

State of New Mexico  
**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
Santa Fe, New Mexico 87505



**BRUCE KING**  
GOVERNOR

**ANITA LOCKWOOD**  
CABINET SECRETARY  
**MATTHEW BACA**  
DEPUTY SECRETARY

November 19, 1991

**KELLAHIN, KELLAHIN & AUBREY**  
Attorneys at Law  
P. O. Drawer 2265  
Santa Fe, New Mexico 87504

RE: CASE NO. 10392  
ORDER NO. R-9613

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

A handwritten signature in cursive script that reads "Florene".

Florene Davidson  
OC Staff Specialist

FD/sl

cc: BLM - Farmington  
OCD - Aztec

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**VILLAGRA BUILDING - 408 Galisteo**  
Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830  
Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465

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**2040 South Pacheco**  
Office of the Secretary  
827-5950  
Administrative Services  
827-5925  
Energy Conservation & Management  
827-5900  
Mining and Minerals

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**LAND OFFICE BUILDING - 310 Old Santa Fe Trail**  
Oil Conservation Division  
P.O. Box 2088 87504-2088  
827-5800

KELLAHIN, KELLAHIN AND AUBREY

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

W. THOMAS KELLAHIN  
KAREN AUBREY

JASON KELLAHIN  
OF COUNSEL

November 5, 1991

Mr. Michael E. Stogner  
Oil Conservation Division  
310 Old Santa Fe Trail  
Room 206  
Santa Fe, New Mexico 87501

HAND DELIVERED

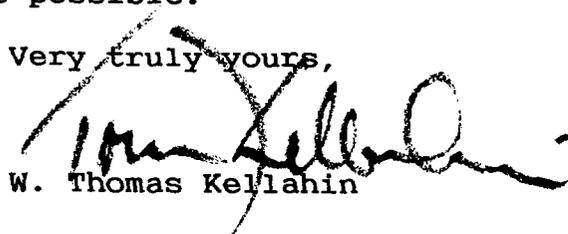
RE: Meridian Oil Inc.,  
Piedra Lumbre No. 1 Well  
High Angle (Mancos)  
NM OCD No. 10392

Dear Mr. Stogner:

In accordance with your request of October 31, 1991, please find enclosed a copy of Federal Oil and Gas Lease NM 86448, effective June 1, 1991 which shows that Meridian Oil Inc. is the 100% owner of record title for all of Section 22.

Please call me if you have any questions. Because of pending bad weather, Meridian is most anxious to spud this well as soon as possible.

Very truly yours,

  
W. Thomas Kellahin

WTK/jcl  
Enclosure  
cc: Alan Alexander - Meridian Oil

ltra1105.330

BUREAU OF LAND MANAGEMENT  
**OFFER TO LEASE AND LEASE FOR OIL AND GAS**

NM NM 86448

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

**READ INSTRUCTIONS BEFORE COMPLETING**

1. Name **LAND/MANAGEMENT CONSULTANTS INC**  
 Street **PO BOX 1463**  
 City, State, Zip Code **CORRALES NM 87048**

2. This application/offer/lease is for: (Check only One)  PUBLIC DOMAIN LANDS  ACQUIRED LANDS (percent U.S. interest \_\_\_\_\_)  
 Surface managing agency if other than BLM: \_\_\_\_\_ Unit/Project \_\_\_\_\_  
 Legal description of land requested: \_\_\_\_\_ \*Parcel No.: \_\_\_\_\_ \*Sale Date (m/d/y): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
**\*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.**  
 T. \_\_\_\_\_ R. \_\_\_\_\_ Meridian \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_

Amount remitted: Filing fee \$ \_\_\_\_\_ Rental fee \$ \_\_\_\_\_ Total acres applied for \_\_\_\_\_  
 Total \$ \_\_\_\_\_

**DO NOT WRITE BELOW THIS LINE**

3. Land included in lease:  
 T. **19N** R. **02W** Meridian **NMPM** State **NM** County **SANDOVAL**  
 SECTION:  
**15 NW;**  
**22 ALL;**

Total acres in lease: **800.0000**  
 Rental retained: **\$1,200.00**

XXXXXXXXXXXXXXXXXXXX  
 Rental retained \$ \_\_\_\_\_

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to buy and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid nomination and those specified on this form.

