NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: May5, 1976	
Company: M^cClellan Oil Corporation	Connection: To Air			
Pool: Double Queen Assoc.	Formation: Queen Sand			Unit:
Completion Date: May 1, 1976	Total Depth: 2112'	Plug Back TD:	Elevation: 3917 G.L.	Farm or Lease Name: Sam State
Csg. Size: 5½" / Wt. / d / Set At: 2088'	Perforations: From Open To Hole			Well No.: 2
Tbg. Size: None / Wt. / d / Set At: ----	Perforations: From To			Unit: P / Sec.: 32 / Twp.: 14S / Rge.: 30E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: None			County: Eddy
Producing Thru: Casing	Reservoir Temp. °F: 85° @ 2100'	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico
L / H / Gg: 0.9123	% CO_2: -0-	% N_2: 60.609	% H_2S: -0-	Prover: Positive / Meter Run: Chokes / 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	Positive Chokes				430.0				
1.	8/64"	427.0		72	427.0	72			45 Min.
2.	10/64"	423.0		74	423.0	74			45 Min.
3.	14/64"	405.0		75	405.0	75			45 Min.
4.	18/64"	386.0		75	386.0	75			45 Min.
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	0.2618		440.2	.9887	1.047	1.020	121.7
2.	0.4173		436.2	.9868	1.047	1.019	191.6
3.	0.8419		418.2	.9859	1.047	1.018	370.0
4.	1.422		399.2	.9859	1.047	1.017	595.9
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.79	532	1.79	.962
2.	0.78	534	1.80	.963
3.	0.75	535	1.80	.965
4.	0.71	535	1.80	.967
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.9123 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 560 P.S.I.A. _____ P.S.I.A.
Critical Temperature 297 R _____ R

P_f 473.2 P_f^2 223.9

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		469.2	220.1	3.8
2		464.2	215.5	8.4
3		446.2	199.1	24.8
4		424.2	179.9	44.0
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 9.028$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 3.671$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 1358$

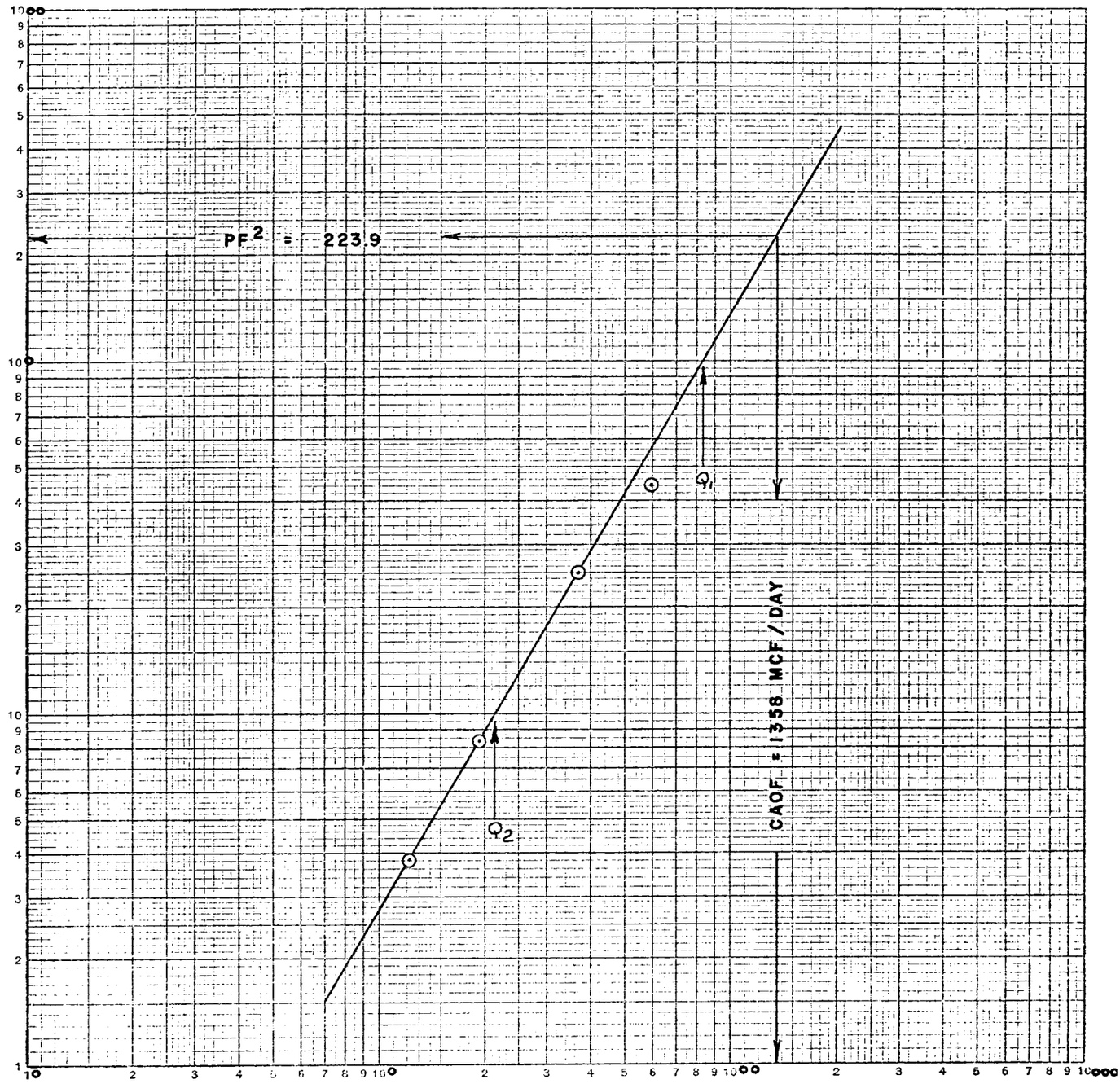
Absolute Open Flow 1358 Mcfd @ 15.025 Angle of Slope θ 59.4° Slope, n 0.591

Remarks: Bottom Hole pressures measured with Kuster gauge @ 2100 feet.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Tyson	R. West	J.W.W.

