



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

September 2, 1998

Burlington Resources Oil & Gas Company
P.O. Box 4289
Farmington, New Mexico 87499-4289
Attention: Peggy Bradfield

RECEIVED
SEP 1 1998

OIL CON. DIV.
SEP 2 1998

Administrative Order NSL-4127

Dear Ms. Bradfield:

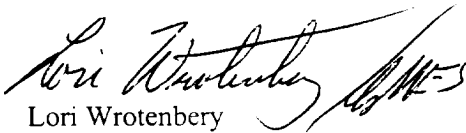
Reference is made to your application dated August 20, 1998 for an unorthodox Chacra gas well location for Burlington Resources Oil & Gas Company's existing Canyon Largo Unit Well No. 388 (API No. 30-039-25277), which was drilled in 1983 and completed in the Blanco-Mesaverde Pool with a 3000-foot horizontal drainhole under the provisions of Division Order No. R-9911, issued in Case No. 10729 dated June 10, 1993. The surface location of this well is 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. The SW/4 of Section 3 is to be dedicated to the well in order to form a standard 160-acre gas spacing and proration unit for the Otero-Chacra Pool.

It is our understanding that this well's horizontal completion within the Blanco-Mesaverde is to be abandoned and this well is to be recompleted uphole into the Chacra formation. The proposed perforations within the Chacra interval are above the directionally drilled section of this well. Pursuant to Rule 104.C(3)(a) of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), this location is also unorthodox. The application has been duly filed under the provisions of Division General Rule 104.F.

By the authority granted me under the provisions of Division General Rule 104.F(2), the above-described unorthodox gas well location is hereby approved.

Further, Division Order No. R-9911 shall be placed in abeyance until further notice.

Sincerely,


Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec /
U. S. Bureau of Land Management - Farmington
File: Case No. 10729

BURLINGTON RESOURCES

SAN JUAN DIVISION

August 20, 1998

Federal Express

Mr. Michael Stogner
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Canyon Largo Unit #388
2040'FSL, 1525'FWL, Section 3, T-25-N, R-6-W, Rio Arriba County
30-039-25277

Dear Mr. Stogner:

This is a request for administrative approval for a non-standard gas well location in the Otero Chacra pool.

Burlington Resources intends to plug and abandon the Blanco Mesa Verde pool in the Canyon Largo Unit #388 and recomplete in the Otero Chacra pool. A cast iron bridge plug will be set at 5240' above the directionally drilled section (see attached wellbore diagram) and cement placed on the bridge plug to plug and abandon the Mesa Verde.

Production from the Otero Chacra is included in a 160 acre gas spacing unit comprising of the southwest quarter (SW/4) of Section 3. This well was originally drilled and completed in the Blanco Mesa Verde pool under Order R-9911, which included the non-standard location and the horizontal drilling to 2462'FSL, 683'FEL in Section 3, T-25N, R-6-W.

To comply with the New Mexico Oil Conservation Division rules, we are submitting the following for your approval of this non-standard location:

1. C-102 plat showing location of the well;
2. Copy of Well Completion Log for original completion;
3. Plat showing offset owners/operators – Burlington is the offset operator;
4. Order R-9911

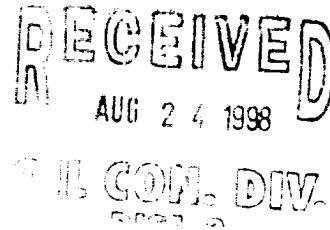
Please let me know if you have any questions concerning this application.

