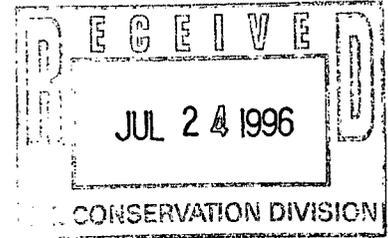


MERIDIAN OIL



July 23, 1996

**Federal Express**

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

Re: Huerfanito Unit #98M  
790'FSL, 1500'FEL, Section 35, T-27-N, R-9-W, San Juan County, NM  
API #30-045-28946

Dear Mr. Stogner:

This is a request for administrative approval for a non-standard gas well location in the Basin Fruitland Coal pool.

Burlington Resources Oil & Gas Company is planning to recomplete the Huerfanito Unit #98M in the Basin Fruitland Coal pool and plugging the Mesa Verde and Dakota formations by squeeze cementing. This location is considered to be off-pattern for the Fruitland Coal. To comply with the New Mexico Oil Conservation Division rules, Burlington is submitting the following for your approval of this non-standard location:

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

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Peggy Bradfield".

Peggy Bradfield  
Regulatory/Compliance Administrator

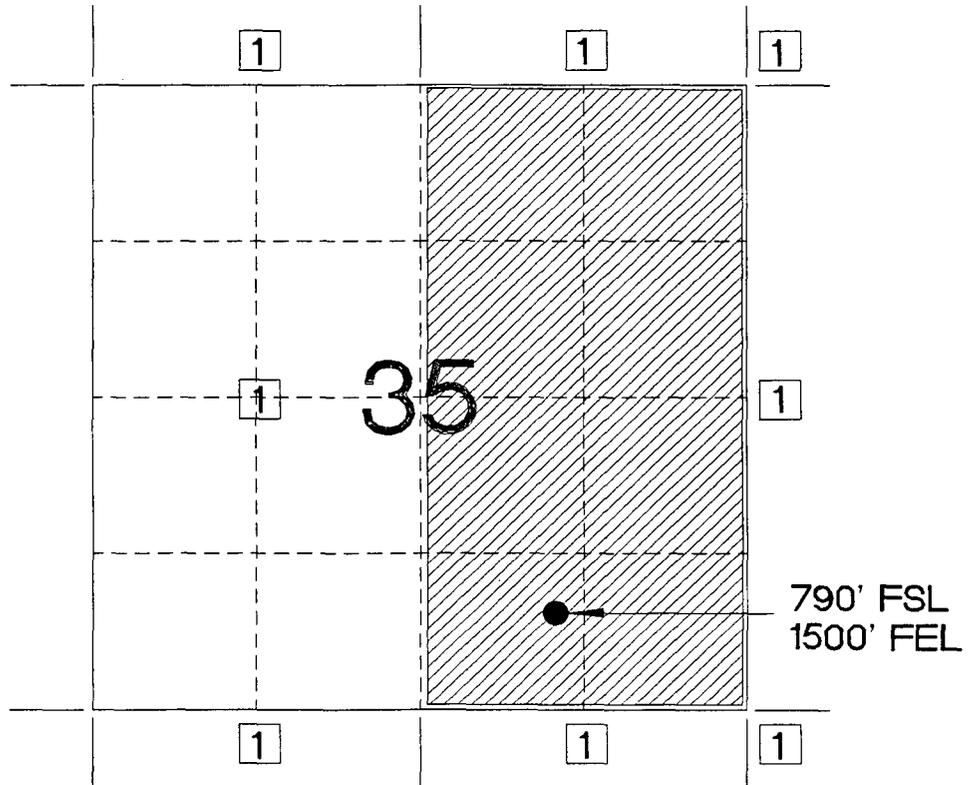


**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**HUERFANITO UNIT #98M  
OFFSET OPERATOR \ OWNER PLAT**

**Fruitland Coal Well**

**Township 27 North, Range 9 West**



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.

(October 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse)

OMB NO. 1004-0137 Expires: December 31, 1991

LEASE DESIGNATION AND SERIAL NO.

SF-078135

IF INDIAN ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

RECEIVED

UNIT AGREEMENT NAME

Huerfanito Unit

FARM OR LEASE NAME, WELL NO.

Huerfanito Unit 98M

WELL NO.

30-045-28946

FIELD AND POOL, OR WILDCAT

Blanco MV/Basin Dk

SEC. T., R. M., OR BLOCK AND SURVEY OR AREA

Sec 35, T-27-N, R-9-W

NMPM

COUNTY OR PARISH

San Juan

STATE

NM

1. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other [ ]

2. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP EN [ ] PLUG BACK [ ] DIFF. RENVR. [ ] Other [ ]

94 FEB -1 AM 8:13

3. NAME OF OPERATOR

Meridian Oil Inc.

