____

PRESSURE: 400#

DISPLACEMENT TIME: _____

CEMENT TIME: _____

PLUG BUMP TIMES & PRESSURE: _____

OTHER: Run 200' 2 1/2" pipe Pump 805X 290cc/lz
pull to 80' pump 155X 290cc/lz circ. Cement to
surface

CEMENTERS, INC.

P. O. BOX 302
FARMINGTON, NEW MEXICO 87499
C/L:ff (505) 632-3683

JOB TICKET № 4686

Att. Mr. Ratcliff (505) 632-3683

Customer: Thriftway (810')		Well No.: Thriftway		Lease: water supply	
Address: 710 East 20th Street Suite 400		County: San Juan		State: NM	
City Farmington		State		Zip	
Date of Job: 3-18-94		Size of Hole:		Depth: Ft.	
Type of Job: PDA		Depth: 240 Ft.		Size & Wt. of Casing: 2"	
New Well <input type="checkbox"/>		Old Well <input checked="" type="checkbox"/>		Other <input type="checkbox"/>	
Size & Wt. of Pipe: 1"		Depth: 200 Ft.			
Pump Truck Used: 101		Mileage: 101		Type:	
Bulk Truck Used: 104		Ton Mileage: 104		Bottom Plugs:	
Type:					
Cement and Additive Data:		Bulk <input checked="" type="checkbox"/>		Sacks <input type="checkbox"/>	
SACKS	BRAND	TYPE	OTHER		
95	Class B				

Slurry Weight: _____ lbs./gal.

Slurry
Volume: _____ lbs./cu. ft.

95 Sacks Cement Treated with 2 % of Coc/L

Price Ref. No.	Description	Rate
PA 1	Service chg	525.00
PR 10	Pump truck mileage chg min. chg	50.00
PA 31	95 SX Cement @ 6.95 per SX	660.25
PR 33	2 SX coils @ 28 ⁰⁰ per SX	56.00
PA 44	Handling chg 99 tons @ .85 ft ³	84.15
PA 45	Ton mileage chg 9100 # @ .76 ton mile	86.74
		1462.14
	Tax 5.625%	82.24
		1544.38

Jack D. Devey

CONTRACT CONDITIONS: (This agreement must be signed before work is commenced)

The undersigned, as authorized agent of the customer, agrees and acknowledges that the services, materials, products and supplies provided for in this order shall be subject to the terms and conditions appearing on the front and reverse sides of order without the consent of an authorized representative of CEMENTERS INC.

SIGNED:

THE ABOVE MATERIAL AND SERVICE

ORDERED BY CUSTOMER AND RECEIVED BY:

(WELL OWNER OPERATOR OR AGENT)

White Copy	Operator	Canary Copy	Office	Pink Copy	Inventory	Gold Copy	File
------------	----------	-------------	--------	-----------	-----------	-----------	------

To: Roger Anderson
Fax #: 505-827-8177
Re: Thriftway Bloomfield Refinery Discharge Permit GW-055
Date: June 16, 1997
Pages: 3, including this cover sheet.

BIO TECH REMEDIATION, INC
FACSIMILE

Mr. Anderson:

Following is the letter in response to your letter dated May 7, 1997. The attachments will follow via mail.

Please contact me if you have additional questions.

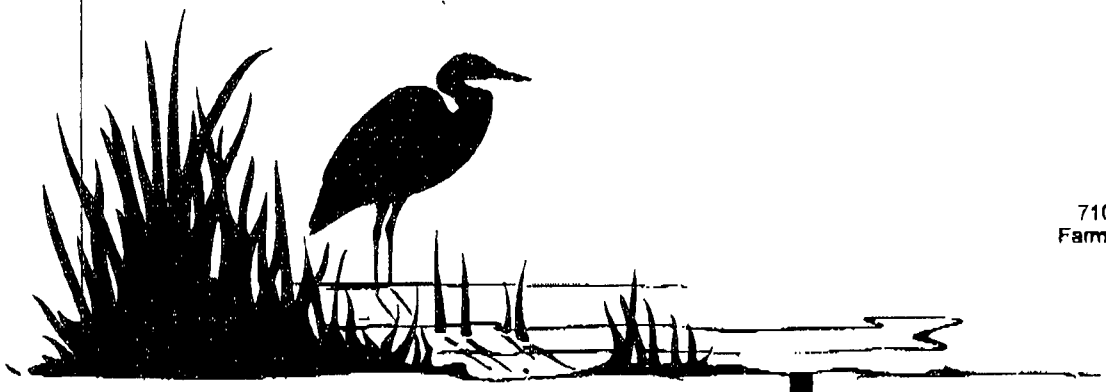
Respectfully,


Terry Griffin

RECEIVED

JUN 16 1997

Environmental Bureau
Oil Conservation Division



From the desk of...

Terry Griffin
Project Administrator
BioTech Remediation, Inc.
710 E. 20th Street - Suite 400
Farmington, New Mexico 87401

505-632-3365
Fax: 505-632-9850



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

June 16, 1997

Mr. Roger C. Anderson
Bureau Chief
Environmental Bureau-OCD
2040 S. Pacheco
Santa Fe, NM 87505

Dear Mr. Anderson:

On May 7, 1997, the New Mexico Oil Conservation Division (OCD) issued a Notice of Deficiency (NOD) for the GW-055 Thriftway Bloomfield Refinery Discharge Permit. Within the NOD, the OCD noted several items which required attention and requested that all items be submitted together as a single report. BioTech Remediation, Inc. (BioTech) has addressed the specific deficiencies outlined in the notice and presents the results in the following sections.

1. The BioTech report on behalf of Thriftway Marketing Corporation (TMC) "Fire Water Pond Sediment Sampling and Analyses, Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico" dated April 24, 1997, was found to be deficient.

On June 6, 1997, soil samples were taken from the soil in the fire water pond below the discharge pipe and tested for BTEX, TPH, and hazardous constituents. The results of the BTEX and TPH analyses are presented below in Table 1. Results for the hazardous constituents are pending and will be submitted to the OCD office upon receipt.

Table 1. Summary of Fire Water Pond Soil Analyses
Thriftway Refinery, Bloomfield, NM

Parameter	Results (ug/kg)
TPH	8186
Benzene	ND
Toluene	55
Ethylbenzene	131
Total Xylene	151

Based on the analyses data, BioTech recommends and requests that the soils within the fire water pond, found to contain hydrocarbon contaminants, be excavated and thin spread on a bermed plastic liner, and then tilled on a periodic basis to promote remediation. Therefore, BioTech requests OCD comments regarding these actions.

2. Results of the below grade UST liner inspection are attached. In short, results indicate UST and liner soundness.
3. Refinery tank testing records were located and are attached.
4. Following a review of the refinery records and further grounds inspection, it was concluded that only one water well had been plugged. Plugging records were located and are attached. The additional noted well remains active, and the casing appears to be in sound condition.

Respectfully submitted,



Ross Kennemer
Project Manager

810/61697nod

enclosures

c: Mr. Denny Foust - OCD Aztec Environmental Geologist
Mr. Jim Ratcliff - Thriftway Company



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 7, 1997

CERTIFIED MAIL

RETURN RECEIPT NO. P-288-258-814

Mr. Jim Ratcliffe
Transportation Director
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM 87401

**RE: Notice of Deficiency - GW-055 "Bloomfield Refinery"
Thriftway Marketing Corporation (TMC)
Discharge Plan Permit Renewal**

Dear Mr. Ratcliffe:

The New Mexico Oil Conservation Division (OCD) on May 8, 1996 approved the "Discharge Plan Renewal" for GW-055. The "Discharge Plan" was renewed under the following terms on May 8, 1996:

The discharge plan renewal consists of the application dated January 8, 1996, submitted by Biotech Remediation Inc. on behalf of Thriftway Bloomfield Refinery, as well as the OCD inspection report dated February 23, 1996 and the follow-up letter from Biotech Remediation Inc. submitted on behalf of Thriftway Bloomfield Refinery dated March 27, 1996, and this approval letter from OCD dated May 8, 1996. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within five working days of receipt of this letter.

The permit conditions for GW-055 were signed by TMC on May 21, 1996, and received by the OCD on May 31, 1996. The OCD (Mr. Pat Sanchez of my Staff) on March 13, 1997 by telephone notified TMC (Ms. Terry Griffin) that several deadlines that had been part of the May 8, 1996 "Approval of Discharge Plan Renewal GW-055" had not been met, at that time OCD was assured that the permit would be looked at and those deadlines and commitments that had been missed would be submitted in short order. The OCD subsequently on April 24, 1997 received from Mr. Ross Kennemer with BioTech Remediation on behalf of TMC "Fire Water Pond Sediment Sampling and Analyses, Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico." This submittal is deficient and does not provide sufficient information and documentation to satisfy the requirements of the May 8, 1996 "Approval of Discharge Plan Renewal GW-055."

