

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

Deny - OK - 12/13/01

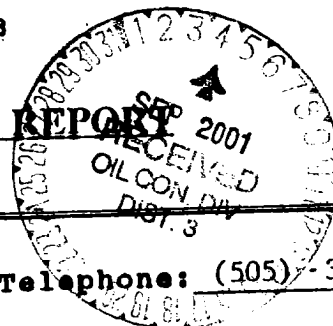
State of New Mexico
Energy, Minerals and Natural Resources Department

Sep - OK

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

80092
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: BOLACK #1
Well Name

Location: Unit or Qtr/Qtr Sec K Sec 29 T 28 R 8 W County SAN JUAN

Pit Type: Separator Dehydrator X Other

Land Type: BLM , State , Fee , Other COM. AGMT.

Pit Location: Pit dimensions: length 21', width 17', depth 13'
(Attach diagram) Reference: wellhead X, other

Footage from reference: 130'

Direction from reference: 43 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: 9/15/94

Remediation Method: Excavation ☒
(Check all appropriate sections)

Approx. cubic yards 120

Landfarmed ☒

Insitu Bioremediation _____

Other _____

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

General Description Of Remedial Action: _____

Excavation BEFORE BOTTOM ⁹¹⁵

Amoco Letter Correspondence 12-9-94

Ground Water Encountered: No ☒ 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 9'

Sample date 9/15/94

Sample time 1145

Sample Results

Benzene(ppm) 0.038

Total BTEX(ppm) 10.701

Field headspace(ppm) 1071

TPH 372 ppm

Ground Water 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 9/27/94

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80092</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>BOLACK</u> WELL #: <u>1</u> PIT: <u>DEHY</u>	DATE STARTED: <u>9/15/94</u> DATE FINISHED: <u>9/15/94</u>
QUAD/UNIT: <u>K</u> SEC: <u>29</u> TWP: <u>28N</u> RNG: <u>8W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>1450' FSL / 2510' FWL</u> CONTRACTOR: <u>P. VELASQUEZ</u>	

SOIL REMEDIATION: EXCAVATION APPROX. 21 FT. x 17 FT. x 13 FT. DEEP.
DISPOSAL FACILITY: LANDFARMED ON-SITE CUBIC YARDAGE: 120
LAND USE: RANGE LEASE: Nm - 03549

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 130 FEET 43 FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMCD RANKING SCORE: 0 NMCD TPH CLOSURE STD: 5000 PPM ELEV. 5954' FORMATION: DK

SOIL AND EXCAVATION DESCRIPTION: SOFT SHALE OBSERVED APPROX. 8' BELOW GROUND SURFACE WITHIN EXCAVATION. DR. MED. GRAY IN COLOR, STRONG HC ODOR. ABOVE 8': DR. YELL ORANGE SAND, NON-COHESIVE, NO APPARENT HC ODOR.

CLOSED
DUE TO
SHALY ROCK.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
④ @ 9'	TPH-1140	5	20	1:1	93	372
"	DWP	5	20	1:1	104	416

SCALE

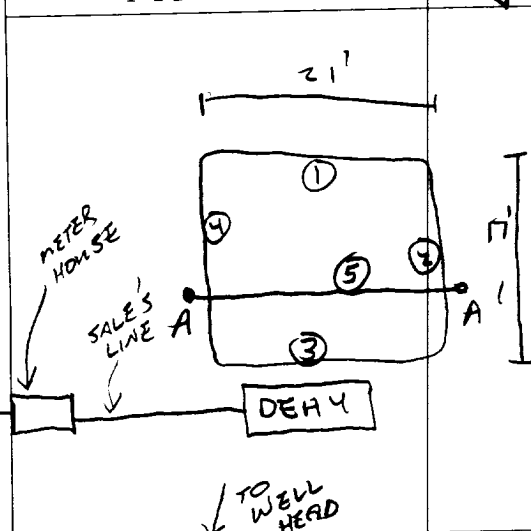


0 FT

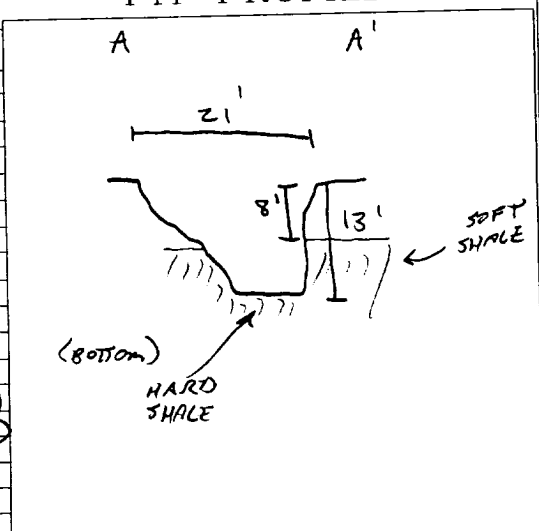
PIT PERIMETER

OVM RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 9'	773
2 @ 9'	1023
3 @ 9'	510
4 @ 9'	1071
5 @ 13'	114.1
LAB SAMPLES	
④ @ 9'	BTEX (2020) PASSED



