Sampled only 1ft below

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

Submit 1 Copy to District Office
and 1 Copy to Santa Fe Office

State of New Mexico Energy, Minerals, and Natural Resources Dept.
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED
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OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator:	Marathon Oil Company				**Telephone:**	(505) 326-2783	
Address:	P.O. Box 1439, Farmington, NM 87499						
Facility/Well Name:	OHIO E Govt 1						
Location: Unit or 1/4 1/4:	A	**Section**	18	**T** 31N	**R** 12W	**County:**	San Juan
Pit Type: Separator:	X	**Dehydrator:**		**Other:**			
Land Status:	**BLM** X	**State**		**Fee**		**Other**	

Pit Location:	**Pit Dimensions: Length:**	25'	**Width:**	25'	**Depth:**	18'
(Attach Diagram)	**Reference: Wellhead**	X	**Other**			
	Footage from Reference:	200' East of wellhead				
	Direction from Reference:	E	**Degrees**		**East**	**North** 90
					West	**South**

Depth to Groundwater:			
(Vertical distance from contaminants	Less than 50 feet	(20 points)	
to seasonal high water elevation of	50 feet to 99 feet	(10 points)	
groundwater)	Greater than 100 feet	(0 points)	10
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water	Yes	(20 points)	
source, or; less than 1000 feet from all other water sources)	No	(0 points)	0
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds,	Less than 200 feet	(20 points)	
rivers, streams, creeks, irrigation canals and ditches)	200 feet to 1000 feet	(10 points)	
	Greater than 1000 feet	(0 points)	10
	RANKING SCORE (TOTAL POINTS)		20

Date Remediation Started: 1994 **Date Completed:** 02/17/99

Remediation Method: (Check all that apply) **Excavation** X **Approx. Cubic Yards** 416
Landfarmed X **In Situ Bioremediation** _____
Other _____

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

General Description of Remedial Action:
Pit was excavated in 1994 and contaminated soil was landfarmed on-site.

Groundwater Encountered: **No** X **Yes** _____ **Depth** _____

Final Pit Closure Sampling (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample Location Excavation Pit
Landfarm
Sample Depth Excavation Pit - 6 in bgs
Landfarm - 6 in bgs
Sample Date 02/17/99 **Sample Time** 1400

Sample Results See Attached Results
Benzene (ppm) _____
Total BTEX (ppm) _____
Field Headspace (ppm) 1.9
TPH 0.8

Groundwater 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 10-18-99 Ross Kennemer, Project Manager (AES)