The OCD requires that the following items be submitted in a single report by June 16, 1997:

1. The report dated April 24, 1997 has the following deficiencies: The TPH is a composite

Mr. Jim Ratcliffe
NOD, GW-055
May 7, 1997
Page -2-

of the entire "Fire Water Pond" and not the effected area. The BTEX sample is a sample of the remediation water and not the effected soil. Also, the release should have been characterized for hazardous constituents.(see Page 2 of the February 23, 1996 inspection report from OCD.)

Note: TMC was to have submitted a work plan for OCD approval prior to sampling the fire water pond. Per the letter from BioTech a work plan was to be submitted 90 days from March 27, 1996 to the OCD.

2. The below grade UST was to be tested per the inspection report dated February 23, 1997 from OCD. (see page 2 of the referenced report.) Per the March 27, 1996 letter from BioTech on behalf of TMC stated that the results would be submitted within 90 days to the OCD.
3. In the letter dated March 27, 1996 from BioTech on behalf of TMC it was stated that a search was under way to locate all refinery tank testing records, what is the status of this search?
4. In the letter dated March 27, 1996 from BioTech on behalf of TMC it was stated that a search was under way to locate the plugging records for the two Ojo Alamo wells, what is the status of this search?

Future deficiencies at this facility GW-055 will subject TMC to enforcement actions provided for under the New Mexico Water Quality Act and the New Mexico Oil and Gas Act. If you have any questions regarding this matter please feel free to call me at (505)-827-7152 or Mr. Pat Sanchez of my staff at (505)-827-7156.

P 288 258 814

Sincerely,



Roger C. Anderson
Bureau Chief
Environmental Bureau-OCD

RCA/pws

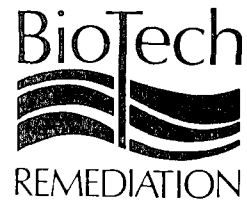
- c: Mr. Denny Foust - OCD Aztec Environmental Geologist
Mr. Ross Kennemer - BioTech Remediation
Ms. Terry Griffin - BioTech Remediation

US Postal Service	
Receipt for Certified Mail	
No Insurance Coverage Provided.	
Do not use for International Mail (See reverse)	
Sent to	TMC - 6W-055 Ratcliffe
Street & Number	RDV
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

April 24, 1997

APR 28 1997



Pat Sanchez
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

Re: Fire Water Pond Sediment Sampling and Analyses, Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico

Dear Mr. Sanchez:

Attached are the laboratory results for sediment sampling at the fire water pond at the above-referenced site. Also, included is an illustration of the pond, indicating the locations from which the samples were collected.

As noted on the laboratory reports, the collected samples (five total) were composited prior to analysis. The method of composite or split was five points, each consisting of 200 ml of soil. Once collected, individual samples were placed into a clean stainless steel bowl and then unbiasedly split with a small soil mechanics type splitter. It is believed that the contaminants found to be present, although minimal, are a result of a failed discharge line from the air stripper unit which runs through an area containing phase separated product. During a period when the stripper was removed from service, relieving discharge line pressure, it is most likely that product entered the line and when the stripper was returned to service the product was moved along to the pond with the treated water stream. This line has since been replaced preventing this from possibly occurring in the future.

As observed on the laboratory reports, the date which the samples were collected was approximately one-year ago. I sincerely apologize for the delay in submitting the results. If you have any questions or comments please call me at (505)632-3365.

Respectfully,

A handwritten signature in cursive script, appearing to read "Ross Kennemer".

Ross Kennemer
Project Manager

810/gc42497

RECEIVED

APR 29 1997

Environmental Bureau
Oil Conservation Division

attachments: Figure 1 Sample Locations
Laboratory Reports

OFF: (505) 325-8786

ON SITE

TECHNOLOGIES, LTD.

MAY - 3 1996
LAB: (505) 325-5667**TPH - Gasoline / Diesel Range Organics****RECEIVED**

Attn: **Ross Kennemer**
Company: **BioTech Remediation**
Address: **710 E 20th Street, Suite 400**
City, State: **Farmington, NM 87401**

Environmental Bureau
Oil Conservation Division

Date: 25-Apr-96
COC No.: 4052
Sample No. 10708
Job No. B-2858

Project Name: **Thriftway Refinery, Bloomfield, NM**
Project Location: **Pond; 5pt. Composite**
Sampled by: RK
Analyzed by: DC
Sample Matrix: **Soil**

APR 29 1997

Date: 24-Apr-96 Time: 9:45
Date: 25-Apr-96

Laboratory Analysis

Analyte	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	<5.0	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	<5.0	mg/kg	5.0	mg/kg
TOTAL	<5.0	mg/kg		

Quality Assurance Report

GRO QC No.: 0447-STD

DRO QC No.: 0446-STD

Calibration Check

Analyte	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<5.0	ppb	1,350	1,318	2.4	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,990	0.5	15%

Matrix Spike

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	102	97	(70-130)	3	20%
Diesel Range (C10-C28)	101	101	(70-130)	0	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas ChromatographyApproved by: *Ja4*

Date: 4/25/96

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786

TECHNOLOGIES, LTD.

ON SITE

MAY - 3 1996

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

RECEIVED

Attn: *Ross Kenemer*
Company: *BioTech Remediation*
Address: *710 E 20th Street, Suite 400*
City, State: *Farmington, NM 87401*

Environmental Bureau
Oil Conservation Division

Date: 25-Apr-96
COC No.: 4052
Sample No. 10709
Job No. B-2858

APR 29 1997

Project Name: *Thriftway Refinery, Bloomfield, NM*
Project Location: *Stripper Discharge*
Sampled by: RK
Analyzed by: DC
Sample Matrix: *Liquid*

Date: 24-Apr-96 Time: 10:50
Date: 24-Apr-96

Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
Methyl-t-Butyl Ether	5.5	ug/L	0.2	ug/L
Benzene	2.2	ug/L	0.2	ug/L
Toluene	5.4	ug/L	0.2	ug/L
Ethylbenzene	0.9	ug/L	0.2	ug/L
m,p-Xylene	4.6	ug/L	0.2	ug/L
o-Xylene	1.0	ug/L	0.2	ug/L
	TOTAL	19.6	ug/L	

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *JAG*

Date: *4/25/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

— TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT —

OFF: (505) 325-8786

TECHNOLOGIES, LTD.

ON SITE

MAY 3 1996

LAB: (505) 325-5667

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 24-Apr-96

Internal QC No.: 0419-STD

Surrogate QC No.: 0420-STD

Reference Standard QC No.: 0355-STD

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Methyl-t-Butyl Ether	ppb	20.0	19.2	4	15%
Benzene	ppb	20.0	19.6	2	15%
Toluene	ppb	20.0	19.7	2	15%
Ethylbenzene	ppb	20.0	19.9	0	15%
m,p-Xylene	ppb	40.0	39.4	1	15%
o-Xylene	ppb	20.0	19.9	1	15%

Matrix Spike

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Methyl-t-Butyl Ether	87	74	(39-150)	11	20%
Benzene	125	106	(39-150)	11	20%
Toluene	124	107	(46-148)	10	20%
Ethylbenzene	122	106	(32-160)	10	20%
m,p-Xylene	118	103	(35-145)	10	20%
o-Xylene	112	97	(35-145)	10	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovery	(70-130)	
10709-4052	101	

S1: Fluorobenzene

RECEIVED

APR 29 1997

Environmental Bureau
Oil Conservation Division

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

55

Page 1 of 1

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Name	Title

Name	Title
Company	
Mailing Address	
City, State, Zip	
Telephone No.	Telefax No.

Thursdays February, Bloomfield, N.J.

Ag. 2222.

