

*Approved*

**Meter Number: 71282**  
**Location Name: HUERFANITO #38-28**  
**Location: TN-27 RG-09**  
**SC-28 UL-O**  
**2 - Federal**  
**NMOCD Zone: OUTSIDE**  
**Hazard Ranking Score: 00**

**RECEIVED**  
APR 14 1997  
**OIL CON. DIV.**  
**DIST. 3**

**RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS  
LOCATED OUTSIDE OF THE VULNERABLE ZONE  
IN THE SAN JUAN BASIN**

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	$10^{-9}$ to $10^{-13}$ cm/sec
Shale	$10^{-12}$ to $10^{-16}$ cm/sec
Clay	$10^{-12}$ to $10^{-15}$ cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

4

GENERAL

Meter: 71282 <sup>2/9/95</sup> ~~71252~~ Location: Huertanito No. 38-28  
Operator #: 2999 Operator Name: Meridian P/L District: Ballard  
Coordinates: Letter: O Section 28 Township: 27 Range: 9  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator \_\_\_\_\_ Location Drip: ☒ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 6-13-94 Area: 11 Run: 31

SITE ASSESSMENT

**NMOCD Zone:**

(From NMOCD  
Maps)

Inside

Outside

**Land Type:**

BLM ☒ (1)

State ☐ (2)

Fee ☐ (3)

Indian \_\_\_\_\_

**Depth to Groundwater**

Less Than 50 Feet (20 points) ☐ (1)

50 Ft to 99 Ft (10 points) ☐ (2)

Greater Than 100 Ft (0 points) ☒ (3)

**Wellhead Protection Area :**

Is it less than 1000 ft from wells, springs, or other sources of  
fresh water extraction? , or ; Is it less than 200 ft from a private  
domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

**Horizontal Distance to Surface Water Body**

Less Than 200 Ft (20 points) ☐ (1)

200 Ft to 1000 Ft (10 points) ☐ (2)

Greater Than 1000 Ft (0 points) ☒ (3)

Name of Surface Water Body \_\_\_\_\_

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks,  
Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)  
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 0 POINTS

REMARKS

Remarks : one pit. Dry

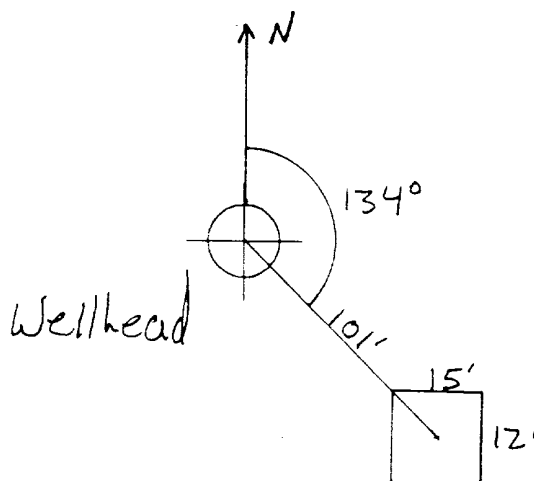
Outside V.Z. Redline & Topo

D. L. L.

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 134 Footage from Wellhead 101  
b) Length : 15 Width : 12 -Depth : 2



## REMARKS

Remarks :

Photo 3 1238 hrs

Completed By:

Signature

6-13-94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<div style="text-align: right; margin-bottom: 5px;">71282 <del>1004</del> 2/9/95</div> <p>Meter: <del>71252</del> Location: <u>Huerfano # 38-28</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>28</u> Township: <u>27</u> Range: <u>9</u></p> <p style="margin-left: 40px;">Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9-7-94</u> Run: <u>11</u> <u>31</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>VW 250</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>71</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Excavation <input type="checkbox"/></div> <div>Approx. Cubic Yards _____</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>Onsite Bioremediation <input type="checkbox"/></div> <div></div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>Backfill Pit Without Excavation <input checked="" type="checkbox"/></div> <div></div> </div> <p>Soil Disposition:</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Envirotech <input type="checkbox"/></div> <div><input type="checkbox"/> Tierra</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>Other Facility <input type="checkbox"/></div> <div>Name: _____</div> </div> <p>Pit Closure Date: <u>9-7-94</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u><del>9 trucks Cont. &amp; Clean</del> VW 9-7-94</u></p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u>Vale Wilson</u></p>