Signature Ross Kennemer Printed Name and Title

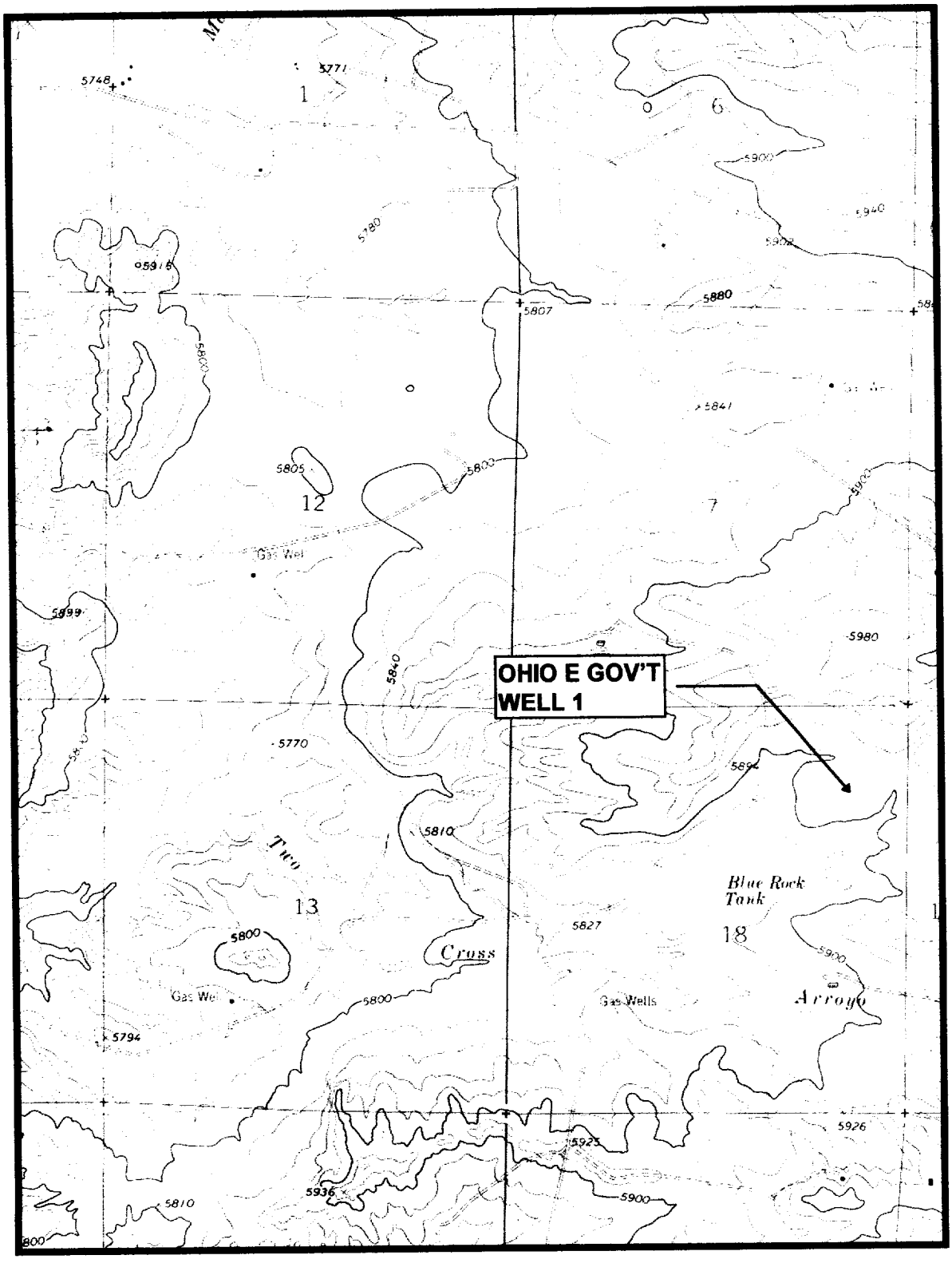


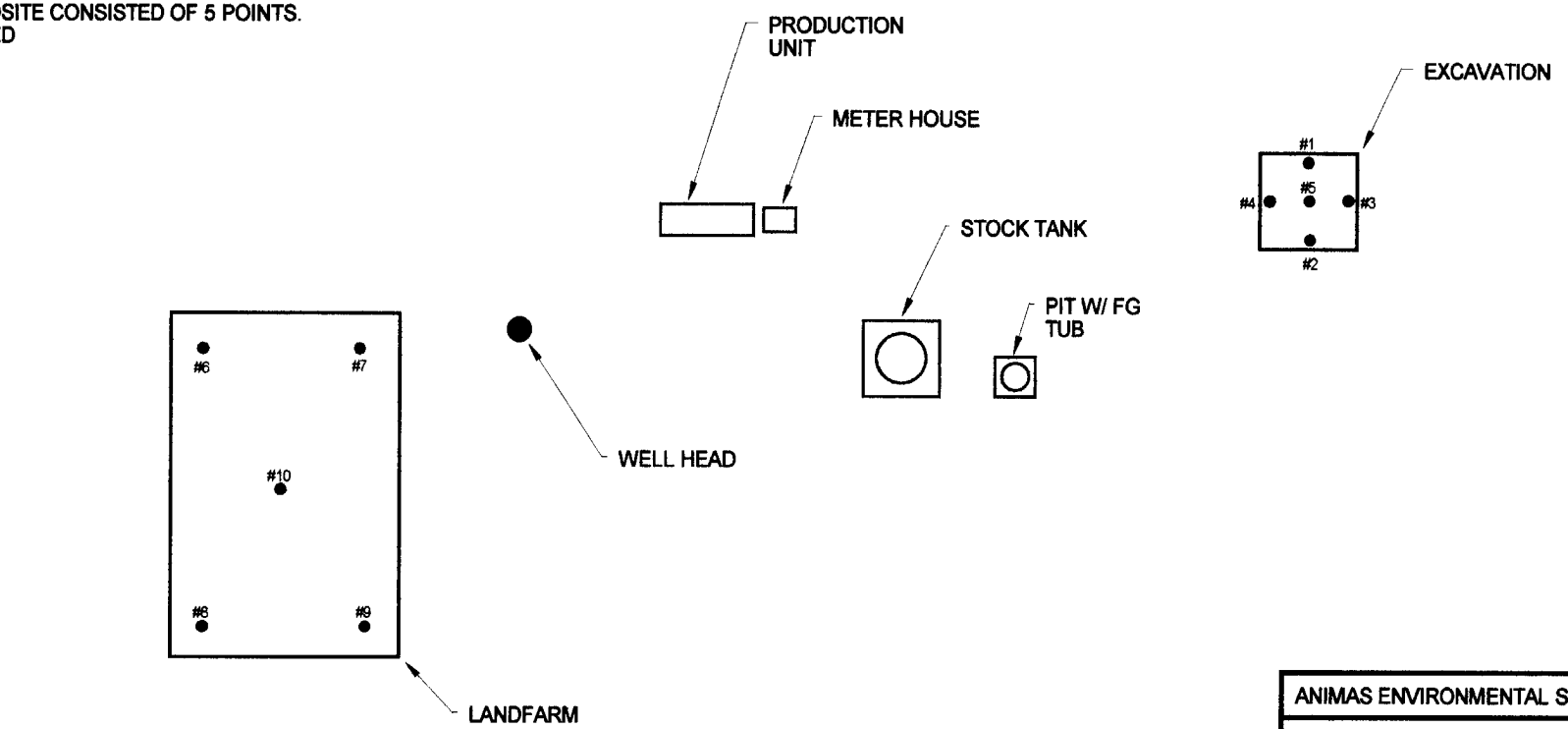
FIGURE 1. SITE LOCATION MAP
(UNIT A S18 T31N R12W)

