

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of Operator
MERIDIAN OIL

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M
1180'FNL, 1500'FWL Sec.6, T-26-N, R-10-W, NMPM

5. Lease Number
SF-080425-A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name
Huerfano Unit

8. Well Name & Number
Huerfano Unit 259

9. API Well No.

10. Field and Pool
Basin Ft Coal

11. County and State
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission	Type of Action	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment	☒ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing-Repair	☐ Water Shut off
	☐ Altering Casing	☐ Conversion to Injectio
	☐ Other -	

13. Describe Proposed or Completed Operations

It is intended to plug back the Dakota and Mesa Verde and recomplete in the Fruitland coal per the attached procedure

RECEIVED

FEB 11 1994

OIL CON. DIV
DIST. 3

070 FARMINGTON, NM

51 FEB -1 AM 8:18

RECEIVED
BLM

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] (MP) Title Regulatory Affairs Date 1/20/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

APPROVED

FEB 07 1994

DISTRICT MANAGER

NMOCO

Schedule to Acquire
District Office
State Lands - 4 acres
Fee Lands - 3 acres

State of New Mexico
Energy, Minerals and Natural Resources Department

RECEIVED
BLM
Form C-182
Revised 1-1-88

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

94 FEB -1 AM 8:18

070 FARMINGTON, NM

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer 00, Arama, NM 88210

DISTRICT III
1000 Rio Arriba St., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.		Lease Huerfano Unit		Well No. 259
Unit Letter C	Section 6	Township 26 North	Range 10 West	County San Juan
Acres Forfeiture Location of Well: 1180 feet from the North line and 1500 feet from the West line.				
Ground level Elev. 6479'	Producing Formation Fruitland Coal	Pool Basin	Dedicated Acreage 320 3/4 Acres	

1. Outline the acreage dedicated to the subject well by corners, point or bearing marks on the plat below.

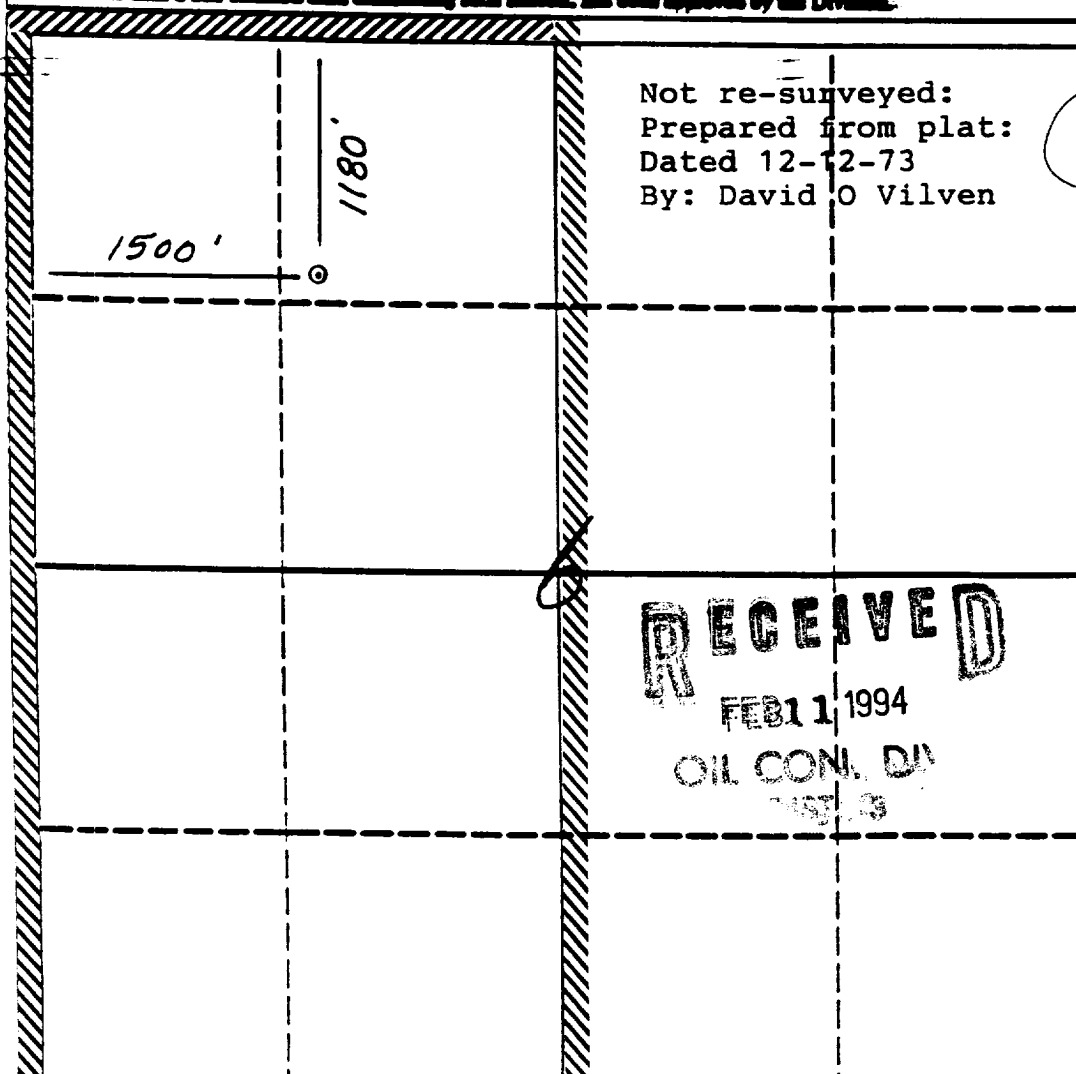
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by commutation, unitization, lease-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation- unitization

