

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

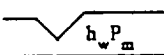
OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator O.G.S. Operating Company, Inc.						Lease or Unit Name Bilberry 14 Federal Com.					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-11-97		Well No. 2			
Completion Date 4-7-97		Total Depth 4716'		Plug Back TD 4684'		Elevation 4014'		Unit Ltr. - Sec. - TWP - Rge. K 14 85 37E			
Csg. Size 4 1/2"	Wt. 11.6	d 4.000	Set At 4715	Perforations: From: 4563 To: 4664				County Roosevelt			
Tbg. Size 2-3/8"	Wt. 4.6	d 1.995	Set At 4560	Perforations: From: Open To: End				Pool Bluitt			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		Formation San Andres Associated			
Producing Thru Tubing		Reservoir Temp. °F 60°		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection To Air			
L 4560	H 4560	Gg 0.736	% CO ₂ 5.62	% N ₂ 6.76	% H ₂ S	Prover 2"		Meter Run	Taps		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							1235	51	1235	51	48 Hours
1.	2	X	.125	1135		46	1135	59	1142	59	1 Hour
2.	2	X	.1875	965		53	965	60	975	60	1 Hour
3.	2	X	.250	730		55	730	62	742	62	1 Hour
4.	2	X	.4375	200		56	200	64	425	64	1 Hour
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv.	Rate of Flow Q, Mcfd
1.	.2648		1148.2	1.014	1.166	1.004	361
2.	.6082		978.2	1.007	1.166	1.004	701
3.	1.087		743.2	1.005	1.166	1.005	951
4.	3.408		213.2	1.004	1.166	1.003	853
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl
1.	1.68853	506	1.35294	0.768	A.P. I. Gravity of Liquid Hydrocarbons	Dry Gas	Deg.
2.	1.43853	513	1.37166	0.809	Specific Gravity Separator Gas	0.736	XXXXXXXXXX
3.	1.09294	515	1.37701	0.855	Specific Gravity Flowing Fluid	XXXXXX	
4.	0.31353	516	1.37968	0.959	Critical Pressure	*680	P.S.I.A.
5.					Critical Temperature	*374	R

P _c 1248.2		P _c ² 1558.0	
NO.	P _i ²	P _w	P _w ²
1.		1155.2	1334.5
2.		988.2	976.5
3.		755.2	570.3
4.		438.2	192.0
5.			

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.577$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.284$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.350$

