Submit to Appropriate		State of New Mexic			Form C-105
District Office	Energy,	Minerais and Natural Reso	surces Department		Revised 1-1-89
State Lease – 6 copies Fee Lease – 5 copies	OT CONCEDUATION DIVISION			WELL API NO.	
DISTRICT I P.O. Box 1980, Hobbs, NM	88240 OIL C	OIL CONSERVATION DIVISION			7
DISTRICT II		P.O. Box 2088 Santa Fe, New Mexico 8	7504-2088	5. Indicate Type of Leas	
P.O. Drawer DD, Artesia, NN		and Te, New Mexico B	,50, 2000	·	
DISTRICT III	ND 4 97410			6. State Oil & Gas Leas	; NO.
1000 Rio Brazos Rd., Aztec,					
WELL COMPLETION OR RECOMPLETION REPORT AND LOG				7. Lease Name or Unit	Agreement Name
OIL WELL	GAS WELL 🔀 🛛 I	DRY OTHER	<u></u>		
b. Type of Completion:				F. M. Burles	son "WN"
NEW WORK X	DEEPEN BACK			-	
2. Name of Operator				8. Well No.	
Doyle Hartman				2	
3. Address of Operator				9. Pool name or Wildca	1
P. O. Box 10	426, Midland,	<u>TX 79702</u>		Jalmat	
4. Well Location	1080	North	Line and231	0 Feet From The	West Line
Unit LetterF	: <u>1980</u> Feet F	Tom the NOLLI			
Section 8	Town	uship 25S Rang	æ 37E	NMPM Lea	County
	Date T.D. Reached	12. Date Compl. (Ready to Prod.	·	(DF& RKB, RT, GR. ec.)	14. Elev. Casinghead
6-23-39		117 If Muhiala Com		DF	Cable Tools
15. Total Depth	16. Plug Back T.D.	17. If Multiple Comp Many Zones?	Dnille	als _I Rotary Tools ^{1 By} I	
3467 ' 19. Producing interval(s), of	3210' RK.	dom, Name		20. Was I	Directional Survey Made
Jalmat					
21. Type Electric and Other Logs Run				22. Was Well Cored	
	nd DSCBL-GR-C	<u>CL</u>		No	
23.	CAS	SING RECORD (Rep	ort all strings set		
CASING SIZE	WEIGHT LB/FT.		HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
12-1/2"	<u> 40# </u>	237	15"	<u>175 sx</u>	
8-5/8"	36#	2745	<u>11"</u> 7-7/8"	<u>700_sx</u> 145_sx	
5-1/2"		3226'		149_58	······
24.	LINE	ER RECORD	1	25. TUBING	RECORD
SIZE	TOP BO	TTOM SACKS CEMENT	SCREEN	حسبتان	PTH SET PACKER SET
-				2-3/8" 3	179'
			TACTO SU	OT FRACTIRE CE	MENT. SQUEEZE, ETC.
26. Perforation record	(interval, size, and n		D KIND MATERIAL USED		
20771 21151	.39" 24 hol		DEPTH INTERV 2877-3115	6000 gal	15% Acid
28/7' - 3115'	• 39 ¹¹ 24 no	322,752#	Sand 234,141 gal		
				water, 52	25 tons CO ₂
28.		PRODUCT			11 Status (Prod. or Shut-in)
Date First Production		on Method (Flowing, gas lift, pur	nping - size and type pun	+,	Prod.
1-13-97	Hours Tested	ing Thoke Size Prod'n For	Oil - Bbl. Ga	is - MCF Water -	
Date of Test 1-17-97		88/128 Test Period	6.79	545 49.8	32 79823.27
I-17-97 Flow Tubing Press.	Casing Pressure C	Calculated 24- Oil - Bbl.	Gas - MCF	Water - Bbl. Oi	I Gravity - API - (Corr.)
Pumping	11	Hour Rale 6.79	545	49.82	
29. Disposition of Gas (Sold, used for fuel, venued, etc.) Sold to Sid Richardson Harold Swain					
Sold to Sid	Richardson			Haro	LU DWATH
30. List Attachments	n o % t				
Workover re	por L he information shown (on both sides of this form is tr	rue and complete to th	e best of my knowledge a	nd belief
	~m_	Name Don	L. Mashburn	Title Engineer	Date_5-22-97
Signature	- July 11 Karls				

JC

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F. M. BURLESON "WN" NO. 2 SECTION 8, T-25-S, R-37-E LEA COUNTY, NEW MEXICO JALMAT (GAS) POOL

12-5-96 - SITP = 95 psig.