Type and primary term of lease:

- Noncompetitive lease (ten years)
- Competitive lease (five years)
- Other \_\_\_\_\_

THE UNITED STATES OF AMERICA

by *Alicia S. Rayford* **MAY 20 1991**  
 (Signing Officer)  
**Acting CHIEF, OIL AND GAS LEASING UNIT**  
 (Title)

EFFECTIVE DATE OF LEASE **JUN 01 1991**

(a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect in either public domain or acquired lands do not exceed 246,000 acres in Federal oil and gas leases in the same State, of which not more than 200,000 acres are held under option, or 300,000 acres in leases and 200,000 acres in options in either leasing District in Alaska; (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer is made but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or in part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1801 makes 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.

Duly executed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
(Signature of Lessee or Attorney-in-fact)

LEASE TERMS

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre, or fraction thereof are:

- (a) Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
(b) Competitive lease, \$1.50; for primary term; thereafter \$2.00;
(c) Other, see attachment, or as specified in regulations at the time this lease is issued.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), or (c) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

- (a) Noncompetitive lease, 12 1/2 %;
(b) Competitive lease, 12 1/2 %;
(c) Other, see attachment; or as specified in regulations at the time this lease is issued.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plans and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, leases, regulations, accounting records, and documentation, including billings, invoices, or similar documents, which are subject

costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated, or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessee.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessor shall immediately contact lessee. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense of loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessor nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such times as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of productive wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver, shall not prevent later cancellation for the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGRMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assigns of the respective parties hereto.

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
WASHINGTON, D.C. 20250

Form 3000-3  
(June 1988)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0034  
Expires: August 31, 1989

ASSIGNMENT OF RECORD TITLE INTEREST IN A  
LEASE FOR OIL AND GAS OR GEOTHERMAL RESOURCES

Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.)  
Act for Acquired Lands of 1947 (30 U.S.C. 351-359)  
Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025)  
Department of the Interior Appropriations Act, Fiscal Year 1981 (42 U.S.C. 6508)

NM-9667-1-10  
Lease Serial No.  
NM 86448  
Lease Effective Date  
(Anniversary Date)  
JUNE 1, 1991  
New Serial No.

Type or print plainly in ink and sign in ink.

PART A: ASSIGNMENT

1. Assignee\* Meridian Oil Inc.  
Street P. O. Box 4289  
City, State, ZIP Code Farmington, New Mexico 87499-4289

\*If more than one assignee, check here  and list the name(s) and address(es) of all additional assignees on the reverse of this form or on a separate attached sheet of paper.

This record title assignment is for: (Check one)  Oil and Gas Lease, or  Geothermal Lease

Interest conveyed: (Check one or both, as appropriate)  Record Title,  Overriding Royalty, payment out of production or other similar interests or payments

2. This assignment conveys the following interest:

Land Description <small>Additional space on reverse, if needed. Do not submit documents or agreements other than this form; such documents or agreements shall only be referenced herein.</small>	Percent of Interest			Percent of Overriding Royalty or Similar Interests	
	Owned	Conveyed	Retained	Reserved	Previously reserved or conveyed
	b	c	d		
TOWNSHIP 19 NORTH, RANGE 2 WEST, NMPM SECTION 15: NW¼ SECTION 22: ALL  Containing 800.00 Acres, More or Less  Sandoval County, New Mexico	100%	100%	NONE	NONE	NONE

FOR BLM USE ONLY—DO NOT WRITE BELOW THIS LINE

UNITED STATES OF AMERICA

This assignment is approved solely for administrative purposes. Approval does not warrant that either party to this assignment holds equitable title to this lease.

Assignment approved for above described lands;

Assignment approved for attached land description

Assignment approved effective \_\_\_\_\_

Assignment approved for land description indicated on reverse of this form.

Part A (Continued): ADDITIONAL SPACE for Names and addresses of additional assignees in Item No. 1, if needed, or for Land needed.

PART B: CERTIFICATION AND REQUEST FOR APPROVAL

- 1. The assignor certifies as owner of an interest in the above designated lease that he/she hereby assigns to the above assignee(s) the rights specified above.
2. Assignee certifies as follows: (a) Assignee is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or territory thereof.
3. Assignee's signature to this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described by

For geothermal assignments, an overriding royalty may not be less than one-fourth (1/4) of one percent of the value of output, nor greater than 50 percent of the rate of production due to the United States when this assignment is added to all previously created overriding royalties (43 CFR 3241).

I certify that the statements made herein by me are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 10TH day of JUNE, 19 91

Executed this 28th day of June, 19 91

Name of Assignor as shown on current lease LAND/MANAGEMENT CONSULTANTS, INC.

