

JUN 9 1982

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-4-81		O. C. D. ARTESIA, OFFICE	
Company McCLELLAN OIL CORP.				Connection TO ATMOSPHERE			
Pool WILDCAT				Formation ABO		Unit	
Completion Date 8-31-81		Total Depth 4400		Plug Back TD 4337		Elevation 3630 G.L.	
Farm or Lease Name BO FEDERAL		Well No. 1					
Csq. Size 4 1/2	Wt. 10 5/8	d 4.052	Set At 4400	Perforations: From 4118' To 4136'			
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 4057	Perforations: From OPENENDED To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 106 @ 4140		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 4140	H 4140	Gg .7109	% CO ₂ .324	% N ₂ 25.451	% H ₂ S -0-	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. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							979		1000	CHOKE	24 Hrs.
1.	2"	x	3/16	80		37	963	84	995	5/64	1 Hr.
2.	2"	x	3/16	140		27	938	74	960	8/64	1 Hr.
3.	2"	x	3/16	650		47	808	83	835	11/64	1 Hr.
4.	2"	x	1/4	500		48	671	90	700	12.5/64	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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.6082		93.2	1.023	1.186	1.008	69
2	.6082		153.2	1.033	1.186	1.013	116
3	.6082		663.2	1.013	1.186	1.049	508
4	1.087		513.2	1.012	1.186	1.038	695
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ TSTM	Mcfd/bbl.
1.	.15	497	1.52	.985	A.P.I. Gravity of Liquid Hydrocarbons .7109 <td>Deg.</td>	Deg.
2.	.24	487	1.49	.975	Specific Gravity Separator Gas _____	XXXXXXX
3.	1.06	507	1.55	.908	Specific Gravity Flowing Fluid _____	XXXXXX
4.	.819	508	1.55	.928	Critical Pressure _____ 627 _____ P.S.I.A.	P.S.I.A.
5.					Critical Temperature _____ 327 _____ R	R

* P_c 1013.2 P_c² .1027

NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		1008.2	1016	11
2		973.2	947	80
3		848.2	719	308
4		713.2	509	518
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.98263$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1040$

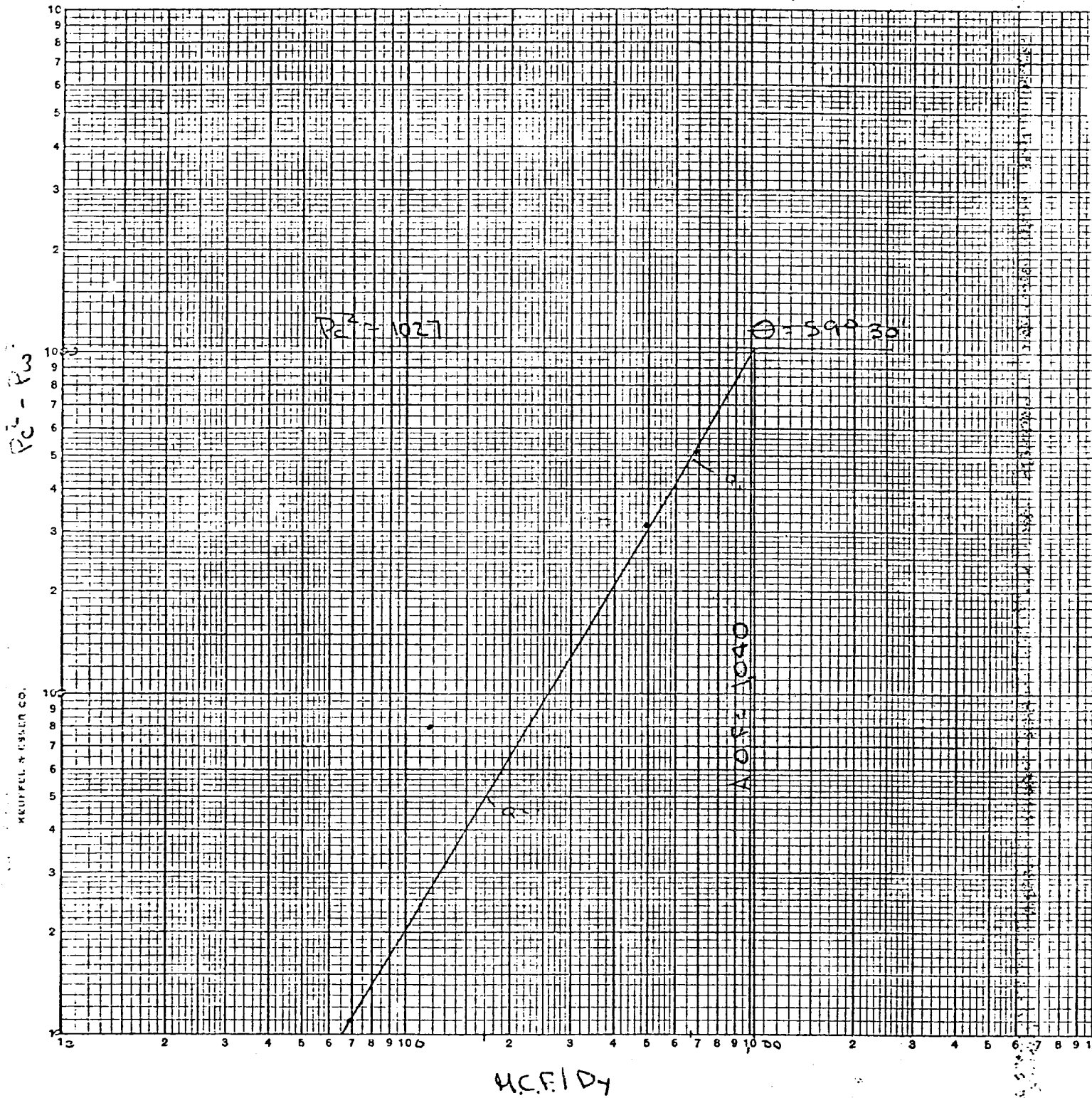
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.49655$

Absolute Open Flow _____ 1,040 _____ Mcfd @ 15.025	Angle of Slope _____ 59° 30'	Slope, n _____ 58905
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Remarks: * Calculated from known Bottom Hole Pressures

Approved By Commission:	Conducted By: W.S.	Calculated By: M.K.	Checked By: M.K.
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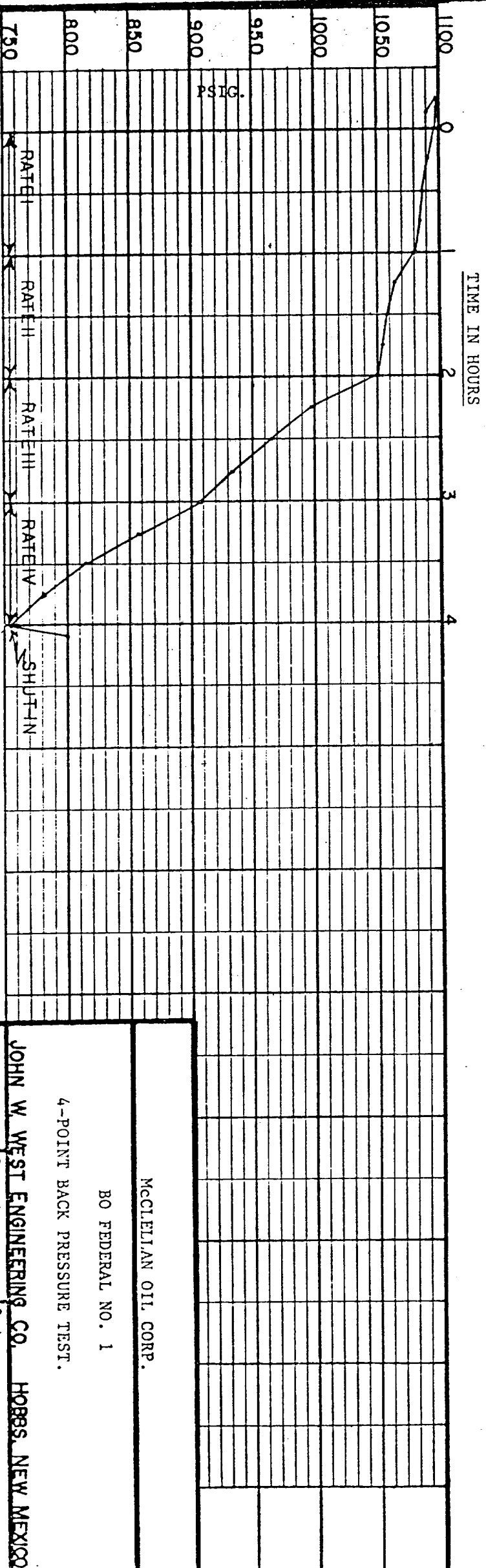
$$695 \left(\frac{1027}{518} \right)^{.58905} = 1040$$



TEST DATE: 9-4-81
TEST DEPTH: 4140 FEET

ELEMENT NO: 18129
RANGE: 0-2500 psi
CLOCK NO: 25358
RANGE: 0-24 HOURS

Note: See tabulation of Times and Pressures on attached sheet.



McCLELLAN OIL CORP.

BO FEDERAL NO. 1

4-POINT BACK PRESSURE TEST.

JOHN W. WEST ENGINEERING CO. HOBBBS, NEW MEXICO

Date: 9-8-81 Drawn by: bsm Scale: as shown