

Case 3126

Well Location and Acreage Dedication Plat

Date September 15, 1964

Section A.

Operator MURPHY OIL CORPORATION Lease Navajo "AA"
 Well No. 18 Unit Letter I Section 18 Township 32 NORTH Range 17 WEST NMPM
 Located 2474 Feet From the SOUTH Line, 133 Feet From the EAST Line
 County SAN JUAN G. L. Elevation 5388 Dedicated Acreage _____ Acres
 Name of Producing Formation Gallup Pool _____

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes No _____
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

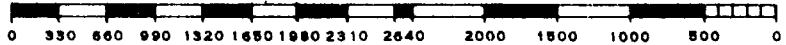
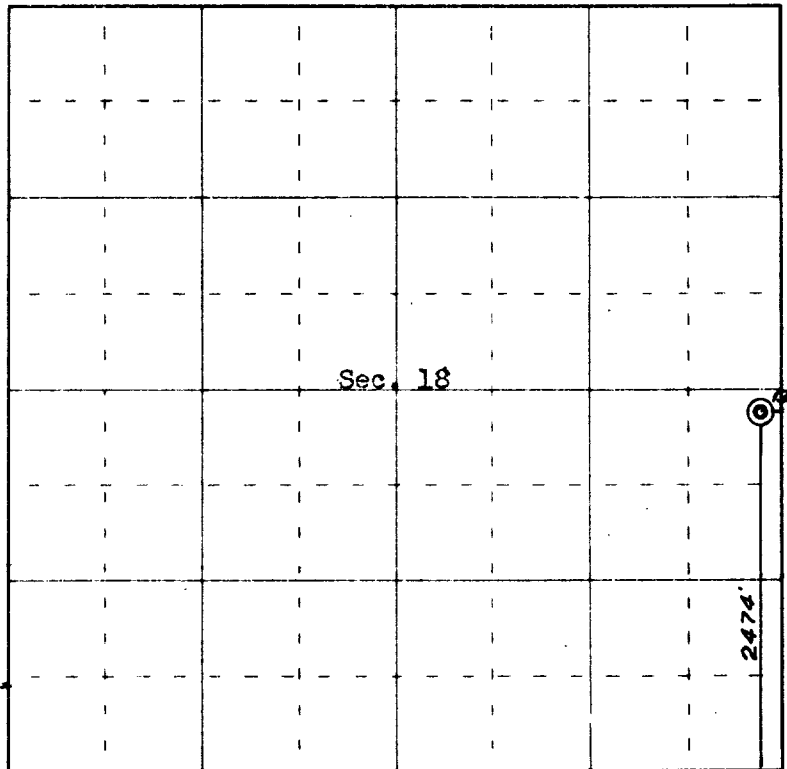
Owner Land Description

Section B.

Note: All distances must be from outer boundaries of section.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Murphy Oil Corporation
 (Operator)
[Signature]
 (Representative)
200 Jefferson Avenue
 (Address)
El Dorado, Arkansas



This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed August 15, 1964

[Signature]
 Registered Professional Engineer and/or Land Surveyor
 James P. Leese, N. Mex. Reg. No. 1463



WELL STATUS AND PRODUCTION DATA
 Murphy Oil Corporation Navajo AA Lease
 Many Rocks Field
 San Juan County, New Mexico

