

OIL CONSERVATION DIVISION

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Operator	

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SANTA FE, NEW MEXICO 87501

MAR 20 1987

O. C. D. REQUEST FOR ALLOWABLE
AND

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

MCKAY OIL CORPORATION

Address

Post Office Box 2014, Roswell, New Mexico 88201

Reason(s) for filing (Check proper box)

New Well	☒	Change in Transporter of:	
Recompletion	☐	Oil	☐
Change in Ownership	☐	Casinghead Gas	☐
		Dry Gas	☐
		Condensate	☐

Other (Please explain)

If change of ownership give name
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, including Formation	Kind of Lease	Lease
Four Mile Draw Federal	8	West Pecos Slope Abo	Federal State, Federal or Fee	NM-36193

Location

Unit Letter F : 1780 Feet From The North Line and 1780 Feet From The WestLine of Section 15 Township 6S Range 22E , NMPM, Chaves County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)	
Name of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)	
New Mexico Gas Marketing, Inc.	Post Office Box 2014, Roswell, New Mexico 88201	
If well produces oil or liquids, give location of tanks.	Unit	Sec.
	G	36
		Twp.
		6S
		Rge.
		22E
Is gas actually connected?	When	
Yes	2-12-87	

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res't.	Diff. Re
		X	X					
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
12-7-86	1-20-87	3400'	3248'					
Elevations (DF, RAB, RT, CR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
4328' GL	Abo	2823.5	2778'					
Perforations			Depth Casing Shoe					
2823.5, 25, 26.5, 28, 29.5, 31, 32.5, 34, 35.5, 37, 38.5, 2865, 66.5, 68, 69.5, 2884.5, 86, 87.5, 89, 90.5, 2947.5, 49, 50.5, 52, 53.5, 55, 56.5, 58, 59.5, 3129.5, 31, 35.5, 37, 38.5								

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12 1/4"	8 5/8"	919'	300+ 370
7 7/8"	4 1/2"	3317'	300 + 250
	2 3/8"	2778'	

TEST DATA AND REQUEST FOR ALLOWABLE
OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
		Post IO-2 3-27-87 Camp + BK	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bble.	Water-Bble.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bble. Condensate/MMCF	Gravity of Condensate
3963	4 hrs.		
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size
4 pt. back pressure	790	787	16/64

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation
Division have been complied with and that the information given
above is true and complete to the best of my knowledge and belief.Theresa Rodriguez
(Signature)Production Analyst
(Title)

March 19, 1987

OIL CONSERVATION DIVISION

MAR 23 1987

APPROVED _____, 19____

BY _____ Original Signed By

Les A. Clements

TITLE _____ Supervisor District II

This form is to be filled in compliance with RULE 1104.

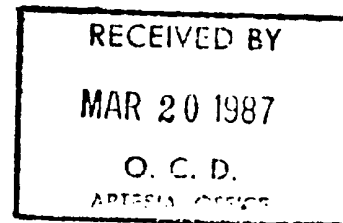
If this is a request for allowable for a newly drilled or deepen
well, this form must be accompanied by a tabulation of the deviate
tests taken on the well in accordance with RULE 111.All sections of this form must be filled out completely for all
able on new and recompleted wells.Fill out only Sections I, II, III, and VI for changes of own-
er, number, or transporter, or other such change of condition.

NEW MEXICO GAS MARKETING, INC.

P. O. Box 2014
Roswell, New Mexico 88202

(505) 623-4735

March 19, 1987



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. Hosmer Federal #4 | 2-17-87 |
| SE/4 Section 13-6S-22E | |
| 2. Four Mile Draw Federal #5 | 2-16-87 |
| NW/4 Section 14-6S-22E | |
| 3. Four Mile Draw Federal #6 | 2-16-87 |
| NE/4 Section 14-6S-22E | |
| 4. Four Mile Draw Federal #7 | 2-17-87 |
| SW/4 Section 15-6S-22E | |
| 5. Four Mile Draw Federal #8 | 2-12-87 |
| NW/4 Section 15-6S-22E | |

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

Theresa Rodriguez

Theresa Rodriguez
Production Analyst

Enclosures

MAR 20 1987

45F.
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test 4POINT ☒ Initial ☐ Annual		Test Date 1/23/87	
Company MCKAY OIL CORP.		Connection TO AIR	
Pool PECOS ABO - W. Pecos Slope Abo		Formation ABO	
Completion Date 1/20/87	Total Depth 3400	Plug Back TD 3248	Elevation 4328
Form or Lease Name FOUR MILE DRAW Fed			Well No. 8
Cas. Size 4.5	WT. 9.5	d 4.090	Set At 3317
Perforations: From 2823.5 To 3138.5	Well No. 8		
Trg. Size 2.375	WT. 4.7	d 1.995	Set At 2778
Perforations: From OPEN To ENDED	Unit Sec. Twp. Rge. EF 15 6S 22E		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE		Packer Set At NONE	
Producing Thru TUBING		Baro. Press. - P _g 13.2	
Reservoir Temp. °F 99 @ 2981		State NEW MEXICO	
Mean Annual Temp. °F 60		County CHAVES	
L 2981	H 2981	G _g .632	% CO ₂ .111
% N ₂ 5.136	% H ₂ S 0	Prover 2.000	Meter Run 0
Taps 0			

FLOW DATA						TUBING DATA		CSC 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							790	40	787	40	72HRS
1.	2.000	.125	778	0.00	40	778	40	778	40	60MIN	
2.	2.000	.1875	759	0.00	44	759	44	759	44	60MIN	
3.	2.000	.250	715	0.00	45	715	45	721	45	60MIN	
4.	2.000	.3125	665	0.00	45	665	45	678	45	60MIN	
5.	2.000	.375	568	0.00	45	568	45	594	45	60MIN	

