

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED BY  
**FEB 20 1984**  
 O. C. D.  
 ARTESIA, OFFICE

Type Test  Initial  Annual  Special Test Date **JAN 11 10 54 AM '84**

Company **McClellan Oil Corporation** Connection **AIR**

Pool **PENJACK & Packer & Pipe 410** Formation **ABO**

Completion Date **12-21-83** Total Depth **4400** Plug Back TD **4400** Elevation **3614 GR** Farm or Lease Name **MM Had Lane**

Coq. Size **4 1/2** Wi. **10.5** d **T** Set At **TD 4400** Perforations: From **4211** To **4243** Well No. **2**

Tng. Size **2 3/8** Wi. **4.7** d **4147** Set At **4147** Perforations: From **4147** To **4147** Unit **H** Sec. **35** Twp. **9** Rge. **15**

Type Well - Single - Bradenhead - G.G. or G.O. Multiple **Single** Packer Set At **None** County **Chaves**

Producing Thru **Tubing** Reservoir Temp. °F **98** Mean Annual Temp. °F **60** Baro. Press. - P<sub>a</sub> **13.2** State **New Mexico**

L **68** H **68** G<sub>g</sub> **68** % CO<sub>2</sub> **68** % N<sub>2</sub> **68** % H<sub>2</sub>S **68** Prover **3"** Meter Run **3"** Taps **3"**

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							753				
1.	3	x	1.125	200	7	55	700		800		1hr
2.	3	x	1.125	200	21	55	575		690		1hr
3.	3	x	1.125	200	35	58	450		550		1hr
4.	3	x	1.125	200	43	58	250		410		1hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow O, Mcfd
1	6.627	38.632	213.2	1.0048	1.2127	1.0233	319
2	6.627	66.912	213.2	1.0048	1.2127	1.0233	553
3	6.627	86.383	213.2	1.0019	1.2127	1.0229	711
4	6.627	95.747	213.2	1.0019	1.2127	1.0229	789
5							

NO.	R <sub>1</sub>	Temp. °R	T <sub>1</sub>	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	_____ Deg.
2.					Specific Gravity Separator Gas	XXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A. _____ P.S.I.A. _____
5.					Critical Temperature	R _____ R _____

NO.	P <sub>1</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1	756		592	210
2	630		474	388
3	478		241	560
4	320		111	690
5				

P<sub>c</sub> 882 P<sub>c</sub><sup>2</sup> 801

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.16$  (2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.76$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 950$

Post TD-2  
2-24-84  
Comp + BK

Absolute Open Flow **950** Mcfd @ 15.025 Angle of Slope  $\theta$  **47** Slope, n **933**

Remarks: Bottom hole pressures recorded with Amerada type guage

Approved By Division	Conducted By: Keltic Services	Calculated By: Kelly	Checked By:
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KELTIC SERVICES INC

COMPANY McCLELLAN OIL CORP  
 LEASE M M.  
 FIELD PENJACK  
 SHUT IN TUBING PRESSURE  
 BOMB NUMBER 792

FORMATION ABO  
 753 PSIG

DATE 1/4/84  
 WELL NUMBER #2  
 CASING PRESSURE  
 OPERATOR CHUCK

DEPTH 4225 FEET  
 840 PSIG

POINT	TIME HOURS	PRESSURE		FLOW RATE MSCFPD
		B. H.	PSIA W. H.	
01	0.00	895.20	766.20	
02	.25	800.20	763.20	
03	.50	790.20	738.20	
04	.75	774.20	738.20	
05	1.00	769.20	713.20	319
06	1.25	722.20	663.20	
07	1.50	695.20	638.20	
08	1.75	669.20	613.20	
09	2.00	643.20	588.20	553
10	2.25	590.20	538.20	
11	2.50	548.20	513.20	
12	2.75	517.20	488.20	
13	3.00	491.20	463.20	711
14	3.25	386.20	313.20	
15	3.50	349.20	263.20	
16	3.75	333.20	263.20	
17	4.00	333.20	263.20	789

THANK YOU

McCLELLAN OIL CORP

M M.#2

1/4/84

PRESSURE PSIA

900  
800  
700  
600  
500  
400  
300  
200  
0

TIME HOURS



KELTIC SERVICES

KELTIC SERVICES INC

COMPANY McCLELLAN OIL CORP  
 LEASE M M.  
 FIELD PENJACK  
 DEPTH 4225 FEET  
 TUBING PRESSURE 726 PSIG  
 BOMB NUMBER 792

