Form 3160-4 (July 1992)

UNITED STATES DEPARTMENT OF THE INTERIO BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE *

OMB NO. 1004-0137 Expires: February 28, 1995

	BUREAU	OF LAND	MANAGEMENT	Cy'		CE		5. LEAS	E DESIGN	ATION A	ND SERIAL NO.		
						Ωţ		SF	07814	6			
WELL COMPLETION OR RECOMPLETION REPORT AND LOG \$ 15 INDIAN, ALLOTTEE OR TRIBE NAME													
1a. TYPE OF WELL			GAS WELL					7. UNIT	AGREEME	NT NAM	 E		
	OIL WE	OTHER []		18 B	NEWBERRY COM							
b. TYPE OF COMPLET				•	A.O. 11.7.		********				WELL NO.		
		DEEP-	DIFF.	7	07115D [٦		NEV	VBERR	Y CON	A #1 NA		
2. NAME OF OPERATO		EN [RESVR.	<u> </u>	OTHER _			<u> </u>		1 001	——————————————————————————————————————		
CONOCO INC								9. API V		00			
						4		30-0					
113													
10 Desta Drive, Suite. 100W Midland, TX 79705-4500 (915) \$86-5424 (933 BASIN DAKOTA 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) * 11. SEC., T., R., M., OR BLOCK AND SURVEY											OCK AND CHRYEN OR		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) * 11. SEC., T., R., M., OR BLOCK AND SURVEY OR At surface 1120' FSL & 1850' FEL, UNIT LETTER 'O' At top prod. Interval reported below At total depth													
		14. PE	ERMIT NO.	DATE	ISSUED		12. COUNTY OR PARISH 13. STATE						
45 04 75 00 100 50	46 0475 70 05		147 217 2212					JUAN CO					
15. DATE SPUDDED 7/2/98	16.DATE T.D. RE/ 7/10/9		17. DATE COMPL					, ETC) *	19. EL	ELEV. CASINGHEAD			
20. TOTAL DEPTH, MD 8			ACK T.D. MD. & TVD	/8/98)	22. IF MULT	1PI F		5' GL	23 INT	TED\/ALS	DRILLED BY		
·										DTARY			
7109'			7105'					TOOLS 🔯 TOOL					
24. PRODUCING INTER	RVAL(S) OF THIS C	OMPLETION	I - TOP, BOTTOM, NA	AME (MD A	(ND TVD)*						VAS DIRECTIONAL		
6912' - 7083'						_					SURVEY MADE		
26. TYPE ELECTRIC AN	ND OTHER LOGS R	UN								27. V	VAS WELL CORED		
28.			CASING R	FCORD /R	Penort all strings	set in	n well)		****	<u> </u>			
CAS NG SIZE/GRADE	CASING RECORD (Report all strings set in well) G SIZE/GRADE WEIGHT, LB/FT DEPTH SET (MD) HOLE SIZE TOP OF CEMENT, CEMENTING RECORD AMOUNT									AMOUNT PULLED			
9-5/8"	36#		288'		12-1/2"			135 sxs					
7"	23#		2515'		8-3/4"		373 sxs						
4-½ "	9.5#		7109'		6-1/4"			510 sx					
SIZE								NG RECO	G RECORD SET (MD) PACKER SET (MD)				
	2-3/8"						6210'						
31. FERFORATION RE	CORD (Interval, size	and number	r)		32.		CID, SHOT, F						
DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL U									IND OF MATERIAL USED				
SEE ATTACHED SUMMARY													
									ļ <u>-</u> -				
33. *				PRODUCT	ION								
DATE FIRST PRODUCTION PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping - size, and type of pump) 9/8/98 FLOWING									L STATUS		ing or shut-in) ‡ 1976		
	OURS TESTED	CHOKE SIZI		OR TEST	OIL - BBL		GAS - MC		WATER		GAS - OIL RATIO		
3/6/98	24 HRS.	1/2"	PERIOD	_	4		1	32		10			
FLOW TUBING	CASING PRESSUR		CULATED 24 - HR	OIL - BBL	1	GAS	- MCF		I TER - BBL		OIL GRAVITY - API		
PRESS	_	RATE									(CORR)		
20	0				4		132		10				
34. DISPOSITION OF G	SAS (Sold, used for I	TEST WITNESSED BY											
VENTED	CNTO						<u> </u>	WE	SLEY HE	RRERA			
35. LIST OF ATTACHM											-ABN		
36. Thereby certify that t	he foreboing and at	acharintor	nation is complete and	Lorrort an	datarmined for	m all	available	COPF	TEDI	ORH	ECOULD		
SUMMARY 36. I hereby certify that the silgned	Jema	Bem	MAKKE	TITI E	Debra Ber	nendi mend	erfer As As	ant for Co		n 26.19	38		
					_ Devia Del	. IÇI IU	oner, As Ag	CITE TOT CO	MACH LUCY	י אשר כ	<u> </u>		

GEOLOGIC MARKERS	тор	MEAS. DEPTH TRUE VERT. DEPTH	4082'	4209'	4679'	.0809	6794'	6852'	6910,	6975.			 		
38. GEOLOG	3****	WE	Cliffhouse	Menefee	Point Lookout	Gallup	Greenhorn	Graneros	Dakota	Dakota (massive)				-	
SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressurs, and recoveries):	DESCRIPTION CONTENTS FTC	NEWBERRY COM #1M													
t zones of porosity and contening and shut-in pressurs, and r	ROTTOM														
SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; of depth interval tested, cushion used, time tool open, flowing and shut-in pressurs, and recoveries):	TOP														
7. SUMMARY OF POROUS depth interval tested, cust	FORMATION						-				•				

COPY

CONOCO, INC. NEWBERRY COM #1 M

API: 30-045-29582 1120' FSL & 1850' FEL, UNIT 'O SEC. 05, T31N - R12W



7/16/98 MIRU, check press, attempt to bleed down annulus, loaded annulus w/50 bbls H20, annulus went on vacuum, RIH on 220 jts of 2-3/8" tbg (4.7#, J-55,EUE, 8RD, Grade A, tagged green cmt @ 6925' from KB, L/D one jt tbg, rev circ. out green, cmt.

7/17/98 RIH w/5 stds of tbg workstring, tagged hard cmt @ 7034' ND DO to FC @ 7064', cont. drilling cement to top of Float Shoe @ 7109', noted only cmt in returns, did not drill out of shoe, Circ. clean. Press tested 4-1/2" csg to 2200 psi, press test to 4200 psi w/pipe in hole & pipe rams closed, attempts 2nd 4200 psi test w/ blind rams closed, RIH, Circ. clean, displace fresh H20 in well w/ 1% KCI H20.

7/2i)/98 Load well w/ 1% KCI H20, test csg to 1000 psi, OK, RU to run CBL/BR/CCL log, RIH W/ CBL/GR/CCL tool on WL, press up csg to 1000 psi & run CBL/BR/CCL from TD (WL 7112') to 2500', cmt bond intervals from 7112' - 4990' & from 4930' - 4800', Float collar noted @ 7062', no cmt bond noted from 4800' - 2500', run TDT/GR log from 7112' - 2500', logged well thru non-cmt bonded sections of hole.

7/21/98 RIH pkr on 2-3/8" tbg workstring, set pkr @ 7096', test 4-1/2" csg from 7096' and shoe to 450 psi surface press, RU press test truck & test, bled off 200 psi, attempt to press up to 3000 psi, POOH, pkr lost upper rubber pack-off element, RIH, retrievematic pkr to 5780', pkr tried to hang up, POOH, CBP & RIH, tagged csg shoe & set CBP @ 7105', POOH 10 stds.

POOH & RIH to 5013', attempt to test csg & CIBP, leaked off @ 2600 psi, still full of 1% KCI H20, OK RIH to 7102' & tested CIBP, leak-off @ 2600 psi, tested csg from 7102' to surface to 4000 psi, OK, POOH RU WL & RIH, cmt dump bailer containing 12 gals of mixed Portland cmt & dump on top of CIBP (approx. 8' on top of CIBP). Load hole w/10 bbls KCl H20, test all of 4-½" csg & CIBP, rel press, LD perf guns & RIH on WL & per DK, POOH, RIH w/perf gun, RIH w/ WL, finish perfing DK, Recorrelated to CCL, POOH w/ WL, Begin to POOH, LIGHTNING STORM.

7/23/98 Pull perf gun from hole, RIH tie in CCL, DK perf locations-7083-78-76-67-62-54-46-41-33-19-17-11-7003-6998-94-92-90-88-86-84-82-78-66-58-54-42-31-21-6912, total of 29 shots, POOH, Run tension pkr on 1 std 2-3/8" tbg & set @ approx. 60', acidize/ballout DK perfs, break down perfs @ 2350 psi w/ 1bpm, ISIP - 400 psi, 45 balls, 12 bbls of 15% HCl, flushed w/105 bbls 1% KCl of 114 bbls before ballout, pumped @ 5.9 bpm, max. press 3500 psi RD BJ, RU WL, 45 balls retrieved, 28 hits.

7/2:5/98 Did gel H20 (tail-in Resin Coated 20/40 sand) Frac DK, placed 124236 # sand, ISIP-1300 psi, avg. rate 45 bpm, min press - 2400 psi, max. press - 3500 psi, pad 10,000# sand, calculated frac gradient - .62.

RU Halib. WL, RIH & set BP @ 5150', POOH, test BP to 1000 psi PU 2 shot Squeeze perf gun w/ .38" shot set @ 180 deg, RIH & perf @ 4670', POOH & RD Halib. WL, RIH w/ Baker 4-½" cmt retainer & set @ 4535'. RU BJ cmt equip., test lines to 3000 psi, est. inj rate w/ 11bls of water (3 bpm @ 1500 psi), mix & pump lead slurry (50 sxs Class 'H' + 10% thiad + PPSX Gilsontie @ 14.6 PPG) @ 3.1 bpm w/ 1500 psi, mix & pump tail slurry (100 sxs CL 'H' neat @ 15.6 PPG) @ 3.1 bpm w/1250 psi, displaced w/ 18.5 bbls H20, stung out, rev circ. 25 bbls, sting in, squeeze to 200 psi, stung out, rev circ. 25 bbls. RD BJ, cmt squeeze went very well.

7/28/98 Drill cmt 1st squeeze, run CBL/CCL, 2nd sqz perfs. PU four 3-1/8" DCs, Bit & B/S, RIH tagged cmt retainer @ 4535', DU retainer, TOC @ 4540', Drilled hard cmt from 4540' - 4643' (103' of cmt.) RIH & tagged D-BP Halib. WL. RI to 5000', tie in CCL & run CBL/CCL to 4000'. Cmt bond up to 4582', POOH, RU & run 2-shot sqz perf gun to 4600', correlated CCL, shoot 2 holes @ 4508', .38" w/180 deg. Phasing (4508' also one of MV Menefee perfs). POOH & RD Halib WL.

7/29/98 RIH & set cmt retainer @ 4314'. SO or retainer, pump 20 bbls 1% KCl to clear tbg, SI retainer, test tbg to 750 psi, OK. Press up annulus to 500 psi, pumped 25 bbls H20, est. inj rat (2000@ 2.6 bpm), MP 88 bbls lead cmt slurry @ 12.2 PPG (250 sxs/ 1.97 yld) POZ w/Bentonite, Celloflake, Gilsonite, CaCL2; MP tail slurry of CL "H" neat @ 15.6 PPG (100 sxs/ 1.2 yld). Press to 750 psi @ 2 bpm while pumping cmt, press up to 2500 psi as

CONOCO, INC. NEWBERRY COM #1M

API: 30-045-29582 1120' FSL & 1850' FEL, UNIT 'O' SEC. 05, T31N - R12W

cmt was displaced past retainer w/ 16.4 bbls H20, bled off press to 500 psi below retainer, circ. 25 bbls H20 to clear tbg.

- 7/30/98 Tagged cmt retainer @ 4314', DO retainer & 343' of hard cmt to 4657' (sqz perfs @ 4508'), RIH & tag D-BP, rev circ. to CO hole, test csg to D-BP to 1000 psi, OK. POOH, RU Halib. WL & perf PLO formation (29 holes, 132' net, 5111' to 4709'), secure well.
- Acidize/Ballout PLO perfs (29 holes), OK, retrieved 19 hits of 45 balls pumped. Run slick H20 frac on PLO (Pro technics ran triple radio-active tracer on PLO frac as per Midland), 1891 bbls fluid to recover, treatment rate: 56 bpm, treatment press's: max. 2680 psi, min 1580 psi, avg. 1800 psi, total of 1050000 lbs 20/40 sieve sand placed, PLO on vacuum afterwards, j0ob went well, RIH w/ WL set CIBP @ 4668', press test CIBP to 1000 psi, OK. RIH w/ perf gun & perf Menefee (29 holes, .36", interval from 4344' 4616', 100' net pay), job went fine, acidize/ballout Menefee perfs, surged balls 3x's to finish flush, formation seemed tighter than PLO, slight flow after we finished job, retrieved 45 of 45 balls, 28 hits (29 holes). Run slick H20 frac job on Menefee formation, screen out after pumping 41400 lbs (of proposed 85000 lbs) of 20/40 sieve sand, total of 1068 bbls fluid to recover, treating rate: 49 bpm thru-out job, treating press, min 2500 psi, avg. 2600 psi, max. 3700 psi, RD BJ.
- 8/3/98 NU blooie line and "T"
- 8/4/98 RIH, 1800', CO sand & H20, RIH to 3650', CO, RIH to 4600', tagged sand @ 4600', CO 68' of sand to CIBP @ 4668', DO CIBP, blow clean, CO sand to D-BP @ 5150', hole is clean.
- 8/5/98 PU Mule shoe & SN & RIH to 5150', no fill on D-BP, POOH to 4860', install ½" bean choke.
- 8/6/98 Flowback Menefee & PLO.
- 8/7/98 Run Protechnics GR/CCL log, CO sand to 5150'.
- 8/8/98 RU WL & run Protechnics logging tool thru tbg & across the PLO perfs, RD after logging, RIH to 4850', Final test Pressures ½" choke: 190# TP, 450# CP, 1-2 bbls per hr water production & 0 noticeable liquid oil production.
- 8/10/98 Arrived to find 600 psi on csg/650 psi on tbg. POH w/ 2-3/8" tbg & S/N w/ mule shoe. Replaced blown hydraulic hose on rig (1.5 hrs.). P/U 4-DC bit & B/S & RIH. Tagged sand @ 5050' (100' above D-BP). CO sand to BP @ 5150'. Drill BP & CO sand 7105'. POH to 4200'.
- 8/11/98 RIH from 4200', Tagged 20' of sand on top of PBTD (7100'), C/O sand to 7100', pump 3 soap H20 sweeps. POH w/ bit, noted some sand w/ H20 in Blewey Line as we were POH so decided not to run compression pkr until we cleaned up well more in an attempt not to allow sand to deposit on top of pkr during flow test. P/U Mule shoe & SN & RIH, tagged PBTD @ 7100'. POH to 7000'.
- Cont. to flow-back well on rigs ½" choke till 0600 hrs. (press @ 0600 tbg 170psi/csg 480 psi), believed washed out choke was causing press drop in tbg. Installed new ½" choke & flow from 0700 hrs. to 1000 hrs. (press @ 1000 hrs. tbg 185 psi/csg 470 psi). Bleed-off well & kill tbg w/ 5 bbls 1% KCl. RIH & tagged sand 15' above PDTD (7100'). C/O sand to PBTD, pumped 2- 5 bbl water/ soap sweeps all the way around. POH to 7000'. Begin flow-back again, Starting press-tbg 50 psi/ csg 360 psi. Press increased in 4 hrs. to- tbg 160 psi/ csg 440 psi but press are still unstable. Cont. flow-back overnight.
- 8/17/98 Csg- 620#, Tbg- 640#. Bled off well. PU, RIH w/ 4-3 1/8" DCs then LD DCs and 10- jts 2 3/8", 4.7#, J-55, 8 rd, EUE tbg. Hang-off 218 jts of 2-3/8", 4.7#, J-55, 8rd, EUE. S/N & Mule shoe set @ 6910' (2' above top DK perf). ND BOPs & Blooie line. RD Big A-#10. FRR. Moved rig and equipment beginning @ 1100 hrs to Bruington LS #3.(transfered 2 drill gas compressors s/#s C-129, 40-2385 to new location)

CONOCO, INC. NEWBERRY COM #1M

API: 30-045-29582 1120' FSL & 1850' FEL, UNIT 'O' SEC. 05, T31N - R12W

9/2/98	New Well Completion: MIRU Big A #10 (from Primo #1). Kill tbg w/ 25 bbls 1%KCL water. NU blooie line, ND
	WH. NU BOP. RU Blewey line to BOP. Begin POH w/ 2-3/8", 4.7#, J-55, EUE, 8RD production tbg string. (Will
	PU test pkr in morning to test DK formation.)

- 9/3/98 Flare-off press. Kill csg w/ 30 bbls 1% KCl. RIH w/ MS, 2-JTS 2-3/8" tbg, Baker test pkr w/ down hole valve, Seat nipple, and 117 jts of 2-3/8",4.7#, J-55, EUE, 8RD tbg. Set pkr @ 6900' and close down hole valve for 1 hour (allow press build-up). RU 2" flowline. Open valve and flow well though 1/2" choke till press stabilizes for 4 hour flow test. (press not yet stabilized high 85# low 40# tbg press). Flow-back continues.
- 9/4/98 Tbg press dropped from initial of 85 psi last night to 27 psi. Swab well all day & periodically flow back well till tbg press dropped off. Last flowback- tbg press started @ 110 # & decreased to 64 # w/¼" choke. Dropped 2 soap sticks.
- 9/5/98 640# csg, 640 tbg. Bled off press though ½" choke down to 150# in 21 min. Tbg press fluctuating and flow includes gas/condensate/water.
- 9/6/98 Well flowed from DK formation all night & morning until approx. 1400 hours. Tbg press stabilized @ 20# for 4 hrs. w/ ½" choke, 4 BOPD, 10 BWPD, Calculated gas @ 132 MCFPD, Wesley Herrera-witness, Depth of tbg for test 6262' w/ Test pkr set @ 6200'.
- 9/8/98 Land 218 jnts of 2-3/8", 4.7#, J-55, EUE 8rd tubing. Set S/N @ 6210'. RDMO. Turned well over to production.