

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

1. TYPE OF WELL GAS		5. LEASE NUMBER SF-080517	
2. OPERATOR MERIDIAN OIL INC.		6. IF INDIAN, ALL. OR TRIBE NAME	
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL 65'FNL 300'FEL		8. FARM OR LEASE NAME PAYNE	
		9. WELL NO. 271	
		10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL	
		11. SEC. T. R. M OR BLK. SEC. 27 T32N R10W NMPM	
14. PERMIT NO.	15. ELEVATIONS 6924'GL	12. COUNTY SAN JUAN	13. STATE NM

16. SUBSEQUENT REPORT OF: Amended Application for Permit to Drill

17. Describe proposed or completed operations

Attached for review is a revised Operations Plan to directionally drill the referenced well from an unorthodox surface location at 65'FNL and 300'FEL to an orthodox bottom-hole location within the NE/4 of Section 27, T32N, R10W.

The NMOCDD has approved Meridian's application to directionally drill the referenced well from an unorthodox surface location to an orthodox bottom-hole location as per Order No. R-9314. A copy of this Order is attached.

18. AUTHORIZED BY: *[Signature]*
REGULATORY AFFAIRS

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-5.

(This space for Federal or State office use)

APPROVED BY: *[Signature]* TITLE

CONDITION OF APPROVAL, IF ANY:

no change
need operator change + hold 5-109
FOR Permit to Drilling #11 P. 2

RECEIVED
NOV 8 1990
OIL COAL DIV.
DIST. 3

APPROVED
NOV 05 1990
DATE *[Signature]*

Well Name: 271 Payne
 Sec. 27, T32N, R10W
 Basin-Fruitland Coal

65'FNL 300'FEL
 San Juan County, NM
 Elevation: 6924'GL

Formation Tops:

	<u>TVD</u>	<u>MD</u>
Nacimiento	- Surface	- Surface
Kick-Off Point	- 1911'	- 1911'
Ojo Alamo	- 1958'	- 1958'
Kirtland	- 1995'	- 1996'
Fruitland	- 3320'	- 3672'
Intermediate Casing	- 3452'	- 3804'
Fruitland Coal Top	- 3470'	- 3822'
Fruitland Coal Bottom	- 3747'	- 4099'
Pictured Cliffs	- 3749'	- 4101'
Total Depth	- 3732'	- 4084'

General Well Plan:**Drilling:**

The well be drilled vertically with a 12 1/4" hole to a surface casing point at 900'MD. 9 5/8" casing will be run to surface and cemented in place. After 12 hours, the well will be drilled vertically with an 8 3/4" hole to a kick-off point at 1911'MD. The well will then be kicked off in direction of S35W and will build angle at 12 deg/100' to 45 deg (2286'MD/2248'TVD). A 45 deg tangent will be drilled to 3229'MD (2915'TVD). At the end of the tangent section, the well will be dropped from 45 deg to vertical at 12 deg/100' (3604'MD/3252'TVD). A 200' vertical section will be drilled to casing point at 3804'MD (3452'TVD). 7" casing will be run to surface and cemented in place.

The well is planned for a bottom hole location of 840'FNL and 840'FEL but is approved for a bottom hole location within the orthodox boundaries of the NE/4.

Completion:

The Fruitland Coal interval will be drilled vertically and completed open-hole.

<u>TVD (ft)</u>	<u>MD (ft)</u>	<u>Azimuth</u>	<u>Displacement</u>	<u>FNL</u>	<u>FEL</u>
0	0	N00E	0'	65'	300'
900	900	N00E	0'	65'	300'
1911	1911	N00E	0'	65'	300'
2248	2286	S35W	139'	179'	380'
2915	3229	S35W	806'	725'	762'
3252	3604	S35W	945'	840'	840'
3452	3804	S35W	945'	840'	840'
3732	4084	S35W	945'	840'	840'

Logging Program: Mud logs from 3804' MD (3452' TVD) to total depth at 4084' MD (3732' TVD).

Mud Program:

<u>Interval (MD)</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Visc.</u>	<u>Fl. Loss</u>
0' - 900'	Spud	8.4 - 9.0	40-45	NC
900' - 3452'	Non-Dispersed	8.4 - 9.0	30-38	10-15
3452' - 4084'	Formation Water	8.4	N/A	NC

Casing Program:

<u>Hole Size</u>	<u>Interval (MD)</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>
12 1/4"	0' - 900'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3452'	7"	20.0#	K-55
6 1/4"	3302' - 4084'	5 1/2"	15.5#	K-55

Tubing Program:

<u>Interval (MD)</u>	<u>Tubing Size</u>	<u>Weight</u>	<u>Grade</u>
0' - 4084'	2 7/8"	6.5#	J-55

Float Equipment:

9 5/8" Surface Casing: Saw Tooth Guide Shoe on bottom. Centralizers will be run in accordance with Onshore Order #2.

