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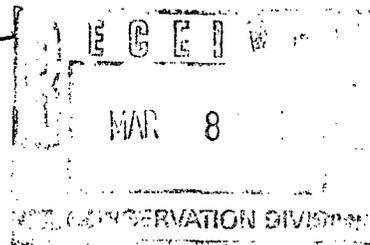
# **REPORTS**

**DATE:**

2001

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1R0349



Presented to:

**Chevron U.S.A.**

PO Box 1949  
Eunice, New Mexico 88231

**Monument 1 Satellite Transfer Line**

**Spill Remediation Report**

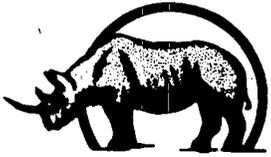
From:



**RHINO**

**Environmental Services, Inc**

4007 Lovington Hwy.  
Hobbs, New Mexico 88240



# RHINO

**Environmental Services, Inc.**

P.O. Box 25547 • Albuquerque, New Mexico 87125  
Phone (505) 247-4646 • Fax (505) 797-4874

February 23, 2001

Chevron U.S.A.  
PO Box 1949  
Eunice, New Mexico 88231

Attn: Mr. R. W. Massey

**RE: Monument 1 Satellite Transfer Line Spill Remediation**

Dear Mr. Massey:

Rhino Environmental Services, Inc. (Rhino) would like to take this time to thank you and Chevron USA for the opportunity to provide our professional services on the spill remediation/clean up that you have requested, for the monument 1 Satellite Transfer Line.

Please find in the following report the summary with finding and conclusions, on-site analysis, lab analysis, site map and job photos.

If you have any questions and/or need more data in regards to this project please call at any time.

Sincerely,

Allen Hodge, REM  
Sr. Project Manager  
Rhino Environmental Services, Inc.

Chevron USA  
Monument 1 Spill Clean Up  
RH01-AH09

# Index

**1. Summary/Overview**

**2. Chronological**

**3. On-Site Analysis**

**4. Lab Analysis**

**5. Site Map**

**6. Job/Site Photos**

# Summary/Overview



### Summary/Overview

The Monument 1 Satellite Transfer Line Spill site was remediated in accordance with the New Mexico Oil Conservation Divisions (NMOCD) guidelines for clean up of leaks and spills. It is our understanding that any potential contamination from the spill site was a result of activities associated with the production of oil and gas.

The potential contaminants of concern were mid to high-level concentrations of petroleum-based hydrocarbons and produced water that were lost due to a line failure and absorbed by the surrounding near-surface soils.

The NMOCD regulates the remediation and disposal of non-domestic wastes resulting from the oil and gas industry. In addition, the NMOCD administers all Water Quality Act regulations pertaining to surface and ground water except sewage for the oil and gas industry. This authority includes the disposition of non-domestic, non-hazardous wastes at oilfield facilities.

The Monument 1 Satellite Transfer Line Spill was located in Unit N of Sec. 1, T19S, and R36E in Lea County New Mexico. The lands primary use is for pasture for cattle and the production of oil and gas. The spill site was located less than 1,000' from a playa lake.

There was no ground water depth data that was available for this section from the state engineers office. There was some data that was from other sections that should the depth to ground water to be in the 70' range.

Pursuant to the NMOCD guidelines for clean up of leaks and spills, the clean up level for this spill will be at <100 ppm of TPH and ND for BTEX. The NMOCD has also asked for Chlorides although there are no set standards it is a general rule to try and get back close to background levels.

### Findings and Conclusions

1. The clean up operations were started within 72 hours of the spill, thus greatly reducing the vertical impact. Rhino received verbal approval to proceed with clean up operations as an emergency from Mr. Wayne Price with the NMOCD due to the fact that the spill had gotten into the playa lake at the site.



