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REPORTS

DATE:

Oct. 14, 1993



TIERRA
ENVIRONMENTAL CORPORATION

CORPORATE OFFICE
6846 S. Canton, Suite 100
Tulsa, OK 74136
918-496-3200

REGIONAL OFFICE
909 W. Apache
Farmington, NM 87401
505-325-0924

October 13, 1993

RECEIVED

OCT 18 1993

OIL CONSERVATION DIV.
SANTA FE

Mr. Roger Anderson, Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: GARY WILLIAMS ENERGY TANKER ACCIDENT AND RESULTING
CRUDE OIL SPILL, OCTOBER 8, 1993, AT MILEPOST 297, HWY
84, RIO ARRIBA COUNTY, NEW MEXICO - 93060

Dear Mr. Anderson:

Enclosed herewith, is the report of spill and remediation activities that took place relative to the above described incident, complete with location map, site diagram and laboratory analysis results from the spill area following excavation of the contaminated soil.

On behalf of our client Gary Williams Energy/Bloomfield Refining, we would respectfully request that the site be officially closed.

As stated in the report, the material pursuant to your instructions has been stockpiled on 22 mil plastic in our secure, bermed area on the Crouch Mesa Landfarm. TCLP samples have been submitted to On-Site Technologies in Farmington for analysis.

For the record, I contacted Ed Horst, NMED Hazardous Materials Bureau on Tuesday, October 12, 1993, the first working day since the accident. He concurred with your decision to remove the material to the landfarm and secure it pending TCLP analysis.

Mr. Roger Anderson
October 13, 1993
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As soon as that analysis has been received, provided it is within parameters, I will be submitting the appropriate paperwork through D. Foust, OCD, Aztec for approval to spread and remediate the contaminated soil on the landfarm.

Thank you for your fine cooperation in this matter.

Sincerely,

TIERRA ENVIRONMENTAL CORPORATION



Phillip C. Nobis
Vice President Operations

PCN/lp

cc: Chris Hawley, BRC
D. Foust, OCD, Aztec
Ed Horst, NMED Haz Mat
File



BY
TIERRA

**Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87401**

RECEIVED

OCT 18 1993

**OIL CONSERVATION DIV.
SANTA FE**

**Tanker Spill
Emergency Response
&
Remediation , Mile Post 287
New Mexico Highway 84,
Rio Arriba County, New Mexico**

**Prepared for
Gary Williams Energy
Bloomfield Refinery
P.O. Box 159
Bloomfield, NM 87413**

October 14, 1993



Project No. 93060

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I. Spill and Remediation Report



TIERRA ENVIRONMENTAL CORPORATION

SPILL and REMEDIAL ACTION REPORT

CORPORATE OFFICE
6846 S. Canton, Suite 100
Tulsa, OK 74136
918-496-3200

REGIONAL OFFICE
909 W. Apache
Farmington, NM 87401
505-325-0924

I. Notification:

D. Foust, New Mexico Oil Conservation Division (OCD) Representative in Aztec, New Mexico was notified by Chris Hawley, Bloomfield Refining of the accident at about 3:30 pm October 8, 1993. New Mexico State Police Hazardous Material Officer Fred Laird was on scene during recovery operations.

A. Responsible Party and Local Contact

Gary Williams Energy Company
P.O. Box 159
Bloomfield, New Mexico 87413

Chris Hawley, Environmental Manager, Bloomfield Refining
P.O. Box 159
Bloomfield, New Mexico 87413
(505) 632-8013

B. Facility

Gary Williams Energy Tanker Truck No.5081 Pup No. 5083
Vehicle Accident at Mile Post 287, New Mexico State Highway 84 Rio Arriba, County, New Mexico, approximately 1/4 mile South of the Colorado State Line, on the West side of the roadway.

C. Time of Incident

The accident and resulting spill occurred October 8, 1993, at 2:00 pm. Final remedial activity was completed on October 10, 1993 at 2:30 pm.

D. Discharge Event

Approximately ten (10) to fifteen (15) barrels of Crude Oil were spilled from the tanker and pup trailer, which was traveling south on Hwy. 84, when the vehicle left the roadway on the west side and overturned near Mile Post 287.

E. Type of discharge

Price Four (4) Crude Oil

F. Quantity

The truck and trailer involved in the accident were off loaded into another transport vehicle at the scene. When the transport vehicle was off loaded at Bloomfield Refining Company, the estimated loss was identified to between ten (10) and fifteen (15) barrels of crude oil.