070 FARMINGTON, NM

4. ADDRESS AND TELEPHONE NO.

PO Box 4289, Farmington, NM 87499

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 790'FSL, 1500'FEL

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 19. ELEV. CASINGHEAD

05-12-93 05-23-93 08-05-93 6292'GL

20. TOTAL DEPTH, MD & TVD 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 24. ROTARY TOOLS 25. CABLE TOOLS

6768' 2 - but MV squeezed off

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE

Dakota 6475-6722'

26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED

DIL, ML, LDT/CNL, NGT

28. CASING RECORD (Report all strings set in well)

Table with 6 columns: CASING SIZE/GRADE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, TOP OF CEMENT, CEMENTING RECORD, AMOUNT PULLED

Table with 3 columns: LINER RECORD (SIZE, TOP (MD), BOTTOM (MD), BACKS CEMENT\*, SCREEN (MD)) and TUBING RECORD (SIZE, DEPTH SET (MD), PACKER SET (MD))

Table with 2 columns: 29. PERFORATION RECORD (Interval, size and number) and 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. (DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED)

33. PRODUCTION 4433' squeeze w/100 sx

DATE FIRST PRODUCTION 08-05-93 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing, capable of commercial hydrocarbon prod. WELL STATUS (Producing or shut-in) shut in

DATE OF TEST 01-14-94 HOURS TESTED 3 hrs CHOKED SIZE 3/4" PROD'N. FOR TEST PERIOD OIL—BBL. 955 GAS—MCF WATER—BBL. GAS-OIL RATIO

FLOW. TUBING PRESS. 305 CASING PRESSURE 920 CALCULATED 24-HOUR RATE OIL—BBL. 1294 GAS—MCF WATER—BBL. OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) to be sold TEST WITNESSED BY K. Culbertson

35. LIST OF ATTACHMENTS none

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records. SIGNED [Signature] TITLE Regulatory Representative DATE 01-31-94

ACCEPTED FOR RECORD

\*(See Instructions and Spaces for Additional Data on Reverse Side) FEB 04 1994

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

OPERATOR BY [Signature]

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

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

RECEIVED  
BLM

LEASE DESIGNATION AND SERIAL NO.

SF-078135

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other 94 FEB -1 AM 8:13

2. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. REVR.  Other 070 FARMINGTON, NM

3. NAME OF OPERATOR  
Meridian Oil Inc.

4. ADDRESS AND TELEPHONE NO.  
PO Box 4289, Farmington, NM 87499

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 790'FSL, 1500'FEL  
At top prod. interval reported below  
At total depth

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Huerfanito Unit

8. FARM OR LEASE NAME, WELL NO.  
Huerfanito Unit 98M

9. API WELL NO.  
30-045-28946

10. FIELD AND POOL OR WILDCAT  
Blanco MV/Basin Dk

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec 35, T-27-N, R-9-W

12. COUNTY OR PARISH  
San Juan

13. STATE  
NM

14. PERMIT NO. DATE ISSUED

15. DATE SPECIFIED 05-12-93 16. DATE T.D. REACHED 05-23-93 17. DATE COMPL. (Ready to prod.) 08-05-93 18. ELEVATIONS (DF, RKB, ET, OR, ETC.)\* 6292'GL 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6768' 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL. HOW MANY? 2 - but MV squeezed off 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Blanco Mesa Verde 4080-4695'

25. WAS DIRECTIONAL SURVEY MADE

26. TYPES ELECTRIC AND OTHER LOGS RUN  
DIL, ML, LDT/CNL, NGT

27. WAS WELL CORED

28. 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
8 5/8"	24.0#	230'	12 1/4"	248 cu.ft.	
4 1/2"	11.6#	6768'	7 7/8"	1854 cu.ft.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
					SIZE: <u>2 3/8"</u> DEPTH SET (MD): <u>6591'</u> PACKER SET (MD):

31. PREPARATION RECORD (Interval, size and number)  
4080-4695' w/1 spf 0.28" holes 41 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<u>4080-4695'</u>	<u>165,000#sand; 163,128 gal. fluid</u>
<u>4665-95'</u>	<u>squeeze w/150 sx</u>
<u>4396-4612'</u>	<u>squeeze w/114 sx</u>
<u>4451-4612'</u>	<u>squeeze w/175 sx</u>

33. PRODUCTION 4433' squeeze w/100 sx

DATE FIRST PRODUCTION 08-05-93 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing, capable of commercial hydrocarbon prod. WELL STATUS (Producing or shut-in) shut in

DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<u>01-14-94</u>	<u>3 hrs</u>	<u>3/4"</u>	<u>→</u>		<u>955</u>		

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
<u>305</u>	<u>920</u>	<u>→</u>		<u>1294</u>		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) to be sold TEST WITNESSED BY K. Culbertson

35. LIST OF ATTACHMENTS none ACCEPTED FOR RECORD

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Regulatory Representative DATE FEB 01 1994

**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. 10701  
Order No. R-9887**

**APPLICATION OF MERIDIAN OIL INC.  
FOR DOWNHOLE COMMINGLING AND FOR  
AN ADMINISTRATIVE DOWNHOLE COMMINGLING  
PROCEDURE WITHIN THE HUERFANITO UNIT  
AREA, SAN JUAN COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

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

NOW, on this 27th day of April, 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 approval to commingle gas production from the Blanco-Mesaverde and Basin-Dakota Pools within the following described wells in San Juan County, New Mexico:

**WELL NAME & NUMBER**

**WELL LOCATION**

**EXISTING WELLS**

**S T R**

Huerfanito Unit No. 71	660' FNL & 660' FEL (A)	3, 26N, 9W
Huerfanito Unit No. 104	1090' FSL & 825' FWL (M)	27, 27N, 9W

WELLS TO BE DRILLED

Huerfanito Unit No. 78M 1545' FSL & 1270' FEL (I) 36, 27N, 9W  
Huerfanito Unit No. 79M 1795' FSL & 1730' FEL (J) 26, 27N, 9W  
Huerfanito Unit No. 82M 870' FNL & 850' FWL (D) 25, 27N, 9W  
Huerfanito Unit No. 98M 790' FSL & 1500' FEL (O) 35, 27N, 9W

(3) The applicant further seeks the adoption of an administrative procedure for authorizing the downhole commingling of Blanco-Mesaverde and Basin-Dakota Pool production within certain existing and subsequently drilled wells in its Huerfanito Unit Area, San Juan County, New Mexico, without additional notice to each affected interest owner within the Unit Area.

(4) The Huerfanito Unit Well Nos. 71 and 104 are currently completed in the Basin-Dakota Pool and, according to Division records, are capable of low marginal production only.

(5) Within the Huerfanito Unit Well Nos. 71 and 104, the applicant expects to encounter marginal production only from the Mesaverde formation.

(6) Within the proposed Huerfanito Unit Well Nos. 78M, 79M, 82M and 98M, the applicant expects to encounter marginal production only from both the Dakota and Mesaverde formations.

(7) Applicant's further evidence indicates that due to the marginal production expected, it is uneconomic to drill either a stand alone Dakota or Mesaverde well in this area. Applicant's testimony also indicates that it is uneconomic to drill and complete the subject wells as dual producers.

(8) The proposed downhole commingling is necessary in order for the applicant to economically recover Basin-Dakota and Blanco-Mesaverde Pool reserves underlying each respective proration unit.

(9) The Huerfanito Unit is a Federal exploratory unit initially comprising some 10,245 acres in portions of Townships 26 and 27 North, Range 9 West, NMPM, San Juan County, New Mexico. The unit was formed in 1952 and is currently operated by Meridian Oil Inc.

(10) The evidence and testimony presented indicates that the Basin-Dakota Pool has been fully developed on 320-acre spacing within the Huerfanito Unit and that approximately half of the Unit Area has been developed in the Blanco-Mesaverde Pool.

(11) The applicant has identified approximately seventeen (17) Basin-Dakota Pool infill well locations it plans to drill within the Unit Area.

(12) Based upon historical production, the applicant expects Basin-Dakota Pool initial production from infill drilling to be marginal in nature.

(13) Testimony and evidence presented by the applicant indicates that gas reserves in the Dakota formation are not sufficient to economically justify the drilling of stand alone wells to produce such reserves.

(14) The current well economics and expected Dakota producing rates virtually assure that these wells will be candidates for downhole commingling with the Mesaverde formation.

(15) The applicant has also identified approximately eleven (11) current Dakota producing wells which also by virtue of well economics and producing rates make them candidates for downhole commingling with the Mesaverde formation.

(16) The applicant expects initial producing rates from the Mesaverde formation to be marginal in nature.

(17) The applicant further demonstrated through its evidence and testimony that within the wells it proposes or will propose to commingle within the Unit Area:

- a) there will be no crossflow between the two commingled pools;
- b) neither commingled zone exposes the other to damage by produced liquids;
- c) the fluids from each zone are compatible with the other;
- d) the bottomhole pressure of the lower pressure zone should not be less than 50 percent of the bottomhole pressure of the higher pressure zone adjusted to a common datum; and,
- e) the value of the commingled production is not less than the sum of the values of the individual production.