TPH (Solismod)
Gos & Diesel
11/11/13
(2000)

ANALYSIS REQUESTED

LAB ID

1	✓					16768-2/1652
2		✓				16765-1

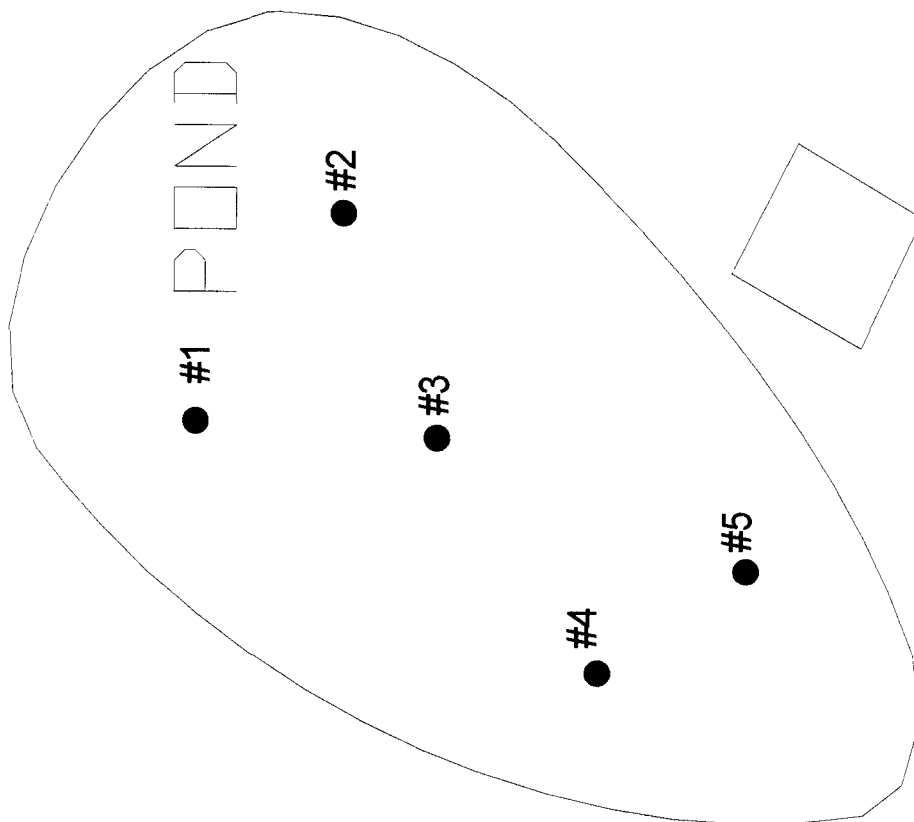
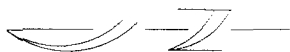
Relinquished by: Jeff Hernandez

Received by:	Date/Time
Received by:	Date/Time

Special Instructions:

11/11/76

Distribution:	White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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KEY

● #2 SAMPLE POINT

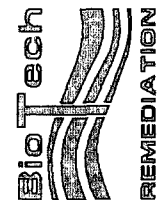
RECEIVED

APR 29 1997

Environmental Bureau
Oil Conservation Division

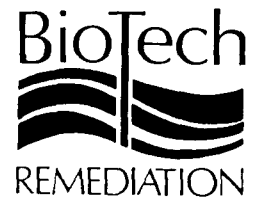
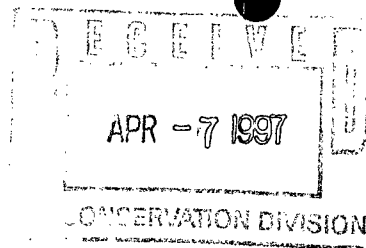
THRIFTWAY REFINERY
626 COUNTY ROAD 5500
BLOOMFIELD, NEW MEXICO
810\PNDSAMPL.SKD

SCIENTIST: R. KENNEMER
DRAWN BY: K. SINKS
FIGURE 1 POND SAMPLE POINTS
APRIL 25, 1996



710 EAST 20TH STREET, SUITE 400
FARMINGTON, NEW MEXICO 87401
OFFICE: (505) 632-3365
FAX: (505) 632-9850

**SENT VIA FAX
AND CERTIFIED MAIL
P 468-883-519**



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

April 1, 1997

Bill Olsen
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Annual Ground Water Monitoring and Sampling Report

Dear Mr. Olsen:

Per our telephone conversation of this morning, BioTech Remediation Inc. ("BioTech"), will be submitting the Annual Ground Water Monitoring Report for the Thriftway Refinery on April 25, 1997.

As addressed in our conversation, the report was to be submitted by April 1, 1996 and the contents are to include the monitoring and sampling results for 1996. However, as I explained, BioTech was under the impression that the annual report was to include data up to April 1, 1997 and some of the samples collected at the end of March 1997 were destroyed at the laboratory prior to being analyzed and BioTech had to collect and resubmit those samples.

Based on a clearer understanding of the reporting schedule, as noted above, the Annual Ground Water Monitoring Report will be submitted to the OCD by April 25, 1997. I appreciate your understanding regarding this matter.

If you have any questions or comments, please contact me at (505) 632-3365.

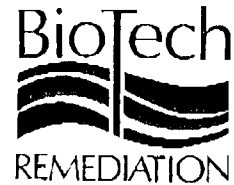
Sincerely,

A handwritten signature in cursive script, appearing to read "Ross Kennemer".

Ross Kennemer
Project Manager

810/amrl

c: Pat Sanchez, OCD Santa Fe



**SENT VIA FAX
AND CERTIFIED MAIL
P 468-883-519**

April 1, 1997

Bill Olsen
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

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Sincerely,

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Ross Kennemer
Project Manager

810/amrl

c: Pat Sanchez, OCD Santa Fe

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 4:05 PM

Date 3-13-97

Originating Party

Other Parties

Terry Griffin - TMC

Pat Sanchez - OGD

Subject

Thriftway Blmfd. Refinery.

Discussion

① Work Plan to Investigate the firewater pond is late. - see permit w/ attached commitments.

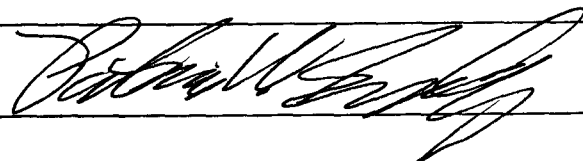
② Testing of secondary containment of below grade UST is late - Notify Denny prior to checking secondary space.
- Note: During the inspection water was in the secondary containment - TMC must sample the contents of the UST and compare it with the secondary containment water.

Conclusions or Agreements

Ms Griffin will follow up on the above items. She will get w/ Ross Boyd next week to write up responses.

Distribution File, Penny Faust.

Signed





GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Surface Water Quality Bureau

Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-0187



MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

Certified Mail - Return Receipt Requested

November 13, 1996

Ms. Terry Griffin
BioTech Remediation
710 East 20th Street Suite 400
Farmington, New Mexico 87401

RECEIVED

NOV 18 1996

Environmental Bureau
Oil Conservation Division

**RE: Reconnaissance Inspection, Thriftway Bloomfield Refinery,
October 4, 1996**

Dear Ms. Griffin:

Enclosed, please find a copy of the report for the referenced inspection that I conducted at your facility. This inspection report will be sent to the U.S. Environmental Protection Agency (USEPA) in Dallas, for their review. These inspections are used to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications and compliance schedules.

My thanks for your help and cooperation during this inspection. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2798.

Sincerely,

Richard E. Powell
Surface Water Quality Bureau

xc: USEPA, Dallas (2 copies)
Taylor Sharpe, USEPA (6EN-WT)
NMED, District I, Farmington
~~Roger Anderson, NMOGD~~



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code			NPDES								yr/mo/day				Inspec. Type		Inspector		Fac Type									
1	N	2	5	3	N	M	R	0	0	0	0	0	0	11	12	9	6	1	0	0	4	17	18	R	19	S	20	2
Remarks																												
Reserved				Facility Evaluation Rating								BI		QA		Reserved												
67				69	70	2								71	N	72	N	73										80

Section B: Facility Data

Name and Location of Facility Inspected Thriftway Bloomfield Refinery - south of Bloomfield on NM 44-1 mile west on CR 5500 on northside		Entry Time 11:08	[X] AM [] PM	Permit Effective Date 9-9-92
		Exit Time/Date 1125 hours 10-4-96		Permit Expiration Date 9-9-97
Name(s) of On-Site Representative(s) Terry Griffin*		Title(s) Project Administrator		Phone No(s) 505-632-3365
Name, Address of Responsible Official Terry Griffin BioTech Remediation 710 East 20th street, suite 400 Farmington, NM 87401		Title Project Administrator		Contacted * Yes <input type="checkbox"/> No <input type="checkbox"/>
		Phone No. 505-632-3365		

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit		Flow Measurement		Pretreatment		Operation and Maintenance
	Records/Reports		Laboratory		Compliance Schedule		Sludge Disposal
	Facility Site Review		Effluent/Receiving Waters		Self-Monitoring Program	U	Other: Storm Water

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

1. Facility has not applied for required NPDES permit coverage nor prepared or implemented a Storm Water Pollution Prevention Plan (SWPPP)
2. Site is currently inactive and in environmental remediation - some BMPs are installed to control storm water runoff under the direction of the New Mexico Oil Conservation Division.

