STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

RECEIVED
NOV 25 '87
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 10/29/87	
Company: MCKAY OIL CORPORATION		Connection: AIR			
Pool: West Pecos Slope		Formation: Abo		Unit	
Completion Date: 10/29/87	Total Depth: 4210'	Plug Back TD: 4079'	Elevation: 4276' GL	Farm or Lease Name: PIERCE FEDERAL	
Csg. Size: 4-1/2" / Wt.: 10.5# / d: 4.090 / Set At: 4165'		Perforations: From 2821 To 2840		Well No.: 3	
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 2796'		Perforations: From -- To --		Unit: P / Sec.: 3 / Twp.: 6S / Rge.: 22E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: --		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 90	Mean Annual Temp. °F: --	Baro. Press. – P_a: --	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
2830.5	2830.5	0.585	0.00	6.500	0.00	2.00	--	--

	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						935		940		SI 72 HR
1.	2.000	.125	179	--	62	890	--	895		SI 60 MI
2.	2.000	.250	147	--	61	717	--	721	--	SI 60 MI
3.	2.000	.375	62	--	70	271	--	271	--	SI 60 MI
4.	2.000	.375	0	--	80	1	--	134	--	SI 60 MI
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	0.2648	--	192.2	.998	1.307	1.013	67
2.	1.0870	--	160.2	.999	1.307	1.011	230
3.	2.3780	--	75.2	.991	1.307	1.009	234
4.	2.3780	--	13.2	.981	1.307	1.001	40
5.							

NO.	P_t	Temp. °R	T_t	Z
1	0.29	522	1.57	.975
2.	0.24	521	1.57	.979
3.	0.11	530	1.60	.991
4.	0.02	540	1.63	.999
5.				

Gas Liquid Hydrocarbon Ratio -- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons -- Deg.
Specific Gravity Separator Gas 0.585 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 661 P.S.I.A. P.S.I.A.
Critical Temperature 332 R R

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1				
2				
3				
4				
5				

P_c ____ P_c^2 ____

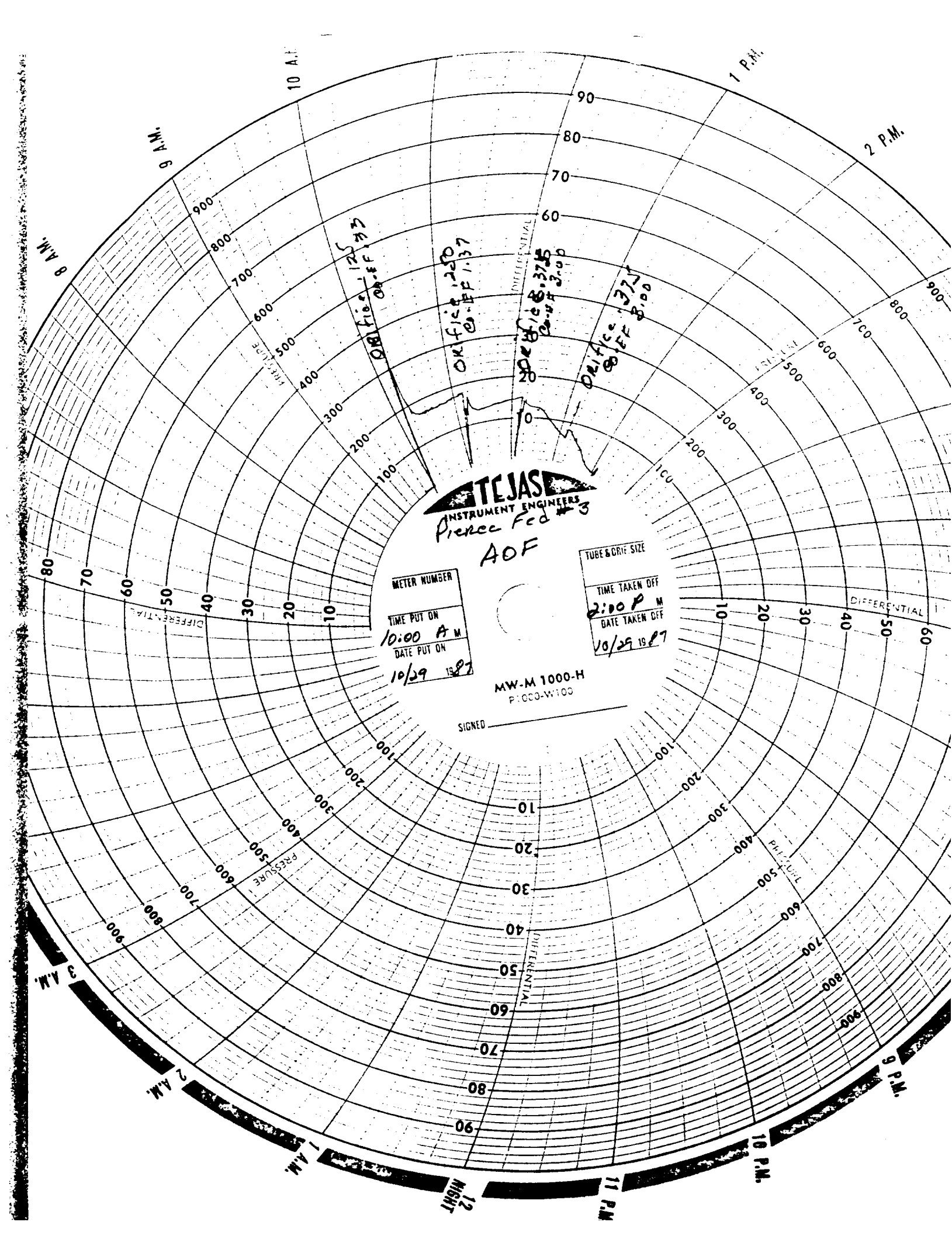
(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ ____ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ ____

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

Absolute Open Flow *100 Mcfd @ 15.025 | Angle of Slope ● ____ | Slope, n ____

Remarks: *Estimated AOF 100 MCFPD. Insufficient permeability to maintain starting flow rate on 3rd & 4th periods. Evidence of water entry on 4th period. Well too weak to test by normal method. *Est. based on 50% shut-in time to build pressure. Copy of flow chart attached.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	D. Kelton	C. Sanders	P. Stewart


TEJAS
INSTRUMENT ENGINEERS
Pierce Fed #3
AOF
METER NUMBER
TIME PUT ON
10:00 A M
DATE PUT ON
10/29 1987
TUBE & ORIF. SIZE
TIME TAKEN OFF
2:00 P M
DATE TAKEN OFF
10/29 1987
MW-M 1000-H
SIGNED
Orifice 1.250 @ 1.37
Orifice 3.375 @ 3.00
Orifice 1.375 @ 8.00
8 A.M.
9 A.M.
10 A.M.
1 P.M.
2 P.M.
9 P.M.
10 P.M.
11 P.M.
MIDNIGHT
1 A.M.
2 A.M.
3 A.M.
PRESSURE
DIFFERENTIAL
LINE