3R - 88

REPORTS

DATE:

8/25/1999

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
http://emnrd.state.nm.us/ocd/District III/3district.htm

GARY E. JOHNSON
Governor

Jennifer A. Salisbury
Cabinet Secretary

August 25, 1999

Certified Receipt #Z 437 492 195

Shirley L. Ebert
Conoco, Inc
3315 Bloomfield Hwy
Farmington, NM 87401

RE: Jicarilla Apache Reservation Pit Closures

Dear Ms. Ebert:

The New Mexico Oil Conservation Division (OCD) has reviewed Blagg Engineering's (Blagg) submittal of pit closure activities at 18 Conoco well sites under cover dated 7/26/99 and at 15 Conoco well sites submitted under cover dated 7/29/99. These documents contain the closure and remediation activities for 41 production pits.

The pit closure and remediation activities conducted at the 26 production pits listed in **ATTACHMENT A** are approved. Utilizing risk analysis the pit closure and remediation activities conducted at the 14 production pits listed in **ATTACHMENT B** are approved based on reaching bedrock. The pit closure and remediation activities at the NE Haynes #1E listed on **ATTACHMENT C** are approved because the ground water sampled was within Water Quality Control Commission standards.

Please be advised OCD approval does not relieve Conoco of liability if remaining contaminants are found to pose a threat to surface water, ground water, human health or the environment. OCD approval does not relieve Conoco of compliance with other federal, state, tribal or local laws and regulations.

If you have questions, please call me at (505) 334-6178 ext 15.

Yours truly,

Denny G. Foust

Denny G. Foust
Environmental Geologist

DGF/mk

XC: Bill Olson, OCD Environmental Bureau
Nelson Velez, Blagg
Kurt Sandoval, Jicarilla EPO
Pat Hester, BLM Albuquerque
Bill Liess, BLM Farmington
Environmental File
DGF File

ATTACHMENT A

1.	NE Haynes #1 Dehy	I-09-24N-05W
2.	Jicarilla BR C #13 Sep	E-16-25N-04W
3.	Jicarilla BR E #14 Sep	D-17-25N-04W
4.	Jicarilla BR E #16 Sep	G-17-25N-04W
5.	Jicarilla BR E #7 Sep	K-20-25N-04W
6.	Jicarilla BR B #1 Comp	F-28-25N-04W
7.	Jicarilla BR B #4 Comp	D-34-25N-04W
8.	Axi Apache J #25 Sep	A-07-25N-05W
9.	Axi Apache J #18 Sep	A-08-25N-05W
10.	Apache #5E Comp	G-17-26N-03W
11.	Apache #5E Tank Drain	G-17-26N-03W
12.	Apache #6 Comp	M-17-26N-03W
13.	Apache #6 Tank Drain	M-17-26N-03W
14.	Apache #1E Comp	A-26-26N-03W
15.	Apache #1E Tank Drain	A-26-26N-03W
16.	Jicarilla A #13 E Tank Drain	N-13-26N-04W
17.	Jicarilla A #11 Tank Drain	J-13-26N-04W
18.	Jicarilla E #9 Comp	B-16-26N-o4W
19.	Jicarilla A #10 E Tank Drain	G-23-26N-04W
20.	Jicarilla A #12 Sep	D-24-26N-04W
21.	Jicarilla A #224 Tank Drain	K-24-26N-04W
22.	Jicarilla A #22 A Sep	P-24-26N-04W
23.	Jicarilla B #8A Sep	D-25-26N-04W
24.	Jicarilla B #12 Sep	B-35-26N-04W
25.	Axi Apache K #4 Sep	M-03-26N-05W
26.	Axi Apache K #2 A Sep	P-04-26N-05W

