

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ROW/APD

FORM APPROVED  
Budget Bureau No. 1004-0136  
Expires February 28, 1995

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work

DRILL ☒DEEPEN ☐

b. Type of Well

Oil Well ☐Gas Well ☒Other ☐Single Well ☒Multiple Zone ☐

2. Name of Operator

Merrion Oil &amp; Gas Corporation

3. Address and Telephone No.

610 Reilly Ave Farmington NM 87401  
ph: (505) 327-9801

4. Location of Well (Footages)

At Surface 850' fml &amp; 1600' fel (nw ne)

At proposed prod. zone Same

14. Distance in Miles and Directions from Nearest Town or Post Office

18 miles south of Farmington NM, near Chaco Plant

15. Distance from Proposed Location to Nearest

Property or Lease Line, Ft 850'

16. No. of Acres in Lease

320 acres

17. No. of Acres Assigned to This Well

320 acres

18. Distance from Proposed Location to Nearest Well Drilling, Completed, or Applied for, on this Lease, FT

~1000'

19. Proposed Depth

~1360'

20. Rotary or Cable Tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc)

6090' GR, 6095' RKB

22. Approximate Date Work will Start

As soon as permitted

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE & GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7" J55	23 ppf	~120' KB	~30 sx (35 cuft)
6-1/4"	4-1/2" J55	10.5 ppf	~1360' KB	~114 sx (181 cuft)

Merrion proposes to drill 8-3/4" hole with native mud to approx 120' and set 7" 23# J55 surface casing, cement to surface with ~30 sx 'B' w/ 2% CaCl<sub>2</sub> (35 cuft). Will drill 6-1/4" hole to TD @ approx 1360' KB with low solids non-dispersed mud system. Run open hole surveys. Will set 4-1/2" 10.5 ppf J55 production casing from TD to surface. Will cement with 53 sx 'B' (109 cuft) lead slurry followed by 61 sx 'B' (72 cuft) cement to fill from total depth to surface. Top of Cement should circulate to surface (will adjust volumes based upon caliper log).

A water spacer will be pumped ahead of the lead slurry to prevent mud contamination of the cement. If cement does not reach surface, a temperature log or cement bond log will be run to determine top of cement.

Will test Fruitland Coal through perforated casing. Will fracture stimulate and put on for production test. Drilling operations below surface casing will be conducted with a Bag type BOP in place, minimum working pressure 1000 psig. Additional drilling technical details attached.

A pipeline route approval is also proposed as part of this APD as per the enclosed topo map.

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO THE FOLLOWING WELL ATTACHED  
'GENERAL REQUIREMENTS'

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal to deepen, give present productive zone and proposed new productive zone.

COPIES: BLM+4, WELL FILE+1

24. I hereby certify that the foregoing is true and correct.

Signed

Steven S. Dunn

Title Drilling &amp; Prod Manager

Date June 20, 2000

(This space for Federal or State office use)

Permit No.

Approval Date

Application approval does not warrant or certify that applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any:

/s/ Joel Farrell

APPROVED BY:

TITLE

DATE

SEP 19 2000

State of New Mexico  
Energy, Minerals & Mining Resources Department

Form C - 102

OIL CONSERVATION DIVISION

2040 South Pacheco

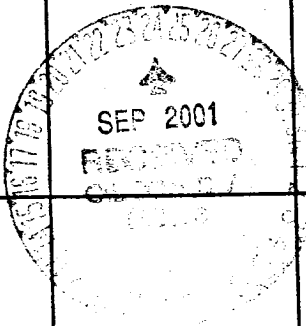
Santa Fe, NM 87505


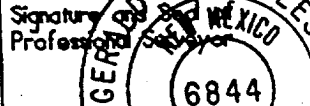
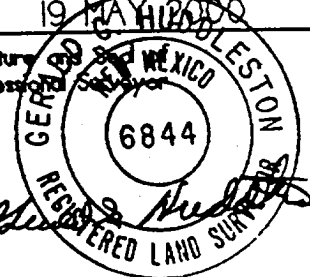
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-045-30292		Pool Code 71629		Pool Name Basin Fruitland Coal	
Property Code 28890		Property Name YAHTZEE			Well Number 1
OGRID No. 014634		Operator Name MERRION OIL & GAS			Elevation 6090'
Surface Location					
UL or Lot B	Sec. 14	Twp. 26 N.	Rge. 13 W.	Lot Ltr. nwne	Feet from > 850
				North/South NORTH	Feet from > 1600
				East/West EAST	County SAN JUAN
Bottom Hole Location If Different From Surface					
UL or Lot	Sec.	Twp.	Rge.	Lot Ltr.	Feet from >
				North/South	Feet from >
				East/West	County
Dedication 320	Joint ?	Consolidation		Order No.	

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

		850'			
				1600'	
Lease Number: NM-31059					
14					
					

<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature  Printed Name Connie S. Dinning Title Engineer Date June 14, 2000	
<b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location 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. Date of Survey 19 MAY 2000 Signature  Professional Surveyor 	

**MERRION OIL & GAS  
CORPORATION**

**TOPO LOCATOR MAP**

**YAHTZEE No. 1**

850' fnl & 1600' fel (nw ne)  
Sec 14, T26N, R13W, NMPM  
San Juan County, New Mexico

ACCESS PIPELINE  
YAHTZEE #1

14-26-13-3

Moncisco

NM 7767

NM 33071

SERENDIPITY #1

Oil Wells

GAS LINE (PROPOSED)

BIST

34

35

36

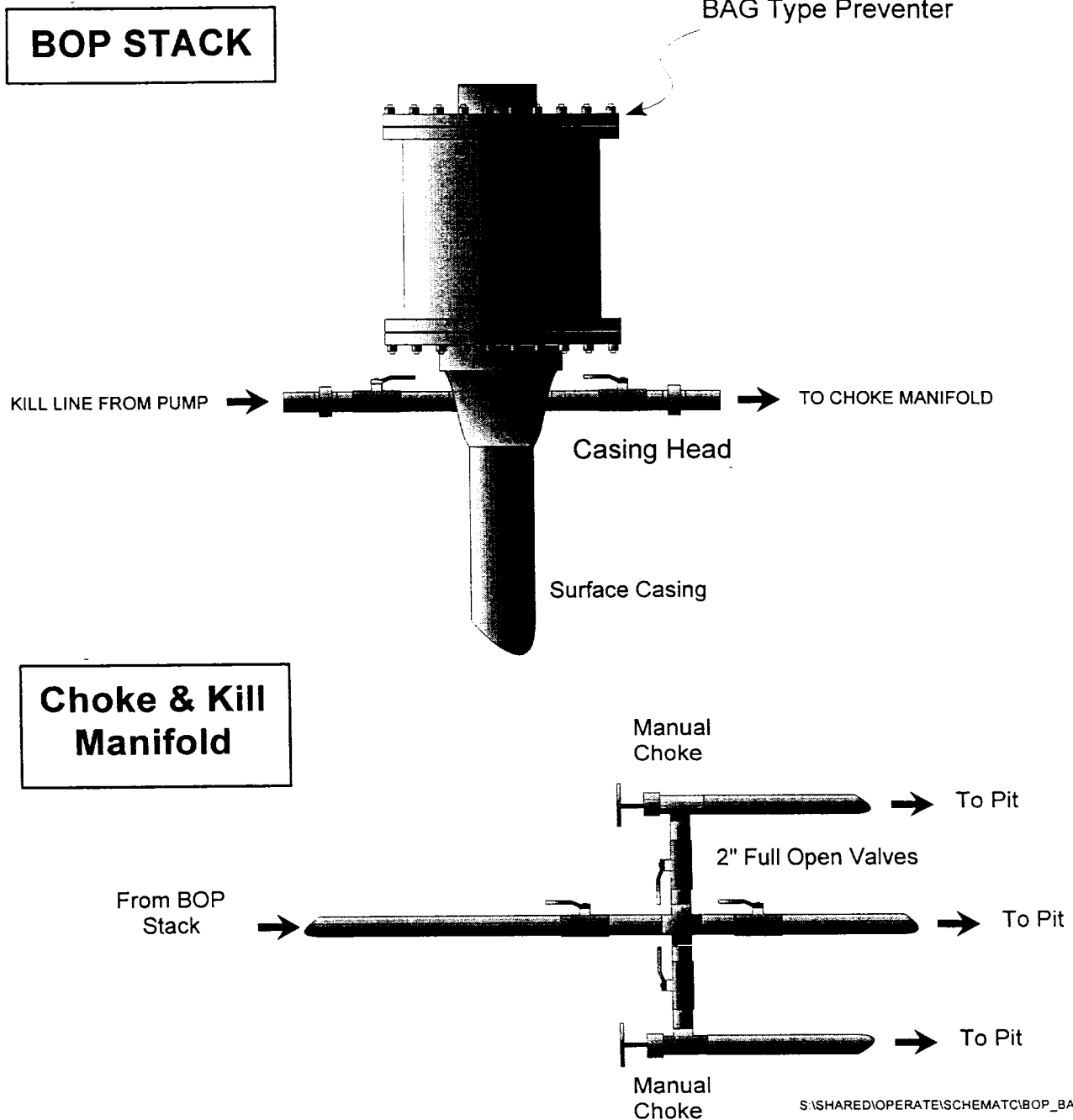
**Merrion Oil & Gas Corporation**  
**Well Control Equipment Schematic for 1M Service**

