SF
Vita
122

NEW MEXICO OIL CONSERVATION COMMSSION

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

JAN - 4 1980

O. C. D.
ARTESIA, OFFICE

RECEIVED
DEC 31 1979
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 12-10-79	
Company: BOYD OPERATING COMPANY			Connection: TO AIR		
Pool: ~~Eumont~~ Wildcat Abo			Formation: ABO		
Completion Date: 12-10-79	Total Depth: 5700		Plug Back TD: ~~5560~~ 5525	Elevation: 3744GL	Farm or Lease Name: BLAKEMORE FEDERAL
Csg. Size: 4 1/2" / Wt.: 9.50 / d: 4.090 / Set At: 5700			Perforations: From 4198 To 4344		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.60 / d: 2.375 / Set At: 5183			Perforations: From SLIDING SLEEVE To		Unit: D / Sec.: 20 / Twp.: 9S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: DUAL COMPLETION			Packer Set At: 5217 KB		County: CHAVES
Producing Thru: TBG.	Reservoir Temp. °F:	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: NEW MEXICO
L	H	Gg: .706	% CO_2: 5.226	% N_2: .5918	% H_2S	Prover: 6" POSITIVE CHOKE	Meter Run	Taps

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI		1/8				871		989		
1.		1/8	832		57	832		942		1 HR
2.		5/32	782		62	782		883		1 HR.
3.		3/16	685		65	685		798		1 HR.
4.		7/32	500		62	500		607		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, Fpv	Rate of Flow Q, Mcfd
1	.2618		845.2	1.003	1.238	1.078	296
2	.4173		795.2	.9981	1.238	1.071	439
3	.6101		698.2	.9952	1.238	1.061	557
4	.8419		513.2	.9981	1.238	1.045	558
5							

NO.	P_t	Temp. °R	T_r	Z
1	1.25	517	1.44	.860
2	1.18	522	1.45	.871
3	1.03	525	1.46	.889
4	.76	522	1.45	.915
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure 675 P.S.I.A. _____ P.S.I.A.
Critical Temperature 359 R _____ R

P_c 1002.2 P_c^2 1004.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		955.2	912.4	92.0
2		896.2	803.2	201.2
3		811.2	658.0	346.4
4		620.2	384.6	619.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 10.917$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.304$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 978$

Absolute Open Flow 978 Mcfd @ 15.025 Angle of Slope θ 63.5 Slope, n .500

Remarks: _____

BOYD OPERATING COMPANY
BLAKEMORE FEDERAL NO. 1

ABS (N) = Q1 = 386 = 2.586359
Q2 = 122 = 2.086359
N = .500000

$$CAOF = 978 \left(\frac{1004.4}{92.0}\right)^{.500} = 978 \text{ MCF / DAY}$$