

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

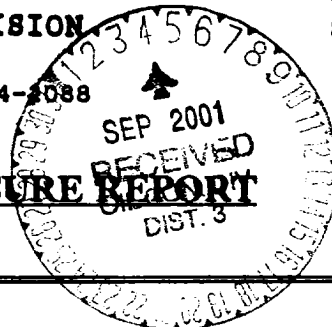
State of New Mexico
Energy, Minerals and Natural Resources Department

Blow-OK - 12/14/01

SEP-OK
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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

PIT REMEDIATION AND CLOSURE REPORT



Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: W. D. HEATH A * 8
Well Name
Location: Unit or Qtr/Qtr Sec C Sec 17 T 29N R 9W County SAN JUAN
Pit Type: Separator Dehydrator Other BLOW
Land Type: BLM X, State , Fee , Other

Pit Location: Pit dimensions: length 35', width 30', depth 18
(Attach diagram) Reference: wellhead X, other
Footage from reference: 135
Direction from reference: 30 Degrees East North X
of
X West South

Depth To Ground Water:
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 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 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) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 11-10-94Remediation Method: Excavation X Approx. cubic yards 600
(Check all appropriate sections) Landfarmed X Insitu Bioremediation _____

Other _____

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

General Description Of Remedial Action: _____

Excavation

NMOC letter correspondence 11-26-96Ground 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 see Attached DocumentsSample depth 14'Sample date 11-10-94 Sample time _____

Sample Results

Benzene(ppm) 0.0072Total BTEX(ppm) 1.682Field headspace(ppm) 556TPH 1200 ppmGround Water Sample: Yes _____ No X (If yes, attach sample results)I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST
OF MY KNOWLEDGE AND BELIEFDATE 11/14/94

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
ENVIRONMENTAL COORDINATOR

RESULT TO BOB MCCOY 11-14-94 RE

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80152</u> C.D.C. NO: <u>2255</u>
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FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>W. D. HEATH A</u>	WELL #: <u>8</u>	PIT: <u>BLOW</u>	DATE STARTED: <u>11-10-99</u>
QUAD/UNIT: <u>C</u>	SEC: <u>17</u>	TWP: <u>29N</u>	DATE FINISHED: _____
RNG: <u>9W</u>	BM: <u>NM</u>	CNTY: <u>SJSTNM</u>	ENVIRONMENTAL SPECIALIST: <u>REO</u>
QTR/FOOTAGE: <u>NE/NW</u>	CONTRACTOR: <u>PAUL + SONS</u>		

EXCAVATION APPROX. 35 FT. x 30 FT. x 18 FT. DEEP. CUBIC YARDS: 600
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LANDFARM
LAND USE: RANGE LEASE: SF - 076337 FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 135 FEET N30°W FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: TO BE ABANDONED

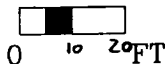
MOIST → DRY, BROWN, ORGANIC SILT. - SLIGHT OOR - NO STAIN DETECTABLE.
STIFF CLAYEY SILT BOTTOM.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
N5@14'	1262	10.0	20.0	-	594	1188