If answer is "no" list the owners and trust descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated by commutation, unitization, lease-pooling, or otherwise, or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature
Peggy Bradfield

Printed Name
Regulatory Representative

Position
Meridian Oil Inc.

Company
1-28-94

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes actual surveys made by me or under supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
1-27-94

Signature
C. EDWARDS

Professional Surveyor
9857

Commission Fee

Huerfano Unit #259 FRTC
FRTC RECOMPLETION
C 6 26 10
San Juan County, N.M.

PLUGGING:

1. Comply to all NMOCB, BLM, & MOI rules & regulations. MOL and RU P & A rig. NU 6" 900 series BOP, flow tee and stripping head. NU blooie line and 2-7/8" relief line.
2. Set blanking plug in S.N. @ 6724' in 2-3/8" tbg & pressure test to 3000 psi. TOH w/217 Jts 2-3/8" tbg & Baker Lok-set pkr @ 5047'.
3. Run 5-1/2" gauge ring on sand line to 6557' (50' above top Dakota). TIH w/4-1/2" cmt ret on tested 2-3/8" tbg & set @ 6557'.
4. Establish rate & sq Dakota perfs w/ 34 sx Cl "G" cmt. This will fill perfs & 4-1/2" csg to 6557' w/100% excess cmt.
5. Sting out of cmt ret & spot 4 sx cmt on top ret. Spot hole w/ 15 bbl mud: 15# sodium bentonite w/non-fermenting polymer, 8.4# gal weight, & 40 qs vis or greater. TOH.
6. W/ tbg @ 5650' (50' below top Gallup), spot 11 sx cmt. This will fill inside csg from 5650' to 5550' (50' above top Gallup) w/50% excess cmt.
7. Spot hole w/ 30 bbl mud: 15# sodium bentonite w/non-fermenting polymer, 8.4# gal weight, & 40 qs vis or greater. TOH.
8. W/ tbg @ 4990' (50' below sq perf @ 4940'), spot 20 sx cmt. This will fill inside csg from 4990' to 4815' (50' above stg tool that didn't open) w/50% excess cmt.
9. W/ tbg @ 3692' (50' below top Mesaverde), spot 11 sx cmt. This will fill inside csg from 3692' to 3592' (50' above top Mesaverde) w/50% excess cmt.
10. Spot hole w/ 24 bbl mud: 15# sodium bentonite w/non-fermenting polymer, 8.4# gal weight, & 40 qs vis or greater. TOH.
11. Set top drillable BP @ 2150' & top w/1 sx sand. Run CBL from 2150' to top of cmt in 4-1/2" csg & cased hole Neutron log from 2150'-1600' & correlate to open hole Density log.
12. Release P & A rig.

COMPLETION:

13. MOL and RU completion rig. NU 6" 900 series BOP, flow tee and stripping head. NU blooie line and 2-7/8" relief line.

HUERFANO UNIT #259 - FRTC RECOMPLETION
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14. Spot and fill 3 - 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. Two tanks are for gel & one tank for breakdown water. Usable gel water required for frac is 325 bbls.
15. TIH w/2-3/8" tbg to 2152'. Roll hole w/2% KCL water & pressure test csg to 1000 psi for 15 min.

LOWER FRTC:

16. Perf lower FRTC @ 2072'-60' w/2 spf. Perforate FRTC using 3-1/8" hollow steel carrier guns loaded w/Owen HSC 13 gm. charges phased at 90 degrees & 2 spf. Avg. perf dia. = 0.48". Average penetration is 18" in Berea. Total 24 holes.
17. TIH w/4-1/2" pkr & 2-7/8" NUE N-80 rental tbg w/shaved collars & set @ 1800'. W/ 500 psi on backside, breakdown FRTC perforations from 2072'-60' w/2000 gal. 15% HCL acid & 60 7/8" 1.3 sp gr RCN perf balls. (1 gal/1000 corrosion inhibitor). Lower pkr to 2100' to knock off perf balls. Reset pkr @ 2000'.
18. Load backside w/2% KCL water & pressure to 500 psi. Monitor & record backside pressure during frac. Fracture treat lower FRTC down frac string with 45,000 gals. of 70 quality foam using 30# gel as the base fluid & 50,000# 20/40 Arizona sand. Pump at 20 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi and estimated treating pressure is 3500 psi. Treat per the following schedule:

<u>Stage</u>	<u>Foam Vol.</u> <u>(Gals.)</u>	<u>Gel Vol.</u> <u>(Gals.)</u>	<u>Sand Vol.</u> <u>(lbs.)</u>
Pad	15,000	4,500	----
1.0 ppg	15,000	4,500	15,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	5,000	1,500	15,000
Flush	(486)	146	
Totals	45,000	13,500	50,000#

Treat frac fluid with the following additives per 1000 gallons:

- | | |
|-----------------|------------------------|
| * 30# LGC8 | (Gel) |
| * 3.0 gal. AQF2 | (Non-ionic Surfactant) |
| * 1.0# GVW3 | (Enzyme Breaker) |
| * 1.0# B-5 | (Breaker) |

19. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible. TOH w/pkr & frac string.
20. Set 4-1/2" ret BP @ 2000' on wireline & top w/1 sx sand. Pressure test csg to 1000 psi for 15 min.
21. Fill 2 - 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank is for gel & one tank for breakdown water. Usable gel water required for frac is 267 bbls.

HUERFANO UNIT #259 - FRTC RECOMPLETION
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UPPER FRTC:

22. Production Engineering will pick upper FRTC perfs using CNL log. Perf upper FRTC w/2 spf. Perforate using 3-1/8" hollow steel carrier guns loaded w/Owen HSC 13 gm. charges phased at 90 degrees & 2 spf. Avg. perf dia.= 0.48". Average penetration is 18" in Berea. Estimated total feet of perfs is 20 feet @ about 1877'-1940'.
23. TIH w/4-1/2" pkr & 2-7/8" NUE N-80 rental tbg w/shaved collars & set @ 1600'. W/ 500 psi on backside, breakdown upper FRTC perforations w/2000 gal. 15% HCL acid & 100 7/8" 1.3 sp gr RCN perf balls. (1 gal/1000 corrosion inhibitor). Lower pkr to 1960' to knock off perf balls. Reset pkr @ 1800'.
24. Fracture treat upper FRTC down frac string with 37,000 gals. of 70 quality foam using 30# gel as the base fluid & 60,000# 20/40 Arizona sand. Pump at 30 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi and estimated treating pressure is 3500 psi. Treat per the following schedule:

<u>Stage</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	12,000	3,600	----
1.0 ppg	5,000	1,500	5,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	5,000	1,500	15,000
4.0 ppg	5,000	1,500	20,000
Flush	(437)	130	
Totals	37,000	11,100#	60,000#

Shut well in after frac for six hours to allow the gel to break.
Treat frac fluid with the following additives per 1000 gallons:

- | | |
|-----------------|------------------------|
| * 30# LGCS | (Gel) |
| * 3.0 gal. AQF2 | (Non-ionic Surfactant) |
| * 1.0# GVW3 | (Enzyme Breaker) |
| * 1.0# B-5 | (Breaker) |

25. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible. TOH w/pkr & frac string.
26. TIH w/ret head on 2-3/8" tbg & C.O. w/air/mist to ret BP @ 2000'. Take pitot gauges when possible. When well is sufficiently clean, retrieve BP & TOH.
27. TIH w/notched collar on 2-3/8" tbg & C.O. to PBTD 2150'. Monitor gas and water returns and take pitot gauges when possible.
28. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 2150'-1700'.

HUERFANO UNIT #259 - FRTC RECOMPLETION
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29. TIH with 2-3/8" tbg with standard seating nipple one joint off bottom and again cleanout to 2150'. When wellbore is sufficiently clean, land tbg at 2050'KB. Take final water and gas samples & rates.
30. Replace any bad valves on wellhead. ND BOP and NU wellhead & tree. Rig down & release rig.

Approve: _____
J. A. Howieson

VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	Western	327-6222
RA Tagging:	Pro-Technics	326-7133

PMP

Pertinent Data Sheet - HUERFANO UNIT #259 DK

Location: 1180' FNL 1500' FWL SEC. 6 T26N R10W, SAN JUAN COUNTY, N.M.

Field: Basin Dakota

Elevation: 6525' TD: 6802'

12' KB PBTD: 6795'

LEASE: Federal SF-080425

DP#: DK=43895A

GWI: 53.1249% (FRTC)

NRI: 41.6442% (FRTC)

Completed: 6-6-74

Initial Potential:

AOF= 446 MCF/D, Q= 408 MCF/D, SICP=1296 psi

Casing Record:

Hole Size	Csg. Size	Wt. & Grade	Depth Set	Cement	Top/Cmt
12-1/4"	8-5/8"	24# J-55	223'	182 cf	Circ Cmt
7-7/8"	4-1/2"	10.5# K-55	6802'	348 cf	5656' @ 75% Eff.
		Stage Tool @	4865'	0 cf	DV Didn't Open
		* Sq perf @	3598'	250 sx	2627' @ 75% Eff.
		Stage Tool @	2360'	418 cf	950' - Survey

Tubing Record: 2-3/8" 4.7# J-55 6754' 217 Jts
Baker Lok-set pkr @ 5047'
S.N. @ 6724'

Formation Tops:

Ojo Alamo	1062'	Point Lookout	4497'
Kirtland	1178'	Gallup	5600'
Fruitland	1798'	Greenhorn	6498'
Pictured Cliffs	2077'	Dakota	6607'
Cliffhouse	3642'		

Logging Record: Induction Log, Density Log

Stimulation: Perf DK @ 6626', 6668', 6684', 6724', 6748', 6761', 6776' w/1 spf & fraced w/55,000# sand in water.

Workover History: * 4-29-74: Perfed sq hole @ 4940' & 3598'. Tested perf @ 4940' using RBP & pkr to 1000# -OK. W/RBP @ 4628' & pkr @ 3481', sqed perf @ 3598' w/125 sx cmt. Resq w/125 sx cmt. Drilled out, pressure tested, ret. RBP, ran Baker Model A-1 lok-set pkr on 217 jts tbg. 8-13-74: Perfed tbg @ 6745' & swabbed well in. 3-21-88: Swabbed well & retrieved piston. 12-1-88: Swabbed well. 6-2-89: Swabbed well. 6-5-89: Swabbed well. 4-3-90: Swabbed well. 5-31-90: Swabbed well. 1-16-91: Swabbed well & retrieved piston. 3-12-91: Swabbed well & retrieved piston. 9-25-91: Swabbed well.

Production History: First Delivery = 7-1-74. Cumulative= 180 MMCF & 10,374 BO. Capacity = 0 MCF/D. Bradenhead = 0 psi. Tbg pressure = 55 psi. Csg pressure= 0 psi. Line Pressure = 234 psi.

Pipeline: EPNG

PMP

HUERFANO UNIT #259 DK

UNIT C SECTION 6 T26N R10W
SAN JUAN COUNTY, NEW MEXICO

