

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 $0 \leq x \leq 2\pi$.

RECEIVED
JUN 22 1960
OIL CON. COM.
DIST. 3
DEPA

U. S. LAND OFFICE **Ignacio**
SERIAL NUMBER _____
LEASE OR PERMIT TO PROSPECT _____
14-20-604-82

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED

JUN 20 1960

LOG OF OIL OR GAS WELL

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

LOCATE WELL CORRECTLY

Company Astec Oil and Gas Company Address Drewer 570, Farmington
Lessor or Tract Ute Indian Field Verde Gallup State New Mexico
Well No. 10-E Sec. 20 T. 31N R. 14W Meridian N.M.P.M. County San Juan
Location 660 ft. N of S Line and 660 ft. E of E Line of Section 20 Elevation 5630
(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.

Date June 16, 1960 Signed ORIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon
Title District Superintendent

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

Commenced drilling 5/12/60, 1960 Finished drilling 6/8/60, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 312 to 372 No. 4, from _____ to _____

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

No. 3, 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—	
7 1/2" 14	2.15	8.0	11-30	100	11-30	11-30	11-30	11-30	11-30
2 3/8	2.75	8.0	11-35	100	11-35	11-35	11-35	11-35	11-35
HOLEY OF GIL OF CYS MEET									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7 5/8	100'	125	Two-Plug Displacement		
4 1/2"	3150'	160	Two-Plug		

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
Send Oil	fraced with	1125 bbls. oil	and 50,000 sand.	SEP-1800	1600	
Treating	Pr.	1600	I. R. 47 bps			

TOOLS USED

Rotary tools were used from 0 feet to 3150 feet, and from _____ feet to _____ feet

Cable tools were used from 0 feet to 3272 feet, and from _____ feet to _____ feet

DATES

Put to producing June 15, 1960

The production for the first 24 hours was 228 barrels of fluid of which 100 % was oil; 0 % emulsion; 0 % water; and 0 % sediment. Gravity, °Bé. _____

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

Rock pressure, lbs. per sq. in. _____

EMPLOYEES		Full
-----------	--	------

EMPLOYEES

_____, Driller _____, Driller

_____, Driller _____, Driller

FORMATION RECORD

FORMATION RECORD			
FROM—	TO—	TOTAL FEET	FORMATION
0	248	248	Surface
248	568	320	Sand and Shale
568	1152	584	Sand and Shale
1152	1661	509	Sand and Shale
1661	1988	327	Sand and Shale
1988	2085	97	Sand and Shale
2085	2190	106	Shale
2190	2290	100	Sand and Shale
2290	2331	41	Sand and Shale
2331	2432	101	Shale
2432	2490	58	Sand and Shale
2490	2548	58	Shale
2548	2598	50	Sand and Shale
2598	2682	84	Shale
2682	2725	43	Sand and Shale
2725	2874	149	Sand and Shale
2874	2917	43	Sand and Shale
2917	2970	53	Shale
2970	3075	105	Sand and Shale
3075	3082	7	Sand and Shale
3082	3150	68	Sand and Shale
			Top of Lower Gallup - 3132'
			"4" Marker - 3208'

[OVER]

[OVER]

LOKATION RECORD—CONTINUED

16-48094-4

FROM—	TO—	TOTAL FEET	FORMATION
			1. 0-10' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 2. 10-20' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 3. 20-30' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 4. 30-40' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 5. 40-50' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 6. 50-60' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 7. 60-70' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 8. 70-80' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 9. 80-90' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert. 10. 90-100' Sandstone, yellowish, medium grained, somewhat silty, contains small pebbles of quartz and chert.

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 "stake-jacked", 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

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10 20 30 40 50 60

DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY
WASHINGTON, D. C.