Lease and Well No.	Total Depth Feet	Production Size In.	Casing Depth Ft.	Perf. Interval, A.	Completion Date	Initial BOPD	Potential GOR	Current Test Date	Test Data BOPD	Cumulative Prod. to 9-1-64	September 1964 Allowable BOPM
Navajo "AA" #2	1,524	4 $\frac{1}{2}$	1,523	1,473-77	6-21-63	60	TSTM	7-2-64	21.68	15,900	1,980
Navajo "AA" #3	1,492	4 $\frac{1}{2}$	1,483	1,443-46	7-3-63	65	TSTM	7-3-64	16.62	10,024	1,230
Navajo "AA" #4	1,794	5 $\frac{1}{2}$	1,794	1,743-47	6-28-63	5	TSTM	5-17-64	5.00	1,170	150
Navajo "AA" #5	1,484	4 $\frac{1}{2}$	1,478	1,440-53	8-13-63	20	TSTM	5-20-64	5.85	2,938	1,230
Navajo "AA" #6	1,454	4 $\frac{1}{2}$	1,447	1,405-07	11-20-63	12	TSTM	5-10-64	6.90	2,024	390
Navajo "AA" #7	1,720	4 $\frac{1}{2}$	1,708	1,664-66	10-6-63	85	TSTM	7-8-64	55.09	20,781	2,100
Navajo "AA" #8	1,473	4 $\frac{1}{2}$	1,473	1,427-29	11-1-63	45	TSTM	5-21-64	11.69	6,062	1,290
Navajo "AA" #9	1,703	4 $\frac{1}{2}$	1,697	1,643-45	11-8-63	102	TSTM	7-5-64	81.40	25,499	2,100
Navajo "AA" #10	1,744	4 $\frac{1}{2}$	1,740	1,697-99	11-21-63	92	TSTM	5-20-64	57.57	18,086	2,100
Navajo "AA" #11	1,620	4 $\frac{1}{2}$	1,619	1,585-88	11-29-63	72	TSTM	5-14-64	12.10	6,431	2,100
Navajo "AA" #12	1,715	4 $\frac{1}{2}$	1,709								
Navajo "AA" #13	1,420	4 $\frac{1}{2}$	1,410	1,374-78	6-4-64	20	SI - To be completed later as an injection well and/or a fuel gas supply well.	7-8-64	20.04	858	630
Navajo "AA" #16	1,653	4 $\frac{1}{2}$	1,647	None	6-28-64	20					

Total Cumulative 109,773

Handwritten notes:
 1. 10/15/64
 2. 10/15/64
 3. 10/15/64
 4. 10/15/64
 5. 10/15/64
 6. 10/15/64
 7. 10/15/64
 8. 10/15/64
 9. 10/15/64
 10. 10/15/64
 11. 10/15/64
 12. 10/15/64
 13. 10/15/64
 16. 10/15/64

RESERVOIR PARAMETERS
Murphy Oil Corporation Navajo AA Lease
San Juan County, New Mexico

Estimated Reservoir Conditions:

Initial Reservoir Pressure, psig	470
Reservoir Temperature, °F	107
Oil Formation Volume Factor	1.1
Initial Oil Viscosity, cp.	1.4

Core Analysis Average Values:

Porosity, per cent	15.5
Water Saturation, per cent	31.4
Residual Hydrocarbon Saturation per cent	34.3

Oil Zone Volumes:

Net Reservoir Volume, acre-feet*	3009
Initial Oil in Place, STB	2,257,000

Approximate Original Cap Gas in Place, MMCF 96

Cumulative Production to 10-1-64, STB 115,490

Estimated Increase in Oil Recovery
Due to Pressure Maintenance, STB 300,000

* Includes only sand having permeability greater than 1 md. and porosity greater than 9.2 per cent.

PRODUCTION HISTORY
 Murphy Oil Corporation Navajo AA Lease
 Many Rocks Field
 San Juan County, New Mexico

<u>Year</u>	<u>Month</u>	<u>Oil Production Barrels</u>
1963	June	262
	July	1,054
	August	2,247
	September	3,757
	October	4,719
	November	9,515
	December	<u>11,649</u>
	Sub Total	33,203
1964	January	12,631
	February	12,126
	March	9,242
	April	10,830
	May	8,050
	June	8,691
	July	6,754
	August	7,916
	September	<u>6,047*</u>
	Total	115,490

