Blow-ok Sep-BISK-bell BOLKY

District I P.O. Box 1980, Hobbs, NM District II P.O. Drawer DD, Arlesia, NM 88211 strict III 1000 Rio Brazos Rd, Aztec, NM \$7410

State of New Mexico Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

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

PIT REMEDIATION AND CLOSURE REPORT

Deniel 1/25/96 due to LF

Operator: Amoco Production Company	Telephone: (505) - 326-9200			
Address: 200 Amoco Court, Farmingto	on, New Mexico 87401			
Facility Or: C.A. McAORMS Well Name	·			
Location: Unit or Qtr/Qtr SecK				
Pit Type: Separator Dehydrator	other Blow			
Land Type: BLM X, State, Fee	_, Other			
Pit Location: Pit dimensions: length NA, width NA, depth NA Reference: wellhead X, other Footage from reference: 340 Direction from reference: 50 Degrees East North 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)				
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)				
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)			
	RANKING SCORE (TOTAL POINTS):			

		Data : gamalahada	12/2/20
		Date Completed:	
Remediation Method: (Check all appropriate	Excavation 🔀	Approx. cubic yards	NF)
sections)	Landfarmed	Insitu Bioremediation	
	other CLOSE	42 IZ	
Remediation Locatio	n: Onsite × Of	fsite	
(ie. landfarmed onsite, name and location of			-
offsite facility)			
General Description	Of Remedial Actio	n:	
Excavation	on - No CONTA	THE SOILS	
Ground Water Encoun	tered: No 💢	Yes Depth	
			
Final Pit:	Sample location _	see Attached Documents	
Closure Sampling: (if multiple samples,			
attach sample results and diagram of sample	Sample depth	S.	
locations and depths)	Sample date Z	2 94 Sample time	1205
			
	Sample Results		
	Benzene(ppm)		
	Total BTEX(p	pm)	
	Field headsp	ace(ppm) 00	
	трн <u>//6 рр</u>	<u>m</u>	
	,		
Ground Water Sample	: Yes No _	\times (If yes, attach sample	results)
I HEREBY CERTIFY TH	THE THEODMATTON	ABOVE IS TRUE AND COMPLET	E TO THE BEST
OF MY KNOWLEDGE AND		HEAT TO INOT WED COME DEL	2 10 1111 1101
DATE /2/ 12 94	A	BIIKC	
SIGNATURE SASI	PRINTED AND TIT	NAME Buddy D. S.	nac disate
PIGHUTOKE ISSA	VANO III	LNTIKONMENIAL	COLO INTION

V2.0	LAGG ENGINEERING, IN DX 87, BLOOMFIELD, NA (505) 632-1199	i	C.D.C. ND:
FIELD REPORT: C	LOSURE VERIFICA	ATION	PAGE No: of
LOCATION: NAME: C.A. MCADAM QUAD/UNIT: K SEC: 5 TWP: Z QTR/FOOTAGE: NELY 5WY	7 ~ RNG: OW PM: DM CNTY:	SJ ST:NM	DATE STARTED: 12/12/94 DATE FINISHED ENVIRONMENTAL NV SPECIALIST: NV
EXCAVATION APPROX. NA FT. x DISPOSAL FACILITY: ON - ST LAND USE: RANGE		N METHOD	MATION: OK
FIELD NOTES & REMARKS: PIT DEPTH TO GROUNDWATER: 2/00' NEARES			
NMOCD RANKING SCORE: S NMOCD SOIL AND EXCAVATION DESCR	TPH CLOSURE STD: 5000 PPM	1	CHECK DINE : PIT ABANDONED STEEL TANK INSTALLED
CLOSED AS 15 TIME S	OVM	CULATIONS The FREON DILL 20 11	JTION READING CALC. ppm
THI D TO THE HER	SAMPLE SAMPLES SAMPLE ANALYSIS TIME	Nor	RMUCABLE
TRAVEL NOTES: CALLOUT: /2/9/	99 ONSITE: /2	/12/94	

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:

1 @ 8'

Date Analyzed:

12-12-94

Project Location:

C.A. McAdams C 2

Date Reported:

12-12-94

Laboratory Number:

TPH-1317

Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	120	20

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg Duplicate TPH mg/kg % *Diff.