7" Intermediate Casing: Guide Shoe on bottom. Float Collar run one joint off bottom. Cement Plug Baffle run to joints off bottom. Standard Centralizers will be run every other joint above the shoe to the base of the surface casing. Two Turbolizing Type Centralizers will be run one joint above and below the base of the Ojo Alamo at 1958' MD (1958' TVD).

5 1/2" Production Casing: Float Shoe on bottom and a pre-drilled liner run to the 7" casing with a minimum of 150' overlap. Liner hanger is a double slip grip type.

Wellhead Equipment:

9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly

Cementing:

9 5/8" Surface Casing: Cement with 720 sacks of Class "B" cement with 1/4# flocele/sack and 3% calcium chloride (850 ft³ of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 1000 psi for 30 minutes.

7" Intermediate Casing: Lead with 710 sacks of 65/35 Class "B" pozmix with 6% gel, 2% calcium chloride, 5#/sack gilsonite and 1/4# flocele/sack (1257 ft³). Tail with 150 sacks of Class "B" with 2% calcium chloride (177 ft³). 1434 ft³ of slurry, 150% excess to circulate to surface. If hole conditions permit, a 600 ft. spacer will be run ahead of the cement slurry to avoid mud contamination of the cement. WOC 12 hours. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC.

5 1/2" Production Liner: Uncemented liner.

BOP and Tests:

Surface to Intermediate Total Depth: An 11" 2000 psi minimum double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, rams will be tested to 1000 psi for 30 minutes.

Intermediate Total Depth to Total Depth: A 7 1/16" 2000 psi minimum double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, blind rams and casing will be tested to 2500 psi for 30 minutes; and all pipe rams and casing will be tested to 2500 psi for 30 minutes each.

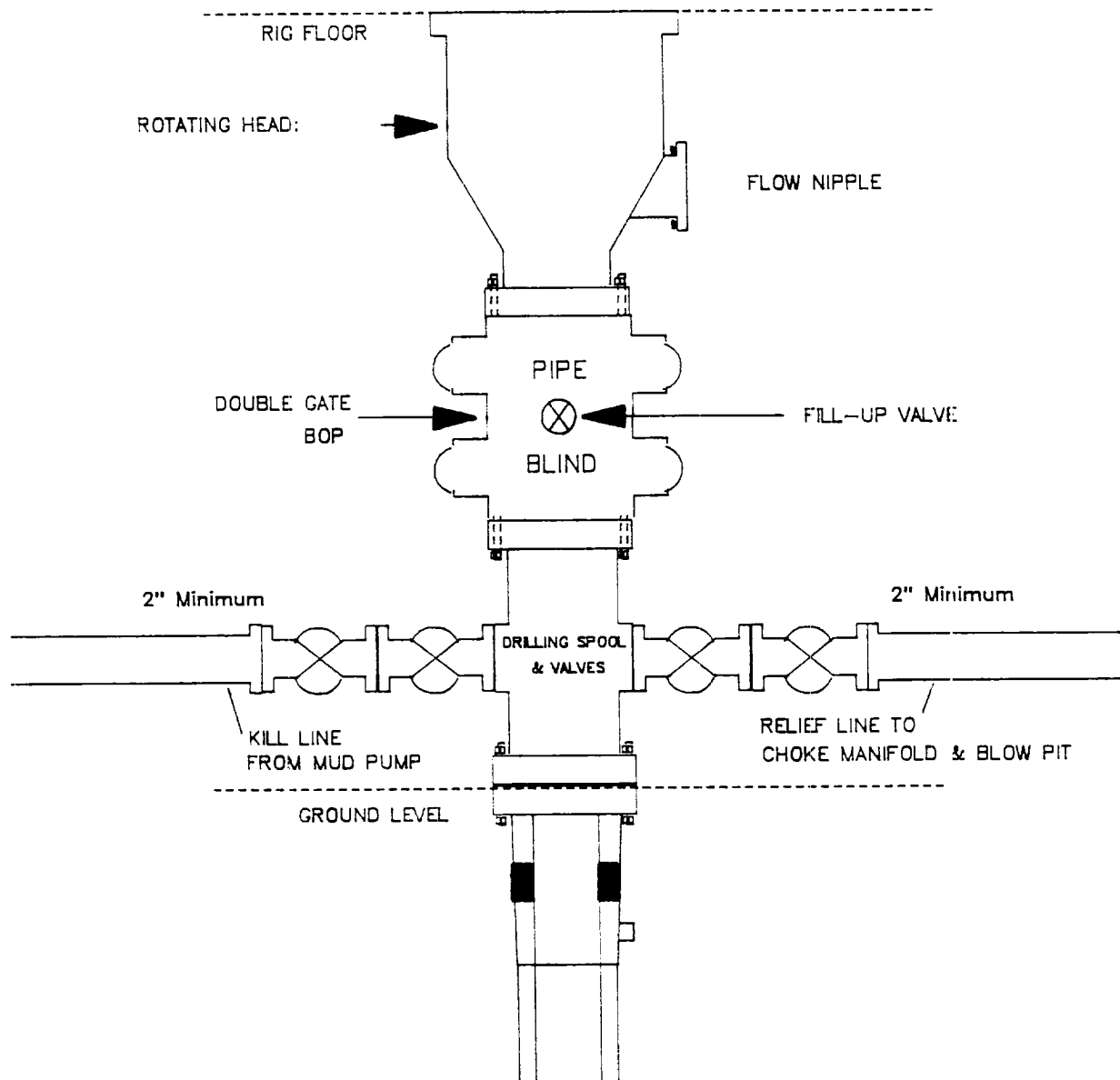
Surface to Total Depth: Choke manifold (Reference Figure #3).

