STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED
DEC 30 1988
OIL CON. DIV.
DIST. 3

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Meridian Oil Inc.

Address: P.O. BOX 4289, FARMINGTON, NM 87499

Reason(s) for filing (Check proper box)

- [ ] New Well
- [ ] Recompletion
- [ ] Change in Ownership

Change in Transporter of:

- [ ] Oil
- [ ] Dry Gas
- [ ] Casinghead Gas
- [ ] Condensate

Other (Please explain): POOL NAME & DEDICATION CHANGE

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Howell C	200	BASIN FRUITLAND COAL	State, (Federal or Fee)	SF-078596

Location
Unit Letter B : 800 Feet From The North Line and 1350 Feet From The East
Line of Section 1 Township 29N Range 8W NMPM, San Juan County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
MERIDIAN OIL INC.	P.O. BOX 1289, FARMINGTON, NM 87499
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS COMPANY	P.O. BOX 4990, FARMINGTON, NM 87499

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected? When
	B	1	29N	8W	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

NOTE: *Complete Parts IV and V on reverse side if necessary.*

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

P. Bradley
(Signature)

REGULATORY AFFAIRS
(Title)

DECEMBER 27, 1988
(Date)

OIL CONSERVATION DIVISION
DEC 30 1988

APPROVED _____, 19 ____

BY _____

TITLE SUPERVISION DISTRICT # 3

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepe well, this form must be accompanied by a tabulation of the devia tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for a able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of ow well name or number, or transporter, or other such change if condi

Separate Forms C-104 must be filed for each pool in mul completed wells.

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

5. **Lease Number**
   SF-078596
6. **If Indian, All. or Tribe Name**
7. **Unit Agreement Name**

2. **Name of Operator**
   MERIDIAN OIL

8. **Well Name & Number**
   Howell C #200
9. **API Well No.**
   30-045-27047
10. **Field and Pool**
    Basin Fruitland Coal
11. **County and State**
    San Juan Co, NM

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

4. **Location of Well, Footage, Sec., T, R, M**
   800'FNL, 1350'FEL, Sec.1, T-29-N, R-8-W, NMPM

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

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

13. **Describe Proposed or Completed Operations**

It is intended to recavitate the subject well according to the attached procedure and wellbore diagram.

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OIL CON. DIV.
DIST. 3

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

Signed [signature] (SCWFTC) Title Regulatory Affairs Date 6/23/95

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date

CONDITION OF APPROVAL, if any:

APPROVED

JUN 29 1995

DISTRICT MANAGER

NMOCD

Pertinent Data Sheet - Howell C #200
Lat-Long: 36.758987 - 107.622726

Location: 800' FNL, 1350' FEL, Unit B, Section 01, T-29-N, R-08-W

Field: Basin Fruitland Coal **Elevation:** 6080' GL 6093' KB **TD:** 2867' **COTD:** 2867'

Spud Date: 9/10/88
Completed: 9/19/88

DP #: 3314A

Casing Record:

Hole Size	Casing Size	Weight & Grade	Depth Set	Cement	Top/Cement
12-1/4"	9-5/8"	36.00# K-55	229'	150 sx	circ to surface
8-3/4"	7"	20.00# K-55	2675'	475 sx	circ to surface
6-1/4"			2867'		

Tubing Record:

Tubing Size	Weight & Grade	Depth Set
2-3/8"	4.7# J-55	2841' (F nipple @ 2809' KB)

Formation Tops:

Ojo Alamo	1787'
Kirtland	1967'
Fruitland	2537'

Logging Record: Mud log only.

Stimulation: open hole completion

Workover History: None.

Production History:

Cumulative Oil Production:	0 MBO
Cumulative Gas Production:	23,025 MCF
Current Oil Production:	0 BBLS/D
Current Gas Production:	0 MCF/D

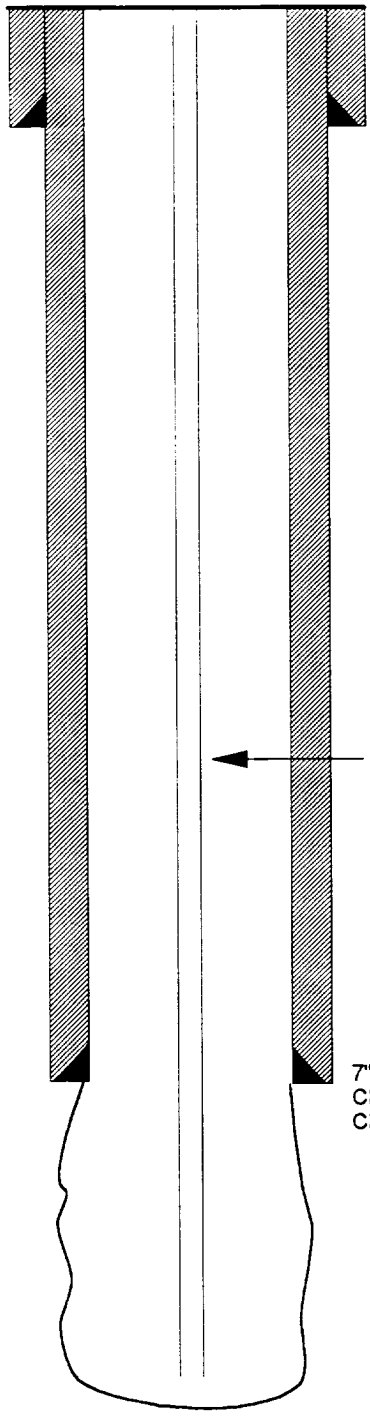
Transporter: El Paso Natural Gas Pipeline

Howell C #200

AS OF 3/30/95

BASIN FRUITLAND COAL

UNIT B, SECTION 01, T29N, R08W, SAN JUAN COUNTY, NM



COMPLETED 9/19/88

12-1/4" HOLE

9-5/8" 36# K-55 CSG SET @ 229' KB
CMT W/150 SX
CIRC. CMT TO SURFACE

8-3/4" HOLE

OJO ALAMO @ 1787'

KIRTLAND @ 1967'

2-3/8" 4.7# J-55 TBG @ 2841' KB

FRUITLAND @ 2537'

7" 20#, K-55 CSG SET @ 2675' KB
CMT W/475 SX
CIRC. CMT TO SURFACE

6-1/4" HOLE

TD 2867'

MERIDIAN OIL - RECAVITATION PROCEDURE

Howell C #200

GENERAL WELL DATA:

Well Name: Howell C #200
Location: Unit B, Section 01, T29N, R08W
County, State: San Juan County, New Mexico
Field: Basin Fruitland Coal
Formation: Fruitland Coal
Elevation: 6080' GL
AFE #:

GEOLOGY:

	TD: 2867'
	COTD: 2867'
Surface:	
Ojo Alamo:	1787'
Kirtland:	1967'
Fruitland Coal:	2537'

PROCEDURE:

1. Hold safety meeting. MIRU WO Rig. Place fire and safety equipment in strategic locations. Comply with all MOI, BLM and NMOCD rules and regulations. Record all tubing and casing pressures. RU wellsite blowlines and flowlines. Blowdown tbg and csg, control well w/wtr. ND wellhead.

2. NU BOP's. TOOH with 2841' of 2-3/8" tubing and stand back. Visually inspect tubing and replace any bad joints.

3. RU mud logging operations and collect samples per request. RU pressure recorder on air injection line.

4. PU 6-1/4" bit and eight (8) 4-3/4" DC's on 3-1/2" DP and TIH. Clean out wellbore with air to TD of 2867' Take baseline gauge. TOOH.

5. Pickup RBU 9" X 6-1/4" underreamer and TIH. Underream 6-1/4" hole to 9" hole with RBU 9" X 6-1/4" bit and air/mist. Collect drill cuttings during under reaming. TOOH.

6. TIH with 6-1/4" bit and clean out hole to TD of 2867'. Unload hole with air. TOOH

7. RU wireline, under full lubricator, run caliper log from 2867' to 2675'. RD wireline.

8. TIH with 6-1/4" bit. Obtain a Baseline Flow Test (1 hour). After flow test, shut well in for 4 hours or until BHP stabilizes (est BHP 1100 psi). Obtain injection breakover test.

9. Begin NATURAL SURGES. Shut well in for 1 hour pressure build-up and record pressures in 15 minute increments. Obtain 1 hour flow test once every 24 hour period and plot results (rates vs cst flow test). Document solids and water returned as well as total coal volume produced.

10. Clean out openhole as hole dictates. Monitor pressure recorder for signs of hole bridging.

11. Upon initial build-up, if well does not build up to BHP naturally, pressure up to BHP with air and surge well. If well fails to cavitate engineering will decided to continue with cavitation procedure or to initiate borehole mining procedure.

Decision Point - Proceed to Borehole Mining (step B1) or Cavitation Procedure (step C1) Contact office prior to proceeding to next step.

Borehole Mining Procedure:

Requirements:

1. Four (4) - 400 bbl frac tanks. Fill with 2% KCL
2. 6 x 6 irrigation pump with 6" discharge. Irrigation piping system from reserve pit to frac tanks.
3. Four (4) - 25 Micron filtering units.

Conduct all pressure testing with acid pump truck.

B1. TOOH with 3-1/2" DP and DC's

B2. If necessary kill well prior to TIH w/ borehole mining assembly. PU 6-1/4" jetted bit with all sections of 5-1/2" FL4S casing body. TIH. Set 5-1/2" casing body in slips. 2-7/8" stinger assembly will be ran into 5-1/2" casing body.

