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U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

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

Form C-104  
Supersedes Old C-104 and C-110  
Effective 1-1-65

(Marathon 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 residue gas at the Plant.)

Operator		JOHN H. TRIGG	
Address			
Post Office Box 520, Roswell, New Mexico 88201			
Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well	<input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion	<input type="checkbox"/>	Oil	<input type="checkbox"/>
Change in Ownership	<input type="checkbox"/>	Dry Gas	<input checked="" type="checkbox"/>
		Casinghead Gas	<input type="checkbox"/>
		Condensate	<input type="checkbox"/>

If change of ownership give name and address of previous owner

I. DESCRIPTION OF WELL AND LEASE

New Mexico 05699

Lease Name	FEDERAL "IB"	Well No.	1	Pool Name, Including Formation	INDIAN BASIN, <del>PENN-CISCO</del>	Kind of Lease	FEDERAL
Location							
Unit Letter	D	660	Feet From The	NORTH	Line and	400	Feet From The
Line of Section				6	Township	22 SOUTH	Range
				24 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"/>	MARATHON OIL COMPANY, OPERATOR, INDIAN BASIN GAS PLANT AND GATHERING SYSTEM			Address (Give address to which approved copy of this form is to be sent)		
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	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.
				D	6	22S. 24E.
				Rge.	Is gas actually connected? When	
					NO	

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.
		XX	XX					
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
5/30/63	4/11/64		9476		7931			
Pool	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
INDIAN BASIN	PENN-CISCO		7414		7344			
Perforations	7430 - 7486 - 1 11/16" - 112		7504 - 7554 - 1 11/16" - 100 (2/ft.)		Depth Casing Shoe			
				7981				
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
	20"		26		6 YDS READY MIX			
	13"		626		200			
10 3/4"	9 5/8"		2427		1437			
8 3/4"	7" 2 3/8"		7981		725			
			7344		TUBING			

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)

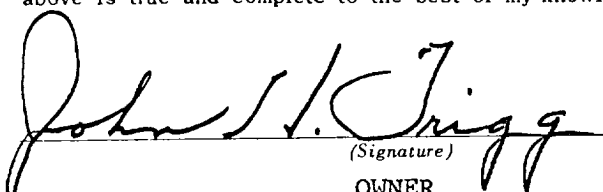
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL


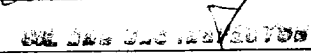
Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
151,349 MCFGPD	36 HRS.	91,483 - 1	59.0°
Testing Method (pitot, back pr.)	Tubing Pressure	Casing Pressure	Choke Size
Back Pressure Meter	2357	--	2.0 - 2.25"

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.

  
(Signature)  
OWNER  
(Title)  
DECEMBER 30, 1965  
(Date)

OIL CONSERVATION COMMISSION

APPROVED JAN 26 1966, 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 Sections I, II, III, and VI only 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.

will file

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Clasco Dolomite County Chavez  
Initial XXXXXX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test Apr. 22-27, 1964  
Company John H. Trigg Company Lease Federal "1B" Well No. 1-6  
Unit D Sec. 6 Twp. 22-S Rge. 24-E Purchaser None  
Casing 7" Wt. 20 I.D. 6.456" Set at 7981 Perf. 7430 To 7554  
Tubing 2-3/8" Wt. 4.74 I.D. 1.995" Set at 7344 Perf. Open End To \_\_\_\_\_  
Gas Pay: From 7430 To 7554 L 7430 xG \_\_\_\_\_ -GL \_\_\_\_\_ Bar.Press. 13.2  
Producing Thru: Casing \_\_\_\_\_ Tubing XXXX Type Well Single  
Date of Completion: April 17, 1964 Packer 7154 Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (1161111/1016111) (Meter) Type Taps Flange

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	( <u>1161111</u> ) (Line) Size	( <u>016111</u> ) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	3"	2.000"	910	46	84	1953	72			24
2.	3"	2.250"	903	101	80	990	76			3
3.	3"	2.250"	903	72 1/2	77	1450	76			3
4.	3"	2.250"	900	39	77	1774	74			3
5.	3"	2.250"	890	33	86	1954	73			3

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_F}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	27.52	206.1	923.2	.9777	.9721	1.076	3,800
2.	37.15	304.5	918.2	.9813	.9721	1.076	11,011
3.	37.15	258.0	918.2	.9840	.9721	1.081	9,911
4.	37.15	188.7	913.2	.9840	.9721	1.081	7,249
5.	37.15	172.6	903.2	.9759	.9721	1.074	6,533

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 104,129 cf/bbl.  
Gravity of Liquid Hydrocarbons 59 deg.  
P<sub>c</sub> \_\_\_\_\_ (1-e<sup>-S</sup>)  
Specific Gravity Separator Gas .635  
Specific Gravity Flowing Fluid .7428  
P<sub>c</sub> 2965.2 P<sub>c</sub> 8792.4

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> / P <sub>c</sub>
1.	2939.2					8638.9	153.5		
2.	2849.2					8117.9	674.5		
3.	2864.2					8203.6	588.8		
4.	2883.2					8312.8	479.6		
5.	2885.2					8324.4	468.0		

Absolute Potential: 151,349 MCFPD; n 1.00000  
COMPANY John H. Trigg Company  
ADDRESS Post Office Box 106 - Maljamar, New Mexico  
AGENT and TITLE Connie W. Snow, Asst. Eng. --- Connie W. Snow  
WITNESSED Jack R. McGraw  
COMPANY John H. Trigg Company

REMARKS

Bomb Coeff. 1552 lbs./sq. in. Bomb set @ 7283'  
Curve #1 represents slope drawn through actual data as measured. Absolute potential obtained from slope of 1.00000 drawn through highest rate of flow.  
Bomb shut-in - 2952 psig

## INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

## NOMENCLATURE

$Q$  = Actual rate of flow at end of flow period at W. H. working pressure ( $P_w$ ).  
MCF/da. @ 15.025 psia and 60° F.

$P_c$  = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.  
psia

$P_w$  = Static wellhead working pressure as determined at the end of flow period.  
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

$P_t$  = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

$P_f$  = Meter pressure, psia.

$h_w$  = Differential meter pressure, inches water.

$F_g$  = Gravity correction factor.

$F_t$  = Flowing temperature correction factor.

$F_{pv}$  = Supercompressability factor.

$n$  = Slope of back pressure curve.

Note: If  $P_w$  cannot be taken because of manner of completion or condition of well, then  $P_w$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_t$ .