

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

RECEIVED

SEP 17 1981

C. C. D.
ARTESIA, OFFICEREQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	1
FILE	1
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL 1
	GAS 1
OPERATOR	1
PRODUCTION OFFICE	

Operator
MESA PETROLEUM CO.

Address

1000 VAUGHN BLDG./MIDLAND, TEXAS 79701-4493

Reason(s) for filing (Check proper box)

New Well

☒

Change in Transporter of:

Recompletion

☐

Oil

☐

Dry Gas

☐

Change in Ownership

☐

Casinghead Gas

☐

Condensate

☐

Other (Please explain)

If change of ownership give name
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name BEDFORD FEDERAL	Well No. 2	Pool Name, Including Formation <u>Pecos Slope - Abo Gas</u> UNDESIGNATED ABO	Kind of Lease State, Federal or Fee NM	Lease No. 20337
Location Unit Letter <u>A</u> ; <u>660</u> Feet From The <u>NORTH</u> Line and <u>660</u> Feet From The <u>EAST</u> Line of Section <u>18</u> Township <u>6 SOUTH</u> Range <u>25 EAST</u> , NMPM, <u>CHAVES</u> County				

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> KOCH OIL COMPANY	Address (Give address to which approved copy of this form is to be sent) BOX 1558, BRECKENRIDGE, TEXAS 76024
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> TRANSWESTERN PIPELINE COM/ATTN: Mr. Aicklen	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2018, ROSWELL, NEW MEXICO 88201
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When <u>A</u> <u>18</u> <u>6</u> <u>25</u> <u>NO</u> <u>YES</u> <u>10-5-81</u>

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'v.	Diff. Res'v.
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Date Spudded 6-1-81	Date Compl. Ready to Prod. 8-26-81	Total Depth 4303'	P.B.T.D. 4223'					
Elevations (DF, RKB, RT, GR, etc.) 3994.9' GR	Name of Producing Formation ABO	Top Oil/Gas Pay 3714'	Tubing Depth 3616'					
Perforations 3714'---3946'	Depth Casing Shoe 4300'							

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17 1/2"	13 3/8	910'	600/250/200/400
11"	8 5/8	1940'	600/250/300
7 7/8"	4 1/2	4300'	500/350
	2 3/8	3616'	

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.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D 359	Length of Test One Hour	Bbls. Condensate/MMCF -	Gravity of Condensate -
Testing Method (pilot, back pr.) Back Pressure	Tubing Pressure (Shut-in) 840	Casing Pressure (Shut-in) 823	Choke Size -

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.NMOC -A (6), TLS, CEN RCDS, ACCTG, MEC,
FILE, PARTNERS, LAND, REM, ROSWELL, K, TW
D&M, MTS (3), EEB, LMC, CTY

(Signature)

REGULATORY COORDINATOR

(Title)

9-16-81

(Date)

OIL CONSERVATION DIVISION

OCT 14 1981

APPROVED

BY

TITLE

SUPERVISOR, DISTRICT II

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

If this is a request for allowable for a newly drilled or deepened
well, this form must be accompanied by a tabulation of the deviation
tests taken on the well in accordance with RULE 111.All sections of this form must be filled out completely for allow-
able on new and recompleted wells.Fill out only Sections I, II, III, and VI for changes of owner,
well name or number, or transporter, or other such change of condition.Separate Form C-104 must be filled for each pool in multiple
completed wells.

NEW MEXICO OIL CONSERVATION DIVISION

P. O. DRAWER "DD"

ARTESIA, NEW MEXICO 88210

RECEIVED

OCT 13 1981

O. C. D.
ARTESIA, OFFICE

AIR MAIL

NOTICE OF GAS CONNECTION

DATE October 9, 1981

This is to notify the Oil Conservation Division that connection for the
purchase of gas from the Mesa Petroleum Co. ✓
Operator

Bedford-Federal
Lease

Well #2-Unit Letter ^A ~~Unknown~~
Well Unit

18-6S-25E, Chaves County
S.T.R.

~~Wildcat~~ (Abo)
Pool

Transwestern
Name of purchaser

was made on October 5, 1981

Transwestern Pipeline Company
Company

 H. N. Aicklen
Representative

Supervisor Gas Purchase Contract Administration
Title

cc: Operator
Oil Conservation Division - Santa Fe

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

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 8-26-81		SEP 22 1981	
Company Mesa Petroleum Co.				Connection UNCONNECTED			
Pool UNDESIGNATED ABO				Formation ABO		Unit A	
Completion Date 8-26-81		Total Depth 4303'		Plug Back TD 4223'		Elevation 3995'	
Farm or Lease Name BEDFORD FEDERAL				Well No. 2			
Csg. Size 4 1/2"	Wt. 10.5#	d	Set At 4300'	Perforations: From 3714' To 3946'		Unit Sec. Twp. Rge. A 18 6S 25E	
Tbg. Size 2 3/8"	Wt. 4.7#	d	Set At 3616'	Perforations: From OPEN-ENDED To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 103° @ 4303'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 3616	H 3616	Gg .65	% CO ₂ 1	% N ₂ 2	% H ₂ S	Prover 2" ORIFICE WELL TESTER	Meter Run Taps

