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See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

CONFIDENTIAL

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Concho Resources Inc.					Lease or Unit Name SHOEBAR "10" State				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11/16/00		Well No. 3		
Completion Date 10/19/00		Total Depth 12820		Plug Back TD 12728		Elevation		Unit Ltr - Sec - TWP - Rge 10 17S 35E	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 12820	Perforations: From: 12583 To: 12661			County LEA		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 12422	Perforations: From: To:			Pool Morrow		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 12422			Formation		
Producing Thru TUBING		Reservoir Temp. °F 198.2		Mean Annual Temp. °F 60		Baro. Press. -P _a 13.2		Connection SALES	
L 12422	H 12422	Gg 0.705	%CO ₂ 0.662	%N ₂ 0.876	%H ₂ S N/A	Prover N/A	Meter Run 4.892	Taps FLG	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
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.	
SI						4400	N/A	PKR	N/A
1	4.892 X 1.500		402	1.4	36	900			
2	4.892 X 1.500		403	2.8	38	820			
3	4.892 X 1.500		390	3.4	47	650			
4	4.892 X 1.500		392	6.7	56	522			
5									

RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q. Mcfd
1							354
2	VOLUMES	FROM	TOTAL		FLOW	METER	502
3							525
4							708
5							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	29.014	Mcf bbl.
1					A.P. I. Gravity of Liquid Hydrocarbons	60	Deg.
2	TOTAL	FLOW	METER		Specific Gravity Separator Gas	.705/GMIX .800	XXXXXX
3					Specific Gravity Flowing Fluid	N/A	XXXXX
4					Critical Pressure	672	P.S.I.A. 668 P.S.I.A.
5					Critical Temperature	388	R. 426 R

P _c 4413.2		P _{c2} 19476.3	
No.	P _t ²	P _w	P _w ²
1	833.9	914.2	835.8
2	694.2	835.5	698.1
3	439.8	666.5	444.3
4	286.4	542.9	294.7
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.015$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.015$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0.719$

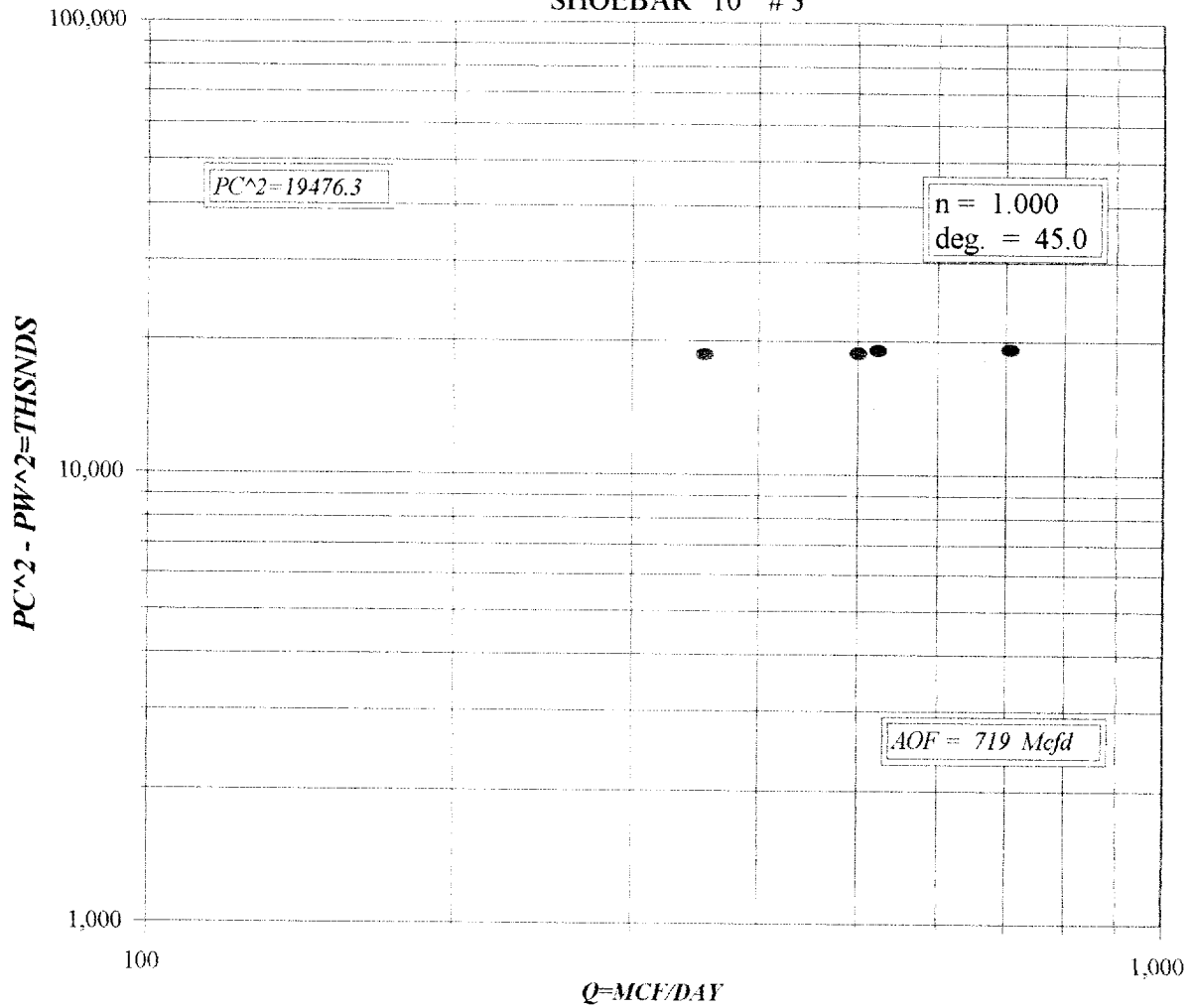
Absolute Open Flow	719	Mcf/d @ 15.025	Angle of Slope (°):	45	Slope n:	1
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Remarks: * WELL MADE 3 BBLs OF 60 API GRAVITY CONDENSATE DURING TEST.

