THE APPLICATION OF EL PASO NATURAL GAS COMPANY FOR PERMISSION TO EFFECT DUAL COMPLETION OF ITS BOLACK NO. 13-C, LOCATED 960 FEET FROM THE SOUTH LINE AND 800 FEET FROM THE WEST LINE OF SECTION 29, TOWNSHIP 27 NORTH, RANGE 8 WEST, NMPM, SAN JUAN COUNTY, NEW MEXICO, IN SUCH A MANNER AS TO PERMIT THE PRODUCTION OF GAS FROM THE SOUTH BLANCO PICTURED CLIFFS POOL AND THE PRODUCTION OF GAS FROM THE BLANCO MESAVERDE POOL.

ORDER NO. DC-598

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 112-A (c) El Paso Natural Gas Company, made application to the New Mexico Oil Conservation Commission on August 4, 1958, for permission to dually complete its Bolack No. 13-C located 960 feet from the South line and 800 feet from the West line of Section 29, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the production of gas from the South Blanco Pictured Cliffs Pool and the production of gas from the Blanco Mesaverde Pool.

Now, on this 20th day of August, 1958, the Secretary-Director finds:

(1) That application has been duly filed under the provisions of Sub-section 'c' of Rule 112-A of the Commission's Rules and Regulations.

(2) That satisfactory information has been provided that all operators of offset acreage have been duly notified; and

(3) That no objections have been received within the waiting period as prescribed by said rule.

(4) That the proposed dual completion will not cause waste nor impair correlative rights.

(5) That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, El Paso Natural Gas Company, be and the same is hereby authorized to dually complete its Bolack No. 13-C, located 960 feet from the South line and 800 feet from the West line of Section 29, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the production of gas from the South Blanco Pictured Cliffs Pool and the production of gas from the Blanco Mesaverde Pool, through the casing-tubing annulus and the tubing respectively.

PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Section V, Rule 112-A, as amended by Order R-1214.

PROVIDED FURTHER, That the operator shall make any and all tests, including segregation and packer-leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the Blanco Mesaverde Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any other tests and/or determinations as deemed necessary by the Commission.

IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights;

upon failure of applicant to comply with any requirement of this order after proper notice and hearing the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.,
Secretary-Director

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Form C-122-A
Revised April 20, 1955

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA EXCEPT BARKER DOME STORAGE AREA)

Pool South Blanco Formation Pictured Cliffs County San Juan

Purchasing Pipeline El Paso Natural Gas Date Test Filed

Operator El Paso Natural Gas Lease Bolack Well No. 13-C (P)

Unit M Sec. 29 Twp. 27 Rge. 8 Pay Zone: From 2578 To 2420

Casing: OD 7-5/8 WT. 26.4 Set At 4428 Tubing: OD 2 WT. 4.7 T. Perf. 4721

Produced Through: Casing X Tubing Gas Gravity: Measured .652 Estimated

Date of Flow Test: From 9/7/58 To 9/15/58 * Date S.I.P. Measured 7/17/58

Meter Run Size Orifice Size Type Chart Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt)	psig + 12 =	psia	(a)
Flowing tubing pressure (Dwt)	psig + 12 =	psia	(b)
Flowing meter pressure (Dwt)	psig + 12 =	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:			
Normal chart reading	psig + 12 =	psia	(d)
Square root chart reading ( ) ^{2} x spring constant	=	psia	(d)
Meter error (c) - (d) or (d) - (c)	± =	psi	(e)
Friction loss, Flowing column to meter:			
(b) - (c) Flow through tubing: (a) - (c) Flow through casing	=	psi	(f)
Seven day average static meter pressure (from meter chart):			
Normal chart average reading	psig + 12 =	psia	(g)
Square root chart average reading (6.95) ^{2} x sp. const. 5	= 242	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	= 242	psia	(h)
P_t = (h) + (f)	= 242	psia	(i)
Wellhead casing shut-in pressure (Dwt) 677	psig + 12 = 689	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 677	psig + 12 = 689	psia	(k)
P_c = (j) or (k) whichever well flowed through	= 689	psia	(l)
Flowing Temp. (Meter Run) 63 °F + 460	= 523	°Abs	(m)
P_d = ½ P_c = ½ (l)	= 345	psia	(n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{h_w}}{\sqrt{(d)}} = \frac{\quad}{\quad} = \frac{\quad}{\quad} \right)^{*} = 384 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right) = \frac{355696}{416157} \right]^{n} \quad n = \frac{.8547}{.8750}$$

$$D = 384 \left[\frac{355696}{416157} \right]^{.8547} = 336 \text{ MCF/da.}$$

SUMMARY

P_c =	689	psia	
Q =	384	Mcf/day	
P_w =	242	psia	
P_d =	345	psia	
D =	336	Mcf/day	

Company El Paso Natural Gas
By Original Signed
Title Harold L. Kendrick
Witnessed by
Company

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)2$	$\frac{(FcQ)^2 \quad (1-e^{-s})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
			Friction Negligible			

D at 250 = 376