## **RHINO ENVIRONMENTAL SERVICES, INC.**

2. The spill ran down a hill and pooled up in the edge of the playa lake at the site. The spill covered an estimated 14,385sq' of surface area and was still wet with free fluid at the start of clean up operations.
3. This spill cleaned up very well with vertical depth of impact only going 18" in depth. All of the final lab analysis was well below the NMOCD guidelines for leaks and spills (see lab analysis for actual levels).
4. There was a total of 1,000cyds of impacted soils that were transported off site to Rhino's OCD land farm. This facility is an NMOCD approved and permitted site. At the facility Chevron has reserved two cells that are held back for Chevron material only.
5. Due to the fact that this spill was cleaned up to background levels, this site should pose very little if any future environmental threat.
6. The site was backfilled with clean backfill and dressed off back to grade. The site should also revegetate very well with upcoming spring rains.
7. There was a small strip of impacted soils that was left under the line as per Mr. Wayne Price with the NMOCD for safety. This small area should bio-remediate well due to the fact that it was treated with Micro-Blaze and a high nitrogen fertilizer.
8. Please refer to the rest of this report for the on-site analysis and final lab analysis for site closure.



# Chronological



Chronology of Operations

1. On 1-30-01 Rhino's Sr. Project Manager Mr. Allen Hodge was contacted by Mr. Nathan Mouser with Chevron USA, to met him at the site to look at a spill that had accrued on 1-27-01, where a line failure had released an estimated 100 bbl of liquid, 40 that was oil and 60 that was produced water. At this point Mr. Mouser gave Rhino the approval to start the clean up operations.

Rhino made a call to New Mexico one call for an emergency line spot, conformation # 01013011050253. Rhino then contacted Mr. Wayne Price with the NMOCD for approval to start clean up operations with out a work plain. Mr. Price gave the approval due to the fact that the spill had gotten into the playa lake at the site. Rhino then mobilized a backhoe and operator to start clean up operations. At the site beginning site photos were taken and the backhoe started at the playa picking up the areas that still had free liquid present.

2. On 1-31-01 Rhino was on site, first we had a tailgate safety meting to go over possible safety concerns of the site and to cover the clean up operations. A site map was made and showed that the spill had impacted an estimated 14,385sq' of surface area. The backhoe was used in the playa area to start stockpiling the impacted soils for trucks to transport off site to a NMOCD approved disposal facility. At this point the playa area was up and stockpiled and starting to work on the middle section of the spill.
3. On 2-1-01 Rhino had a tailgate safety meeting, backhoe stockpiling impacted soils. Rhino mobilized to the site a D6R dozer. This was for two reasons one was to speed up the stockpiling and the other was the upper section of the spill area was very rocky and it would not be cost affective to have the backhoe work this area. At this point the spill is about 65% stockpiled and contained.
4. On 2-2-01 Rhino had a tailgate safety meeting, backhoe and dozer excavating and stockpiling impacted soils. At this point the spill is 95% stockpiled and ready for the trucks to come in to transport the impacted soils off site.
5. On 2-5-01 Rhino had a tailgate safety meeting; Rhino had three 20cyd belly dump trucks on site to start the transportation of impacted soils.

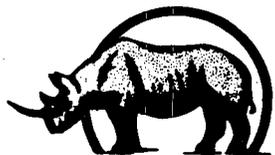


## **RHINO ENVIRONMENTAL SERVICES, INC.**

The impacted soils were transported to Rhinos OCD land farm where Chevron has reserved cells for their material only.

