

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT


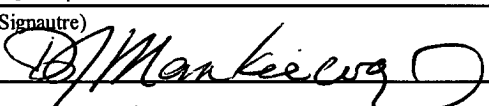
FORM APPROVED
OMB NO. 1004-0136
Expires January 31, 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF 078050	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No.	
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401		8. Lease Name and Well No. Turner Hughes 8S	
3b. Phone No. (include area code) (505) 325-1600		9. API Well No. 3004532311	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 910' FNL, 2225' FWL At proposed prod. zone		10. Field and Pool, or Exploratory Basin Fruitland Coal	
11. Sec., T., R., M., or Blk. and Survey or Area C, Sec. 04, T27N, R09W NMPM		12. County or Parish San Juan	
13. State NM		14. Distance in miles and direction from nearest town or post office* 10 miles SE of Blanco, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 910'		16. No. of Acres in lease 302.72	
17. Spacing Unit dedicated to this well 306.98 W 1/2		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 320'	
19. Proposed Depth 3305'		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7108'		22. Approximate date work will start* Aug 04	
23. Estimated duration 5 days		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Doug Thomas	Date 04/9/04
Title Drilling Superintendent		
Approved by (Signature) 	Name (Printed/Typed)	Date 9-9-04
Title AFM	Office PFO	

Application approval does not warrant or certify that the 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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on Reverse)

HOLD C104 FOR N.S.L.

NMOC

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

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

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, 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-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30045-32311		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 21424	*Property Name TURNER HUGHES		*Well Number 8S
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7108'

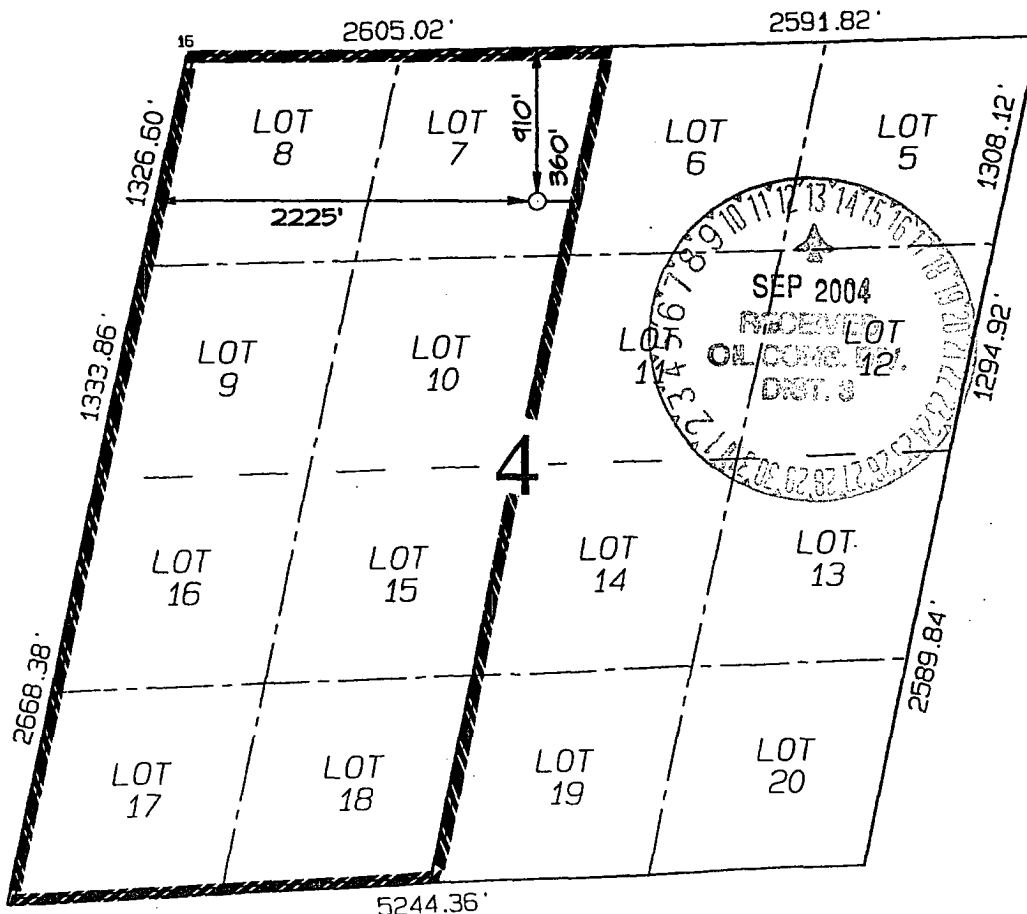
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	4	27N	9W		910	NORTH	2225	WEST	SAN JUAN

¹¹ 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
¹² Dedicated Acres 306.98 Acres - (W/2)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Doug Thomas
Signature

DOUG THOMAS
Printed Name

Drilling Superintendent
Title

4/8/04
Date

¹⁸ SURVEYOR CERTIFICATION

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.

