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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Geology, 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 OGS Operating						Lease or Unit Name Bluitt 16 State					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-25-99		Well No. 1			
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr. - Sec. - TWP - Rge.			
Csg. Size 4 1/2	Wt. 11.5	d 1.995	Set At	Perforations: From: 4702 To: 4738				County Roosevelt			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		Formation San Andres			
Producing Thru Tbg		Reservoir Temp. °F 60°F		Mean Annual Temp. °F 60°F		Baro. Press - P _a 13.2		Connection			
L 4702	H 4702	Gg .742	% CO ₂ 5.472	% N ₂ 7.461	% H ₂ S	Prover	Meter Run 3.068	Taps Flg			

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							1248		1240		72 Hrs.
1.	3	x	1.500	90	11.60	60	1218		1240		1 Hr.
2.	3	x	1.500	90	43.60	60	1155		1190		1 Hr.
3.	3	x	2.125	103	30.30	64	962		1020		1 Hr.
4.	3	x	2.125	124	39.70	68	650		740		1 Hr.
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, F _{pv} .	Rate of Flow Q, Mcfd
1.	11.13	34.60	103.2	1.000	1.161	1.011	452
2.	11.13	67.08	103.2	1.000	1.161	1.011	876
3.	24.76	59.34	116.2	.9962	1.161	1.017	1,728
4.	24.76	73.80	137.2	.9924	1.161	1.017	3,700
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.15	520	1.38	.978	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.15	520	1.38	.978	Specific Gravity Separator Gas	XXXXXXX	
3.	.17	524	1.40	.966	Specific Gravity Flowing Fluid	XXXXXX	
4.	.20	528	1.40	.966	Critical Pressure	**676	P.S.I.A. P.S.I.A.
5.					Critical Temperature	**376	R R

P_c 1261.2 P_c 1590.6

NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²
1.	*	1253.2	1570.5	20.1
2.	*	1203.2	1447.7	142.9
3.	*	1033.2	1067.5	523.1
4.	*	753.2	567.3	1023.3
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.554$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.554$

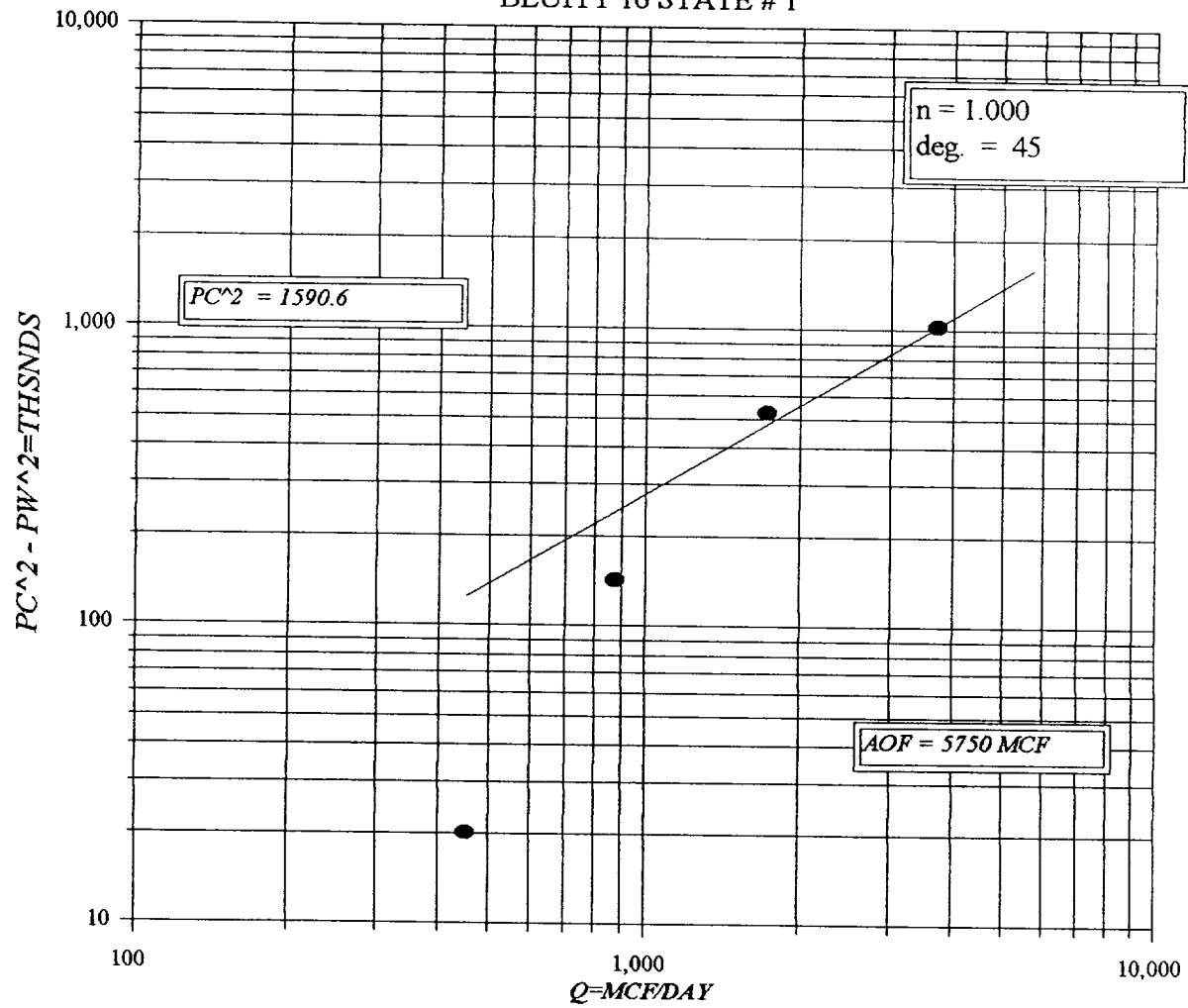
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.750$

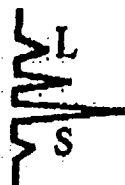
Absolute Open Flow	5,750	Mcf/d @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks: *PW = Csg Pressures

Approved By Division	Conducted By: West-Test, Inc.	Calculated By: BM	Checked By: BM
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O G S OPERATING
BLUITT 16 STATE # 1





Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

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

SAMPLE:
IDENTIFICATION: Bluit 16 State #1
COMPANY: OGS Operating
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 1/25/99 11:00 AM
ANALYSIS DATE: 1/26/99
PRESSURE - PSIG
SAMPLE TEMP. °F
ATMOS. TEMP. °F 58

GAS (XX) LIQUID ()
SAMPLED BY: Bob Sonnamaker
ANALYSIS BY: Vickie Walker

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	7.461	
Carbon Dioxide (CO2)	5.472	
Methane (C1)	74.908	
Ethane (C2)	6.736	1.797
Propane (C3)	3.047	0.838
I-Butane (IC4)	0.398	0.130
N-Butane (NC4)	0.901	0.283
I-Pentane (IC5)	0.273	0.100
N-Pentane (NC5)	0.309	0.112
Hexane Plus (C6+)	0.495	0.203
	100.000	3.463

BTU/CU.FT. - DRY 1042
AT 14.650 DRY 1038
AT 14.650 WET 1020
AT 14.73 DRY 1044
AT 14.73 WET 1026

MOLECULAR WT. 21.4840

SPECIFIC GRAVITY -
CALCULATED 0.742
MEASURED