TRAVEL NOTES: CALLOUT: 9/14/94 ONSITE: 9/15/94

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: 4 @ 9'
Project Location: Bolack # 1
Laboratory Number: TPH-1140

Project #:
Date Analyzed: 9-15-94
Date Reported: 9-15-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	370	20

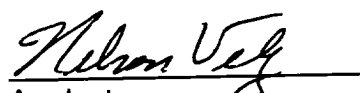
ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	93	104	11.17

*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: Dehydrator Pit - B0092


Analyst


Review



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *Nelson Velez*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/16/94*
Lab ID: *2045*
Sample ID: *3051*
Job No. *2-1000*

Project Name: *Bolack #1*
Project Location: *4 @ 9' - Dehy Pit*
Sampled by: *NV*
Analyzed by: *DLA*
Sample Matrix: *Soil*

Date: *9/15/94*

Time: *11:45*

Date: *9/16/94*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>38</i>	<i>0.2</i>
<i>Toluene</i>	<i>720</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>57</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>7,940</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>1,946</i>	<i>0.2</i>
TOTAL <i>10,701 ug/kg</i>		

ND - Not Detectable

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

Approved by: *DLA*

Date: *9/16/94*

District I
O. Box 1980, Hobbs, NM

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O. Drawer DD, Artesia, NM 88211

District III
000 Rio Brazos Rd, Aztec, NM 87410

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Energy, Minerals and Natural Resources Department

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

PTT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: BOLACK # 1
Well Name _____
Location: Unit or Qtr/Qtr Sec K Sec 29 T 28N R 8W County SAN JUAN
Pit Type: Separator X Dehydrator _____ Other _____
Land Type: BLM X, State _____, Fee _____, Other COM. AGMT.

Pit Location: (Attach diagram) Pit dimensions: length 17', width 15', depth 6'
Reference: wellhead X, other _____
Footage from reference: 82'
Direction from reference: 45 Degrees X East North _____
West South X

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: 9/15/94

Remediation Method: Excavation X Approx. cubic yards 28
(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 . BEDROCK BOTTOM -

nmcd letter correspondence 12-9-96

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location see Attached Documents

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

Sample depth 9'

Sample date 9-15-94 Sample time _____

Sample Results

Benzene(ppm) 0.007

Total BTEX(ppm) 11.291

Field headspace(ppm) 992

TPH 1000 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 9/27/94

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

CLIENT: <u>AMOCO</u>	P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80092</u> C.O.C. NO: _____
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FIELD REPORT:		CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>BOLACK</u>	WELL #: <u>1</u>	PIT: <u>SEP</u>	DATE STARTED: <u>9/15/94</u>	DATE FINISHED: <u>9/15/94</u>
QUAD/UNIT: <u>1C</u>	SEC: <u>29</u>	TWP: <u>28N</u>	RNG: <u>8W</u>	PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u>
QTR/FOOTAGE: <u>1450 FSL/250 FWL</u>	CONTRACTOR: <u>P. VELASQUEZ</u>			ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION: EXCAVATION APPROX. 17 FT. x 15 FT. x 6 FT. DEEP.
DISPOSAL FACILITY: LANDFARMED ON-SITE CUBIC YARDAGE: 28
LAND USE: RANGE LEASE: NM-03549

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 82 FEET S45E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOC D RANKING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPM ELEV. 5954' FORMATION: DK

SOIL AND EXCAVATION DESCRIPTION:

SIDEWALLS: DR. YELL. ORANGE SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HC ODOR.

BOTTOM: ASSUMED BACKFILLED W/ CLEAN SOIL APPROX. 3' BELOW BOTTOM AT EXCAVATION (APPROX. 6'). SHALY ROCK ENCOUNTERED @ 9', OLIVE TO DR. GRAY IN COLOR, STRONG HC ODOR.

SAMPLE I.D.		LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
④	4'	TPH-1138	5	20	1:1	6	24
⑤	9'	TPH-1139	5	20	1:1	250	1000

0 1000 FT

PIT PERIMETER

OVM RESULTS

PIT PROFILE

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	1.8
2 @ 4'	2.1
3 @ 4'	1.8
4 @ 4'	3.8
5 @ 9'	992

LAB SAMPLES
5 @ 9' BTX (8020)

TRAVEL NOTES: CALLOUT: 9/14/94 ONSITE: 9/15/94

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: 4 @ 4'
Project Location: Bolack # 1
Laboratory Number: TPH-1138

Project #:
Date Analyzed: 9-15-94
Date Reported: 9-15-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	24	20

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	49200	46000	6.72

*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 -- B0092

Nicholas Velly
Analyst

R. E. O'Neill
Review

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: 5 @ 9'
Project Location: Bolack # 1
Laboratory Number: TPH-1139

Project #:
Date Analyzed: 9-15-94
Date Reported: 9-15-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	1,000	20

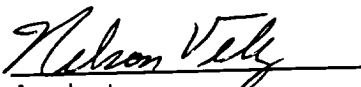
ND = Not Detectable at stated detection limits.

