

District I
P.O. Box 1980, Hobbes, NM

District II
P.O. Drawer DD, Artes, NM 88211

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resource Department

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

Blow - OK
Sep - risk - nonVulnerable

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE
(Revised 3/9/94)

RECEIVED
AUG 12 1999
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9219
Address: 200 AMOCO COURT, FARMINGTON, NM 87401
Facility Or: STATE GAS COM M #1
Well Name _____
Location: Unit or Qtr/Qtr Sec SW/SW Sec 16 T 31 R 12 County SAN JUAN
Pit Type: Separator _____ Dehydrator _____ Other BLOW DOWN
Land Type: BLM XX State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 50 width 50 depth 13
(Attach diagram)
Reference: wellhead _____ Other _____ See Attached
Footage from reference: _____
Direction from reference: _____ 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 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	<u>10</u> <u>0</u> <u>305</u>
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)	<u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 10

215

Date Remediation Started: 06/10/94 Date Completed: 06/10/94

Remediation Method: Excavation XX Approx. cubic yards 1203

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remediation Action: _____

CONTAMINATION WAS REMEDIATED BY DILUTION AND AERATION. ⁹¹⁵ ~~Complete~~ COMPETENT

SANDSTONE ENCOUNTERED BETWEEN 5' TO 7' BELOW GRADE W/ DRILL
RIG.

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

Sample depth 13

Sample date 06/10/94 Sample time 11:00:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) <100 @ 7' 10/23/97 915

TPH 834

Ground Water Sample: Yes _____ No XX (If yes, attach sample results)