General: Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Addition Information:

- * The Fruitland Coal formation will be completed.
- * Anticipated Fruitland pore pressure is 1553 psi.
- * This gas is dedicated.
- * The E/2 of Section 27 is dedicated to this well.
- * New casing will be utilized.
- * Cementing vendor will provide the BLM with a
 chronological log including the pump rate, pressure,
 slurry density and volume for all cement jobs.
- * Pipe movement, either rotation or reciprocation,
 will be done if hole conditions permit.

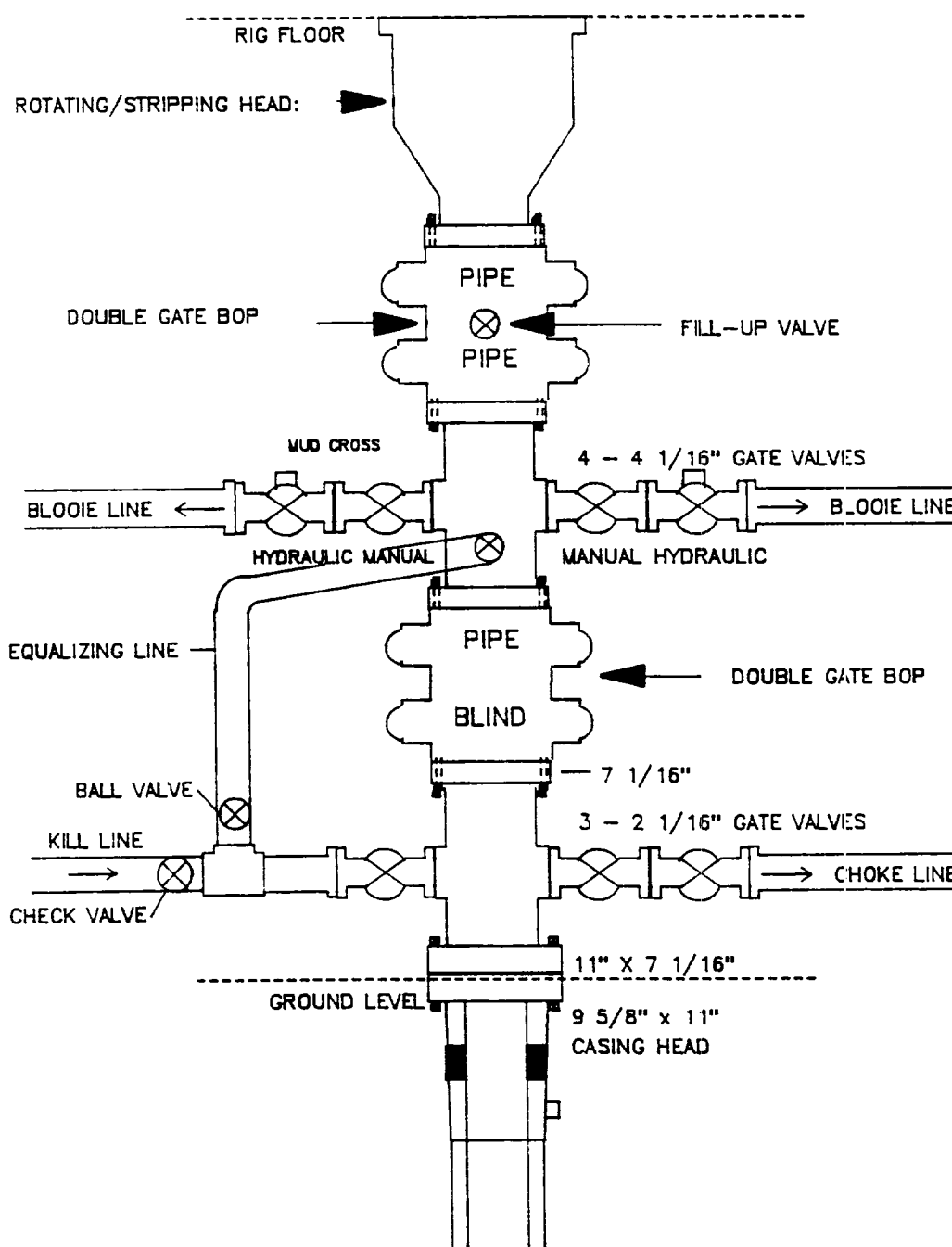
MERIDIAN OIL INC.
Drilling Rig
BOP Configuration



Minimum BOP installation for a typical Fruitland Coal well from surface to Intermediate casing point. 11" Bore (10" Nominal), 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 equivalent rotating head to be installed on the top of BOP. All equipment is 2000psi working pressure/or greater.

Figure #1

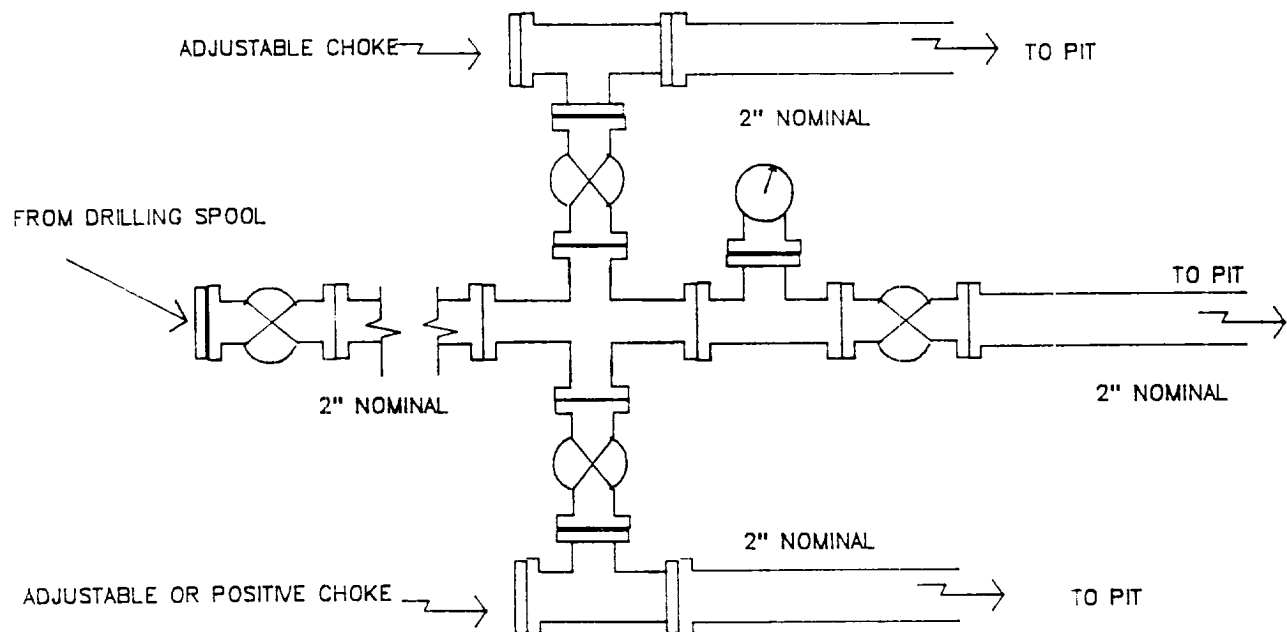
MERIDIAN OIL INC. Completion Rig BOP Configuration



Minimum BOP installation for a typical open-hole Fruitland Coal well from intermediate TD to TD. 7 1/16" Bore (6" Nominal), 2000psi working pressure/ or greater double stack double gate BOP equipped with three pipe and one blind ram.

