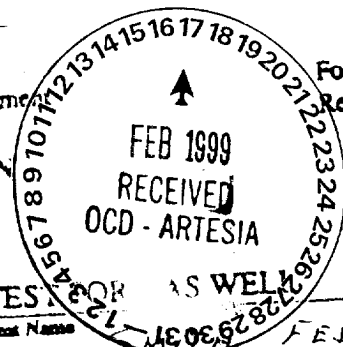


Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088



Form C-122
Revised 4-1-91

MULTIPOINT AND ONE POINT BACK PRESSURE TEST

Operator <u>MARATHON OIL CO.</u>					Test Date <u>1-7-98</u>				
Type Test ☒ Initial ☐ Annual ☐ Special					Elevation <u>11-22-23</u>				
Completion Date <u>1-7-98</u>					Country <u>USA</u>				
Csg. Size <u>7"</u>		WC <u>23#</u>		Set At <u>7280</u>		Performances From <u>7280</u> To <u>7305</u>		Pool <u>EDDY</u>	
Tbg. Size <u>2 7/8</u>		WC <u>6.5</u>		Set At <u>2.441</u>		Performances From <u>7280</u> To <u>7305</u>		Pool <u>EDDY</u>	
Type Well - Single - Bradenhead - GG or CO Multiple <u>SINGLE</u>					Packer Set At <u>7153</u>				
Producing Thru <u>7153</u>		Reservoir Temp. °F <u>145.5 @ 7153</u>		Mean Annual Temp. °F <u>60</u>		Buro. Press. - P _s <u>1.12</u>		Connection <u>CISCO</u>	
L <u>7153</u>		H <u>7153</u>		G _s <u>.6344</u>		% CO ₂ <u>.4957</u>		% N ₂ <u>.8277</u>	
				% H ₂ S <u>Prover</u>		Meter Run <u>3.668</u>		Taps <u>FLG</u>	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. P _s	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1	3 X 1.000	16	2.30	50	480	484	PER	11	1 NR.
2	3 X 2.000	42	26.52	80	465	465	11	11	1 NR.
3	3 X 2.000	65	32.20	80	437	437	11	11	90 MIN.
4	3 X 2.000	77	54.80	80	410	410	11	11	

RATE OF FLOW CALCULATIONS							
COEFFICIENT (24 HOUR)	Pressure P _s	Flow Temp. F _{avg}	Gravity Factor F _g	Super. express. Factor F _{sp}	Rate of Flow Q, Mcfd		
4.789	8.20	29.2	1.010	1.256	1.003		
21.32	38.26	55.2	.9813	1.256	1.003		
21.32	53.94	78.2	.9813	1.256	1.006		
21.32	70.31	90.2	.9813	1.256	1.006		

NO.	P _s	Temp. °R	T	L	Gas Liquid Hydrocarbons	DRY GAS	Mcfd/bbl
1	.04	510	1.38	.994	A.P. Gravity of Hydrocarbons	DRY	
2	.08	540	1.46	.984	Specific Gravity Sep. air Gas	.6344	XXXXXXXXXX
	.11	540	1.46	.984	Specific Gravity Flowing Phase	XXXXXX	
	.13	540	1.46	.984	Critical Pressure	620	PSIA
					Critical Temperature	368	R