Assignor [Signature] Please type or print

Assignee MERIDIAN OIL INC. [Signature]

BY: L. MICHAEL CAMPBELL, PRESIDENT [Signature]

or Attorney-in-fact [Signature]

P.O. BOX 1463 [Signature]

Kent Beers (Signature) Attorney-in-Fact

CORRALES, NM 87048 (Assignor's Address)

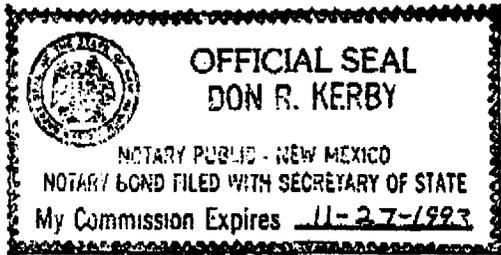
(City) (State) (Zip Code)

STATE OF NEW MEXICO    )  
                                  )  
COUNTY OF BERNALILLO    )            ss.

The foregoing instrument was acknowledged before me this  
10th day of JUNE, 1991 by L. Michael  
Campbell, President of Land/Management Consultants, Inc., a  
New Mexico Corporation, on behalf of said corporation.

  
\_\_\_\_\_  
Notary Public

My Commission expires 11-27-93



UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 COMPETITIVE OIL AND GAS OR  
 GEOTHERMAL RESOURCES LEASE BID  
 30 U.S.C. 181 et seq.; 30 U.S.C. 351-359;  
 30 U.S.C. 1001-1025; 42 U.S.C. 6508

NM 86448

FORM APPROVED  
 OMB NO. 1004-0074  
 Expires: Feb. 28, 1991

State	NM	Date of sale	4-17-91
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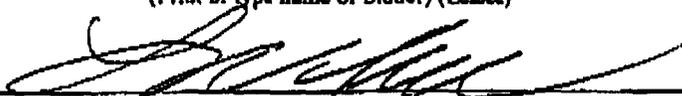
PARCEL NUMBER <i>(Include name of known geothermal resource area if bid is for geothermal resources lease)</i>	AMOUNT OF BID <i>(See instructions on reverse)</i>	
	TOTAL BID	PAYMENT SUBMITTED WITH BID
9104036	\$7,675.00	\$2,875.00

The appropriate regulations applicable to this bid are: (1) for oil and gas leases—43 CFR 3120; (2) for National Petroleum Reserve-Alaska (NPR-A) leases—43 CFR 3132; and (3) for Geothermal resources leases—43 CFR 3220. *(See details concerning lease qualifications on reverse.)*

I CERTIFY THAT I have read and am in compliance with, and not in violation of, the lessee qualification requirements under the applicable regulations for this bid.

I CERTIFY THAT this bid is not in violation of 18 U.S.C. 1860 which prohibits unlawful combination or intimidation of bidders. I further certify that this bid was arrived at independently and is tendered without collusion with any other bidder for the purpose of restricting competition.

**IMPORTANT NOTICE:** Execution of this form, where the offer is the high bid, constitutes a binding lease offer, including all applicable terms and conditions. Failure to comply with the applicable laws and regulations under which this bid is made shall result in rejection of the bid and forfeiture of all monies submitted.

<u>LAND/MANAGEMENT CONSULTANTS, INC.</u> (Print or type name of Bidder) (Lessee)	<u>PO BOX 1463</u> (Address of Bidder) (Lessee)
<u></u> (Signature of Bidder) (Lessee)	<u>CORRALES, NM 87048</u> (City, State, and zip code)

Title 18 U.S.C. Section 1001, makes 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.

## QUALIFICATIONS

For leases that may be issued as a result of this sale under the Mineral Leasing Act (The Act) of 1920, as amended, the oral bidder must: (1) Be a citizen of the United States; an association (including partnerships and trusts) of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) Be in compliance with acreage limitation requirements wherein the bidder's interests, direct and indirect, in oil and gas leases in the State identified do not exceed 246,080 acres each in public domain or acquired lands including acreage covered by this bid, of which not more than 200,000 acres are under options. If this bid is submitted for lands in Alaska, the bidder's holdings in each of the Alaska leasing districts do not exceed 300,000 acres, of which no more than 200,000 acres are under options in each district; (3) Be in compliance with Federal coal lease holdings as provided in sec. 2(a)(2)(A) of the Act; (4) Be in compliance with reclamation requirements for all Federal oil and gas holdings as required by sec. 17 of the Act; (5) Not be in violation of sec. 41 of the Act, and (6) Certify that all parties in interest in this bid are in compliance with 43 CFR Groups 3000 and 3100 and the leasing authorities cited herein.