Name(s) and Signature(s) of Inspector(s) Richard E. Powell		Agency/Office/Telephone NMED/SWQB 505-827-2798	Date 11-15-96
Signature Of Reviewer		Agency/Office	Date
Regulatory Office Use Only			
Action Taken		Date	Compliance Status <input type="checkbox"/> Noncompliance <input type="checkbox"/> Compliance

**NPDES Reconnaissance Inspection
Thriftway Bloomfield Refinery**

Further Explanations

Introduction

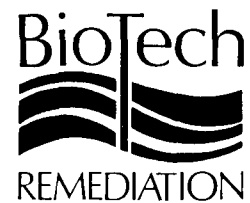
On October 4, 1996, a Reconnaissance Inspection was conducted at the Thriftway Bloomfield Refinery (Standard Industrial Classification 2911) located near Bloomfield, New Mexico by Richard E. Powell of the State of New Mexico Environment Department (NMED). The purpose of this inspection was to evaluate compliance with the NPDES storm water permit program and storm water regulations at 40 Code of Federal Regulations Part 122.26.

This is a currently inactive facility which is undergoing environmental remediation by BioTech Remediation (a subsidiary of Thriftway Corporation) under the direction of the New Mexico Energy, Minerals & Natural Resources Department/Oil Conservation Division (OCD). According to the facility's representative, OCD has imposed some storm water runoff control requirements for this project. Storm water runoff from this industrial facility discharges to Kutz Canyon; thence to the San Juan River in Segment 2401 of the San Juan Basin. This report is based on on-site observation by NMED personnel and verbal information provided by the facility's representative, Ms. Terry Griffin.

An entrance interview was conducted with Ms. Terry Griffin at approximately 1108 hours on October 4, 1996. The inspector made introductions, presented his credentials and discussed the purpose of the inspection.

Findings

This facility did not have permit coverage through the National Pollutant Discharge Elimination System (NPDES) on the date of this inspection. There was no pollution prevention plan prepared in written form and available at this site for the inspection, and a pollution prevention plan was not being implemented (although the facility's representative later stated, during a telephone conversation, that certain storm water runoff controls are required by OCD as a part of the remediation project). The facility's representative was briefly informed of the requirements under the NPDES storm water program and further informed that to attain compliance with this program that a SWPPP needs to be prepared, a NOI needs to be filed (a copy of the NPDES baseline general permit and NOI form [published in the **Federal Register/Vol. 57, No. 175/Wednesday, September 9, 1992**] were given to Ms. Griffin during this inspection) and that appropriate storm water runoff control practices (per the SWPPP) need to be installed. A brief exit interview to discuss the findings of this inspection was conducted at approximately 1120 hours on October 4, 1996, and by telephone at 0945 hours on October 24, 1996, with Ms. Griffin.



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

May 21, 1996

RECEIVED
MAY 31 1996
Environmental Bureau
Oil Conservation Division

Mr. William J. LeMay, Director
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

**RE: Discharge Plan Renewal GW-055
Thriftway Bloomfield Refinery
San Juan County, New Mexico**

Dear Mr. LeMay,

Enclosed, please find a copy of the approved discharge plan renewal GW-055 signed by Mr. Jim Ratcliffe, Refinery Operations, Thriftway Company. I apologize for the delay in returning this document to your office, Mr. Ratcliffe and myself were out of town the week of May 13th and were not able to review the document jointly prior to signature.

We appreciate the cooperative manner in which the OCD worked with us on retaining this permit. If you have any questions, please feel free to contact me at the number listed above.

Respectfully Submitted,


Terry Griffin
Project Administrator

Enclosures

c: Mr. Patricio W. Sanchez, PE - OCD Santa Fe Office (w/o enclosures)

810/gc052196

MAY 14 1996

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 3
May 8, 1996

ATTACHMENT TO DISCHARGE PLAN RENEWAL GW-055
Thriftway Bloomfield Refinery
DISCHARGE PLAN REQUIREMENTS
(May 8, 1996)

1. **Thriftway Bloomfield Refinery Commitments:** Thriftway Bloomfield Refinery will abide by all commitments submitted in the Renewal Application from Biotech Remediation Inc. on behalf of Thriftway dated January 8, 1996 and the inspection report from NMOCD dated February 23, 1996, and the submittal by Biotech Remediation Inc. on behalf of Thriftway dated March 27, 1996, as well as this Discharge Plan Renewal Approval and its conditions of approval letter from OCD dated May 8, 1996.
2. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad and curb type containment. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.
3. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
4. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad.
5. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
6. **Tank Labeling:** All tanks should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
7. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks that do not have secondary containment and leak detection must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 4
May 8, 1996

8. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Companies may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

9. **Housekeeping:** All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

Any contaminated soils that are collected at the facility will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

10. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the Aztec OCD District Office at (505)-334-6178.

11. **Transfer of Discharge Plan:** The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

12. **Closure:** The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

13. **Remediation Monitoring Requirements:**

A. **Product and Waste Disposal:**

All recovered product, waste filters or treatment system waste products will be recycled and/or disposed of at an OCD approved facility.

B. **Ground Water and Treatment System Monitoring:**

The ground water treatment and injection system will be operated such that reinjected effluent from the air stripper does not exceed WQCC ground water standards. Ground water from monitor wells and the treatment system will be sampled and analyzed for specific constituents according to the schedule listed below.

Mr. Jim Ratcliffe
 Thriftway Marketing Corporation
 Page 5
 May 8, 1996

<u>Monitoring pt.</u>	<u>Monthly</u>	<u>Quarterly</u>	<u>Annually</u>
MW-4		602*	PAH's** Metals** Cations/anions**
MW-5		602*	PAH's** Metals** Cations/anions**
MW-6		602*	PAH's** Metals** Cations/anions**
MW-8		602*	PAH's** Metals** Cations/anions**
MW-9		602*	PAH's** Metals** Cations/anions**
MW-10		602*	PAH's** Metals** Cations/anions**
MW-11		602*	PAH's** Metals** Cations/anions**
MW-12		602*	PAH's** Metals** Cations/anions**
MW-13		602*	PAH's** Metals** Cations/anions**
MW-15		602*	PAH's** Metals** Cations/anions**
MW-18		602*	PAH's** Metals** Cations/anions**
MW-19		602*	PAH's** Metals** Cations/anions**
MW-20		602*	PAH's** Metals**

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 6
May 8, 1996

MW-21	602*	Cations/anions** PAH's** Metals**
MW-22	602*	Cations/anions** PAH's** Metals** Cations/anions**
Air Stripper Influent	602*	PAH's** Metals** Cations/anions**
Air Stripper Effluent	602*	PAH's** Metals** Cations/anions**

- * - Or other appropriate EPA method for aromatic volatile organics
** - using appropriate EPA methods

C. Annual Reports:

Annual reports will be submitted to OCD by April 1 of each respective year. Annual reports will contain:

- a. A description of all remedial and monitoring activities which occurred during the past year including conclusions and recommendations.
- b. A summary of all laboratory analytic results of ground water quality and treatment system monitoring including copies of the laboratory analyses performed during the year. The summary will include tables for each monitoring point and will list all past and present sampling results.
- c. Ground water isoconcentration maps for contaminants of concern for each quarter (ie. benzene, TDS, chloride, metals, PAH's, etc.).
- d. A water table elevation map for each quarter using the water table elevation of ground water in all monitor wells.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 7
May 8, 1996

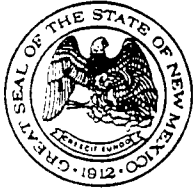
- e. A product thickness map for each quarter using the water table elevation of ground water in all monitor wells.
- f. The volume of water and free phase product recovered each quarter and the cumulative volumes recovered since pumping began.