ATTACHMENT B

1.	Jicarilla BR E #10 Sep	E-18-25N-04W
2.	Jicarilla BR E #10 Comp	E-18-25N-04W
3.	Jicarilla BR C #11 Sep	H-22-25N-04W
4.	Apache #5 Comp	E-17-26N-03W
5.	Jicarilla E #9 Comp	B-16-26N-04W
6.	Jicarilla E #11 Comp	C-22-26N-04W
7.	Jicarilla E #10 Comp	I-22-26N-04W
8.	Jicarilla E #10 Sep	I-22-26N-04W
9.	Jicarilla #5 Tank Drain	D-29-26N-04W
10.	Jicarilla #5 Sep	D-29-26N-04W
11.	Axi Apache K #6A Sep	O-09-26N-05W
12.	Axi Apache K #5 Sep	H-10-26N-05W
13.	Axi Apache K #5 Tank Drain	H-10-26N-05W
14.	Axi Apache K #5A Sep	P-10-26N-05W

ATTACHMENT C

1.	NE Haynes #1E	O-09-24N-05W

FILE

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

November 2, 1998

Mr. William C. Olson
Hydrologist/Environmental Bureau
NM Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Re: Request for Closure & Notification of Groundwater Discovery
Conoco Inc. - Northeast Haynes 1E
SW/4 SE/4 (O) Sec 9 - T24N - R5W
Rio Arriba County, New Mexico

Dear Mr. Olson:

On behalf of Conoco Inc., Blagg Engineering, Inc. (BEI) conducted environmental sampling following site remediation of a dehydrator pit at the Northeast Haynes No. 1E, (O) Sec 9 - T24N - R5W, Rio Arriba County, New Mexico. This pit was remediated by excavation and on-site landfarming of the removed soils. During remedial activities, groundwater was encountered at a depth of 19 feet below ground surface.

Soil sidewalls and groundwater in the bottom center of the pit was sampled within 12 hours of groundwater discovery. The results of this environmental testing indicate there is no residual soil contamination in excess of NMOCD closure standards remaining in the pit. Additionally, the groundwater test reports indicate that there is no hydrocarbon contamination in excess of New Mexico Water Quality Commission Standards. Attached, please find a BLM Sundry Notice, pit Field Report Closure Verification, Jicarilla Apache Pit Remediation and Closure Report and attached laboratory data reports. BEI respectfully requests approval for closure of the pit at the Northeast Haynes No. 1E. Note that a request for closure of the onsite landfarm will be submitted to your office after these soils meet closure standards.

Respectfully submitted,
Blagg Engineering, Inc.

Jeffrey C. Blagg

Jeffrey C. Blagg, President
NMPE 11607

Attachments: BLM Sundry, Pit Remediation & Closure Report, Field Reports, lab data reports

cc: Ms. Pat Hester, BLM - Albuquerque (2)
Mr. Kirt Sandoval, Jicarilla EPO - Dulce
Mr. Denny Foust, NMOCD - Aztec
Ms. Shirley Ebert, Conoco - Farmington

File: nehaynes1e.xmt

CA667

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
NORTHEAST HAYNES 1E

2. Name of Operator
CONOCO, INC.

9. API Well No.
30-039-22320

3. Address and Telephone No.
3315 BLOOMFIELD HWY., FARMINGTON, N.M. 87401 (505) 324-5884

10. Field and Pool, or Exploratory Area
OTERO GALLUP

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SW/4 SE/4, SEC. 9, T24N, R5W, N.M.P.M.

11. County or Parish, State
RIO ARRIBA, N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other PIT CLOSURE	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

PIT CLOSURE VERIFICATION - SEE ATTACHED DOCUMENTATION.