G. Site Characteristics

The elevation at the site was approximately 7,840 feet. The roadway on which the accident occurred is blacktop, two (2) lane, elevated with fill, approximately twenty-five (25) feet above native soil. At ground level, the soil is loam, populated with heavy oak brush, Russian thistle, native grasses and plants common to that area of New Mexico at that elevation. The spill was contained within twenty (20) yards of an existing flowing creek. The site is located approximately six (6) miles south of Cromo, Colorado.

H. Immediate Corrective Action

Immediately following the accident, the driver observed that the hatch on the pup trailer was damaged and leaking crude product. The leak was mitigated by the driver stuffing his shirt into and around the opening. The truck and pup were off loaded onto a transport vehicle, preventing the danger of further release. The tanker and pup were then removed from the scene by Sunco Trucking Wrecker. Tierra Environmental Response Team was on scene during recovery operations. A second release from the pup trailer occurred. An absorbent material was applied immediately to the area of both the first and second releases in order to prevent migration towards the creek. The area directly down gradient of the spill was diked also with the absorbent material in order to prevent further migration in the event of rainfall.

NARRATIVE

On October 8, 1993, at about 3:30 p.m., I was contacted via telephone by Chris Hawley, Environmental Manager for Bloomfield Refining Company. Hawley stated that one of their tank trucks and pup trailer belonging to Gary Williams Energy had been involved in an accident on New Mexico State Hwy 84 in New Mexico near the Colorado border. The tanker had been carrying crude from Cromo, Colorado when it overturned, spilling product on the ground.

At about 3:45 p.m., I dispatched Tierra Environmental Specialist, Ron Castleberry, to the scene to conduct a preliminary assessment. At about 4:00 p.m., I was contacted by D.Foust, local representative for the New Mexico Oil Conservation Division (OCD), who advised me that he was in-route to the scene. Foust further advised that according to his information the spill was in an environmentally sensitive area and needed to be removed as quickly as possible.

Roger Anderson, OCD Bureau Chief in Santa Fe, had authorized removal to the Tierra Crouch Mesa Landfarm Facility. According to Foust, Anderson had not been able to reach the New Mexico Environmental Department, Hazardous Materials Bureau (NMED Haz Mat), and therefore, had assumed jurisdiction. State Police Haz Mat were on scene.

After speaking with Foust, I called Hawley back and suggested that I deploy a containment team to the scene. He concurred. At about 4:15 p.m., I contacted Bob Griffie, V.P. On-Site Technologies, and directed him to dispatch personnel and spagsor to the site.

At about 6:30 p.m., Castleberry arrived on scene. He observed that the tanker and pup had overturned about 1/4 mile south of the Colorado State line, on the west side of the roadway. The tanker was on its' top on the highway. The pup trailer was lying on its side resting at the bottom of about a twenty (20) foot embankment. The tanks on both the truck and pup trailer appeared to be intact. However, it further appeared that the hatches on both the tanker and pup trailer had opened during the accident, spraying the area with crude oil, contaminating the roadway, embankment and an area below the embankment of about 60' x 40' including a stand of oak brush and other native vegetation. There was a flowing creek (Store Creek), located about twenty (20) yards south of the pup trailer.

Bloomfield Refining dispatched an additional tanker to the location of the accident and the remaining crude was transferred from the damaged tanker and pup. A large wrecker from Sunco Trucking winched the damaged pup up the embankment. At that time additional crude spilled from the pup onto the pavement and down the embankment.

The containment team arrived at the scene about 7:15 p.m. and was present during the second spill. They had already applied absorbent material to the first spill, resulting from the accident, containing the spill and preventing further migration towards the creek. They immediately applied additional absorbent material to the second spill, resulting from the recovery operations.

Castleberry characterized the site as being about 7840 feet in elevation, typical Northern New Mexico mountain terrain, with large vegas. Flora at the site consists of scrub oak, aspen and cedar. Soil composition is about three (3) to six (6) inches of humus and decaying vegetation. Subsurface soil appears to be a sandy loam and clay. Cobble and stream gravel were at about four (4) feet.

Containment and recovery operations were completed at about 12:30 a.m., October 9, 1993. The area of contamination was in an isolated area about six (6) miles south of Chromo, Colorado, the nearest population center, and mostly hidden from view below the roadway. No additional security measures appeared necessary at the time. Containment and recovery operations were complete. Operations were suspended at about 1:00 a.m., until daylight later on that morning.

