

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company Pan American Petroleum Corporation				Address P. O. Box 480, Farmington, New Mexico			
Lease Lobato Gas Unit "D"	Well No. 1	Unit Letter D	Section 3	Township T-29-N	Range R-9-W		
Date Work Performed		Pool Blanco Pictured Cliffs		County San Juan			
THIS IS A REPORT OF: (Check appropriate block)							
<input type="checkbox"/> Beginning Drilling Operations		<input checked="" type="checkbox"/> Casing Test and Cement Job		<input type="checkbox"/> Other (Explain):			
<input type="checkbox"/> Plugging		<input type="checkbox"/> Remedial Work					
Detailed account of work done, nature and quantity of materials used, and results obtained. Spudded 12-1/4" hole December 7, 1961. Set 8-5/8" casing at 197' with 165 sacks Incor cement containing 2 percent Calcium chloride. Failed to circulate. Cemented annulus with 50 sacks Incor and circulated 10 sacks of cement. Tested 8-5/8" casing with 450 psi for 30 minutes, which held with no indication of pressure drop. Reduced hole to 7-7/8" at 197'. Resumed drilling operations.							
Witnessed by		Position		Company			
FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY							
ORIGINAL WELL DATA							
D F Elev.	T D		P BTD		Producing Interval		Completion Date
Tubing Diameter		Tubing Depth		Oil String Diameter		Oil String Depth	
Perforated Interval(s)							
Open Hole Interval				Producing Formation(s)			
RESULTS OF WORKOVER							
Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD	
Before Workover							
After Workover							
OIL CONSERVATION COMMISSION				I hereby certify that the information given above is true and complete to the best of my knowledge.			
Approved by Original Signed By A. R. KENDRICK				Name ORIGINAL SIGNED BY R. M. Bauer, Jr.			
Title PETROLEUM ENGINEER DIST. NO. 3				Position Senior Petroleum Engineer			
Date DEC 13 1961				Company Pan American Petroleum Corporation			



STATE OF NEW MEXICO		
OIL CONSERVATION COMMISSION		
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FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company Pan American Petroleum Corporation				Address P. O. Box 480, Farmington, New Mexico			
Lease Lobato Gas Unit "D"	Well No. 1	Unit Letter D	Section 3	Township T-29-N	Range R-9-W		
Date Work Performed December 12, 1961	Pool Blanco Pictured Cliffs			County San Juan			

THIS IS A REPORT OF: (Check appropriate block)

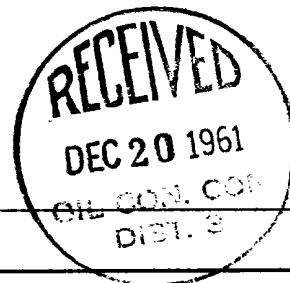
- ☐ Beginning Drilling Operations
 ☒ Casing Test and Cement Job
 ☒ Other (Explain): **Frac**
- ☐ Plugging
 ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Total depth 2323'. 4-1/2" casing set at 2323' with 650 sacks 4 percent gel Incor cement containing 1-1/2 pounds Tuf Plug per sack followed by 50 sacks Incor neat. After waiting on cement for 3 days tested casing and cement job with 3000 psi for 15 minutes, with no drop in pressure.

Perforated Pictured Cliff with 8 shots per foot 2243-2249'. Fracked these perforations with 29,800 gallons water containing 1 percent calcium chloride and 30,000 pounds of sand. Pressures were: Breakdown 1350 psi; average treating 1500 psi. Average injection rate 46 barrels per minute. Currently testing well.

Landed 1-1/4" tubing at 2247'.



Witnessed by	Position	Company
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FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval			Producing Formation(s)	

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION		I hereby certify that the information given above is true and complete to the best of my knowledge.	
Approved by	Original Signed By A. R. KENDRICK	Name	ORIGINAL SIGNED BY R. M. Bauer, Jr.
Title	PETROLEUM ENGINEER DIST. NO. 31	Position	Senior Petroleum Engineer
Date	DEC 20 1961	Company	Pan American Petroleum Corporation

Santa Fe, New Mexico

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in **QUINTUPLICATE**. If State Land submit 6 Copies

Pan American Petroleum Corporation
(Company or Operator)

Lobato Gas Unit WDM
(Lease)

Well No. 1 in NW $\frac{1}{4}$ of NW $\frac{1}{4}$, of Sec. 3, T. 29N, R. 9W, NMPM.

Blanco Pictured Cliffs

Pool. San Juan

...County.

Well is 1190 feet from North line and 790 feet from West line

of Section 3 If State Land the Oil and Gas Lease No. is.....

Drilling Commenced.....**December 7**....., 19**61**..... Drilling was Completed.....**December 11**....., 19**61**

Name of Drilling Contractor..... **Brannon & Murray Drilling Company**

Address P. O. Box 672, Coleman, Texas

Elevation above sea level at Top of Tubing Head 5602' (GL) The information given is to be kept confidential until

Not confidential 19

No. 1, from 2243 to 2249 No. 4, from _____ to _____

No. 2, from.....to..... No. 5, from.....to.....