12-12-96 - Moved in roustabout crew and backhoe. Dug out around wellhead. Inspected 13" casinghead and 8-5/8" casinghead. Installed new fittings on 13" and 8-5/8" casingheads. Installed new 2" surface risers off of 13" and 8-5/8" casingheads. Installed 60" OD x 71 corrugated steel cellar can around wellhead. Backfilled around cellar can. Cleared and leveled location.

Moved in and rigged up well service unit. Rigged up kill truck. Tied onto $5-1/2" \ge 2-3/8"$ casing-tubing annulus. Pressured 5-1/2" OD casing to 1000 psi. Tied onto 8-5/8" casing to 1000 psi. Loaded $8-5/8" \ge 5-1/2"$ annulus with 8 bbls of 2% KCL water. Pressured 8-5/8" casing to 1000 psi. While holding 1000 psi on 8-5/8" OD casing, pressured 5-1/2" OD casing to 1800 psi. Tied onto 13" casinghead and pumped down 13" $\ge 8-5/8"$ casing annulus. Released Baker $5-1/2" \ge 2-3/8"$ Lockset packer set at 2820' and dumped 51 bbls of treated packer fluid. Pulled out of hole with 98 jts (3039.22') of 2-3/8" OD, 4.7 lb/ft, J-55 EUE tubing and Baker $5-1/2" \ge 2-3/8"$ Lockset packer.

Cut off original 5-1/2" OD casing extension nipple 28" below ground level and removed existing tubinghead and 5-1/2" casing control valve. Welded remainder of original 5-1/2" OD casing extension nipple to 8-5/8" x 5-1/2" flange-to-thread changeover located on top of 8-5/8" casinghead. Welded 5-1/2" slip collar onto top of original 5-1/2" casing extension nipple. Welded new 5-1/2" OD x 34" casing extension nipple onto top of 5-1/2" slip x slip collar. Welded 5-1/2" slip x thread collar onto top of new 5-1/2" x 34" casing extension nipple. Installed B&M Oil Tools 5-1/2" x 2-3/8" x 3" Type MR tuginghead. Closed well in for night. This A.M., SICP = 5 psig.

12-13-96 - Ran into hole with 85 jots of 2-3/8" OD, 4.7 lb/ft, J-55 EUE tubing and 177.32' bottom hole assembly consisting of 4-3/4" bit, bit sub, (6) 3-1/4" drill collars, and top sub. Landed bottom of tubing string at 2810' RKB (85 jts @ 31.01'/jt + 177.32' BHA = 6' KBC). Rigged up ABC Rental Tool foam circulating unit. Commenced generating and pumping foam. After gaining circulation (approximately 15 minutes), began rotating tubing and bit down hole. Before making a new connection, worked each joint up and down four or five times. First returns back to the surface included a small quantity of water.

With 15' of 94^{th} joint below the slips, encountered a 4' section of hard iron sulfide buildup at a depth of 3082' (93 jts @ 31.01'/jt + 177.32' BHA + 6' KBC + 15' of 94^{th} jt). After drilling on buildup for approximately 5 minutes, bit fell free. Continued cleaning out wellbore until reaching 10' cement cap on top of Guiberson CIBP set at a depth of 3177'

F. M. BURLESON "WN" NO. 2 (continued) Page 2

RKB (96 jts @ 31.01'/jt + 177.32' BHA + 6' KBC + 17' of 97^{th} joint). Drilled up 10' cement cap, circulated hole with foam for 30 minutes, and then circulated hole with air for an additional 45 minutes.

Pulled out of hole with tubing and bottom-hole assembly. Rigged up Schlumberger. Made up and ran into hole with Schlumberger Platform Express Logging Tool. Found fluid level at 3020'. Raised fluid level to 2400' by loading wellbore with a total of 73 bbls (20 + 28 + 25 = 73) of 2% KCL water, but could not log due to air bubbles entrained in KCL water. Made decision to shut down for night to allow bubbles to segregate out. Pumped an additional 40 bbls before shutting well in and allowing water to sit and equalize over night. Total fluid pumped for logging well was 113 bbls.

