

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

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-122
 Revised 4-1-91

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator TEXACO EXPLORATION						Lease or Unit Name NEW MEXICO C STATE NCT-2					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-7-95		Well No. 10			
Completion Date		Total Depth 3670		Plug Back TD 3630		Elevation		Unit Lr. - Sec. - TWP - Rge. H-19-20S-37E			
Csg. Size 5 1/2	Wt. 17#	d	Set At 3670	Perforations: From: 3348 To: 3596				County LEA			
Tbg. Size 2-3/8	Wt. 4.7#	d 1.995	Set At 3561	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or H.O. Multiple single						Packer Set At NONE		Formation EUMONT			
Producing Thru tbg. & csg.		Reservoir Temp. °F 93°		Mean Annual Temp. °F 60		Baro. Press - P 13.2		Connection AIR			
L 3348	II 3348	Gg. .854	% CO ₂ 10.48	% N ₂ 1.26	% H ₂ S	Prover		Meter Run 2.067		Taps FLG.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI									70		
1.									20		24 hrs
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.							
2.							
3.	RATE TAKEN FROM ELECTRONIC TOTAL FLOW METER						222
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					15.857	
2.					32.3	
3.					.854	XXXXXXX
4.					3	XXXXXX
5.					*707	*698
					*421	*490

P_c **83.2** P_w **6.9**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.	1.1	45.9	2.1	4.8
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.439$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.439$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 319$

Absolute Open Flow 319 Mcfd @ 15.025	Angle of Slope θ 45°	Slope, n 1.000
---	------------------------------------	-----------------------

Remarks: ***CORRECTED TO 10% CO₂ & 1% N₂**

ORIGINAL SIGNED BY JERRY SEXTON

APPROVED BY DIVISION SUPERVISOR Conducted By: **PRO WELL TESTER** Calculated By: **KS** Checked By: **BM**

TEXACO EXPLORATION

New Mexico C State NCT-2, Well # 10

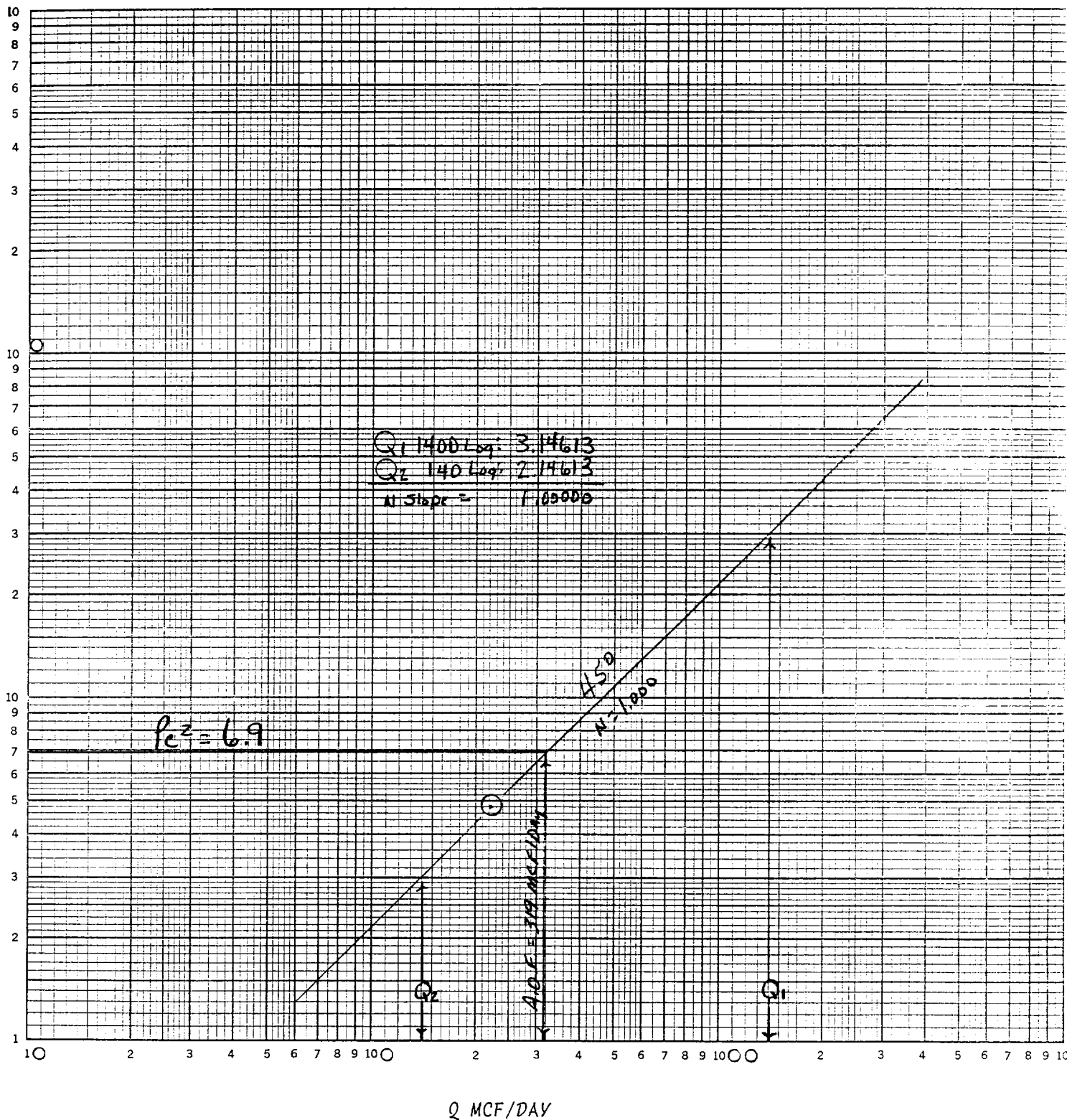
H-19-20S-37E

LEA COUNTY, NEW MEXICO

2-7-95

$P2^2 - Pw^2$ (thsnds) 46 7400

LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



NEW MEXICO G.O.R./G. MIX

NO. OF BBLs PRODUCED = 14.0

API GRAVITY @ 60 DEG. = 32.3

SPECIFIC GRAVITY OF GAS = 0.8540

XX

TOTAL GAS PRODUCED = 222

G.O.R. = 15.857

G.MIX = 1.066

0 COMPANY : TEXACO E & P LEASE : NM C ST.NCT2 WELL NO. : 10 Pc = 83.2 Pc2 = 6.9 *
 UNIT : H SECTION : 19 TOWNSHIP : 20 *
 L : 3348 H : 3348 L/H : 1 G/GMIX : 1.066 Pz2 = 1.1 Pw = 45.9 *
 %CO2 : 10.48 %N2 : 1.26 H2S : DATE : 02-07-95 0.0 ERR *
 d : 1.995 Fx : 0.018231 GH : 3569.0 RANGE : 37 0.0 ERR *
 0.0 ERR *

VOL 1 : 222 PSIA 1 : 33.2 RESV.TEMP 93.0 Pc2-Pw2= 4.8 Pw2 = 2.1 *
 VOL 2 : PSIA 2 : ERR ERR *
 VOL 3 : PSIA 3 : SHUT-IN PR= 83.2 ERR ERR *
 VOL 4 : PSIA 4 : ERR ERR *

PCR : 698 n = 1.000 *
 TCR : 490 *

Pc2/(Pc2-Pw2) = 1.439 *
 ERR *
 ERR *
 ERR *

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 QM	0.222	0.222	0.000	0.000	0.000	0.000	0.000	0.000
2 TW	534	534	534	534	534	534	534	534
3 Ta	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
4 T	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5
PR (est)	0.05		0.00		0.00		0.00	
5 Z(est)	0.964	0.960	0.000	ERR	0.000	ERR	0.000	ERR
6 TZ	523.7	521.8	0.0	ERR	0.0	ERR	0.0	ERR
7 GH/TZ	6.815	6.840	ERR	ERR	ERR	ERR	ERR	ERR
8 eS	1.291	1.292	ERR	ERR	ERR	ERR	ERR	ERR
9 L-e-S	0.226	0.226	ERR	ERR	ERR	ERR	ERR	ERR
10 Pt	33.2	33.2	0.0	0.0	0.0	0.0	0.0	0.0
11 Pt2 /1000	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
12 Fx	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231
13 Fc=FxTZ	9.547	9.513	0.000	ERR	0.000	ERR	0.000	ERR
14 FcQm	2.12	2.11	0.00	ERR	0.00	ERR	0.00	ERR
15 L/H(FcQm)	4.5	4.5	0.0	ERR	0.0	ERR	0.0	ERR
16 Fw	1.013115	1.009023	ERR	ERR	ERR	ERR	ERR	ERR
17 Pw2	2.1	2.1	ERR	ERR	ERR	ERR	ERR	ERR
18 Pd2	2.7	2.7	ERR	ERR	ERR	ERR	ERR	ERR
19 Pd	52.3	52.2	ERR	ERR	ERR	ERR	ERR	ERR
20 P	42.7	42.7	ERR	ERR	ERR	ERR	ERR	ERR
21 Pa	0.06	0.06	ERR	ERR	ERR	ERR	ERR	ERR
22 Ta	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
23 Z	0.960	0.960	ERR	ERR	ERR	ERR	ERR	ERR

[Pc2/Pc2-Pw2]n = 1.439 *
 ERR *
 ERR *
 ERR *
 AOF= Q 0.319 *
 ERR *
 ERR *
 ERR *

FORM C122-D

Laboratory Services, Inc.

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Pro Well Testing & Wireline
Attention: Mr. Floyd Davis
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE

IDENTIFICATION: N.M. "C" State NCT-2 #10

COMPANY: Texaco

LEASE:

PLANT:

SAMPLE DATA:	DATE SAMPLED:	02-09-95	GAS (XX)	LIQUID ()
	ANALYSIS DATE:	02-09-95	SAMPLED BY:	Floyd Davis
	PRESSURE - PSIG	36.00	ANALYSIS BY:	Vickie Walker
	SAMPLE TEMP. °F	71.80		
	ATMOS. TEMP. °F			

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM	
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	1.26		
Carbon Dioxide	(CO2)	10.48		
Methane	(C1)	67.19		
Ethane	(C2)	9.96	2.657	
Propane	(C3)	6.06	1.665	
I-Butane	(IC4)	1.00	0.326	
N-Butane	(NC4)	2.11	0.664	
I-Pentane	(IC5)	0.65	0.237	
N-Pentane	(NC5)	0.55	0.199	
Hexane Plus	(C6)	0.74	0.303	
		100.00	6.051	
BTU/CU.FT. - DRY		1192	MOLECULAR WT.	24.7176
AT 14.650 DRY		1188		
AT 14.650 WET		1167		
AT 14.73 DRY		1195		
AT 14.73 WET		1174		
SPECIFIC GRAVITY -				
CALCULATED		0.854		
MEASURED				

RECEIVED

APR 17 1955
WILLIAMS ROBBES
OFFICE