

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-123
 Revised 9-1-66

RECEIVED

Type Test 4POINT ☒ Initial ☐ Annual ☐ Special						Test Date 2/10/87		JUN 10 '88	
Company MCKAY OIL CORP				Connection TO AIR				O.C.D.	
Pool W. PECOS ABO				Formation ABO				Unit ARTESIA, OFFICE	
Completion Date 2/7/87		Total Depth 3400		Plug Back To 3075		Elevation 4135		Farm or Lease Name SNAKE WEED	
Well Size 4.5	Wt. 9.5	d 3163	Set At 3163	Perforations: From 2871.5 To 2984.5		Well No. 2			
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 2848	Perforations: From OPEN To ENDED		Unit D	Sec. 18	Twp. 6S	Rye. 23E
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES			
Producing Thru TUBING		Reservoir Temp. °F 99 # 2928		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 2928	H 2928	G _g 0.633	% CO ₂ .192	% N ₂ 4.884	% H ₂ S 0	Prover 2.000	Motor Run 0	Taps 0	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
51							794	32	794	32	72HRS
1.	2.000	.125	763	0.0	32	763	32	760	32	760	60MIN
2.	2.000	.1875	698	0.0	36	698	36	698	36	698	60MIN
3.	2.000	.21875	625	0.0	41	625	41	628	41	628	60MIN
4.	2.000	.250	550	0.0	47	550	47	554	47	554	60MIN
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.2648	0.00	776.2	1.028	1.257	1.087	289
2	0.6082	0.00	711.2	1.024	1.257	1.078	600
3	0.8393	0.00	638.2	1.019	1.257	1.066	731
4	1.0870	0.00	563.2	1.013	1.257	1.055	822
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.17	492	1.38	.846	0	0	0.633	XXXXXXX	663	357
2	1.07	496	1.39	.861				XXXXXX		
3	.96	501	1.40	.880						
4	.85	507	1.42	.898						
5										

$P_c = 807.2$ $P_c^2 = 652$				$(1) \frac{P_c^2}{P_b^2 - P_w^2} = 1.9757$		$(2) \left[\frac{P_c^2}{P_b^2 - P_w^2} \right]^n = 1.4813$	
NO.	P _t	P _w	P _b	P _c	P _c - P _w		
1		773.2	598		54		
2		711.2	506		146		
3		641.2	411		241		
4		567.2	322		330		
5							