Attachment to APD Form 3160-3

**Yahtzee No. 1**

Location: 850' fml & 1600' fel (nw ne)  
Sec 14, T26N, R13W, NMPM  
San Juan County, New Mexico

Date: June 14, 2000  
Drawn By: Connie S. Dinning



### 3. DRILLING MUD PROGRAM

- A. A 8-3/4" surface hole will be drilled with fresh water system, lime and gel added to provide viscosity as needed.
- B. A 6-1/4" hole will be drilled to total depth utilizing a low solids non-dispersed mud system. Additives such as starch, cmc, and others will be used to control mud characteristics as necessary. No materials of a hazardous nature will be added to the drilling fluid in hazardous quantities. Lost circulation materials will not be stored on location. Mud weighting materials will not be stored on location.

<u>INTERVAL</u>	<u>MUD SYSTEM</u>	<u>WEIGHT #/GAL</u>	<u>VISCOSITY SEC/QT</u>	<u>WATER LOSS CC</u>
0 - 120'	Native	< 9.0	35-55	NA
120' - 1360'±LSND	8.6-9.1	28-45	NA	

Maximum anticipated mud weight is 9.1 lb./gal (0.47 psi/ft).

- C. Mud trip monitoring will be done visually.

### 4. HAZARDS

- A. Abnormal Pressure is not expected to be a problem in this area.
- B. Lost circulation is not expected to be a problem in this area.
- C. No H<sub>2</sub>S is expected. However, should H<sub>2</sub>S be found during drilling, detection and warning equipment will be installed.
- D. Unintentional hole deviation is not expected to be a problem. Single shot surveys giving hole inclination will be run a minimum of every 500 feet.

### 5. LOGGING AND TESTING

- A. An Induction, Density Log will be run from TD across zones of interest.
- B. Drill stem tests will not be run.
- C. No coring is anticipated.
- D. A mud logging unit may be used during drilling.

### 6. CASING PROGRAM

- A. Casing:

	Description	Top	Bottom
1	7" 23# J55	Surface	120 ft ±
2	4-1/2" 10.5# J55	Surface	1360 ft ±

Merrion requests that a variance be granted to allow us to set surface casing at the proposed depth of ± 120' because this setting depth has been shown to be adequate as demonstrated by the innumerable wells that have been previously drilled in the area without incident. In addition, the potential for a gas kick is very low.

Estimated formation pore pressure gradient is ~0.26 psi/ft.

- B. A proposed wellbore schematic is attached.