

OIL CONSERVATION COMMISSION
_____ DISTRICT

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 8-17-62

Re: Proposed NSP _____

Proposed NWU _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 8-14-62

for the EPNG Co SLU 27-5 69 A-7-27-5
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Approved

Yours very truly,

Ernest C. Caud

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco Mesa Verde & Basin Dakota		County Rio Arriba		Date August 9, 1962
Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit		Well No. 69 (ND)
Location of well	Unit A	Section 7	Township 27N	Range 5N

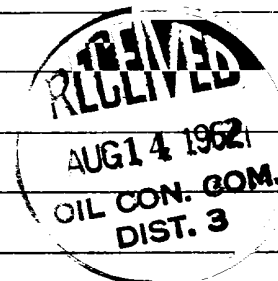
1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____ ; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Mesa Verde	Dakota
b. Top and Bottom of Pay Section (Perforations)	5085 - 5744	7572 - 7890
c. Type of production (Oil or Gas)	Gas	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing

4. The following are attached. (Please mark YES or NO)

- Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- No c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- Yes d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.



6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES _____ NO _____. If answer is yes, give date of such notification _____.

CERTIFICATE: I, the undersigned, state that I am the Area Petroleum Engineer of the El Paso Natural Gas Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

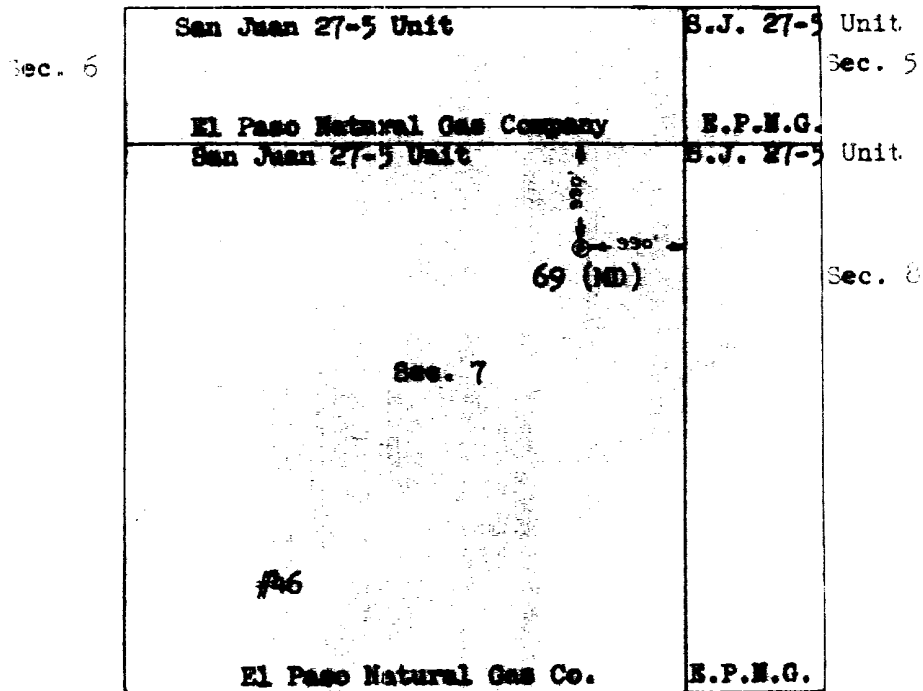
ORIGINAL SIGNED E. S. OBERLY

Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.
- NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard perforation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

PLAT SHOWING LOCATION OF DUALY COMPLETED
 El Paso Natural Gas Co. San Juan 27-5 Unit #69 (MD)
 and Offset Acreage

Sec. 7, T-27-N, R-5-W



EL PASO NATURAL GAS COMPANY
 EL PASO, TEXAS

SCALE _____ DATE _____
 DRAWN BY _____ CHECKED BY _____

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE July 5, 1962

Operator El Paso Natural Gas Company		Lease San Juan Unit 27-5 No. 69 (DK)	
Location 1090'N, 990'E, Sec. 7-27-5		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing Diameter 4.5	Set At Feet 7900	Tubing Diameter 2-1/16	Set At Feet 7790
Flow Line Feet 7604	To 7776	Total Depth 7900	Shut In 6-28-62
Stimulation Method Sand/Water Frac.		Flow Through Casing	Flow Through Tubing X

Casing Size, inches .750	Flow Constant, C 12.365		
Initial Pressure, casing, (MV) 1026	PSIG 12 PSIA 1038	Days Shut In 7	Shut In Pressure, Tubing (DK) 2657
Flowing Pressure, P 850	PSIG 12 PSIA 264		Working Pressure, P _w Calc. 775
Temperature 66	Fr .9943		Grav. .670
	.75		Fg .9463
			1.027

Initial SIPT (MV) = 487 psig

Final SIPC (MV) = 1032 psig

Q = C x P_i x F_r x F_g x F_v

Q (12.365)(264)(.9943)(.9463)(1.027)

3154 MCF/D

$$Q = C \left(\frac{P_i^2 - P_w^2}{P_i^2} \right)^n$$

$$Q = C \left(\frac{7,123,561 - 6,504,192}{7,123,561} \right)^n$$

$$(1.0952)^{.75} (3154) = (1.0706)(3154)$$

Act 3377

MCF/D

NOTE: Made spray of distillate throughout test.

By R. F. Headrick

Witness

Checked by: C. R. Wagner

Lewis D. Galloway
Lewis D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE July 12, 1962

Operator El Paso Natural Gas Company	Lease San Juan Unit 27-5 No. 69 (MV)
Location 1090'N, 990'E, Sec. 7-27-5	County Rio Arriba
Formation Mesa Verde	State New Mexico
Casing Diameter 5.5	Pool Blanco
Set At: Feet 5822	Tubing Diameter 1-1/4
Flow Zone From 5099	Set At: Feet 5714
To 5706	Total Depth 7900
Shut-In Pressure Sand/Water Frac.	Shut-In 6-28-62
	Flow Through Casing X
	Flow Through Tubing

Choke Size, Inches .750	Choke Constant, C 12.365	Days Shut-In 14	Shut-In Pressure, Tubing (MV) 489	PSIG 501
Working Pressure, Casing (MV) 1055	PSIG 1067	Working Pressure, Fw 459	PSIG 471	
Flow Zone From 358	PSIG 370	Eq. From Tables 1.039	Gravity .680	Eq. .9393
Temperature 74	.9868	0.75		

Initial SIPT (DK) 2470 psig
Final SIPT (DK) 2544 psig

$$Q = C \times P_1 \times F_1 \times F_2 \times F_3$$

$$Q = (12.365)(370)(.9868)(.9393)(1.039)$$

4406

MCF/D

$$Q_{OF} = Q \left(\frac{P_1^2 - P_2^2}{P_1^2 - P_w^2} \right)^n$$

$$Q_{OF} = \left(\frac{1,138,489}{916,648} \right)^n$$

$$(1.2420)^{.75}(4406) = (1.1763)(4406)$$

Q_{OF} 5183

MCF/D

NOTE: Unloaded steady stream of water through MV tubing before starting test. Blew medium fog of water throughout casing test.