14. Conditions accepted by:

Jim D. Ratcliffe
Company Representative

5-21-96
Date

Refinery Operations
Title



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 8, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-963-136

Mr. Jim Ratcliffe
Transportation Director
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM 87401

**RE: Approval of Discharge Plan Renewal GW-055
Thriftway Bloomfield Refinery
San Juan County, New Mexico**

Dear Mr. Ratcliffe:

The discharge plan renewal GW-055 for the Thriftway Bloomfield Refinery located in SE/4, Section 32, SW/4 Section 33, Township 29 North, Range 11 West, and NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. The discharge plan renewal consists of the application dated January 8, 1996, submitted by Biotech Remediation Inc. on behalf of Thriftway Bloomfield Refinery, as well as the OCD inspection report dated February 23, 1996 and the follow-up letter from Biotech Remediation Inc. submitted on behalf of Thriftway Bloomfield Refinery dated March 27, 1996, and this approval letter from OCD dated May 8, 1996. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within five working days of receipt of this letter.**

The discharge plan application was submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission Regulations. Please note Sections 3109.E and 3109.F which provide for possible future amendments or modifications of the plan. Please be advised that the approval of this plan does not relieve **Thriftway Bloomfield Refinery** of liability should the operations associated with this facility result in pollution of surface water, ground water, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 2
May 8, 1996

Please note that Section 3104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C Thriftway Bloomfield Refinery is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

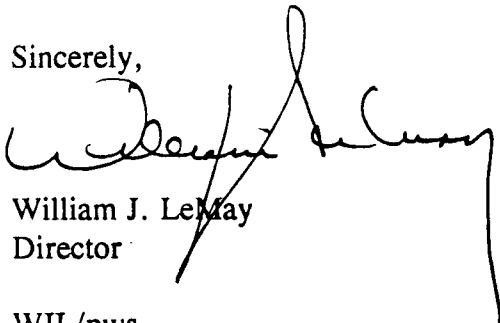
Pursuant to Section 3109.G.4, this plan is for a period of five (5) years. This approval will expire May 9, 2001, and an application for renewal should be submitted in ample time before that date. It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan approval.

The discharge plan renewal for the Thriftway Bloomfield Refinery GW-055 is subject to the WQCC Regulation 3114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty dollars (\$50) plus the flat fee of three-thousand nine-hundred and ten dollars (\$3,910) for Refineries.

The \$50 filing fee has been received by the OCD. The flat fee for an approved discharge plan has been received by the OCD.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



William J. LeMay
Director

WJL/pws
Attachment

xc: Mr. Denny Foust

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 3
May 8, 1996

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Thriftway Bloomfield Refinery
DISCHARGE PLAN REQUIREMENTS
(May 8, 1996)

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Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 4
May 8, 1996

8. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Companies may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

9. **Housekeeping:** All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

Any contaminated soils that are collected at the facility will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

10. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the Aztec OCD District Office at (505)-334-6178.

11. **Transfer of Discharge Plan:** The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

12. **Closure:** The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

13. **Remediation Monitoring Requirements:**

A. **Product and Waste Disposal:**

All recovered product, waste filters or treatment system waste products will be recycled and/or disposed of at an OCD approved facility.

B. **Ground Water and Treatment System Monitoring:**

The ground water treatment and injection system will be operated such that reinjected effluent from the air stripper does not exceed WQCC ground water standards. Ground water from monitor wells and the treatment system will be sampled and analyzed for specific constituents according to the schedule listed below.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 5
May 8, 1996

<u>Monitoring pt.</u>	<u>Monthly</u>	<u>Quarterly</u>	<u>Annually</u>
MW-4		602*	PAH's** Metals** Cations/anions**
MW-5		602*	PAH's** Metals** Cations/anions**
MW-6		602*	PAH's** Metals** Cations/anions**
MW-8		602*	PAH's** Metals** Cations/anions**
MW-9		602*	PAH's** Metals** Cations/anions**
MW-10		602*	PAH's** Metals** Cations/anions**
MW-11		602*	PAH's** Metals** Cations/anions**
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MW-13		602*	PAH's** Metals** Cations/anions**
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MW-18		602*	PAH's** Metals** Cations/anions**
MW-19		602*	PAH's** Metals** Cations/anions**
MW-20		602*	PAH's** Metals**

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 6
May 8, 1996

MW-21	602*	Cations/anions** PAH's** Metals**
MW-22	602*	Cations/anions** PAH's** Metals** Cations/anions**
Air Stripper Influent	602*	PAH's** Metals** Cations/anions**
Air Stripper Effluent	602*	PAH's** Metals** Cations/anions**

- * - Or other appropriate EPA method for aromatic volatile organics
** - using appropriate EPA methods

C. Annual Reports:

Annual reports will be submitted to OCD by April 1 of each respective year. Annual reports will contain:

- A description of all remedial and monitoring activities which occurred during the past year including conclusions and recommendations.
- A summary of all laboratory analytic results of ground water quality and treatment system monitoring including copies of the laboratory analyses performed during the year. The summary will include tables for each monitoring point and will list all past and present sampling results.
- Ground water isoconcentration maps for contaminants of concern for each quarter (ie. benzene, TDS, chloride, metals, PAH's, etc.).
- A water table elevation map for each quarter using the water table elevation of ground water in all monitor wells.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 7
May 8, 1996

- e. A product thickness map for each quarter using the water table elevation of ground water in all monitor wells.
- f. The volume of water and free phase product recovered each quarter and the cumulative volumes recovered since pumping began.

14. **Conditions accepted by:**

Company Representative

Date

Title

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 11:10 AM

Date 5-6-96

Originating Party

632-3365 Other Parties

Pat Sanchez & Bill Olson

Ross Kehnenmer

NMCP - Returned Phone Left at 9:51 AM

Bio Tech - Representing Thriftway.

Subject

GW-055 Discharge Plan Renewal.

Discussion

Talked w/ Ross about the permit conditions - He said all looked fine to him - will revise 601/602 to allow flexibility - other EPA approved method may be used. (per Bill Olson & Ross Kehnenmer.)

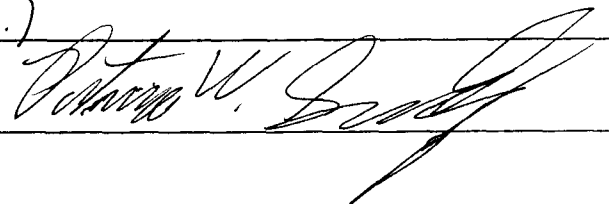
+ Will try to get out approval on Wednesday.

Conclusions or Agreements

* Ross Kehnenmer to call us if there is a problem w/ Mr. Jim Ratcliffe signing off on Discharge Plan. (see Fax that was sent to Thriftway dated 5-3-96.)

Distribution File

Signed



5-3-96

OIL CONSERVATION DIVISION-ENVIRONMENTAL BUREAU

TO: Mr. Ross Kenner - BioTech

FROM: PATRICIO W. SANCHEZ , PETROLEUM ENGINEER 505-827-7156

NUMBER OF PAGES INCLUDING THIS ONE: 6

MESSAGE:

Ross, here are the discharge plan
conditions for the Renewal of
Thriftway Refiner's Discharge Plan.
Any questions/comments - give me a call.

IF YOU HAVE ANY TROUBLE RECEIVING THIS FAX PLEASE CALL
(505)-827-7133.

OCD FAX NUMBER: (505)-827-8177

Fax: No. 632-9850

Phone 632-3365

Fax'd on 5-2-96 at

4:15 pm - let the Secretary
who received the Fax. know
that it is important for Ross
to see permit conditions - their
permit expires 5-9-96.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 3
April 22, 1996

ATTACHMENT TO DISCHARGE PLAN RENEWAL GW-055
Thriftway Bloomfield Refinery
DISCHARGE PLAN REQUIREMENTS
(April 22, 1996)

1. **Thriftway Bloomfield Refinery Commitments:** Thriftway Bloomfield Refinery will abide by all commitments submitted in the Renewal Application from Biotech Remediation Inc. on behalf of Thriftway dated January 8, 1996 and the inspection report from NMOCD dated February 23, 1996, and the submittal by Biotech Remediation Inc. on behalf of Thriftway dated March 27, 1996, as well as this Discharge Plan Renewal Approval and its conditions of approval from OCD dated April 22, 1996.
2. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad and curb type containment. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.
3. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
4. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad.
5. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
6. **Tank Labeling:** All tanks should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
7. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks that do not have secondary containment and leak detection must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 4
April 22, 1996

8. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter. Companies may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

9. **Housekeeping:** All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

Any contaminated soils that are collected at the facility will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

10. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the Aztec OCD District Office at (505)-334-6178.

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Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 5
April 22, 1996

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MW-20		601/602*	PAH's** Metals**

Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 6
April 22, 1996

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Air Stripper Influent	601/602*	PAH's** Metals** Cations/anions**
Air Stripper Effluent	601/602*	PAH's** Metals** Cations/anions**

(
* - ^{or other appropriate} EPA Method for aromatic ~~and~~ halogenated volatile organics
** - using appropriate EPA methods

Per Russ Kuhnemann
& Bill Blum
on 5/8/96
phone call.