14. I hereby certify that the foregoing is true and correct

Signed Jeffrey C. Blagg Title AGENT Date 11-2-98

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

CA667

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

Operator: CONOCO, INC. **Telephone:** (505)324-5884

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: NORTHEAST HAYNES 1E

Location: **Unit or Qtr/Qtr Sec** O **Sec** 9 **T** 24N **R** 5W **County** RIO ARRIBA

Pit Type: **Separator** ____ **Dehydrator** X **Other** ____

Land Type: RANGE

Pit Location: (Attach diagram)

Pit dimensions: length 27, width 33, depth 19

Reference: wellhead X, other ____

Footage from reference: 130

Direction from reference: 75 Degrees X East ____ North of ____ West South X

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	20
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	0
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	0
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources)	Yes No	(20 points) (0 points)	0
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)	0

RANKING SCORE (TOTAL POINTS): 20

6667 - DEHY. PIT

Date Remediation Started: 10-15-98 **Date Completed:** 10-20-98

Remediation Method: (Check all appropriate sections)
Excavation X Approx. cubic yards 627
Landfarmed X Insitu Bioremediation _____
Other _____

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)
Onsite X Offsite _____

General Description of Remedial Action: Excavation

Groundwater Encountered: No ___ Yes X Depth 19'

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

Sample location see Attached Documents

Sample depth Soil @ 15' WATER @ 19'

Sample date 10-16-98 Sample time 0945/1015

Sample Results

Soil:	Benzene	(ppm) 0.418	Water:	Benzene	(ppb) 4.1
	Total BTEX	(ppm) 4.09		Toluene	(ppb) 21.3
	Field Headspace	(ppm) —		Ethylbenzene	(ppb) 0.6
	TPH	(ppm) 25.9		Total Xylenes	(ppb) 21.8

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

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF

DATE 10-26-98 **PRINTED NAME** Jeffrey C. Blagg, P.E. # 11607

SIGNATURE Jeffrey C. Blagg **AND TITLE** President

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO ___ (REASON) _____

SIGNED: [signature] **DATE:** 10-27-98

CLIENT: CONOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: CA667
C.O.C. NO: 6357

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: NORTHEAST HAYNES WELL #: 1E PIT: DEHY
QUAD/UNIT: O SEC: 9 TWP: 24N RNG: 5W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: CONTRACTOR: JVJ

DATE STARTED: 10/15/98
DATE FINISHED: 10/20/98
ENVIRONMENTAL SPECIALIST: JCS

EXCAVATION APPROX. 27 FT. x 33 FT. x 19 FT. DEEP. CUBIC YARDAGE: 627
DISPOSAL FACILITY: ONSITE REMEDIATION METHOD: LANDFARM
LAND USE: RANGE LEASE: FORMATION: MV

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 130 FT. S75°E FROM WELLHEAD.
DEPTH TO GROUNDWATER: 19' NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

CHECK ONE:
X PIT ABANDONED
___ STEEL TANK INSTALLED
___ FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

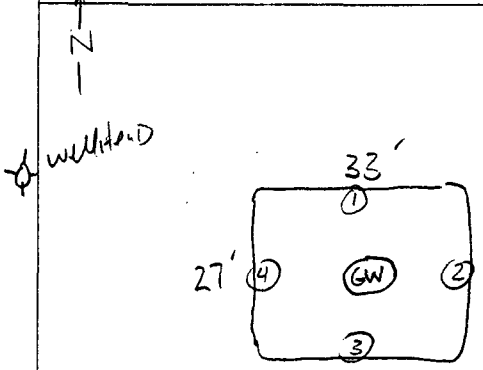
Silty clay soil. G.W. @ 19' @ Pit Bottom
Sample water for BTEX.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FT

PIT PERIMETER



OVM RESULTS

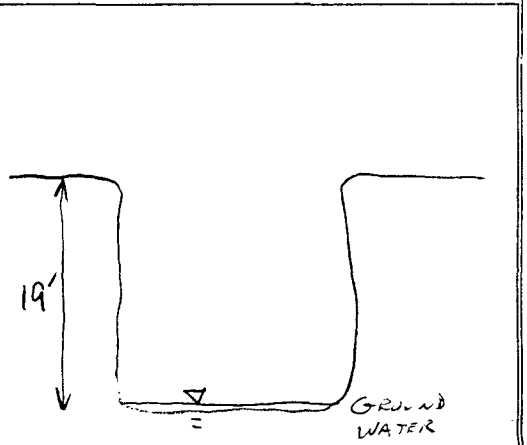
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1N@16'	162
2E@17'	2.7
3S@15'	186
4W@17'	2.2
5	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
GW@19'	BTEX	1015
S@15'	BTEX/TPH	0945
GW@19'	CAT/ANION	1053