Sincerely yours,



Peggy Bradfield
Regulatory/Compliance Administrator

xc: New Mexico Oil Conservation Division – Aztec
Bureau of Land Management – Farmington



Form 0-10
Revised February 21, 1960
Instruction 1008, 1009, 1010

Submit to Appropriate District Office
State Lease - 4 COCIS
Free Lease - 3 COCIS

2058
02 JUL 14 AM 9:36 AMENDED REFOR

WELL LOCATION AND ACREAGE DEDICATION PLAN

OWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div data-bbox="332 1112 1120 1264" data-label="Text"> <p>NOT RESURVEYED. PREPARED BY A PLAT DATED 3-26-93 BY NEALE C. EDWARDS</p> </div>		<div data-bbox="774 1053 1107 1264" data-label="Text"> <p>RECEIVED AUG 24 1998 OIL CON. DIV.</p> </div>		<div data-bbox="1149 1012 1550 1072" data-label="Text"> <p>OPERATOR CERTIFICATE</p> </div>	
		<div data-bbox="1149 1072 1550 1453" data-label="Text"> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Peggy A. Bradfield</i> Signature Peggy A. Bradfield Printed Name Regulatory Administrator Title</p> </div>			
<div data-bbox="318 1483 1149 1885" data-label="Diagram"> </div>		<div data-bbox="1149 1453 1550 1653" data-label="Text"> <p>Date</p> <p>28 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was located from field notes or actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> </div>			
<div data-bbox="1149 1653 1550 1985" data-label="Text"> <p>JUNE 25, 1998 Date of Survey</p> <p><i>Neale C. Edwards</i> Signature and Seal of</p> <p>NEALE C. EDWARDS NEW MEXICO 6852 REG. 6852 Certificate No. 6852 PROFESSIONAL SURVEYOR</p> </div>					

UNITED STATES

SUBMIT IN DUPLICATE

FOR APPROVED
OMB NO. 1004-0137
Date: December 31, 1991

CONFIDENTIAL

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		5. NAME DESIGNATION AND SERIAL NO. SF-078885	
2. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. SERV. <input type="checkbox"/> Other <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. NAME OF OPERATOR Meridian Oil Inc		7. UNIT AGREEMENT NAME Canyon Largo Unit	
4. ADDRESS AND TELEPHONE NO. PO Box 4289, Farmington, NM 87499 (505) 328-9700		8. FARM OR LEASE NAME, WELL NO. Canyon Largo Unit #388	
9. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 2040' FSL, 1625' FWL At top prod. interval reported below At total depth 2462' FSL, 683' FEL Sec 3, T-25-N, R-6-W		10. FIELD AND POOL, OR WILDCAT Blanco Mesaverde	
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec 3, T-25-N, R-6-W		12. COUNTY OR PARISH Rio Arriba	
13. STATE NM		14. PERMIT NO. DD R-9911	
15. DATE SPUN 8-27-93		16. DATE T.D. REACHED 9-14-93	
17. DATE COMPL. (Ready to prod.) 9-25-94		18. ELEVATIONS (OF. RKB. RT. GR. ETC.) 6741 GR	
19. TOTAL DEPTH, MD & TVD 5104-MD 5100 TVD		20. PLUG BACK T.D., MD & TVD	
21. IF MULTIPLE COMPL., HOW MANY?		22. INTERVALS DRILLED BY 10-5404	
23. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) 5190-5196 Mesaverde		24. WAS DIRECTIONAL SURVEY MADE	
25. TYPE ELECTRIC AND OTHER LOGS RUN GR		26. WAS WELL CORED No	

CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9 5/8	36#	226	12 1/4	236 cu.ft.	
7	23#	5335	7 7/8	1753 cu.ft.	

