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appropriate district office.
See Rule 401 & Rule 1122

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

Form C-122
Revised October, 1999

C157

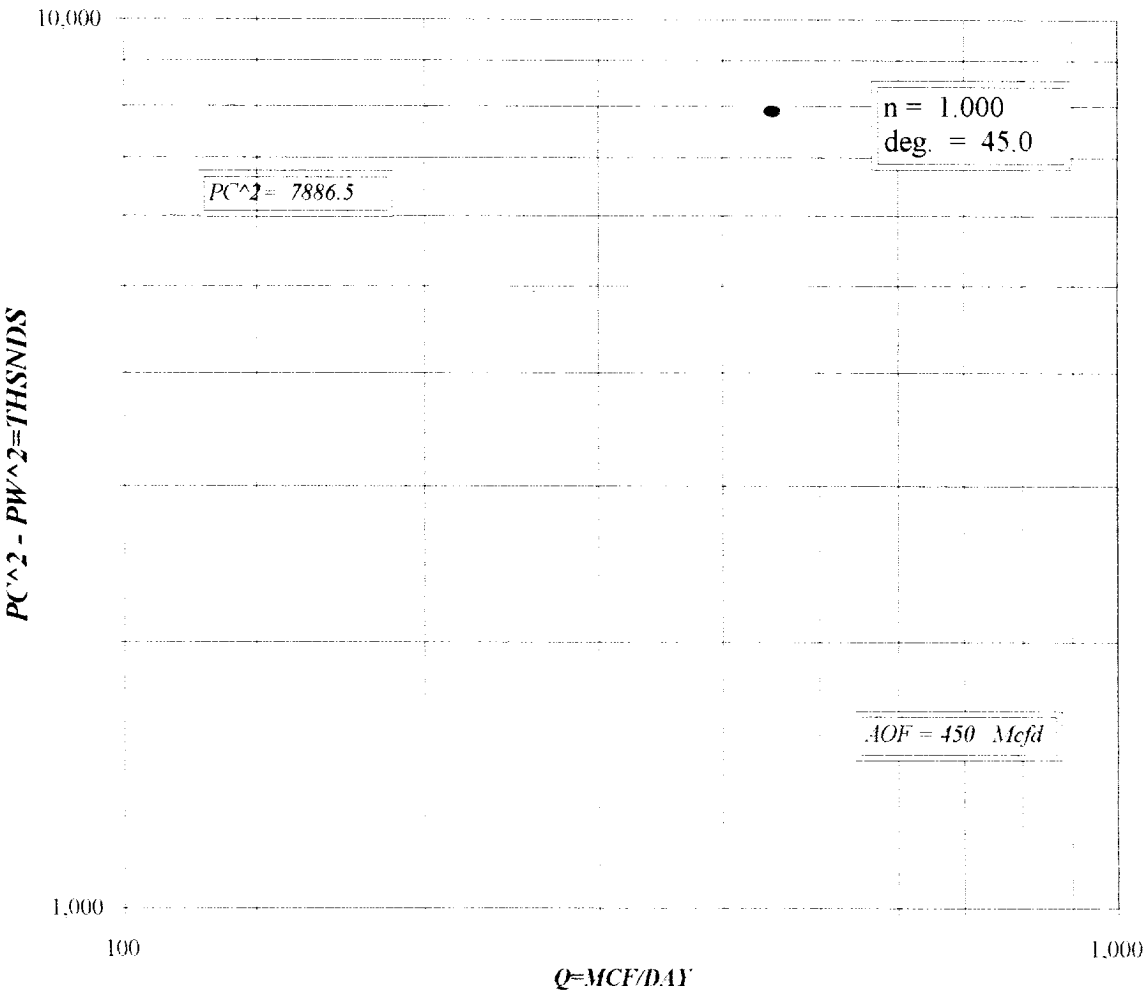
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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator		CHI OPERATING		Lease or Unit Name		IRONSIDES FED	
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date	
Completion Date		Total Depth		Plug Back TD		Well No.	
		10023		9979		1	
Csg. Size	Wt.	d	Set At	Perforations:		Unit Ltr - Sec - TWP - Rge	
5 1/2	17	4.892	10023	From: 9640 To: 9660		3 17S 28E	
Tbg. Size	Wt.	d	Set At	Perforations:		County	
2 7/8	6.5	2.441	9606	From: To:		EDDY	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple				Packer Set At		Formation	
SINGLE				9606			
Producing Thru TUBING		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P ₁	
		145		60		13.2	
L		H		Gg		Meter Run	
9606		9606		0.761		3.068	
				%CO ₂		Taps	
				10.92		FLG	
				%N ₂			
				4.38			
				%H ₂ S			
				N/A			
				Prover			
				N/A			
				TUBING DATA		Casing DATA	
No.	Prover Line Size	Orifice Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F
1	44/64 CHOKE		25			2809	N/A
2							
3							
4							
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							
2	GAS	VOLUME	FROM	CHOKE	COE.		450
3							
4							
5							
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		
1					N/A Mcf/bbl.		
2	CHOKE		VOLUME		A.P. I. Gravity of Liquid Hydrocarbons		
3					N/A Deg.		
4					Specific Gravity Separator Gas		
5					0.761 XXXXXX		
					Specific Gravity Flowing Fluid		
					N/A XXXXX		
					Critical Pressure		
					708 P.S.I.A. P.S.I.A.		
					Critical Temperature		
					381 R. R.		
P _c	2809	P _{c2}	7890.5				
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.001}{1.001}$		
1	1.5	65.8	4.3	7886.2	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.001}{1.001}$		
2							
3							
4							
5							
Absolute Open Flow				450	Mcfd @ 15.025	Angle of Slope (°)	45
					Slope n:	1	
Remarks: * NO LIQUID MADE DURING TEST. / CALCULATED FROM KNOWN SHUT IN BOTTOM HOLE PRESSURE.							
Approved By Division:		Conducted By:		Calculated By:		Checked By:	
		PRO WELL TESTING		MERV BUECKER		BM	