* Approximation

PRODUCTION RATE, Bbls / Month

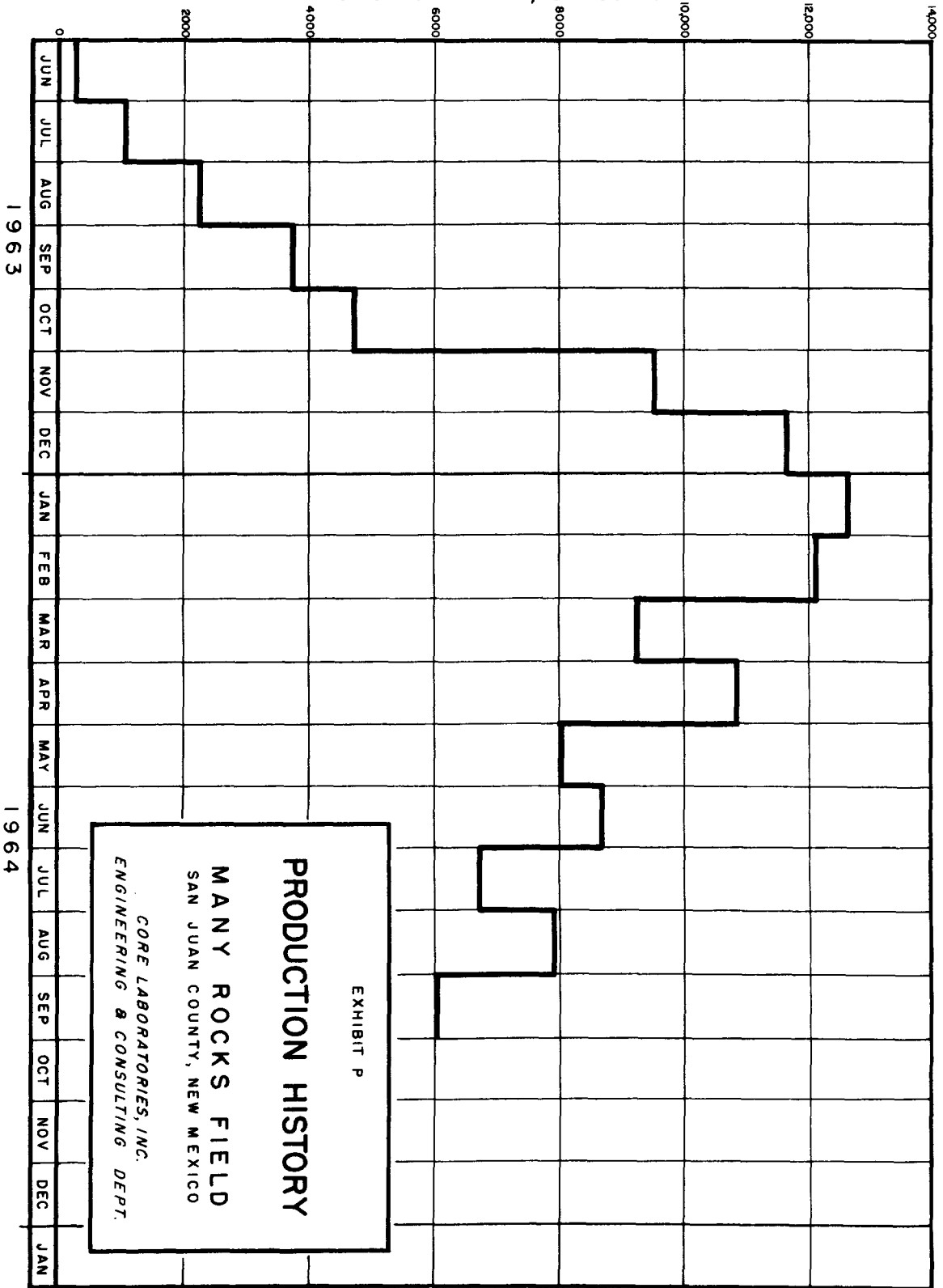


EXHIBIT P
PRODUCTION HISTORY
MANY ROCKS FIELD
SAN JUAN COUNTY, NEW MEXICO
CORE LABORATORIES, INC.
ENGINEERING & CONSULTING DEPT.