NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 2-1-65

RECEIVED
MAR 29 1972
O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 3-7-72	
Company: BLACKROCK OIL COMPANY		Connection:			
Pool: ~~HAYSTACK~~ Wildcat		Formation: CISCO GAS			Unit: ~~"X"~~ "H"
Completion Date: February 28, 1972	Total Depth: 6477'		Plug Back TD: 5807'	Elevation: 3973 GR.	Farm or Lease Name: BATES McINTYRE FED.
Csg. Size: 5½" / Wt.: 15.5 / d: 4.950" / Set At: ~~5800'~~ 6370			Perforations: From 5783 To 5784		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.6 / d: 1.995" / Set At: 5753'			Perforations: From OPEN To ENDED		Unit: H / Sec.: 9 / Twp.: 6-S / Rge.: 27-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 5750'		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 118 @ 5790'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
5753	5753	0.657	.003	.039	.02 GR.		3"	FLANGE

	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					1444.0	72	PKR.		
1.	3.00 x 1.000	160.0	61.0	82	246.0	79	"		1.0 HR
2.	3.00 x 1.000	160.0	40.0	84	305.0	80	"		1.0
3.	3.00 x 1.000	150.0	20.0	91	454.0	80	"		1.0
4.	3.00 x 1.000	145.0	4.0	98	742.0	81	"		1.0
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	4.789	102.79	173.2	.9795	1.234	1.015	604
2.	"	83.23	173.2	.9777	1.234	1.015	488
3.	"	57.13	163.2	.9715	1.234	1.013	332
4.	"	25.16	158.2	.9653	1.234	1.013	145
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.26	542	1.45	.971
2.	0.26	544	1.45	.971
3.	0.24	551	1.47	.974
4.	0.24	558	1.49	.975
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.657 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 670 P.S.I.A. _____ P.S.I.A.
Critical Temperature 375 R _____ R

P_c 2213.2 P_c^2 4898.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1083.2	1173.3	3725.0
2		1144.2	1309.2	3589.1
3		1347.2	1814.9	3083.4
4		1781.2	3172.7	1725.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3149$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3149$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 794$

Absolute Open Flow 794 Mcfd @ 15.025 | Angle of Slope θ 0.45° LIMITED | Slope, n 1.00 LIMITED

Remarks: TEST RUN IN REVERSE SEQUENCE DUE TO QUANITY OF WATER PRODUCTION.
WATER PRODUCTION= 1ST RATE 16 BBLS.- 2ND RATE 12 BBLS.- 3RD RATE 8 BBLS.- 4TH RATE 5 BBLS.
BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE AT 5790 FEET.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D.G.T.	R.L.W.	