LINER RECORD				TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SIZE	DEPTH SET (MD)	PACKER SET (MD)
				2 7/8	5229	

PERFORATION RECORD (Interval, size and number)		ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
5190-5196		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
			None

27. PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
11-30-93		Flowing		SI			
DATE OF TEST	HOURS TESTED	CHOKES SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
11-30-93	3	3/4	→		TSTM		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
	SI-492	→		TSTM			
28. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)						TEST WITNESSED BY	
To be Sold							

29. LIST OF ATTACHMENTS	
None	
30. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.	
SIGNED <u>[Signature]</u>	TITLE Regulatory Affairs
DATE 8-24-94	

*(See Instructions and Spaces for Additional Data on Reverse Side)

BURLINGTON RESOURCES OIL AND GAS COMPANY

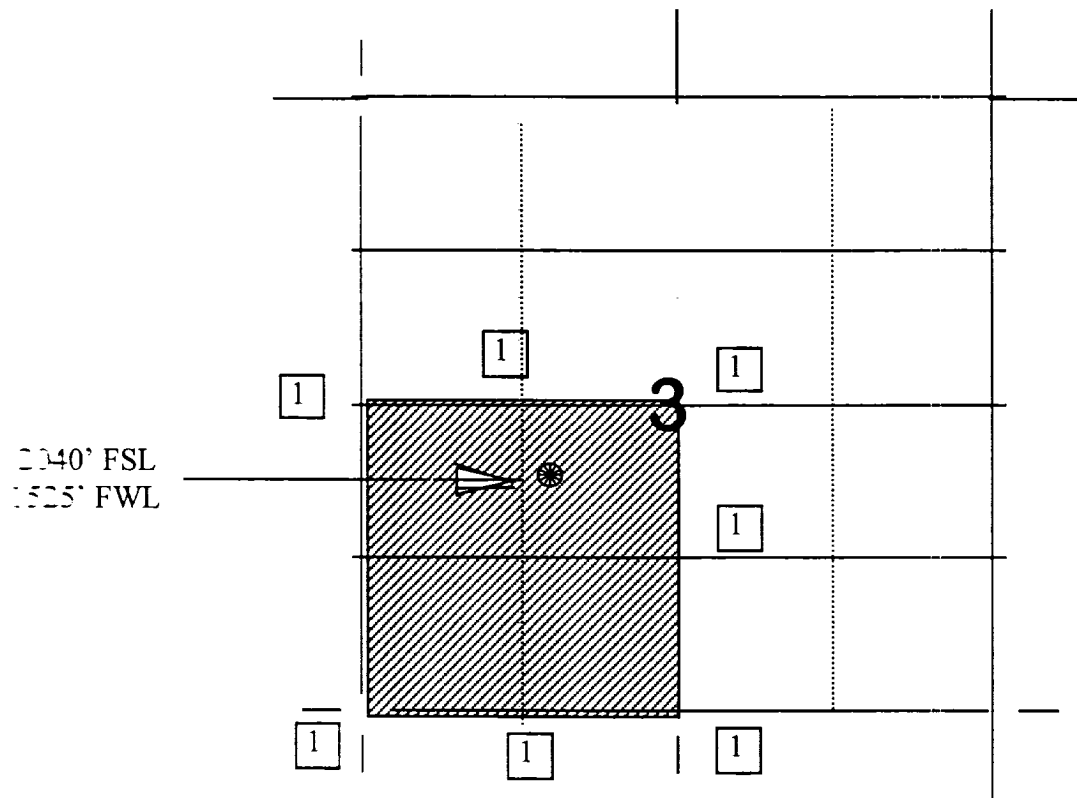
OFFSET OPERATOR/OWNER PLAT

Canyon Largo Unit #388

Non Standard Location

Chacra Formation Well

Township 25 North, Range 6 West



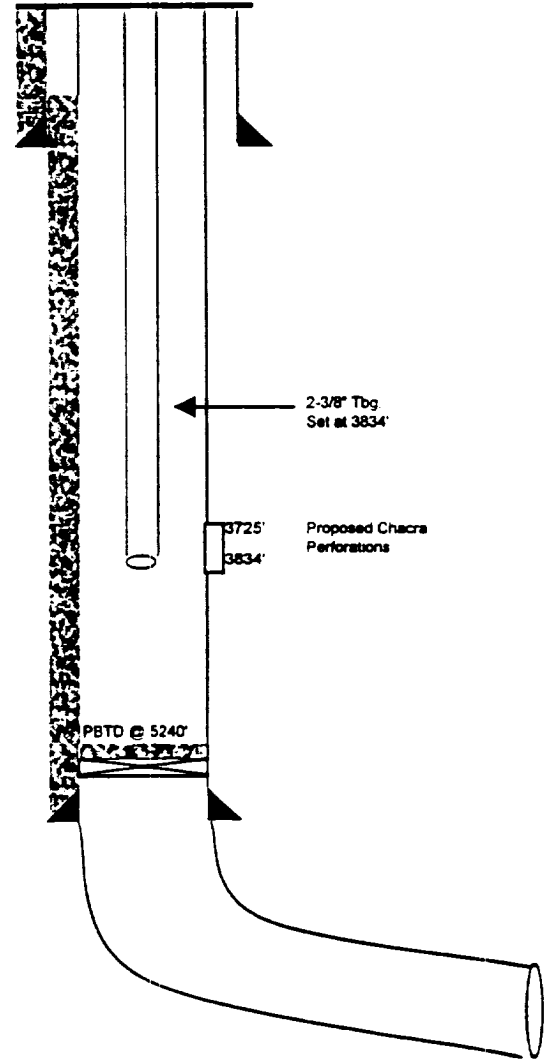
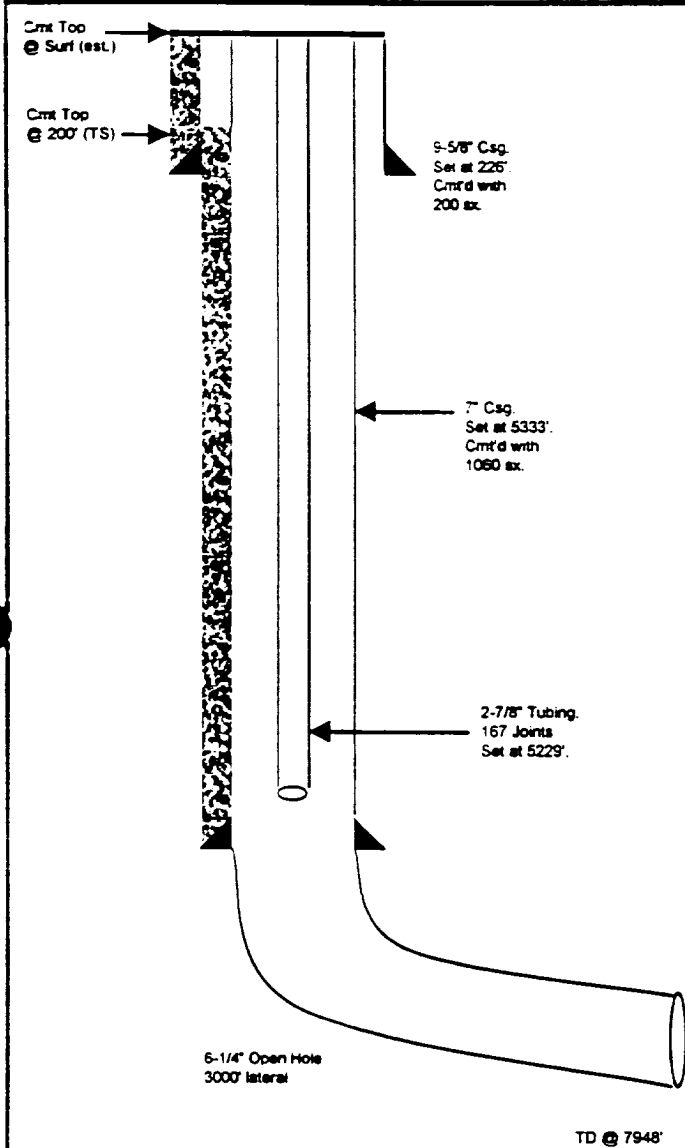
1) Burlington Resources

Canyon Largo Unit #388

Lat: 36° - 25.59816'/Long: 107° - 27.46032'
Unit K, Section 3, T25N, R6W
Rio Arriba County, NM

Current Schematic

Proposed Schematic



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. 10729
Order No. R-9911

APPLICATION OF MERIDIAN OIL INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT, SPECIAL OPERATING
RULES THEREFOR, A SPECIAL PROJECT GAS
ALLOWABLE AND A NON-STANDARD GAS SPACING
AND PRORATION UNIT, RIO ARriba COUNTY,
NEW MEXICO.