2640

2640

0.00

*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 - B0184

Analyst

Review

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

Project Location:

Client:

Amoco

Sample ID:

1 @ 8'

C.A. McAdams C 2

Date Analyzed: Date Reported:

Project #:

12-12-94 12-12-94

Laboratory Number:

TPH-1317

Sample Matrix:

Soil

Sample Weight: Volume Freon:

5.00 grams 20.00 mL

Dilution Factor: TPH Reading:

1 (unitless)

29 mg/kg

TPH Result:

116.0 mg/kg

Reported TPH Result: Actual Detection Limit:

120 mg/kg

Actual Detection Limit: Reported Detection Limit:

20.0 mg/kg 20 mg/kg

QA/QC:

Original TPH mg/kg Duplicate TPH mg/kg % Diff.

2640

2640

0.00

Comments:

Comments:

Blow Pit - B0184

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

State of New Mexico Energy, Minerals and Natural Resources Department

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

PIT REMEDIATION AND CLOSURE REPORT

		Telephone: (505) - 326-9200	
Operator:	Amoco Production Company		
Address:		•	
Facility Or:	C.A. McADAMS C	22	
Well Name			
Location: Unit	or Qtr/Qtr Sec Se	C 5 TZ7H RIOW County SAN TWAN	
Pit Type: Sepa	rator \times Dehydrator_ 0	ther	
Land Type: BL	$ exttt{M}\underline{ imes}$, State $\underline{\hspace{0.5cm}}$, Fee $\underline{\hspace{0.5cm}}$, Other	
Pit Location: Pit dimensions: length 25, width 22, depth 10 Reference: wellhead X, other Footage from reference: 163 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)			
domestic water so	ection Area: set from a private ource, or; less than ll other water sources)	Yes (20 points) No (0 points)	
Distance To Su (Horizontal distal lakes, ponds, ri- irrigation canal	ance to perennial vers, streams, creeks,	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	
		RANKING SCORE (TOTAL POINTS):	

Date Remediation St.	arted:	Date Completed:	12/13/94
Remediation Method:		Approx. cubic yards	
(Check all appropriate	Landfarmed	Insitu Bioremediation	
sections)	other Comfos		
	Other		
Remediation Location (ie. landfarmed onsite, name and location of offsite facility) General Description		fsite	-
General Description	- RENDECK R	OTTOM. BSK ASSESSED.	
Excavation	on - BEOROCK 6	OHOW (, NOR 7/35230ED)	
Ground Water Encoun	tered: No X	Yes Depth	
Final Pit: Closure Sampling: (if multiple samples,	Sample location	see Attached Documents	
attach sample results and diagram of sample	Sample depth	6'	
locations and depths)	Sample date 12	2 94 Sample time	1155
	Sample Results		
	Benzene(ppm)	0.0163	
		opm) 62.610	
		pace(ppm) 552	
	TPH 1,508 P		
Ground Water Sample: Yes NoX (If yes, attach sample results)			
I HEREBY CERTIFY THOSE OF MY KNOWLEDGE AND	HAT THE INFORMATION BELIEF	N ABOVE IS TRUE AND COMPL	ETE TO THE BEST
DATE /2/13/94	A	NAME RILL DS	Shaul
SIGNATURE BAS	haw AND TI	D NAME Buddy D	Coordinator

CLIENT: AMOCO	BLAGG ENGINE P.O. BOX 87, BLOOM (505) 632	FIELD, NM 87413	LOCATION NO. 80/84 COC. NO. 2323
FIELD REPOR'	Γ: CLOSURE V	ERIFICATION	PAGE No: of
LOCATION: NAME: C.A. DIS	HOSMS WELL #: CQ		DATE STARTED: /2/12/94 DATE FINISHED
	swly CONTRACTOR:		ENVIRONMENTAL SPECIALIST:
DISPOSAL FACILITY:	FT. x FT. x/ 	REMEDIATION METH	OD: <u>COMPOSTED</u>
	(S:) PIT LOCATED APPROXI		
NMOCD RANKING SCORE -	NMOCD TPH CLOSURE STD: 50	200 PPM	CHECK DINE: PIT ABANDONED
SOIL AND EXCAVATION	· · · · · · · · · · · · · · · · · · ·		STEEL TANK INSTALLED
Exet Oter	Box ASSESSED FIE	CLD 418.1 <u>Calculations</u>	STISM), SAMPLES NO ALL SUM SAMPLES DILUTION READING CALC. ppm
SCALE O FT PIT PERIME	1155 (De6' TPH-1316	5 2 ₀	PROFILE
25' D S TEP	SAMPLE FIELD FIELD ID TOT. STEX - CZ	HEADSPACE D (ppm) 79 52 72 .0 BY LES TIME 1715	BEDROCK GENY DISCOLORED Soll
TRAVEL NOTES: CALLOUT:	12/9/94	ONSITE: 12/12/9	4

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

McAdams CA C #2
Unit K. Sec. 5, T27N, R10W
Separator Pit

Separator Pit Basin Dakota Non Vulnerable

> > 1000 ft. > 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 10 feet below grade.

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

- 1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 10 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
- 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.
- Well site located within the <u>non-vulnerable area</u> and is approximately 1.02 miles north northeast of the nearest vulnerable area boundary (East Fork Kutz wash).

(Refer to East Fork Kutz Canyon Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), provisional edition 1985, (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 lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

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

2 @ 6'

Project #:
Date Analyzed:

12-12-94

Sample ID: Project Location:

C.A. McAdams C 2

Date Reported:

12-12-94

Laboratory Number:

TPH-1316

Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	1,500	20

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample	Duplicate	%
TPH mg/kg	TPH mg/kg	*Diff.
2640	2640	0.00

^{*}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 - B0184

Analyst

R. E. O'Well Review



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:

Nelson Velez

OFF: (505) 325-8786

Date:

12/13/94

Company: Blagg Engineering

Lab ID:

2323

Address:

P.O. Box 87

Sample ID: Job No.

4361 2-1000

City, State: Bloomfield, NM 87413

C. A. McAdams C 2

Project Name: **Project Location:**

2 @ 6' - Sep Pit

NV

Date: Date:

12/12/94 12/13/94

Time:

11:15

Sampled by: Analyzed by: Sample Matrix:

DLA

Soil

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
Benzene	16.3	0.2
Toluene	2,969	0.2
Ethylbenzene	2,125	0.2
m,p-Xylene	42,571	0.2
o-Xylene	14,928	0.2
	тотаL 62,610 ug/kg	

ND - Not Detectable

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

Approved by:

Date:

P. O. BOX 2606 • FARMINGTON, NM 87499

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

Client:

Amoco

Sample ID:

2 @ 6'

Project #: Date Analyzed:

12-12-94

Project Location:

C.A. McAdams C 2

Date Reported:

12-12-94

Laboratory Number:

TPH-1316

Sample Matrix:

Soil

Sample Weight: Volume Freon:

5.00 grams 20.00 mL

Dilution Factor:

1 (unitless)

377 mg/kg TPH Reading:

TPH Result:

1508.0 mg/kg

Reported TPH Result: Actual Detection Limit: 1500 mg/kg

Reported Detection Limit:

20.0 mg/kg 20 mg/kg

QA/QC:

Original TPH mg/kg

Duplicate TPH mg/kg

% Diff.

2640

2640

0.00

Comments:

Comments:

Separator Pit - B0184

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CJ
(·)
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CHAIN OF CUS. JDY RECORD

Date: 12/12/28

Page.

TECHNOLOGIES, LTD.

