

A blank 10x10 grid for graphing, consisting of 10 columns and 10 rows of squares. The grid is used for plotting the graph of the function $y = \sin x$ for $0 \leq x \leq 2\pi$.

LOCATE WELL CORRECTLY

U. S. LAND OFFICE Hobbs, New Mexico
SERIAL NUMBER L. C. 062178
LEASE OR PERMIT TO PROSPECT -----

Federal "A" No. 4
UNITED STATES

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Lario Oil & Gas Company Address Box 1209, Odessa, Texas
 Lessor or Tract Federal "A" Field Milnesand San Andres State New Mexico
 Well No. 4 Sec. 14 T. 8-S R. 34-E Meridian _____ County Roosevelt
 Location 660 ft. N. of _____ Line and 1980 ft. E. of _____ Line of SE/4 Elevation 4272
 (S.) (W.) (Derrik 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 B. F. Finkbeiner

Date Feb. 4, 1964 Title Dist. Prod. Superintendent

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

Commenced drilling Dec. 8, 1963 Finished drilling Dec. 17, 1963

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3784 to 4680 No. 4, from _____ to _____
No. 2, from _____ to _____ No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from none to _____

No. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

CASING RECORD

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	374.88	125 sacks regular 8% gel and 75 sacks neat w/2% calcium Chloride			
4-1/2	4680.30	200 sacks 50/50 posmix w/2% gel, 3/4 of 1% CFR and 5% salt per sack.			
				Top of cement at 3875'	

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

TOOLS USED

Rotary tools were used from ~~surface~~ feet to ~~4680~~ feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

-----**Jan. 7, 1964**-----, 19----- Put to producing -----**Jan. 1**-----, 19-**64**

The production for the first 24 hours was 58.50 barrels of fluid of which 100 % was oil; 0 % emulsion; 0 % water; and 0 % sediment. Gravity, °Bé. 29.1

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

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

-----~~Verna Drilling Company~~-----, Driller
-----~~1216 Mercantile Securities Building~~-----, Driller
Dallas, Texas **FORMATION RECORD**

FORMATION RECORD

FROM--	TO--	TOTAL FEET	FORMATION
0	205	205	Caliche, Sand, Red Bed
205	376	171	Red Bed
376	620	244	Red Bed and Shale
620	1600	980	Red Bed
1600	2115	515	Red Bed, Shale and Sand
2115	2150	35	Red Bed and Shale
2150	2200	50	Red Bed and Anhydrite streaks
2200	2230	30	Anhydrite
2230	2530	300	Red Bed
2530	3122	592	Anhydrite and Salt
3122	3422	300	Anhydrite, Shale, Lime Streaks
3422	3810	388	Anhydrite and Shale
3810	3865	55	Lime
3865	4165	300	Lime and Anhydrite
4165	4680	515	Lime
	GEOLOGIC TOPS - Electric Log		
Yates	2608		
San Andres	3784		
Porosity	4531		