DATE 1/4-8/84  
 WELL NUMBER #2  
 FORMATION ABO  
 CASING PRESSURE 0 PSIG  
 OPERATOR CHUCK

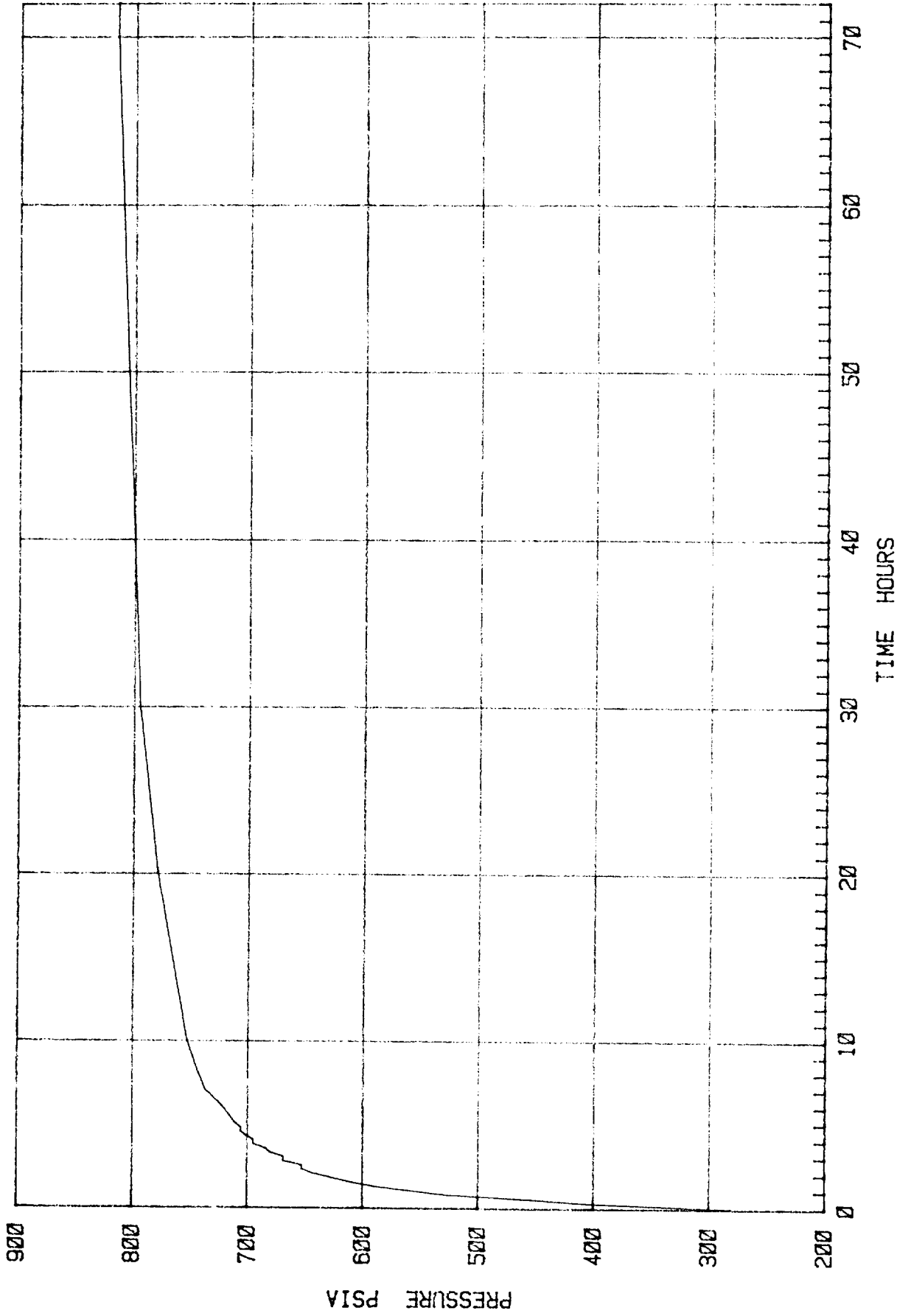
TIME	HOURS	PRESSURE	PSIA
0.00		281.20	
.25		401.20	
.50		454.20	
.75		527.20	
1.00		559.20	
1.25		590.20	
1.50		611.20	
1.75		627.20	
2.00		643.20	
2.25		653.20	
2.50		653.20	
2.75		669.20	
3.00		669.20	
3.25		680.20	
3.50		685.20	
3.75		695.20	
4.00		695.20	
4.25		701.20	
4.50		706.20	
4.75		706.20	
5.00		711.20	
6.00		722.20	
7.00		737.20	
8.00		743.20	
9.00		748.20	
10.00		753.20	
20.00		779.20	
30.00		795.20	
40.00		800.20	
50.00		806.20	
60.00		811.20	
70.00		816.20	
72.00		816.20	