I HEREBY CERTIFY THAT INFORMATION ABOVE IS TRUE AND COMPLETE

TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 11-11-95 5/25/98 915

SIGNATURE

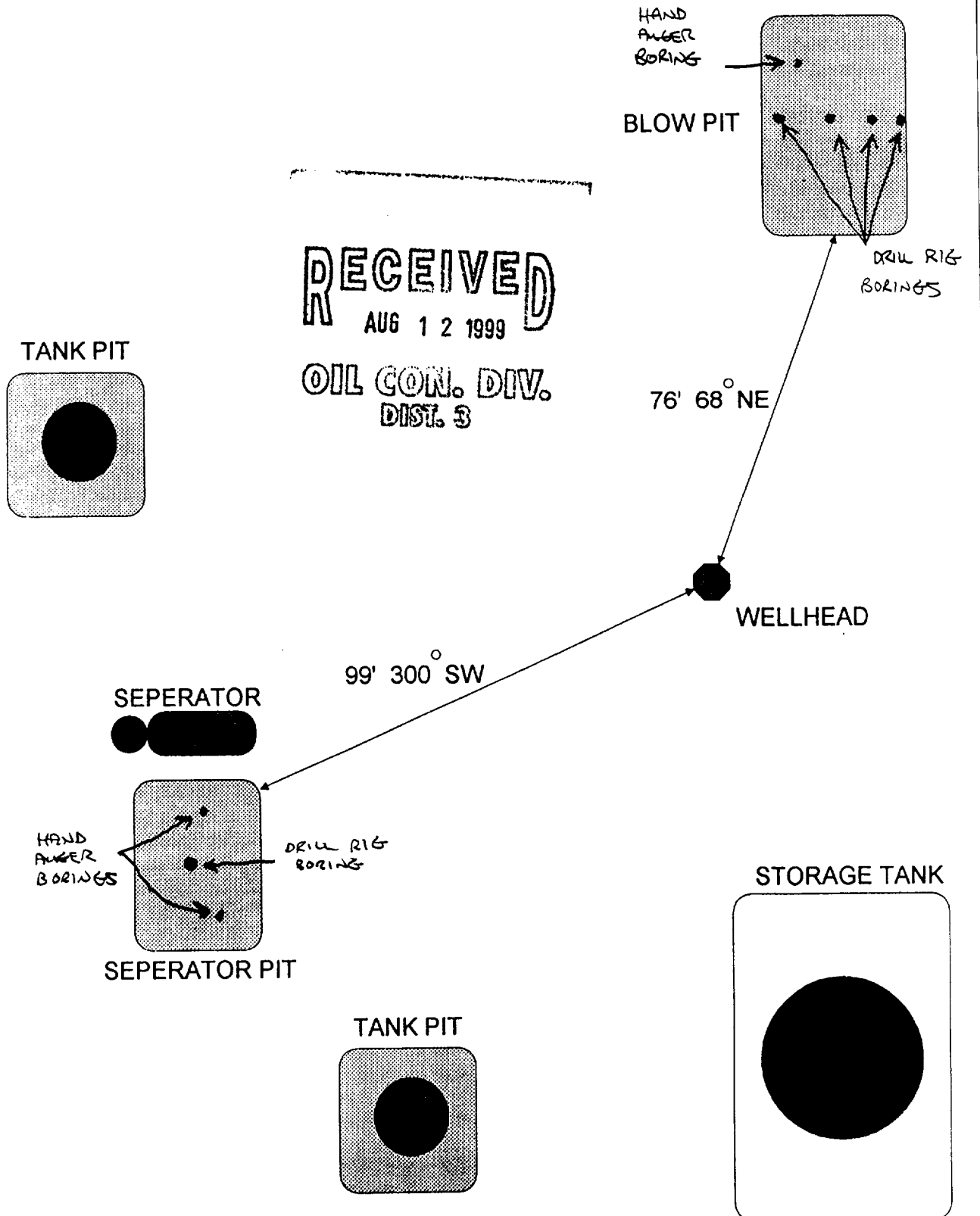
BS Shaw

PRINTED NAME
AND TITLE

Environmental
Coordinator

AMOCO PRODUCTION COMPANY

STATE GAS COM M #1



BOTH PITS PREVIOUSLY DENTED CLOSURE - NMOCED
LETTER CORRESPONDENCE DATED 11/21/96. 925

FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR: AMOCO PRODUCTION COMPANY

ADDRESS: 200 AMOCO COURT FARMINGTON, NM

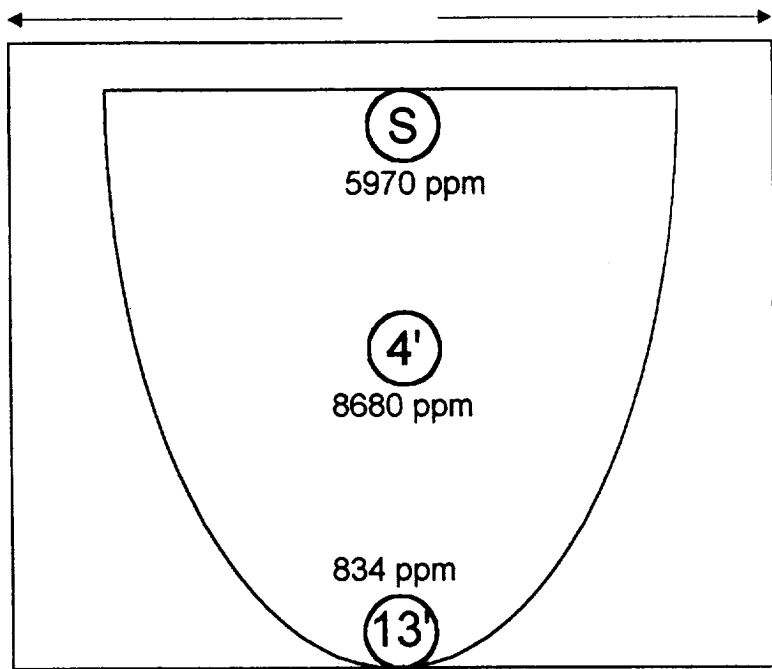
WELL NAME
OR FACILITY: STATE GAS COM M#1

PIT TYPE: BLOW PIT LEGALS: SW/SW SEC.16 T31N R12W

DEPTH	TPH/PPM
SURFACE	5970
4'	8680
8'	4600
13'	834
	<i>0.00</i>
7'	<i>< 100 ppm</i>

