NEW MEXICO CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Copy to SF
C-122/60

RECEIVED
NOV 15 1972
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 10-22-72					
Company: Jake L. Hamon				Connection: None							
Pool: Rock Tank				Formation: Upper Morrow						Unit	
Completion Date: 10-14-72		Total Depth: 10,350'			Plug Back TD: 10,275'		Elevation: 3909' K.B.		Farm or Lease Name: Union Federal		
Csg. Size: 4-½"	Wt.: 11.6	d: 4.000	Set At: 10,350'	Perforations: From 10034		To 10078			Well No.: 1		
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 9870'	Perforations: From		To			Unit: F	Sec.: 23	Twp.: 23-S Rge.: 24-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 9862					County: Eddy		
Producing Thru: 2-3/8" tubing	Reservoir Temp. °F: 184°@ 10,300			Mean Annual Temp. °F		Baro. Press. – P_a: 13.2			State: New Mexico		
L: 10040	H: 10400	Gg: .599	% CO_2: 0.67	% N_2: 0.28	% H_2S: Nil	Prover	Meter Run: X	Taps: Flange			

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI						3151	70	Packer		72 hrs.+
1.	3.068"	x 1.250	752	15	102	2508	72			1.00
2.	3.068"	x 1.250	780	24	110	2398	72			.50
3.	3.068"	x 1.250	797	66	97	2.082	72			1.00
4.	3.068"	x 1.500	780	52	95	1760	72			1.00
5.										

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	7.577	107.14	765.2	.9619	1.292	1.060	1069
2	7.577	137.97	793.2	.9551	1.292	1.048	1352
3	7.577	231.24	810.2	.9662	1.292	1.064	2327
4	11.13	203.09	793.2	.9680	1.292	1.062	3002
5							

NO.	P_t	Temp. °R	T_r	Z
1				
2.				
3.				
4.				
5	3252			

Gas Liquid Hydrocarbon Ratio: 201.8 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 50.8 Deg.
Specific Gravity Separator Gas: .599 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .614
Critical Pressure: 674 P.S.I.A. 673 P.S.I.A.
Critical Temperature: 354 R 362 R

P_c 3252 P_c^2 10576

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	6356.4	2716	7377	3199
2	5813.9	2664	7097	3479
3	4389.9	2392	5722	4854
4	3144.2	2122	4503	6073
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.741$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.741$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5,228$

Absolute Open Flow: 5,228 Mcfd @ 15.025 Angle of Slope θ: 45.0 Slope, n: 1.000

Remarks: Set Bottom Hole Pressure Guage @ 10040'.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Cone & Kerley, Inc.	Bill Kerley	Bill Kerley