

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 copy to
appropriate
District Office
and 1 copy to
the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30045-22936

Operator: Hallador Petroleum, LLP Telephone: 1-800-839-5506

Address: 1660 Lincoln Street, Denver, CO 80264

Facility Or: Horton 4A

Well Name

Location: Unit D Sec 27 T 32N R 12W County San Juan, NM

Pit Type: Separator X Dehydrator Other

Land Type: BLM X, State , Fee Other

Pit Location: Pit dimensions: length 20', width 20', depth 25'

(Attach diagram)

Reference: wellhead X, other

Footage from reference: 80'

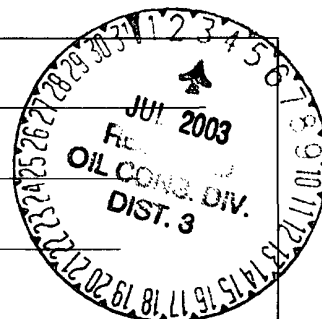
Direction from reference: 78 Degrees East of North

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet Yes	(0 points)
high water elevation of		<u>0</u>
ground water.)		

Wellhead Protection Area:	Yes	(20 points)
(Less than 200 feet from a private	No	(0 points)
domestic water source, or; less than		<u>0</u>
1000 feet from all other water sources.)		

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet Yes	(0 points)
irrigation canals and ditches.)		<u>0</u>

RANKING SCORE (TOTAL POINTS): 0



Date Remediation Started: 10/1999 Date completed: 6/2003

Remediation Method: Excavation X Approx. cubic yards 370
(Check all appropriate sections.) Landfarmed X Insitu Bioremediation

Other _____

Remediation Location: Onsite Landfarmed Offsite

(i.e. landfarmed onsite,
name and location of
offsite facility)

General Description of Remedial Action: Contaminated soils were excavated from pit area to a bedrock of shale at approx. 22 feet. Recovered soil was distributed on the location and plowed and tilled periodically over a two year period.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample location Horton 4A, pit excavation bottom
Sample depth 1' below excavated bottom approx. 23' BGS
Sample Date 11/27/00 Sample time 1015
Sample Results
Benzene(ppm) NA
Total BTEX(ppm) NA
Field headspace(ppm) 0.0
TPH ND mg/Kg

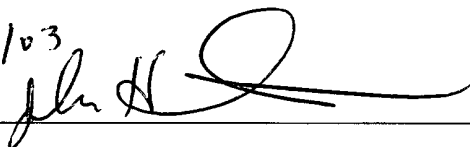
Sample location Horton 4A, side wall
Sample depth 3-4' BGS
Sample Date 11/27/00 Sample time 1020
Sample Results
Benzene(ppm) NA
Total BTEX(ppm) NA
Field headspace(ppm) 0.0
TPH ND mg/Kg

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

As an agent for Hallador, LLP, I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 7/1/03

Signature



Printed Name: John Hagstrom
and Title: Environ. Technician

District I

P.O. Box 1980,
Hobbs, NM
District II

P.O. Drawer DD,
Artesia, NM 88211
District III

1000 Rio Brazos Rd,
Aztec, NM 87410

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 St. Francis Drive
Santa, Fe NM 87505

SUBMIT 1 COPY
TO
APPROPRIATE

DISTRICT
OFFICE
AND 1 COPY TO

SANTA FE
OFFICE

Landfarm Remediation and Closure Report

Owner/Operator: Hallador Petroleum, LLP

Telephone: 1-800-839-5506

Address: 1660 Lincoln Street Denver, CO 80264

Facility or Well Name: Horton 4A

Location: Unit D, Section: 27 T 32N R 12W

County: San Juan, NM

Land Type BLM X, State _____, Fee _____, Other _____

Landfarm location Length: 40' Width: 40'

Reference: Wellhead: X Other: _____

Footage from reference: 100'

Direction from reference: 50° East of North

Refer to attached map for land farm location

GENERAL DISCRIPTION of LANDFARM ACTIVITIES: Contaminated soils from pit area were excavated to bedrock. Soils from pit were distributed on location and turned numerous times in a twenty four month period. Following landfarm remediation, soils were sampled for clearance and will be backfilled in the original pit areas.

SAMPLING INFORMATION

Type of sample: Grab: _____ Composite: 10 points

Sample Depth : 0-12"

Sample Date: 6/9/03 Sample Time: 1305

Laboratory Analysis: BTEX _____ (ppm) TPH ND(ppm)

OVM/PID 0.8 units

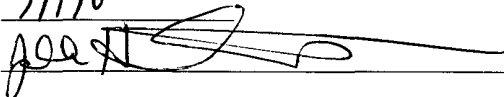
Refer to attached map for sample location. Laboratory results attached

AS AN AUTHORIZED AGENT FOR HALLADOR PETROLEUM, I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Date:

2/1/03

Signature:



Print Name: John Hagstrom

Title: Environmental Technician



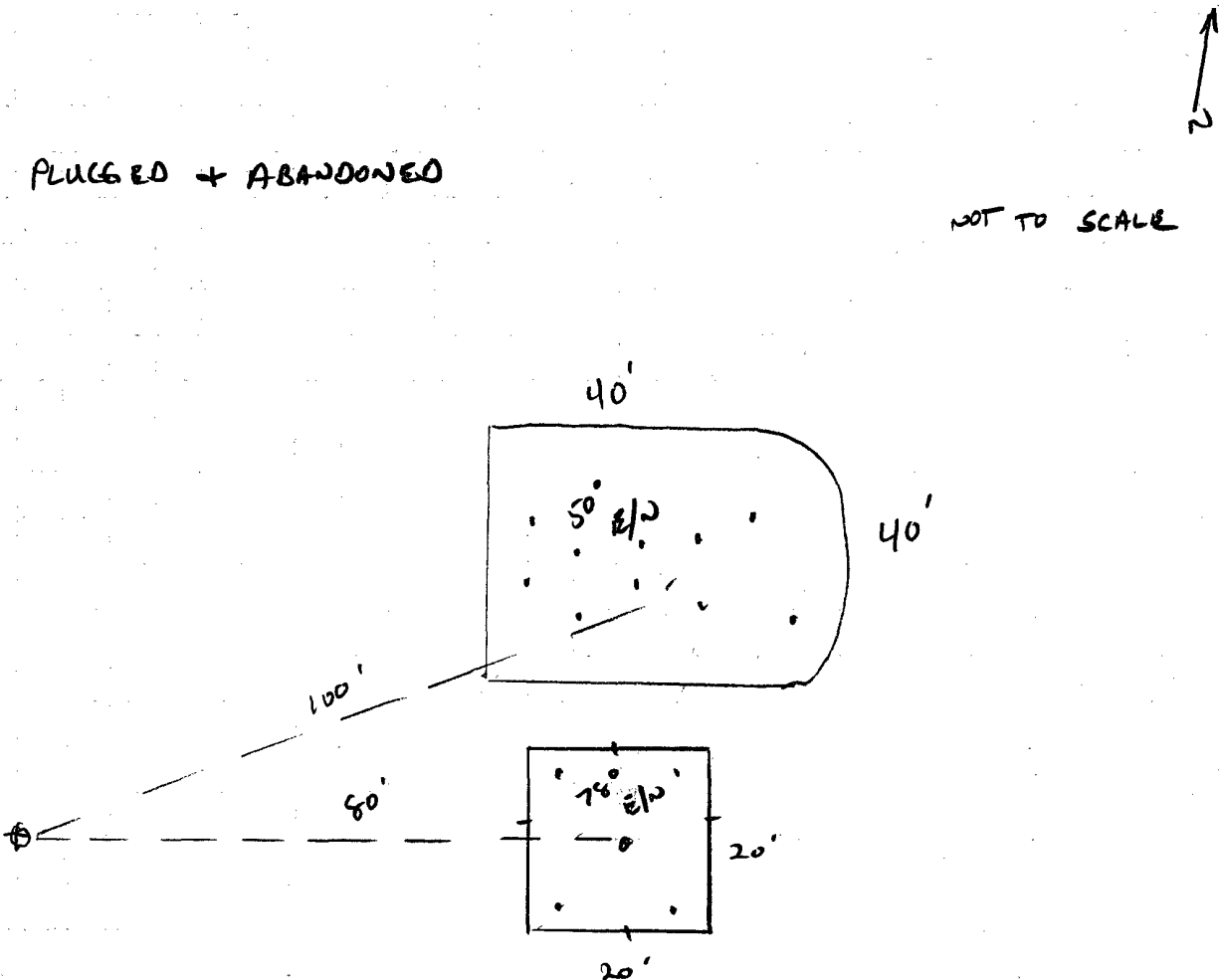
DATE 11/27/00
BY JPH

SUBJECT HORTON 4A

NW/NW SEC 27 T 32N R 12W SJ COUNTY

PLUGGED + ABANDONED

NOT TO SCALE



612 E. Murray Drive
Farmington, NM 87499

Off: (505) 327-1072
FAX: (505) 327-1496

iiná bá

P.O. Box 3788
Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: 17-Jun-03

CLIENT: Souder, Miller & Associates
Work Order: 0306019
Project: 1114128; Horton 4A Landfarm
Lab ID: 0306019-001A

Client Sample Info: Horton 4A
Client Sample ID: Landfarm Sample
Collection Date: 6/9/2003 1:05:00 PM
Matrix: SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: JEM
T/R Hydrocarbons: C10-C28	ND	25.0		mg/Kg	1	6/16/2003
GASOLINE RANGE ORGANICS		SW8015B				Analyst: JEM
T/R Hydrocarbons: C6-C10	ND	4.50		mg/Kg	25	6/16/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

Page 1 of 1

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT