

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals, & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address Merit Energy Company 12222 Merit Drive, Suite 1500 Dallas, TX 75251		2. OGRID Number 14591
		3. API Number 30-025-33096
4. Property Code 7694	5. Property Name Langlie Mattix Queens Unit Lease	6. Well No. 46

**7. Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	15	25	37		2620	South	1300	East	Lea

**8. Proposed Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	15	25	37		2620	South	1300	East	Lea

**9. Proposed Pool 1**

**10. Proposed Pool 2**

Penrose Queens Langlie Mattix 7Rvs QN

11. Work Type Code	12. Well Type Code	13. Cable/Rotary	14. Lease Type Code	15. Ground Level Elevation
N	O	R	P	3105'
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
No	3700	Penrose Queen	Nabors	ASAP

**21. Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	8 5/8	24	1050	500sx Class A	Surface
7 7/8	5.5	15.5	3700	700sx Class C	Surface

22. Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

NSL-3556

Merit Energy Company proposes to drill and test the 7-Rivers Queens formation. Approx. 1050' surface casing will be set & circulated to surface. Approx. 3700' production casing will be ran & cemented to surface, perforated & stimulated as needed for production.

Mud program FW to 1050', cut Brine to 3700'.

BOPE Program: BOPE will be installed at the offset and tested daily for operational conditions.

23. I hereby certify that the information given above is true and complete to the best of my Knowledge and belief.

Signature:

*Russell Whited*

Printed Name:

Russell Whited

Title:

Operations Supt.

Date:

Sept. 6, 1995

Phone:

(915)520-4345

**OIL CONSERVATION DIVISION**

Approved By:

ORIGINAL SIGNED BY JERRY SEXTON

Title:

DISTRICT I SUPERVISOR

Approval Date:

SEP 14 1995

Expiration Date:

Conditions of Approval:

Attached ☐

Permit Expires 6 Months From Approval  
Date Unless Drilling Underway.

RECEIVED

SEP 12 1955  
JOHN HOBBS  
OFFICE

DISTRICT I  
P.O. Box 1680, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Instruction on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-33096	Pool Code 37240	Pool Name Langlie Mattix - Riveras Queen
Property Code 7694	Property Name LANGLIE MATTIX	Well Number 46
OGRID No. 14591	Operator Name MERIT ENERGY COMPANY	Elevation 3105'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	15	25 S	37 E		2620	SOUTH	1300	EAST	LEA

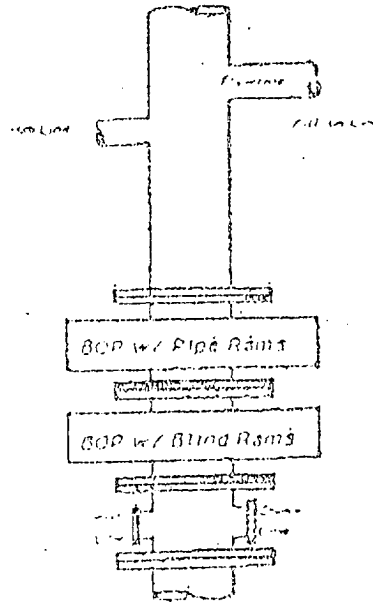
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  <u>Russell Whitel</u> Signature <u>Russell Whitel</u> Printed Name <u>Operation's Supt.</u> Title <u>9-6-95</u> Date	
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  APRIL 06, 1995 Date Surveyed <u>Ronald J. Eidson</u> Signature & Seal of Professional Surveyor <u>W.O. Num. 95-11-0045</u> W.O. Num. <u>JOHN W. WEST, 676</u> Certificate No. <u>RONALD J. EIDSON, 3239</u>	

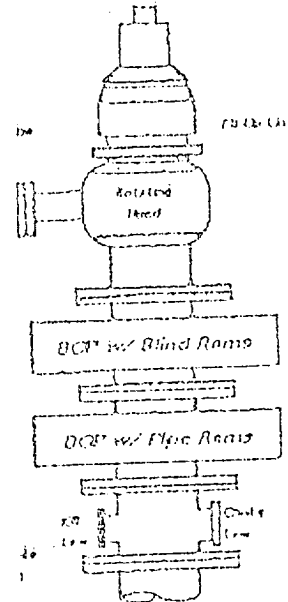
Exhibit B



CASE 11

3000 lbs

Exhibit B-1



CASE 11

3000 lbs

# MERIT ENERGY COMPANY

Langlie Mattix #46  
2640 FSL - 1320 FEL  
Unit I, Section 15-T25S-R37E  
Lea County, New Mexico

