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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



I. Operator **El Paso Natural Gas Company**
Address **Box 990, Farmington, New Mexico - 87401**
Reason(s) for filing (Check proper box)
New Well ☐ Change in Transporter of: Oil ☐ Dry Gas ☐
Recompletion ☒ Casinghead Gas ☐ Condensate ☐
Change in Ownership ☐ Other (Please explain) **See Back for Details**

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name San Juan 27-4 Unit	Well No. 30 (D)	Pool Name, Including Formation Basin Dakota	Kind of Lease State, Federal or Fee SF	Lease No. 080670
Location Unit Letter N ; 800 Feet From The South Line and 1450 Feet From The West Line of Section 32 Township 27N Range 4W , 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 checked="" type="checkbox"/> El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) Box 990, Farmington, New Mexico			
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) Box 990, Farmington, New Mexico			
If well produces oil or liquids, give location of tanks.	Unit N	Sec. 32	Twp. 27N	Rge. 4W
Is gas actually connected?		When		

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(X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X		X			X	
Date Spudded W/O 11-26-67	Date Compl. Ready to Prod. W/O 1-8-68		Total Depth 8494'		P.B.T.D. 8400'			
Elevations (DF, RKB, RT, GR, etc.) 7168' GL	Name of Producing Formation Dakota		Top Oil/Gas Pay 8158'		Tubing Depth 8100'			
Perforations 8158-70, 8182-88, 8296-8302, 8306-12, 8342-48					Depth Casing Shoe 8494'			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
15"	10 3/4"		297'		220 Sks.			
7 7/8"	4 1/2"		8494'		685 Sks.			
	2 3/8" & 2 1/16"		2 3/8" @ 7461'					
			2 1/16" @ 8100'		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 107	Length of Test 3 Hours	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.) Calculated A.O.F.	Tubing Pressure (shut-in)	Casing Pressure (shut-in) 1138	Choke Size 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.

Original Signed **F. H. WOOD**

(Signature)

Petroleum Engineer

(Title)

January 17, 1968

(Date)

OIL CONSERVATION COMMISSION

MAR 25 1968

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 completed wells.

WORKOVER

11-26-67 Rigged up Dwinell Bros. rig #1, pulled tubing.
11-27-67 Set bridge plug at 7733', found hole in 4 1/2" casing at 5386', set Baker fullbore packer at 5288', squeezed hole at 5386' w/50 sacks cement, no squeeze pressure, squeezed again w/50 sacks cement, squeeze pressure 1800#. W.O.C.
11-28-67 Drilled out cement, tested squeeze job, would not hold. Set Baker fullbore packer at 5288', re-squeezed hole in casing at 5386' w/100 sacks of cement, pressure 3000#.
11-29-67 Drilled out cement, tested w/2000#, held O. K. Cleaned out to 7733'.
11-30-67 Set bridge plug at 7738', tested casing to 4000# O. K. Spotted 250 gallons 15% MCA. Perf. Gallup 7677-89', 7700-06' w/24 SPZ. Frac w/38,000# 20/40 sand, 30,330 gal. water. Max. pr. 4000#, BDP 1000#, tr. pr. 2900-3000-3200#. I.R. 50 BPM. Dropped 1 set of 26 balls each, flushed w/5500 gal. water. isip 1200#, 5 Min. 700#. Set BP @ 7525', tested w/4000# O. K. Perf. Gallup 7486-7500' w/2 SPZ, Frac w/25,000# 20/40 sand, 26,460 gallons of water. Max. pr. 4000#, BDP 3800#, tr. pr. 3200-3300-3700#. I.R. 45 BPM. Flushed w/5200 gal. water. ISIP 900#, 5 Min. 600#.
12-1-67 Blowing well.
12-2-67 Blowing well. Gauged 20# on 1" line, 1/2" water.
12-3-67 Blowing well, drilled bridge plug at 7738', cleaned out to 8400'.
12-4-67 Attempted to set production packer, packer stopped at 5430', stuck packer at 5392' while pulling, milled up packer, cleaned out to 8400'. Reamed tight spot in casing at 5433'.
12-5-67 Set Baker Model "D" production packer at 8100', set Baker model "FA" production packer at 7461', ran 19 joints 2 1/16" intergal joint tubing and 236 joints 2 3/8", 4.7#, J-55 tubing (8085') landed at 8100' (see daily drilling report and tubing record in well file).
12-28-68 Date Gallup was tested.
1-8-68 Date Dakota was tested.

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

CORRECTED COPY

DUAL COMPLETION

DATE January 8, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 30 (DK) (OWWO)	
Location 800'S, 1450'W, Sec. 32, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8494	Tubing: Diameter 2.0625	Set At: Feet 640
Pay Zone: From 8158	To 8462	Total Depth: 8494	Shut In 12-9-67
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Baker Model D Packer set at 8100 Baker Model FA Packer set at 7461 2 1/16" Crossover sub.	
Shut-In Pressure, Casing, PSIG 1126 (DK)	+ 12 = PSIA 1138 (DK)	Days Shut-In 30	Shut-In Pressure, Tubing PSIG 1287 (GL)	+ 12 = PSIA 1299 (GL)	
Flowing Pressure: P PSIG 79	+ 12 = PSIA 91		Working Pressure: P _w PSIG (Friction Negligible)	+ 12 = PSIA 91	
Temperature: T = 54 °F	n = .750		F _{pv} (From Tables) 1.009	Gravity .695	F _g = .9292

ISIPT (GL) = 1287 psig

FSIPT (GL) = 1296 psig

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = (12.365)(91)(1.0058)(.9292)(1.009) = \underline{1061} \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{1295044}{1286763} \right)^n = (\underline{1061})(1.0064)^{.75} = (\underline{1061})(1.0048)$$

NOTE: The well produced clear gas for the first hour and a half, then it produced a light spray of distillate for the remainder of the test.

$$Aof = \underline{1066} \text{ MCF/D}$$

TESTED BY R. F. HeadrickCALCULATED
WITNESSED BY T. B. Grant

H. Z. Kendrick
H. Z. Kendrick

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3724
Order No. R-3390

APPLICATION OF EL PASO NATURAL GAS
COMPANY FOR A DUAL COMPLETION, RIO
ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 20, 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of March, 1968, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, El Paso Natural Gas Company, seeks
authority to complete its San Juan 27-4 Unit Well No. 30 (GD),
located 800 feet from the South line and 1450 feet from the West
line of Section 32, Township 27 North, Range 4 West, NMPM, Rio
Arriba County, New Mexico, as a dual completion (conventional)
to produce gas from an undesignated Gallup gas pool through
2 3/8-inch tubing and the Basin-Dakota Gas Pool through the
casing-tubing annulus by means of a cross-over assembly, with
separation of zones by packers set at approximately 8100 feet
and 7461 feet.

(3) That the mechanics of the proposed dual completion are
feasible and in accord with good conservation practices.

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CASE No. 3724

Order No. R-3390

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to complete its San Juan 27-4 Unit Well No. 30 (GD), located 800 feet from the South line and 1450 feet from the West line of Section 32, Township 27 North, Range 4 West, NMPM, Rio Arriba County, New Mexico, as a dual completion (conventional) to produce gas from an undesignated Gallup gas pool through 2 3/8-inch tubing and the Basin-Dakota Gas Pool through the casing-tubing annulus by means of a cross-over assembly, with separation of zones by packers set at approximately 8100 feet and 7461 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the Basin-Dakota Gas Pool.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/