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REPORTS

DATE:

Oct. 29, 1997



**Navajo Refining Company
Pipeline Division**

Artesia Station Discharge #2 Closure Report
Eddy County, New Mexico

*Safety & Environmental Solutions, Inc.
703 E. Clinton Suite 103
Hobbs, New Mexico 88240
(505) 397-0510*

TABLE OF CONTENTS

Physical Description.....	<u>2</u>
Background	<u>2</u>
Contaminant and Size of Leak	<u>2</u>
Vertical and Horizontal Extent of Contamination	<u>2</u>
Surface Water and Waterways.....	<u>3</u>
Groundwater	<u>3</u>
Soil Information	<u>3</u>
Worked Performed	<u>3</u>
Maps and Figures.....	<u>3</u>

I. **Physical Description**

The legal description of the leak site is in the NW 1/4 NE 1/4 of Section 29 Township 18S, Range 28E, Eddy County, New Mexico. The leak site is situated on a relatively level site. (Vicinity Map) The land is owned by the Bureau of Land Management.

II. **Background**

There is evidence of a past historical leaks along the pipeline.

III. **Contaminant and Size of Leak**

The leak in the pipeline resulted in oil being discharged. The leak flowed along the pipeline over an area approximately 415 feet in length, 75 feet to 190 feet in width. No evidence of other contaminants was observed.

IV. **Vertical and Horizontal Extent of Contamination**

On April 18, 1997, composite samples were taken on the bottom and sides of the excavation of the leak site. Total Petroleum Hydrocarbons (EPA Method 418.1) was performed on the samples. These tests verify the extent of contamination and insure removal of the contaminants to an acceptable regulatory level. (See Analytical Results) The test results are as follows:

<u>Site</u>	<u>Side TPH Results</u>	<u>Bottom TPH Results</u>	<u>Bottom Depth</u>
Excavated Area	<10ppm	<10ppm	23'

The site was left as excavated until October 13, 1997 when blending began on the spoils piles at the site. Beginning on October 14, 1997, composite samples were taken during blending and Total Petroleum Hydrocarbons (EPA Method 418.1) was performed on the samples onsite. These tests verify the extent of contamination and insure removal of the contaminants to an acceptable regulatory level. The tests taken during blending gave results ranging from 1300ppm to >10,000ppm. Materials that tested high were reblended with clean material to lower TPH levels to acceptable regulatory levels.

Final surface composite samples were taken on October 29, 1997 after completion of work. The results from Cardinal laboratories are as follows:

<u>Site</u>	<u>Final TPH Results</u>
North 1/3 of Location	2360ppm
South 1/3 of Location	779ppm

Middle 1/3 of Location 2040ppm

V. Surface Water and Waterways

The distance to the nearest surface water is in excess of 1 mile.

VI. Groundwater

The nearest water wells on record with the New Mexico State Engineer and the United States Geological Survey in Albuquerque are in excess of 1 mile away.