(CLOSE FIT

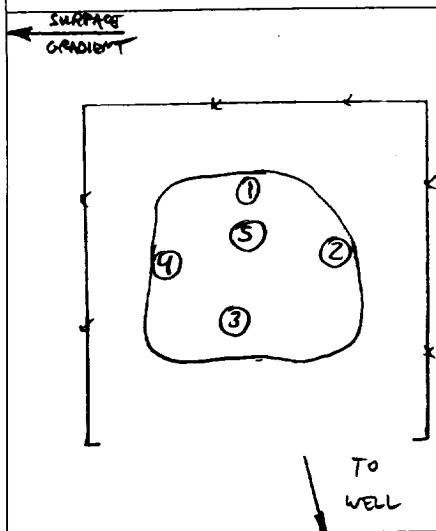
SCALE



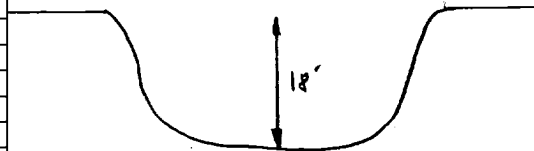
PIT PERIMETER

OVM RESULTS

PIT PROFILE



SAMPLE ID		FIELD HEADSPACE PID (ppm)
1	NS @ 14'	556
2	ES @ 13'	11
3	SS @ 10'	15
4	WS @ 12'	4
5	NS @ 20'	35
LAB		SAMPLES
NS @ 14'		BTX (PASSED)



TRAVEL NOTES: CALLOUT: 11-10-94 ONSITE: 11-10-94 0900

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS**

Client: Amoco
Sample ID: N Side @ 14'
Project Location: W.D. Heath A 8
Laboratory Number: TPH-1262

Project #:
Date Analyzed: 11-10-94
Date Reported: 11-10-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	1200	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	3,720	3,680	1

*Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total
Recoverable, Chemical Analysis of Water and Waste,
USEPA Storet No.4551, 1978

Comments: Blow Pit - B0152

R. E. Small
Analyst

Nelson Vely
Review

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *11/11/94*
Lab ID: *2255*
Sample ID: *3937*
Job No. *2-1000*

Project Name: *W. D. Heath A 8*
Project Location: *N Side @ 14' - Blow Pit*
Sampled by: *REO* Date: *11/10/94*
Analyzed by: *DLA* Date: *11/11/94*
Sample Matrix: *Soil*

Time: *10:00*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/kg</i>	<i>Detection Limit Concentration ug/kg</i>
<i>Benzene</i>	<i>7.2</i>	<i>0.2</i>
<i>Toluene</i>	<i>3.3</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>149</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>805</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>718</i>	<i>0.2</i>
	<i>TOTAL 1,682 ug/kg</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:
Date:

Bill Valeri
11/11/94

P. O. BOX 2606 • FARMINGTON, NM 87499

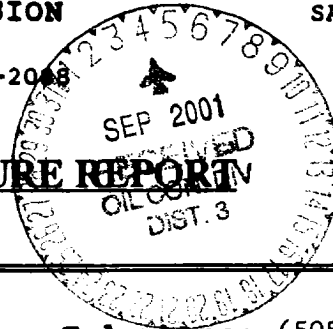
— TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT —

District I
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District III
1000 Rio Brazos Rd, Aztec, NM 87410

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

P.O. Box 2088

Santa Fe, New Mexico 87504-2048



PIT REMEDIATION AND CLOSURE REPORT

Land Type: BLM X, State , Fee , Other

Direction from reference: 85 Degrees X East North ____
of
West South X

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

Yes (20 points)
No (0 points) 0

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 11-10-94

Remediation Method: Excavation X Approx. cubic yards 150
 (Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
 Other _____

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

General Description Of Remedial Action: _____

Excavation

rmocd letter correspondence

11-26-94

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location see Attached Documents

Closure Sampling: _____

(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 11'

Sample date 11-10-94 Sample time _____

Sample Results

Benzene(ppm) 0.004

Total BTEX(ppm) 0.0887

Field headspace(ppm) 140

TPH 82 ppm

Ground Water Sample: Yes _____ No X (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 11/14/94

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

RESULTS TO BOB MCCOY 11-14-94 RLO

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80152</u> C.D.C. NO: <u>2255</u>
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FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>W. D. HEATH A</u>	WELL #: <u>8</u>	PIT: <u>SEP.</u>	DATE STARTED: <u>11-10-99</u>
QUAD/UNIT: <u>C</u>	SEC: <u>17</u>	TWP: <u>29 N</u>	DATE FINISHED: _____
RNG: <u>9 W</u>	BM: <u>NM</u>	CNTY: <u>SJ</u>	ST: <u>NM</u>
QTR/FOOTAGE: <u>NE/NW</u>	CONTRACTOR: <u>PAUL + SONS</u>		ENVIRONMENTAL SPECIALIST: <u>RCO</u>