## FIELD SERVICES LABORATORY

### ANALYTICAL REPORT

#### PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW250	946066
MTR CODE   SITE NAME:	<sup>2/9/95</sup> <del>71252</del> 71282	N/A
SAMPLE DATE   TIME (Hrs):	9-7-94	1415
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	9-9-94	9-8-94
DATE OF BTEX EXT.   ANAL:	N/A	N/A
TYPE   DESCRIPTION:	VG	REDDISH BROWN FINE SAND

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	<del>330</del> 333	<sup>JWS 9/21/94</sup> MG/KG			2.24	23
HEADSPACE PID	71	PPM				
PERCENT SOLIDS	92.4	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By: J.P.

Date: 9/30/94

\*\*\*\*\*  
 Test Method for  
 Oil and Grease and Petroleum Hydrocarbons  
 in Water and Soil  
 Perkin-Elmer Model 1600 FT-IR  
 Analysis Report  
 \*\*\*\*\*

24/09/08 14:48

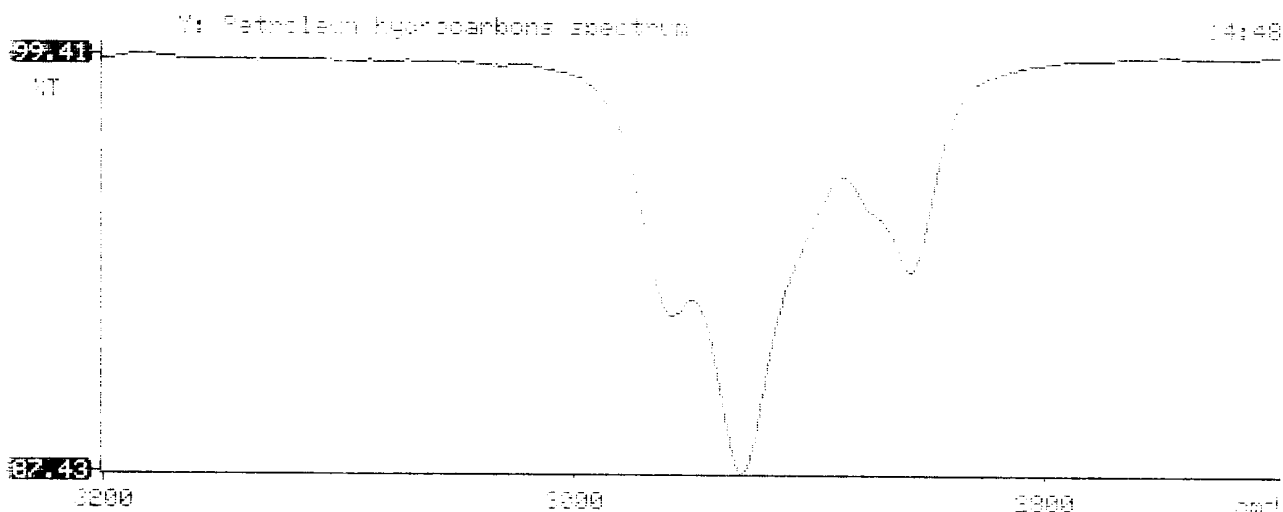
Sample identification  
 246066

Initial mass of sample, g  
 0.240

Volume of sample after extraction, ml  
 28.000

Petroleum hydrocarbons, ppm  
 13.052

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
 0.055



IN REPLY REFER TO:



COPY TO U.C.G.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
P. O. Box 965  
Farmington, New Mexico

January 9, 1956

J. Glenn Turner  
Box 728  
Farmington, New Mexico

Re: Santa Fe 278081

Gentlemen:

Receipt is acknowledged of your "Notice of Intention to Drill" dated January 9, 1956 covering your well No. 38-28 Huerfanito Unit in SE<sup>1</sup> sec. 28, T. 27 N., R. 9 W., N. M. P. M., San Juan County, New Mexico, Fulcher-Kutz ext.