For leases that may be issued as a result of this sale under the Geothermal Steam Act of 1970, as amended, the bidder must: (1) Be a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; and (2) Be in compliance with acreage limitation requirements wherein the bidder's interests, direct and indirect, do not exceed 51,200 acres; and (3) Certify that all parties in interest in this bid are in compliance with 43 CFR Group 3200 and the leasing authority cited herein.

For leases that may be issued as a result of this sale under the Department of the Interior Appropriations Act of 1981, the bidder must: (1) Be a citizen or national of the United States; an alien lawfully admitted for permanent residence; a private, public or municipal corporation organized under the laws of the United States or of any State or Territory thereof; an association of such citizens, nationals, resident aliens or private, public or municipal corporations, and (2) Certify that all parties in interest in this bid are in compliance with 43 CFR Part 3130 and the leasing authorities cited herein.

## INSTRUCTIONS

INSTRUCTIONS FOR OIL AND GAS BID  
(Except NPR-A)

1. Separate bid for each parcel is required. Identify parcel by the parcel number assigned in the *Notice of Competitive Lease Sale*.
2. Bid must be accompanied by the national minimum acceptable bid, the first year's rental and the administrative fee. The remittance must be in the form specified in 43 CFR 3103.1-1. The remainder of the bonus bid, if any, must be submitted to the proper BLM office within 10 working days after the last day of the oral auction.
3. If bidder is not the sole party in interest in the lease for which the bid is submitted, all other parties in interest may be required to furnish evidence of their qualifications upon written request by the authorized officer.
4. This bid may be executed (*signed*) before the oral auction. If signed before the oral auction, this form cannot be modified without being executed again.
5. In view of the above requirement (4), bidder may wish to leave AMOUNT OF BID section blank so that final bid amount may be either completed by the bidder or the Bureau of Land Management at the oral auction.

INSTRUCTIONS FOR GEOTHERMAL OR  
NPR-A OIL AND GAS BID

1. Separate bid for each parcel is required. Identify parcel by the number assigned to a tract.
2. Bid must be accompanied by one-fifth of the total amount of bid. The remittance must be in the form specified in 43 CFR 3220.4 for Geothermal Resources bid and 3132.2 for a NPR-A lease bid.
3. Mark envelope Bid for Geothermal Resources Lease in (*Name KGRA*) or Bid for NPR-A Lease, as appropriate. Be sure correct parcel number of tract on which bid is submitted and date of opening are noted plainly on envelope. No bid may be modified withdrawn unless such modification or withdrawal is received prior to time fixed for opening of bids.
4. Mail or deliver bid to the proper BLM office or place indicated in *Notice of Competitive Lease Sale*.
5. If bidder is not the sole party in interest in the lease for which bid is submitted, all other parties in interest may be required to furnish evidence of their qualifications upon written request by the authorized officer.

## NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this bid for a Competitive Oil and Gas or Geothermal Resources Lease.

**AUTHORITY:** 30 U.S.C. 181 et seq.; 30 U.S.C. 351-359; 30 U.S.C. 1001-1025; 42 U.S.C. 6508

**PRINCIPLE PURPOSE:** The information is to be used to process your bid.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected in accordance with 43 CFR 3120.1-1 and 43 CFR 3220.1-1.

**ROUTINE USES:** (1) The adjudication of the bidder's right to resources for which this bid is made. (2) Documentation for public information. (3) Transfer to appropriate Federal agencies for comment or concurrence is required prior to granting a right to public lands or resources. (4)(5) Information from the record or the record will be transferred to appropriate Federal, State, local, foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

**EFFECT OF NOT PROVIDING INFORMATION:** Disclosure of information is voluntary. If all the information is not provided, your bid may be rejected.

This information will be used to determine the bidder submitting the highest bid.

Response to this notice is required to obtain a benefit.

