ARTESIA, OFFICE

File

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-65

RECEIVED

AUG 14 1973

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8-6-73	
Company: BRUNSON & MCKNIGHT, INC.		Connection: TO AIR			
Pool: WEST ATOKA Morrow		Formation: MORROW			Unit:
Completion Date: 8-4-73	Total Depth: ~~8904'~~		Plug Back TD: 8782'	Elevation: 3453 RDB	Farm or Lease Name: VANDIVER
Csg. Size: 4½ / Wt.: 11.6 / d: 4.082 / Set At: 8904'			Perforations: From 8676 To 8734		Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.5 / d: 1.995 / Set At: 8660'			Perforations: From OPEN To ENDED		Unit: H / Sec.: 13 / Twp.: 18S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 8660		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 147 @ 8735'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8660	8660	0.632	0.47	0.70	-----	OWT		

	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					EST.	2154.0		CHOKE		40 HRS
1.	2" OWT	X 0.75"		38.0	60	1772.0	83	7/64		120 MIN
2.	4" OWT	X 1.25"		25.5	60	1376.0	80	11/64		90 MIN
3.	4" OWT	X 1.50"		18.0	60	760.0	77	15/64		75 MIN
4.	4" OWT	X 1.50"		20.5	60	357.0	78	20/64		60 MIN
5.										

RATE OF FLOW CALCULATIONS

NO.	VOLUMES AND FACTORS FROM G O R MANUAL	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	358.3		1.000	0.9896	1.000	354.6
2.	745.3		1.000	0.9896	1.000	737.5
3.	879.9		1.000	0.9896	1.000	870.7
4.	950.1		1.000	0.9896	1.000	940.2
5.						

NO.	P_r	Temp. °R	T_r	Z
1.		NEGLIGIBLE		
2.				
3.				
4.				
5				

Gas Liquid Hydrocarbon Ratio 334,320 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas 0.632 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure NEG. P.S.I.A. ____ P.S.I.A.
Critical Temperature NEG. R ____ R

NO	P_c	P_c^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			2322.2	5393.0	2482.0
2			1870.2	3498.0	4377.0
3			1217.2	1482.0	6393.0
4			854.2	729.7	7145.3
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.021$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0947$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1029$

Absolute Open Flow 1029 Mcfd @ 15.025 Angle of Slope θ 47.1° n 0.931

Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA BOMB AT 8755 FEET
USED GOR TEST MANUAL TO DETERMINE GAS VOLUMES

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	M.C.T.	R.L.W.	J.W.W.