EXCAVATION APPROX. 15 FT. x 20 FT. x 15 FT. DEEP. CUBIC YARDS: 150
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LANDFARM
LAND USE: RANGE LEASE: SF- 076337 FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 135 FEET S 85° E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: STEEL TANK TO BE INSTALLED

MOIST, BROWN, CLAYEY/ORGANIC SILT - NO ODOR - SOME SMALL AREAS OF
STAW REMNANT, BOTTOM IS STIFF CLAYEY SILT.

FIELD 418.1 CALCULATIONS

FIELD 418.1 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
N5011'	1263	10.0	20.0	—	41	82

CLOSE PIT

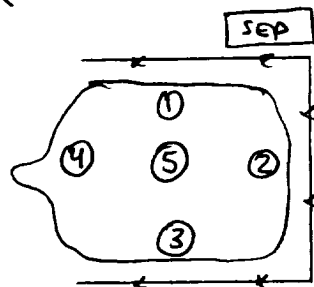
SCALE

PIT PERIMETER

OVM RESULTS

PIT PROFILE

TO
WELL



N/

SAMPLE ID		FIELD HEADSPACE PID (ppm)
1	NS @ 11'	140
2	ES @ 11'	6
3	SS @ 11'	8
4	WS @ 10'	4
5	CB @ 15'	8
LAB		SAMPLES
NS @ 11'		B TEX (PASSED)

LAB	SAMPLES
-----	---------

USC II'	BTE X (PASSED)
---------	-------------------

SURFACE
GRADIENT

TRAVEL NOTES: CALLOUT: 11-10-94 ONSITE: 11-10-94 1030

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS**

Client: Amoco
Sample ID: N Side @ 11'
Project Location: W.D. Heath A 8
Laboratory Number: TPH-1263

Project #:
Date Analyzed: 11-10-94
Date Reported: 11-10-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	82	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	3,720	3,680	1

*Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Separator Pit - B0152

R. E. O'Neill
Analyst

Melvin Vely
Review

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *11/11/94*
Lab ID: *2255*
Sample ID: *3938*
Job No. *2-1000*

Project Name: *W. D. Heath A 8*
Project Location: *N Side @ 11' - Sep. Pit*
Sampled by: *REO* Date: *11/10/94*
Analyzed by: *DLA* Date: *11/11/94*
Sample Matrix: *Soil*

Time: *10:50*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>4.0</i>	<i>0.2</i>
<i>Toluene</i>	<i>4.4</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>65.6</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>14.7</i>	<i>0.2</i>
	<i>TOTAL 88.7 ug/kg</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by:

Date:

Bill Vohrt
11/11/94

P. O. BOX 2606 • FARMINGTON, NM 87499

— TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT —

CHAIN OF CUSTODY RECORD

10
10
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Date: 11-10-99

Page 1 of 1

TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

80152

[illegible]

Distribution:	White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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CLIENT <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80152</u> C.D.C. NO: <u>9271</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>HEATH WD</u> A WELL #: <u>8</u> PITS: <u>BLOW, SEP.</u> QUAD/UNIT: <u>C</u> SEC: <u>17</u> TWP: <u>29N</u> RNG: <u>9W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u> QTR/FOOTAGE: _____ NE/NEW CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>7/9/01</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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SOIL REMEDIATION:	750
REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>750</u>
LAND USE: <u>RANGE-BLM SF-076337</u>	LIFT DEPTH (ft): <u>0.5-1</u>