ATTACHMENT TO EACH ISSUED LEASE

MLA Section 2(a)(2)(A) Compliance

NOTICE TO LESSEE

Provisions of the Mineral Leasing Act (MLA) of 1920, as amended by the Federal Coal Leasing Amendments Act of 1976, affect an entity's qualifications to obtain an oil and gas lease. Section 2(a)(2)(A) of the MLA, 30 U.S.C. 201(a)(2)(A), requires that any entity that holds and has held a Federal coal lease for 10 years beginning on or after August 4, 1976, and who is not producing coal in commercial quantities from each such lease, cannot qualify for the issuance of any other lease granted under the MLA. Compliance by coal lessees with Section 2(a)(2)(A) is explained in 43 CFR 3472.

In accordance with the terms of this oil and gas lease with respect to compliance by the initial lessee with qualifications concerning Federal coal lease holdings, all assignees and transferees are hereby notified that this oil and gas lease is subject to cancellation if: (1) the initial lessee as assignor or as transferor has falsely certified compliance with Section 2(a)(2)(A) or, (2) because of a denial or disapproval by a State Office of a pending coal action, i.e., arms-length assignment, relinquishment, or logical mining unit, the initial lessee as assignor or as transferor is no longer in compliance with Section 2(a)(2)(A). The assignee or transferee does not qualify as a bona fide purchaser and, thus, has no rights to bona fide purchaser protection in the event of cancellation of this lease due to noncompliance with Section 2(a)(2)(A).

Information regarding assignor or transferor compliance with Section 2(a)(2)(A) is contained in the lease case file as well as in other Bureau of Land Management records available through the State Office issuing this lease.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

October 31, 1991

Kellahin, Kellahin & Aubrey  
P.O. Box 2265  
Santa Fe, NM 87504

Attention: W. Thomas Kellahin

*RE: Case No. 10392, Application of Meridian Oil, Inc. for a high angle/horizontal directional drilling pilot project; Section 22, Township 19 North, Range 2 West, Sandoval County, New Mexico.*

Dear Mr. Kellahin:

During the hearing on October 3, 1991 a question was raised about the ownership of said Section 22. At this time I am looking for verification that all of Section 22 is one single lease with common ownership and interest. The lease in question is NM 86448 and a copy of the land plat for this area is enclosed.

Thank you for your assistance in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Stogner".

Michael E. Stogner  
Chief Hearing Officer/Engineer

MES/ag

Enclosures

1 have shown where the various offset interest  
2 owners are in relation to Section 22.

3 A. We notified each owner in each section  
4 that offsets the Section 22. And the coding that  
5 is used is a square block with a number in it  
6 that represents the party that's in that  
7 section. And we notified all of those parties.

8 Q. What type of acreage are you dealing  
9 with in Section 22 in terms of its mineral  
10 ownership?

11 A. This is a federal oil and gas lease.

12 Q. The entire section is the same federal  
13 oil and gas lease?

14 A. Yes --

15 Q. If you'll look at Exhibit A on the  
16 application.

17 A. Yes, sir, it is.

18 Q. So you're dealing with common working  
19 interest and royalty ownership with regards to  
20 the entire section?

21 A. That is correct.

22 Q. Okay. If we look behind the  
23 notification plat, which is the first display  
24 behind Exhibit No. 2, what's the next display,  
25 Mr. Alexander?

1           A.       The striped pattern is also a Meridian  
2 ownership, but it is less than 100-percent  
3 ownership, and it ranges is from 50 to 90 percent  
4 gross working interest. The solid patterns are  
5 100 percent gross working interest.

6           Q.       When I look at Section 22, inside of  
7 that section I see what appear to be boundary  
8 lines following 40 acres, particularly the  
9 northeast quarter being boxed, the north half,  
10 the southeast quarter being boxed, and the  
11 southeast quarter southeast quarter being boxed.  
12 Are these of any significance?

13          A.       No, sir, I don't believe they are.  
14 When I hesitated in answering Mr. Kellahin's  
15 question, I was looking at that same exhibit, but  
16 it is my understanding that this is one federal  
17 oil and gas lease at this point in time. It's a  
18 new lease that has been advertised. And I think  
19 some of those prior lease lines were leases that  
20 had expired in that area.

21          Q.       So it's your understanding at this  
22 point that all of Section 22 is one single lease  
23 with common interest and ownership?

24          A.       Yes, sir. And I will double-check  
25 that, and if it's different from that, I will let

1 you know that. However, we do own 100 percent of  
2 the working interest in the section.

3 Q. Now, in Exhibit A of Exhibit 1 -- I'm  
4 sorry. I should say Exhibit No. 1, the  
5 sub-Exhibit A, you show a lease number. It  
6 appears to be USA, being federal, NM 86448. Is  
7 that your understanding that that is the lease  
8 number that's inclusive of this whole section?