Approved By Division:	Conducted By: PRO WELL TESTING	Calculated By: MB	Checked By: BM
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CONOCHO RES.
SHOEBAR "10" #3



COMPANY : CONOCHO RES. LEASE : SHOEBAK "10" WELL NO. : 3
 UNIT : SECTION : 10 TOWNSHIP : 17-S
 L : 12422 H : 12422 L/I : 1 G/GMIX : 0.800
 %CO2 : 0.662 %N2 : 0.876 H2S : DATE : 11/16/00
 d : 2.441 Pr : 0.010763 GH : 9937.6 RANGE : 35-E

Pc = 4413.2 Pc2 = 19476.3
 Pt2 = 694.2 Pw = 914.1
 439.8 835.3
 286.4 666.3
 542.5

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VOL 1 : 354 PSIA 1 : 913.2 RESV.TEMP 198.2
 VOL 2 : 502 PSIA 2 : 833.2
 VOL 3 : 525 PSIA 3 : 663.2 SHUT-IN PR= 4413.2
 VOL 4 : 708 PSIA 4 : 535.2

PCR : 668
 TCR : 426

Pc2-Pw2= ***** Pw2 = 835.6
 ***** 697.8
 ***** 444.0
 ***** 294.3

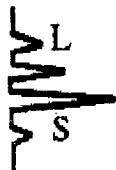
n = 1.000
 Pc2/(Pc2-Pw2) = 1.045
 1.037
 1.023
 1.015

[Pc2/Pc2-Pw2]n = 1.045
 1.037
 1.023
 1.015

AOF= Q 0.370
 0.521
 0.537
 0.719

LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1	QM	0.354	0.354	0.502	0.502	0.525	0.525	0.708	0.708
2	TW	534	534	534	534	534	534	534	534
3	Ts	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2
4	T	596.1	596.1	596.1	596.1	596.1	596.1	596.1	596.1
	PR (est)	1.37		1.25		0.99		0.80	
5	Z (est)	0.810	0.775	0.824	0.791	0.854	0.828	0.878	0.856
6	TZ	482.9	461.9	491.2	471.6	509.2	493.4	523.1	510.1
7	GH/TZ	20.577	21.516	20.232	21.074	19.515	20.141	18.998	19.481
8	eS	2.163	2.241	2.135	2.204	2.079	2.128	2.039	2.076
9	l-e-S	0.538	0.554	0.532	0.546	0.519	0.530	0.510	0.518
10	Pt	913.2	913.2	833.2	833.2	663.2	663.2	535.2	535.2
11	Pt2 /1000	833.9	833.9	694.2	694.2	439.8	439.8	286.4	286.4
12	Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.0107631
13	Fc=FrTZ	5.198	4.971	5.287	5.076	5.481	5.311	5.630	5.490
14	FcQm	1.84	1.76	2.65	2.55	2.88	2.79	3.99	3.89
15	L/H(FcQm)	3.4	3.1	7.0	6.5	8.3	7.8	15.9	15.1
16	Pw	1.820726	1.714879	3.745126	3.546338	4.296977	4.120755	8.096335	7.8324360
17	Pw2	835.8	835.6	698.0	697.8	444.1	444.0	294.5	294.3
18	Ps2	1808.0	1872.5	1490.5	1537.9	923.3	944.8	600.5	611.0
19	Ps	1344.6	1368.4	1220.9	1240.1	960.9	972.0	774.9	781.6
20	P	1128.9	1140.8	1027.0	1036.7	812.0	817.6	655.1	658.4
21	Pr	1.69	1.71	1.54	1.55	1.22	1.22	0.98	0.99
22	Tr	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
23	Z	0.775	0.773	0.791	0.790	0.828	0.827	0.856	0.855

FORM C122-D

**Laboratory Services, Inc.**

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

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FOR: Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE:
IDENTIFICATION: Shoebar 10 #8
COMPANY: Concho Resources Inc.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 11/16/00
ANALYSIS DATE: 11/17/00
PRESSURE - PSIG 400
SAMPLE TEMP. °F 87.6
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: K. P. Wright
ANALYSIS BY: Vickie Walker

REMARKS: Sample taken @ the meter run.

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.876	
Carbon Dioxide (CO2)	0.662	
Methane (C1)	81.899	
Ethane (C2)	9.506	2.536
Propane (C3)	3.865	1.062
I-Butane (IC4)	0.544	0.178
N-Butane (NC4)	1.167	0.867
I-Pentane (IC5)	0.329	0.120
N-Pentane (NC5)	0.375	0.135
Hexane Plus (C6+)	0.777	0.337
	100.000	4.785

BTU/CU.FT. - DRY 1214
AT 14.650 DRY 1210
AT 14.650 WET 1189
AT 14.73 DRY 1216
AT 14.73 WET 1195

MOLECULAR WT. 20.4572

SPECIFIC GRAVITY -
CALCULATED 0.705
MEASURED

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NEW MEXICO G.O.R./G. MIX	
NO. OF BBLs PRODUCED	= 3.0
API GRAVITY @ 60 DEG.	= 60.0
.....	
SPECIFIC GRAVITY OF GAS	= 0.7050
XX	
TOTAL GAS PRODUCED	= 87
G.O.R.	= 29.014
G.MIX	= 0.800