B3. Place blanking plug in 2-7/8" X 2-1/4" F-nipple. TIH with 2-7/8" stinger assembly. Sting 2-7/8" seal assembly into base of BMT. **Note: Top of 2-7/8" inner-string screws into bottom of 3-1/2" X 5-1/2" hub section.**

B4. TIH with 3-1/2" X 5-1/2" hub and screw on to 5-1/2" FL4S casing.

B5. TIH with 1 joint of 3-1/2" drill pipe. Pressure test BMT to 3500 psi.

B6. RU wireline, under slickline lubricator, pull blanking plug.

B7. TIH with 3-1/2" drill pipe with 3-1/2"X2-1/4" F-nipple on bottom to base of 7" casing. Circulate hole clean.

B8. RU wireline, under slickline lubricator, TIH with blanking plug and set in 2-1/4" F-nipple.

B9. RU 3-1/2" power swivel with 3-1/2" TIW valve. Pressure test lines, stand-pipe, manifold, kelly hose, 3-1/2" power swivel to 3500 psi. RU slickline lubricator to 3-1/2" TIW valve and test to shut-in pressure. Pull blanking plug in 2-1/4" F nipple.

B10. Perform BMT process for approximately 16 hrs. Mine lower seam first. Mine from 2835' to 2850'. Next mine from 2813' to 2824'. Then mine from 2770' to 2791'. Finally mine upper seam from 2730' to 2758'. Total footage mined 74'. Collect drill cuttings during BMT process. Document solids and water returned as well as total coal volume produced.

B11. TOOH to base of 7" casing prior to setting plug. If necessary kill well prior to TOOH w/ borehole mining assembly.

B12. RU slickline lubricator to 3-1/2" TIW valve and test to shut-in well pressure. TIH with blanking plug on slickline and set in 2-1/4" F-nipple.

B13. TOOH 3-1/2" drill pipe.

B14. Unscrew hub section and TOOH.

B15. TOOH w/ 2-7/8" tubing and seal assembly.

B16. PU 3-1/2" X 5-1/2" hub section and screw into 5-1/2" casing. TOOH.

B17. PU 6-1/4" bit and eight (8) 4-3/4" DC's on 3-1/2" DP and TIH. Clean out wellbore to TD of 2867'. **Rotate and reciprocate the pipe at all times during clean out.**

B18. Once wellbore is cleaned out pull up into 7" and take gauge (1 hour). After flow test, shut well in for 4 hours or until BHP stabilizes. TOOH

B19. RU wireline, under full lubricator, run caliper log from 2867' to 2675'. RD wireline.

Decision Point - Proceed to Cavitation (step C1) or land tubing (step 12)
Contact office prior to proceeding to next step.

Cavitation Procedure:

C1. Increase injection pressure in 250 psi increments. If injection pressure build-up curve breaks over, surge well. Use air injection pressure recorder to determine maximum build-up pressure.

C2. Discontinue air injections if well begins to make coal fines.

C3. Clean out open-hole as hole dictates. Monitor pressure recorder for signs of hole bridging.

C4. **Rotate and reciprocate the pipe at all times during clean out.** Pull into 7" casing for all production tests.

C5. Record all gauges in the Daily Tower Report and on WIMS Report. When hole is clean and stabilized, TOOH with 3-1/2" DP and DC's

C6. (Check w/ office first.) RU wireline, under full lubricator, run caliper log from 2867' to 2675'. RD wireline.

C8. Engineering will decide to run liner or leave open-hole

Land Tubing

12. TIH with pump-off plug on bottom, Model 'F' profile nipple one joint off bottom and remaining 2-3/8", 4.7# 8rd EUE tubing. Land tubing a minimum of 45' off bottom. Run lockdown screws in on donut.

13. Nipple down BOP. Nipple up wellhead assembly.

14. Pump out plug. Blow the hole clean with air for 1 hour.

15. Take final gauges (Gas & Water) at 15 minutes, 30 minutes, 45 minutes and 60 minutes. **Notify Production Operation.** Catch gas and water samples as required. Shut in well. Rig down.

Compiled By: Sean Woolverton 6/21/95
S. C. Woolverton
Production Engineer

Approved By: Danny W. Hill 6/21/95 PW Bates 6/22
D. W. Hill
Drilling Superintendent

Vendors:

Wireline Services:	Schlumberger (325-5006)
Pumping Services:	BJ Services (327-6288)
BMT Tool Services	Protocom-Drew Bates (326-3192)

SCW/scw	Engineer:	Sean Woolverton	(H) 326-4525	(W) 326-9837
	Geologist:	Jay Close	(H) 325-5352	(W) 326-9764

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