9 A. Yes, sir, that's correct.

10 Q. Does this particular lease extend  
11 outside of this section?

12 A. Mr. Stogner, I don't know the answer to  
13 that question, but I would be happy to find it  
14 for you.

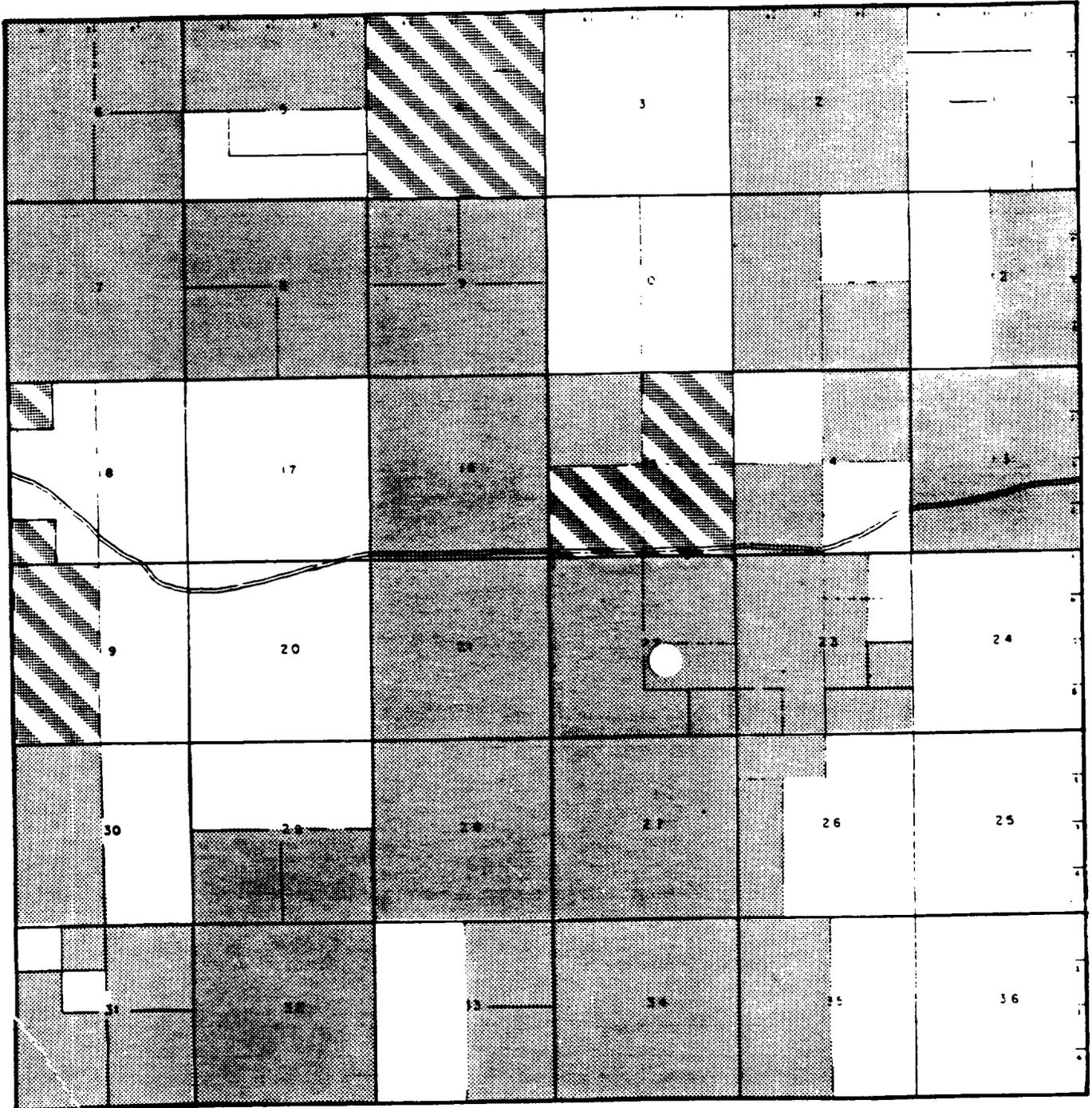
15 Q. If you can perhaps supplement the  
16 extent of that particular lease and, as you  
17 had mentioned before, if there appears to be  
18 other federal leases within that track that may  
19 or may not correspond with the third page of  
20 Exhibit 2 --

21 A. Yes, sir.

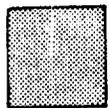
22 Q. -- we would appreciate that.

23 EXAMINER STOGNER: I have no other  
24 questions of Mr. Alexander at this time, Mr.  
25 Kellahin, but we may reserve a question at a

R 2 W



T  
19  
N



Meridian 100% G.W.I.



Meridian 50 to 90 % G.W.I.

**MERIDIAN** OIL

CASE NO. 10392

PIEDRA LUMBRE #1 WELL

SANDOVAL CO., N.M.

**KELLAHIN, KELLAHIN AND AUBREY**

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

W. THOMAS KELLAHIN  
KAREN AUBREY

JASON KELLAHIN  
OF COUNSEL

October 11, 1991

Mr. Michael E. Stogner  
Oil Conservation Division  
310 Old Santa Fe Trail  
Room 206  
Santa Fe, New Mexico 87501

HAND DELIVERED

RE: NM OCD Case No. 10392  
Application of Meridian Oil Inc.  
for a High Angle/Horizontal Directional  
Drilling Pilot Project etc.

Dear Mr. Stogner:

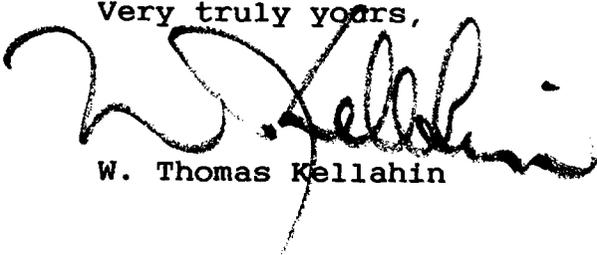
Please find enclosed for your consideration a proposed order for entry in this case. I have also enclosed a WordPerfect diskette with this order on it.

In addition, the order contains Finding (5) which was written by Mr. David Schroderbek, the Meridian geologist to describe the Niobrara formation.

Finally, I have also enclosed a regional structure map for your reference.

Please call me if you can be of further assistance.

Very truly yours,

  
W. Thomas Kellahin

WTK/jcl  
Enclosures  
cc: Alan Alexander - Meridian

ltrt1011a.330

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. 10392  
ORDER NO. R-

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

ORDER OF THE DIVISION

BY THE DIVISION

This cause came on for hearing at 8:15 a.m. on  
October 3, 1991, at Santa Fe, New Mexico, before  
Examiner Michael E. Stogner.

NOW, on this \_\_\_\_\_ day of October, 1991 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.

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Order No. R-  
Page No. 2

(2) The applicant, Meridian Oil Inc., seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Mancos formation as an exception to statewide oil proration and spacing rules by forming a 640-acre non-standard proration unit consisting of all of Section 22, T19N, R2W to be dedicated to its Piedra Lumbre Well No. 1 which will be commenced at a standard oil well location 2005 feet from the South line and 1775 feet from the East line (Unit J) of said Section 22, thence drilled vertically to approximately 2,000 feet, kicked off in a northwesterly direction, building angle up to approximately 80 degrees and drilling at such inclination for approximately 3,860 feet.

(3) The applicant further requests that special operating provisions and rules be established for said project area including a special project oil allowable of 640 barrels of oil per day and the designation of a prescribed drilling window limiting the horizontal displacement of the wellbore such that its producing interval can be no closer than 660 feet to the outer boundary of said proration unit.

(4) The proposed high angle/horizontal pilot project is neither within the boundaries of nor within one mile of any existing Mancos pool and is therefore subject to state-wide rules and regulations.

(5) The Niobrara intervals of the Mancos formation are the potential productive zones in this spacing/proration unit. The Niobrara is characterized by tight, low matrix permeability sandstones, siltstones and silt shales that are naturally fractured. Past experience in Mancos pools has shown that conventionally drilled (vertical) wells may not economically develop and produce all of the reserves in a spacing unit. By drilling a high angle/horizontal wellbore, the applicant is attempting to increase the probability of encountering and producing hydrocarbon reserves which may not ultimately be produced by a vertical well in the spacing unit, thereby preventing waste.

(6) The area which the Applicant seeks to develop with this special pilot project is towards the eastern edge of the Niobrara outcrop and is approximately 6 miles south of the Rio Puerco-Mancos Oil Pool a portion

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of which is being developed with high-angle wells pursuant to Division Order R-9330, as amended.