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{1/P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	0.2648	0.00	791.2	1.020	1.258	1.082	291
2	0.5082	0.00	772.2	1.016	1.258	1.076	645
3	1.087	0.00	728.2	1.015	1.258	1.070	1081
4	1.672	0.00	678.2	1.015	1.258	1.065	1542
5	2.378	0.00	581.2	1.015	1.258	1.057	1865

NO.	P _h	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.20	500	.41	.854	A.P.L. Gravity of Liquid Hydrocarbons	Deq.
2	1.17	504	.42	.864	Specific Gravity Separator Gas	.632
3	1.10	505	.43	.873	Specific Gravity Flowing Fluid	.632
4	1.03	505	.43	.882	Critical Pressure	661 P.S.I.A.
5	.88	505	.43	.895	Critical Temperature	354 R

NO.	P _h	P _w	P _h ²	P _w ²	P _h ² - P _w ²
1	791.2	626	14		
2	772.2	596	44		
3	734.2	539	101		
4	691.2	478	162		
5	607.2	359	271		

(1) $\frac{P_h^2}{P_h^2 - P_w^2} = 3.9506$

AOI = Q $\left[\frac{P_h^2}{P_h^2 - P_w^2} \right]^n = 3963$

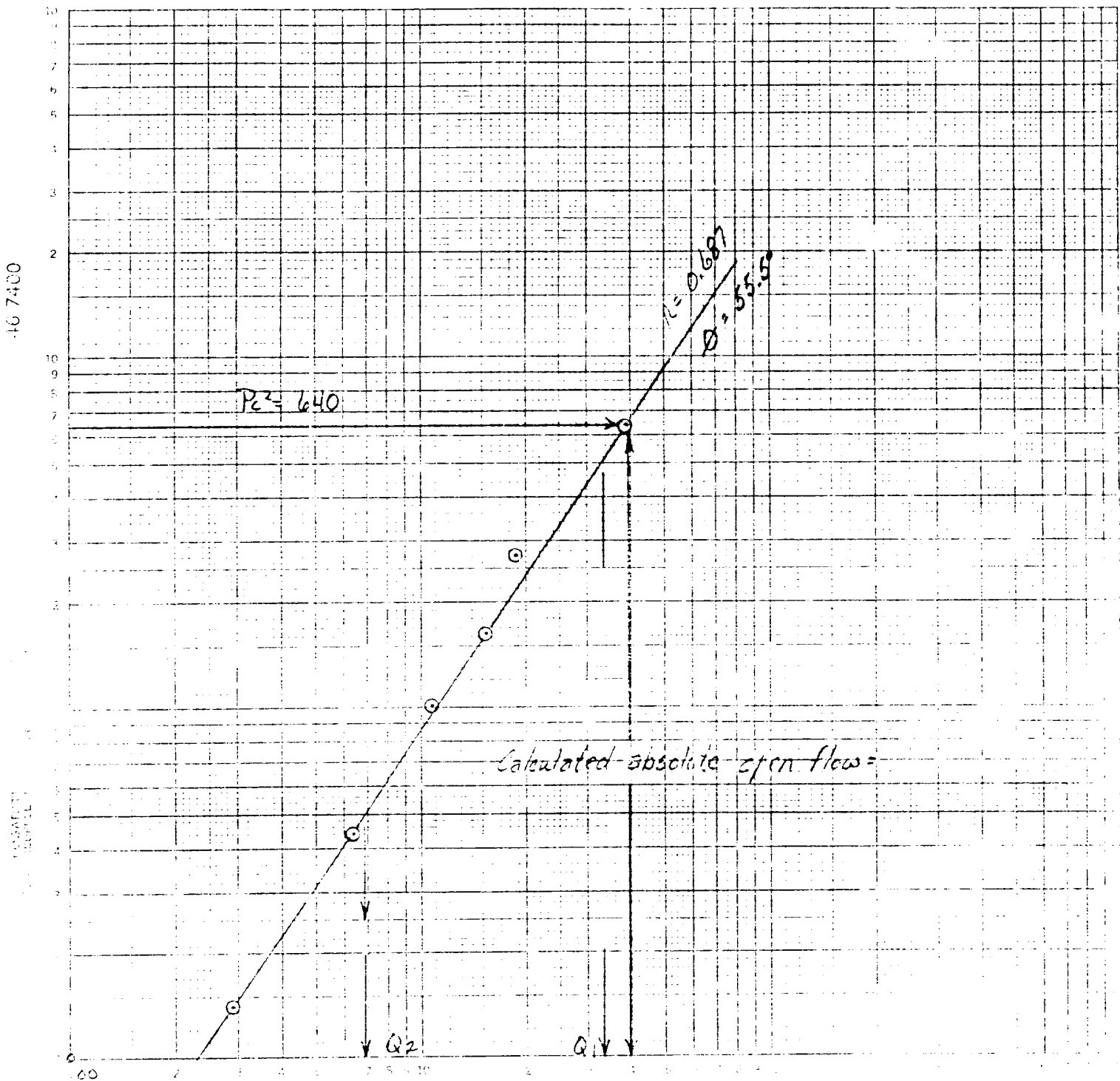
(2) $\left[\frac{P_h^2}{P_h^2 - P_w^2} \right]^n = 2.5698$

Absolute Open Flow	3963	Mcf @ 15.025	Angle of Slope	55.5	Slope, n	.687
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Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
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Four Mile Draw 8
 15 65 22E
 Chaves County
 1-23-87



$$Q_1 = 3356$$

$$Q_2 = 690$$

$$\log Q_1 = 3.5258$$

$$\log Q_2 = 2.8393$$

$$n = 0.687$$