VII. Soil Information

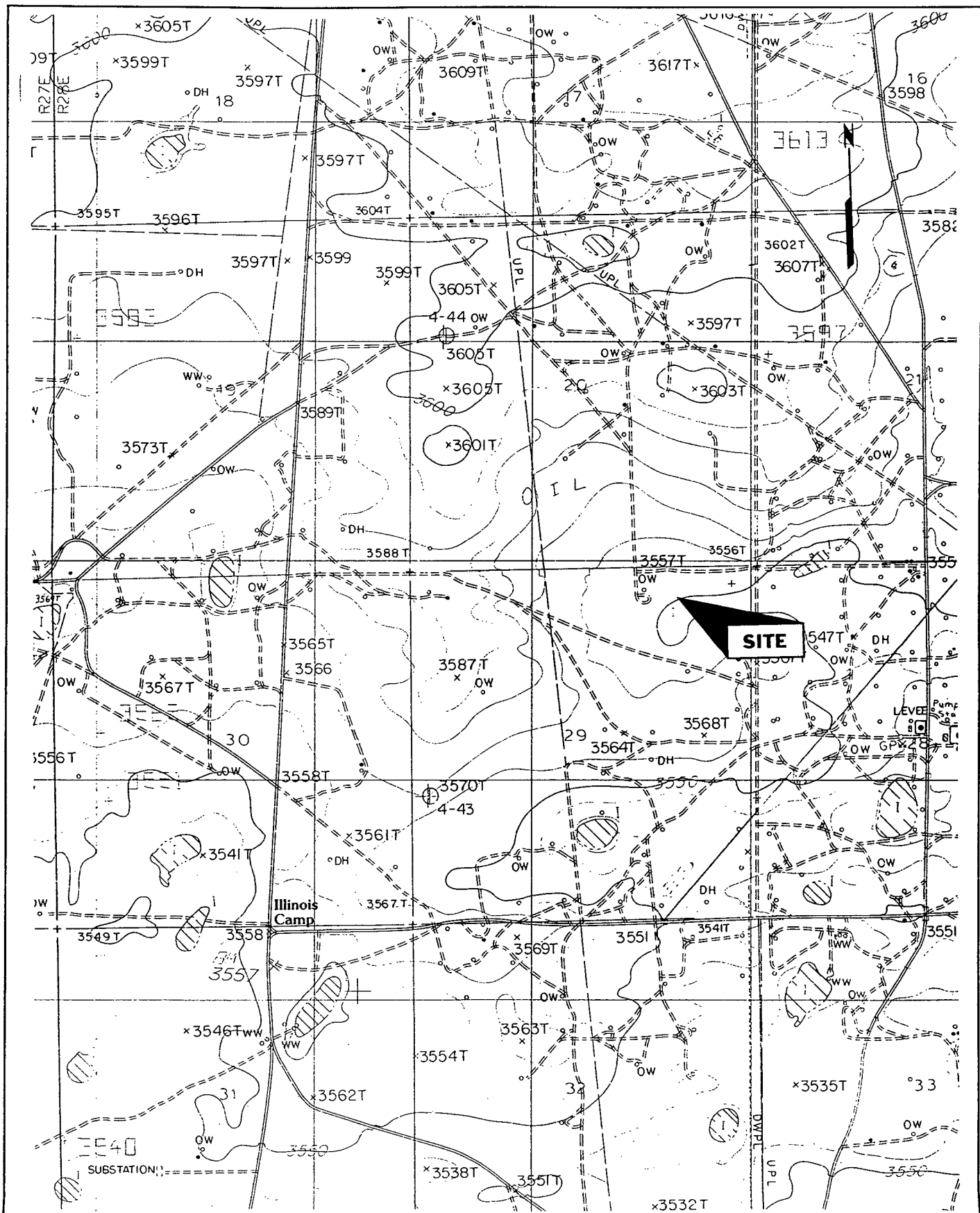
The soil on the west side of the area consists of shallow sandy loam and clay to a depth of approximately 0 - 12 inches on top of indurated caliche to total excavation depth. The soil in the east side of the area consists of shallow sandy loam and clay to a depth of approximately 60 - 84 inches on top of indurated caliche to total excavation depth.

VIII. Work Performed

The spoils piles were blended with clean soils onsite October 13-17, 20-23, and 27-29, 1997. The TPH levels of the soil backfilled into the excavation comply with the target regulatory levels obtained from "**Guidelines for Remediation of Leaks, Spills and Releases**" *New Mexico Oil Conservation Division* - August 13, 1993.

VIII. Maps and Figures

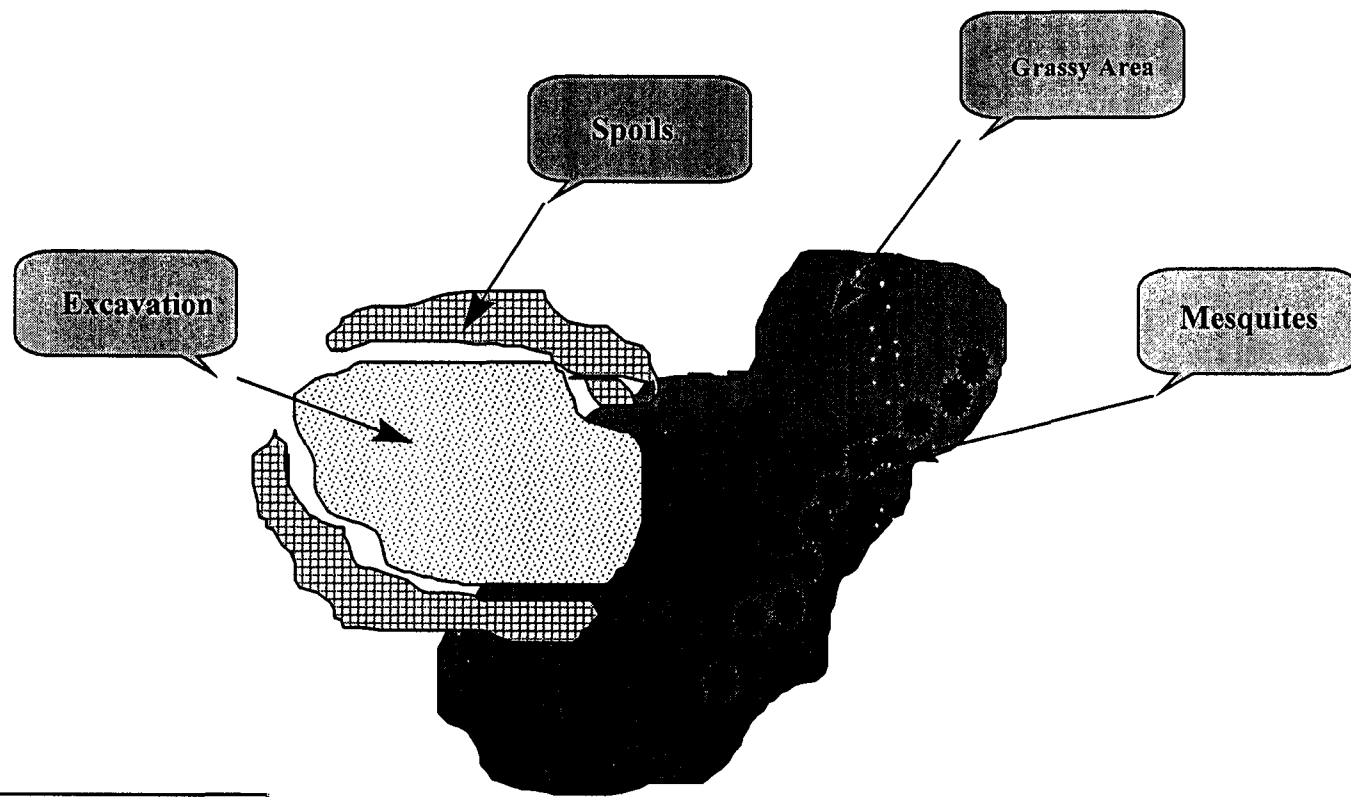
Vicinity Map
Site Plan
Photo Exhibits
Chain of Custody for Samples
Analytical Results



Navajo Refining Company
Pipeline Division

Artesia Station Discharge #2
Vicinity Map

Safety & Environmental
Solutions, Inc.
Hobbs, NM



Navajo Refining Company
Figure 1

Site Map
Artesia Station #2

Safety & Environmental Solutions, Inc.



Navajo Discharge #2 - Photo #1 Prior to Project Facing East



Navajo Discharge #2 - Photo #2 Prior to Project Facing East



Navajo Discharge #2 - Photo #3 Prior to Project Facing Southeast



Navajo Discharge #2 - Photo #4 During Project Facing Southwest



Navajo Discharge #2 - Photo #5 During Project Facing West



Navajo Discharge #2 - Photo #6 During Project Facing Northwest



Navajo Discharge #2 - Photo #7 Completed Project Facing Northwest



Navajo Discharge #2 - Photo #8 Completed Project Facing West



Navajo Discharge #2 - Photo #9 Completed Project Facing East



Navajo Discharge #2 - Photo #10 Completed Project Facing South



ARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: D. WORMINGTON
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 10/30/97
Reporting Date: 11/03/97
Project Number: NOT GIVEN
Project Name: NOT GIVEN
Project Location: NAVAJO DISCHARGE # 2

Analysis Date: 10/30/97
Sampling Date: 10/29/97
Sample Type: SOIL
Sample Condition: COOL, INTACT
Sample Received By: JS
Analyzed By: BC

LAB NUMBER	SAMPLE ID	TPH (mg/Kg)
H3292-1	SAMPLE #1, NORTH 1/3	2360
H3292-2	SAMPLE #2, SOUTH 1/3	779
H3292-3	SAMPLE #3, MIDDLE 1/3	2040
Quality Control		210
True Value QC		200
% Recovery		105
Relative Percent Difference		1.7

METHOD: EPA 418.1, 3510, 3540, or 3550; Infrared Spectroscopy

[Signature]
Chemist

11/03/97
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or third parties arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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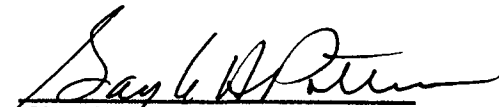
ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BROWNING
703 E. CLINTON
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/18/97
Reporting Date: 04/28/97
Project Number: NOT GIVEN
Project Name: NAVAJO ARTESIA ST. DISCHARGE #2
Project Location: LOCO HILLS

Analysis Date: 04/28/97
Sampling Date: 04/18/97
Sample Type: SOIL
Sample Condition: COOL, INTACT
Sample Received By: BC
Analyzed By: GP

LAB NUMBER	SAMPLE ID	TPH (ppm)
H2925-1	BOTTOM FINAL COMP.	<10
H2925-2	WALL COMPOSITE	<10
Quality Control		216.6
True Value QC		203.0
% Recovery		107
Relative Percent Difference		6.48

METHOD: EPA 418.1, 3510, 3540, or 3550; Infrared Spectroscopy


Chemist

04/28/97
Date