(7) The Niobrara member of the Mancos ("Gallup") formation is informally subdivided into an "A", "B" and "C" stratigraphic zones all of which are correlative to the producing intervals in the Verde-Gallup Pool, Boulder-Mancos Pool, East and West Puerto Chiquito-Mancos Pools, Gavilan-Mancos Pool and Rio Puerco-Mancos Pool.

(8) The Niobrara "A", "B", and "C" zones of the Mancos consist of thinly interbedded fine-grained sandstones, siltstones and silty shales deposited in deep-water environments of the Cretaceous Interior Seaway.

(9) Applicant's Piedra Lumbre No 1 well will be drilled in an area which geologically correlates to the Niobrara formation being developed in the pools identified in Finding (7) above.

(10) The Niobrara in this area is interpreted to be naturally fractured because of its position relative to the eastern structural margin of the San Juan Basin. The proposed location is near the basin-marginal

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synclinal flexure, where relatively steep basin-flank dip changes to relative gentle basin-floor dip. In the Piedra Lumbre area this dip change is from approximately 5 degrees to approximately 2 degrees. Structural strike also changes in this area and the combined affects of changing dip direction and dip cause natural fracturing in the Niobrara formation.

(11) Drilling the subject well at a high angle in a Northwesterly direction, perpendicular to the main fracture system and strike of the structure is expected to result in the penetration of numerous fractures providing for good drainage.

(12) Applicant testified that this area cannot be economically developed with conventional vertical wellbore technology nor without an allowable incentive to offset the risk involved in drilling a high angle/horizontal well.

(13) At no point in its traverse of the Mancos formation does the proposed highly-deviated wellbore encroach upon the 660 foot set back to the outer boundary of the spacing and proration unit.

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(14) No offset operator appeared and objected to the proposed pilot project.

(15) A conventional vertical oil well in this pool to which 40 acres were assigned would be entitled to a top oil allowable of 80 BOPD and the high angle/horizontal well will penetrate seven 40-acre units.

(16) The applicant should be afforded the opportunity to produce the well at the requested allowable assigned to the subject spacing and proration unit in order to encourage the development of an area of potential Mancos production that might not be developed as efficiently if conventional vertical wells were drilled.

(17) The aforementioned prescribed area limiting the horizontal displacement of the wellbore so that it is no closer than 660 feet to any outer boundary of the spacing unit would allow for flexibility, serve to minimize risk and maximize the success of such a completion.

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(18) In the interest of conservation, the application of Meridian Oil Inc. for this high angle/horizontal well project should be approved.

(19) The applicant should be required to determine the actual location of the kick-off point prior to commencement of directional drilling operations. Also, the applicant should notify the supervisor of the Aztec District Office of the Division of the proposed azimuth and inclination of the deviated hole and of the date and time of the commencement of directional drilling in order that the same may be witnessed.

(20) The applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of the drilling operations on the well and submit a copy of said survey to both the Santa Fe and Aztec Offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project in all of Section 22 Township 19 North, Range 2 West, NMPM, Sandoval County, New Mexico is hereby approved.

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Order No. R-  
Page No. 8

(2) The applicant is further authorized to drill its Piedra Lumbre No. 1 Well at an standard oil surface well location 2005 feet FSL and 1775 feet FEL of said Section 22 in the unconventional manner as described in Finding Paragraph No. 2 of this order.

(3) The lateral extent of the high angle/horizontal wellbore shall be such that the producing interval be limited to an area which extends no closer than 660 feet to the outer boundary of the spacing and proration unit.

(4) All of said Section 22 forming a 640-acre oil spacing and proration unit with a 640 barrel a day allowable and a 2,000 to 1 GOR is hereby approved.

(5) The geographic location of the kick-off point for the proposed high angle/horizontal well shall be determined prior to directional drilling. Also, the operator shall notify the supervisor of the Aztec District of the Division of the proposed direction (azimuth, and inclination) of the deviated hole and of the date and time of the directional drilling in order that the same may be witnessed.

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(6) The applicant shall conduct a directional drilling survey on the well during or after completion of high angle/horizontal drilling operations.

(7) Upon completion of the high angle/horizontal drilling operations on the well, the applicant shall file a copy of said directional drilling survey along with a final report specifying the depth and location of the terminus of said high angle/horizontal wellbore to both the Santa Fe and Aztec Offices of the Division.

(8) 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

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