

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 5-20-57 & 5-24-57
Company Tidewater Oil Company Lease King Well No. 1
Unit M Sec. 1 Twp. 23S Rge. 36E Purchaser El Paso Natural Gas Co.
Casing 6-5/8 Wt. 24 I.D. _____ Set at 3020 Perf. _____ To _____
Tubing 2-7/8 Wt. 6.5 I.D. _____ Set at 3422 Perf. _____ To _____
Gas Pay: From 3041 To 3450 L 3422 xG 0.655 -GL 2241 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8-3-1949 Packer _____ Reservoir Temp. 112°

OBSERVED DATA

Tested Through (Pressure) (Cross) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Cross) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						869				72
1.	1	1.500	815	27.56	74	819				24
2.	1	1.500	791	47.61	74	798				24
3.	1	1.500	772	64.00	73	782				24
4.	1	1.500	736	100.00	72	752				24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	151.07	828	0.9868	0.9571	1.083	2,162
2.	13.99	195.65	804	0.9068	0.9571	1.083	2,800
3.	13.99	224.14	785	0.9877	0.9571	1.079	3,198
4.	13.99	273.68	749	0.9887	0.9571	1.075	3,896
5.	13.99						

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
F_c 5.866 (1-e^{-s}) 0.243

Specific Gravity Separator Gas 0.655
Specific Gravity Flowing Fluid -
P_c 882.2 P_c 778.3

No.	P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	832.2	692.6	12.68	160.78	22.99	715.6	62.7	268.0	28.34
2.	811.2	658.0	16.42	269.62	38.56	696.6	81.7	264.3	28.43
3.	795.2	632.3	18.76	351.94	50.33	682.6	95.7	261.0	28.77
4.	765.2	585.5	22.85	522.12	74.66	660.2	118.1	254.3	28.20
5.									

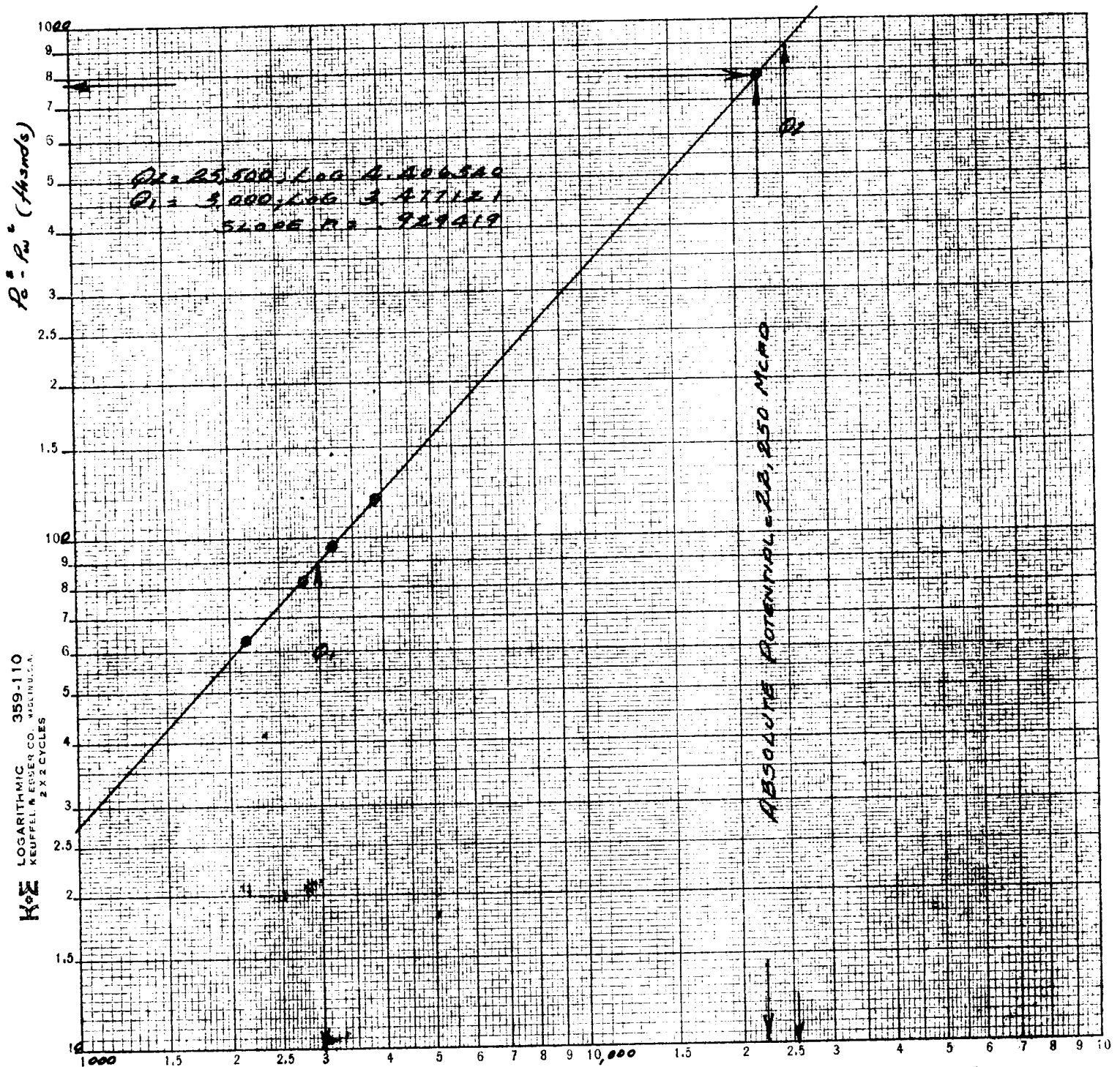
Absolute Potential: 22,250 MCFPD; n 0.930

COMPANY Tidewater Oil Company
ADDRESS Box 517 Hobbs, New Mexico
AGENT and TITLE H. P. Shackelford, Area Supt.
WITNESSED Earl G. Smith
COMPANY El Paso Natural Gas Co.

REMARKS

EL PASO NATURAL GAS ENGINEER

TIDEWATER OIL CO.
 KING NO 1
 M-1 - 23-36 LEA CO. N.M.
 5-24-1957



Q - MCFD - 15,025 PSIA 60°F