503.2 253.2 57.768 (2) $\left[\frac{P_s^2}{P_i^2 - P_s^2} \right] = 57.768$

572.2 252.2 10 $\left[\frac{P_s^2}{P_i^2 - P_s^2} \right] = 10.723$

487.3 237.5 15.7

469.5 220.4 32.8

457.6 209.4 43.9

Angle of Slope θ 45 Slope n 1.000

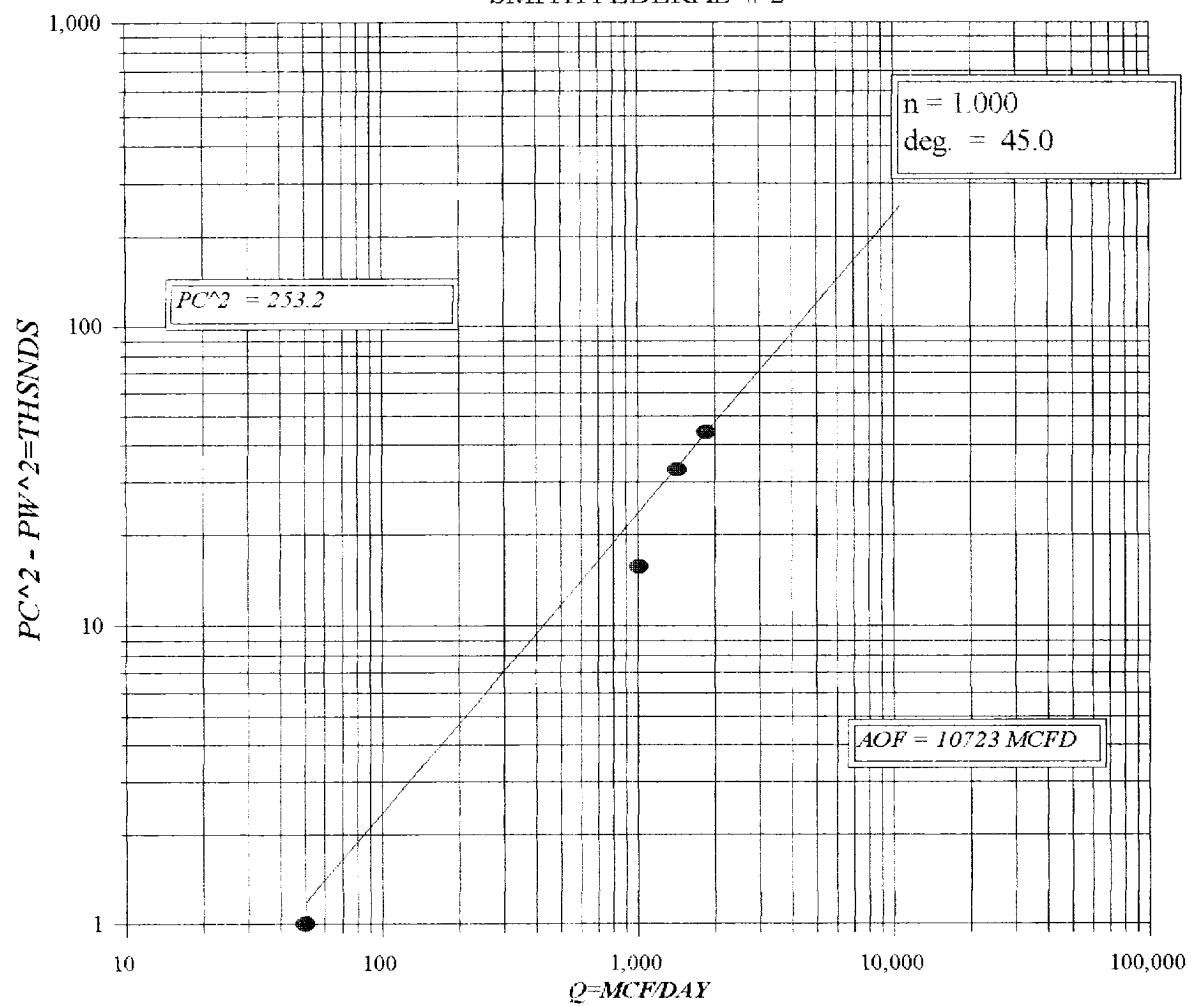
Remarks: NO FLUID PRODUCED

Approved By Division _____ Conducted By _____ Calculated By _____ Checked By _____