Absolute Open Flow	1,284	Mcf/d @ 15.025	Angle of Slope θ	56.6	Slope, n	0.658
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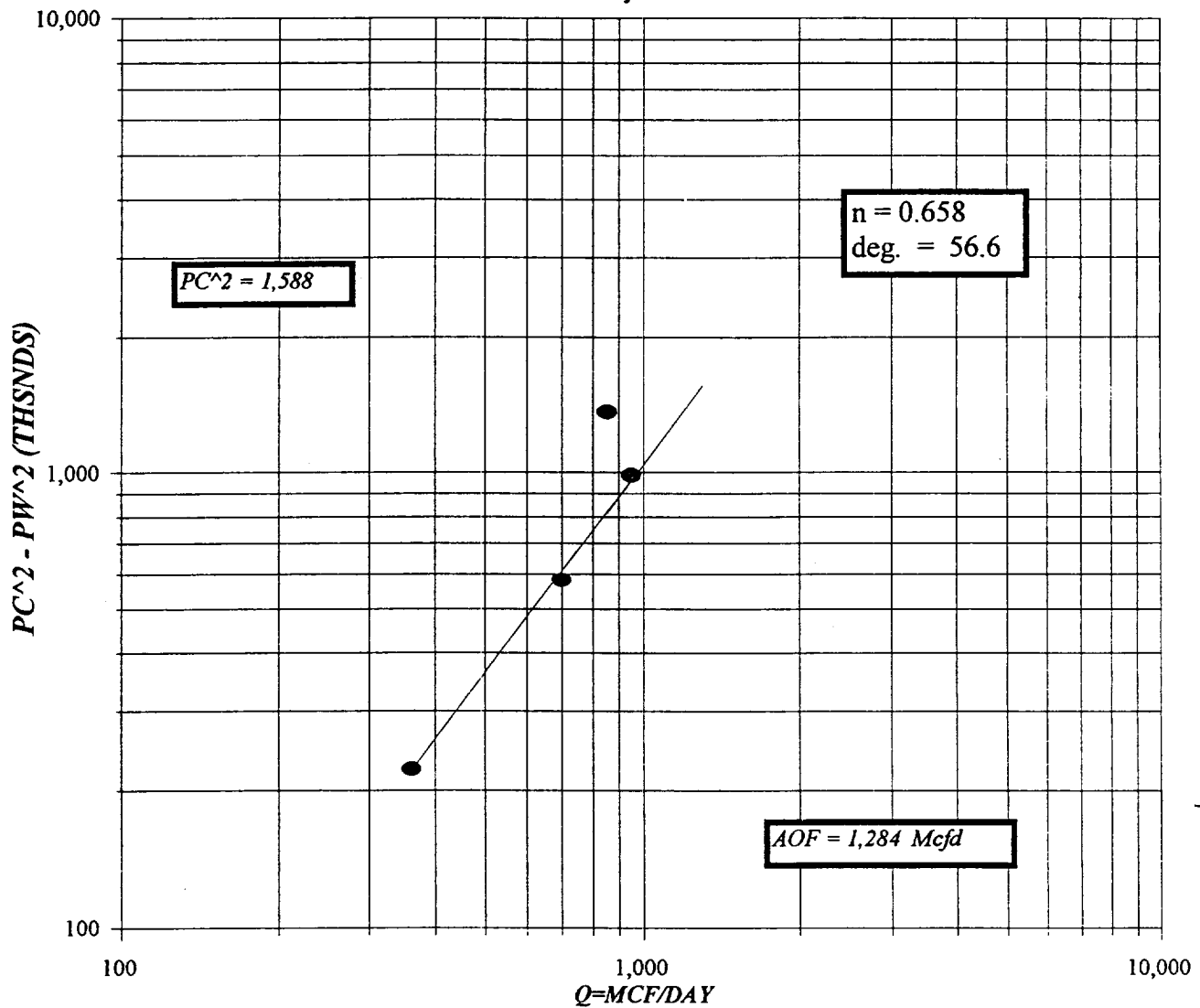
Remarks: Made a trace of fluid on last rate.

*=Corrected to 5.62 CO₂ & 6.76 N₂

Approved By Division	Conducted By: West-Test, Inc.	Calculated By: T.R.	Checked By: T.R.
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OGS OPERATING Co., Inc.

Bilberry 14 Fed Com No 2





Laboratory Services, Inc.

1331 Tasker Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

FOR: West Test, Inc.
Attention: Mr. Buz Thomason
412 N. Dal Paso
Hobbs, New Mexico 88240

SAMPLE
IDENTIFICATION: Bilberry 14 Fed. Com # 2
COMPANY: O. G. S. Operating Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 4/11/97 1:30PM
ANALYSIS DATE: 4/12/97
PRESSURE - PSIG 450
SAMPLE TEMP. °F
ATMOS. TEMP. °F 56

GAS (XX) LIQUID ()
SAMPLED BY: West Test
ANALYSIS BY: Rolland Perry

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)	0.00	
Nitrogen (N2)	6.76	
Carbon Dioxide (CO2)	5.62	
Methane (C1)	75.24	
Ethane (C2)	7.16	1.910
Propane (C3)	3.16	0.869
I-Butane (IC4)	0.40	0.129
N-Butane (NC4)	0.88	0.278
I-Pentane (IC5)	0.26	0.095
N-Pentane (NC5)	0.26	0.095
Hexane Plus (C6+)	0.26	0.107
	100.00	3.483

BTU/CU.FT. - DRY 1041
AT 14.650 DRY 1038
AT 14.650 WET 1020
AT 14.73 DRY 1043
AT 14.73 WET 1025

MOLECULAR WT. 21.3265

SPECIFIC GRAVITY -
CALCULATED 0.736
MEASURED