submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM
96 JUL 15 PM 3:50
070 FARMINGTON, NM

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
SF-079302A

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
MERIDIAN OIL

8. **Well Name & Number**
Sanchez A #2

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

9. **API Well No.**
30-039-21968

4. **Location of Well, Footage, Sec., T, R, M**
1570'FSL, 810'FWL, Sec.20, T-26-N, R-6-W, NMPM
L

10. **Field and Pool**
Blanco MV/Basin DK/
Ensenada Gallup EXT

11. **County and State**
Rio Arriba Co, NM

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	
	_X_ Recompletion	___ New Construction	
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing	
	___ Casing Repair	___ Water Shut off	
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection	
	_X_ Other - Commingle		

13. **Describe Proposed or Completed Operations**

It is intended to add the Gallup and Mesaverde formations to the subject well and commingle with the Dakota. Casing failures that are found will be repaired, and the well returned to production. A down hole commingle order will be applied for.

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JUL 24 1996
OIL CON. DIV.
DIST. 3

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

Signed [signature] (JME3) Title Regulatory Administrator Date 7/15/96

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

APPROVED
JUL 19 1996
DISTRICT MANAGER

NMOCD

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

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070 FARMINGTON, NM

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
30-039-21968	72319 / 96321/71599	Blanco MV/Ensenada Gal/Basin DK

⁴ Property Code	⁵ Property Name	⁶ Well Number
7475	Sanchez "A"	2

⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
14538	MERIDIAN OIL INC.	6426'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	20	26 N	6 W		1570	South	810	West	R.A.

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
S/320 160-S/320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶ Not resurveyed, prepared from a plat dated 11-6-78 by Fred B. Kerr Jr.

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OIL CON. DIV.
DIST. 3

20

810'

1570'

¹⁷ OPERATOR CERTIFICATION

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

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Administrator
Title

7-15-96
Date

¹⁸ SURVEYOR CERTIFICATION

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

7-11-96
Date of Survey

Signature and Seal of Professional Surveyor:

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED LAND SURVEYOR

6857
Certificate Number

Sanchez A #2
Blanco Mesaverde/Undesignated Gallup/Basin Dakota Workover
UnitL-Sec20-T26N-R06W
Lat: 36° 28' 7"
Long: 107° 29' 49"

- Comply with all BLM, NMOCD, & MOI rules & regulations.
- **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
- **Lower Dakota stimulation will entail high surface pressures = 8500 psi.**
- 2-3/8" 5.95# P-110 tubing required for overbalanced surge (7200' +/- required).
- 2-7/8" N-80 Buttress Frac String 6400 +/- required).
- Fifty (50) joints 2-3/8" 4.7# EUE J-55 tubing and six (6) 3-1/8" drill collars on location
- **8** frac tanks required for hydraulic stimulations. Use 2% KCl water.
- **Acetic acid** will be used for Gallup stimulation.
- **Immediate flowback will be implemented on the fracs.**
- Use drill gas or Nitrogen **ONLY** for all operations - **NO AIR.**
- Ensure CIBPs used are T-Lok for easier drilling of stacked plugs.

This well is part of the 1996 Klein/Vaughn Mesaverde/Gallup/Dakota commingle program. The well is currently completed in the Dakota with a production rate of 56 MCFD/ <1 BOPD. Cumulative Dakota production is 738 MMCF/ 7.3 MBO.

Lower Dakota pay will be reperforated and restimulated. The Dakota will then be temporarily abandoned so that the Gallup (Niobrara) and Mesaverde (Point Lookout) intervals can be added. All three zones will be commingled immediately after completion of the workover.

NOTE: All plunger lift equipment, if any, should have been removed from the tubing by the lease operator.

1. MIRU. Record and report SI pressures on tubing, casing, & bradenhead. Lay blowdown line. Blow down casing & tubing. Kill well w/ 2% KCl down tubing. ND WH, NU BOP.

