cISF File

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY
JUL 17 1986
O. C. D.
ARTESIA, OFFICE

Type Test: 4-POINT [X] Initial [ ] Annual [ ] Special | Test Date: 7-11-86

Company: READ & STEVENS Inc.	Connection: EPNG			
Pool: N. Lovington Wolfcamp	Formation: ATOKA			Unit: F
Completion Date: 7-8-86	Total Depth: 12,750	Plug Back T.D.: 12065	Elevation: 3832	Farm or Lease Name: KIMLEY
Csg. Size: 5.0 / Wt.: 20.30 / d: / Set At: 12065		Perforations: From 11157 To 11801		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.70 / d: / Set At: 11090		Perforations: From 11,157 To 11,801		Unit: F / Sec.: 19 / Twp.: 23S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 11090		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 240 @ 11479	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
11479	11479	0.633	0.11	0.71	0	0	4.0	FLANGE

FLOW DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					3942		5198	240	72.0
1.	4.03 X 0.875	208	13.0	95	3742	3764	5000	240	1.0
2.	4.03 X 0.875	273	37.8	78	3530	4764	4772	240	1.0
3.	4.03 X 0.875	300	53.3	80	3310	6.5/64	4519	240	1.0
4.	4.03 X 0.875	300	83.7	70	3010	8764	4200	240	1.0
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	3.63	53.51	220.9	0.9680	1.2569	1.0167	240
2	3.63	104.05	286.2	0.9831	1.2569	1.0249	478
3	3.63	129.27	313.6	0.9813	1.2569	1.0270	594
4	3.63	162.04	313.6	0.9905	1.2569	1.0290	753
5							

NO.	P_t	Temp. °R	T_f	Z
1	0.33	555	1.51	0.967
2.	0.43	538	.147	0.952
3.	0.47	540	1.47	0.948
4.	0.47	530	1.45	0.944
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 0.633 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.633
Critical Pressure: 670 P.S.I.A. 670 P.S.I.A.
Critical Temperature: 367 R 367 R

P_c 4110.6 P_c^2 16897

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3939	15519	1378
2		3744	14018	2879
3		3529	12457	4440
4		3262	10641	6256
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.7009$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.1108$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1590$

Absolute Open Flow: 1590 Mcfd @ 15.025 | Angle of Slope θ: 53.1 | Slope, n: 0.752

Remarks: MEASURED WITH AMERADA PRESSURE ELEMENT

Approved By Commission:	Conducted By: BENNETT & CATHEY	Calculated By: RICHARD	Checked By: