<u>Ništrict I</u>
P.O. Box 1980, Hobbs, NM
<u>District II</u>
P.O. <u>Drawer DD, Arlesia</u>, NM 88211
<u>District III</u>

State of New Mexico Energy, Minerals and Natural Resources Department SUBHIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO

OIL CONSERVATION DIVISION
P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DEPUTY OIL & GAS INSPECTOR
(Revised 3/9/94)

NOV 11 4 1995

No C-134

1000 Rio Brazos Rd, Aztec, NM 87410

PIT REMEDIATION AND CLOSURE REPORT Approved

Operator: Hallwood Petroleum	Telephone: (303)259-1374
Address: P.O. Box 378111 Denver	, CO 80237
Facility Or: Yager #3 Well Name	
Location: Unit or Qtr/Qtr Sec Sec Sec	2 3 T 31 R 7 County San Juan
Pit Type: Separator Dehydrator_x Ot	her & Tank
Land Type: BLM, State, Fee _x_,	Other
Pit Location: Pit dimensions: length_ (Attach diagram) Reference: wellhead, Footage from reference: Direction from reference	other
Depth To Ground Water DECEIVED (Vertical distance from AU6 2 9 1994 high water elevation of OIL CON DIV.	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) 0 (0 points)
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
	RANKING SCORE (TOTAL POINTS): 0

Date Remediation St	Date Completed:
Rémédiation Method: (Check all appropriate	Excavation Annrow cubic words
sections)	Landfarmed Insitu Bioremediation
	Other No action on pit necessary
Remediation Location (ie. landfarmed onsite,	on: Onsite Offsite
name and location of offsite facility)	
General Description	Of Remedial Action: No action on pit necessary
-	
Ground water Encount	tered: No X Yes Depth
Final Pit: Sample location See pit diagram Closure Samples (if multiple samples	
Closure Sampling: (if multiple samples.	Sample location See pit diagram
Closure Sampling: (if multiple samples, attach sample results and diagram of sample	
Closure Sampling: (if multiple samples, attach sample results	Sample depth 3 holes to 3' below bottom of pit
Closure Sampling: (if multiple samples, attach sample results and diagram of sample	
Closure Sampling: (if multiple samples, attach sample results and diagram of sample	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94 Sample time Sample Results
Closure Sampling: (if multiple samples, attach sample results and diagram of sample	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94 Sample time Sample Results Benzene(ppm) 0.151 ppm
Closure Sampling: (if multiple samples, attach sample results and diagram of sample	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94
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Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths) Ground Water Sample:	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94
Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths) Ground Water Sample:	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94 Sample time Sample Results Benzene(ppm) 0.151 ppm Total BTEX(ppm) 4.421 ppm Field headspace(ppm) 2.0 ppm TPH 45 mg/kg Yes No _X (If yes, attach sample results)
Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths) Ground Water Sample: I HEREBY CERTIFY THAOF MY KNOWLEDGE AND DATE 8/194	Sample depth3 holes to 3' below bottom of pit Sample date05/24/94 Sample time Sample Results Benzene(ppm)0.151 ppm Total BTEX(ppm)4.421 ppm Field headspace(ppm)2.0 ppm TPH45 mg/kg Yes No _X (If yes, attach sample results) T THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST BELIEF
Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths) Ground Water Sample: I HEREBY CERTIFY THAOF MY KNOWLEDGE AND	Sample depth 3 holes to 3' below bottom of pit Sample date 05/24/94 Sample time Sample Results Benzene(ppm) 0.151 ppm Total BTEX(ppm) 4.421 ppm Field headspace(ppm) 2.0 ppm TPH 45 mg/kg Yes No _X (If yes, attach sample results)

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SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Hallwood Petroleum	Telephone: (303)259-1374	
Address: P.O. Box 378111 Denve	er, CO 80237	
Facility Or: Yager #4		
Well Name Location: Unit or Qtr/Qtr Sec E Se	z 10 T 31 R 7 County San Juan	
Pit Type: Separator Dehydrator_X Of	·	
Land Type: BLM, State, Fee _X	, Other	
(Attach diagram) Reference: wellhead Footage from reference:	105', width 60', depth 15', other e: Degrees East North of West South	
Depth To Ground Water DEC VE So feet to 99 feet (20 points) (Vertical distance from Contaminants to seasonal high water elevation of ground water) Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)		
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points) DANKING GOODE (TOTAL POINTS): 0	
	RANKING SCORE (TOTAL POINTS):	