2. TOOH, rabbit, & strap 2-3/8" tubing (from 7244', SN @ 7214'). **Note: Possible tight spots in tubing @ 1133', 6770', 7054'.** Visually inspect tubing, note any scale in tubing. Replace any damaged joints. Utilize tubing for 2-3/8" workstring.

3. PU 3-7/8" bit, float, six (6) 3-1/8" drill collars on 2-3/8" tbg. Clean out w/ gas to PBTD @ **7288'**. Note drilling mud in returns if any. TOOH with bit & collars.

4. PU 4-1/2" RBP & 4-1/2" packer combination on 2-3/8". TIH & set RBP @ **6800'**. Load hole from bottom w/ 2% KCl water.

5. Pressure test entire casing string to 1000 psi for 10 minutes. If PT does not hold, pull above DV tools @ 5466' and 2788' & test below each to 1000 psi. Locate hole(s). TOOH. Engineering will provide a squeeze procedure if required.

6. RU wireline. Run GR-CCL-CBL from 6800' to surface under 1000 psi w/ no gaps. Note and report all cement tops and quality of bond over both Gallup & Mesaverde intervals. If cement is not covering the Gallup interval, a block squeeze may be performed across the Gallup. Engineering will provide a squeeze procedure if required.

7. Complete all squeeze cementing operations which will be determined based upon pressure test information and bond quality. WOC recommended time. Drill out cement. Pressure test to 1000 psi. If

casing integrity is not sound, identify leaks, & engineering will recommend squeeze procedure & modify stimulation work.

8. If no squeeze work is necessary and the casing held a solid test @ 1000 psi (no bleedoff), isolate wellhead with 2 joints 2-7/8" tbg and PKR. Test casing string to 3800 psi. If the test holds, make necessary adjustments to frac down casing. If test does not hold, bleed off and retest to 1000 psi to make sure no new leaks developed.

9. PU retrieving head and TIH to RBP @ 6800'. Latch onto RBP, TOOH, standing 2-3/8" back.

Lower Dakota Completion:

10. PU 2-3/8" P-110 tubing with 4-1/2" FB PKR and 3-1/2" Schlumberger TCP guns set up for the following perforations (w/ production valve to enable pressuring up on tubing before firing). TIH to 7200' +/- to get on depth - SETTING DEPTH WILL BE DETERMINED ON LOCATION ACCORDING TO GUN CONFIGURATION. Run GR-CCL through tubing to get on depth. Set PKR. Load backside. Hold 500 psi on annulus during stimulation.

11. Pressure test surface lines and flowback equipment to 9500 psi. **Maximum surface pressure = 8500 psi.** Pressure up tubing f/ surface with nitrogen to 5000 psi.

12. Pump 2% KCl down tubing until surface pressure reaches **8500 psi** (about 12.6 bbls). At 8500 psi surface pressure, the BHP at the production valve is 10,500 psi.

13. Perforate the following intervals w/ TCP guns, DP 34B Hyperjet II 34g charges (0.44" hole, 18" penetration), 4 SPF @ 60° phasing.

7182' - 7196'

7204' - 7210'

7220' - 7240'

(40', 4 SPF, 160 holes)

14. Open tubing up to pit on 1/4" positive choke for flowback.

15. Swab test to determine if zone is wet. Consult engineering for this decision. Release PKR, TOOH laying down 2-3/8" P-110 tubing. Change rams to 2-7/8".

16. PU CIBP, TIH. If zone is wet, set CIBP @ 7150'. Set CIBP @ 6350' to T&A entire Dakota zone.

Niobrara Completion:

17. Spot 250 gallons **10% acetic acid** (w/ 2 gal/1000 corrosion inhibitor) across Gallup @ 6296'.

18. RU wireline under packoff. Perforate Gallup top-down in acid @ the following depths with 3-1/8" HSC gun w/ Owen 306 12 g charges (0.31" hole, 11" penetration), 1 SPF @ 180 degree phasing. Engineering may modify perforations based upon bond character.

6080'	**6084'**	**6087'**	**6090'**	**6119'**	**6121'**
6134'	**6137'**	**6164'**	**6172'**	**6194'**	**6204'**
6222'	**6224'**	**6234'**	**6238'**	**6248'**	**6252'**
6260'	**6264'**	**6285'**	**6294'**		

(22 total holes, 216' of interval)

19. PU 4-1/2" FB PKR, 1.81" profile nipple, 4 joints 2-3/8" 4.7# N-80 tubing, 2-3/8" x 2-7/8" buttress changeover, 2.25" profile nipple, and 2-7/8" 8.7# N-80 Buttress frac string. TIH above CIBP and below bottom perforation. Test CIBP to 3800 psi. Release PKR, pull uphole & set PKR 100' above top Gallup perforation. Hold 500 psi on annulus during acid job.

20. RU stimulation company. Pressure test surface lines to 7500 psi. **Max pressure = 6500 psi.** Prepare to break down Niobrara w/ 250 gallons **10% acetic acid** (w/ 2 gal/1000 corrosion inhibitor) and 44 7/8" 1.3 s.g. ball sealers. Attempt to achieve 20 BPM on breakdown, go higher if possible. Release pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. Pull up and reset PKR.

21. RU immediate flowback equipment (frac nipple, valve, tee, etc.). See attached diagram.

22. RU stimulation company. Pressure test surface lines to 7500 psi. **Maximum STP = 6500 psi.** Hold 500 psi on annulus. Fracture stimulate the Niobrara w/ 20# linear gel w/ 70Q N2 foam and 50,000# Tempered DC sand. See attached frac schedule for details. *(1 frac tanks needed)*

23. Flow back well immediately after shutdown -- **NOTE: Time from frac shut-down until flow tee is opened for flow back should be around 30 seconds. Time is critical to achieve reverse gravel packing. Flowback rate not to exceed 4 BPM - choke flowback line as necessary.** Frac company is to monitor flowback pressures for 30 minutes after shutdown. Flowback should continue for as long as possible while still allowing for completion of both stages within 24 hours. Blow down to release pressure when necessary.

24. Release PKR, TOOH w/ 2-7/8" tubing and PKR. RU wireline under packoff. Make 4-1/2" gauge ring run to 5320'. Set 4-1/2" CIBP @ 5300'.

Point Lookout Completion:

25. TIH w/ PKR on 2-7/8" and test CIBP to 3800 psi. Spot 300 gallons 7.5% HCl acid (w/ 2 gal/1000 corrosion inhibitor) at 5242' across Mesaverde. TOOH.

26. Perforate Mesaverde top-down in acid @ the following depths 3-1/8" HSC gun w/ Owen 306 12 g charges (0.31" hole, 11" penetration), 1 SPF @ 180 degree phasing. Engineering may modify perforations based upon bond character.

4924'	**4926'**	**4930'**	**4932'**	**4935'**	**4980'**
4982'	**4985'**	**4988'**	**5028'**	**5031'**	**5046'**
5048'	**5096'**	**5100'**	**5111'**	**5113'**	**5160'**
5163'	**5184'**	**5188'**	**5211'**	**5214'**	**5240'**
5242'					

(25 total holes, 318' of interval)

27. PU 4-1/2" FB PKR, 1.81" profile nipple, 4 joints 2-3/8" 4.7# N-80 tubing, 2-3/8" x 2-7/8" buttress changeover, 2.25" profile nipple, and 2-7/8" 8.7# N-80 Buttress frac string. Set PKR 100' above top Mesaverde perforation. Hold 500 psi on annulus during acid job.

28. RU stimulation company. Pressure test surface lines to 7500 psi. **Max pressure = 6500 psi.** Prepare to break down Mesaverde w/ 300 gallons **7.5% HCl acid** (w/ 2 gal/1000 corrosion inhibitor) and 50 7/8" 1.3 s.g ball sealers. Attempt to achieve 20 BPM on breakdown, go higher if possible. Release

pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. Pull up and reset PKR.

29. RU immediate flowback equipment (frac nipple, valve, tee, etc.). See attached diagram

30. RU stimulation company. Pressure test surface lines to 7500 psi. **Maximum STP = 6500 psi.** Hold 500 psi on annulus. Fracture stimulate the Mesaverde w/ 100,000# 20/40 sand in slickwater + 30% N2 foam. See attached frac schedule for details. *(7 frac tanks needed)*

31. Flow back well immediately after shutdown -- **NOTE: Time from frac shut-down until flow tee is opened for flow back should be around 30 seconds. Time is critical to achieve reverse gravel packing. Flowback rate not to exceed 4 BPM - choke flowback line as necessary.** Frac company is to monitor flowback pressures for 30 minutes after shutdown. Flowback should continue for as long as necessary to release PKR.

32. Release PKR & TOOH laying down 2-7/8" N-80 tubing. Change out rams to 2-3/8".

33. TIH w/ 3-7/8" bit and drill collars on 2-3/8" tubing and clean out to CIBP @ 5300'. Drill CIBP, clean out to CIBP @ 6350'. Drill CIBP, clean out to PBTD @ 7288'. (If Lower Dakota is wet, PBTD will be CIBP @ 7150'). Clean up to +/- 5 BPH and trace to no sand. Obtain final pitot gauge. TOOH.

34. Prepare to run production tubing string as follows: expendable check, one joint 2-3/8" tubing, 1.78" seating nipple, and remaining tubing. Rabbit tubing in hole, land @ bottom DK perf.

35. ND BOP, NU WH. Pump off expendable check and flow well up tubing. RD & release rig to next location.

36. Notify Marketing & government agencies that commingled production from all horizons MV, GP, & DK will occur in order to finalize allocation formula. At end of 90 days, the allocation formula will be submitted to NMOCD for approval, **production will commence prior to actual allocation approval.**

Concur: JDS 7/17/96
Northeast Basin Team Leader

Approved: W.S. 7/18/96
Drilling Superintendent

JME JME

Recommended Vendors:

Overbalanced Perforating	Schlumberger	325-5006
Stimulation, N2 for OB perf'ing	Rig Dependent	
Cased Hole Services	Rig Dependent	
Engineering	Joan Easley	599-4026-work 324-2717-pager 327-6843-home

Meridian Oil
7/15/96:dla

PERTINENT DATA SHEET
SANCHEZ A #2

Location: 1570' FSL, 810' FWL
Unit L, Section 20, T26N, R6W
Rio Arriba County, NM

Field: Basin Dakota

Spud Date: 08-19-79
Completion Date: 10-23-79 **Cathodic Protection:** NONE

Elevation: 6426' GL
LAT: 36° 28' 7"
LONG: 107° 29' 49"
DP#: 43937A
GWI: 90%
NRI: 72.375%
TD: 7304'
PBTD: 7288'

Casing Record:

Hole Size	Casing Size	Weight & Grade	Depth Set	Sxs Cement	Cement Type
13-3/4"	9-5/8"	36#, K-55	218'	190 (224 ft3)	B w/3% CaCl, 1/4#/sk gel-flake
8-3/4"	4-1/2"	11.6#, K-55	7304'	300 (450 ft3)	200sx B 65/35 w/6% gel, 2% CaCl
7-7/8"	4-1/2"	10.5#, K-55	6467'		100sx B 50/50w/2%gel,2%CaCl,1/4#Tufplug
Marker jt. @ 6808'		Stage Tool	5466'	355 (575 ft3)	B 65/35 w/6% gel, 2% CaCl
		Stage Tool	2788'	262 (425 ft3)	B 65/35 w/6% gel, 2% CaCl

good circulation all stages

Tubing Record:

Tubing Size	Weight & Grade	Depth Set	BHA
2-3/8"	4.7#, J-55	7244'	SN set @ 7214'

Formation Tops:

Ojo Alamo	1918'	Mesaverde	4285'	Greenhorn	6830'
Pictured Cliffs	2644'	Pt. Lookout	4880'	Graneros	6874'
Chacra	3518'	Gallup	6075'	Dakota	7016'

Logging Record:
FDC-GR, I-SFL, Temp Survey

Stimulation:
Perf'd 6944', 6958', 7023', 7030', 7036', 7060', 7070', 7082', 7102', 7113', 7183', 7192', 7200', 7232', 7242' w/1 SPZ
Frac'd w/181,000# 20/40 sand, 139,616 gal water

Workover History:

04-19-93 MIRU swab unit. Run GR to 7200'. FL @ 5000'. Pulled & inspected piston. RD.

03-16-93 MIRU swab unit. Csg 610#, tbg 600#. FL @ 5600'. Swab in well, RD.

11-26-90: RIH w/1.904 gauge ring. Hit tight spot @ 1133'. Run to 7232', POOH. RIH w/2" JDC, fish piston from 7232'. Piston bent, POOH. Check lab, found spring collasped. RD.

11-7-89 MIRU swab unit. FL @ 1700'. Pulled piston. RD.

05-31-89: RU Western Co. & laid blow line from csg annulus to pit. Blew down backside. Pumped 1000 gal 15% HCL, double inhibited w/5% Super A-Sol down 2-3/8" tbg @ 1/2 BPM & no pressure. Disp w/20 bbl 2% KCL (balanced plug). RU swab. Fl @ 5500#. Brought back sand. Swab in, RD.

05-25-89: RIH w/1.906 pineapple broach to 7034'. Jarred for 45 min to 7036'. Lots of gyp.

01-23-89 MIRU Swab unit. FL @ 5400'. Some sand on cups. Swab well in. RD.

05-16-88: Ran guage ring. Hit tight spots @ 1135', 6770', 7054'. POOH. Ran impression block. Went to 7054'. Would not stick or gain. Block showed no impression. Ran tubing stop & set @ 7050'. Dropped FB BH spring. Chased & set on stop. Installed Ferguson Beauregard Lubricator, catcher, 1 Kimray 2" motorvalve, & 1 used Fisher controller.

12-22-88: RIH w/fishing tool, caught spring @ 7050'. RIH w/fishing tool, caught stop @ 7050'. Jarred loose & POOH. RIH w/blind box to 7068', stacked out. Jarred & worked down to 7184', could go no farther. Tried to catch sample @ 7184', but sample washed out before got to surface. Fluid level @ 5800'. Heavy fluid @ 7068'.

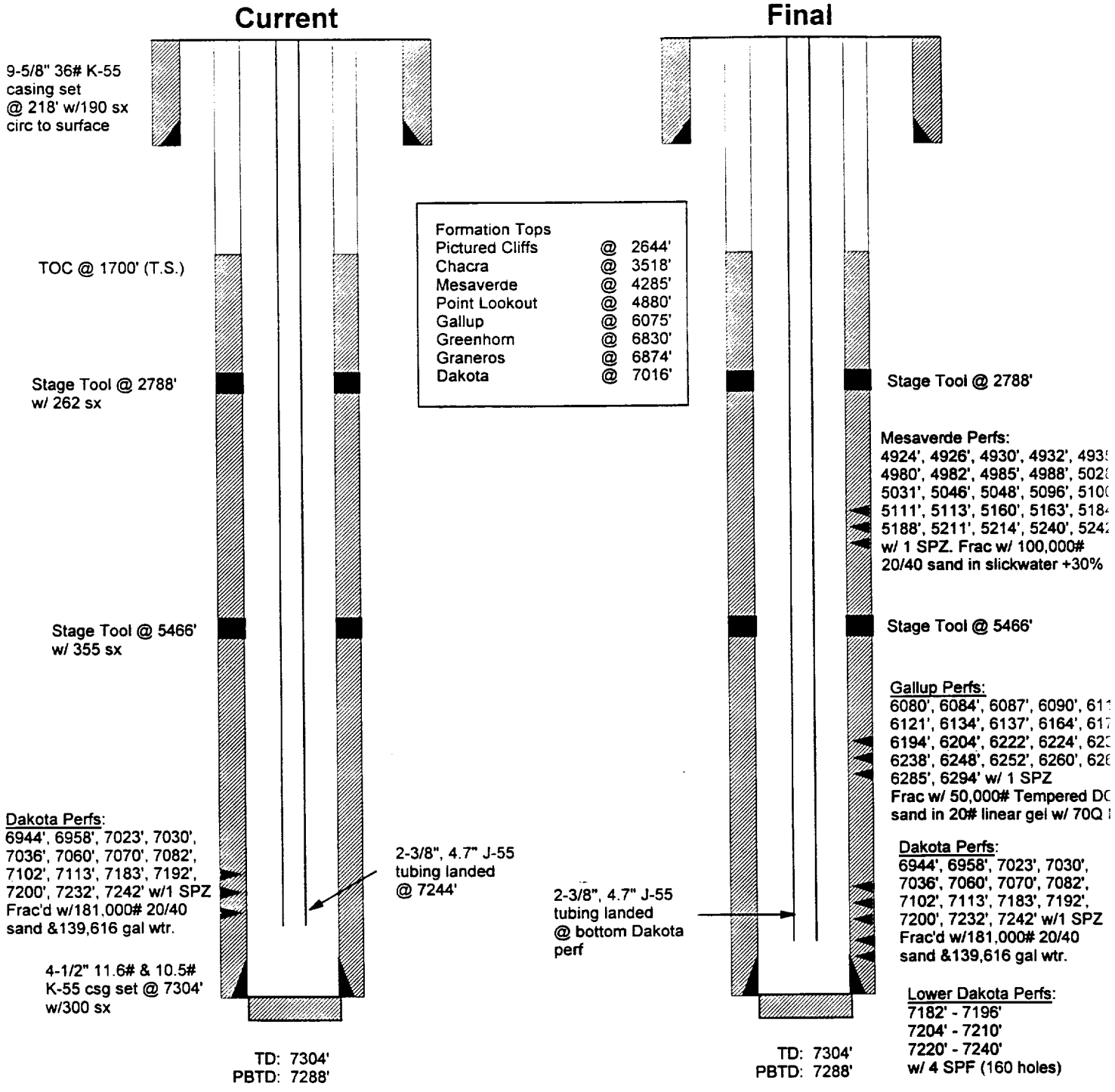
Production History: Current Production: 56 MCFD 0.85 BOPD
Initial Deliverability No Info Latest Deliverability: 347 MCFD
Cum Gas: 738 MMCF Cum Oil: 7269 BOP ISITP: 212 ISICP: 2412
Note: Acquired f/ Union Oil Co. of California DBO of Unocal effective 2/1/93

Transporter: Oil/Condensate: Giant Transporation Gas: El Paso Natural Gas

JME

Sanchez A #2

Basin Dakota
Unit L, Section 20, T26N, R6W
Rio Arriba County, NM
Elevation: 6426' GL
LAT: 36° 28' 7"
LONG: 107° 29' 49"
date spud: 08-19-79



Meridian Oil Inc.
06/06/96: dla

Sanchez A #2
Alternate Procedure Items for Fracing Down Casing

The workover procedure for this well has been written assuming that it will be necessary to frac down tubing (worst case scenario).

If no squeeze operations are necessary and the subsequent pressure test to 3800 psi (Step #8) is okay, we will frac down casing. Alternate frac designs for this possibility are attached.

If we can frac down casing, we will still spot acid and pressure test bridge plugs as before. We will do the acid breakdown down casing and retrieve balls with a junk basket. The frac will still be flowed back immediately.

Concur: _____ 7/11/2
Northeast Basin Team Leader

Approved: _____ 7/17/02
Drilling Superintendent

JME
599-4026-work
324-2717-pager
327-6843-home