6. On 2-6-01 Rhino had a tailgate safety meeting; Rhino had three 20cyd belly dump trucks on site to transport the impacted soils. The impacted soils were transported to Rhinos OCD land farm where Chevron has reserved cells for their material only. The trucks are also back hauling clean fill material back to the site. This will cut the trucking cost by about 45% and help keep the overall cost of clean up down. Rhino also mobilized to the site a front-end loader to load the trucks and to help keep cost down.
7. On 2-7-01 Rhino had a tailgate safety meeting; Rhino had three 20cyd belly dump trucks on site to transport the impacted soils. Rhino took some preliminary soil samples of the spill site to confirm that the TPH levels were being addressed for site closure. These samples were composite samples taken from the north ½ and from the south ½, refer to the on-site analysis in this report for the levels.
8. On 2-7-01 Rhino had a tailgate safety meeting; Rhino had three 20cyd belly dump trucks on site to transport the impacted soils. At this point Rhino was ready to take the final samples of the site. These samples were taken and sent to a third party lab for conformation, refer to the lab analysis for the final bottom levels. These final samples were tested for TPH, BTEX and chlorides (CL).
9. On 2-9-01 Rhino had received the final sample results from the lab showing that all test results were well below NMOCD guidelines for site closure. At this point Rhino started back filling the site. Rhino made a call to Mr. Price with the NMOCD in regards to the small strip of impacted soil that would be left under the line at the site due to safety reasons. Mr. Price felt that this would not be a problem due to the small amount and the fact that we were going to treat the area with Micro-Blaze and a high nitrogen fertilizer.
10. On 2-12-01 Rhino was on site completing the backfilling and dressing the site off back to grade. Final site photos were being taken in preparation for site closure.
11. On 2-13-01 Rhino had completed the site backfilling and demobilization of equipment back to our Hobbs yard. At this point clean up operations had been completed and ready to start the final report process.

# On-Site Analysis



# RHINO

## Environmental Services, Inc.

P.O. Box 25547 • Albuquerque, New Mexico 87125

Phone (505) 247-4646 • Fax (505) 797-4874

## SOIL ANALYSIS REPORT

Date: 2-7-01  
Client: Chevron USA  
Supervisor: Allen Hodge  
Sample Matrix: Soil

Facility: Monument 1 Sat. Tran. Line  
Test Method: EPA 418.1  
Order No. Rick Massey  
Sample Received: Intact on site

|               | <u>TPH</u> |     | <u>Depth</u> | <u>Location</u>       |
|---------------|------------|-----|--------------|-----------------------|
| SAMPLE NO. 1: | 67         | PPM | 18"          | North ½ of spill site |
| SAMPLE NO. 2: | 42         | PPM | 18"          | South ½ of spill site |

|                | <u>CL</u> |     | <u>Depth</u> | <u>Location</u>       |
|----------------|-----------|-----|--------------|-----------------------|
| SAMPLE NO. 3:  | 125       | PPM | 18"          | North ½ of spill site |
| SAMPLE NO. 4:  | 90        | PPM | 18"          | South ½ of spill site |
| SAMPLE NO. 5:  |           | PPM |              |                       |
| SAMPLE NO. 6:  |           | PPM |              |                       |
| SAMPLE NO. 7:  |           | PPM |              |                       |
| SAMPLE NO. 8:  |           | PPM |              |                       |
| SAMPLE NO. 9:  |           | PPM |              |                       |
| SAMPLE NO. 10: |           | PPM |              |                       |

COMMENTS: These samples were taken to insure that the clean up operations were addressing all of the concerns of the NMOCD for final site closure.

Chevron USA  
Monument 1 Spill Clean Up  
RH01-AH09

# Lab Analysis

**ECD Environmental, Inc.**

**Client:** Rhino Environmental  
**Project:** Chevron Monument/ Sat Trans  
**Project Manager:** Allen Hodge  
**Project Number:**

**Date Collected:** 2/09/01  
**Date Received:** 2/09/01  
**Sample Matrix:** Soil  
**Extraction Date:** 2/10/01

**EPA Method 8015B MOD (Gas/Diesel)**

| Heal ID          | Client ID         | Dilution | TPH (GRO)<br>(mg/kg) | TPH (DRO)<br>(mg/kg) | Analysis Date |
|------------------|-------------------|----------|----------------------|----------------------|---------------|
| 0021101-1        | North ½ Composite | 1        | ND                   | ND                   | 2/11/01       |
| 0021101-2        | South ½ Composite | 1        | ND                   | ND                   | 2/11/01       |
| Extraction Blank |                   |          | ND                   | ND                   | 2/11/01       |

**EPA Method 8021 BTEX**

|            |                   |   | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethyl-Benzene<br>(mg/kg) | Xylenes<br>(mg/kg) |
|------------|-------------------|---|--------------------|--------------------|--------------------------|--------------------|
| 0021101-1A | North ½ Composite | 1 | ND                 | ND                 | ND                       | ND                 |
| 0021101-2A | South ½ Composite | 1 | ND                 | ND                 | ND                       | ND                 |

**QC/QA**

| <u>Sample ID</u>  | <u>Sample Amount</u> | <u>Spike</u> | <u>Recovery</u> | <u>%Recovery</u> |
|-------------------|----------------------|--------------|-----------------|------------------|
| 0021101-1 MS      | ND                   | 100 ppm      | 103 ppm         | 103              |
| 0021101-1 MSD 100 |                      |              | 99 ppm          |                  |

**Chloride EPA method 4500.00**

North ½ Composite 89 ppm  
 South ½ Composite 121 ppm

# Purchase Order/Chain Of Custody

Anachem, Inc. 8 Prestige Circle, Suite 104, Allen, TX 75002 Phone: 972-727-9003 Fax: 972-727-9686

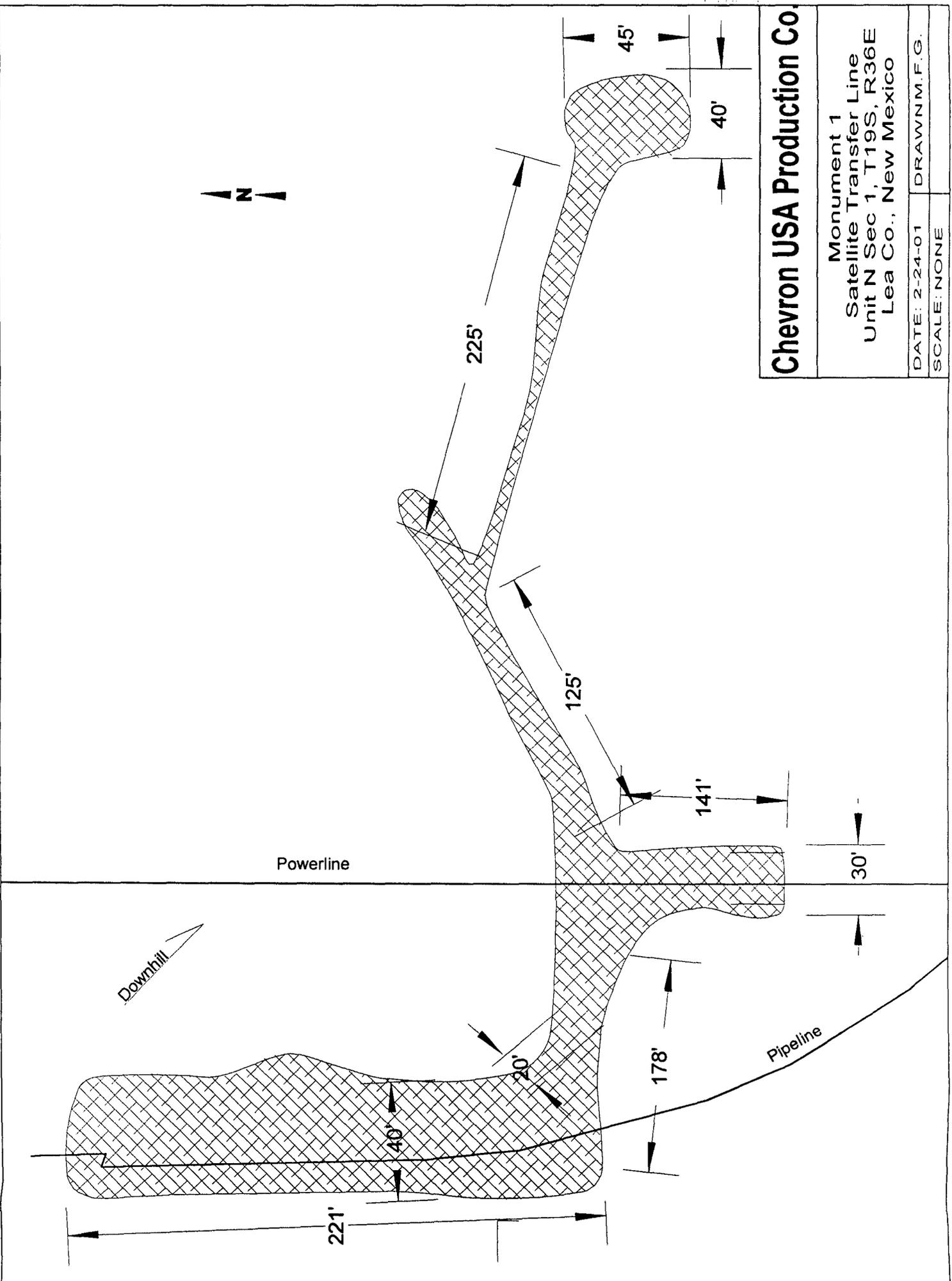
Page of

| Report To: <b>Allen Nozge</b>  | Bill To: (Buyer)       | Analysts                       |  |                     |                   |                      |
|--|------------------------|--------------------------------|--|---------------------|-------------------|----------------------|
| Company: <b>RHINO Environmental</b>  | Purchase Order #:      |                                |  |                     |                   |                      |
| Address: <b>4007 Lovington Hwy</b>   | Address:               |                                |  |                     |                   |                      |
| City, State, Zip: <b>Nobbs, NC 28240</b>   | City, State, Zip:      |                                |  |                     |                   |                      |
| Phone: <b>392-4498</b>   | Phone:                 |                                |  |                     |                   |                      |
| Fax: <b>392-9376</b>   | Fax:                   |                                |  |                     |                   |                      |
| Project Name: <b>CHURCH MOVEMENT / SAT. IRMS LINE</b>  | City, State: <b>NC</b> |                                |  |                     |                   |                      |
| Project Location: <b>MOVEMENT</b>  | City, State: <b>NC</b> |                                |  |                     |                   |                      |
| Date Due:  | Run: 0% 25% 50% 100%   | Sampled By: <b>Allen Nozge</b> |  |                     |                   |                      |
| Lab#   | Client Sample ID       | Matrix                         | Date/Time  | Sample Notes        |                   |                      |
|  | 1. NORTH 1/2 Composite | SOIL                           | 2901   | 900                 |                   |                      |
|  | 2. SOUTH 1/2 Composite | "                              | 2901   | 930                 |                   |                      |
