

APPLICATION FOR WELLHEAD
PRICE CEILING CATEGORY DETERMINATION

1. FOR DIVISION USE ONLY:

DATE COMPLETE APPLICATION FILED _____

DATE DETERMINATION MADE _____

WAS APPLICATION CONTESTED? YES _____ NO _____

NAME(S) OF INTERVENOR(S), IF ANY: _____

RECEIVED

SEP 3 1981

O. C. D.

ARTERIAL OFFICE

5A. Indicate Type of Lease

STATE ☒

FEE ☐

5. State Oil & Gas Lease No.

LG -9571

7. Unit Agreement Name

8. Farm or Lease Name

BOSWELL STATE

9. Well No.

1

10. Field and Pool, or Wildcat

WILDCAT ABO
W. PECOS SLOPE ABO GAS

12. County

CHAVES

2. Name of Operator

MESA PETROLEUM CO /

3. Address of Operator

P.O. BOX 2009 AMARILLO, TEXAS 79189

4. Location of Well

UNIT LETTER J LOCATED 1650 FEET FROM THE SOUTH LINE

AND 1650 FEET FROM THE EAST LINE OF SEC. 30 TWP. 5S RGE. 21E NMPM

11. Name and Address of Purchaser(s)

Undetermined

WELL CATEGORY INFORMATION

Check appropriate box for category sought and information submitted.

1. Category(ies) Sought (By NGPA Section No.) 102

2. All Applications must contain:

- ☒ a. C-101 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK
☒ b. C-105 WELL COMPLETION OR RECOMPLETION REPORT
☐ c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED UNDER RULE 111 N/A
☒ d. AFFIDAVITS OF MAILING OR DELIVERY

3. In addition to the above, all applications must contain the items required by the applicable rule of the Division's "Special Rules for Applications For Wellhead Price Ceiling Category Determinations" as follows:

A. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (using 2.5 Mile or 1000 Feet Deeper Test)

☒ All items required by Rule 14(1) and/or Rule 14(2)

B. NEW NATURAL GAS UNDER SEC. 102(c)(1)(C) (new onshore reservoir)

☐ All items required by Rule 15

C. NEW ONSHORE PRODUCTION WELL

☐ All items required by Rule 16A or Rule 16B

D. DEEP, HIGH-COST NATURAL GAS and TIGHT FORMATION NATURAL GAS

☐ All items required by Rule 17(1) or Rule 17(2)

E. STRIPPER WELL NATURAL GAS

☐ All items required by Rule 18

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED
HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

C. TAYLOR YOAKAM

NAME OF APPLICANT (Type or Print)

SIGNATURE OF APPLICANT

Title MGR, GAS SALES & CONTRACTS

Date 8-31-81

FOR DIVISION USE ONLY

☐ Approved

☐ Disapproved

The information contained herein includes all
of the information required to be filed by the
applicant under Subpart 3 of Part 274 of the
FERC regulations.

EXAMINER

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7-31-81		AUG 17 1981		
Company Mesa Petroleum Co./				Connection Unconnected				O.C.B. ARTESIAN OFFICE	
Pool Willcox Undesignated ABO				Formation ABO				Unit	
Completion Date 7-31-81		Total Depth 3125		Plug Back TD 2870		Elevation 4242		Farm or Lease Name Boswell State	
Csg. Size 4 1/2	Wt. 10.5	d	Set At 3118	Perforations: From 2478 To 2636		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.7	d	Set At 2381	Perforations: From Open Ended		Unit Sec. Twp. Rge. J 30 5S 21E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At None		County Chaves		
Producing Thru Tubing		Reservoir Temp. °F 95 @ 3125		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 2381	H 2381	Gg .65	% CO ₂ 1	% N ₂ 2	% H ₂ S	Prover 2" Orifice Well	Meter Run	Taps Tester	

FLOW DATA						TUBING DATA		CASING 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							830		830		72 hr. S
1.	2" orifice	3/4	18	-	80	765	80	765			3/4 hr.
2.	Well	3/4	25	-	80	670	80	670			3/4 hr.
3.	Tester	3/4	30	-	80	580	80	580			3/4 hr.
4.		3/4	32	-	80	440	80	440			3/4 hr.
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	350	2" Orifice		.9813	.9608	-	330
2	461	Well		.9813	.9608	-	435
3	521	Tester		.9813	.9608	-	491
4	545			.9813	.9608	-	514
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

