

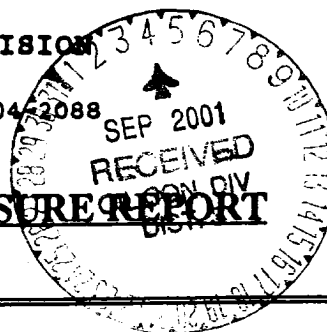
District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Blow-OK-12/14/01

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



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 # 2
Well Name
Location: Unit or Qtr/Qtr Sec A 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 40', width 40', depth 18'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 180
Direction from reference: 60 Degrees X East North X
of
 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: 11-18-94Remediation Method: Excavation X Approx. cubic yards 900
(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

nmacd letter correspondence11-26-94Ground 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 12'Sample date 11-18-94 Sample time _____

Sample Results

Benzene(ppm) NDTotal BTEX(ppm) 0.038Field headspace(ppm) 265TPH 84 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 BELIEF

DATE 11/22/94

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

RESULTS TO BOB MILES 11-18-94 PLO

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80166</u> C.D.C. NO: <u>2262</u>
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FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>W. D. HEATH A</u>	WELL #: <u>2</u>	PIT: <u>BLOW</u>	DATE STARTED: <u>11-18-94</u>
QUAD/UNIT: <u>A</u>	SEC: <u>17</u>	TWP: <u>29N</u> RNG: <u>9W</u> BM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>NE / NE</u>	CONTRACTOR: <u>PAUL + SONS</u>	ENVIRONMENTAL SPECIALIST: <u>PLO</u>	

EXCAVATION APPROX. 40 FT. x 40 FT. x 18 FT. DEEP. CUBIC YARDS: 900
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LANDFARM
LAND USE: RANGE LEASE: 076337 FORMATION: MV

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 180 FEET N60°E FROM WELLHEAD.
DEPTH TO GROUNDWATER: 7100' NEAREST WATER SOURCE: 71000' NEAREST SURFACE WATER: 71000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM
SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: STEEL TANK TO BE INSTALLED
MOIST, BROWN, SANDY SILT - STIFF BOTTOM + SIDE WALLS - NO STAIN/OIL.

FIELD 418.1 CALCULATIONS

FIELD 418.1 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
WS @ 12"	1285	10.0	20.0	—	42	84

CLOSE ALT

SCALE

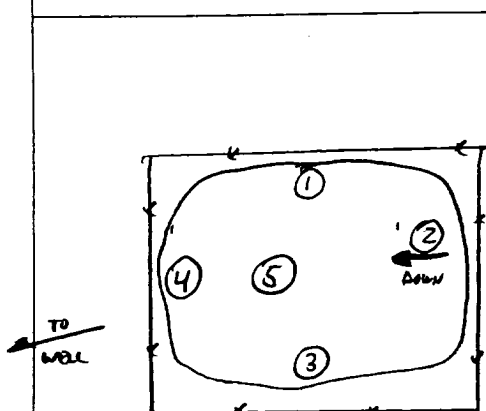


0 10 20 FT

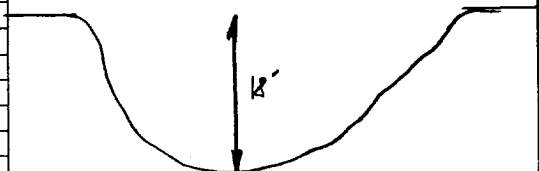
PIT PERIMETER

OVM RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 NS @ 12'	0
2 ES @ 12'	33
3 SS @ 12'	0
4 WS @ 12'	265
5 WB @ 19'	54
LAB	SAMPLES
WS @ 12'	BTEX
	PAHs



TRAVEL NOTES: CALLOUT: 11-16-94 ONSITE: 11-18-94 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: W Side @ 12'
Project Location: W.D. Heath A 2
Laboratory Number: TPH-1285

Project #:
Date Analyzed: 11-18-94
Date Reported: 11-21-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	84	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	1,500	1,300	14

*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 - B0166

P. E. O'Neil
Analyst

Nikolai Viley
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: 11/22/94
Lab ID: 2262
Sample ID: 4064
Job No. 2-1000

Project Name: *W. D. Heath A 2*
Project Location: *WS @ 12' - Blow Pit*
Sampled by: REO Date: 11/18/94
Analyzed by: DLA Date: 11/22/94
Sample Matrix: *Soil*