ON SITE

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

Remarks (matrix) 7/0 80184 Date/Time /2//3/91/ 5 Working Days | 10 Working Days | Sampling Location: Date/Time Date/Time Telefax No. ANALYSIS REQUESTED Title N 77 (. 6611-13 1217 1216 3007 100 1,450 Mailing Address City, State, Zip Telephone No. Company Received by: Rush Received by: Received by: Name RESULTS TO Containers Number of Date/Time/**Z**//15/5/5 074 / COMPOSITE/ PRESERVATIVES GRAB Date/Time Date Dept. DATE/TIME SAMPLED 5111 Reference No.: (Client Signature Must Accompany Request) 7117.7KM 111 N SAMPLE IDENTIFICATION City, State, Zip Method of Shipment: Purchase Order No.: Special Instructions: Company Address Relinquished by: Relinquished by: Relinquished by: Name Authorized by: <u>)</u> INVOICE SEND Sampler:

Pink - Sampler Goldenrod - Client

Distribution: White - On Site Yellow - LAB

CLIENT: <u>AMOCO</u>	BLAGG ENC P.O. BOX 87, BLO (505)	GINEERING, IN OOMFIELD, NN 632-1199	NC. M 87413	C.D.C. NO: ROBY
	LANDFARM/COM			
	ADAMS C # Z			DATE STARTED: 3-26-96 DATE FINISHED:
	TWP: 27 N RNG: 10 W			ENVIRONMENTAL RES
	'sw co	ONTRACTOR: EFC	<u>-</u>	SPECIALIST:
SOIL REMEDIATION:			-	140
	TEM: Compost	APPROX	CUBIC Y	ARDAGE:
LAND USE:	RANGE			
FIELD NOTES & REMAR	KS:	,		,
DEPTH TO GROUNDWATER >10	NEAREST WATER SOURCE	E: >1000 NE	AREST SURFACE	WATER: >1000
NMDCD PANKING SCERE:				
SOIL HAS BEEN	LEVELED ON EDGE	e of Location	∨.	
	BROWN, MOIST, SILTY	SAMO. Some m	LANG SWINI	A VISIBLE -
COMPOSTING ODOR 1	श्वस्य,			
	EIE! D 4191	I CALCULATIONS		CLOSE C.P.
SAMPLE	I.D. LAB No: WEIGHT (g)	mL. FREON DILUTION	READING CALC	. ppm
\				
SKETCH/SAMPLE I	OCATIONS			
				LAB SAMPLES
	1	OVM RESULT		SAMPLE ANALYSIS
سفر سفر		COMP. A 8		MP. A 8015 - ND
₩ 🕏				
	$\mathcal{O} \otimes \mathcal{H}$			
SOIL	AREA SCAI	T.		
	_ SCAL	. <u>c.</u>		
		FT		
TRAVEL NOTES: CALLOUT		ONSITE:3	-26-96	2480
				FORM REVISED 1/96



TOTAL VOLATILE PETROLEUM HYDROCARBONS Gasoline Range Organics

Blagg Engineering, Inc.

Project ID:

Condition:

C.A. McAdams C #2

Sample Matrix: Preservative:

Cool Intact

Soil

Report Date:
Date Sampled:
Date Received:

04/04/96 03/26/96

Date Extracted:

03/26/96 03/28/96

Date Analyzed:

03/28/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	2982	ND	18.5

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate
Trifluorotoluene

% Recovery 70%

Acceptance Limits 50 - 150%

Reference:

Method for the Determination of Gasoline Range Organics,

State of Tennessee, Department of Environment and Conservation, Division

of Underground Storage Tanks.

Comments:

Dung MA



TOTAL RECOVERABLE PETROLEUM HYDROCARBONS Diesel Range Organics

Blagg Engineering, Inc.

Project ID:

C.A. McAdams C #2

Sample Matrix:

Soil

Preservative: Condition:

Cool Intact

Poil

Report Date:

04/04/96

Date Sampled:
Date Received:

03/26/96

Date Extracted:

03/26/96 03/28/96

Date Analyzed:

03/28/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	2982	ND	19.2

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

% Recovery

Acceptance Limits

o - Terphenyl

99%

50 - 150%

Reference:

EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas

Chromatography." Test Methods for Evaluating Solid Waste, Physical/

Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

Analyst

Reviev