1. The estimated top of geologic markers are as follows:

Base Red Beds	1000'
Top Salt	1090'
Yates	2820'
7-Rivers	2900'
Queen	3300'
Penrose	3450'

2. The estimated depth at which anticipated water, oil and gas are expected to be encountered:

Water	Surface to 500'
Oil and Gas	Yates @ 2820' to Bottom Penrose 3700'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 3000#. BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B & B-1.

4. Auxiliary Equipment and proposed Casing Program:

A. Auxiliary Equipment: Kelly Cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit drill pipe and collars will be available on rig floor in open position at all times for use when Kelly is not in use.

B. Casing and Cementing Program:

Hole Size: 12 1/4" Total Depth: 1050' Casing Size: 8 5/8"  
Setting Depth: 1050' Mud Weight: 8.8 ppg

## Surface Casing Design:

O.D.	Weight	Grade	Thread	Coupling	Interval	Length
8 5/8"	24#	J-55	8R	ST & C	0-1050'	1050'

## Minimum Casing Design Factors:

Collapse 1370, Burst 2950, Tensile Strength 3.81

## Cement Program:

Lead Slurry: 550 sacks-Class A with 2% CaCl<sub>2</sub>

1/4 lb per sack Cellophane Flake

Expected Linear Fill: True Hole Volume-1089 feet

Slurry Properties: Weight-12.8 ppg Yeild-1.98 cu.ft./sack

Hole Size: 7 7/8" Total Depth: 3700' Casing Size: 5 1/2" Setting Depth: 3700' Mud Weight: 8.7 ppg

## Casing Design:

O.D.	Weight	Grade	Thread	Coupling	Interval	Length
5 1/2	15.5#	J-55	8R	LT & C	0-3700'	3700'

Minimum Casing Design Factors:

Collapse 40.40, Burst 48.10, Tensile Strength 2.17

Cement Program:

Lead Slurry: 700 sacks Class "C" with .2% Calcium Chloride, 1/4# per sx Cello-Flake

Calculated Linear Fill: True Hole Volume-3785.8.

Slurry Properties: Weight-15.6 ppg Yeild-1.18 cu.ft./sack

5. Mud Program and Auxiliary Equipment: From 0 to 1050' (Minimum).

Mud Weight: 8.6 ppg, Viscosity: 32 sec./1000 cc, Water Loss: N C cc, Mud Type:FW Gel/LCM. Mud will be checked tourly by mud engineer. Sufficeint quantities of mud will be kept on location to maintain minimum properties.

From 1050' to 3700' (Minimum Properties).

Mud Weight: 10.2 ppg, Viscosity: 34-40 sec./1000cc, Water Loss: N/C cc. Mud Type: Brine, use salt water gel for hole sweeps. Mud will be checked tourly by mud engineer. Sufficient quantities of mud will be kept on location to maintain minimum properties.

6. Testing, Logging and Coring Program: Samples: Every 10' from surface casing to TD. DST's: Any tests will be based on the recommendations of the wellsite Geologist as warranted by drilling breaks and shows. Coring: None Anticipated  
Logging: CNL-FCD form TD to casing, with GR-CNL up to Yates @ 2820'.

7. Abnormal Conditions, Bottom Hole Pressure and Potential Hazards:

Anticipated BHP:

From: 0' to 1050' Anticipated Max. BHP: -0- PSI

From: 1050' to 3700' Anticipated Max. BHP: 1000 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Possible lost circulation 1050' to 3700'.

H2S Zones Anticipated: Yates 2820' 7-Rivers 2900', Queens 3300', Penrose 3450'

Maximum Bottom Hole Temperature: 104 degrees Fahrenheit

8. Anticipated starting date: As soon as possible after approval with the drilling time being approximately 10 days and the completion time being another 12 days.