Figure #2

MERIDIAN OIL INC.
Typical Fruitland Coal Well
Choke Manifold Configuration



Minimum choke manifold installation for a typical Fruitland Coal well from surface to Total Depth. 2", 2000psi working pressure equipment with two chokes.

Figure #3

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 10055
Order No. R-9314

APPLICATION OF MERIDIAN OIL, INC.
FOR A NON-STANDARD GAS PRORATION
UNIT, AN UNORTHODOX COAL GAS WELL
LOCATION, AND DIRECTIONAL DRILLING,
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22 and September 19, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 2nd day of October, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Meridian Oil, Inc., seeks approval of an unorthodox coal gas well location for its Payne Well No. 271, to be drilled 65 feet from the North line and 300 feet from the East line (Unit A) of Section 27, Township 32 North, Range 10 West, NMPM, Cedar Hill-Fruitland Basal Coal Gas Pool, San Juan County, New Mexico, Lots 1 through 8 (E/2 equivalent)

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of said Section 27 to be dedicated to said well forming a non-standard 305.03-acre gas spacing and proration unit for said pool. IN THE ALTERNATIVE, the applicant seeks authority to directionally drill said well from the above-described surface location to a standard bottomhole coal gas well location within the NE/4 equivalent of said Section 27.

(3) At the time of the hearing, the applicant requested the Division only consider the directional drilling option and requested the dismissal of its request for an unorthodox location.

(4) The Cedar Hill-Fruitland Basal Coal Gas Pool is spaced on 320 acres pursuant to Division Order No. R-7588, as amended.

(5) The proposed non-standard gas proration unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey.

(6) The entire non-standard gas proration unit may reasonably be presumed productive of gas from the Cedar Hill-Fruitland Basal Coal Gas Pool and the entire non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid well.

(7) The directional drilling portion of this application is necessitated due to the severe and numerous topographic restrictions existing in the immediate area.

(8) No offset operator and/or interest owner appeared in opposition to the application.

(9) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the Cedar Hill-Fruitland Basal Coal Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

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(10) The applicant should be required to determine the subsurface location of the kick-off point in the wellbore prior to directional drilling and should subsequently be required to conduct an accurate wellbore survey during or upon completion of drilling operations from the kick-off point to total depth to determine its true depth and course.

(11) The applicant should be required to notify the supervisor of the Aztec district office of the Division of the date and time said directional surveys are to be conducted so that they may be witnessed. The applicant should further be required to provide a copy of said directional surveys to the Santa Fe and Aztec offices of the Division upon completion.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil, Inc., is hereby authorized to directionally drill its Payne Well No. 271 from a surface location 65 feet from the North line and 300 feet from the East line (Unit A) of Section 27, Township 32 North, Range 10 West, NMPM, Cedar Hill-Fruitland Basal Coal Gas Pool, San Juan County, New Mexico, to a standard bottomhole coal gas well location within the NE/4 equivalent of said Section 27.

(2) A 305.03-acre non-standard gas proration unit, also hereby approved, comprising Lots 1 through 8 (E/2 equivalent) of said Section 27 shall be dedicated to the above-described well.

(3) The applicant shall determine the subsurface location of the kick-off point in the wellbore prior to directional drilling and shall conduct an accurate wellbore survey during or upon completion of drilling operations from the kick-off point to total depth to determine its true depth and course.

(4) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time said directional surveys are to be conducted so that they may be witnessed. The applicant shall provide a copy of said directional surveys to the Santa Fe and Aztec offices of the Division upon completion.

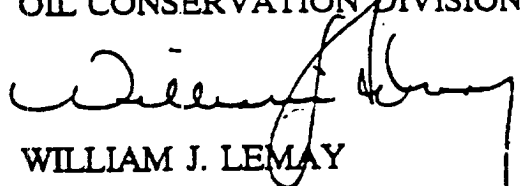
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(5) The unorthodox coal gas well location portion of this application is hereby dismissed.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L