NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 1-25-73	
Company: Read & Stevens, Inc		Connection: NONE			
Pool: W.C.		Formation: Queen		Unit: I 660'FE/1980'FS	
Completion Date: 1-20-73	Total Depth: 2510	Plug Back TD: 2499	Elevation: 4026 RKB	Farm or Lease Name: Jackson	
Csg. Size: 4½ / Wt.: 9.5 / d: 4.090 / Set At: 2510		Perforations: From 2426 To 2462		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.6 / d: 1.995 / Set At: 2473		Perforations: From open end To		Unit: I / Sec.: 25 / Twp.: 12S / Rge.: 30E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 2284		County: Chaves	
Producing Thru: 2 3/8" Tubing	Reservoir Temp. °F: 80° @ 2460	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.3	State: N. Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
2473	2473	.8940	—	64%	—	1" Choke		

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	6 7½/100 Shut in				892	—	Pk		—
1.	9/64 Choke				824	60	Pk		55"
2.	11/64				762	60	Pk		35"
3.	13/64				702	60	Pk		30"
4.	15/64				640	60	Pk		25"
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		.3105	837	1.000	1.058	1.031	284
2.		.4758	775	1.000	1.058	1.029	401
3.		.6778	715	1.000	1.058	1.027	527
4.		.9165	653	1.000	1.058	1.024	648
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.51	520	1.86	.941
2.	1.40	520	1.86	.945
3.	1.29	520	1.86	.948
4.	1.18	520	1.86	.953
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas .8940 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 554 P.S.I.A. ____ P.S.I.A.
Critical Temperature 279 R ____ R

P_c 905 P_c^2 819.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	700.6		701.64	117.4
2	600.6		602.68	216.3
3	511.2		504.80	314.2
4	426.4		431.97	388.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = $ ____

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

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

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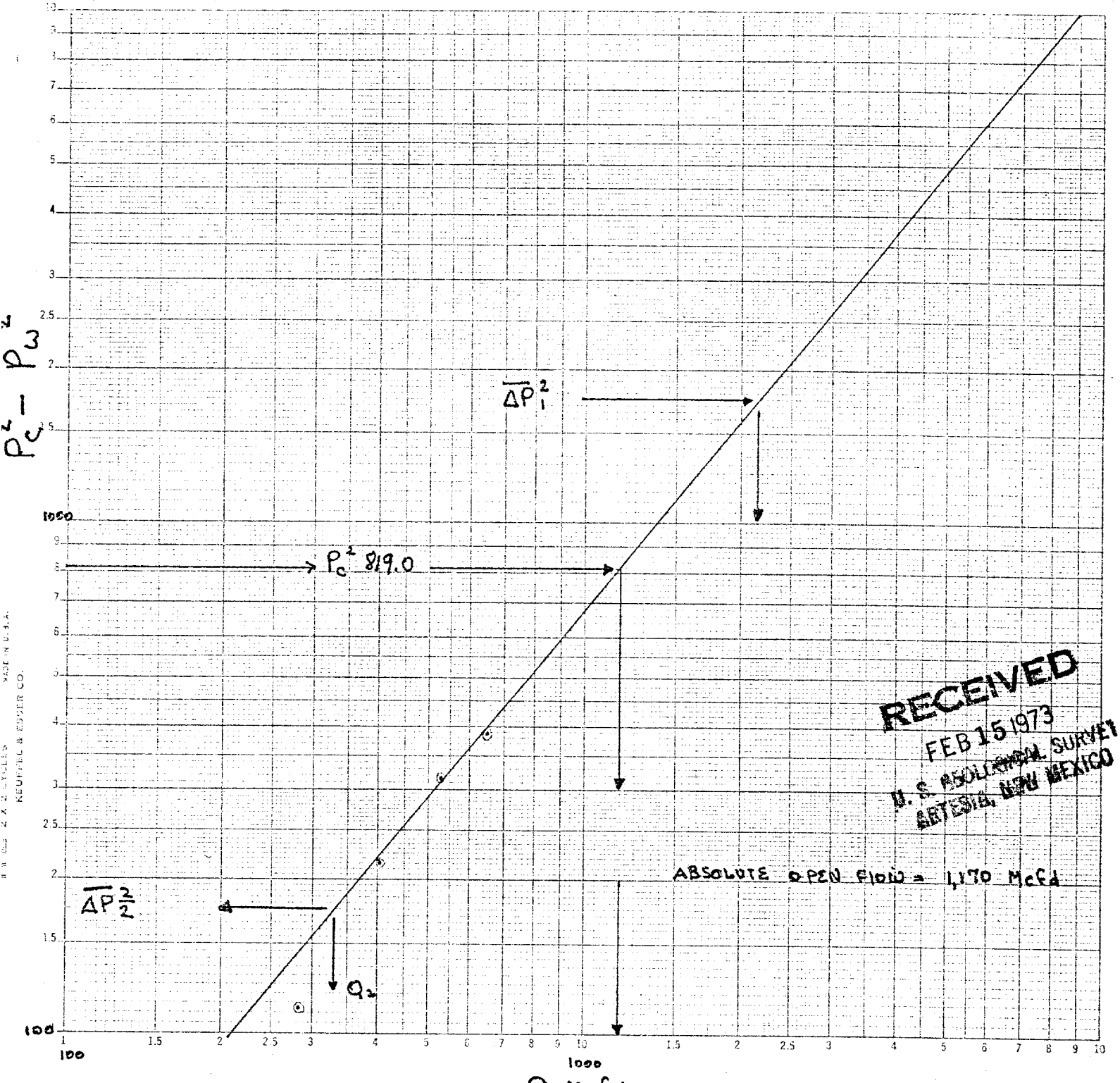
Absolute Open Flow 1,170 Mcfd @ 15.025 | Angle of Slope θ ____ | Slope, n .816