C. Annual Reports:

Annual reports will be submitted to OCD by April 1 of each respective year. Annual reports will contain:

- A description of all remedial and monitoring activities which occurred during the past year including conclusions and recommendations.
- A summary of all laboratory analytic results of ground water quality and treatment system monitoring including copies of the laboratory analyses performed during the year. The summary will include tables for each monitoring point and will list all past and present sampling results.
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Mr. Jim Ratcliffe
Thriftway Marketing Corporation
Page 7
April 22, 1996

- e. A product thickness map for each quarter using the water table elevation of ground water in all monitor wells.
- f. The volume of water and free phase product recovered each quarter and the cumulative volumes recovered since pumping began.

14. **Conditions accepted by:**

Company Representative

Date

Title

March 27, 1996



Patricio W. Sanchez
Petroleum Engineer
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

RECEIVED

APR 15 1996

Environmental Bureau
Oil Conservation Division

**RE: Renewal of Discharge Plan GW-55
Thriftway Bloomfield Refinery**

Dear Mr. Sanchez:

Thriftway Company has contracted with BioTech Remediation, Inc., to prepare and submit all necessary documentation required for approval of the Thriftway Bloomfield Refinery Discharge Plan GW-55.

The following text addresses the issues noted in the Renewal Inspection Letter (RIL), dated February 23, 1996. The items will be addressed in the same order as presented in the above referenced letter.

- ▶ Prior to Refinery start up, a workplan adhering to all Federal and State regulations will be submitted to the OCD, Santa Fe Office. Those items noted on Page 1, Paragraph 2 of the RIL will be addressed within this workplan.
- ▶ When the refinery was removed from operation all tank testing records were removed and archived along with all other facility records. Currently efforts are being made to retrieve these records.
- ▶ Firewater pond - A workplan detailing the proposed sampling locations and the requested analysis to be performed at the firewater pond will be prepared and forwarded within 90 days.
- ▶ UngROUTed groundwater wells - The ungrouted groundwater wells noted during the walk around inspection have been completed per NMED specifications.
- ▶ Housekeeping of 55,000-bbl tanks - Housekeeping around the tanks being leased by Giant has been addressed and will be continued on an as needed basis.

- ▶ General housekeeping - The noted hydrocarbon stained soils have been tilled or raked. General housekeeping is and will be an on going task.
- ▶ Below grade tank (UST) - The requested analyses, to determine the soundness of the UST, is in the process of being completed. The pH and Conductivity readings for both the internal and secondary containment of the UST will be collected in order to determine tank soundness. The results of these analyses will be forwarded to the OCD, Santa Fe office within 90 days. Additionally, this tank is included on the annual cleaning and inspection schedule.
- ▶ Start up monitoring plan for leak detection and spill containment areas - Prior to start up, a workplan detailing scheduled monitoring of leak detection and spill containment will be submitted to the OCD for approval.
- ▶ Plugging of the two Ojo Alamo wells - The plugging records for the two on-site wells have been archived and efforts to retrieve this information is currently underway.
- ▶ Spill Leak Prevention and Solid Waste Disposal - Any occurrence of spills at the facility will be reported to the OCD, Aztec office and the Santa Fe office within 72 hours.
- ▶ Waste Streams and their final disposition - A discussion addressing facility waste streams and disposition of those streams was included in the renewal report and application.
- ▶ Refinery Start Up - Prior to start up of the facility, Thriftway will notify both the OCD, Aztec District office and the Santa Fe office.
- ▶ OCD approval letter dated May 13, 1991 and OCD inspection report dated February 13, 1990.

Letter dated May 13, 1991 -

Page 1, #1 - Investigation of full extent of contamination - The required investigation delineating the full extent of hydrocarbon contaminated soil and ground water has been completed and is on file at the OCD, Santa Fe office.

Page 2, Paragraph 1 - No open top structures including lined pits and open top tanks, which contain substance that could be considered hazardous to wildlife, including migrating birds, are present at the facility.

Page 2, Paragraph 2 - Pursuant to Section 3-104 - All discharges, from this site, will be consistent with the terms and conditions of the plan. Pursuant to Section

3-107.C. - The Director shall be notified of any facility modifications resulting in changes to the discharge plan.

Page 2, Paragraph 3 - In accordance with discharge plan renewal procedures - An underground drainage determination program was implemented and completed during the hydrogeological investigation conducted at the facility. The results of this investigation are detailed in the investigation report which is on file at the OCD, Santa Fe office.

Letter dated February 13, 1990-

1. Crude unloading facility south of the tank farm - Concrete curbing and pads have been installed with central drains and a collection system. A 20-mil double lined leak detection system is in place around the buried collection tank.
2. Diesel Storage Tank - Concrete pads and berms have been installed at the diesel storage tank with a central drain that collects any over flow.
3. Tank-~~#1~~ #11 (Condensate Storage) - a concrete trough with piping has been installed from the water draw to the collection sump. The leaking sample valve has been capped and all other valves have either been repaired or replaced. Collection drums were placed beneath the hatches for temporary catchment until the hatch gaskets were repaired. The sump is included on the annual cleaning and inspection schedule.
4. Tank #12 (Condensate storage) - Concrete catch basins have been installed around the pumps. A drain has been installed to the sump and the sump is included on the annual cleaning and inspection schedule. The sampling valve has been plugged. A tank draining procedure has been instituted to prevent the reoccurrence of any sump overfills.
5. Tank #14 (Gasoline Storage) - A water collection system has been installed with a central collection tank located north of tank #21. The sample valve has been capped.
6. Tank #13 (Gasoline Storage) - A water collection system has been installed with a central collection tank located north of tank #21.
7. Tank Farm Transfer Manifold - Leaking valves have been repaired.
8. Tank #19 (Gasoline Storage) - A water collection system has been installed with a central collection tank located north of tank #21.

9. Tank #18 - Leaking valves have been repaired.
10. Diesel Bottom Loading Rack - A soil tilling program has been implemented to address the hydrocarbon stained soil. Concrete curbing and padding has been installed to contain spills or leaks and a drain system has been installed to the crude pad tank.
11. Tank #20 (Diesel Storage) - This tank is no longer in service. Transfer piping has been removed, flange faces have been blind plated and all valves plugged.
12. Run Down Tanks - The 30 series run-down tanks were 400-bbl or less. These tanks have been removed from service and all but one has been disposed of. The tank which has not been disposed of has been removed from service. All piping associated with these tanks have been removed and blind plated.
13. Ethanol Load Manifold - Piping has been rerouted in order to prevent gasoline loading. Concrete curbing and padding has been installed to catch leaks or spills. A 250 gallon metal sump has been installed for the drain-off of this padding. This sump is included on the annual cleaning and inspection schedule.
14. Tank #17 (Gasoline Storage) - Water draw piping has been installed at the tank and routed to the central collection tank.
15. Tank #22 (Mixer Tank) - Water draw piping has been installed to the central collection tank and leaking valves have been repaired.
16. Tank #23 (Blend Tank) - Water draw piping has been installed to the central collection tank and leaking valves have been repaired.
17. Tank #25 (Bolted Tank) - This tank has been removed from service and disposed of.
18. Area between tank #25 and #26 - The pump has been removed from service and the oil staining has been tilled.
19. Drum Area at the MTT Building - This area is no longer used for drum storage.
20. Tank #27 (Ethanol) - Water draw piping has been installed to the central collection tank.

21. Tank #29 - Water draw piping has been installed to the central collection tank and leaking valves have been repaired.
22. Tank #21 (Gasoline) - Water draw piping has been installed to the central collection tank.
23. Tank #30 and #31 (Residual Oil) - Tank #30 and #31 are no longer in service.
24. Northeast corner of property - A subsurface investigation including installation of monitoring wells has been conducted in the noted area. The report documenting the results of the investigation is on file with the OCD, Santa Fe office.
25. Open culvert - The open culvert at the north center of the facility has been bermed to prevent off-site migration of storm water runoff.
26. Heavy Oil Loading Rack - Concrete berming and padding has been installed, as well as a heated collection tank to collect spills. This tank is also on the annual cleaning and inspection schedule.
27. Reflux Pump - A cement pad and curbing have been installed in the process area complete with storm water and process sewer collection systems.
28. Preflash Unit - The pump seal and valves have been repaired and a cement pad and curbing have been installed in the process area complete with storm water and process sewer collection systems.
29. Oil Collection Sump - With the installation of the concrete curbing and padding in the process area the noted sump has been removed.

- The following paragraph addresses the additional items requested in the February 13, 1990 letter.

