Form 3160-5 Yovember 1983) Formerly 9-331)	UNITED ST DEPARTMENT OF T BUREAU OF LAND	HE INTERI		00 70	Form approved. Budget Eureau N Expires August ; LEASE DESIGNATION A NM-012201	31, 1985
SUND! (Do not use this for	RY NOTICES AND The for proposals to drill or to the "APPLICATION FOR PERI	REPORTS C	N WELLS		. IF INDIAN, ALLOTTEE	OR TRIBE NAME
OIL GAS X	·		RECEIVED		. Unit agreembnt had	42
Z. HAMB OF OPERATOR Tenneco Oil			JAN 1 5 1986	8	8. FARM OR LEASE HAME Blanco LS	
3. ADDRESS OF OPERATOR	249, Englewood, C	0 80155 BU	REAU OF LAND MANAGE	"	. WELL BO. 12	
4. LOCATION OF WELL (Repose also space 17 below.	ort location clearly and in acc	ordance with any	EW TO THE COURCE A	AREA 1	O. PIBLD AND POOL, OR	
At surface	•			1	Blanco Mesav	
790' FNL, 990'	FEL				Sec. 36, T28N R8W	
14. PERMIT NO.	15. BLEVATIONS	(Show whether DF,	27, GR, etc.)	- <u>1</u>	2. COURTY OR PARISH	18. STATE
	5906' G				San Juan	NM
16.	Check Appropriate Box	To Indicate N	·	•		
	PTIL OR ALTER C		WATER BRUT-OFF	BOSESQUEN.	T REPORT OF:	
TEST WATER SEUT-OFF	MULTIPLE COMPLE		FRACTURE TRRATMEN		ALTERING CA	<u> </u>
SMOOT OR ACIDIZE	ABANDON*		SECOTING OR ACIDIZI	NG	NEMKODKAGA	7.
REPAIR WELL	change Plans ack & recomplete		(Other)	namita of	multiple completion of	
	sts permisssion to ed detailed proced		Ĺ	JAI	Serenced well V171986 ON. DIV.	according
SIGNED With the SIGNED (This space for Federal APPROVED BY CONDITIONS OF APPROVED APPROVED BY CONDITIONS OF APPROVED BY CO			ior Regulatory A	nalyst	PRROV	0/86 /ED
		See Instructions	4100 0	fa	M. MILLENBA	CH GER
Title 18 U.S.C. Section 1 United States any faise,	1001, makes it a crime for fictitious or fraudulent sta	any person know stements or repre	ringly and willfully to mesentations as to any mi	ster with:	in its jurisdiction.	ency of the

252		-
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	tt/ m cn - "0/12	
3986'	Pororation Bridged of C = 440	: :

		5388/RJS/2	
		LEASE <u>Blanc</u>	o LS
CACT	TNC.	WELL NO. 12	
CASI			
<u>9-5/</u>	<u>/8</u> "OD, <u>25.4</u> LB, <u>*</u>		
	TOC <u>@Surface</u> HO	E SIZE	DATE: 4/12/5
	REMARKS <u>Circula</u>	ate to surfa	ce
		CSG.W/3	<u>00 </u>
4	TOC @ 2200'. HOL	E SIZE	DATE: 4/25/5
	REMARKS		
	LB,C	SG.W/	DATE:S
	TOC @ HOL		
	REMARKS TOC by t		
	* Note: Spiral		
TUBIN	<u>IG</u> :		
2 3/8	_"OD, <u>4.7</u> LB, <u>J–5</u>	5 GRADE. 8	RD. FUECDIO
	LANDED @ 4750 .		
	LB,		
	LANDED @		
Note			
Note	: Well bridged off 4400'. Tbg is pe	in meneree z rforated (or	one @ approx.
	4046' and 4355'.	Tbg is like	ly to be stuck.
DETAI	ILED PROCEDURE:		
1.	Prepare location by anchors, if necessa	blading and	installing
	lines and blow well	down.	promgomu
2.	MIRURY. Kill the w		r
3.	NDWH. NU 6" 3000 ps	i BOPE.	•
4.	POOH laying down tul	bing. Visua	lly inspect
	tbg on trip out. No	ote: If the	is stuck, do
	not pull over 40K# a	as tbg may b	e in very poor
	condition RIH w/jet	cutter and	attempt first
	shot at least 100' !	pelow the 7"	csg shoe.

PROCEDURE - PAGE 2

- Set Baker cement retainer at 3786' (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% CaCl $_2$ (sidetrack plug). Sting out and reverse $\alpha\ell$ 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/nitrogen. Drill out cement retainer, and dress off open hole plug to 15' below the 7" csg shoe. Blow hole clean and TOOH.
- 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 \pm 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, 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 degrees phasing.
- 20. Acidize down csg w/20 gal per perf of 15% wgtd HCL containing 600# NACL/1000 gal & 1.5 1.1 SG RCN ball sealers per perforation. Displace at maximum rate w/MSP less than 3500 psi.

PROCEDURE - PAGE 3

LEASE NAME: Blanco LS	WELL	NUMBER:	12	
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- 21. RIH w/ junk basket on WL to recover ball slrs.
- 22. RU & frac Lower Mesaverde w/slickwater containing 1% KCL, .5 gal /1000 gal friction reducer and 2500#/ft 20/40 sand @ 1 BPM /perf; fluid/sand design below. Flush to 10 BBLS shy of top perf and close blind rams ASAP if well is on vacuum. Otherwise, obtain ISIP, 5 & 15 minute SIP. Close Rams.
- 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 bottom of next interval a sufficient quantity of 7-1/2% DI HCL to cover the top perf + 200'. and spot 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 degrees phasing.
- 26. Acidize down csg w/20 gal per perf of 15% wgtd HCL containing 600# NACL/1000 gal and 1.5 l.1 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, .5 gal/1000 gal 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 if well is on vacuum. Otherwise, obtain ISIP, 5 and 15 minute SIP, and close rams. RIH W/RETRIVING HEAD ON TEG. CO TO RBP W/FOMM. 29. ARetrieve RBP.
- 30. TIH w/2-3/8" production string w/

SN l jt up.

- 31. CO to PBTD w/nitrogen foam. PU and set bottom of tbg within 20' of lowest perforation. Land tbg and NUWH.
- 31. Kick well around w/nitrogen and FTCU.
- 33. RDMOSU.

Mesaverde Frac Design

- 2500# 20/40 sand per ft. net pay.
- 2. 1 BPM per perforation.
- 3. Fluid to contain 1% KCL, .5 gals/1000 gal friction reducer.
- Schedule
 - 2 csg volume @ 1/2 ppg 20/40 sand
 - 2 csg volume @ 1 ppg 20/40 sand
 - 2 csg volume @ 1-1/2 ppg 20/40 sand
 - remains @ 2 ppg 20/40 sd