RECEIVED

JUN 1 5 1993

OIL CON. DIV
DIST. 3

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 20, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of June, 1993, 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 authority to initiate a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Pool underlying all of Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, thereby creating a non-standard 642.52-acre gas spacing and proration unit for said pool.

(3) The applicant proposes to drill its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

(4) The applicant further seeks:

- a) the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of said well's producing interval such that it can be no closer than 790 feet from the outer boundary of Section 3;
- b) approval of a 642.52-acre non-standard gas spacing and proration unit comprising all of Section 3;
- c) a special project gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula.

(5) The proposed well is located within the boundaries of the Blanco-Mesaverde Pool and is therefore subject to the Special Rules and Regulations for said pool and the General Rules for the Prorated Gas Pools of New Mexico, both contained within Division Order No. R-8170, as amended.

(6) According to applicant's geologic evidence, the proposed well is located at the southwest edge of the Blanco-Mesaverde Pool. The proposed well is designed to test the effectiveness of horizontal drilling in recovering gas from an area of the pool which has limited potential for gas recovery from conventional vertical wellbores.

(7) The potentially productive zone in the subject wellbore is the Point Lookout interval. The Point Lookout interval is characterized by natural fractures oriented in a north-northeast south-southwest direction.

(8) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore should encounter a substantially greater number of natural fractures within the Point Lookout interval than would a conventional wellbore, which should substantially increase the productivity of the subject well and which should ultimately result in the recovery of a greater amount of gas from the proposed project area, thereby preventing waste.

(9) The evidence further indicates that the subject wellbore, which should traverse both the W/2 and E/2 of Section 3, should effectively drain and develop all of Section 3.

(10) There is currently no other wellbore in Section 3 producing from the Blanco-Mesaverde Pool.

(11) The proposed well is located within the Canyon Largo Unit, a federal exploratory unit formed in 1953 which is currently operated by the applicant.

(12) The applicant is the only working interest owner in Section 3.

(13) Merrion Oil and Gas Corporation and Robert Bayless, the only two offset operators, were notified of the application in this case and did not appear at the hearing in opposition.

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

(15) The aforementioned prescribed area limiting the horizontal displacement of the wellbore would allow for flexibility, serve to minimize risk, maximize the success of such a completion, and would serve to protect correlative rights.

(16) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Meridian Oil Inc. for a high angle/horizontal directional drilling project should be approved.

(17) The subject well and project area should be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.

(18) The applicant should be required to determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.

(19) The applicant should notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(20) The applicant should be required to submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, by drilling its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

PROVIDED HOWEVER THAT, no portion of the horizontal portion of the wellbore shall be located closer than 790 feet from the outer boundary of the project area.

(2) All of Section 3 shall be dedicated to the above-described well forming a non-standard 642.52-acre gas spacing and proration unit, also hereby approved.

(3) The subject well and project area shall be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.

(4) The applicant shall determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.

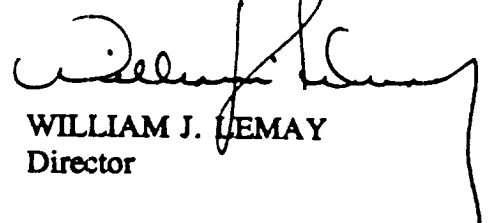
(5) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

(7) Jurisdiction is hereby 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