Remarks: ____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. A. Snow	J. A. Snow	

Read & Stevens, Inc
Jackson #1



$\overline{\Delta P_1^2}$ $P_c^2 - P_w^2 =$ 1750

$\overline{\Delta P_2^2}$ $P_c^2 - P_w^2 =$ 175

$Q_1 =$ 2160 Mcfd

$Q_2 =$ 330 Mcfd

Log Q_1 = 3.33450

Log Q_2 = 2.51850

n = .81600

n = .816

WOLF PETRO LAB, INC.
DIAL EMERSON 6-9701
DIAL EMERSON 6-7171
2411 WEST 42ND STREET
P. O. BOX 643
ODESSA, TEXAS
79760

HYDROCARBON ANALYSIS

LABORATORY REPORT

Charge Read & Stevens, Inc.
Test No. WPL-73-93
Date of Run 1-27-73
Date Received 1-25-73

A Sample of Gas from Wellhead - Jackson No. 1

Secured from Queens Formation

At Chaves County, New Mexico Secured by J. Wolf

Purpose Time Date 1-25-73

Sampling Conditions: Pressure 762 psig

CHROMATOGRAPH ANALYSIS

	Gas Vol. or Mol. %	Liquid Vol. %	GPM
Hydrogen Sulfide			
Carbon Dioxide	.04		
Air			
Nitrogen	64.00		
Oxygen			
Methane	25.25		
Ethane	5.97		
Propane	2.50		.69
Iso-Butane	.29		.09
N-Butane	.56		.18
Iso-Pentane	.11		.04
N-Pentane	.12		.04
Iso-Hexane			
N-Hexane			
Pentanes (2)			
Hexanes (2)	.16		.07
Heptane (2)			
TOTAL	100.00		1.11

(1) and lighter
(2) and heavier

ANALYSIS INFORMATION

Volume of Sample cc. @ ° F
Sp. Gr. Residue Vol. of Residue cc.
Molecular Wgt. of Residue
Gal/lb. Mol.

VAPOR PRESSURE

lbs. @ 100° F
Calculated lbs. @ 100° F

GASOLINE CONTENT

26/70 Gasoline .225 G. P. M.
100% Propane .690 G. P. M.
Excess Butanes .195 G. P. M.
TOTAL 1.110 G. P. M.

SULFUR DETERMINATION

Hydrogen Sulfide	H_2S	grs/100 SCF
Mercaptans	RSH	grs/100 SCF
Sulfides	RSR	grs/100 SCF
Residual Sulfur	RSSR	grs/100 SCF
Total Sulfur		grs/100 SCF

OTHER DATA

	WET BASIS		DRY BASIS
BTU Content (Actual)	468	(Calc.)	479
Sp. Gravity (Actual)	.8940	(Calc.)	.8927
A. P. I. Gr. (Actual)		(Calc.)	

Run by: J. Wolf Checked by: J. Wolf Approved:

Additional Data and Remarks

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