12-14-96 - After leaving well shut in overnight, found fluid level at 2250'. Logged well with CNL-GR-CCL log and DSCBL-GR-CCL log. Rigged down Schlumberger. Attempted to run into hole with Baker 5-1/2" Model "C" RBP dressed for 13 lb/ft to 15.5 lb/ft 5-1/2" OD casing. RBP would not run past slip collar at top of 5-1/2" OD casing string. Ran into hole with Baker 5-1/2" Model "C" RBP dressed for 15.5 lb/ft to 20 lb/ft 5-1/2" OD casing. Attempted to set RBP at 2666'. Could not set RBP. Pulled out of hole and inspected RBP. Ran back into hole with RBP and set at 2666'. Loaded 5-1/2" OD casing with 42 bbls of 25 KCL water. In 1000-psi steps, incremented pressure on 5-1/2" OD casing to 3000 psi. Simultaneously, in 1000-psi steps, attempted to increment pressure on 8-5/8" casing to 3000-psi. At a pressure of 2400 psi, gasket beneath 8-5/8" x 5-1/2" flange-to-thread changeover ruptured. After gasket ruptured, 5-1/2" OD casing to 2000 psi. Shut well in for night. After being shut in overnight, pressure on 5-1/2" OD casing to 2000 psi.

12-15-96 - On 12-14-96, rigged up welder and welded together top and bottom flanges located on top of 8-5/8" casinghead. Cut off nuts on flange stud bolts and welded stud bolts to top and bottom flanges. Welded 8-5/8" OD casing extension nipple to 13" x 8-5/8" flange-to-thread changeover on top of 13" casinghead. Welded 8-5/8" OD casing extension nipple to bottom of 8-5/8" casinghead. Pressured 8-5/8" OD casing and 8-5/8" Casinghead to 2000 psi and experienced a minor leak. Repaired leak. Re-pressured 8-5/8" OD casing and 8-5/8" casinghead to 2050 psi. Pressure held steady at 2050 psi. Tied onto 13" casinghead and performed injectivity test down 13" x 8-5/8" casing annulus. Pumped a total of 40 bbls of 2% KCL water at a rate of 1.5 BPM to 2.0 BPM. Caught pressure after pumping 26 bbls. After catching pressure, pump-in pressure was 200 psi at a pump-in rate of 1.5 BPM to 2.0 BPM. Straightened 5-1/2" casinghead and 2" surface risers. Filled 60" OD x 7' corrugated steel cellar can with 4.5 cu. yds. of ready-mix concrete. Shut down for remainder of weekend.

F. M. BURLESON "WN" NO. 2 (continued) Page 3

12-17-96 - Released Baker 5-1/2" Model "C" RBP. Pulled out of hole with RBP. Ran into hole with 60 jts of 2-3/8" OD tubing and 177.32' bottom-hole assembly. Landed tubing at 2037' RKB. Commenced generating and pumping foam. Utilizing foam circulating unit, unloaded KCL water from wellbore. Upon reaching top of Guiberson CIBP set at 3177' RKB, drilled on Guiberson CIBP for 23 minutes before CIBP came loose. Pushed CIBP to 3239' RKB. Circulated hole until foam returns wee clean and then pushed CIBP to a depth of 3450' RKB.

Pulled out of hole with tubing and bottom-hole assembly. Rigged up Capitan Services wireline truck and ran into hole with casing collar locator. Found bottom of 5-1/2" OD, 15.5 lb/ft casing at 3227' RKB. Ran into hole with Baker 5-1/2" Model "K-l" cement retainer. Set retainer at 3217' RKB (Schlumberger CNL-GR-CCL log). Detected no noticeable fluid level while running cement retainer.

Ran into hole with 2-3/8" OD tubing equipped with a seating nipple and retainer stinger and stung into retainer. Rigged up kill truck. Loaded tubing with 9 bbls of 2% KCL wtaer and then performed injectivity test into open-hole section below retainer with a total of 21 bbls of 2% KCL water at a rate of 2 BPM at 1200 psi. Shut down for night.

12-18-96 - Rigged up Halliburton. At an average rate of 4 BPM and average pressure of 1600 psi, cemented open-hole section below 3227' RKB with a total of 300 sx of API class-C cement containing 2% CaCl₂. Maximum pressure was 1800 psi. After mixing all 300 sx of class-C cement, washed up surface lines and displaced final 53 sx of cement in 3 stages consisting of 5 bbls, 5 bbls, and 2.45 bbls. Shut down 7 minutes between 1st and 2nd stage and shut down 5 minutes between 2nd and 3rd stage. While pumping 2nd 5-bbl stage, pressure increased from 300 psi to 1075 psi, and while pumping final stage of 2.45 bbls, pressure increased from 800 psi to 1700 psi. ISIP = 1500 psi. Pulled out of retainer. Pulled out of hole with tubing.

