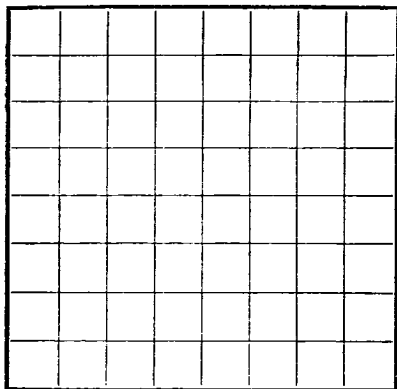
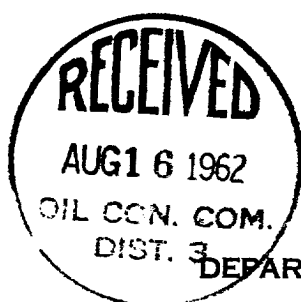




LOCATE WELL CORRECTLY

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 97764
LEASE OR PERMIT TO PROSPECT

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Co. Address Box 990, Farmington, New Mexico
Lessor or Tract Schumacher Field Basin Dakota State New Mexico
Well No. 12 Sec 17 T. 30N R. 10W Meridian N.M.P.M. County San Juan
Location 800 ft. N. of 8 Line and 800 ft. E. of W Line of Sec. 17 Elevation 6467
(Derrick floor relative to datum)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.
Signed D. W. Meehan Original Signed D. W. Meehan

Date August 13, 1962 Title Petroleum Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling _____, 19____ Finished drilling _____, 19____

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 7238 to 7382 (G) No. 4, from _____ to _____
No. 2, from 7382 to 7508 (G) No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
<u>9 5/8</u>	<u>35</u>	<u>8</u>	<u>3-55</u>	<u>204</u>	<u>2-55</u>				<u>Surface</u>
<u>4 1/2</u>	<u>19.6</u>	<u>8</u>	<u>3-55</u>	<u>1289</u>	<u>2-55</u>				<u>2-55 Csg.</u>
<u>2 3/8</u>	<u>4.7</u>	<u>8</u>	<u>3-55</u>	<u>7408</u>	<u>2-55</u>				<u>Prod. tubing</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>9 5/8</u>	<u>301</u>	<u>200</u>	<u>Circulated</u>		
<u>4 1/2</u>	<u>7541</u>	<u>715</u>	<u>3 Stg.</u>		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
<u>Perf. 7297-7303 w/2 STP; 7384-88, 7396-7400 w/3 STP, frac. w/71,000 gallons water</u> <u>80,000# sand. Flush w/5000 gallons water. I.M. 31.5 BPM. Max. pr. 4300#, MD</u> <u>1350#, tr. pr. 3400-3800-3000#. Dropped 3 sets of 12 balls.</u>						

TOOLS USED

Rotary tools were used from _____ feet to 7541 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____ 7-19 _____, 19 62 Put to producing _____, 19____

The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours 2,455,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 2042 Csg. A.O.P. = 2612 MCF/D

EMPLOYEES

Brennan & Murray Rig #2 _____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>1572</u>	<u>1572</u>	<u>Tan to gry cr-grn ss interbedded w/gry sh.</u>
<u>1572</u>	<u>1660</u>	<u>88</u>	<u>Ojo Alamo ss. White cr-grn s.</u>
<u>1660</u>	<u>2580</u>	<u>920</u>	<u>Kirtland form. Gry sh interbedded w/tight gry fine grn ss.</u>
<u>2580</u>	<u>2909</u>	<u>329</u>	<u>Fruitland form. Gry carb sh, scattered coals, coals & gry, tight, fine-grn ss.</u>
<u>2909</u>	<u>2990</u>	<u>81</u>	<u>Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.</u>
<u>2990</u>	<u>2990 4540</u>	<u>1550</u>	<u>Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.</u>
<u>4540</u>	<u>4722</u>	<u>182</u>	<u>Cliff House ss. Gry, fine-grn, dense sil ss.</u>
<u>4722</u>	<u>5164</u>	<u>442</u>	<u>Manatee form. Gry, fine-grn s, carb sh & coal.</u>
<u>5164</u>	<u>5426</u>	<u>262</u>	<u>Point Lockout form. Gry, very fine sil ss w/frequent sh breaks.</u>
<u>5426</u>	<u>6443</u>	<u>1017</u>	<u>Mancos formation. Gry carb sh.</u>
<u>6443</u>	<u>7178</u>	<u>735</u>	<u>Gallup form. Lt gry to brn calc carb micac glauco very fine gry ss w/irreg interbed sh.</u>
<u>7178</u>	<u>7238</u>	<u>60</u>	<u>Greenhorn form. Highly calc gry sh w/thin lnt.</u>
<u>7238</u>	<u>7382</u>	<u>144</u>	<u>Graneros form. Bk gry shale, fossil & carb w/pit incl.</u>
<u>7382</u>	<u>7508</u>	<u>126</u>	<u>Dakota form. Lt to dk gry foss carb al calc al silty ss w/pyrite incl thin sh bands clay & shale breaks.</u>
<u>7508</u>	<u>7541</u>	<u>33</u>	<u>Morrison form. Interbed grn brn & red waxy sh & fr to cr grnd.</u>

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler and Whistler (1973).

[illegible]

CONFIDENTIAL

1. The Government of the United States of America, the Government of the Republic of the Philippines, and the Government of the Republic of China (Taiwan) have agreed to enter into a Mutual Defense Treaty (MDT) between the United States and the Republic of the Philippines, and a Mutual Defense Treaty (MDT) between the United States and the Republic of China (Taiwan).

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

16-43084-2 U. S. GOVERNMENT PRINTING OFFICE

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FORMATION RECORD—Continued