,	UNITED STATES RTMENT OF THE INTER EAU OF LAND MANAGEMEN	/	Form approved, Budget Eureau No. 1004-0135 Expires August 31, 1985 5. LEASE DESIGNATION AND SHELL NO. SF-079289A		
SUNDRY NO (Do not use this form for pre Use "APPI	OTICES AND REPORTS oponals to drill or to deepen or plug LICATION FOR PERMIT—" for such	ON WELLS back to a different reservoir. proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
OIL GAB C.		. /	7. UNIT AGREEMENT NAME		
2. NAME OF OPERATOR	•	 	San Juan Unit 28-7 8. FARM OR LEASE NAME		
Tenneco Oil Compan	у				
3. ADDRESS OF OPERATOR			9. WELL NO.		
4. LOCATION OF WELL (Report location	nglewood, CO 80155 on clearly and in accordance with an	But rectirements 1	10. FIELD AND POOL, OR WILDCAT		
See also space 17 below.) At surface	•	LECEINED	Blanco Mesaverde		
890' FSL, 1090' FW	L	DEC 16 1985			
14. PERMIT NO.		UREAD OF LAND MANAGEMENT FARMINGTON RESOURCE AREA	Sec. 14, T28N R7W 12. COURTY OR PARISH 13. STATE Rio Arriba NM		
16. Check	Appropriate Box To Indicate I	Nature of Notice, Report, or C			
NOTICE OF IN		SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL		
FRACTURE TREAT	MULTIPLE COMPLETE	PRACTURE TREATMENT	ALTERING CASING		
REPAIR WELL	ABANDON* CHANGE PLANS	SHOOTING OR ACIDIZING (Other)	ABANDONMENT*		
(Other) case & refr		Completion or Recompl	of multiple completion on Welletion Report and Log form.) including estimated date of starting any depths for all markers and sones perti-		
	ermission to plug off tached detailed proced		the existing zone OEC 201985 CON DIV.		
18. I hereby certify that the foregoing		nior Regulatory Analys	t 12/10/85		
(This space for Federal or State of)More time)	· ·			
APPROVED BYCONDITIONS OF APPROVAL, IF	TITLE		DATE 1985		

*See Instructions on Reverse Side

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

2 1/8" LANDED AT 5560"

4830'

			592/		_	
		Li	EASE_S	JB 28-	-/	
CASIN	<u>IG</u> :	W	ELL NO.		9	
9 5/8	"OD, <u>25.4</u> L	.В,С	SG.W/	150		sx
	TOC @ st	<u>ırf</u> . HOL	E SIZE_		DATE:	5/31/53
	REMARKS	PT to 50	O psi f	or 30	min	
7	"OD, 23.0 l	_B ,C	SG.W/	300		sx
	TOC @321	<u>.5</u> . HOL	E SIZE_		DATE :	5/18/53
	REMARKS_	PT to 10	00 psi	for 30) min	
	"OD,l	_В,С	SG.W/			sx
	TOC @	HOL	E SIZE_		DATE:	
TUBING	<u>}</u> :					
2 3/8	_"OD,	LB,	GRADE		RD,	CPLG
	LANDED (<u> 5560</u> .	SN, PA	CKER,	ETC	
	"OD,	LB,	GRADE	· ,	RD,	CPLG
	LANDED (<u>a</u>	SN, PA	CKER,	ETC	
PUMP		RODS	,	AN	CHOR	

DETAILED PROCEDURE:

- Prepare location by blading and installing anchors, if necessary. Install blowdown lines and blow well down.
- 2. MIRUSU. Kill tbg w/1% KCL water.
- 3. NDWH. NU 6" 3000 psi BOPE.
- 4. POOH laying down tubing. Visually inspect tbg on trip out. Note: If tbg is stuck, do not pull over 40K# as tbg may be in very poor condition RIH w/ jet cutter and attempt first shot at least 100 ' below the 7" csg shoe.

- 5. Set Baker cement retainer at 4630' (approx. 200' above the 7" csg shoe.) PU stinger, crossover, 2-7/8" drill pipe and TIH. Fill hole and PT BS to 1000 psi.
- 6. Squeeze open hole w/300 sxs Class B w/1% CaCl₂ (sidetrack plug). Sting out and reverse tbg clean. TOOH and LD stinger.
- 7. NDBOP and tbghd, NU 11"-2M x 11"-2M casing spool and BOPE. PT stack, blind and pipe rams to 1000 psi.
- 8. TIH w/6-1/4" bit and drill collars. Unload hole w/N_2 . Drill out cement retainer, and dress off open hole plug to 15' below the 7" csg shoe. Blow hole clean and TOOH.
- 9. RU to drill w/gas. PU knuckle joint kick-off assembly. TIH. Survey as needed, make kickoff and angle building run.
- 10. Open hole to 6-1/4". Drill to TD w/air or foam. POOH for logs.
- 11. RUWL and run GR-DIL and GR-CDL-Caliper over entire open hole. TIH to TD, blow hole clean, POOH laying down, and RU to run csg.
- 12. Run 4-1/2" 10.5# K-55 STC csg as a long string as follows: guide shoe, float collar one jt up with 3 centralizers.
- 13. Cement as follows: Precede cement w/10 BBLS mud flush. Cement 4-1/2" in place using sufficient volume of 50:50 pozmix + 1/4# /sx flocele to raise cement to + 2500'.
- 14. Set slips w/full csg weight. NDBOP and cut off 4-1/2" csg. NU tubinghead.
- 15. Load BS w/corrosion inhibited water and PT to 1000 psi. RDMORT.
- 16. MIRUSU. NUBOPE.
- 17. PU 3-7/8" bit, csg scraper, 2-3/8" 4.7# J-55 EUE 8 rd tbg and tally in hole. Roll hole w/ 1% KCL water. PT csg to 3500 psi.
- 18. Spot a sufficient quantity of 7-1/2% DI HCL to cover the perforated interval + 200'. POOH. LD bit and scraper.
- 19. RUWL. Run GR-CCL fr PBTD to 150' above the highest pay. Perf the Lower Mesaverde under lubricator from the top interval down using a 3-1/8" hollow carrier csg gun loaded 2 JSPF @ 120° phasing.
- 20. Acidize down csg w/20 gal per perf of 15% wgtd HCL containing 600# NACL/1000 gal & 1.5 l.l SG RCN ball sealers per perforation. Displace at maximum rate w/MSP less then 3500 psi.

- 21. RIH w/junk basket on WL to recover ball slrs.
- 22. RU & frac Lower Mesaverde w/slickwater containing 1% KCL, 15#/1000 gal friction reducer & 2500#/ft 20/40 sand @ 1 BPM/perf; fluid/sand design on following page. Flush to 10 BBLS shy of top perf & close blind rams ASAP.
- 23. RUWL and RIH w/Baker 4-1/2" RBP. Set approx. 50' above top perf. Dump 2 sx frac sand on RBP, load csg w/1% KCL water. PT RBP to 3500 psi.
- 24. TIH w/2-3/8" tbg to approx 10' above the RBP and spot a sufficient quantity of 7-1/2% DI HCL to cover the top perf + 200'. POOH.
- 25. RUWL. Perforate the Upper Mesaverde under lubricator from the top interval down using a 3-1/8" hollow carrier csg gun loaded w/2 JSPF @ 120° phasing.
- 26. Acidize down csg w/20 gal per perf of 15% wgtd HCL containing 600# NaCl/1000 gal & 1.5 l.l SG RCN ball sealers per perforation. Displace at max rate w/MSP less than 3500 psi.
- 27. RIH w/junk basket on wireline to recover ball sealers.
- 28. RU and frac Upper Mesaverde w/slickwater containing 1% KCL, 15#/1000/friction reducer, and 2500#/ft 20/40 sand @ 1 BPM/perf; fluid/sand design below. Flush to 10 BBLS shy of top perf. Shut blind rams ASAP.
- 29. Retrieve RBP.
- 30. TIH w/2-3/8" production string w/ pump out plug on bottom and SN 1 jt up.
- 31. CO to PBTD w/nitrogen foam. PU and set bottom of tbg within 20' of lowest perforation. Land tbg and NUWH.
- 32. Kick well around w/nitrogen and FTCU.
- 33. RDMOSU.

MESAVERDE FRAC DESIGN:

- 1. 2500# 20/40 sand per ft net pay.
- 2. 2 BPM per ft net pay
- 3. Fluid to contain 1% KCL, 15#/1000 gal friction reducer.
- 4. <u>Schedule</u>

30% pad

- 1 csg volume @ 1/2 ppg 20/40 sand
- 1 csg volume @ 1 ppg 20/40 sand
- 1 csg volume @ 1-1/2 ppg 20/40 sand

Remains @ 2 ppg 20/40 sd