As requested, all above grade tanks have been bermed. As previously noted, at this time efforts to retrieve archived tank testing data is being made. Concrete padding and berming has been installed in the noted areas of concern. In the instance that a below grade tank would be installed, a workplan detailing the proposed installation will be submitted to the OCD for approval.

I hope that this information meets your requests and approval. If you have any additional questions, please do not hesitate to call me at (505) 632-3365.

Sincerely,

Ross Kennemer
Ross Kennemer
Project Manager

810\gwrenewl

BioTech Remediation, Inc.
710 E. 20th Street, Suite 400
Farmington, NM 87401
Office (505) 632-3365 * Fax (505) 632-9850

DATE: 4/9/96

OF PAGES TO FOLLOW: 6

TO: Pat Sanchez

COMPANY: Oil Conservation Division

FAX: 505 827- 8177

Will This Contamination Ever End?

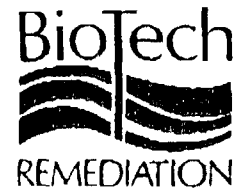


MESSAGE: Pat -

A hard copy is in the mail. We
wanted you to get a copy today
as requested in your 2/23/96 letter for
renewal of the discharge permit.

Thank You -

123\FAX2



March 27, 1996

Patricio W. Sanchez
Petroleum Engineer
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

**RE: Renewal of Discharge Plan GW-55
Thriftway Bloomfield Refinery**

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Letter dated May 13, 1991 -

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Page 2, Paragraph 1 - No open top structures including lined pits and open top tanks, which contain substance that could be considered hazardous to wildlife, including migrating birds, are present at the facility.

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2. Diesel Storage Tank - Concrete pads and berms have been installed at the diesel storage tank with a central drain that collects any over flow.
3. Tank-#1 #11 (Condensate Storage) - a concrete trough with piping has been installed from the water draw to the collection sump. The leaking sample valve has been capped and all other valves have either been repaired or replaced. Collection drums were placed beneath the hatches for temporary catchment until the hatch gaskets were repaired. The sump is included on the annual cleaning and inspection schedule.
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24. Northeast corner of property - A subsurface investigation including installation of monitoring wells has been conducted in the noted area. The report documenting the results of the investigation is on file with the OCD, Santa Fe office.
25. Open culvert - The open culvert at the north center of the facility has been bermed to prevent off-site migration of storm water runoff.
26. Heavy Oil Loading Rack - Concrete berming and padding has been installed, as well as a heated collection tank to collect spills. This tank is also on the annual cleaning and inspection schedule.
27. Reflux Pump - A cement pad and curbing have been installed in the process area complete with storm water and process sewer collection systems.
28. Preflash Unit - The pump seal and valves have been repaired and a cement pad and curbing have been installed in the process area complete with storm water and process sewer collection systems.
29. Oil Collection Sump - With the installation of the concrete curbing and padding in the process area the noted sump has been removed.

- The following paragraph addresses the additional items requested in the February 13, 1990 letter.

As requested, all above grade tanks have been bermed. As previously noted, at this time efforts to retrieve archived tank testing data is being made. Concrete padding and berming has been installed in the noted areas of concern. In the instance that a below grade tank would be installed, a workplan detailing the proposed installation will be submitted to the OCD for approval.

I hope that this information meets your requests and approval. If you have any additional questions, please do not hesitate to call me at (505) 632-3365.

Sincerely,

Ross Kennemer
Ross Kennemer
Project Manager

810\gwrenewl

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. 1174 dated 1/31/96,
or cash received on _____ in the amount of \$ 3960.00

from Thriftway Co

for Bloomfield Refinery GW55
(Facility Name) (DP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: R. Chisler Date: 3/25/96

Received in ASD by: Angela Herrera Date: 3-29-96

Filing Fee ☒ New Facility _____ Renewal ☒

Modification _____ Other _____
(Specify)

Organization Code 521.07 Applicable FY 96

To be deposited in the Water Quality Management Fund.

Full Payment ☒ or Annual Increment _____

THRIFTWAY COMPANY
710 E. 20TH ST.
FARMINGTON, NM 87401



1174

93-477/929

PAY

TO
THE
ORDER
OF

OIL CONSERVATION DIVISION
NMED - WATER QUALITY MANAGEMENT

THE SUM 3960.00

DATE

1/31/96

AMOUNT

\$3,960.00

[Signature]
[Signature]

⑈001174⑈ ⑆092904774⑆ 2714801883⑈

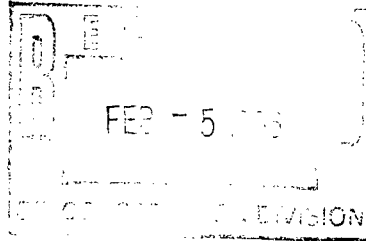
THRIFTWAY COMPANY

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED

DELUXE - FORM TWC-3 V-2

DATE	DESCRIPTION	AMOUNT
1/29/96	GROUND WATER DISCHARGE PERMIT - RENEWAL FEE GW-055	\$3,960.00

February 2, 1996



Mr. Roger Anderson
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

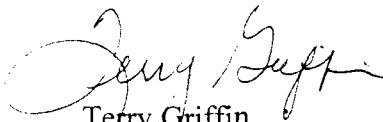
**RE: Discharge Plan GW-55 Renewal - Thriftway Company
Bloomfield Refinery
626 County Road 5500
Bloomfield, San Juan Co., NM**

Dear Mr. Anderson:

Enclosed, please find the discharge plan renewal (an original and a copy) for the above referenced site along with a check for the renewal fee. A copy of this report has also been submitted to Mr. Denny Foutz, OCD, Aztec office.

A notice verifying receipt of this report and that it has been directed to the appropriate office(s) would be appreciated. If you need further information, please contact me at the number listed above.

Sincerely,


Terry Griffin
Project Administrator

810\gc020296



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

February 23, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-963-026

Mr. Jim Ratcliffe
Transportation Director
Thriftway Marketing Corporation
710 East 20th Street
Farmington, NM 87401

**RE: Renewal Inspection
Discharge Plan GW-55
Thriftway Bloomfield Refinery**

Dear Mr. Ratcliffe:

The New Mexico Oil Conservation Division (OCD) has completed this inspection report as part of the permit renewal process for discharge plan GW-55. The following OCD staff members were present during the renewal inspection on Wednesday February 14, 1996 - Mr. Bill Olson, Mr. Denny Foust, and Mr. Patricio Sanchez. The purpose of this report is to provide Thriftway with the information that is needed to ensure that the NMOCD can renew GW-55 on or before the expiration date of May 9, 1996. However, it will be Thriftways responsibility to provide the OCD with commitments and time lines that are approvable at least 30 days before the permit GW-55 expires.

- Before the Refinery can be started up - Thriftway will submit a plan to pressure test all below grade lines to 3 psig above normal working pressure of the line - see OCD "Discharge Plan Guidelines, Revised 12-95" page 9. The testing plan must be approved by the Santa Fe OCD office and executed before plant start up. Also, all below grade sumps that do not have leak detection and secondary containment must be cleaned and inspected for integrity before the plant can start up-further these type of sumps shall be cleaned and inspected yearly - with written documentation kept at the facility so that OCD may view the inspection results at any time during a facility inspection.

Note: Any new sumps, below grade tanks, double lined evaporation ponds, or modifications to the remediation system will be approved by the OCD Santa Fe office before installation - Please see the enclosed "Discharge Plan Guidelines, Revised 12-95" for other items that require OCD approval.