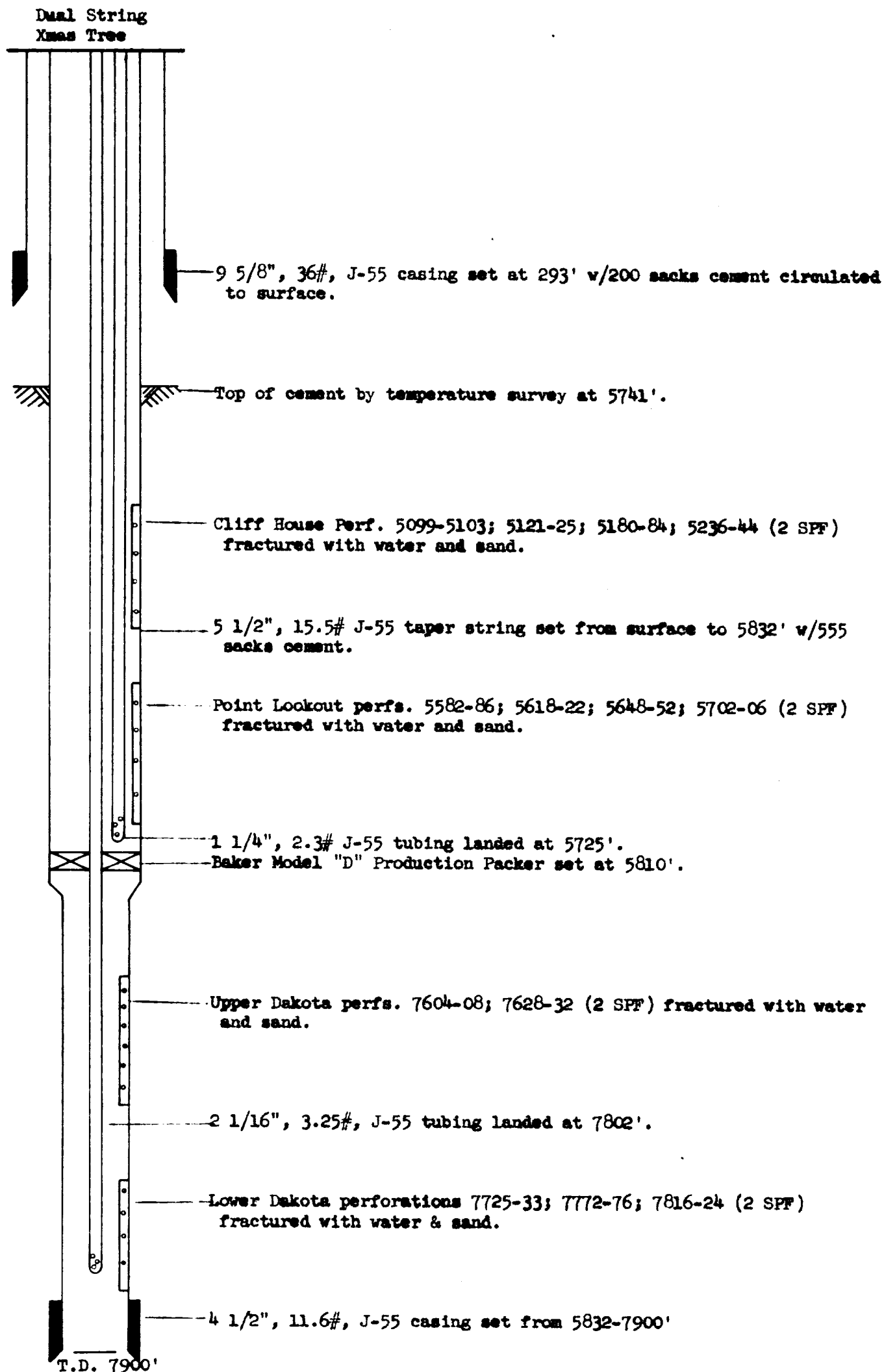
D. E. Mortensen

APPROVED BY

Calculated by: Tom B. Grant

H. L. Kendrick
H. L. Kendrick

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 27-5 Unit #69 (MD)
NE/4 Sec. 7, T-27-N, R-5-W



Operator	El Paso Natural Gas Company	Lease	San Juan Unit 27-5	Well No.	69 (MD)
Location of Well	Unit A Sec. 7 Twp 27 Rge 5	County	Rio Arriba	Type of Test	Initial July 12, 1962 Annual
UPPER	Name of Reservoir or Pool	Oil or Gas	Flowing or Artificial Lift	Producing casing or tubing	
COMPLETION:	Mesa Verde	Gas	Flowing	Tubing	
LOWER	Name of Reservoir or Pool	Oil or Gas	Flowing or Artificial Lift	Producing casing or tubing	
COMPLETION:	Dakota	Gas	Flowing	Tubing	

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 1

UPPER	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
COMPLETION:	6-28-62	7 days	1026(C) 487(T)	(XXXXX No)
LOWER	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
COMPLETION:	6-28-62	7 days	2657	(XXXXX No)
Zone Producing (Upper or Lower)			Hour & Date Flow Started	

FLOW TEST NO. 1

Elapsed Time	Shut-in Zone	Working Column	Flowing Zone	Flowing	Remarks
Since Flow Began	Pressure, PSIG	Pressure, PSIG	Pressure, PSIG	Temperature	
15 min.	1029		442	60	
30 min.	1030		381	62	
45 min.	1031		354	64	
60 min.	1031		332	65	
120 min.	1032		277	65	
180 min.	1032	(Calc.) 775	252	66	

OIL PRODUCED	Total Bbls.	Number Hours	Oil Rate	Gravity	Gas Oil Ratio
				Bbl. D	
GAS PRODUCED	Rate of Flow	Tested Through			
	3154 MCT D (Choke XXXXXX)				

REMARKS:

Spray of Distillate throughout test.

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 2

UPPER	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
COMPLETION:	6-28-62	14 days	1055(C) 489(T)	(XXXXX No)
LOWER	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
COMPLETION:	7-5-62	7 days	2470	(XXXXX No)
Zone Producing (Upper or Lower)			Hour & Date Flow Started	

FLOW TEST NO. 2

Elapsed Time	Shut-in Zone	Working Column	Shut-in Zone	Flowing	Remarks
Since Flow Began	Pressure, PSIG	Pressure, PSIG	Pressure, PSIG	Temperature	
15 min.	762	856	2511	65	
30 min.	637		2520	66	
45 min.	563		2532	68	
60 min.	527		2535	69	
180 min.	358	459	2544	74	

OIL PRODUCED	Total Bbls.	Number Hours	Oil Rate	Gravity	Gas Oil Ratio
				Bbl. D	
GAS PRODUCED	Rate of Flow	Tested Through			
	4406 AR F D (Choke XXXXXX)				

REMARKS

Opened MV tubing, after 10 minutes, unloaded steady stream of liquid for 1 minute 30 seconds. Blew medium fog of water throughout casing test.

The results of this test indicate (No Packer Leakage) ~~XXXXXXXXXXXX~~ in this well.

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved	19	OPERATOR	EL PASO NATURAL GAS COMPANY
NEW MEXICO OIL CONSERVATION COMMISSION		BY	H. L. Kendrick
		TITLE	Sr. Gas Engineer
		DATE	July 16, 1962