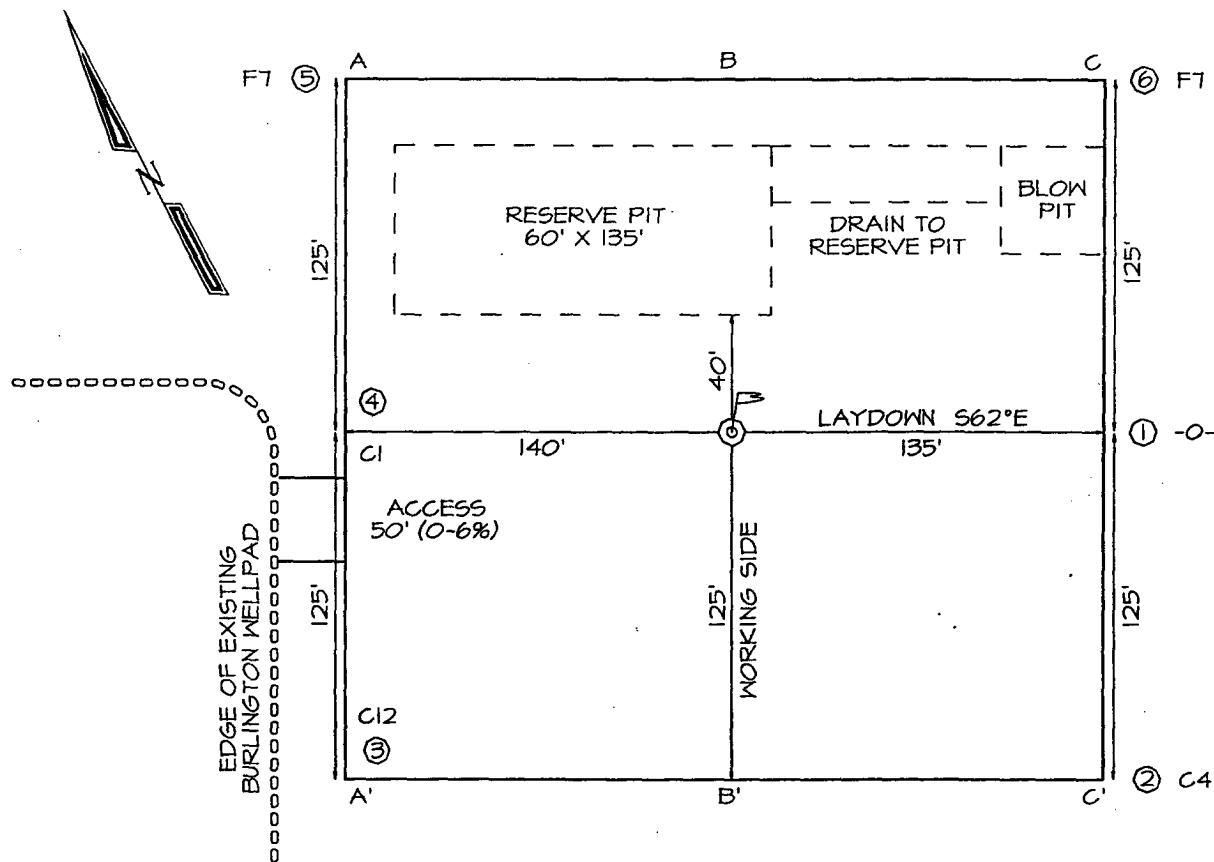
Date of Survey: MARCH 8, 2004

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

ENERGEN RESOURCES CORPORATION TURNER HUGHES #8S
910' FNL & 2225' FWL, SECTION 4, T27N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 7108'



LATITUDE: 36°36'29"
LONGITUDE: 107°47'27"
 DATUM: NAD1927

A-A'						
7118'						
7108'						
7098'						
B-B'						
7118'						
7108'						
7098'						
C-C'						
7118'						
7108'						
7098'						

OPERATIONS PLAN

WELL NAME: Turner Hughes # 8S

LOCATION: 910' FSL, 2225' FWL, Section 4, T27N, R9W, San Juan County, NM

FIELD: BASIN FRUITLAND COAL

ELEVATION: 7108' GL

FORMATION TOPS:

San Jose	Surface
Nacimiento	1115
Ojo Alamo	2250
Kirtland	2330
Fruitland	2935

Total Depth **3305**

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: None

Top of Fruitland to total depth:

Mud Logs: None

Coring: None

Natural Gauges: Every 500' from intermediate TD to total depth

MUD PROGRAM: Fresh water low solids mud from surface to intermediate TD (9.0 PPG).
Air/mist from Intermediate casing point to total depth.