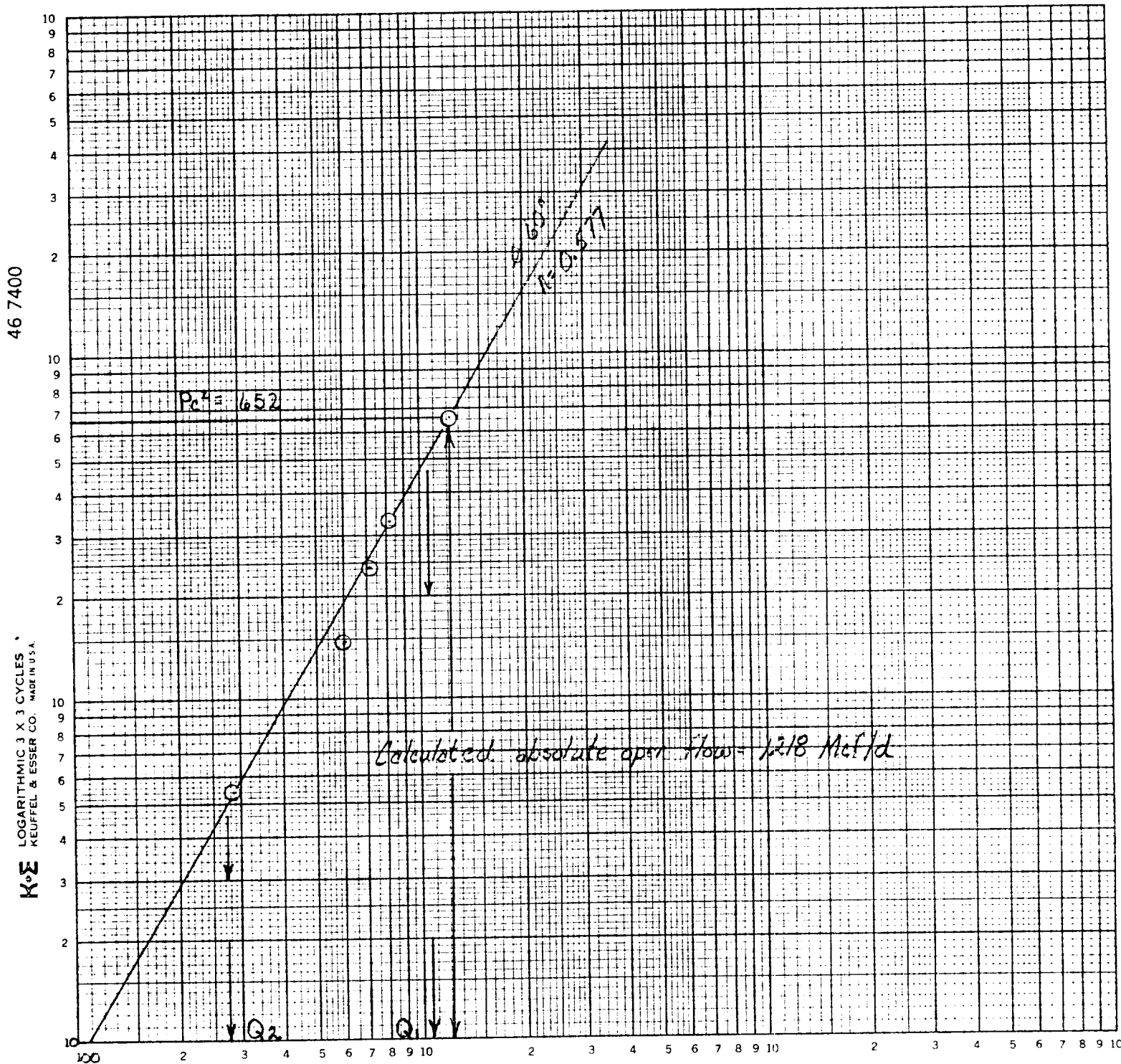
$AOI = Q \left[\frac{h_b^2}{P_b^2 - P_w^2} \right]^n = 1217.6$

Absolute Open Flow	1218	Mcfd @ 15.025	Angle of Slope @	60°	Slope, n	0.577
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Remarks:

Approved By Commission	Conducted By	Calculated By	Checked By
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McKay Oil Corp.
 Snake Weed #2
 18 6S 23E
 Chaves County
 2-10-87



$Q_1 = 1031$

$Q_2 = 273$

$\log Q_1 = 3.0132$

$\log Q_2 = 2.4362$

$R = 0.577$

"Let your Interest in Measurement be our Concern"



PRECISION SERVICE INC.
Flow Measurement Engineers
Analysis Results Summary
Casper, WY 82601

Run No. 212-2
Date Run 02/12/87
Date Sampled 02/10/87

Analysis For: BENNETT & CATHEY WRLN.

Lease: SNAKE WEED #2 Producer: MCKAY OIL CORP.
Location: CHINA DRAW County: CHAVES State: NEW MEXICO
Purpose: WELL TEST Sampled By: B & C WRLN.
Sampling Temp.: 58 °F Atmos Temp.: 64 °F
Volume/day: 757 MCF Formation: ABO
Pressure on Bomb: 570 PSIG: Line Pressure 583.2 PSIA PSIG

