State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division

			/		API	# (assigned by OCD)
						30-045-60075
L. !	Type of GAS	Well			5.	Lease Number Fee
					6.	State Oil&Gas Lease
2. 1		Operator			7.	Lease Name/Unit Name
	MERI	DIAN OIL			8.	Culpepper Martin SRC Well No.
3. 3	Address	& Phone No. of Operat	or			7
			87499 (505) 326-9700		9.	Pool Name or Wildcat Blanco Mesaverde
1	Location	n of Well, Footage, Se	т. В. М		10.	Elevation:
			-32-N, R-12-W, NMPM, San	Juan Coun	ty	
	Type of	Submission	Type of Act	ion		
		Notice of Intent	Abandonment	Change o		
			Recompletion	_ New Cons		
		Subsequent Report	Plugging Back	_ Non-Rout	ine	Fracturing
				_ Water Sh	ut o	11 - T
		Final Abandonment	Altering CasingX_ Other - Pay add an			o Injection n
13.	Desci	ribe Proposed or Compl	leted Operations			
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Culpepper Martin #7 (Mesaverde) Point Lookout Restimulation / Menefee Pay Add NE/4 Section 28, 32N-12W San Juan County, New Mexico Lat. 36.962100 Long 108.096660

Equipment Requirements:

7 frac tanks, 2 joints of 3-1/2" frac tubing, 7-5/8" fullbore stimulation packer, 5-1/2" packer, immediate flowback line and chokes, 2 additional joints of 2-3/8", eue, 8-rd production tubing.

- Hold safety meeting. MIRU. Comply with all MOI, BLM and NMOCD rules and regulations. 1. Install 6 frac tanks and 1x400 bbl rig tank. Fill each frac tank with 3#'s of biocide 1-2% KCl water (check w/ engineer to determine 1% or 2% KCL water).
- Obtain and record all wellhead pressures. ND WH, NU BOP. Strap OOH w/ 2-3/8" tubing set at 2. 4921' Confirm tubing strap footage w/ Pertinent Data Sheet footage. Check joints very carefully when TOOH for scale and holes. Replace bad tubing as necessary.
- A 7-5/8" scraper run may need to be made to 4560' (Liner Top) if tubing scaled up. If not, TIH 3. with 4-3/4" bit, 5-1/2" casing scraper, 3-1/8" drill collars (if needed) and 2-3/8" tubing. CO to PBTD @ 4988' est (note: F.C. has been drilled). Blow hole clean with air/mist. TOOH.
- PU a 5-1/2" RBP on 2-3/8" tubing and TIH. Set RBP @ 4800'. PU 10', load hole, close pipe 4. rams and pressure test RBP to 1000 psi for 15 minutes. TOOH w/ tubing.
- RU wireline. Spot 5' sand on RBP with bailer. Run CBL w/ 1000 psi pressure from RBP @ 5. 4800' to 3500' (TOC in 5-1/2" @ liner top @ 4589' & 7-5/8" @ 3775' from TS).
- PU 7-5/8" packer on 2 jts of 3-1/2" N-80 tubing and set. Pressure test casing and RBP 3000 psi 6. for 15 minutes. Release pressure and stand back packer. If casing does not pressure test prepare to hunt for leaks and call for 3-1/2" & 2-7/8" frac tubing.
- TIH w/ retrieving head on 2-3/8" tbg blowing down as you go. Wash sand from RBP @ 4800' 7. and retrieve. TOOH.
- PU 5-1/2" cement retainer on 2-3/8" tubing and TIH. Set cement retainer @ 4800' (50' above top 8. perforation). Pressure up on annulus to 500 psi.
- RU cement company. Establish rate into Point Lookout perforations @ 4842' to 4947' (105'). 9. Mix cement @ 15.4 #/gal (keeping constant density). Squeeze perforations w/ cement. Under displace by one (1) BBL. Sting out of retainer and TOOH. LD stinger.

Be prepared to reverse out if early squeeze is obtained before displacement is complete.

Cement Slurry:

200 sx Class "B" Standard Cement

0.3% halad 344 (Fluid Loss)

6-1/2 pps Gilsonite (Loss Circulation).

4.97 gal/sk 15.4 #/gal 1.27 cf/sk

- TIH with 4-3/4" bit/mill, 3-1/8" drill collars (if needed) and 2-3/8" tubing. Drill out retainer @ 4800' 11. and cement CO to PBTD @ 4988'. Drill an additional 12' of shoe cement to new PBTD @ 5000'. Close pipe rams and pressure test squeeze to 1500 psi for 15 minutes. TOOH to 2000' and blow hole clean with air/mist. TIH blowing hole clean in stages to PBTD @ 4988'. Spot 300 gallons of inhibited 15% HCL acid across perforations. TOOH.
- RU lubricator for underbalanced perforating. Perforate the Point Lookout interval top down using 12. 3-1/8" HSC with 12 gram charges (Owen HSC-3125 306T) and 0.29" diameter holes: 2 SPF,180 degree phasing. Inspect guns to ensure all perforations fired. Record pressures if any. RD wireline.

4824, 4831, 4838, 4854, 4858, 4866, 4870, 4874, 4882. **Point Lookout:**

4902, 4906, 4916, 4920, 4927, 4942, 4946, 4958, 4967, 4978, 4988

20 intervals, 40 holes Total:

- TIH w/ 7-5/8" packer and 2 joints of 3-1/2" tbg. Set packer & test w/ 500 psi on backside. RU 13. flowback line w/ 1/8" positive choke. RU Stimulation Company. Pressure test flowback line to 1000 psi w/ plug in the end. Pressure test Stimulation Company lines to 4000 psi.
- Hold safety meeting. Max allowable surface treating pressure is 3000 psi @ 50 Bbls/min. 14. Pressure test surface lines to 4000 psi. (1000 psi over maximum treating pressure but less than the working pressure of the lines.) Re-stimulate the Massive Point Lookout interval @ +/- 50 BPM w/ 30# XL gel and 7000 SCF/M N2, 20/40 Arizona and 20/40 resin coated. Hold and monitor 500 psi on backside. Sand will be tagged w Ir-192. Stage flush when sand concentration drops to 4-1/2 #/gal. Quick flush w/ 1% KCL water and N2. Cut flush rate in half (to 15 BPM) when half of flush is away. Note rate and pressure and underflush by a minimum of 20%.
- Flow back well immediately through 1/8" positive choke to reverse gravel pack. If well is not 15. dead after 2 hours, increase positive choke size until pressure falls to zero. Accurately record sand volume and gel/water coming back.
- Release packer and stand back. Check and inspect packer. 16.
- RU wireline and set a 5-1/2" CIBP @ 4795'. Dump 5' sand on RBP w/ bailer. Load hole w/ 1% 17. KCL water.
- PU 7" pkr and 2 jts 3-1/2" tubing. Set pkr and pressure test casing and RBP to 3000 psi for 15 18. min. Release and pull pkr. Check and inspect packer. Call back Stimulation Crew once BP pressure tests.
- TIH w/ 2-3/8" tbg and blow down in stages to 4780' (15' above sand/RBP). Spot 400 gallons of 19. inhibited 15% HCL acid across Menefee interval. TOOH.
- RU lubricator for underbalanced perforating. Perforate the Menefee top down using 3-1/8" HSC 20. guns with 12 gram charges (Owen HSC-3125 306T) and 0.29" diameter holes: 2 SPF, 180 degree phasing. Inspect guns to ensure all perforations fired. Record pressures if any. RD wireline.

4504, 4515, 4530, 4540, 4556, 4574, 4591, 4608, 4612, 4621, Menefee:

4630, 4653, 4669, 4685, 4694, 4698, 4713, 4717, 4755, 4762

20 intervals, 40 holes Total:

Culpepper Martin #7 Point Lookout Restimulation / Menefee Pay Add Page 3

- 21. TIH w/ 7-5/8" packer and 2 joints of 3-1/2" tbg. Set packer & test w/ 500 psi on backside. RU flowback line w/ 1/8" positive choke. RU Stimulation Company. Pressure test flowback line to 1000 psi w/ plug in the end. Pressure test Stimulation Company lines to 4000 psi.
- 22. Hold safety meeting. Max allowable surface treating pressure is 3000 psi @ 45 Bbls/min. Pressure test surface lines to 4000 psi. (1000 psi over maximum treating pressure but less than the working pressure of the lines). Stimulate the Menefee interval @ +/- 45 BPM w/ 30# XL gel and 7000 SCF/M N2, 20/40 Arizona and 20/40 resin coated. Hold and monitor 500 psi on backside. Sand will be tagged w Ir-192. Stage flush when sand concentration drops to 4-1/2 #/gal. Quick flush w/ 1% KCL water and N2. Cut flush rate in half (to 15 BPM) when half of flush is away. Note rate and pressure and underflush by a minimum of 20%.
- 23. Flow back well immediately through 1/8" positive choke to reverse gravel pack. If well is not dead after 2 hours, open well wide open over 15 minutes until pressure falls to zero. Accurately record sand volume and gel/water coming back.
- 24. PU 4-3/4" bit on 2-3/8" workstring and clean out to CIBP @ 4795'. Obtain stable pitot gauge from Menefee. Drill CIBP and clean out to new PBTD @ 5000' PU above the Mesaverde perforations and flow the well naturally, making short trips for clean up when necessary. Obtain pitot gauge from MV after clean up.
- 25. When sand has diminished, obtain pitot gauge & TOOH.
- 26. RU wireline. Run after frac gamma ray log.
- 27. TIH with one joint of 2-3/8", 4.7#, J-55 tubing w/ expendable check, an F-nipple, then the rest of the tubing. Land tubing as removed from well plus 2 additional joints close to the new bottom perf @ 4988'.
- 28. ND BOP's, NU WH. Pump off expendable check. Run swab to FN. Obtain final pitot. RD and MOL. Return well to production.

Approval:	
• •	Drilling Superintendent
Approval:	
Apploval.	Northwest Basin Team Leader

Pertinent Data Sheet

CULPEPPER MARTIN #7

Location: Unit B NW/4 NE/4, Section 28, T32N, R12W, 790' FNL, 1650' FEL,

Lat. 36.962100, Long. -108.096660 by TDG

San Juan County, NM

Field: Blanco Mesaverde

Elevation: 6067' DF

KB: N/A

TD: 5028'

PBTD: 4988' est.

FC Drilled

Spud Date: 08-27-56

Completed: 09-28-56

DP No: 10672

Prop. No: 0023106

Casing/Liner Record:

Hole Size	Csg. Size	Wt. & Grade	Depth Set	<u>Cement</u>	Top/Cement
131/4"	103/4"	32.75#	169'	125 sx	to surface
9 7/8"	7 5/8"	26.4#	4732'	200 sx	3775' (TS)
61/4"	51/2"	15.5# Liner	4589'-5028'	100 sx	TOC Liner Top

Tubing Record: 2 3/8" set @ 4921'.

Formation Tops:

Ojo Alamo: est. 610' est. 624' Kirtland: 1976' Fruitland: 2466' Pictured Cliffs: 2680' Lewis: Massive Cliffhouse: 4140' Menefee: 4365' Massive Point Lookout: 4805' 4954 Lower Point Lookout:

Logging Record:

ES, GRN, TS

Perf/Stim History:

Perforated @ 2 SPF: 4842'-4870', 4878'-4908', 4916'-4930', 4940'-4947'.

Stimulated with 40,000# of sand and 42,000 gallons of water.

Entire job on vacume @ 60 BPM.



BLANCO MESAVERDE

AS OF 4/18/96

790' FNL, 1650' FEL SEC 28, T32N, R12W, SAN JUAN COUNTY, NM

13-1/4" HOLE 10-3/4" 32.75# CSG SET @ 169' CMT W/125 SX COMPLETED 9/28/56 CIRC. CMT TO SURFACE 9-7/8" HOLE OJO ALAMO @ EST 610' KIRTLAND @ EST 624' FRUITLAND @ 1976' PICTURED CLIFFS @ 2466' 2-3/8" TBG SET @ 4921' LEWIS @ 2680' TOC @ 3775' (TEMP. SURVEY) MASS. CLIFF HOUSE @ 4140' **MENEFEE @ 4365'** 7-5/8" 26.4# CSG SET @ 4732" CMT W/200 SX 6-1/4" HOLE MASS. POINT LOOKOUT @ 4805' PERF 4842'-4947' LOWER POINT LOOKOUT @ 4954' FRAC W/40,000# SAND & 42,000 GALS WATER 5-1/2" 15.5# LINER @ 4589'-5028' CMT W/100 SX TO LINER TOP