

3R - 88

REPORTS

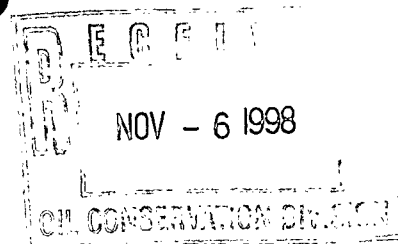
DATE:

11/2/1998

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, 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

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

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

2. Name of Operator
CONOCO, INC.

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SW 1/4 SE 1/4, SEC. 9, T 24 N, R 5 W, N.M.P.M.

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

7. If Unit or CA, Agreement Designation

8. Well Name and No.
NORTHEAST HAYNES 1 E

9. API Well No.
30-039-22320

10. Field and Pool, or Exploratory Area
OTERO GALLUP

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	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>PIT CLOSURE</u>	<input type="checkbox"/> 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 [Signature] Title AGENT Date 11-2-98
(This space for Federal or State office use)

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

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

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

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 1 E

Location: Unit or Qtr/Qtr Sec 0 Sec 9 T24N R5W 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 of North
 West of South X

Depth To Groundwater:

(Vertical distance from
contaminants to seasonal
high water elevation of
groundwater)

Less than 50 feet	(20 points)
50 feet to 99 feet	(10 points)
Greater than 100 feet	(0 points)

20

Distance to an Ephemeral Stream

(Downgradient dry wash greater than
ten feet in width)

Less than 100 feet	(10 points)
Greater than 100 feet	(0 points)

0

Distance to Nearest Lake, Playa, or Watering Pond

(Downgradient lakes, playas and
livestock or wildlife watering ponds)

Less than 100 feet	(10 points)
Greater than 100 feet	(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	(20 points)
No	(0 points)

0

Distance To SurfaceWater:

(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 100 feet	(20 points)
100 feet to 1000 feet	(10 points)
Greater than 1000 feet	(0 points)

0

RANKING SCORE (TOTAL POINTS): 20

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

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

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

General Description of Remedial Action: Excavation

Groundwater Encountered: No _____ Yes ☒ Depth 19'

Final Pit: Sample location see Attached Documents

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth Soil @ 15' Water @ 19'
Sample date 10-16-98 Sample time 0945/1015

Sample Results

Soil: Benzene	(ppm)	<u>0.418</u>	Water: Benzene	(ppb)	<u>4.1</u>
Total BTEX	(ppm)	<u>4.09</u>	Toluene	(ppb)	<u>21.3</u>
Field Headspace	(ppm)	<u>-</u>	Ethylbenzene	(ppb)	<u>0.6</u>
TPH	(ppm)	<u>25.9</u>	Total Xylenes	(ppb)	<u>21.8</u>

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

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE 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 ☒ NO _____ (REASON) _____

SIGNED: Ken C. Mammall DATE: 10-27-98

CLIENT: <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: _____ C.D.C. NO: <u>6357</u>
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>NORTHEAST HAYNES</u> WELL #: <u>1E</u> PIT: <u>DEHY</u>	DATE STARTED: <u>10/15/98</u>
QUAD/UNIT: <u>0</u> SEC: <u>9</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	DATE FINISHED: <u>10/20/98</u>
QTR/FOOTAGE: _____ CONTRACTOR: <u>JVJ</u>	ENVIRONMENTAL SPECIALIST: <u>JCS</u>

EXCAVATION APPROX. <u>27</u> FT. x <u>33</u> FT. x <u>19</u> FT. DEEP. CUBIC YARDAGE: <u>627</u>
DISPOSAL FACILITY: <u>ONSITE</u> REMEDIATION METHOD: <u>LANDFILL</u>
LAND USE: <u>RANGE</u> LEASE: _____ FORMATION: <u>MV</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>130'</u> FT. <u>S75°E</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>19'</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u>
NMOC D RANKING SCORE: <u>20</u> NMOC D TPH CLOSURE STD: <u>100</u> PPM
SOIL AND EXCAVATION DESCRIPTION:
<p>Silty clay soil. G.W. @ 19' @ Pit Bottom.</p> <p>SAMPLED WATER FOR BTEX.</p>
<p>CHECK ONE:</p> <p><input checked="" type="checkbox"/> PIT ABANDONED</p> <p><input type="checkbox"/> STEEL TANK INSTALLED</p> <p><input type="checkbox"/> FIBERGLASS TANK INSTALLED</p>

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		PIT PROFILE		
	SAMPLE ID	FIELD HEADSPACE PID (ppm)		SAMPLE ID	ANALYSIS	TIME
	1N@16'	162		GW@19'	BTEX	1015
	2E@17'	2.7		S@15'	BTEX/TPH	0945
	3S@15'	186		GW@19'	CAT/ANUN	1053
	4W@17'	2.2				
	5					

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

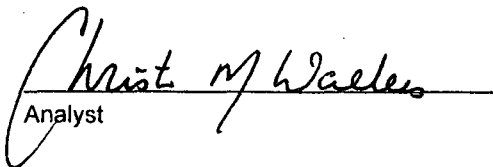
Client:	Blagg / Conoco	Project #:	04034-10
Sample ID:	S @ 15'	Date Reported:	10-19-98
Laboratory Number:	E081	Date Sampled:	10-16-98
Chain of Custody No:	6357	Date Received:	10-16-98
Sample Matrix:	Soil	Date Extracted:	10-19-98
Preservative:	Cool	Date Analyzed:	10-19-98
Condition:	Cool and Intact	Analysis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

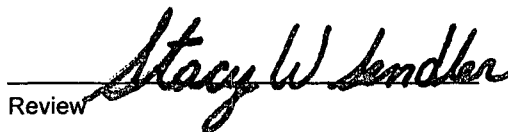
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.4	0.2
Diesel Range (C10 - C28)	21.5	0.1
Total Petroleum Hydrocarbons	25.9	0.2

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.


Analyst


Review

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

Chris M. Webb

Review

Stacy W. Bender

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.


Analyst


Review

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:	HgCl ₂ & 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

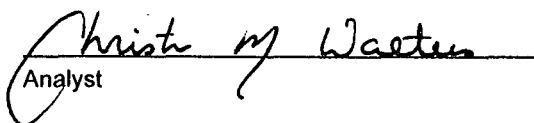
ND - Parameter not detected at the stated detection limit.

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

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.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
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.

Christy M. Warden
Analyst

Stacy W. Bender
Review

6357

ENVIROTECH INC.

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

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

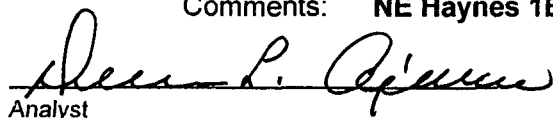
Client: Blagg / ~~AMECO~~ ^{CONOCO SW³} 11/2/98
Sample ID: GW @ 19'
Laboratory Number: E084
Chain of Custody: 6359
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

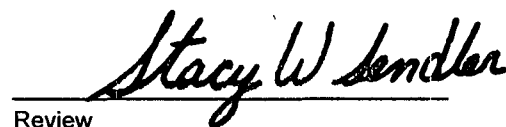
Project #: 04034-10
Date Reported: 10-21-98
Date Sampled: 10-20-98
Date Received: 10-20-98
Date Extracted: NA
Date Analyzed: 10-21-98

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 CaCO ₃	376	mg/L	
Total Hardness as CaCO ₃	272	mg/L	
Bicarbonate as HCO ₃	376	mg/L	6.16 meq/L
Carbonate as CO ₃	<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.


Analyst


Review

6359

ENVIROTECH INC.

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