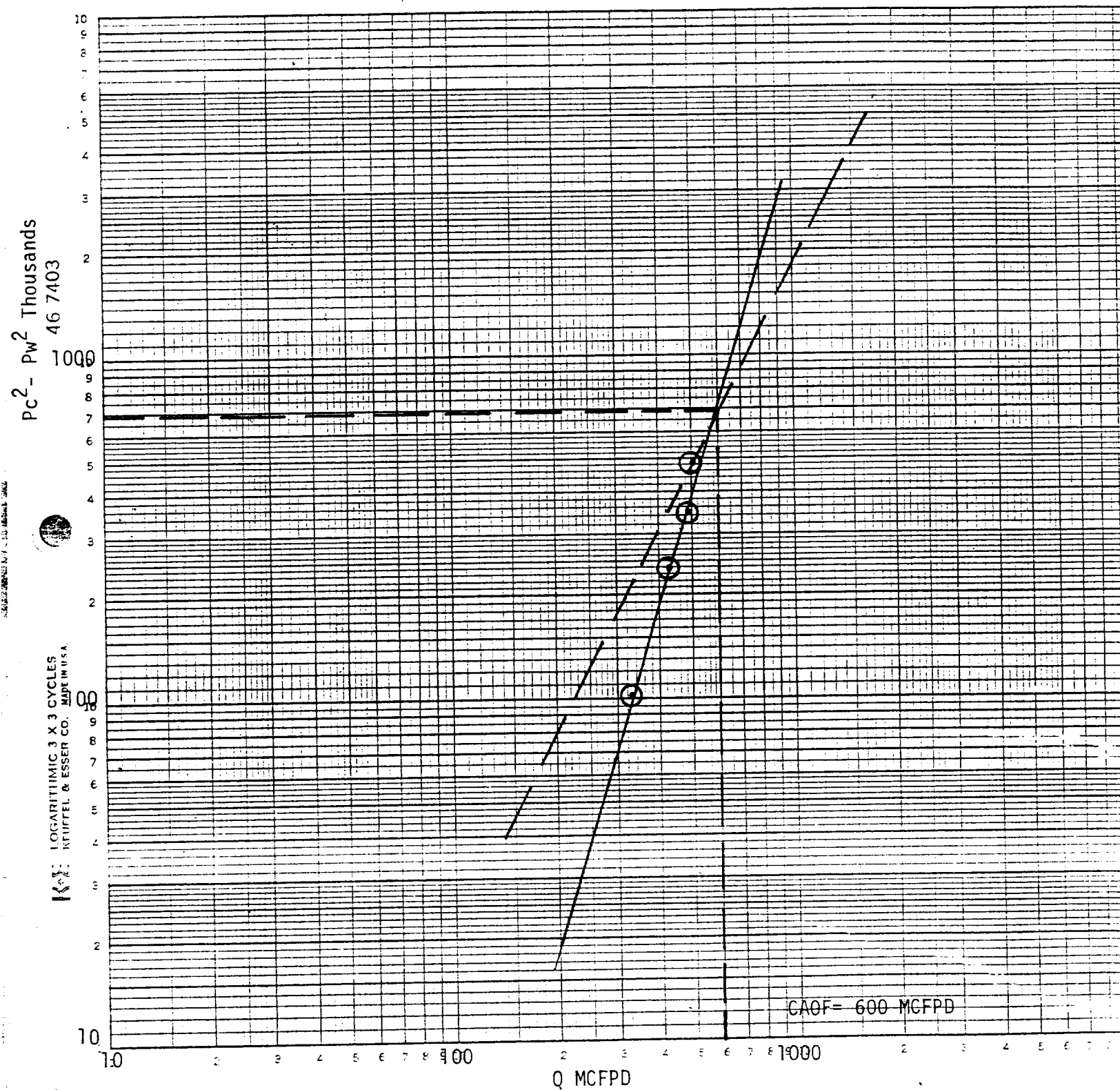
P _c 830	P _c ² 689	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3919$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1797$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		765	585	104
2		670	449	240
3		580	336	353
4		440	194	495
5				

Absolute Open Flow 600 Mcfd @ 15.025		Angle of Slope @ 63.5°		Slope, n .5
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Remarks: Plot of P_c²-P_w² VS Q yielded a straight line with a θ greater than 63.5°. Drew 63.5° line through highest point.

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E.L. BUTTROSS, JR.	Checked By:
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MESA PETROLEUM CO
 BOSWELL STATE NO. 1
 SEC. 30, T5S, R21E
 CHAVES COUNTY, NEW MEXICO
 7-31-81



Assumed $\theta = 63.5^\circ$ and $n = .5$. Actual θ greater than 63.5° .