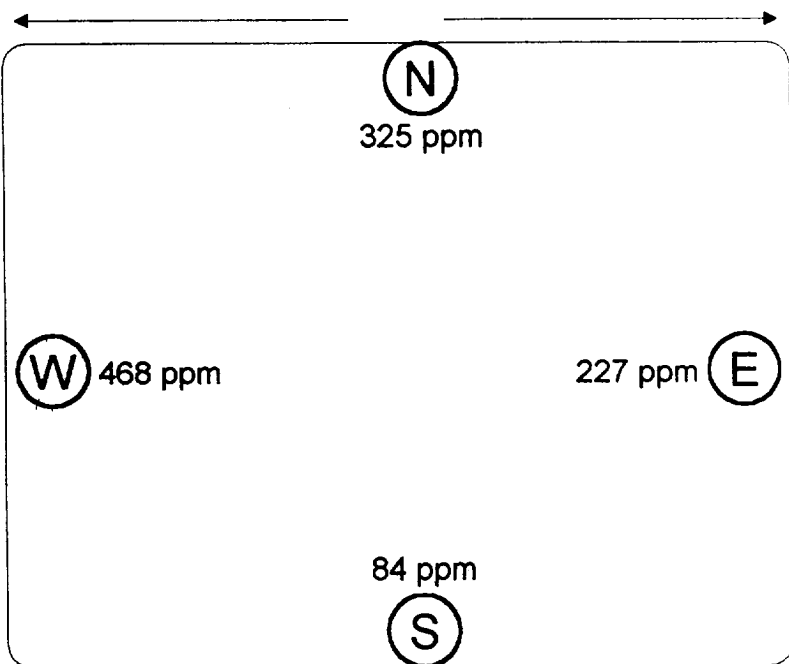
90°

SIDE VIEW



TOP VIEW

WALL	DEPTH	TPH
NORTH	6'	325
WEST	6'	468
SOUTH	6'	84
EAST	6'	227



CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>WEE</u> C.O.C. NO: <u>5421</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>STATE GC</u> WELL #: <u>M1</u> PITS: <u>BLOW</u>	DATE STARTED: <u>10/23/97</u> DATE FINISHED: _____
QUAD/UNIT: <u>M SEC: 16 TWP: 31N RNG: 12W PM: NM CNTY: SJ ST: NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV JCB</u>
DTP/FOOTAGE: <u>SW14 SW14</u> CONTRACTOR: <u>WHOLE EARTH</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: DILUTION & AERATION

APPROX. CUBIC YARDAGE: 1203

LAND USE: RANGE

LIFT DEPTH (ft): NA

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

CONDUCTED 3 BORINGS IN PIT AREA ACCORDING TO PIT CLOSURE REPORT, ENCOUNTERED SANDSTONE BETWEEN 5'-7' BELOW GRADE, SOIL CONSIST OF MOSTLY OK. YELL. BROWN SAND w/ NO DISCOLORATION OR HC ODOOR OBSERVED THROUGHOUT ENTIRE BORING, COLLECTED 1 SAMPLE PT. USING HAND AUGER (2' DEPTH BELOW GRADE) IN PIT AREA, 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS OF SUPPOSEDLY DILUTED & AERATED SOIL PORED BACK INTO EXCAVATED AREA, UNABLE TO COLLECTED SUFFICIENT AMOUNT OF SOIL FROM BORING TOTAL DEPTH FOR OVM SAMPLE. FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS


SEE SITE MAP

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
DA-1	0.0	DA-1	TPH (8015)	1230	ND
27'	<100				

SCALE

0  1 FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE: 10/23/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

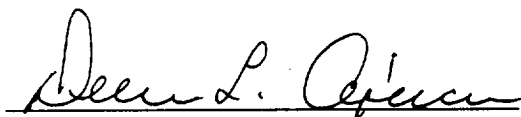
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	10-28-97
Laboratory Number:	C368	Date Sampled:	10-23-97
Chain of Custody No:	5421	Date Received:	10-24-97
Sample Matrix:	Soil	Date Extracted:	10-27-97
Preservative:	Cool	Date Analyzed:	10-28-97
Condition:	Cool and Intact	Analysis 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 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: **State GC M #1. Blow Pit. 5 Pt. Composite.**


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name <i>BRS66 / Amoco</i>			Project Location <i>Brow PIT</i>			ANALYSIS/PARAMETERS					
Sampler: (Signature) <i>Johnson</i>			Chain of Custody Tape No. <i>04034-10</i>								
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Remarks					
<i>DA-1</i>	<i>10/23/97</i>	<i>1230</i>	<i>C368</i>	<i>Soil</i>	<i>1</i>						
					<i>TPH (8015)</i>	<i>RESTED - cool</i>					
					<i>✓</i>						
						<i>5 PT. COMPOSITE</i>					
Reinquished by: (Signature) <i>Johnson</i>	<i>VEg</i>										
Reinquished by: (Signature)											
Reinquished by: (Signature)											
Reinquished by: (Signature)											

