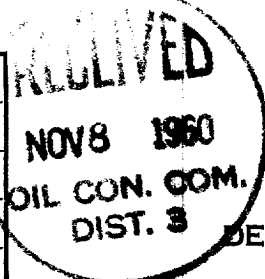
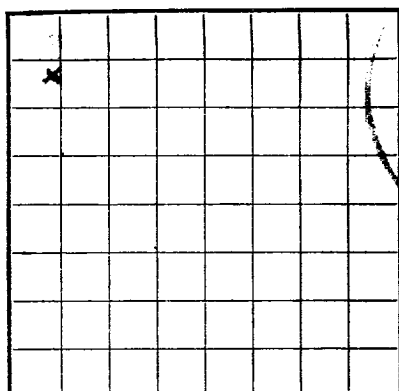
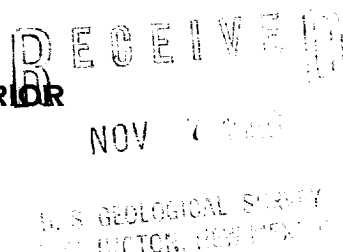


Santa Fe

U. S. LAND OFFICE 080657

SERIAL NUMBER

LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company La Plata Gathering System, Inc. Address Box 728 - Farmington, New Mexico
Lessor or Tract San Juan 32-5 Unit Field Undesignated State New Mexico
Well No. 1-31 Sec. 31 T. 32-N R. 5-W Meridian N.M.P.M. County Rio Arriba
Location 990 ft. N. of Line and 713 ft. W. of Line of Section 31 Elevation 6,666
(Derrick floor relative to sea level)

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 C. Deeson Neal, Agent in Farmington
Date November 4, 1960 Title _____

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

Commenced drilling July 11, 1960, 19____ Finished drilling October 13, 1960, 19____

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from 5,638 to 5,883 No. 4, from _____ to _____
No. 2, from 5,918 to 6,028 No. 5, from _____ to _____
No. 3, from 8,183 to 8,300 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>8-5/8"</u>	<u>26.4</u>	<u>8</u>	<u>CS-40</u>	<u>8,183</u>	<u>OK</u>	<u>OK</u>	<u>5,638</u>	<u>6,028</u>	<u>Perforated</u>
<u>5-1/2"</u>	<u>19.6</u>	<u>8</u>	<u>CS-40</u>	<u>8,300</u>	<u>OK</u>	<u>OK</u>	<u>6,028</u>	<u>8,300</u>	<u>Perforated</u>
<u>2-1/16"</u>	<u>1.6</u>	<u>14</u>	<u>CS-40</u>	<u>8,300</u>	<u>OK</u>	<u>OK</u>	<u>8,300</u>	<u>8,300</u>	<u>Perforated</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>8-5/8"</u>	<u>816'</u>	<u>500</u>	<u>Halliburton</u>	<u>Mostly Water</u>	
<u>5-1/2"</u>	<u>8,368</u>	<u>230</u>	<u>Halliburton</u>	<u>Mostly Water</u>	
		<u>230 sacks at 6,234'</u>	<u>stage collar.</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>8/20/60</u>	<u>Spotted 1000 gal.</u>	<u>15% NCA.</u>	<u>On 8/21/60</u>	<u>sand water fractured through perfs.</u>		
<u>818'-8300'</u>	<u>with 70,337 gal.</u>	<u>water and 75,000% sand.</u>	<u>Flushed with 5,000 gal.</u>			
<u>On 9/30</u>	<u>sand water fractured perfs.</u>	<u>5918-6028</u>	<u>with 30,000 gal. water,</u>	<u>50,000% sand.</u>		
<u>Flushed with 6300 gal.</u>	<u>sand water fractured perfs.</u>	<u>5638-5883"</u>	<u>with 25,000 gal.</u>			
<u>water and 25,000% sand.</u>	<u>Flushed with</u>	<u>6,000 gal. water.</u>				

Rotary tools were used from _____ feet to 83,69 feet, and from _____ feet to _____ feet

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

Shut in for potential test _____ DATES _____

10/13/60, 19____ Put to producing Mesa Verde tested 10/24/60

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 Mesa Verde: 3,679 MCF/Day Aof

Rock pressure, lbs. per sq. in. Dakota: 912 MCF/Day Aof

_____ 1090

EMPLOYEES

Great Western Drilling Co., Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>-0-</u>	<u>2175</u>	<u>2175</u>	<u>Coarse white sands interbedded with gray soft shale</u>
<u>2175</u>	<u>2510</u>	<u>335</u>	<u>Fine to medium gray sands and gray shales T/O o Alamo at 2175</u>
<u>2510</u>	<u>2865</u>	<u>355</u>	<u>Medium white to gray sand with thick shale beds. Top Kirtland at 2510'</u>
<u>2865</u>	<u>3440</u>	<u>575</u>	<u>Fine to medium gray sand interbedded with gray-black shale with some coal bed. Top of Fruitland at 2865'</u>
<u>3440</u>	<u>3745</u>	<u>305</u>	<u>Medium gray fine silty sand with thin coal beds and gray shales. Top Pictured Cliffs at 3440'</u>
<u>3745</u>	<u>5745</u>	<u>2000</u>	<u>Gray shales and gray silt - stones w/Top Lewis shale at 3745'</u>
<u>5745</u>	<u>5918</u>	<u>173</u>	<u>Gray silty sand with gray black shales and coal beds</u>
<u>5918</u>	<u>6457</u>	<u>539</u>	<u>White to light gray fine to coarse sand and siltstones with gray silty shale. Top Point Lockport 5918'</u>
<u>6457</u>	<u>8083</u>	<u>1626</u>	<u>Gray limy shale with silty shale sands. Top Mancos shale 6457'</u>
<u>8083</u>	<u>8325</u>	<u>242</u>	<u>White to light gray sandstone with gray to black shale. Top Dakota 8183'</u>
<u>8325</u>	<u>8334</u>	<u>9</u>	<u>Plugged back Total Depth</u>
FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD—Continued

