NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Form C-104
Revised 2-1-57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

~~XXXXXXXX~~
Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, N. M. (Place) April 27, 1961 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS

El Paso Natural Gas Co. (Company or Operator) Cox Canyon (Lease) Well No. 9-20 in SE ¼ NE ¼

H (Unit Letter), Sec. 20, T 32, R 11, NMPM, Blanco Mesa Verde (Pool)

San Juan County. Date Spudded ~~Date Completed~~ Re-Completed 2-28-61

Please indicate location

D	C	B	A
E	F	G	H X
L	K	J	I
M	N	O	P

Elevation 6702 Total Depth 5900 PBTD

Top Oil/Gas Pay 5204 Name of Prod. Form. Mesa Verde

PRODUCING INTERVAL -

Perforations

Open Hole Depth Casing Shoe 5900 Tubing 5874

OIL WELL TEST -

Natural Prod. Test: bbls.oil, bbls water in hrs, min. Size

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used): bbls.oil, bbls water in hrs, min. Size

GAS WELL TEST -

Natural Prod. Test: MCF/Day; Hours flowed Choke Size

Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: MCF/Day; Hours flowed

Choke Size Method of Testing:

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand):

Casing Pressure Tubing Pressure Date first new oil run to tanks

Oil Transporter

Gas Transporter El Paso Natural Gas Co.

Remarks An Intermitter was installed. Turned back on Production, 3-7-61.

Tubing, Casing and Cementing Record

Size	Feet	Sax
10-3/4	232	
7-5/8	3672	
5-1/2	5900	
2"	5874	

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DIST. 3

I hereby certify that the information given above is true and complete to the best of my knowledge

Approved MAY 1 1961, 19

OIL CONSERVATION COMMISSION

By: Original Signed Emery C. Arnold

Title Supervisor Dist. # 3

El Paso Natural Gas Company
(Company or Operator)

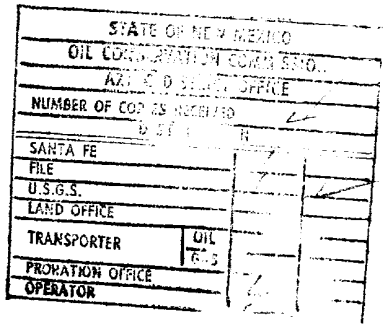
By C. E. Pamell
(Signature)

Title Production Engineer

Send Communications regarding well to

Name

Address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NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

(Form C-104)
(Revised 7/1/52)

REQUEST FOR (OIL) - (GAS) ALLOWABLE

New Well X
Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, New Mexico (Place) 11-1-56 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Pacific Northwest Pipeline Corp. (Company or Operator) Cox Canyon (Lease), Well No. 9-20, in SE ¼ NE ¼,

H Unit Letter, Sec. 20, T. 32N, R. 11W, NMPM., Blanco Mesa Verde Pool

San Juan County. Date Spudded 8-25-56, Date Completed 10-29-56

Please indicate location:

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

1850 N, 990 E

Elevation 6,702 Total Depth 5900, P.B. 5897

Top oil/gas pay 5204 Name of Prod. Form. Mesa Verde

Casing Perforations: 5204 - 5642 ; 5670 - 5874 or

Depth to Casing shoe of Prod. String

Natural Prod. Test BOPD

based on bbls. Oil in Hrs. Mins.

Test after acid or shot BOPD

Based on bbls. Oil in Hrs. Mins.

Gas Well Potential 18,621 mcf/d CAOF

Size choke in inches

Date first oil run to tanks or gas to Transmission system:

Transporter taking Oil or Gas: Pacific Northwest Pipeline Corp.

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Casing and Cementing Record

Size	Feet	Sax
10 3/4	232	200
7 5/8	3672	200
* 5 1/2	5900	w/150
2	5874	

Remarks: * 5 1/2" Liner Top 3602 set @ 5900
Frac. w/ water only in 2 sections using Rubber Ball method

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

Approved 11-2, 1956

Pacific Northwest Pipeline Corp. (Company or Operator)

OIL CONSERVATION COMMISSION

By: Original signed by A. R. Kendrick (Signature)

Title Oil and Gas Inspector Dist. #3

Title District Proration Engineer

Send Communications regarding well to:

Name Pacific Northwest Pipeline Corp.

Address 405½ West Broadway, Farmington, N. Mex.

OIL CONSERVATION COMMISSION

AZTEC DISTRICT OFFICE

No. Copies Received 4

DISTRIBUTION

	NO. FURNISHED	
Operator	1	
[illegible]	1	
Operator Office	1	
[illegible] Land Office		
U. S. G. S.		
Transporter		
File	1	✓

1 - L. B. Truby
1 - W. R. Johnston
1 - File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Blanco** Formation **Mesaverde** County **San Juan**

Initial **XX** Annual _____ Special _____ Date of Test **10-29-56**

Company **Pacific Northwest Pipeline Corp** Lease **Cox Canyon 32-11** Well No. **9-20**

Unit **H** Sec. **20** Twp. **32N** Rge. **11W** Purchaser **Not Corrected**

Casing **7 & 5** Wt. _____ I.D. _____ Set at **3672 5900** Perf. _____ To _____

Tubing **2"** Wt. _____ I.D. _____ Set at **5874** Perf. _____ To _____

Gas Pay: From **5874** To **5204** L _____ xG **est. .690** -GL _____ Bar.Press. **12.0**

Producing Thru: Casing _____ Tubing **XX** Type Well **Single**
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ *SI 11 days* Type Taps **---**

No.	Flow Data ~~(Prover)~~ ~~(Line)~~ Size	Flow Data (Choke) ~~(Orifice)~~ Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						979		1030		~~Shut-in~~
1.										
2.	2	3/4	399		77	399	77	920		~~3 hrs.~~
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	14.1605		411	.9840	.9325	1.043	5570
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
F_c _____ $(1-e^{-s})$ _____ P_c **1042** P_c^2 **1085.8**

No.	P_w ~~P_t~~ (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.	932					868.6	217.2		4.999
4.									
5.									

Absolute Potential: **18,621** MCFPD; n **.75/ 3.343**
COMPANY **Pacific Northwest Pipeline Corporation**
ADDRESS **405½ West Broadway**
AGENT and TITLE **W. B. Richardson, Well Test Engineer**
WITNESSED _____
COMPANY _____

REMARKS

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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.