

MULTIPOINT AND IE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12-4-80	
Company MARALO, INC.		Connection To Air	
Pool <i>Shieldcat</i>		Formation Mississippian	
Completion Date		Total Length 10599	Plug Back TD
Elevation		Farm or Lease Name Chavelea Carson	
Csg. Size 5 1/2	Wt. d	Set At 10599	Perforations: From 10548 To 10566
Trg. Size 2 7/8	Wt. 6.5	Set At 10452	Perforations: From Open To End
Type Well - Single - Bronthead - G.C. or C.O. Multiple Single		Packer Set At 10,452	County Lea
Producing Thru Tbg.	Reservoir Temp. °F 179 @ 10537	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
State New Mexico			
L 10,537	H 10,537	G _g .663	% CO ₂ 1.00
% N ₂ 1.53	% H ₂ S	Prover 2"	Meter Run
Taps			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Flow 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							1119				72 hrs.
1.	2 X 1.00			36		58	177				1 hr.
2.	2 X 1.00			33		59	270				1 hr.
3.	2 X 1.00			28		64	455				1 hr.
4.	2 X .625			79		55	532				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compres. Factor, F _{pv}	Rate of Flow Q, Mhd
1	17.09		49.2	1.002	1.228	NIL	1035
2	17.09		46.2	1.001	1.228	NIL	971
3	17.09		41.2	.9962	1.228	NIL	861
4	6.473		92.2	1.005	1.228	NIL	737
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>-0-</u> Mcf/bbl.	
1	.07	518	1.37	NIL	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2	.07	519	1.37	NIL	Specific Gravity Separator Gas .663	XXXXXXXXXX
3	.06	524	1.39	NIL	Specific Gravity Flowing Fluid XXXXX	
4	.13	515	1.36	NIL	Critical Pressure 670	P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 378	R _____ R

P _c 1168.0 P _c ² 1364.2				
NO.	P _s	P _w	P _w ²	P _c ² - P _w ²
1	601.2	*471.6	222.4	1141.8
2	644.2	*504.7	254.7	1109.5
3	790.2	*616.0	379.5	984.7
4	863.2	*571.6	451.0	913.2
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.195$$

$$AOI = 0 \quad \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.237$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.195$$

Absolute Open Flow <u>1,237</u> Mhd @ 15.025	Angle of Slope @ <u>45</u>	Slope, n <u>1.00</u>
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Remarks: 2.8 bbls of water during test.
P_E = 1532.2
*Calculated from known BHP

Approved Original Signed By Jerry Sexton Dist. 1, Supv.	Conducted By: Sutton JOHN WEST ENGR.	Calculated By: Reston	Checked By:
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RECEIVED

JAN 26 1981

OIL CONSERVATION DIV.