Date Remediation St	arted:	Date Completed:
Remediation Method:	Excavation	Approx. cubic yards
(Check all appropriate sections)		Insitu Bioremediation
	Other No re	emediation needed
Remediation Locatio (ie. landfarmed onsite, name and location of offsite facility)	n: OnsiteOf	fsite
2 .	Of Remedial Actio	n: No remediation needed
Sampling on	pit was in Sandsto	one. Pit has been cut in Sandstone.
		· · · · · · · · · · · · · · · · · · ·
		Yes Depth
Final Pit: Closure Sampling: (if multiple samples,		See pit diagram
attach sample results and diagram of sample	Sample depth 6	' below bottom of pit
locations and depths)	Sample date 05	/24/94 Sample time
	Sample Results	
	Benzene(ppm)	<u>0.204</u> ppm
	Total BTEX(p	pm) 36.875 ppm
	Field headsp	ace(ppm) 132 ppm
	TPH 4176 mg	g/kg
Ground Water Sample	: Yes No _	(If yes, attach sample results)
I HEREBY CERTIFY TH OF MY KNOWLEDGE AND	AT THE INFORMATION	ABOVE IS TRUE AND COMPLETE TO THE BEST
DATE 8.1.94	A A	
SIGNATURE AND MA	PRINTED AND TIT	NAME $\Omega \subset \mathcal{A} \cup \mathcal{A} \cup \mathcal{A} \cup \mathcal{A}$

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Sampling
watery
Level 3
Cross-SECTION 8
Pit wall



O well head P; A d

meter run

meter run



AROMATIC VOLATILE ORGANICS

Attn: Cindy Gray Date:

6/10/94

Company: On Site Technologies

Lab ID:

1549

Address:

657 W. Maple Std.

City, State: Farmington, NM 87401

Sample ID: Job No.

Time:

1574 4-1097

15:15

Project Name:

Hallwood Petroleum / Pit Assessments

Project Location:

Yager #3 Dehy. Pit; Composite

Date:

Sampled by:

Date:

6/1/94

Analyzed by: Sample Matrix: JL DLA Soil

6/10/94

Aromatic Volatile Organics

Component	**Measured Concentration ug/kg
Benzene	151
Toluene	474
Ethylbenzene	540
m,p-Xylene	2,809
o-Xylene	447
	TOTAL 4,421 ug/kg

ND - Not Detectable

** - Method Detection Limit, 2 ug/kg

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography Approved by: Bill Value Land



QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 6/10/94

Internal QC No.:

0222-STD

Surrogate QC No.:

0223-STD

Reference Standard QC No.:

0300-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	<1 ppb

Calibration Check

			4 4 4		
	Units of	*True	Analyzed		
Calibration Standards	Measure	Value	Value	% Diff	Limit
Benzene	ppb	20	20	2	15%
Toluene	ppb	20	21	4	15%
Ethylbenzene	ppb	20	19	6	15%
m,p-Xylene	ppb	40	40	0	15%_
o-Xylene	ppb	20	21	3	15%

Spike Results

	1- Percent	2 - Percent			
Analyte	Recovered	Recovered	Limit	%RSD	Limit
Benzene	99	95	(39-150)	3	20%
Toluene	95	94	(46-148)	1	20%
Ethylbenzene	95	93	(32-160)	2	20%
m,p-Xylene	96	94	(35-145)	1	20%
o-Xylene	94	93	(35-145)	1	20%

Surrogate Recoveries

Surrogate Recoveries			
Laboratory	\$1	S2	S3
Identification	Percent	Percent	Percent
	Recovered	Recovered	Recovered
Limits	(70-130)		
1574-1549	97		

S1: Flourobenzene



TOTAL PETROLEUM HYDROCARBONS

Attn:

Cindy Gray

City, State: Farmington, NM 87401

Date:

6/8/94

Company: On Site Technologies

Lab ID:

1549

Address:

657 W Maple St.

Sample No. Job No.

4-1097

Project Name:

Hallwood Petroleum / Pit Assessments

Project Location:

Yager #3 / #4

Sampled by:

JL

Date: Date: 6/1/94 Time:

1515

Analyzed by: Type of Sample: TT Soil

6/6/94

Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
	Hallwood Petroleum / Pit Assessments	
1574-1549	Yager #3 Dehy. Pit; Composite	45 mg/kg
	Hallwood Petroleum / Pit Assessments	
1575-1549	Yager #4 Dehy. Pit; Grab	4176 <i>mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by:

CHAIN OF CUSTODY RECORD

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JESHIVOLOGHEST IMPRED	657 W. Maple . P. O. Box 2606 . Farmington NM 87499

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 P. O. Box 2606 	299
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Maple	(5
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	(Client Signature Must Accompany Request)	Request)	1				7			

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client