M CLELLAN OIL CORPORATION SAM STATE WELL NO. 2

MAY 5, 1976



ABS SLOPE (n) = Q1 = 835 = 6.921686
Q2 = 214 = 6.330414
(n) = 0.591272

CAOF = $370\left(\frac{223.9}{24.8}\right)$ = 1358 MCF/DAY

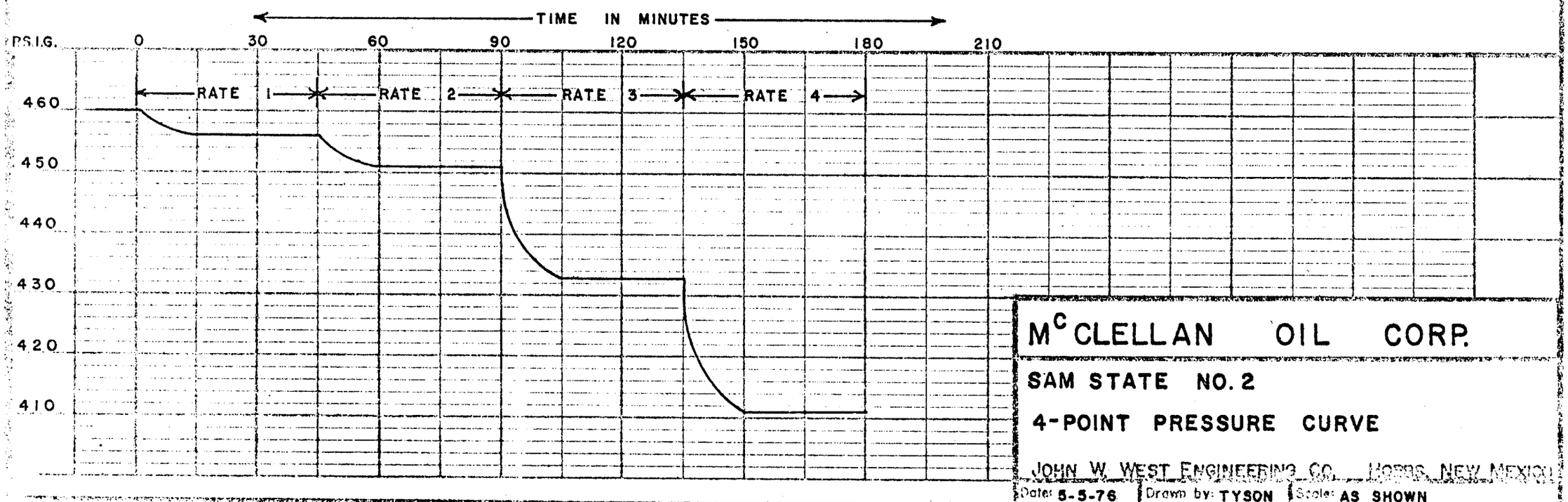
TEST DATE: MAY 4, 1976
TEST DEPTH: 2100 FEET

ELEMENT NO.: 9156-N
RANGE: 0-2900 P.S.I.G.

CLOCK NO.: 5250
RANGE: 0-12 HOURS

OPERATOR: Don Tyson

Note; See attached sheet for tabulation of pressure and time.



McCLELLAN OIL CORP.

SAM STATE NO. 2

4-POINT PRESSURE CURVE

JOHN W. WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 5-5-76 | Drawn by: TYSON | Scale: AS SHOWN

McCLELLAN OIL CORPORATION
SAMSTATE WELL NO. 2
4-POINT PRESSURE TEST
TABULATION OF PRESSURE & TIME

TEST CONDUCTED BY:
JOHN WEST ENGINEERING COMPANY

TEST DATE: MAY 4, 1976
TEST DEPTH: 2100 FEET
ELEMENT NO.: 9156-N
RANGE: 0-2900 P.S.I.G.
CLOCK NO.: 5250
RANGE: 0-12 HOURS
OPERATOR: Don Tyson & Richard Tyson

DATE	TIME	CUM. HRS. / MIN.		P.S.I.G. @ 2100 FEET
5-4-76	11:20 A.M.	00 Hrs.	00 Min.	460 Gauge reached 2100'
	11:30 A.M.	00	10	460 Rate 1 Choke 8/64"
		00	25	456
		00	40	456
	12:15 P.M.	00	55	456 End Rate 1
	12:30 P.M.	01	10	451 Rate 2 Choke 10/64"
		01	25	451
	1:00 P.M.	01	40	451 End Rate 2
	1:15 P.M.	01	55	433 Rate 3 Choke 14/64"
		02	10	433 Took Gas Sample
	1:45 P.M.	02	25	433 End Rate 3
	2:00 P.M.	02	40	411 Rate 4 Choke 18/64"
		02	55	411
	2:30 P.M.	03	10	411 End Rate 4, End Test.