

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

State of New Mexico
Energy Minerals and Natural Resources

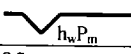
Form C-122
Revised October, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Marbob Energy Corporation						Lease or Unit Name Lusk Deep Unit A					
Type Test ☐ XX Initial ☐ Annual ☐ Special						Test Date 02-22-2000			Well No. 14		
Completion Date 02-15-00		Total Depth 12540		Plug Back TD		Elevation			Unit Ltr. - Sec. - TWP - Rge. A 19 19S 32E		
Csg. Size 5.5	Wt. 17	D 4.89	Set At 12540	Perforations: From: To:				County Eddy			
Thg. Size 2.375	Wt. 4.7	D 1.99	Set At 12238	Perforations: From: 12410 To: 12416				Pool			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12238			Formation Morrow		
Producing Thru Tubing		Reservoir Temp. °F 173		Mean Annual Temp. °F		Baro. Press - P _a 13.2			Connection Pipeline		
L 1250	H 1250	Gg 0.682	%CO ₂ 0.607	%N ₂ 0.516	%H ₂ S 0.0	Prover		Meter Run 4 inch	Taps Flange		

FLOW DATA						TUBING DATA		CASING DATA		Duration
No.	Prover Line Size	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	Of Flow
SI	4"	2.625			68.7	1250		1790	173.4	20.5 Hrs
1.	4"	2.625	19.1	5.2	78.6	1210		1730	173.8	1 Hour
2.	4"	2.625	20.4	9.5	80.6	1110		1630	172.0	1 Hour
3.	4"	2.625	24.6	49	57.0	895		1442	169.0	1 Hour
4.	4"	2.625	27.7	77.6	69.1	680		1260	165.8	1 Hour
5.										

RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	36.66		12.95	32.3	0.982	1.027	580
2.	36.66		17.86	33.6	0.980	1.027	798
3.	36.66		43.03	37.8	1.001	1.027	1968
4.	36.66		56.33	40.9	0.991	1.027	2547
5.							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.				0.948	A. P. I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.				0.948	Specific Gravity Separator Gas 0.682 XXXXXXXXXX		
3.				0.947	Specific Gravity Flowing Fluid XXXXXX		
4.				0.947	Critical Pressure _____ P.S.I.A. _____ P.S.I.A.		
5.					Critical Temperature _____ R. _____ R		

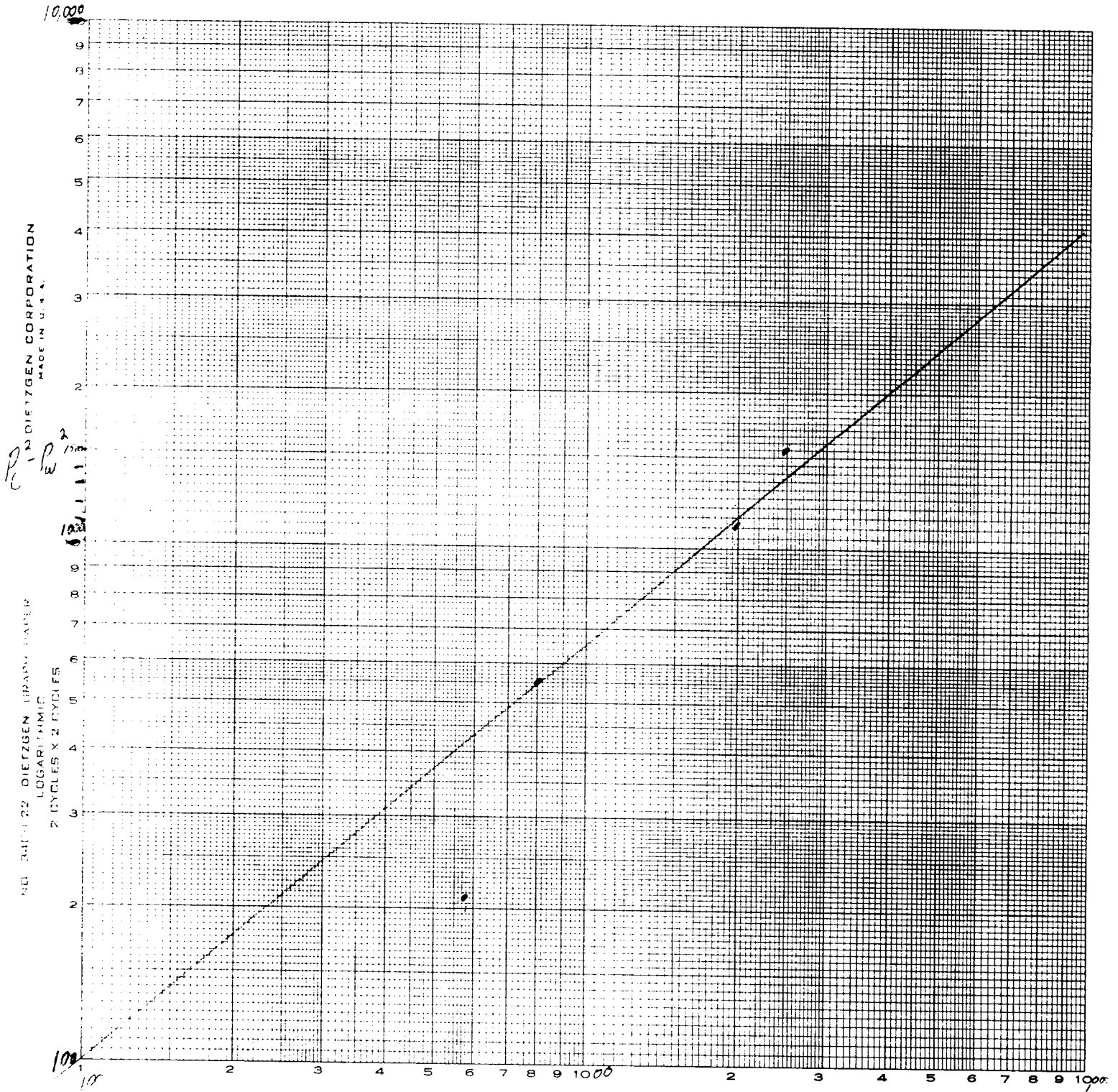
P _c 1790		P _c ² 3204			
No.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	
1.				212	(1) P _{i2} = 2.848 $\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{4710}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{2.393}$
2.				548	
3.				1125	
4.				1617	
5.					

Absolute Open Flow 4710		Mcf/d @ 15.025		Angle of Slope θ: 39		Slope, n: 0.834	
Remarks: Choke Sizes: Q ₁ =8/64 Q ₂ =12/64 Q ₃ =18/64 Q ₄ =24/64							
Approved By Division		Conducted By: Keltic Services		Calculated By: JJ McGlasson		Checked By:	

MARBLE ENERGY

LUSK DEEP UN. A #14

2-22-5000



$Q(MBF)$

$Q_1 = 3000$ $\log Q_1 = 3.477$

$\theta = 39^\circ$

$Q_2 = 798$ $\log Q_2 = 2.90$

Wildcat Measurement Service
PO Box 1836
Artesia, New Mexico 88211-1836
Office #505-746-3481
"Quality and Service is our First Concern"

DOS 2.0

Run No. 20222-06
Date Run 02/22/00
Date Sampled 02/22/00

Analysis for: MARBOB ENERGY CORPORATION

GPANGL.L60

Well Name: LUSK DEEP #14

Field:

Sta. Number:

Purpose: SPOT

Sampling Temp: DEG F

Volume/day:

Pressure on Cylinder: 680 PSIG

Producer: MARBOB ENERGY CORPORATION

County: EDDY State: NM

Sampled By: KELTIC SERVICES

Atmos Temp: DEG F

Formation:

Line Pressure: 693.2 PSIA

GAS COMPONENT ANALYSIS

Pressure Base: 14.730

		Mol %	GPM
Carbon Dioxide	CO2	0.607	
Nitrogen	N2	0.516	
Methane	C1	85.862	14.553
Ethane	C2	7.463	1.996
Propane	C3	2.705	0.745
Iso-Butane	IC4	0.378	0.124
Nor-Butane	NC4	0.789	0.249
Iso-Pentane	IC5	0.356	0.130
Nor-Pentane	NC5	0.367	0.133
Hexanes Plus	C6+	0.957	0.411
TOTAL		100.000	18.342

Real BTU Dry: 1185
Real BTU Wet: 1165
Real Calc. Specific Gravity: 0.682
Field Specific Gravity: 0.000

Standard Pressure: 14.696
BTU Dry: 1183
BTU Wet: 1162

Z Factor: 0.9970
N Value: 1.2878
Avg Mol Weight: 19.7018
Avg CuFt/Gal: 56.0431
26 Lb Product: 1.0620
Methane+ GPM: 18.342
Ethane+ GPM: 3.788
Propane+ GPM: 1.792
Butane+ GPM: 1.047
Pentane+ GPM: 0.675

REMARKS:

Approved by: KARL HAENY

Tue Feb 22 16:06:38 2000