No. 3, from.....to..... No. 6, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from..... to..... feet.

No. 2, from to feet. MAR 1962

No. 3, from to feet. 10000000

No. 4, from to feet. DIST. 3

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
6-5/8"	22.7	New	183'	Guide			Surface
4-1/2"	10.5	New	2326'	Guide			Oil string

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. BAGS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12-1/4"	8-5/8"	196'	165	Halliburton 1 plug		
7-7/8"	4-1/2"	2323'	700	Halliburton 2 plug		

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Total depth 2323'. Perforated Pictured Cliffs with 8 shots per foot 2243-2249'. Sand water fracked with 29,800 gallons of water containing 1 percent Calcium Chloride and 20,000 pounds of sand.

Result of Production Stimulation. Completed as shut-in gas well Blanco Pictured Cliffs Field December 22, 1961, flowed 3 hours and gauged 2148 MCF per day with tubing pressure flowing 100 psi and casing pressure flowing 80 psi. Top pay Pictured Cliffs 2240'. RDB 5615!

Depth Cleaned Out.....2276'

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 2323 feet, and from feet to feet.
Cable tools were used from feet to feet, and from feet to feet.

Completed as shut-in Blanco Pictured Cliffs Field Well PRODUCTION

Put to Producing December 22, 1961

OIL WELL: The production during the first 24 hours was 2148 barrels of liquid of which % was oil; % was emulsion; % water; and % was sediment. A.P.I. Gravity.

GAS WELL: The production during the first 24 hours was 2148 M.C.F. plus barrels of liquid Hydrocarbon. Shut in Pressure 895 lbs. (SICP)

Length of Time Shut in 21 hours

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico

Northwestern New Mexico

T. Anhy	T. Devonian	T. Ojo Alamo
T. Salt	T. Silurian	T. Kirtland-Fruitland
B. Salt	T. Montoya	T. Farmington
T. Yates	T. Simpson	T. Pictured Cliffs
T. 7 Rivers	T. McKee	T. Menefee
T. Queen	T. Ellenburger	T. Point Lookout
T. Grayburg	T. Gr. Wash	T. Mancos
T. San Andres	T. Granite	T. Dakota
T. Glorieta	T.	T. Morrison
T. Drinkard	T.	T. Penn
T. Tubbs	T.	T.
T. Abo	T.	T.
T. Penn	T.	T.
T. Miss	T.	T.

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	1110	1110	Surface sands and shales.				
1110	1240	130	Ojo Alamo sand.				
1240	1908	668	Kirtland shale including Farmington sand and shale.				
1908	2240	332	Fruitland sands, shales, and coals.				
2240	2323	83	Pictured Cliffs sand and shale.				
			(Tops from "E" log)				

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

January 2, 1962

Company or Operator Pan American Petroleum Corporation P. O. Box 480
Name R. M. Bauer, Jr. ORIGINAL SIGNED BY Position Title Senior Petroleum Engineer

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Pictured Cliffs Formation Pictured Cliffs County San Juan
Initial X Annual _____ Special _____ Date of Test 12-29-61
Company Pan American Petroleum Corp. Lease Lobato Gas Unit "D" Well No. 1
Unit D Sec. 3 Twp. 29-N Rge. 9-W Purchaser El Paso Natural Gas Company
Casing 1-1/2 Wt. 9.5 I.D. 4.090 Set at 2323 Perf. 2243 To 2249
Tubing 1-1/4 Wt. 2.40 I.D. 1.380 Set at 2247 Perf. - To -
Gas Pay: From 2243 To 2249 L 2246 xG .65 (EST) GL 1460 Bar. Press. 12
Producing Thru: Casing X Tubing _____ Type Well Single-Gas
Date of Completion: 12-22-61 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 95° F

OBSERVED DATA

Tested Through (none) (Choke) (none)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	7 Days	Start-In				876		876		
1.	2"	1 1/4"	169		60 est	218	60° est	187	60° est	3 hrs
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3690		177	1.0000	.9600	1.0170	2138
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 888 P_c² 788,544

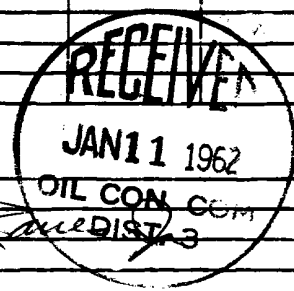
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	230					52,900	735,644		
2.									
3.									
4.									
5.									

Absolute Potential: 2268 MCFPD; n 0.85COMPANY PAN AMERICAN PETROLEUM CORPORATIONADDRESS Box 480, Farmington, New MexicoAGENT and TITLE R. M. Bauer, Jr. Senior Petroleum Engineer

WITNESSED _____

COMPANY _____

REMARKS _____



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 .