(18) The Dakota and Mesaverde Participating Areas within the Huerfanito Unit are not common.

(19) By virtue of different Participating Areas, the interest ownership between the Dakota and Mesaverde formations within any given wellbore is not common.

(20) Applicant's Exhibit E in this case is a list of one hundred and forty (140) interest owners in the Dakota and Mesaverde Participating Areas within the Huerfanito Unit. All such interest owners were notified of the application in this case.

(21) Rule No. 303(C) of the Division Rules and Regulations provides that administrative approval for downhole commingling may be granted provided that the interest ownership, including working, royalty and overriding royalty interest, is common among the commingled zones.

(22) Applicant's proposed administrative procedure would provide for Division approval to downhole commingle wells in the Huerfanito Unit Area without hearing, and without the requirement that each interest owner in the Dakota and Mesaverde Participating Areas be notified of such commingling.

(23) The downhole commingling of wells within the Huerfanito Unit Area will benefit working, royalty and overriding royalty interest owners. In addition, the downhole commingling of wells within the Huerfanito Unit Area should not violate the correlative rights of any interest owner.

(24) The evidence in this case indicates that notice to each interest owner within the Dakota and Mesaverde Participating Areas of subsequent downhole comminglings within the Huerfanito Unit is unnecessary and is an excessive burden on the applicant.

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

(26) An administrative procedure should be established within the Huerfanito Unit for obtaining approval for subsequently downhole commingled wells without notice to Unit interest owners and hearing, provided however that, all provisions contained within Rule No. 303(C) of the Division Rules and Regulations, with the exception of Part 1 (b)(v), are fully complied with.

(27) The proposed administrative procedure for obtaining approval for downhole commingling will allow the applicant the opportunity to recover additional gas reserves from the Huerfanito Unit Area which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(28) In the interest of prevention of waste and protection of correlative rights, the proposed downhole commingling within the Huerfanito Unit Well Nos. 71, 104, 78M, 79M, 82M and 98M should be approved.

(29) The applicant should consult with the supervisor of the Aztec District Office of the Division subsequent to the completion of the subject wells in order to determine a proper allocation of production.

(30) The operator should immediately notify the supervisor of the Aztec district office of the Division any time any of the subject wells has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Meridian Oil Inc., is hereby authorized to commingle gas production from the Blanco-Mesaverde and Basin-Dakota Pools within the following described wells in San Juan County, New Mexico:

<u>WELL NAME &amp; NUMBER</u>	<u>WELL LOCATION</u>
<u>EXISTING WELLS</u>	<u>S T R</u>
Huerfanito Unit No. 71	660' FNL & 660' FEL (A) 3, 26N, 9W
Huerfanito Unit No. 104	1090' FSL & 825' FWL (M) 27, 27N, 9W

**WELLS TO BE DRILLED**

Huerfanito Unit No. 78M	1545' FSL & 1270' FEL (I) 36, 27N, 9W
Huerfanito Unit No. 79M	1795' FSL & 1730' FEL (J) 26, 27N, 9W
Huerfanito Unit No. 82M	870' FNL & 850' FWL (D) 25, 27N, 9W
Huerfanito Unit No. 98M	790' FSL & 1500' FEL (O) 35, 27N, 9W

(2) The applicant shall consult with the supervisor of the Aztec District Office of the Division subsequent to the completion of the subject wells in order to determine a proper allocation of production.

(3) The operator shall immediately notify the supervisor of the Aztec district office of the Division any time any of the subject wells has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

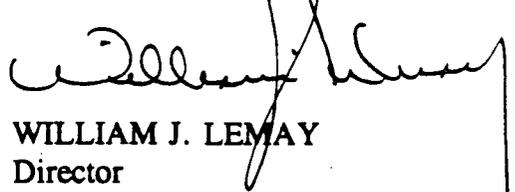
(4) An administrative procedure for obtaining approval to downhole commingle wells within the Huerfanito Unit, located in portions of Townships 26 and 27 North, Range 9 West, NMPM, San Juan County, New Mexico, is hereby established.

(5) In order to obtain Division authorization to downhole commingle wells within the Huerfanito Unit, the applicant shall file an application with the Santa Fe and Aztec Offices of the Division. Such application shall contain all of the information required under Rule No. 303(C) of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the Dakota and Mesaverde Participating Areas in the Huerfanito Unit of such proposed commingling. In addition, the application shall contain evidence that all offset operators and the United States Bureau of Land Management (BLM) have been notified of the proposed commingling.

(6) 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