10/21/98

PIT PROFILE



TRAVEL NOTES: CALLOUT: ONSITE:

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	S @ 15'	Date Reported:	10-19-98
Laboratory Number:	E081	Date Sampled:	10-16-98
Chain of Custody No:	6357	Date Received:	10-16-98
Sample Matrix:	Soil	Date Extracted:	10-19-98
Preservative:	Cool	Date Analyzed:	10-19-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**4.4**	**0.2**
Diesel Range (C10 - C28)	**21.5**	**0.1**
Total Petroleum Hydrocarbons	**25.9**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Haynes 1E.**

Christine M Walters
Analyst

Stacy W Sendler
Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	S @ 15'	Date Reported:	10-19-98
Laboratory Number:	E081	Date Sampled:	10-16-98
Chain of Custody:	6357	Date Received:	10-16-98
Sample Matrix:	Soil	Date Analyzed:	10-19-98
Preservative:	Cool	Date Extracted:	10-19-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**418**	**8.8**
Toluene	**444**	**8.4**
Ethylbenzene	**205**	**7.6**
p,m-Xylene	**2,360**	**10.8**
o-Xylene	**661**	**5.2**
Total BTEX	**4,090**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**97 %**
	Bromofluorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Haynes 1E.**

Christine M Waeten
Analyst

Stacy W Sendler
Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	GW @ 19'	Date Reported:	10-19-98
Chain of Custody:	6357	Date Sampled:	10-16-98
Laboratory Number:	E082	Date Received:	10-16-98
Sample Matrix:	Water	Date Analyzed:	10-19-98
Preservative:	HgCl2 & Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**4.1**	**1**	**0.2**
Toluene	**21.3**	**1**	**0.2**
Ethylbenzene	**0.6**	**1**	**0.2**
p,m-Xylene	**17.1**	**1**	**0.2**
o-Xylene	**4.7**	**1**	**0.1**
Total BTEX	**47.8**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**100 %**
	Bromofluorobenzene	**100 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Haynes 1E.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	GW @ 19'	Date Reported:	10-21-98
Laboratory Number:	E084	Date Sampled:	10-20-98
Chain of Custody:	6359	Date Received:	10-20-98
Sample Matrix:	Water	Date Extracted:	NA
Preservative:	Cool	Date Analyzed:	10-21-98
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.11**	s.u.		
Conductivity @ 25° C	**5,530**	umhos/cm		
Total Dissolved Solids @ 180C	**2,760**	mg/L		
Total Dissolved Solids (Calc)	**2,748**	mg/L		
SAR	**21.1**	ratio		
Total Alkalinity as CaCO3	**376**	mg/L		
Total Hardness as CaCO3	**272**	mg/L		
Bicarbonate as HCO3	**376**	mg/L	6.16	meq/L
Carbonate as CO3	**<1**	mg/L	0.00	meq/L
Hydroxide as OH	**<1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.2**	mg/L	0.00	meq/L
Nitrite Nitrogen	**0.001**	mg/L	0.00	meq/L
Chloride	**77.8**	mg/L	2.19	meq/L
Fluoride	**1.75**	mg/L	0.09	meq/L
Phosphate	**1.2**	mg/L	0.04	meq/L
Sulfate	**1,530**	mg/L	31.85	meq/L
Iron	**0.001**	mg/L		
Calcium	**92.0**	mg/L	4.59	meq/L
Magnesium	**10.2**	mg/L	0.84	meq/L
Potassium	**6.5**	mg/L	0.17	meq/L
Sodium	**800**	mg/L	34.80	meq/L
Cations			40.40	meq/L
Anions			40.35	meq/L
Cation/Anion Difference			**0.13%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **NE Haynes 1E.**