Gas Component

Analysis

Press. Base: 14.73

Mol. % Liq. % GPM
Per MCF

Carbon Dioxide CO ₂	<u>.192</u>		
Oxygen O ₂			
Nitrogen N ₂	<u>4.884</u>		
Hydrogen Sulfide H ₂ S			
Methane C ₁	<u>89.233</u>		<u>15.125</u>
Ethane C ₂	<u>2.889</u>		<u>.773</u>
Propane C ₃	<u>1.280</u>		<u>.353</u>
Iso-Butane IC ₄	<u>.200</u>		<u>.066</u>
Nor-Butane NC ₄	<u>.545</u>		<u>.172</u>
Iso-Pentane IC ₅	<u>.135</u>		<u>.049</u>
Nor-Pentane NC ₅	<u>.217</u>		<u>.078</u>
Hexanes plus	<u>.424</u>		<u>.195</u>
Hexanes C ₆			
Heptanes			
Heptanes Plus C ₇ +			
Total	<u>100.000</u>		<u>16.811</u>

BTU Dry 1051
BTU Wet 1033
Calc. Specific Gravity .633

@ Std. Press. 14.696

BTU Dry 1049
BTU Wet 1030

Calc. Vap. Press. #/Sq.In.

Reid Vap. Press. #/Sq.In.

Z Factor .9977

N Value 1.3027

Ave Mol Wt 18.3136

Ave Cu Ft/Gal

Run by JEFFREY A. PROPP

Calculated By JEFFREY A. PROPP

Pentane + G.P.M. .323
Propane + GPM .914
26-lb Gasoline .512

Ethane + GPM 1.686

Remarks:

Distribution:

NOON

1

2

PRINTED
IN U.S.A.

900

800

700

600

500

400

300

200

100

300

200

100

100

200

300

400

500

600

700

800

900

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

clp

Rick

#2

Snake Weed

1987

2-10

BR 5340

6 AM

7

8

9

10

11

5

4

3

900

800

700

600

500

400

300

200

100

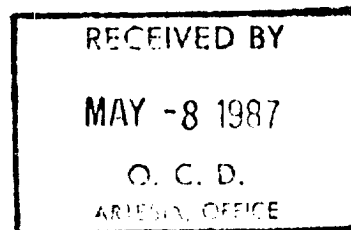


NEW MEXICO GAS MARKETING, INC.

P. O. Box 2014
Roswell, New Mexico 88202

(505) 623-4735

May 7, 1987



New Mexico Oil Conservation Division
Post Office Drawer DD
Artesia, New Mexico 88210

Re: Purchase of Gas Production

Gentlemen:

Please be advised that New Mexico Gas Marketing, Inc. has commenced the purchase of gas production from wells operated by McKay Oil Corporation as follows:

1. Snakeweed Federal #2	5-5-87
NW/4 Sec. 18-6S-23E	
2. Miller Federal #1	5-2-87
NE/4 Sec. 7-6S-23E	
3. Miller Federal #5	5-2-87
W/2 Sec. 6-6S-23E	
4. Lookout Federal #8	5-2-87
NE/4 Sec. 9-6S-22E	
5. Lookout Federal #5	5-2-87
SE/4 Sec. 9-6S-22E	
6. Middle Fork Federal #5	5-1-87
NW/4 Sec. 5-6S-23E	
7. L. L. & E. Federal #1	5-1-87
SE/4 Sec. 12-6S-22E	
8. Hosmer Federal #3	5-1-87
NE/4 Sec. 13-6S-22E	
9. Hosmer Federal #2	5-1-87
NW/4 Sec. 13-6S-22E	
10. Miller Federal #4	5-1-87
SE/4 Sec. 7-6S-23E	
11. Miller Federal #3	5-1-87
SW/4 Sec. 7-6S-23E	
12. Miller Federal #2	5-1-87
NW/4 Sec. 7-6S-23E	
13. Miller Federal #6	5-1-87
SE/4 Sec. 6-6S-23E	
14. Middle Fork Federal #3	5-1-87
NW/4 Sec. 8-6S-23E	

All of the above wells are located in Chaves County, New Mexico. We request that this information be kept "CONFIDENTIAL".

Yours very truly,

MCKAY OIL CORPORATION

Shirley Rodriguez