Mr. Jim Ratcliffe
Thriftway Refinery GW-55
February 23, 1996
Page 2

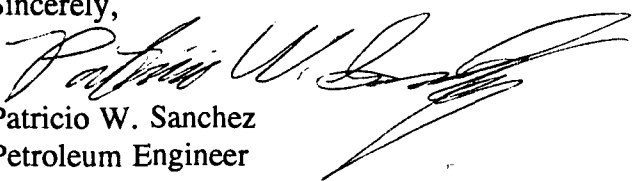
- All results from the previous discharge plan approval tank testing shall be submitted to the OCD Santa Fe office - as the OCD has not yet received the results from these previous tests.
- The firewater pond needs to be investigated for contamination - please submit a work plan as part of the renewal to address possible contamination at the firewater pond. The work plan shall include sample analysis for BTEX, TPH, Heavy Metals, as well as other applicable Hazardous Constituents and Characteristics found in 40 CFR Part 261.
- During the inspection it was noted that several groundwater wells were ungrouted - see photo No. 20 - these type of wells need to be grouted to surface with a cement grout containing 5% bentonite.
- The two 55,000 bbl tanks that are currently being leased by Giant are in need of housekeeping - see photo No. 14.
- General housekeeping is a concern - all small spills shall be racked out.
- The below grade tank (UST) needs to have the water that was in the secondary containment evacuated. The PH and Conductivity of the water in the secondary containment needs to be measured and compared with the PH and conductivity of the water inside of the UST to make certain that the UST still has integrity and is not leaking. Also, the secondary containment inspection pipe shall be capped.
- If Thriftway starts up the Refinery a monitoring plan for all leak detection and spill containment areas shall be proposed and implemented by Thriftway to ensure that minor spills and leaks are addressed promptly before they become major leaks and spills.
- Enclosed for Thriftways reference are the OCD approval letter dated May 13, 1991, and the OCD inspection report dated February 13, 1990. All items that have not been addressed as previously required must be addressed promptly as part of the renewal process.
- Please provide the OCD with the plugging information on the two Ojo Alamo wells at the site - SJ 103 and SJ 103-S. During the inspection it was stated that the two wells had been plugged and abandoned. In verbal conversation with the State Engineers office they indicated that they had no records of the wells being plugged. The OCD is concerned that these wells could act as conduits to the ground water.

Mr. Jim Ratcliffe
Thriftway Refinery GW-55
February 23, 1996
Page 3

- Under the Spill/Leak Prevention and solid waste disposal please refer to NMOCD Rule 116 and WQCC 1203 for spill reporting. Contact the Aztec District NMOCD office at 334-6178 for initial verbal reporting.
- Please include under section 7 and 8 as shown in the NMOCD "Discharge Plan Guidelines, Revised 12/95" on pages 6 through 11 of the guidelines all waste streams and their final disposition.
- Thriftway shall notify the OCD Aztec District office and the Santa Fe Division office 72 hours before start up of the Refinery so that OCD can make arrangements to conduct a compliance inspection during operations.

If Thriftway has any questions with regards to this inspection report feel free to contact the OCD (505)-827-7156.

Sincerely,


Patricio W. Sanchez
Petroleum Engineer

enclosure

Z 765 963 026



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to <u>Jim Ratcliffe</u>	
Street and No. <u>GW-55 Refinery</u>	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, March 1993

XC: Mr. Denny Foust

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone

☐ Personal

Time 10:40 AM

Date 2-23-96

Originating Party

Other Parties

Ray Cruz - State Engineer
Albng. 841-9480

Pat Sanchez - OCD

Subject

SJ-103 & SJ103-S - 050 Alamo wells.

Discussion

Mr. Cruz is a water Resource Tech. III w/ State Engineer in Albuquerque - He said they have no records of SJ-103 or SJ103-S being plugged.

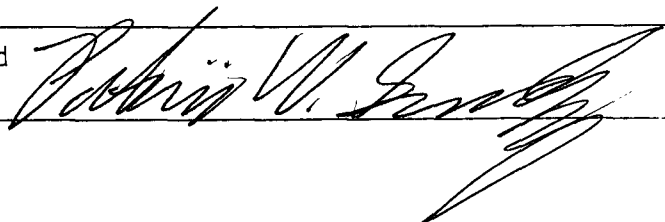
He said last report for SJ-103 was in 1994, SJ-103-S last reported in Jan. 1996. - So, as far as he knows the wells have not been plugged. I let Mr. Cruz know that the OCD is concerned that inactive/unplugged wells could become conduits to the groundwater.

Conclusions or Agreements

I told Mr. Cruz that I would mention the wells in my inspection report - ask how they were plugged. Mr. Cruz said he was going to call Thriftway and see what the status of the wells are.

Distribution File

Signed



AFFIDAVIT OF PUBLICATION

No. 35900


STATE OF NEW MEXICO

County of San Juan:


ROBERT LOVETT being duly sworn says: That he is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Thursday, February 15, 1996

and the cost of publication is: \$71.19



On 2/19/96 ROBERT LOVETT appeared before me, whom I know personally to be the person who signed the above document.


_____ My Commission Expires March 21, 1998

RECEIVED

FEB 22 1996

Environmental Bureau
Oil Conservation Division

COPY OF PUBLICATION

Legals

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-55) - Thriftway Marketing Corporation, Ms. Terry Griffin, (505) 632-3365, 710 East 20th Street, Farmington, NM 87401, has submitted a Discharge Plan Renewal Application for the Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1,375 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of approximately 1,670 mg/L. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth from 5 to 30 feet with a total dissolved solids concentration of approximately 4,300 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

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If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of February, 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

/s/William J. LeMay
WILLIAM J. LEMAY, Director

SEAL

WJL/pws

Legal No. 35900 published in The Daily Times, Farmington, New Mexico on Thursday, February 15, 1996.

RECEIVED

FEB 22 1996

AFFIDAVIT OF PUBLICATION

No. 35900

Environmental Bureau
Oil Conservation Division

COPY OF PUBLICATION

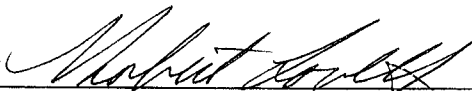
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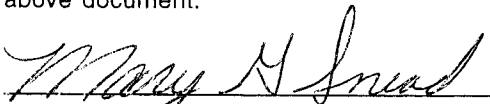
Thursday, February 15, 1996

and the cost of publication is: \$71.19



On 2/19/96 **ROBERT LOVETT**

appeared before me, whom I know personally to be the person who signed the above document.



My Commission Expires March 21, 1998

Legals

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of February, 1996.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**

/s/William J. LeMay
WILLIAM J. LEMAY, Director

SEAL

WJL/pw:

Legal No. 35900 published in The Daily Times, Farmington, New Mexico on Thursday, February 15 1996.

The Santa Fe New Mexican

Since 1849 We Read You

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FEB 21 1996

NM OIL CONSERVATION

P O BOX 6429

SANTA FE, NM 87505-6429

Environmental Bureau

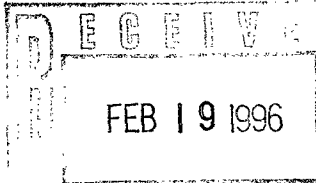
Oil Conservation Division

AD NUMBER: 467870

ACCOUNT: 56689

LEGAL NO: 59075

P.O. #: 96-199-002997



176 LINES once at \$ 70.40
Affidavits: 5.25
Tax: 4.73
Total: \$ 80.38

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

Energy, Minerals and
Natural Resources
Department
Oil Conservation Division

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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director
(Legal #59075)
Pub. February 14, 1996

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 59075 a copy of which is hereto attached was published in said newspaper once each week for one consecutive one (s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 14 day of February 1996 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/

Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this
14 day of February A.D., 1996



OFFICIAL SEAL

Candace C. Ruiz

NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 9/29/99

Candace C. Ruiz

202 East Marcy Street, P.O. Box 2043, Santa Fe, New Mexico 87501

505-983-3303 • (FAX) 505-984-1785

The Santa Fe New Mexican

Since 1849. We Read You.

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FEB 21 1996

NM OIL CONSERVATION

P O BOX 6429

SANTA FE, NM 87505-6429

Environmental Bureau
Oil Conservation Division

AD NUMBER: 467870

ACCOUNT: 56689

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176

LINES

once

at \$ 70.40

Affidavits: 5.25

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OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director
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LEGAL ADVERTISEMENT REPRESENTATIVE

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OFFICIAL SEAL

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NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 9/29/98

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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

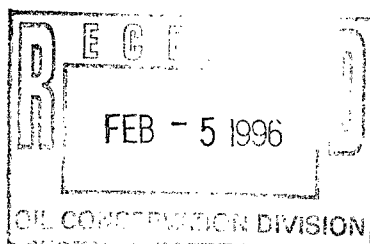

WILLIAM J. LEMAY, Director

WJL/pws

S E A L

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-9850

February 2, 1996



Mr. Roger Anderson
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

**RE: Discharge Plan GW-55 Renewal - Thriftway Company
Bloomfield Refinery
626 County Road 5500
Bloomfield, San Juan Co., NM**

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Sincerely,


Terry Griffin
Project Administrator

810\gc020296

Oil Conservation Division
Environmental Bureau

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BioTECH REMEDIATION Inc.

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ORIGINAL

**DISCHARGE PLAN GW-55 RENEWAL
THRIFTWAY COMPANY
BLOOMFIELD REFINERY
626 COUNTY ROAD 5500
BLOOMFIELD, SAN JUAN CO., NM**

**PREPARED FOR THE
OIL CONSERVATION DIVISION
ROGER ANDERSON, DIRECTOR**

BY

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