Time: 9:20

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/kg</i>	<i>Detection Limit Concentration ug/kg</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>3.5</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>4.5</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>24.2</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>6.1</i>	<i>0.2</i>
	<i>TOTAL 38.2 ug/kg</i>	

ND - Not Detectable

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

Approved by: *Jack*

Date: *11/22/94*

P. O. BOX 2606 • FARMINGTON, NM 87499

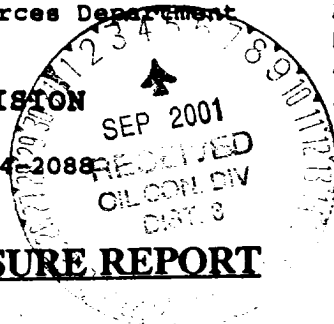
- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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

80166
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 2
Well Name
Location: Unit or Qtr/Qtr Sec A Sec 17 T 29N R 9W County SAN JUAN
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: BLM ☒ State ☐ Fee ☐ Other ☐

Pit Location: Pit dimensions: length 15', width 15', depth 6'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 125
Direction from reference: 75 Degrees ☒ East North ☒
of
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: 11-18-94

Remediation Method: Excavation X Approx. cubic yards 50
 (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

nmacd letter correspondence 11-26-96

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 see Attached Documents

Sample depth 7'

Sample date 11-18-94 Sample time _____

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 0.067

Field headspace(ppm) 408

TPH 272 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 11/22/94

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

RESULTS TO DOB McCoy 11-18-94 PLO

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80166</u> C.D.C. NO: <u>2262</u>
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FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>W.D. HENNA A</u>	WELL #: <u>2</u>	PIT: <u>SEP</u>	DATE STARTED: <u>11-18-94</u>
QUAD/UNIT: <u>A</u>	SEC: <u>17</u>	TWP: <u>29 N</u> RNG: <u>9 W</u> BM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>NE/NE</u>	CONTRACTOR: <u>PAUL + SONS</u>		ENVIRONMENTAL SPECIALIST: <u>REO</u>

EXCAVATION APPROX. 15 FT. x 15 FT. x 6 FT. DEEP. CUBIC YARDS: 50
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LAMFARM
LAND USE: RANGE LEASE: 076337 FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 125 FEET N75°E 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: STEEL MP/LC IN STALLED

MOIST → DRY, BROWN SILTY SOIL - NO STAIN / ODOOR.
STIFF BOTTOM + WALLS.

FIELD 418.1 CALCULATIONS

FIELD 418.1 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
NW807	1284	10.0	20.0	—	136	272

SCALE



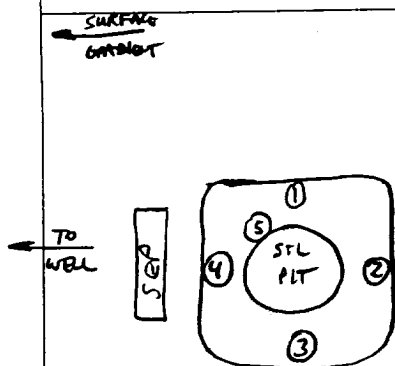
0 5 10 FT

PIT PERIMETER

OVM RESULTS

PIT PROFILE

CLOSE PIT



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 NS @ 4'	9
2 ES @ 4'	3
3 SS @ 4'	5
4 WS @ 4'	15
5 NWB @ 7'	408
LAB	SAMPLES
NWB @ 7'	BTEX PASSED



TRAVEL NOTES: CALLOUT: 11-16-94 ONSITE: 11-18-94 0730

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	Project #:	
Sample ID:	NW Bottom @ 7'	Date Analyzed:	11-18-94
Project Location:	W.D. Heath A 2	Date Reported:	11-21-94
Laboratory Number:	TPH-1284	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	270	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	1,500	1,300	14

*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 - B0166

R E O'Neil
Analyst

Nickon 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: **11/22/94**
Lab ID: **2262**
Sample ID: **4065**
Job No. **2-1000**

Project Name: **W. D. Heath A 2**
Project Location: **NWB @ 7' - Separator Pit**
Sampled by: **REO** Date: **11/18/94**
Analyzed by: **DLA** Date: **11/22/94**
Sample Matrix: **Soil**

Time: **8:30**

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
Benzene	ND	0.2
Toluene	21.0	0.2
Ethylbenzene	ND	0.2
m,p-Xylene	34.2	0.2
o-Xylene	12.1	0.2
	TOTAL 67.3 ug/kg	

