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C-122

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
APR 19 1974
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 4-4-74				
Company: H.L. BROWN, JR.				Connection: TO AIR						
Pool: GRAYBURG-~~JACKSON~~				Formation: MORROW					Unit:	
Completion Date: 3-25-74		Total Depth: 10,864'		Plug Back TD: 10,834'		Elevation:			Farm or Lease Name: ~~FEDERAL~~ DODD	
Csg. Size: 4½"	Wt.:	d:	Set At: 10,864'	Perforations: From 10,770' To 10,790'					Well No.: 1	
Tbg. Size: 2 3/8"	Wt.: 4.7#	d: 1.995"	Set At: 10,753'	Perforations: From OPEN To ENDED					Unit: P Sec.: 15 Twp.: 17S Rge.: 29E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE				Packer Set At: 10,753'					County: EDDY	
Producing Thru: TUBING	Reservoir Temp. °F: 156 @ 10,700'		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2					State: NEW MEXICO	
L: .10753	H: 10753	Gg: 0.740	% CO_2: 0.436	% N_2: 1.273	% H_2S: -0-	Prover: 4" OWT	Meter Run: -----	Taps: -----		

FLOW DATA						TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	IN. HG	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						1102.0		PACKER	CHOKE	
1.	4"	x 1.25"		37.5	72	228.0	61		32/64	120 MIN
2.	4"	x 1.25"		31.0	72	390.0	61		19/64	60 MIN
3.	4"	x 1.25"		17.0	72	717.0	62		13/64	60 MIN
4.	4"	x 1.25"		4.0	72	971.0	62		8/64	60 MIN
5.										

RATE OF FLOW CALCULATIONS

NO.	Q FROM GOR MANUAL BEFORE COR.	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	949.8			0.9887	0.9005	1.000	846
2.	341.2			0.9887	0.9005	1.000	749
3.	585.6			0.9887	0.9005	1.000	521
4.	266.2			0.9887	0.9005	1.000	237
5.							

NO.	P_t	Temp. °R	T_f	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: ____ Deg.
Specific Gravity Separator Gas: 0.740 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: ____ P.S.I.A. ____ P.S.I.A.
Critical Temperature: ____ R ____ R

P_c 1525.2 P_c^2 2326.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		571.2	326.3	1999.9
2		676.2	457.2	1869.0
3		1073.2	1151.8	1174.4
4		1413.2	1997.1	329.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1631$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1631$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 984$

Absolute Open Flow: 984 Mcfd @ 15.025 Angle of Slope θ: 45.0 Slope, n: 1.000 LIMITED

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE @ 10,700'

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D.A.T.	R.L.W.	J.W.W.