THANK YOU

1/4-8/84

M M. #2

McCLELLAN OIL CORP



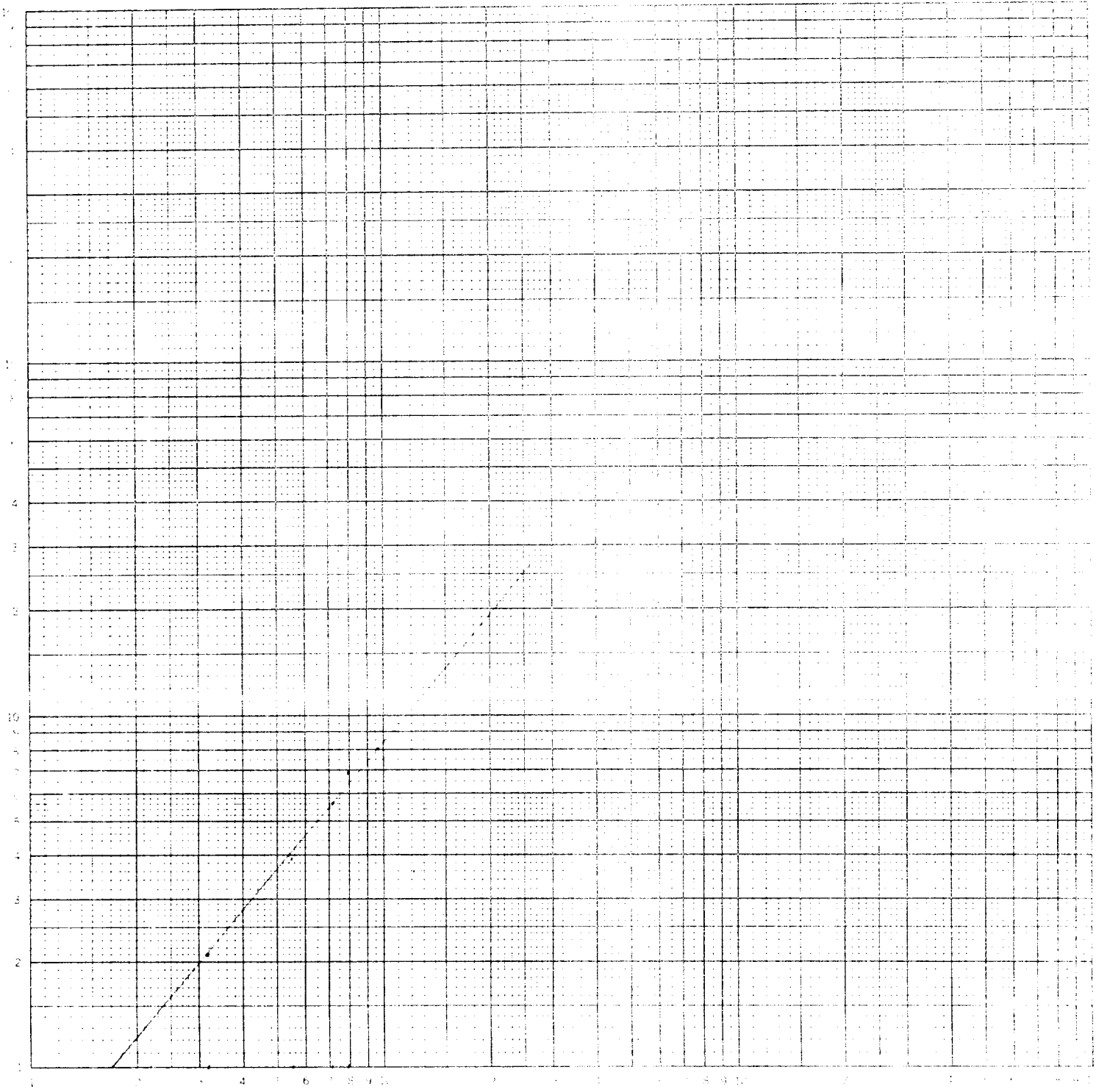
McCLELLAN OIL CORP

1/4/84

MM #2

P-P (000) 46 7400

LOS ANGELES AREA  
KEUFFEL & ESSER CO. M.S. & P.



Q  
MSCFPD