Tied Halliburton onto 13" x 8-5/8" casing annulus. Backed up and protected outside of 8-5/8" OD casing by cementing down 13" x 8-5/8" casing annulus at an average rate of 4 BPM with 1018 cu. ft. of cement slurry consisting of 400 sx of API class-C cement containing 2% Econolite, $\frac{1}{2}$ lb/sx flocele, and 5 lb/sx gilsonite followed by 150 sx of API class-C cement containing 2% CaCl₂. Maximum pump pressure was 780 psi and minimum pump pressure was 430 psi. ISIP = 230 psi. 5-min SIP = 130 psi.

Ran into hole with drill collars. Pulled and laid down drill collars. Ran into hole with 2-3/8" OD tubing and 4-3/4" bit. Using foam circulating unit, pumped air and unload 2% KCL water from hole. Found PBTD at 3210' RKB. Pulled out of hole with tubing.

F. M. BURLESON "WN" #2 (continued) Page 4

While unloading fluid from hole, installed the following pumping unit equipment transferred from Myers "B" Federal No. 30:

Unit Mfg.: American Unit Size: 80-119-64 Structure No.: T11F64-2-6086 Gear Box No.: D-80G-2828 Date Manufactured: 4-23-91 Reducer Ratio: 29.93:1 Unit Sheave: 30" 2C

Motor Mfg.: Oilwell Motor Size: 20 hp Nema-D S/N: 91403732 Frame Size: 286T RPM: 1100 Voltage: 230/460/796 Amperage: 59/29.5/17 Motor Sheave: 8" 4C

Controller Mfg.: Square D Controller Size: 2

Shut well in for night. Overnight SICP = 4 psig.

12-19-96 - Rigged up Capitan. Perforated well with 3-1/4" select-fire casing gun with (16) 0.39" holes with one p/ft 2908 to 3079' overall. Acidized perfs 2909 to 3087' with 3950 gal. Of 15%.

Pulled out of hole with Model "C" packer and Model "C" RBP. Rigged up Capitan. Perforated well with 3-1/4" select-fire casing gun with (8) 0.39" holes with one shot each from 2877 to 3115'. Acidize perfs 2877 to 3115' with 2050 gal. Of 15% acid.

Pulled out of hole with 2-3/8" OD tubing and laid down 5-1/2" Model "C" packer and 5-1/2" Model "C" RBP. Ran back into hole with 2-3/8" OD tubing and landed tubing at 3179' RKB (98 jts @ 31.01'/jt + 3 jts @ 32.40'/jt + (1) 10' sub + (1) 6' sub + 1.10 SN + 18' MA + 8' KBC). Made up wellhead. Shot fluid level at 8:00 P.M. 12-18-96. Found fluid 1892' (61 jts) from surface.

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Ran 2" x 1-1/4" x 12' RHAC insert pump and a $\frac{3}{4}$ " API class-KD rod string consisting of (125) $\frac{3}{4}$ " x 25' rods + (1) $\frac{3}{4}$ " x 6' rod sub + (1) $\frac{3}{4}$ " x 8' rod sub. At 10:00 P.M. CDT 12-18-96, placed well to pumping at 10.6 x 64 x 1-1/4. Left annulus shut in for night.

1-8-97 - Rigged up Halliburton and performed the following CO_2 foam frac down 5-1/2" x 2-3/8" casing-tubing annulus with 548,207# sand, 234,141 gal. Water and 525 tons CO_2 .

1-9-97 - Flow well back to clean up CO₂. Pumped 8 bbls of 2% KCL water down casing to momentarily kill casing. Removed frac valves. Installed 3" Balon production valves. Pumped 2 bbls of 2% KCL water down tubing to momentarily kill tubing. Installed 2" tubing check valve. Rigged up ABC Rental Tool foam circulating unit. Commenced generating and pumping foam. Circulated frac fluid and some oil from hole. Encountered top of frac sand at 3175' RKB. Cleaned well out to PBTD. Circulated hole with foam for one additional hour and then switched to air for 30 minutes. Raised tubing and removed check valve. Lowered tubing and landed at 3179' RKB (98 jts @ 31.01'/jt @ 32.30'/jt + (1) 10' sub + (1) 6' sub + 1.1' SN + 18' MA + 8' KBC). Ran 2" x 1-1/4" x 12' RHAC insert pump and ³/₄" API class-KD rod string consisting of (125) ³/₄" x 25' rods + (1) ³/₄" x 6' rod sub + (1) ³/₄" x 8' rod sub. At 4:30 P.M. CST 1-8-97, placed well to pumping at 10.6 x 64" x 1-1/4".