

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

RECEIVED

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. Lease Designation and Serial No. NM 087305	
b. Type of Well Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Stratigraphic Test Single Well <input checked="" type="checkbox"/> Multiple Zone <input type="checkbox"/>		6. If Indian, Allottee or Tribe Name 070 Farmington, NM	
2. Name of Operator Merrion Oil & Gas Corporation		7. If Unit or CA. Agreement Designation 29663	
3. Address and Telephone No. 610 Reilly Ave Farmington NM 87401 ph: (505) 327-9801		8. Well Name and No. Engleberry No. 2	
4. Location of Well (Footages) At Surface 1781' fsl & 1573' fwl (ne sw) At proposed prod. zone Same		9. API Well No. 30045 31434	
14. Distance in Miles and Directions from Nearest Town or Post Office 30 miles south of Farmington NM		10. Field and Pool, or Exploratory Area N/A Strat Test	
15. Distance from Proposed Location to Nearest Property or Lease Line, Ft 1573'		11. Sec., T., R., M., or BLK. and Survey or Area K Section 28, T25N, R13W	
16. No. of Acres in Lease 320 acres		12. County or Parish San Juan	
17. No. of Acres Assigned to This Well 320 acres		13. State NM	
18. Distance from Proposed Location to Nearest Well Drilling, Completed, or Applied for, on this Lease, FT 71'		20. Rotary or Cable Tools Rotary (Core)	
19. Proposed Depth 2150'		22. Approximate Date Work will Start 03-17-03	
21. Elevations (Show whether DF, RT, GR, etc) 6222' GR			

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE & GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
4.83"	4.5" HWT	11.7 ppf	~120'	~2 sx (2.5 cuft) + 50% excess

The Engleberry #1-Core will be a stratigraphic test. Subsequent to setting 120' of 4.5" HWT casing, Merrion proposes to core a 3.78" hole from surface to TD, as 2.4" cores will be retrieved by wireline continuously to TD. This well will be drilled on the same pad as the Engleberry #1.

As shown on the enclosed diagram, 3 small pits will be dug and lined for the core rig's mud system, but all operations will be within the boundaries of the existing pad, with no new construction taking place. After reaching TD, bulk density, gamma ray and caliper logs will be run, then the hole will be plugged with Class A, 2% CaCl cement to surface.

A 1000 psi annular BOP will be installed prior to coring.

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

ANY QUESTIONS PLEASE CONTACT:

TERKY BURNS
GEOMGT
(205) 425-3855 ext 109

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

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

COPIES: BLM+5, WELL FILE+1

24. I hereby certify that the foregoing is true and correct
Signed Connie S. Dinning Title Production Engineer Date March 6, 2003
(This space for Federal or State office use)

Permit No.

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:
1st David J. Merrion

APPROVED BY:

TITLE:

DATE:

MAR 12 2003

NMOCD

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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Form C - 102