At about 8:00 a.m., operations again commenced. A backhoe was brought to the scene and dug test holes to a depth of four (4) feet. Field Headspace Testing with a photo-ionization meter indicated that contamination had not gone below about two (2) feet in the area below the embankment. Groundwater was not encountered.

Because of the location of the spill, it was necessary to conduct loading from the roadway. A traffic control defile became necessary, including a pilot car to shuttle traffic past the site. At times while trucks were delivering backfill and that backfill was being moved into the excavation area, it became necessary to totally shut down traffic from both directions.

Approximately one-hundred thirty-two (132) cubic yards of contaminated soil, mixed with oak brush that had been broken and contaminated as a result of the accident were removed and transported via truck to the Tierra Crouch Mesa Landfarm Facility. The excavation was field tested using the headspace method and photo-ionization detector until it appeared that all contamination had been removed.

Upon arrival at the Tierra Crouch Mesa Landfarm Facility, the contaminated material was off loaded from the trucks and placed into a secure area, isolated from normal landfarm operations. The area was bermed to atleast eighteen (18) inches in order to prevent run on and runoff of contaminants should precipitation occur and lined with 22 mil plastic liner. A composite sample of the material was obtained by On-Site Technologies for RCRA TCLP Analysis. The material will be kept in the secure area pending RCRA TCLP analytical results and then disposed of properly. While stockpiled, the material will be kept moist in order to prevent blowing dust, as had been directed by Anderson (OCD).

Composite closure samples were then obtained from the sides and bottom of the excavated area at the spill site. They were submitted to On-Site Technologies Laboratory in Farmington, New Mexico for analysis. The results of the analysis are enclosed and are below the regulatory limits established by the New Mexico Oil Conservation Division.

Approximately sixty-two (62) cubic yards of clean soil backfill was transported to the site and replaced into the excavated areas.

Operations removing the contaminated soil and backfilling were completed at about 2:30 pm October 10, 1993.

by: Phillip C. Nobis
Vice President Operation

Phillip C. Nobis 10/14/93

II. Location Map

LUMBERTON QUADRANGLE
NEW MEXICO-COLORADO
15 MINUTE SERIES (TOPOGRAPHIC)

4658 II
(CHAMA)

4658 III
(CHROMO)

334

335

50, 337

338

340 000 FEET (N. MEX.)

106°45'

37°00'

4096

2 180 000 FEET
(N. MEX.)