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

District I
P.O. Box 1980, Hobbes, NM

District II
P.O. Drawer DD, Artes, NM 88211

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resource Department

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

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(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9219
Address: 200 AMOCO COURT, FARMINGTON, NM 87401
Facility Or: STATE GAS COM M #1
Well Name _____
Location: Unit or Qtr/Qtr Sec SW/SW Sec 16 T 31 R 12 County SAN JUAN
Pit Type: Separator XX Dehydrator _____ Other _____
Land Type: BLM XX State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 22 width 18 depth 14
(Attach diagram)
Reference: wellhead _____ Other _____ See Attached
Footage from reference: _____
Direction from reference: _____ 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)	<u>10</u> <u>BJS</u>
	50 feet to 99 feet	(10 points)	
	Greater than 100 feet	(0 points)	
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)	<u>0</u>
	No	(0 points)	
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	(20 points)	<u>0</u>
	200 feet to 1000 feet	(10 points)	
	Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 10
BJS

Date Remediation Started: 06/09/94 Date Completed: 06/10/94
Remediation Method: Excavation XX Approx. cubic yards 205

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remediation Action: _____
CONTAMINATION WAS REMEDIATED BY DILUTION AND AERATION. RISK ASSESSED -
NON VULNERABLE AREA -

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

Sample depth 14

Sample date 06/09/94 Sample time 04:00:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 926 @ 14' 11/21/97 NV

TPH 478

Ground Water Sample: Yes _____ No XX (If yes, attach sample results)

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

DATE 11-11-95 5/25/98 NV

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

ENVIRONMENTAL
COORDINATOR

FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR : AMOCO PRODUCTION COMPANY

ADDRESS : 200 AMOCO COURT FARMINGTON, NM

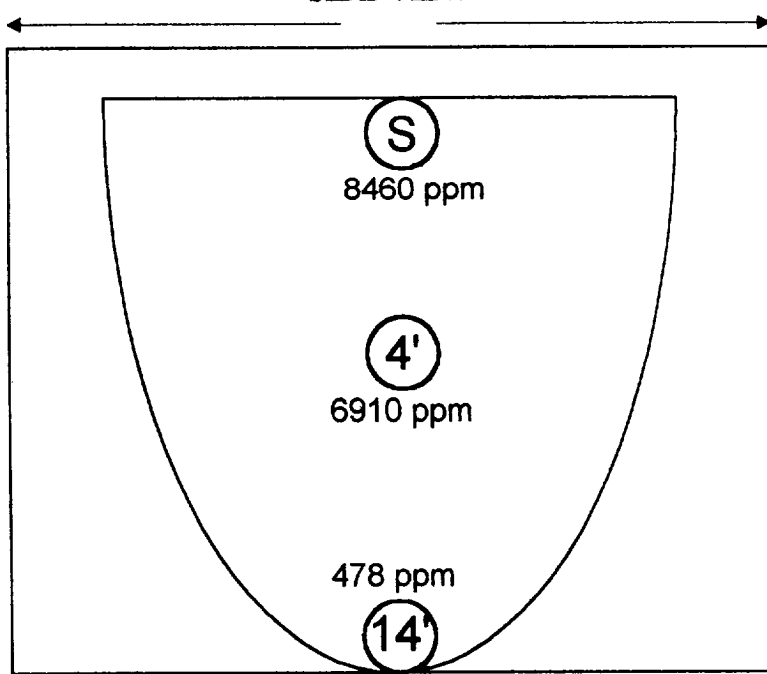
WELL NAME
OR FACILITY : STATE GAS COM M#1