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM P.C. - 11/10/94

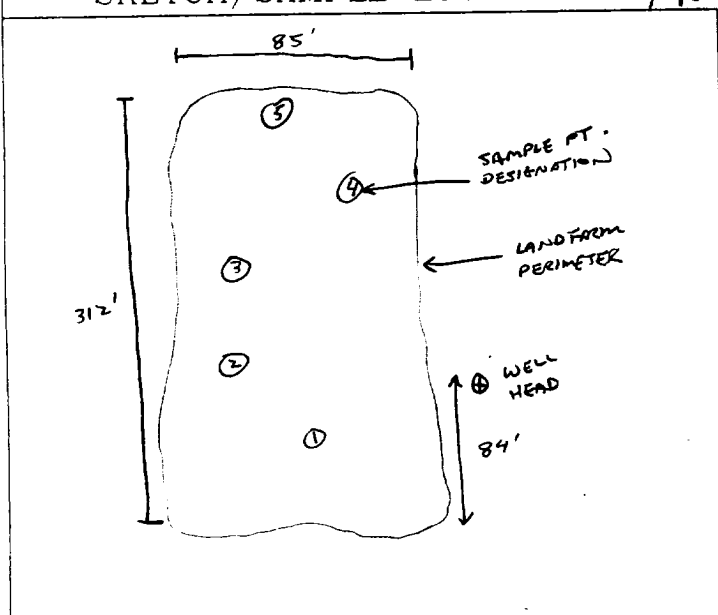
PALE TO MOD. FINE BROWN SAND, NON COHESIVE, DRY TO SLIGHTLY MOIST, FIRM TO VERY RENE,
 NO APPARENT DISCOLORATION/STAINING OBSERVED OR HC 000R DETECTED @ ANY OF THE SAMPLE PTS.
 OR OVM SAMPLE, SAMPLE DEPTHS RANGED FROM 4"-8", COLLECTED 5 PT. COMPOSITE SAMPLE FOR
 LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

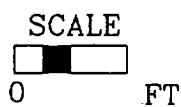
SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS N



OVM CALIB. READ. 54.3 ppm
 TIME: 0738 ~~PM~~ PM 7/9/01

OVM RESULTS		LAB SAMPLES			
SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (8015)	1305	ND



TRAVEL NOTES: CALLOUT: N/A ONSITE: 7/9/01

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

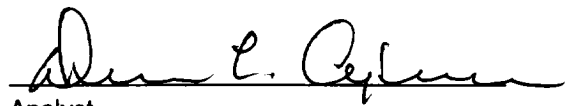
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	LF - 1	Date Reported:	07-11-00
Laboratory Number:	20237	Date Sampled:	07-09-01
Chain of Custody No:	9271	Date Received:	07-09-01
Sample Matrix:	Soil	Date Extracted:	07-11-01
Preservative:	Cool	Date Analyzed:	07-11-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

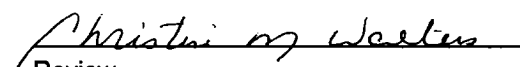
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.1

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: **Heath WD A #8 Landfarm 5 Pt. Composite.**


Analyst


Review

CHAIN OF CUSTODY RECORD

09271

Client / Project Name		Project Location		ANALYSIS / PARAMETERS																					
BLASS / BP		HEATH LEASE																							
Sampler: NTU		Client No. 94034-010																							
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	1PH (8015)							Remarks												
LF-1	7/9/01	1110	20235	SOIL	1	✓							PRESERVED COOL												
LF-1	7/9/01	1215	20236	SOIL	1	✓							HEATH GC K #1E												
LF-1	7/9/01	1305	20237	SOIL	1	✓							HEATH WD A #2												
													HEATH WD A #8												
													ALL SAMPLES												
													5 PT. COMPOSITE												
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time															
[Signature]		7/9/01		1335		[Signature]		07/09/01		1335															
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 <table border="1"> <tr> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Received Intact</td> <td></td> <td></td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>✓</td> <td></td> </tr> </table>														Y	N	N/A	✓			Received Intact			Cool - Ice/Blue Ice	✓	
Y	N	N/A																							
✓																									
Received Intact																									
Cool - Ice/Blue Ice	✓																								