METERING & TESTING SERV, INC. BM

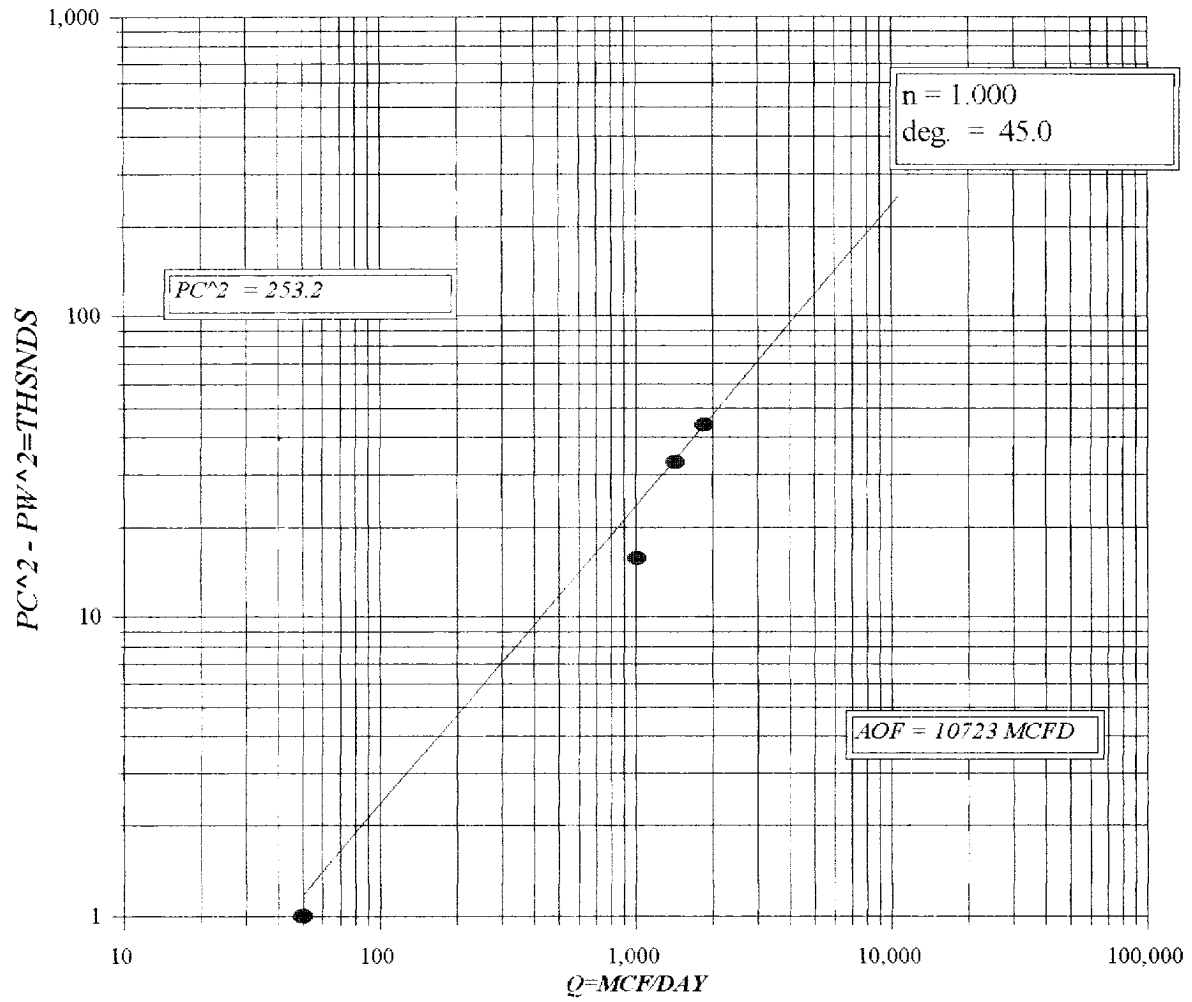
MARATHON OIL COMPANY

SMITH FEDERAL # 2



MARATHON OIL COMPANY

SMITH FEDERAL # 2



CAPROCK LABORATORIES, INC.
3312 BANKHEAD HIGHWAY
MIDLAND, TEXAS 79701

CHROMATOGRAPHIC ANALYSIS

COMPANY:	MARATHON OIL CO.	JOB #:	9710141
SAMPLE ID:	311B @ TEST SEP.	SAMPLE #:	D3810MOC3
SAMPLE TYPE:	SPOT	DATE ON:	19971030
STATION:	INDIAN BASIN	DATE OFF:	19971030
BASE PRESSURE,PSIA:	14.650	TIME ON:	1052
RANAREX GRAVITY:		TIME OFF:	1052
SAMPLE PRESS.,psig:	800.0	SAMPLED BY:	J. PRITCHARD
GAS TEMP. F:	100	CYLINDER #:	000001
ANALYSIS DATE:	19971103	SAMPLE USE * :	A
ANALYSIS COMMENTS:			

COMPONENT	MOLE %	GPM
HYDROGEN SULFIDE	0.5037	
NITROGEN	0.8277	
OXYGEN	0.0000	
METHANE	89.9586	
CARBON DIOXIDE	0.4957	
ETHANE	4.8920	1.3012
PROPANE	1.5418	0.4225
ISO-BUTANE	0.2867	0.0933
N-BUTANE	0.4812	0.1509
ISO-PENTANE	0.1806	0.0657
N-PENTANE	0.1671	0.0602
HEXANES	0.1465	0.0599
HEPTANES +	0.5184	0.2378
TOTAL	100.0000	2.3915

HEATING VALUE

BTU DRY	1107.8
BTU SATURATED	1088.6

COMPRESSIBILITY, Z	0.9973
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RELATIVE DENSITY	0.6344
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AVE. MOLE WEIGHT	18.5476
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H2S, TUTWEILER, GR./100 CUBIC FEET	316.8
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26 # GASOLINE	1.8403
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BASE CONDITIONS, 14.65 PSIA @ 60 DEGREES FAHRENHEIT

* A = ACCOUNTABLE, O = OPERATIONAL