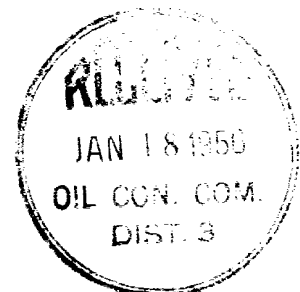
Your proposed work is hereby approved subject to compliance with the provisions of the "Oil and Gas Operating Regulations" revised May 25, 1942, a copy of which will be sent to you on request, and subject to the following conditions:

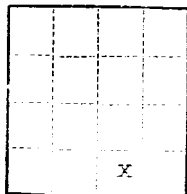
1. Drilling operations so authorized are subject to the attached sheet for general conditions of approval.
2. Furnish copies of all logs.

Very truly yours,

Jerry W. Long

JwLong:ac





(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Santa Fe  
Lease No. 078031  
Unit SE/4

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

January 9, 1956, 19

Huerfano Unit  
Well No. 28-28 is located 1150 ft. from (S) line and 1520 ft. from (E) line of sec. 28  
SE/4 Sec. 28  
(1/4 Sec. and Sec. No.)  
Fulcher 40 & Ext.  
(Field)  
T 27-N R 9-W  
(Twp.) (Range)  
N.M.P.M.  
(Meridian)  
San Juan County  
(County or Subdivision)  
New Mexico  
(State or Territory)

The elevation of the derrick floor above sea level is 6519 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

SE/4 of Section 28 is dedicated to this well. Propose to spud with cable tools; then drill with rotary tools to the top of the Pictured Cliffs Formation - expected between 1,900 feet and 2,300 feet below the surface. Completion with cable tools - and sand oil fracturing or shooting with solidified nitro-glycerin as conditions warrant.

Casing program: 90 feet 8-5/8" O.D. new 8 rd. thd. 24# casing. Circulate cement to surface, using at least 70 sacks of cement.

5-1/2" O.D. 14# J-55 casing to be set on top of Pictured Cliffs formation, cemented with 100 sacks regular cement.

1" tubing to be set within 20 feet of total depth for production.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company J. Glenn Turner - Unit Operator

Address Box 520  
Fowler, N. M.  
New Mexico.

By [Signature]  
C. Reeson Neal, Agent in Charge  
Title

Company J. GLENN TURNER

Lease HUERFANITO UNIT Well No. 38-28

Sec. 28, T. 27 N., R. 9 W., N.M.P.M.

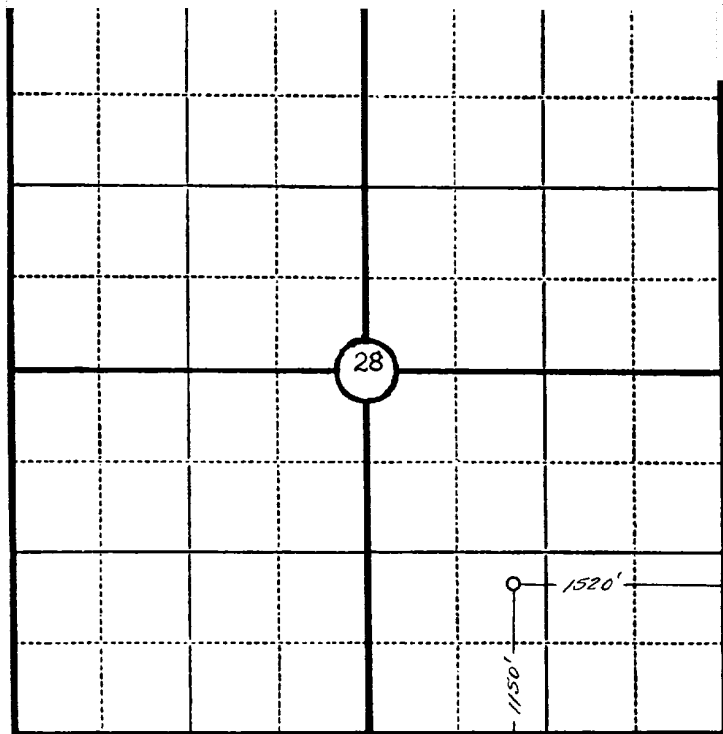
Location 1150' FROM THE SOUTH LINE AND 1520' FROM  
THE EAST LINE.

Elevation 6511.0 UNGRADED GROUND.

RECEIVED  
NEW MEXICO

SAN JUAN COUNTY

NEW MEXICO



Scale—4 inches equal 1 mile.

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Seal:

*James P. Leese*

Registered Land Surveyor.  
James P. Leese  
N. Mex. Reg. No. 1463

Surveyed 22 September 1955

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.