CASING PROGRAM:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG SIZE</u>	<u>WT.</u>	<u>GRADE</u>
12 1/4"	200'	9 5/8"	32.3#	H-40 ST&C
7 7/8"	3305'	5 1/2"	15.5#	J-55 ST&C

TUBING PROGRAM:

2600'	2-3/8"	4.7#	J-55
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WELLHEAD: 9 5/8"x 2000# x 5 1/2" Larkin Fig. 92 casing head. 5 1/2" 2000 x 2" tubing head.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be available on the rig floor during drilling operations.

CEMENTING:

9 5/8" surface casing - Cement with 110 sks Class B Cement with 1/4# flocele/sk and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom, with 3 centralizers on first 3 joints.

5 1/2" production casing:

Cement with 455 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (1002 cu. ft. of slurry, 75% excess to circulate to surface). WOC 12 hrs prior to completion. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

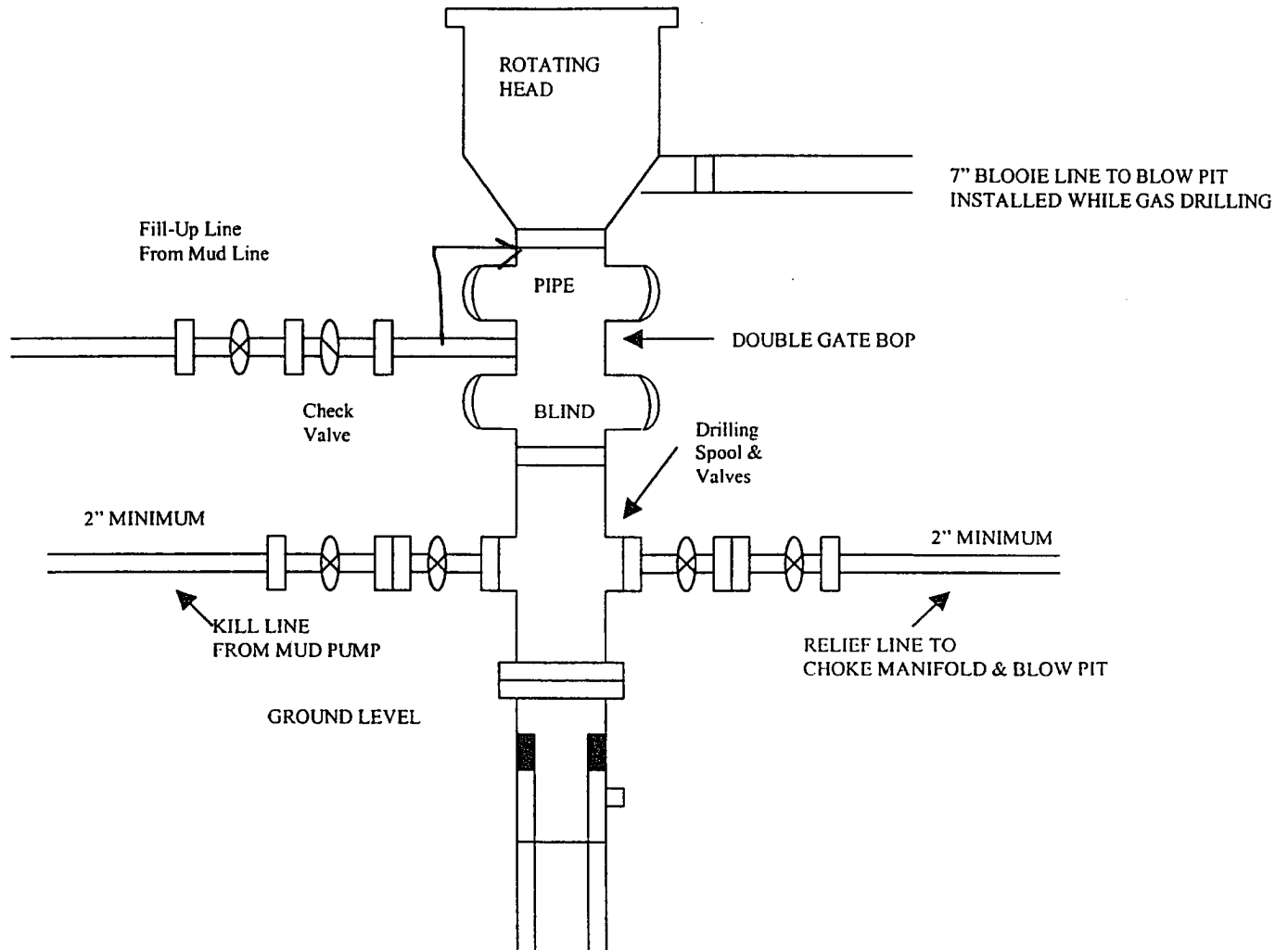
OTHER INFORMATION:

- 1) No abnormal temperatures or pressures are anticipated.
- 2) If lost circulation is encountered, sufficient LCM will be added to mud system to maintain well control.
- 3) This gas is dedicated.
- 4) Anticipated pore pressure for the Furitland is 700 psi.

