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LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	9
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

PUBCO PETROLEUM CORP.  
MERGED INTO MESA PETROLEUM CO.  
EFFECTIVE MAY 1, 1973

I. Operator  
Pubco Petroleum Corporation

Address  
P. O. Box 869, Albuquerque, New Mexico 87103

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

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Lease No.	Well No.	Pool Name, Including Formation	Kind of Lease
Jicarilla	Jicarilla Tribal	1	South Blanco Pictured Cliffs	State, Federal or Fee
Location	#161, Tr. 262			Jicarilla Apache
Unit Letter	K	1850	Feet From The West	Line and 1850
			Feet From The South	
Line of Section	16	Township 23N	Range 2W	NMPM, Rio Arriba County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
None	
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)
E1 Paso Natural Gas Company	P. O. Box 1492, El Paso, Texas 79999
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When
	No

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

IV. 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	9/22/72	Date Compl. Ready to Prod.	12/07/72	Total Depth	3246'	P.B.T.D.	3182'	
Elevations (DF, RKB, RT, GR, etc.)	7322' GL	Name of Producing Formation	Pictured Cliffs	Top Oil/Gas Pay	3038'	Tubing Depth	--	
Perforations	3038-46, 3052-60, 3063-65	Depth Casing Shoe	3212'					
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
12-1/4"	8-5/8"	142'	100 sxs.					
6-3/4"	3-1/2"	3212'	515 sxs.					
--								

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.)	Choke Size
Length of Test	Tubing Pressure	Casing Pressure	Gas-MCF
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	OIL CON. COM. DIST. 3

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
1440	3 hrs.	--	--
Testing Method (pitot, back pr.)	Tubing Pressure	Casing Pressure	Choke Size
Back Pressure	--	111	3/4"

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.

Charles W. Sanders (Signature)  
Area Production Manager  
1/26/73 (Date)

OIL CONSERVATION COMMISSION

JAN 31 1973

APPROVED

BY Original Signed by Emery C. Arnold

TITLE SUPERVISOR DIST. #3

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

# **NEW MEXICO OIL CONSERVATION COMMISSION** **WELL DELIVERABILITY TEST REPORT FOR 19 73**

Form C122-A  
 Revised 1-1-66

POOL NAME <b>South Blanco PC</b>	POOL SLOPE n = <b>.85</b>	FORMATION <b>PC</b>	COUNTY <b>Rio Arriba</b>
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COMPANY <b>Mesa Petroleum Co.</b>			WELL NAME AND NUMBER <b>Jicarilla #1</b>		
UNIT LETTER <b>K</b>	SECTION <b>16</b>	TOWNSHIP <b>23N</b>	RANGE <b>2W</b>	PURCHASING PIPELINE <b>EL PASO NATURAL GAS CO.</b>	
CASING O.D. - INCHES <b>3.5</b>	CASING I.D. - INCHES <b>2.992</b>	SET AT DEPTH - FEET <b>3212</b>	TUBING O.D. - INCHES <b>1.66</b>	TUBING I.D. - INCHES <b>1.38</b>	TOP - TUBING PERF. - FEET <b>3050</b>
GAS PAY ZONE FROM <b>3038</b> TO <b>3065</b>		WELL PRODUCING THRU CASING <b>X</b> TUBING		GAS GRAVITY <b>0.656</b>	GRAVITY X LENGTH <b>2001</b>
DATE OF FLOW TEST FROM <b>19 JUN</b> TO <b>27 JUN</b>			DATE SHUT-IN PRESSURE MEASURED <b>5 JAN '73</b>		

## **PRESSURE DATA - ALL PRESSURES IN PSIA**

(a) Flowing Casing Pressure (DWt) <b>119</b>	(b) Flowing Tubing Pressure (DWt) <b>127</b>	(c) Flowing Meter Pressure (DWt) <b>119</b>	(d) Flow Chart Static Reading <b>119</b>	(e) Meter Error (Item c - Item d) <b>0</b>	(f) Friction Loss (a - c) or (b - c) <b>0</b>	(g) Average Meter Pressure (Integr.) <b>119</b>
(h) Corrected Meter Pressure (g + e) <b>119</b>	(i) Avg. Wellhead Press. $P_i = (h + f)$ <b>119</b>	(j) Shut-in Casing Pressure (DWt) <b>639</b>	(k) Shut-in Tubing Pressure (DWt) <b>639</b>	(l) $P_c$ = higher value of (j) or (k) <b>639</b>	(m) Del. Pressure $P_d = \frac{80}{511} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

## **FLOW RATE CORRECTION (METER ERROR)**

Integrated Volume - MCF/D <b>197</b>	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ <b>1</b>	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ <b>1</b>	Corrected Volume $Q = \frac{197}{1}$ <b>197</b> MCF/D
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$F_c = 3.095$  **7.733**

## **WORKING PRESSURE CALCULATION**

$(1 - e^{-s})$ <b>0.135</b>	$(F_c Q_m)^2 (1000)$ <b>372 2321</b>	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ <b>50.2</b>	$P_i^2$ <b>14,161</b>	$P_w^2 = P_i^2 + R^2$ <b>14,474</b>	$P_w = \sqrt{P_w^2}$ <b>120</b>
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## **DELIVERABILITY CALCULATION**

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{197}{1} \left[ \frac{147,200}{394,110} \right]^{0.3737} = \frac{197}{1} \left[ \frac{147,200}{394,110} \right]^{0.3737} = 85 \text{ MCF/D}$$

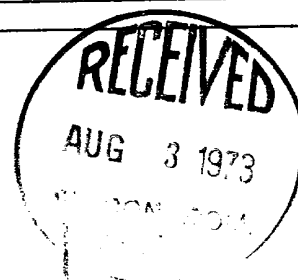
REMARKS:

**392847**

## **SUMMARY**

Item h **119** Psia  
 $P_c$  **639** Psia  
 $Q$  **197** MCF/D  
 $P_w$  **119.2 120** Psia  
 $P_d$  **511** Psia  
 $D$  **85** MCF/D

Company **MESA PETROLEUM CO.**  
 By **[Signature]**  
 Title **PET Petroleum Engineer**  
 Witnessed By \_\_\_\_\_  
 Company \_\_\_\_\_



**OK**

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.)
(h) Corrected Meter Pressure (g + e)	(i) Avg. Wellhead Press. $P_1 = (h + f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) $P_c$ = higher value of (j) or (k)	(m) Del. Pressure. $P_d = \frac{\text{ } \% P_c}{\text{ }}$	(n) Separator or De-hydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume	$Q = \frac{\text{MCF/D}}{\text{ }}$
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$	$(F_c Q_m)^2 (1000)$	$(1 - e^{-s}) (F_c Q_m)^2 (1000)$	$R^2 = \text{ }$	$P_2^2$	$P_2^w = P_2^i + R^2$	$P^w = \sqrt{P_2^w}$
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DELIVERABILITY CALCULATION

$D = Q \left[ \frac{P_c^2 - P_d^2}{P_2^2 - P_2^w} \right]^{\frac{1}{n}} = \text{ }$	$\left( \frac{\text{ }}{\text{ }} \right)^{\frac{1}{n}} = \text{ }$	$\left( \frac{\text{ }}{\text{ }} \right)^{\frac{1}{n}} = \text{ }$	$\text{MCF/D}$
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REMARKS:

SUMMARY

Item h	Psia	Psia	Psia	Q	MCF/D	Psia	Psia	D	MCF/D
Company	By	Title	Witnessed By	Company					