

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE October 1, 1962

Operator El Paso Natural Gas Company		Lease Riddle No. 4-A	
Location 1190'N, 863'E, Sec. 1-29-9		County San Juan	State New Mexico
Formation Pictured Cliff		Pool Blanco	
Casing Diameter 2.875	Set At Feet 3146	Tubing Diameter No Tubing	Set At Feet ----
Play Zone Feet 3057	To 3073	Total Depth 3156	Shut In 9-21-62
Stimulation Method Sand/Water Frac.		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .75	Choke Constant: C 12.365			"TUBINGLESS COMPLETION"		
Shut-In Pressure, Casing, PSIG 1004	PSIA 1016	Days Shut-in 10	Shut-In Pressure, Tubing, PSIG No Tubing	PSIA ----		
Flowing Pressure, P, PSIG 91	PSIA 103		Working Pressure: P _w , PSIG Calc.	PSIA 130		
Temperature 61	F _r .9990	.85	F _{pv} (From Tables) 1.009	Gravity .650	F _g .9608	

CHOKE VOLUME $Q = C \times P_r \times F_r \times F_g \times F_{pv}$

$$Q = (12.365)(103)(.9990)(.9608)(1.009)$$

1233

MCF/D

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

$$Aof = \left(\frac{1,032,256}{1,015,356} \right)^n (1.0166)^{.85} (1233) = (1.0141)(1233)$$

Aof 1250 MCF/D

NOTE: Blew clear gas



By T. B. Grant

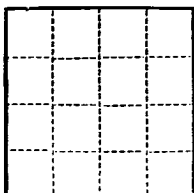
Checked by

W. D. Dawson

Lewis D. Galloway
Lewis D. Galloway

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe
Lease No. 97201-A
Unit _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....	<u>Water Frac.</u>	<u>X</u>

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 25, 1962

Middle "A"
Well No. 4 is located 1100 ft. from N line and 803 ft. from W line of sec. 1
NE Section 1 29-S 9-W N.M.P.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Blanco Pictured Cliffs San Juan New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6372 ft.

DETAILS OF WORK

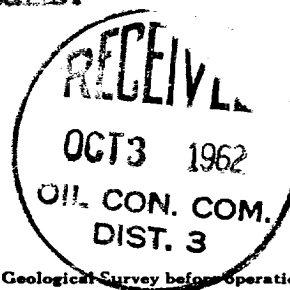
(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

On 9-12-62, T.D. 3156'. C.O.T.D. 3120'.
Perf 3059-73; 3057-81 (3 SPF);
Frac w/30,000 gallons water, 30,000# sand.
Flush 2100 gallons water. I.R. 23 BPM. Max pr 31000'.
IDP 2000#, 12 pr 2500-3000#. 1 drop of 12 balls.

RECEIVED

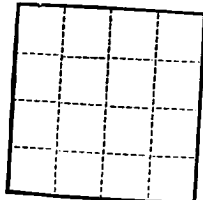
OCT 1 1962

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO



I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Company
Address Box 900
Farmington, New Mexico
By ORIGINAL SIGNED H.E. McANALLY
Title Petroleum Engineer



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Form Approved.

Land Office Santa Fe
Lease No. 073201-A
Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		

RECEIVED

SEP 13 1962

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

Riddle "A"
Well No. 4 is located 1190 ft. from [N] line and 863 ft. from [E] line of sec. 1
NE Section 1
(1/4 Sec. and Sec. No.) 29-N (Twp.) 9-W (Range) N.M.P.M. (Meridian)
Blanco Pictured Cliffs (Field) San Juan (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 6399 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded 9-5-62. On 9-5-62 T.D. 305'.
Ran 7 jts. 9 5/8" 43.5# S-98 casing (294') set at 304'.
Cemented w/210 sacks regular, 1/4 cu. ft. Strata-Crete 4'/sk.,
2 1/2 A-6, circulated to surface. Held 600#/30 min.

On 9-9-62, T.D. 3157'. Ran 107 jts. 2 7/8" 6.4# J-55 casing (3145')
set at 3155'. Cemented w/185 sks Dixie & El Toro "35", w/2 1/2 cu. ft. cement.
Held 1500#/30 minutes.

RECEIVED
SEP 14 1962
OIL CON. COM.
DIST. 3

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Farmington, New Mexico

By ORIGINAL SIGNED H.E. McANALLY

Title Petroleum Engineer