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
SI							840		823		72 HR SI
1.	2" ORIFICE		3/4	20		65	260	78	245		1 HR
2.	WELL TESTER										
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	375	2" ORIFICE WELL TESTER		.9952	.9608		359
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 836	P _c ² 699				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1060$	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1060$
NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²		
1		258	67	632		
2						
3						
4						
5						

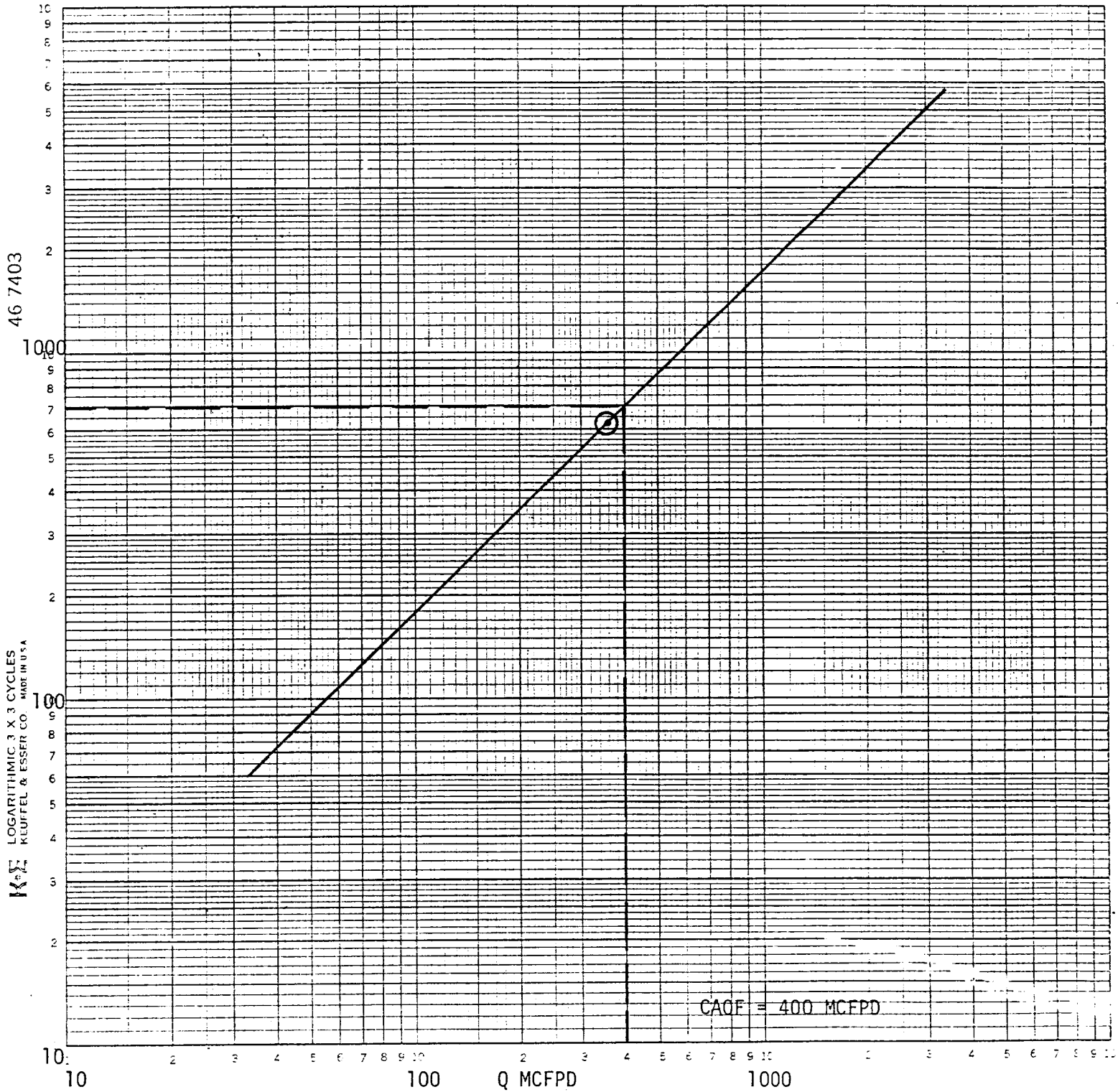
ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 400$

Absolute Open Flow 400 Mcfd @ 15.025 Angle of Slope 45° Slope, n 1

Remarks: UNABLE TO RUN FOUR FLOW RATES DUE TO LOW DELIVERY OF WELL.
 ASSUMED n = 1 AND BASED CALCULATIONS ON ONE POINT TEST.

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E. L. BUTTROSS, JR.	Checked By:
-------------------------	------------------------------	---------------------------------------	-------------

MECA PETROLEUM CO.
 BE JRD FEDERAL NO. 2
 SEC 18, T6S, R25E
 CHAVES COUNTY, NEW MEXICO
 8-26-81



ASSUMED $n = 1$ AND $\theta = 45^\circ$