SE Crow Flats
Morrow

CHI OPERATING INC.
IRONSIDES FED #1



COMPANY : CHI LEASE : IRONSIL WELL NO. : 1
UNIT : SECTION : 3 TOWNSHIP : 17S
L : 9606 H : 9606 L/H : 1 G/GMIX : 0.761
%CO2 : 10.92 %N2 : 4.38 H2S : DATE :
d : 2.441 Fr : 0.010763 GH : 7310.2 RANGE : 28E

Pc = 2809 Pc2 = 7890.5
Pt2 = 1.5 Pw = 65.8
0.0
0.0
0.0

VOL 1 : 450 PSIA 1 : 38.2 RESV.TEMP 170.1
VOL 2 : PSIA 2 :
VOL 3 : PSIA 3 : SHUT-IN PR= 2809
VOL 4 : PSIA 4 :

Pc2-Pw2= 7886.2 Pw2 = 4.3
ERR
ERR
ERR

PCR : 708
TCR : 381

n = 1.000

Pc2/(Pc2-Pw2) = 1.001
ERR
ERR
ERR

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 QM	0.450	0.450	0.000	0.000	0.000	0.000	0.000	0.000
2 TW	534	534	534	534	534	534	534	534
3 Ts	630.1	630.1	630.1	630.1	630.1	630.1	630.1	630.1
4 T	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0
PR (est)	0.05		0.00		0.00		0.00	
5 Z(est)	0.971	0.968	ERR	ERR	ERR	ERR	ERR	ERR
6 TZ	564.9	563.2	ERR	ERR	ERR	ERR	ERR	ERR
7 GH/TZ	12.941	12.980	ERR	ERR	ERR	ERR	ERR	ERR
8 eS	1.625	1.627	ERR	ERR	ERR	ERR	ERR	ERR
9 1-e-S	0.384	0.385	ERR	ERR	ERR	ERR	ERR	ERR
10 Pt	38.2	38.2	0.0	0.0	0.0	0.0	0.0	0.0
11 Pt2 /1000	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763
13 Pc=FrTZ	6.080	6.061	ERR	ERR	ERR	ERR	ERR	ERR
14 FcQm	2.74	2.73	ERR	ERR	ERR	ERR	ERR	ERR
15 L/H(FcQm)	7.5	7.4	ERR	ERR	ERR	ERR	ERR	ERR
16 Fw	2.878058	2.867328	ERR	ERR	ERR	ERR	ERR	ERR
17 Pw2	4.3	4.3	ERR	ERR	ERR	ERR	ERR	ERR
18 Ps2	7.0	7.0	ERR	ERR	ERR	ERR	ERR	ERR
19 Ps	83.9	83.9	ERR	ERR	ERR	ERR	ERR	ERR
20 P	61.1	61.1	ERR	ERR	ERR	ERR	ERR	ERR
21 Pr	0.09	0.09	ERR	ERR	ERR	ERR	ERR	ERR
22 Tr	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
23 Z	0.968	0.968	ERR	ERR	ERR	ERR	ERR	ERR

[Pc2/Pc2-Pw2]n = 1.001
ERR
ERR
ERR

AOF= Q 0.450
ERR
ERR
ERR

FORM C122-D

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

COMPANY CHI
UNIT L
LEASE : IRONSIDE WELL NO. : 1 DATE
SECTION : TWSHP : RANGE :
H : 9606 L/H : 1 G/GMIX : 0.7610
CO2 : 10.92 N2 : 4.38 H2S :
GH : 7310.2 PCR : 708 TCR : 381

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	630.1	630.1	630.1	630.1	630.1	630.1	630.1	630.1
3	T=(Tw+Ts/2)	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0
4	Z (EST.)	0.877	0.792	ERR	ERR	ERR	ERR	ERR	ERR
5	TZ	510	461	ERR	ERR	ERR	ERR	ERR	ERR
6	GH/TZ	14.321	15.862	ERR	ERR	ERR	ERR	ERR	ERR
7	eS(TABLE XIV)	1.711	1.813	ERR	ERR	ERR	ERR	ERR	ERR
8	Pf or Ps	3782	3782	0	0	0	0	0	0
9	Pf2 or Ps2	14303.5	14303.5	0.0	0.0	0.0	0.0	0.0	0.0
10	Pc2=Pf/eS or Pw2=Ps2/eS	8360.0	7890.5	ERR	ERR	ERR	ERR	ERR	ERR
11	Pc or Pw	2891	2809	ERR	ERR	ERR	ERR	ERR	ERR
12	P=(Pw+Ps/2) or (Pc+Pf/2)	3337	3296	ERR	ERR	ERR	ERR	ERR	ERR
13	Pr=(P/Pcr)	4.71	4.65	ERR	ERR	ERR	ERR	ERR	ERR
14	Tr(T/Tcr)	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
15	Z (TABLE XI)	0.792	0.790	ERR	ERR	ERR	ERR	ERR	ERR

PC # 1 : 2809.0 PW 2 : ERR PW 3 : ERR PW 4