

NEW MEXICO OIL CONSERVATION COMMISSION

ILLEGIBLE

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122

Revised 12-1-55

Pool Sawyer Formation San Andres (Gas) County Lea
Initial _____ Annual X Special _____ Date of Test April 24, 1965
Company Western Drilling Company Lease McDermott Federal Well No. 2
Unit M Sec. 19 Twp. 9S Rge. 38E Purchaser Nearburg & Ingram
Casing 4 1/2" Wt. 11.60# I.D. 4" Set at 5,008' Perf. (4,940' to 4,958')
Tubing 2-3/8" Wt. 4.70# I.D. 1.995" Set at 4,996' Perf. Open To _____
Gas Pay: From 4,923' To 4,998' L _____ xG _____ -GL _____ Bar.Press. 13.2 psia
Producing Thru: Casing _____ Tubing X Type Well _____
Date of Completion: Feb. 9, 1961 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1,169		1,169		72 hrs
1.	2"	0.0625"	1,158		72°	1,158		1,158	72°	1 hr 45 min
2.	2"	0.1250"	1,103		68°	1,101		1,103	68°	3 hrs 0 min
3.	3.068"	1.1250"	356.6	18.92	67°	886		978	67°	3 hrs 0 min
4.	3.068"	1.1250"	354.9	29.92	60°	655		889	60°	3 hrs 0 min
5.	3.068"	1.1250"	346.4	20.25	62°	552		707	62°	20 hrs

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.	0.0827		1,171.2	.9887	0.8549	1.123	92
2.	0.3418		1,116.2	.9924	0.8549	1.123	363
3.	6.0950	83.65	369.8	.9933	1.1036	1.039	581
4.	6.0950	104.94	368.1	1.0000	1.1036	1.041	735
5.	6.0950	85.333	359.6	.9981	1.1036	1.041	596

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ P_w Measured (1-e⁻⁸) _____

Specific Gravity Separator Gas 0.821
Specific Gravity Flowing Fluid _____
P_c 1,182.2 P_c 1,397.6

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	1,171.2					1,371.7	25.9		99.07
2.	1,116.2					1,245.9	151.7		94.42
3.	991.2					982.5	415.1		83.84
4.	902.2					814.0	583.6		76.32
5.	720.2					518.7	878.9		60.92

Absolute Potential: 811.2 MCFPD; n 0.66313COMPANY Denton Oil CompanyADDRESS Post Office Box 4359 Tech Station, Lubbock, TexasAGENT and TITLE C. J. Jordan, Jr., Gas Engineer

WITNESSED _____

COMPANY _____

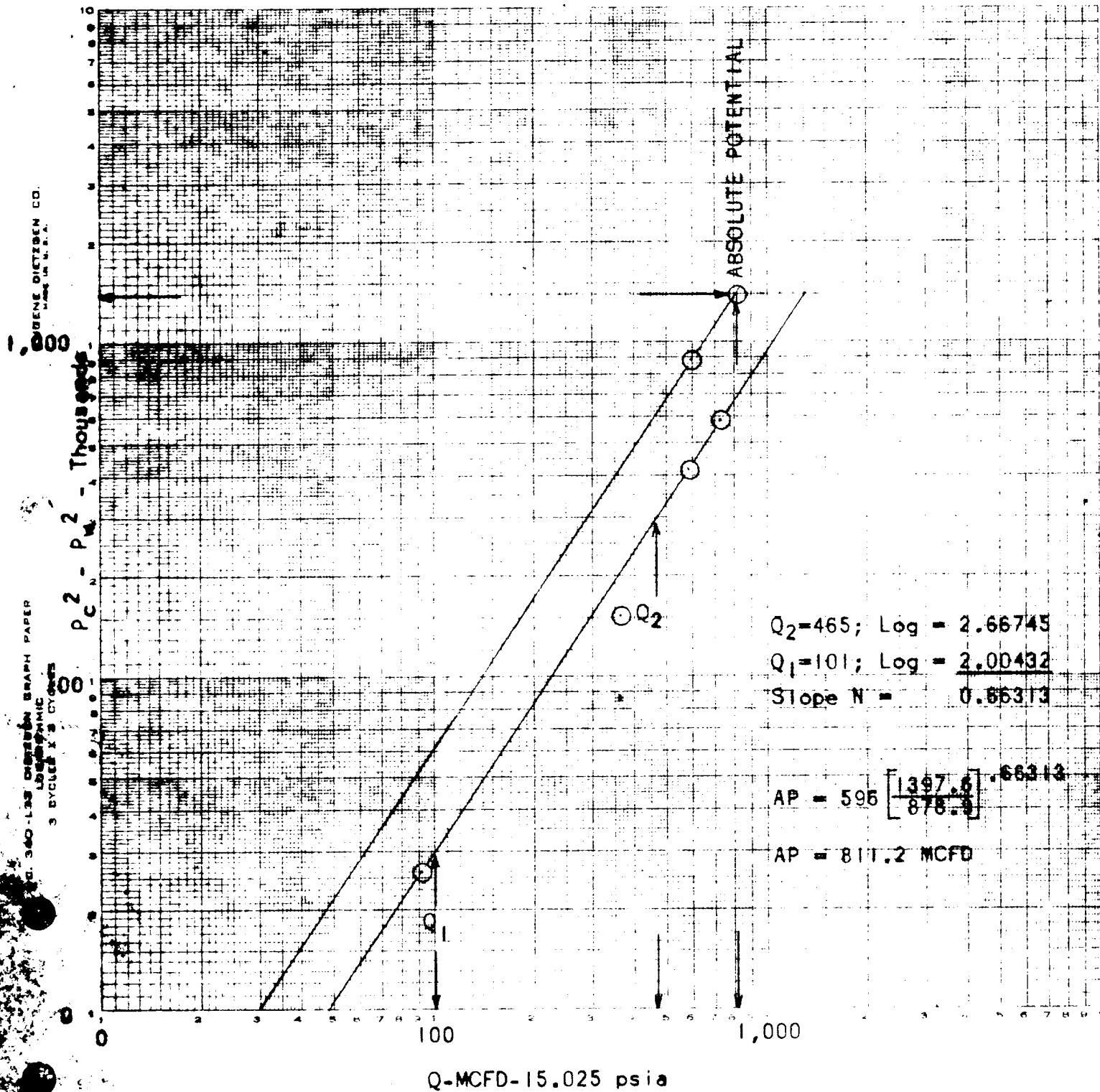
REMARKS

CO₂ and N composition considered as being 10% each.

*Note: Critical flow prover used for first two points due to hydrate formation in attempting to produce into pipeline.

DENTON OIL COMPANY

COMPANY: Western Drilling Company
LSE & WELL: McDermott Federal No. 2
LOCATION: N-19-95-38E
FIELD: Sawyer
COUNTY: Lee
DATE: April 24, 1965



ILLEGIBLE