PIT TYPE : SEPERATOR LEGALS : SW/SW SEC.16 T31N R12W

DEPTH	TPH/PPM
SURFACE	8460
4'	6910
8'	3340
14'	478
	00m
14'	926 ppm

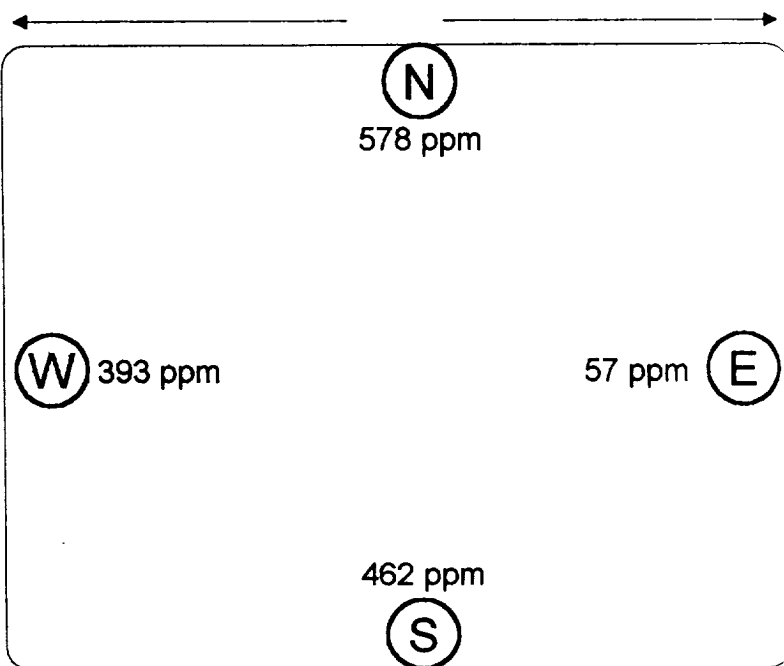
9.15

SIDE VIEW



TOP VIEW

WALL	DEPTH	TPH
NORTH	6'	578
WEST	6'	393
SOUTH	6'	462
EAST	6'	57



Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

State GC M #1

Unit M, Sec. 16, T31N, R12W

Separator Pit

Blanco Mesa Verde

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when loader reached practical extent for abandoned pit at 14 ft. below grade and for safety concerns (underground piping and surface equipment).

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on informal site observation of adjacent sandstone outcrop).
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located within the **non-vulnerable area** and is approximately 0.14 miles northwest of the nearest vulnerable area boundary (Farmington Glade).

(Refer to Adobe Downs Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface vertical and lateral impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: WEEC.D.C. NO: 5579

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: STATE GC WELL #: M1 PITS: SEP.DATE STARTED 11/21/97
DATE FINISHED: _____QUAD/UNIT: M SEC: 16 TWP: 31N RNG: 12W PM: NM CNTY: ST ST: NMENVIRONMENTAL
SPECIALIST: NV/ICBQIP/FOOTAGE: SW14 SW14 CONTRACTOR: WHOLE EARTH

SOIL REMEDIATION:

REMEDICATION SYSTEM: DILUTION & AERATIONAPPROX. CUBIC YARDAGE: 205LAND USE: RANGELIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOCID BANKING SCORE: 0 NMOCID TPH CLOSURE STD: 5000 PPM

CONDUCTED BORING @ PIT CENTER ACCORDING TO PIT CLOSURE REPORT, REACHED 14'
DEPTH BELOW GRADE. SOIL CONSIST OF DR. YELL. BROWN TO OLIVE GRAY CLAY W/ STRONG
HC. COOR. BETWEEN 0' - 11' BELOW GRADE, DUSKY RED HARD CLAY BETWEEN 11' - 12', DUSKY
RED VERY HARD CLAY BETWEEN 12' - 14', COLLECTED 2 SAMPLE PTS. USING HARD AUGER
(2' - 3' DEPTHS BELOW GRADE) IN PIT AREA, 5 PT. COMPOSITE COLLECTED FOR LAB
ANALYSIS OF SUPPOSEDLY DILUTED & AERATED SOIL PLACED BACK INTO EXCAVATED AREA.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS

SEE SITE MAP

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
DA-1	885	DA-1	TPH (8015)	1300	ND
③ @ 14'	926				

SCALE



0 FT

TRAVEL NOTES:

CALLOUT: NAONSITE: 11/21/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

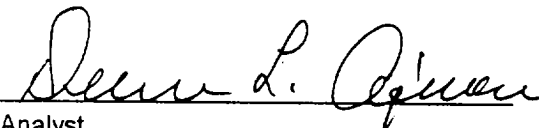
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	11-26-97
Laboratory Number:	C556	Date Sampled:	11-21-97
Chain of Custody No:	5579	Date Received:	11-24-97
Sample Matrix:	Soil	Date Extracted:	11-24-97
Preservative:	Cool	Date Analyzed:	11-25-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

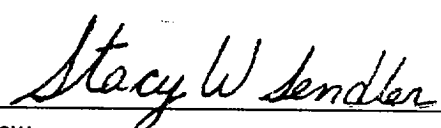
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: State GC M #1 Separator Pit. 5 Pt. Composite.


Analyst


Review

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615