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670 Farmington, NM

☐ AMENDED REPORT

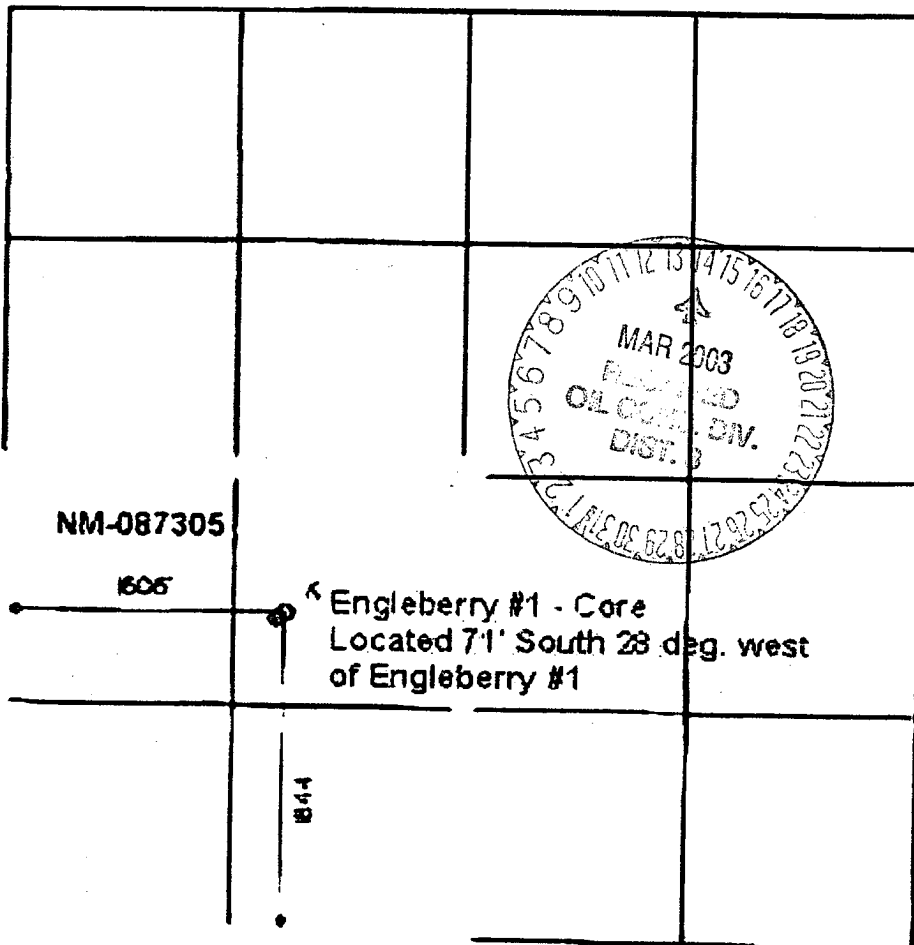
WELL LOCATION AND ACREAGE DEDICATION PLAT

APN Number 30045-31434	Pool Code	Pool Name Mesa Verde Street West
Property Code 29663	Property Name ENGLEBERRY	Well Number 12
OPD No. 014634	Operator Name HERRON OIL & GAS	Section 6227

UL or Lot	Sec.	Twp.	Rge.	Lot No.	Feet From	North/South	Feet From	East/West	County
K	28	25 N	13 W	ne sw	844	SOUTH	1606	WEST	SAN JUAN

Surface Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot No.	Feet From	North/South	Feet From	East/West	County
160-A-2									
Order No.	John P.	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



OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>[Signature]</i>	
Printed Name	Connie S. Earning
Title	Production Engineer
Date	February 10, 2003
SURVEYOR CERTIFICATION 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: <i>[Signature]</i>	

MERRION OIL & GAS CORPORATION

DRILLING TECHNICAL PROGRAM

(Attachment to Form 3160-3)

Engleberry No. 1-Core

1781' fsl & 1573' fwl (ne sw)
Section 28, T25N, R13W, NMPM
San Juan County, New Mexico

1. *Estimated Formation Tops:*

<u>Formation</u>	<u>Depth KB</u>
Undif. Tertiary	Surface
Fruitland	550'
Main Fruitland Coal	877'
Pictured Cliffs	940'
La Ventana	1732'
Cliffhouse	2084'
Total Depth	~2150'

2. *Well Control System*

- A. We will use an annular blowout preventer rated for 1000 psi (schematic drawings attached).
- B. Maximum anticipated bottomhole pressure = ± 930 psi. Well Control Anticipated Surface Pressure (ASP) = $930 \text{ psi} - (0.22 * 2150') = 457 \text{ psi}$, assuming a partially gas cut column per BLM guidelines.

3. *Drilling Mud Program*

- A. A 4.83" surface hole will be drilled with mud system
- B. A 3.78" hole will be cored to total depth utilizing a low solids non-dispersed mud system. Additives such as starch, cmc, and others could 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 unless required.

Mud weighting materials will not be stored on location unless required.

<u>Interval</u>	<u>Mud System</u>	<u>Weight #/Gal</u>	<u>Viscosity Sec/Qt</u>	<u>Water Loss cc</u>
0 - 2150'	EZ-mud	+ - 8.6	35-55	NA

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. Although many years of production have taken place at shallow depths in this area, we anticipate that rock strengths and reservoir pressures are adequate to maintain circulation to total depth.
- C. No H₂S is expected. However, should H₂S be found during drilling, detection and warning equipment will be installed.

5. Logging and Testing

- A. Gas desorption tests will be conducted on coal cores taken from the Fruitland and Upper Menefee/La Ventana coal groups.

6. Casing Program

- A. Casing:

	<u>Description</u>	<u>Top</u>	<u>Bottom</u>
1	4.5" 11.7#/ft HWT	Surface	120 ft ±