ENERGEN RESOURCES CORPORATION

Mesa Verde / Dakota Well

BOP Configuration

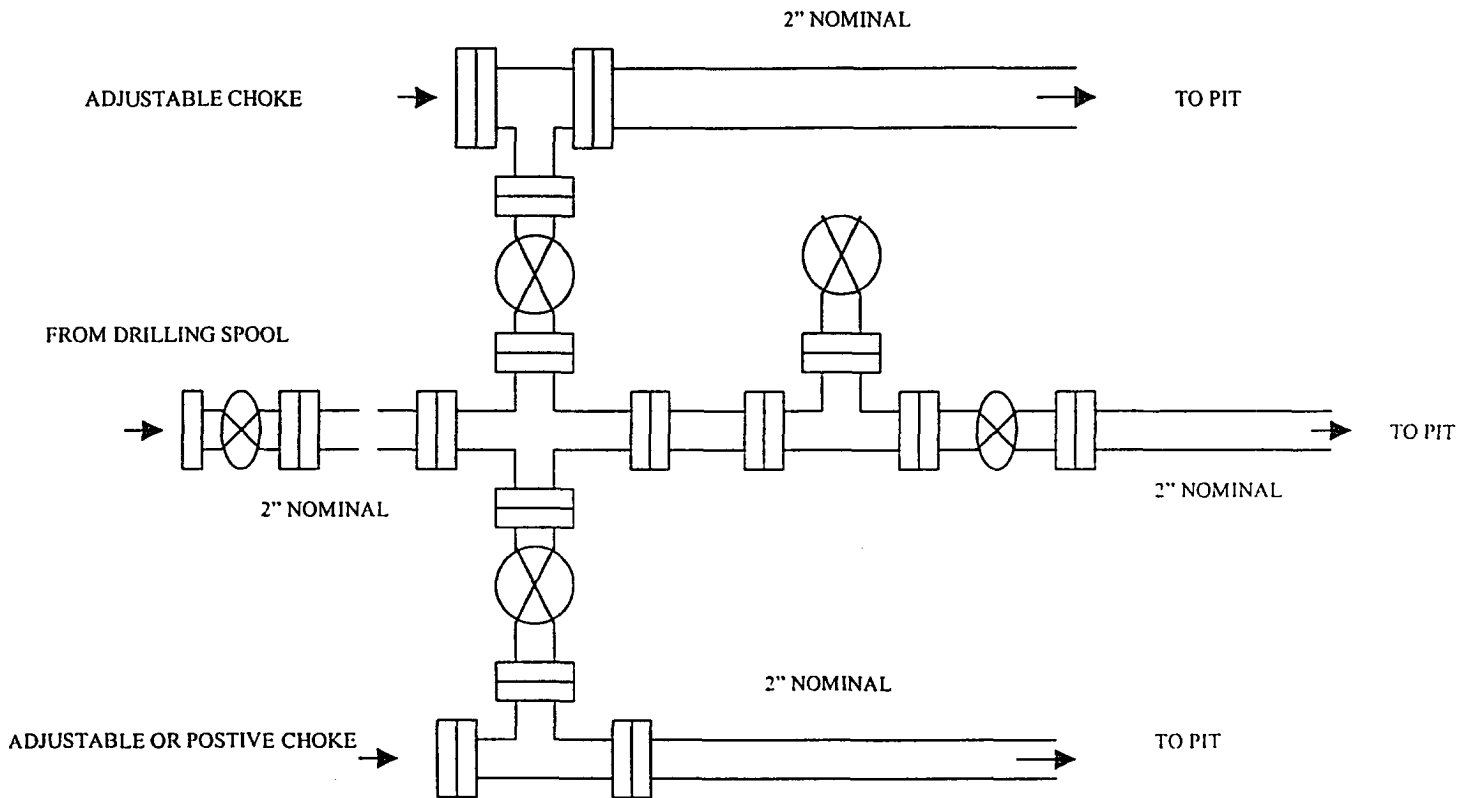


Minimum BOP installation for a Mesaverde well from Surface to Total Depth. 11' Bore, 2000 psi minimum working pressure double Gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of The BOP. All equipment is 2000 psi working pressure or greater.

ENERGEN RESOURCES CORPORATION

Choke Manifold Configuration

2M psi System



Minimum choke manifold installation from surface to Total Depth.
2" minimum, 2000 psi working pressure equipment with two chokes.