

NOTICE OF ASSIGNMENT OF ALLOWABLE TO A GAS WELL
SANTA FE

The operator of the following well has complied with all the requirements of the Oil Conservation Division and the well is hereby assigned an allowable as shown below.

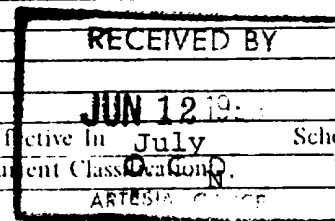
Date of Connection 3-20-85 Date of First Allowable or Allowable Change _____
Purchaser Marathon Oil Co. Pool Indian Basin U/Penn
Operator Robert N. Enfield Lease Bunnel Federal
Well No. 2 Unit Letter P Sec. 18 Twp. 21 Range 23
Dedicated Acreage 574.04 Revised Acreage _____ Difference _____
Acreage Factor .60 Revised Acreage Factor _____ Difference _____
Deliverability _____ Revised Deliverability _____ Difference _____
A x D Factor _____ Revised A x D Factor _____ Difference _____

Change in acreage

Lee A. Clements OCD District No. II

CALCULATION OF SUPPLEMENTAL ALLOWABLE

Previous Status Adjustments						REMARKS
MONTH	% OF MO.	PREV. ALLOW.	REV. ALLOW.	PREV. PROD.	REV. PROD.	
April						
May						
June						
July						
August						
September						
October						
November						*Corrected
December						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTALS						
Allowable Production Difference						
June Schedule O/U Status						
Revised April O/U Status						



Note: All gas volumes are in MCF @ 15.025 psia.

R. L. Stamets, Division Director

By _____

State of New Mexico
Energy/Minerals Department

Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gas
Supplement
Number: ~~NY-SE-88~~ AR-619

Date 3-22-85

NOTICE OF ASSIGNMENT OF ALLOWABLE TO A GAS WELL

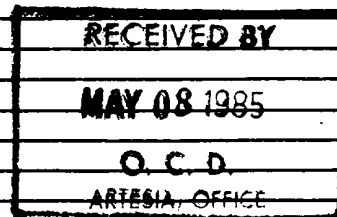
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Date of Connection 3-20-85 Date of First Allowable or Allowable Change _____
Purchaser Marathon Oil Co. Pool Indian Basin U/Penn
Operator Robert N. Enfield Lease Bunnel Federal
Well No. 2 Unit Letter P Sec. 18 Twp. 21 Range 23
Dedicated Acreage 574.04 Revised Acreage _____ Difference _____
Acreage Factor .90 Revised Acreage Factor _____ Difference _____
Deliverability _____ Revised Deliverability _____ Difference _____
A x D Factor _____ Revised A x D Factor _____ Difference _____
New Connection
AOF 18231 MCF
Les A. Staments OCD District No. II

CALCULATION OF SUPPLEMENTAL ALLOWABLE

Previous Status Adjustments.....

MONTH	% OF MO.	PREV.ALLOW.	REV.ALLOW.	PREV.PROD.	REV.PROD.	REMARKS
April						
May						
June						
July						
August						
September						
October						
November						
December						
January						
February						
March			48075			
April			118000			
May						
June						
July						
August						
September						
October						
November						
December						
January						
February						
March						
TOTALS						
Allowable Production Difference.....						
April Schedule O/U Status.....						
Revised Feb O/U Status.....						
Effective In				May	Schedule	
Current Classification				NC	To N	



Note: All gas volumes are in MCF@15.025 psia.

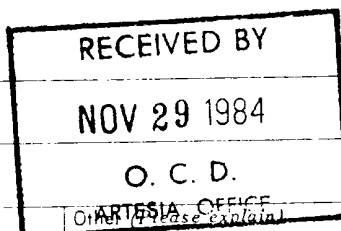
R. L. STAMETS, Division Director

By _____

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	<input checked="" type="checkbox"/>
FILE	<input checked="" type="checkbox"/>
U.S.G.S.	<input type="checkbox"/>
LAND OFFICE	<input type="checkbox"/>
TRANSPORTER	<input checked="" type="checkbox"/>
OIL	<input checked="" type="checkbox"/>
GAS	<input checked="" type="checkbox"/>
OPERATOR	<input checked="" type="checkbox"/>
PRODUCTION OFFICE	<input type="checkbox"/>
Operator	
Robert N. Enfield	
Address	
P. O. Box 2431, Santa Fe, NM 87501	
Reason(s) for filing (Check proper box)	
New Well	<input checked="" type="checkbox"/>
Recompletion	<input type="checkbox"/>
Change in Ownership	<input type="checkbox"/>
Change in Transporter of:	
Oil	<input type="checkbox"/>
Casinghead Gas	<input type="checkbox"/>
Dry Gas	<input type="checkbox"/>
Condensate	<input type="checkbox"/>

