

NEW MEXICO OIL CONSERVATION COMMISSION

NOV 8 7 37 AM '65

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Sawyer Formation San Andres County Lea
Initial X Annual _____ Special _____ Date of Test Oct. 20, 1965
Company Western Drilling Company Lease Great Western Fed. "C" Well No. 1
Unit M Sec. 21 Twp. 9S Rge. 38E Purchaser Capitan, Inc.
Casing 4 1/2" Wt. 11.60# I.D. 4.0 Set at 5025 Perf. 4914 To 4978
Tubing 2-3/8" Wt. 4.70# I.D. 1.995 Set at 4895 Perf. Open To _____
Gas Pay: From 4914 To 4978 L _____ xG _____ -GL _____ Bar.Press. 13.2 psia
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Aug. 2, 1965 Packer None 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						869		870	62°	72 Hrs. 0 Min.
1.	2"	0.0625"	857		66°	856		857	66°	3 Hrs. 0 Min.
2.	2"	0.125 "	796		69°	792		796	69°	3 Hrs. 0 Min.
3.	3.016"	0.750"	352	26.0	69°	627		730	69°	3 Hrs. 0 Min.
4.	3.016"	0.750"	352	48.58	53°	514		624	53°	3 Hrs. 0 Min.
5.	3.016"	0.750"	352	31.36	63°	446		562	63°	20 Hrs. 0 Min.

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		870.2	0.9943	0.8874	1.075	68
2.	0.3418		809.2	0.9915	0.8874	1.069	260
3.	3.449	97.46	365.2	0.9915	0.8874	1.032	305
4.	3.449	133.20	365.2	1.0068	0.8874	1.036	425
5.	3.449	107.02	365.2	0.9971	0.8874	1.034	338

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas 0.762
Specific Gravity Flowing Fluid _____
P_c 883.2 P_c 780.0

No.	P _w P _t (psia)	P _t ²	P _c Q	(P _c Q) ²	(P _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	870.2					757.2	22.8		98.5
2.	809.2					654.8	125.2		91.6
3.	743.2					552.3	227.7		84.1
4.	637.2					406.0	374.0		72.1
5.	575.2					330.9	449.1		65.1

Absolute Potential: 484 MCFPD; n 0.64940COMPANY Denton Oil CompanyADDRESS P. O. Box 4359, Lubbock, TexasAGENT and TITLE C. J. Jordan, Jr., Gas Engineer

WITNESSED _____

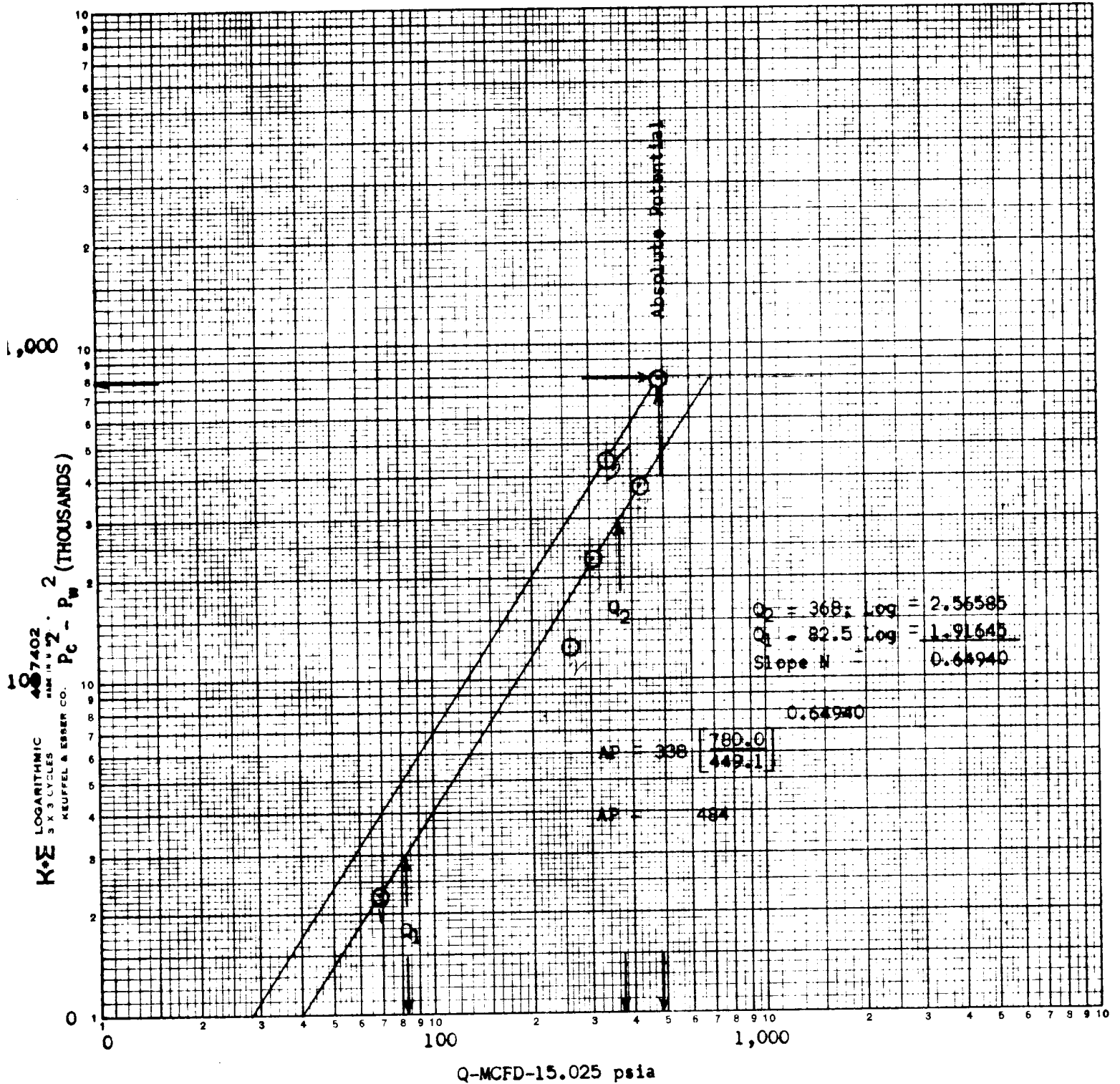
COMPANY _____

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.

COMPANY: Western Drilling Company
 LSE & WELL: Great Western Federal "C" No. 1
 LOCATION: M-21-9S-38E
 FIELD: Sawyer Field
 COUNTY: Lea
 DATE: October 20, 1965



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Nov 3 1965

DENTON OIL COMPANY
P. O. BOX 4359
DENVER, TEXAS

GAS-OIL RATIO REPORT

COMPANY: Western Drilling Company
LOG & WELL: Great Western Federal "C" Well No. 1
LOCATION: A-21-95-38E, Sawyer field
COUNTY: Lea
STATE: New Mexico
Test Period: 6:00 P.M. 10-20-65 to 3:30 P.M. 10-21-65

Total volume of gas produced during test period	<u>340.02 MCF</u>
Total volume of liquid produced during test period	<u>14.57 BBLs.</u>
Water Content of liquid produced	<u>2.91 BBLs.</u>
Net volume of crude oil produced during test period	<u>11.66 BBLs.</u>
Gas-Oil Ratio: <u>340.020 / 11.66</u> =	<u>29.161 Ft³/BBL.</u>