Christine M Walden
Analyst

Review

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CHAIN OF CUSTODY RECORD

6357

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/CONOCO	HAYNES 1E	
Sampler: J. C. Blagg	Client No. 04034-10	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX	TPH 8015					Remarks
S @ 15'	10/16/98	0945	E081	Soil	1	X	X					
GW @ 19'	"	1015	E082	WATER	2	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J. C. Blagg	10/16/98	1340	Glenn L. Spencer	10-16-98	1340
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

CHAIN OF CUSTODY RECORD

6359

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/CONOCO	NE HAINES 1E	

Sampler:	Client No.
J.C. Blagg	04034-10

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	CATION/ANION						Remarks
GW @ 19'	10-20-98	1053	E084	WATER	1	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J.C. Blagg	10-20-98	1438	Dawn L. Cejemon	10.20.98	1438
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-19-TPH QA/QC	Date Reported:	10-19-98
Laboratory Number:	E081	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-19-98
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-28-98	4.9098E-002	4.9054E-002	**0.09%**	**0 - 15%**
Diesel Range C10 - C28	04-28-98	3.9029E-002	3.9005E-002	**0.06%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**4.4**	**4.3**	**2.3%**	**0 - 30%**
Diesel Range C10 - C28	**21.5**	**21.3**	**0.9%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**4.4**	**250**	**254**	**100%**	**75 - 125%**
Diesel Range C10 - C28	**21.5**	**250**	**271**	**100%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for sample E081.**

Analyst Christy Waeb

Review Stacy W Sendler

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	10-19-BTEX QA/QC	Date Reported:	10-19-98
Laboratory Number:	E081	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-19-98
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	3.7569E-002	3.7834E-002	0.7%	ND	0.2
Toluene	1.2324E-002	1.2386E-002	0.5%	ND	0.2
Ethylbenzene	1.5149E-002	1.5210E-002	0.4%	ND	0.2
p,m-Xylene	1.2209E-002	1.2270E-002	0.5%	ND	0.2
o-Xylene	1.2474E-002	1.2562E-002	0.7%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	418	421	0.8%	0 - 30%	8.8
Toluene	444	445	0.3%	0 - 30%	8.4
Ethylbenzene	205	205	0.0%	0 - 30%	7.6
p,m-Xylene	2,360	2,380	0.8%	0 - 30%	10.8
o-Xylene	661	668	1.0%	0 - 30%	5.2

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	418	50.0	463	99%	39 - 150
Toluene	444	50.0	489	99%	46 - 148
Ethylbenzene	205	50.0	252	99%	32 - 160
p,m-Xylene	2,360	100.0	2,460	100%	46 - 148
o-Xylene	661	50.0	709	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:
Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples E081 - E082.**

Christine M Walters
Analyst

Review Stacy W Sendler

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CA667

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: Conoco, Inc. **Telephone:** (505) 324-5884

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: NE HAYNES #1E

Location: Unit or Qtr/Qtr Sec D Sec 9 T 24N R 5W County RIO ARRIBA

Land Type: RANGE

Date Remediation Started: 10/15/98 **Date Completed:** 5/19/99

Remediation Method: Landfarmed ✓ Approx. cubic yards 627

Composted ____

Other ____

epth To Groundwater:	(pts.)	20
Distance to an Ephemeral Stream	(pts.)	0
Distance to Nearest Lake, Playa, or Watering Pond	(pts.)	0
Wellhead Protection Area:	(pts.)	0
Distance To SurfaceWater:	(pts.)	0
RANKING SCORE (TOTAL POINTS):		20

Final Closure Sampling:

Sampling Date: 5/14/99 Time: 0800

Sample Results:

Field Headspace (ppm) 0.0

TPH (ppm) ND Method 8015

Other ____

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF

DATE 5/19/99 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

SIGNATURE Jeffrey C. Blagg AND TITLE President

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO ____ (REASON) ____

SIGNED: [signature] DATE: 6-3-99

CLIENT: CONOCO

BLAGG ENGINEERING, INC.

P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: CA667
C.O.C. NO: 6644

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: NE HAYNES WELL #: 1E PITS: Dehy.
QUAD/UNIT: O SEC: 9 TWP: 24N RNG: 5W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: NW/4 NW/4 CONTRACTOR: JUC

DATE STARTED: 5/14/99
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 627
LAND USE: RANGE LIFT DEPTH (ft): 1.5

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM 10/15/98

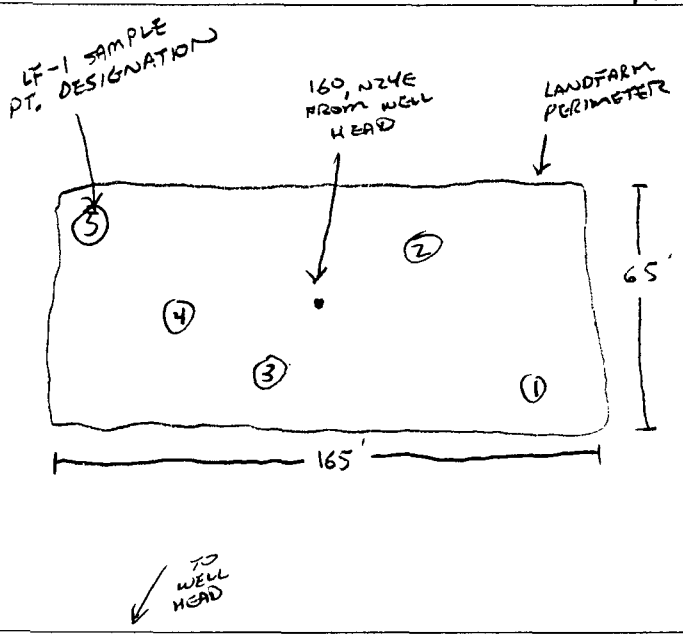
OK. WELL. ORANGE TO BROWN SAND TO CLAY NON COHESIVE TO PLASTIC, SLIGHTLY MOIST TO MOIST, FIRM, SAMPLING DEPTHS RANGE FROM 8 TO 12 INCHES, NO APPARENT DISCOLORATION OBSERVED, NO APPARENT HC ODOR IN OVM SAMPLE, COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (8015)	0800	ND

SCALE
0 FT

TRAVEL NOTES: CALLOUT: NA ONSITE: 5/14/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / CONOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-19-99
Laboratory Number:	F264	Date Sampled:	05-14-99
Chain of Custody No:	6664	Date Received:	05-18-99
Sample Matrix:	Soil	Date Extracted:	05-18-99
Preservative:	Cool	Date Analyzed:	05-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **NE Haynes #1 E Landfarm. 5 Pt. Composite.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

6664

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/CONOCO	LANDFARM NE HAYNES #1E	
Sampler: NJV	Client No. 403410	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)						Remarks
												PRESERV. - COOL
LF-1	5/14/99	0800	F264	SOIL	1	✓						5 PT. COMPOSITE

	Date	Time		Date	Time
Relinquished by: (Signature) Nelson Velez	5/18/99	0705	Received by: (Signature) Debra L. Quintana	5.18.99	0705
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	05-19-TPH QA/QC	Date Reported:	05-19-99
Laboratory Number:	F264	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-19-99
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	03-15-99	4.4525E-002	4.4312E-002	**0.48%**	**0 - 15%**
Diesel Range C10 - C28	03-15-99	4.1817E-002	4.1583E-002	**0.56%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for samples F264 - F268.**

Analyst

Review

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