4094

4093

4091

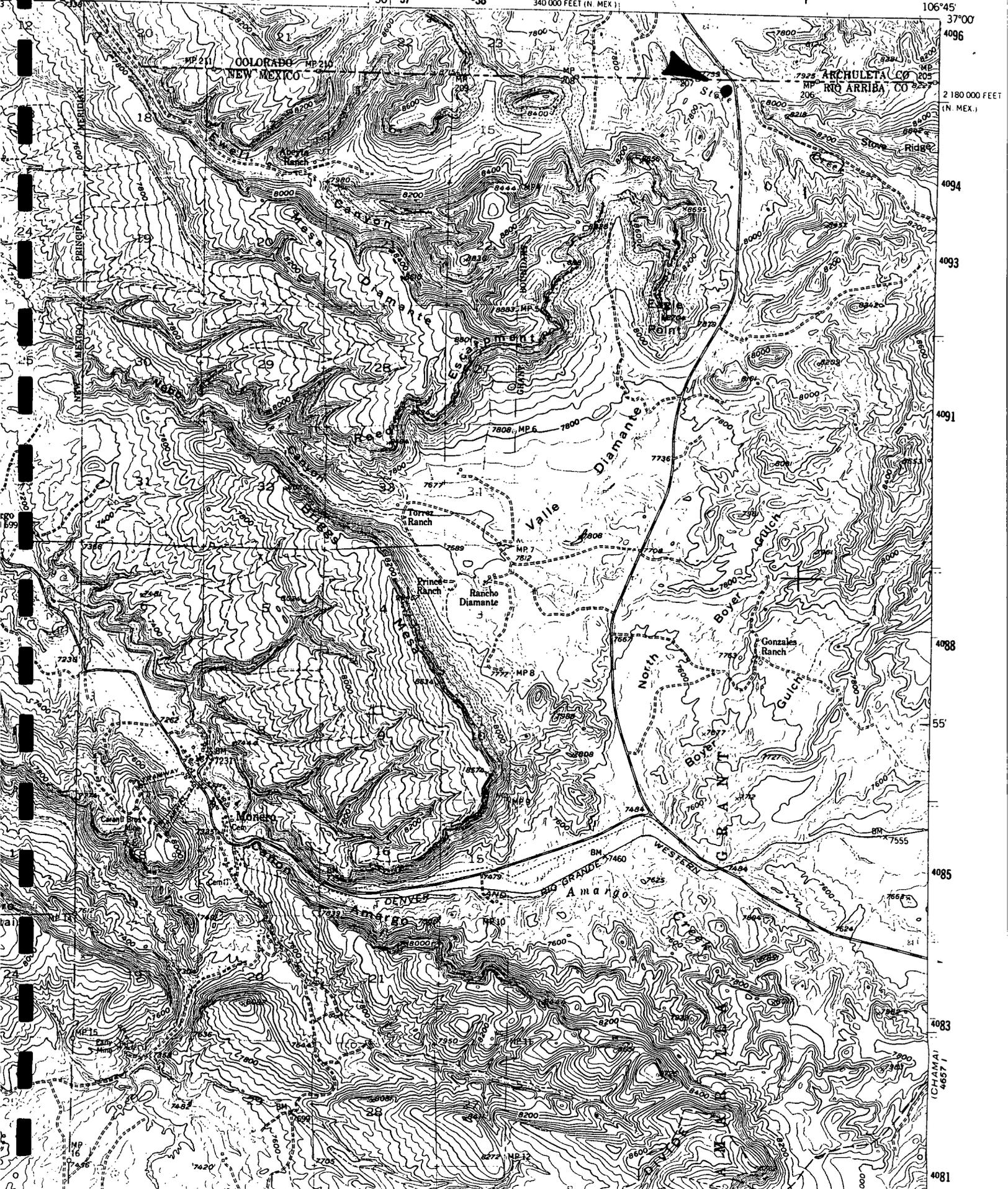
4088

55'

4085

4083

4081



III. Site Diagram



TIERRA

Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87401

TANKER SPILL REMEDIATION SOUTH OF CHROMO, COLORADO FOR BLOOMFIELD REFINING COMPANY

STATE
LINE

COLORADO
NEW MEXICO

HIGHWAY #84

FENCE

FENCE

ACCESS ROAD

GATES

ACCESS ROAD

60'x40' AREA
OF SPILL

100'

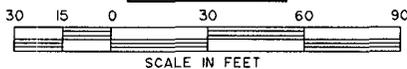
20'± EMBANKMENT

20± YARDS

TANKER

STORE

CREEK



IV. Laboratory Analysis for Closure



PRIORITY POLLUTANTS / AROMATIC VOLATILE ORGANICS

Attn: *Phil Nobis*
Company: *Tierra Environmental Corporation*
Address: *909 W Apache St*
City, State: *Farmington, NM 87499*

Date: *10/14/93*
Lab ID: *1291*
Sample ID: *#0635*
Job No. *2-1000*

Project Name: *Tierra Environmental - Bloomfield Refinery Tanker Spill*
Project Location: *HWY 84 - 6 miles North of HWY 64 Junction*
Sampled by: *RC* Date: *10/12/93* Time:
Analyzed by: *DC* Date: *10/14/93*
Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Chlorobenzene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>1,3-Dichlorobenzene</i>	<i>ND</i>
<i>1,4-Dichlorobenzene</i>	<i>ND</i>
<i>1,2-Dichlorobenzene</i>	<i>ND</i>
TOTAL	0 ug/L

ND - Not Detectable

*** - Method Detection Limit, 2.0 ug/L*

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

Approved by: *[Signature]*
Date: *10/14/93*



Attn: *Phil Nobis*
 Company: *Tierra Environmental Corporation*
 Address: *909 W Apache St.*
 City, State: *Farmington, NM 87499*

Date: *10/13/93*
 Lab ID: *1291*
 Sample No. *#0635*
 Job No. *2-1000*

Project Name: *Tierra Environmental - Bloomfield Refinery Tanker Spill*
 Project Location: *HWY 84 - 6 miles North of HWY 64 Junction*
 Sampled by: *RC* Date: *10/12/93*
 Analyzed by: *TW* Date: *10/13/93*
 Type of Sample: *Soil*

Laboratory Analysis

<i>Laboratory Identification</i>	<i>Sample Identification</i>	<i>Total Petroleum Hydrocarbons</i>
<i>0635-1291</i>	<i>Tierra Environmental Closure Composite Chromo No.2</i>	<i>21 ppm wt.</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *[Signature]*
 Date: *10/13/93*

V. Photography