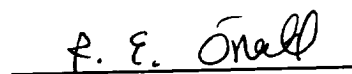
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	49200	46000	6.72

*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 - B0092


Analyst


Review



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *Nelson Velez*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/16/94*
Lab ID: *2045*
Sample ID: *3050*
Job No. *2-1000*

Project Name: *Bolack #1*
Project Location: *5 @ 9' - Separator Pit*
Sampled by: *NV* Date: *9/15/94*
Analyzed by: *DLA* Date: *9/16/94*
Sample Matrix: *Soil*

Time: *11:15*

Aromatic Volatile Organics

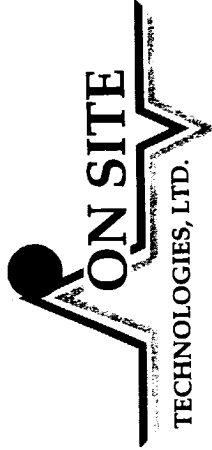
Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>7.2</i>	<i>0.2</i>
<i>Toluene</i>	<i>136</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>339</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>9,043</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>1,765</i>	<i>0.2</i>
TOTAL <i>11,291 ug/kg</i>		

ND - Not Detectable

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

Approved by: *DLA*

Date: *9/16/94*



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 BLAGG ENGINEERING Address P.O. BOX 87 City, State, Zip BLOOMFIELD NM 87413	Dept. 		
SEND INVOICE TO			
Special Instructions: BOLACK #1			
Sampler:	Nelson Vely		
SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE/ GRAB	PRESERVATIVES
(5) @ 9' - SEP PIT	9/15/04 11:15	GRAB	
(4) @ 9' - DEHY PIT	9/15/04 11:45	GRAB	
Relinquished by:	Date/Time: 9/15/04 1530		
Relinquished by:	Date/Time		
Relinquished by:	Date/Time		
Method of Shipment:			
Authorized by:	(Client Signature Must Accompany Request)		

CLIENT: <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80092</u> C.O.C. NO: <u>8417</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>BOLACK</u>	WELL #: <u>1</u>	PITS: <u>DEHY., SEP.</u>	DATE STARTED: <u>6/13/01</u>
QUAD/UNIT: <u>K SEC: 29 TWP: T28N RNG: R8W PM: NM CNTY: SJ ST: NM</u>			DATE FINISHED: _____
QTR/FOOTAGE: _____		CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>STOCKPILE</u>	APPROX. CUBIC YARDAGE: <u>148</u>
LAND USE: <u>RANGE - BLN</u>	LIFT DEPTH (ft): <u>N/A</u>

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM P.C. - 9/15/94

MOSTLY MED. FINE BROWN SAND WITH GRAVEL AND SANDSTONE FRAGMENTS, NON COHESIVE, ONLY TO SLIGHTLY MOIST, LOOSE, NO APPARENT DISCOLORATION/STAINING OBSERVED OR AKE ODOR DETECTED @ ANY OF THE SAMPLE PTS. & OVM SAMPLE, COLLECTED 5 FT. 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

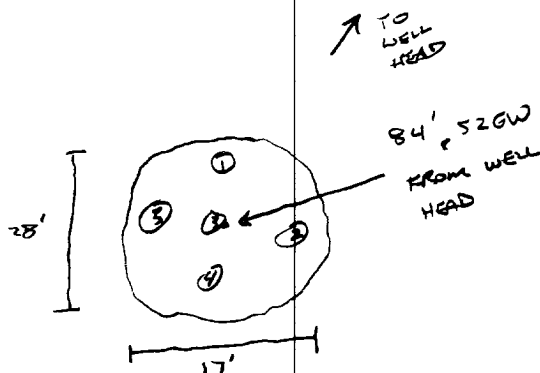


OVM CALIB. READ: 52.9 ppm
 TIME: 1000 @ pm 6/13/01

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
SP-1	0.6	SP-1	TPH (8013)	1145	ND



SCALE



0 FT

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____
 revised: 03/12/01 bei1006.skd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

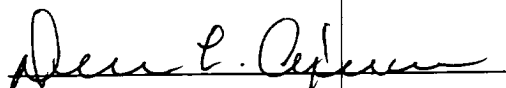
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	SP - 1	Date Reported:	06-15-01
Laboratory Number:	20029	Date Sampled:	06-13-01
Chain of Custody No:	8417	Date Received:	06-14-01
Sample Matrix:	Soil	Date Extracted:	06-14-01
Preservative:	Cool	Date Analyzed:	06-15-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

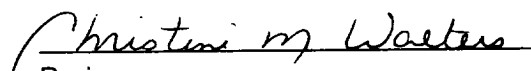
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.1

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: **Bolack #1 Stockpile. 5 Pt. Composite.**


Analyst


Review

08417

[illegible]