ND - Not Detectable

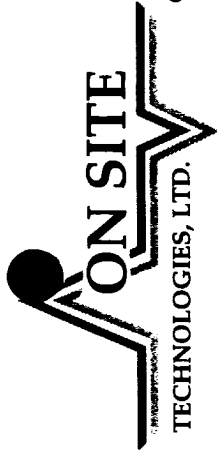
Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:

Date: **11/22/94**

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



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

Purchase Order No.: _____						Reference No.: _____					
Name Company Address City, State, Zip						Title					
Company Address City, State, Zip						Title					
Telephone No.						Telefax No.					
Special Instructions:						ANALYSIS REQUESTED					
W. A. HEATH A 2											
Sampler: R. E. O'NEILL											
DATE/TIME SAMPLED						COMPOSITE/ GRAB					
PRESERVATIVES						Number of Containers					
REPORT RESULTS TO						Received by:					
Date/Time						Date/Time					
Relinquished by:						Relinquished by:					
Date/Time						Date/Time					
Relinquished by:						Relinquished by:					
Date/Time						Date/Time					
Method of Shipment:						Sampling Location:					
Authorized by:						Date:					
(Client Signature Must Accompany Request)											

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>80166</u> C.O.C. NO: <u>9271</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>HEATH WD A</u> WELL #: <u>2</u> PITS: <u>BLOW SEP.</u> QUAD/UNIT: <u>A</u> SEC: <u>17</u> TWP: <u>29N</u> RNG: <u>9W</u> PM: <u>NM</u> CNTY: <u>JS</u> ST: <u>NM</u> QTR/FOOTAGE: _____ NE/NE CONTRACTOR: <u>P&S</u>	DATE STARTED: <u>7/9/01</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
---	--

SOIL REMEDIATION:	950
REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>950</u>
LAND USE: <u>RANGE - 8UM SF-076337</u>	LIFT DEPTH (ft): <u>1-2</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. - 11/8/94

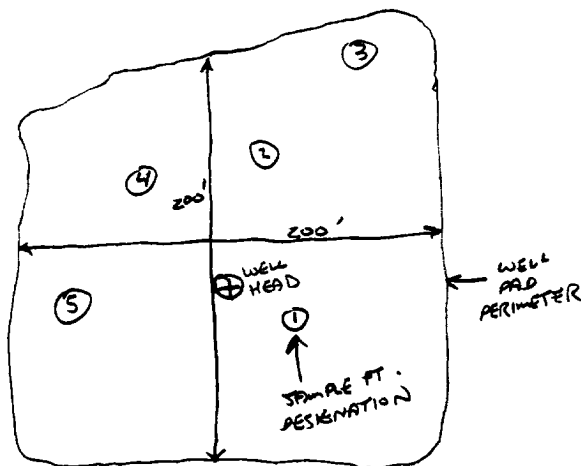
LANDFARM SPREAD OUT OVER ENTIRE WELL PAD AREA, MOD. YELL. BROWN SAND, NON COHESIVE SLIGHTLY MOIST, FIRM, CRUSTY BETWEEN 3"-8" BELOW GRADE (+ PALE YELL. BROWN), NO APPARENT DISCOLORATION/STAINING OBSERVED OR HC ODOR DETECTED @ ANY OF THE SAMPLE PTS. OR OVM SAMPLE. SAMPLE DEPTHS RANGED FROM 1'-1.5', COLLECTED 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 CALIB. READ. 54.3 ppm
 TIME: 0738 @ 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)	1215	ND

SCALE



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

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

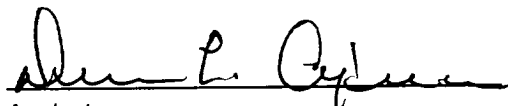
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	LF - 1	Date Reported:	07-11-00
Laboratory Number:	20236	Date Sampled:	07-09-01
Chain of Custody No:	9271	Date Received:	07-09-01
Sample Matrix:	Soil	Date Extracted:	07-11-01
Preservative:	Cool	Date Analyzed:	07-11-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

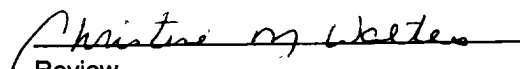
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.1

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 #2 Landfarm 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

09271

Client / Project Name		Project Location		ANALYSIS / PARAMETERS										
BLAGE / 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 PH. COMPOSITE	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time				
<i>[Signature]</i>		7/9/01		1335		<i>[Signature]</i>		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														
												Y	N	N/A
												Received Intact		
												Cool - Ice/Blue Ice		