|  | 3.                     |                                |  |                     |                   |                      |
|  | 4.                     |                                |  |                     |                   |                      |
|  | 5.                     |                                |  |                     |                   |                      |
|  | 6.                     |                                |  |                     |                   |                      |
|  | 7.                     |                                |  |                     |                   |                      |
|  | 8.                     |                                |  |                     |                   |                      |
|  | 9.                     |                                |  |                     |                   |                      |
|  | 10.                    |                                |  |                     |                   |                      |
| Relinquished By:    | Date: <b>2/9/01</b>    | Time: <b>10:00</b>             | Received By:  | Date: <b>2/9/01</b> | Time: <b>0:01</b> | Sample Receipt Notes |
|  |                        |                                |  |                     |                   | Temperature          |
|  |                        |                                |  |                     |                   | Preserved Property   |
|  |                        |                                |  |                     |                   | COC Seals Intact     |
|  |                        |                                |  |                     |                   | Method of Shipment   |
| <p>In the event that Anachem determines that a sample is hazardous, the client agrees to: Pay For Sample Disposal _____ Accept Returned Sample _____</p> |                        |                                |  |                     |                   |                      |
| <p>Submission #</p>  |                        |                                |  |                     |                   |                      |

OTO REV 5/97

Sample information is vital for proper tests and reporting. This is a contract subject to the terms and conditions on the reverse side.

# Site Map



**Chevron USA Production Co.**

Monument 1  
 Satellite Transfer Line  
 Unit N Sec 1, T19S, R36E  
 Lea Co., New Mexico

DATE: 2-24-01      DRAWN: M.F.G.  
 SCALE: NONE



# Job/Site Photos



Beginning Site Photos





Beginning Site Photos





In Progress Site Photos





In Progress Site Photos





In Progress Site Photos





In Progress Site Photos





In Progress Site Photos





Final Site Photos





Final Site Photos