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-101 and C-110
Effective 1-1-85



If change of ownership give name
and address of previous owner

I. DESCRIPTION OF WELL AND LEASE

Lease Name	Lease No.	Well No.	Pool Name, including Formation	Kind of Lease
Bunnel Federal Gas Com.		2	Indian Basin Upper Penn/Gas	NM 0420859 State, Federal or Fee Federal
Location				
Unit Letter	P	1200	Feet From The South	Line and 330
				Feet From The East
Line of Section	18	Township	21 South	Range 23 East
				NMPM, Eddy County

I. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil	<input type="checkbox"/>	or Condensate	<input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
The Permian Corporation				1509 W. Wall, Midland, TX 79701
Name of Authorized Transporter of Casinghead Gas	<input type="checkbox"/>	or Dry Gas	<input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Marathon Oil Company, Operator, Indian Basin Gas Plant and Gathering System				P. O. Box 1324, Artesia, New Mexico
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.
	P	18	21	23
				Is gas actually connected? When
				No- 12/15/84 2-31-85

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

V. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
9/15/84	11/2/84	7600'	CIBP 7395'					
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
4075.5 GR	Cisco Canyon	7229'	7288'					
Perforations 7229', 31', 33', 47', 49', 51', 53', 67', 7273, 84', 85', 86', 87'			Depth Casing Shoe					
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
17 1/2"	13-3/8"	282'	375 Sx Class C					
12 1/4"	8-5/8"	1622'	615 Sx Halliburton Light					
7-7/8"	4-1/2"	7600'	450 Sx Halliburton Cl H					
	2 7/8	7288'						

V. 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	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
4260	1 hr	TSTM	
Testing Method (pilot, back pr.)	Tubing Pressure	Casing Pressure	Choke Size
back pr.	1182	Packer	17/64"

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Robert N. Enfield
Robert N. Enfield (Signature)
Operator

11/27/84

(Title)

(Date)

OIL CONSERVATION COMMISSION

APPROVED _____, 19 _____

BY _____

TITLE _____

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 allowable 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 Forms C-104 must be filed for each pool in multiply completed wells.

OIL CONSERVATION DIVISION
DRAWER DD
ARTESIA, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE March 20, 1985

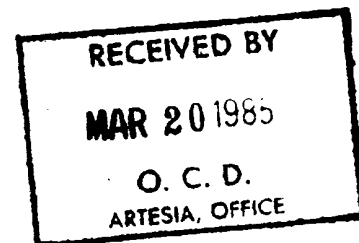
This is to notify the Oil Conservation Division that connection for the purchase
of gas from the Marathon Oil Company, Robert N. Enfield
Operator Bunnel Fed. ~~Gas Com~~ No. 2
Lease

P, 18 - 21S - 23E, Indian Basin NATURAL GAS PIPELINE
Well Unit S. T. R. Upper Penn COMPANY OF AMERICA,
Pool Name of Purchaser

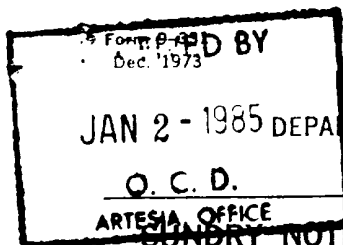
was made on March 20, 1985. (Marathon Oil Company is operator of the Indian
Basin Gas Plant and gathering system. Natural Gas Pipeline Company of America is
purchaser of the gas under contracts providing for delivery of processed gas at the plant.)

MARATHON OIL COMPANY, Operator of the Indian
Basin Gas Plant and Gathering System.

W. J. Sneyling
Representative - Plant Supt.



cc: To Operator
Oil Conservation Division - Santa Fe, N.M.



c/SF

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ARTESIA OFFICE
GENERAL NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other ☐
2. NAME OF OPERATOR
Robert N. Enfield
3. ADDRESS OF OPERATOR
P.O. Box 2431, Santa Fe, NM 87501
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE 200' FSL & 330' FEL of Sec. 18
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) <u>FULL COMPLETION</u> <input checked="" type="checkbox"/>	<u>PAGE 1</u> <input type="checkbox"/>

5. LEASE
NM-0424859
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
Bunnel Federal
9. WELL NO.
2
10. FIELD OR WILDCAT NAME
Indian Basin Upper Penn
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 18, T21S, R23E
12. COUNTY OR PARISH
Eddy
13. STATE
NM
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD)
4075.5 GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

10/18/84: Rigged up Mack Chase pulling unit.
10/19/84: Spot 250 gal. 15% HCL w/additives. Close blind rams & press. tested w/2000 PSI.
10/20/84: Ran GR cement bond log from 7541' to top of cement at 5786'. Perforated 8 shots at 7407', 08', 09', 10', 15', 16', 17', & 18' w/ultra shot 0.33" holes. Swabbed & recovered all load.
10/21/84: 12 hr SITP 550 PSI, swabbed 18 bls of fluid w/good show gas. SI for pressure buildup. After 15" SIP 30 PSIG, after 120" SIP 140 PSIG.
10/22/84: 17 hr. SITP 650 PSI. Swabbed formation water.
10/23/84: Set CIBP at 7395' w/35' cement on top. Spot 500 gal 15% acid w/additives.
10/24/84: Perforated w/ultra shot gun 0.33 hole 1 shot/ft. at 7229', 31', 33', 47', 49', 51', 53', 67', 69', 73', 75', 84', 85', 86', & 87'. GIH & set packer & set at 7188'. Hole took 108 bls fluid before setting packer. Swabbed, recovered 52 bls. load.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Robert N. Enfield TITLE Operator DATE 12/26/84
Robert N. Enfield (This space for Federal or State office use)

APPROVED BY [Signature] TITLE _____ DATE _____
CONDITIONS OF APPROVAL DEC 8 1984

Carl [Signature] NEW MEXICO *See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Robert N. Enfield ✓

3. ADDRESS OF OPERATOR
P.O. Box 2431, Santa Fe, NM 87501

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE 1200' FSL & 330' FEL of Sec. 18
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐

(other) FULL COMPLETION X - PAGE 2

5. LEASE
NM-0424859

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Bunnel Federal

9. WELL NO.
2

10. FIELD OR WILDCAT NAME
Indian Basin Upper Penn

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 18, T21S, R23E

12. COUNTY OR PARISH
Eddy

13. STATE
NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
4075.5 GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

10/25/84: Swabbed-well kicked off & flowed, 1/2" choke for 1 hr. 120 PSIG, est. 750 MCF. Recovered all load. Treated from 7284'-87' w/100 gal 15% HCL, treated 7267'-75' w/1000 gal 15% HCL, treated 7247'-53' w/1000 gal 15% HCL, treated 7229'-33' w/1000 gal. Made 3 swab rund, recovered 10 bls.

10/26/84: Made 37 swab runs, recovered 144 bls, good kick on last 13 runs.

10/27/84: 13 hr. SITP 280 PSI. Swabbed, at 12:00 noon, flowing to pit on 3/4" choke w/200 PSIG, At 12 midnight 180 PSI on 3/4" choke, est. 2550 MCF/day, mist

10/28/84: Flowing to pit, 6:00 AM 188 PSI on 3/4" choke, est. 2900 MCF/day - dry gas. SI for pressure build up. In 15 minutes 975 PSI, at end of 4 hrs. 1350 PSI.

Subsurface Safety Valve: Manu. and Type

Set @ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED

Robert N. Enfield

TITLE Operator

DATE 12/26/84

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Robert N. Enfield

3. ADDRESS OF OPERATOR
P.O. Box 2431, Santa Fe, NM 87501

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE 1200' FSL & 330' FEL of Sec. 18
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

CHANGE ZONES ☐

ABANDON* ☐

(other) FULL COMPLETION X - PAGE 3

5. LEASE
NM-0424859

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Bunnel Federal

9. WELL NO.
2

10. FIELD OR WILDCAT NAME
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11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 18, T21S, R23E

12. COUNTY OR PARISH
Eddy

13. STATE
NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
4075.5 GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

10/29/84: 24 hr. SITP 1400 PSIG. GIH w/Baker Loc-set packer, set at 7212'.

10/30/84: Well flowing, at 5:00 PM 900 PSI on 1/4" choke, estimated 1300 MCF.

10/31/84: Flow to pit for 3 hrs, stabilized at 350 PSI on 1/2" choke, est. 2300 MCF/day.

11/1/84: Treated well w/10,000 gal. 70 quality 20% HCL acid containing 237,080 SCF nitrogen.

11/2/84: Flowed for 2 hrs. 1100 PSI on 1/4" choke, estimated 1600 MCF/day

11/14/84: Ran 4 point test and BHP bomb

Subsurface Safety Valve: Manu. and Type

Set @ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED

Robert N. Enfield

TITLE Operator

DATE 12/26/84

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY

NOV 29 1964

O. C. D.

ARTESIA

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 11-14-84	
Company ROBERT ENFIELD ✓				Connection AIR NEW WELL	
Pool Indian Basin U/P				Formation CISCO	
Completion Date 11-2-84		Total Depth 7600.		Elevation 4076.	
Well Size 4.500		Well ID 11.6		Perforations: From 7229. To 7287.	
Fig. Size 2.375		Well ID 4.7		Perforations: From 0. To 0.	
Type Well - Single - Drawhead - G.G. or G.O. Multiple SINGLE				Packer Set At 7212.	
Producing thru TUBING		Reservoir Temp. °F 156. 7258.		Main Annual Temp. °F 60.0	
L 7258.		H 7258.		Cg 0.636	
CO ₂ 0.78		N ₂ 2.85		H ₂ O 0.	
Prover 0		Motor Run 3.1		Tape FLANGE	

FLOW DATA						TUBING DATA		B.H.P. 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.		CHOKE
51							1406.		1718.		288.0
1.	3.07 X 1.250			220.	23.0	98.	1390.		1699.	7/64	1.0
2.	3.07 X 1.250			230.	78.0	76.	1360.		1679.	9/64	1.0
3.	3.07 X 2.000			235.	49.0	84.	1295.		1624.	14/64	1.0
4.	3.07 X 2.000			235.	102.0	79.	1182.		1548.	17/64	1.0
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. Compres. Factor, F _{pv}	Rate of Flow Q, Mscf
1	7.58	73.24	233.2	0.9653	1.2539	1.0164	683.
2	7.58	137.73	243.2	0.9850	1.2539	1.0199	1315.
3	21.32	110.28	248.2	0.9777	1.2539	1.0191	2937.
4	21.32	159.11	248.2	0.9822	1.2539	1.0198	4260.
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.35	558.	1.55	0.968	0.	
2	0.36	536.	1.49	0.961	0.	
3	0.37	544.	1.51	0.963	0.636	0.636
4	0.37	539.	1.49	0.962	669.	669.
5					361.	361.

NO.	P _i ²	P _w ²	P _w ²	P _i ² - P _w ²	(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 5.4790$	(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 4.2793$
1	2931.	1425.	2031.	45.		
2	2864.	1409.	1985.	91.		
3	2680.	1364.	1861.	215.		
4	2438.	1303.	1697.	379.		
5						

Absolute Open Flow	18231.	Mscf @ 15.025	Angle of Slope	49.5	Slope, n	0.855
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REMARKS: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

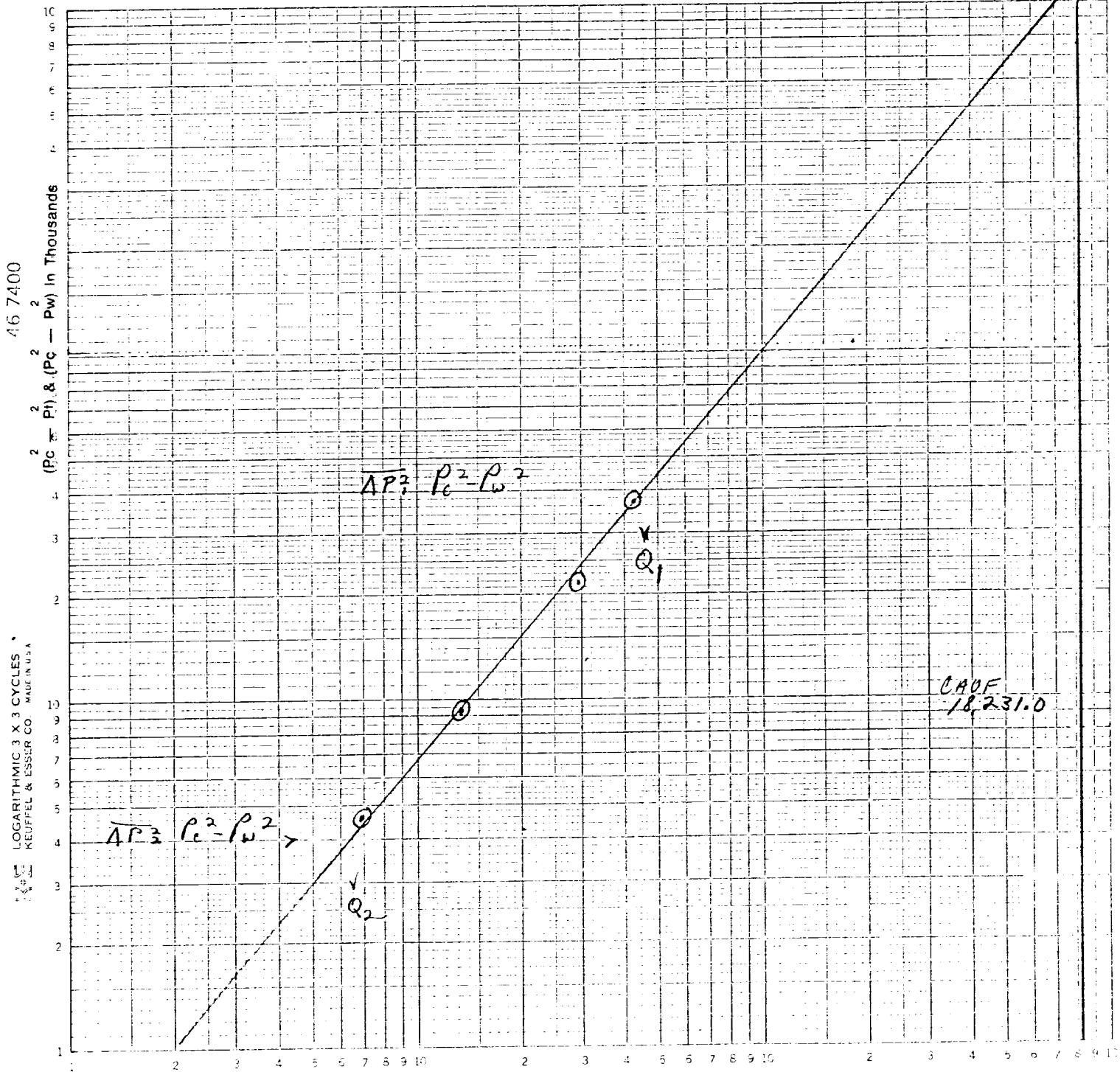
Approved By Commission	Conducted By: DON BENNETT	Calculated By: BENNETT & CATHEY INC.	Checked By:
------------------------	------------------------------	---	-------------

Post FD-2
12-7-84
Camp & BH

BENNETT & CATHEY PRODUCER TESTING BACK PRESSURE CURVE

Operator Robert Enfield Lease Bunwell Federal Well No. 2
 County Eddy Field _____ Location P 12 215 28E
 Date of Test 11-14-84 Slope "n" .855 Angle of Slope 49.5

Calc. Abs. Potential 18,231.0



$$\begin{aligned}\overline{\Delta P^2} \quad P_c^2 - P_w^2 &= 400 \\ \overline{\Delta P^2} \quad P_c^2 - P_w^2 &= 40 \\ Q_1 &= 4508 \\ n &= 1.30\end{aligned}$$

Q in MCF/D

$$\begin{aligned}\text{LOG } Q_1 &= 3.654 \\ \text{LOG } Q_2 &= 2.799 \\ n &= .855\end{aligned}$$