LA PLATA QUADRANGLE
NEW MEXICO - COLORADO
7.5 MINUTE SERIES (TOPOGRAPHIC)
1979 PHOTOREVISION

FIELD AND LABORATORY ANALYSIS RESUTLS
FEBRUARY 17, 1999

SAMPLE ID	OVM	TPH
#1	1.0	**
#2	0.9	**
#3	0.7	**
#4	1.0	**
#5	1.9	**
#6	0.5	**
#7	0.4	**
#8	0.6	**
#9	0.5	**
#10	0.4	**
PIT COMPOSITE	**	0.8
LAND FARM COMPOSITE	**	4.9

NOTE:
FIELD SAMPLES ANALYZED WITH OVM PID METER CALIBRATED TO 100 PPM.
FIELD SAMPLE RESULTS REPORTED AS PPM (mg/kg).
LABORATORY SAMPLES ANALYZED PER EPA METHOD 8015 (TPH)
LABORATORY SAMPLE RESULTS REPORTED AS PPM (mg/kg).
PIT COMPOSITE CONSISTED OF 5 POINTS.
LANDFARM COMPOSITE CONSISTED OF 5 POINTS.
ND = NOT DETECTED
** = NOT ANALYZED



ANIMAS ENVIRONMENTAL SERVICES

FIGURE 2. SITE PLAN & SAMPLE LOCATIONS

OHIO E GOV'T WELL 1
UNIT A S18 T31N R12W
SAN JUAN COUNTY, NM

10/8/99
RK
MARTH/OHIOE

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Marathon Oil Co.	Project #:	95047
Sample ID:	OHIO E Govt 1 Pit	Date Reported:	02-18-99
Laboratory Number:	E672	Date Sampled:	02-17-99
Chain of Custody No:	6607	Date Received:	02-17-99
Sample Matrix:	Soil	Date Extracted:	02-17-99
Preservative:	Cool	Date Analyzed:	02-18-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**0.8**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**0.8**	**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: **OHIO E Govt 1.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Marathon Oil Co.	Project #:	95047
Sample ID:	OHIO E Govt 1 Landfarm	Date Reported:	02-18-99
Laboratory Number:	E673	Date Sampled:	02-17-99
Chain of Custody No:	6607	Date Received:	02-17-99
Sample Matrix:	Soil	Date Extracted:	02-17-99
Preservative:	Cool	Date Analyzed:	02-18-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**4.9**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**4.9**	**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: **OHIO E Govt 1.**

Analyst

Review

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Project Summary

Pursuant to requirements set forth in the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division (OCD) Pit Remediation and Closure Guidelines, Animas Environmental Services (AES), on behalf of Marathon Oil Company, has prepared the following summary of soil sampling at an excavated separator pit and associated landfarm soils at the Ohio E Gov't 1 well. This well is located in Unit A of Section 18, T31N, R12W, San Juan County, New Mexico. A site location map is provided as Figure 1.

Previous Work

In 1994, approximately 416 cubic yards (yds) of contaminated soil were excavated from an unlined separator pit and landfarmed on-site. The pit was excavated to an approximate depth of 18 feet (ft) below the ground surface (bgs). Subsequently, the excavation was left open in order to facilitate further remediation by aeration. A site plan illustrating the location of the excavation and landfarmed soils is included as Figure 2.

Pit Remediation and Closure Sampling

On February 17, 1999, Marathon Oil Company personnel collected soil samples from the excavated pit and landfarm for confirmation of effective remediation. Five representative samples were collected from one ft below the base of the excavation, and five representative samples were collected from the landfarm soils. Samples from the landfarm were collected at approximately one ft below the surface.

Each sample was field screened with an organic vapor meter (OVM) by heated headspace analysis. Composite samples, consisting of five points each, were also collected and submitted for laboratory analysis of total petroleum hydrocarbons (TPH) by EPA Method 8015. Sample locations and the results of the field and laboratory analysis are presented in Figure 2.

Results

The results of the field and laboratory analysis of the excavation and landfarm report residual contaminant concentrations to be well below action levels and have been sufficiently remediated to warrant closure.

Recommendations

Based on the aforementioned findings, AES recommends seeking OCD approval to close the excavation by backfilling and contouring with the landfarmed soils and purchased fill, if required.

Certification and Limitations

I hereby certify that I am an Environmental Scientist experienced in subsurface sampling of the nature described, and I am fully familiar with the contents of this Pit Remediation and Closure Report. The contents of this report are based on data collected by others, and on the premise that this data is reflective of the defined project area. In presenting this report, AES assumes that site conditions are as they were found to be during sample collection.

Ross Kennemer
Project Scientist

Elizabeth McNally
Environmental Engineer