

Indian Agency
U. S. LAND OFFICE Dulce, New Mexico
SERIAL NUMBER Cont. All-Tract #19
LEASE OR PERMIT TO PROSPECT
J. Apache "B"APR 20 1962
OIL CON. COM.
DIST. 3

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Amarado Petroleum Corporation Address Box 1469, Durango, Colorado
Lessor or Tract Federal Gov't (Apache) Field Sasin Dakota State New Mexico
Well No. 9 Sec. 20 T. 24N R. 5W Meridian NMP County Do Arriba
Location 990' of N Line and 990' of E Line of Section 20 Elevation 6567' DF
(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 D.F. Furse

Date 4/17/62Title Foreman

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

Commenced drilling 9:30 PM - 3/22/62, 1962 Finished drilling 4/16/62, 1962

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2220'-2336' in to P.L. Zone - G No. 4, from 5476'-6075' Gallup-Non-Prod. in this
Cemented off w/ D.V. Tool & Protected well and protected by Cement. G.
No. 2, from to No. 5, from to
No. 3, from to No. 6, from 6584'-6696' Dakto Zone - G & will
prod. from this zone.

IMPORTANT WATER SANDS

No. 1, from None - encountered 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>25.44</u>	<u>5J-SH</u>	<u>Amaco</u>	<u>160'</u>	<u>TI</u>	<u>None</u>			
<u>3-1/2"</u>	<u>9.37</u>	<u>J55-SS</u>	<u>CP&I</u>	<u>6811'</u>	<u>Hallib.</u>	<u>None</u>			
<u>3 1/2" string has D.V. Tool set at 2408' - see below for cementing.</u>									
<u>After drill out D.V. Tool - 2408' - Test 3 1/2" Csg. w/4000# for 1 1/2 Hr. Held OK.</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>174'</u>	<u>150 Sacks Reg.</u>	<u>Halliburton</u>	<u>-</u>	<u>Cement Circulated</u>
<u>3-1/2"</u>	<u>6811'</u>	<u>400 "50-50"</u>	<u>Halliburton</u>	<u>9.8</u>	<u>-</u>
<u>3-1/2"</u>	<u>Hallib. D.V. Tool in string at 2408'</u>	<u>and cemented w/100 Sacks in second stage.</u>			
<u>Top of Crt. outside of 3 1/2" Csg. on lower stage at 4576' & Second Stage at 2021'.</u>					

PLUGS AND ADAPTERS

Heaving plug—Material None Length to Depth set to
Adapters—Material to Size to

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
<u>No shots - see below for perforating record.</u>						

TOOLS USED

Rotary tools were used from to feet, and from 0' feet to 6815' feet TD
Cable tools were used from to feet, and from to feet to to feet.

DATES

GAS WELL 4/16/62 - 3 Hr. 19-62 Test. Put to producing Waiting on Sales Connection
The production for the first 24 hours was barrels of fluid of which % was oil; %
emulsion; % water; and % sediment. Gravity, °Bé. to

If gas well, cu. ft. per 24 hours 4,306 SCF/Da. Gallons gasoline per 1,000 cu. ft. of gas *1.638 Gals.

Rock pressure, lbs. per sq. in. Flowing Csg. P. 1741#. Will produce thru 3 1/2" OD Csg.

EMPLOYEES

W. D. Bailey, Driller Dale W. Steinbeck, Driller
Ira Ellis, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0'</u>	<u>6815' Sand and Shale</u> <u>6815' Total Depth.</u>		
<u>4-12-62-6815' Total Depth: Finished formation hole at 6AM 4/12/62. Ran Lane-Wells</u> <u>surveys.</u>			
<u>4-13-62-Ran 3 1/2" OD Csg. 9.37, R-2, J55, SS Casing, set at 6811'; Hallib float shoe,</u> <u>and float collar at 6749' with rotating scratchers and centralizers; Hallib.</u> <u>D.V. Staggering tool at 2408', Hallib. cement basket at 2440'; Cemented with</u> <u>400 Sacks 50-50 Poz-mix cement; pumped plug to 6749' at 3PM, 4/13/62.</u> <u>4 Hrs. WOC - for Second stage cement job at 2408' thru D.V. Tool.</u> <u>Cemented second stage at 2408' with 100 Sacks 50-50 Poz-mix cement, pump plug</u> <u>to 2408' at 7:30 PM, 4/13/62. WOC.</u>			
<u>4-15-62-Drilled out Hallib. plug and cement from D.V. Tool at 2408'; found plug at</u> <u>2408'; Ran Lane-Wells Cementon Survey and found top of cement outside 3 1/2" Csg.</u> <u>as follows: Top of cement outside 3 1/2" Csg. on lower stage at 4576'</u> <u>Top of cement outside 3 1/2" Csg. on second stage at 2021'</u> <u>Perforated 3 1/2" OD Casing by Lane-Wells from 6657'-6612' and 6596'-6586' with</u> <u>2 Holes per ft. and Sand-Water fractured by Halliburton down 3 1/2" Csg. thru</u> <u>above perforations w/50,000# Sand and 54,390 Gals. water; breakdown press. 2200</u> <u>Max. treating press. 4000#, Min. press. 2500#, Avg. inj. rate 18.9 Bbls/Min.</u>			
<u>4-16-62-After cleaning well of fracture water took 3 Hr. flow test on 1/4" Adj. Choke</u> <u>Gas Volume 4,306 SCF/Daily. Flowing Press. 1741#, Flowed 21 Bbbls. Distillate</u> <u>Well closed in waiting on Sales Connection. on 3-Hr. Test.</u>			
<u>See back for D.S.Ts. and Lane-wells Tops.</u>			

(OVER)

16-43094-4

Finished prints of surveys will be mailed upon receipt of same.

FORMATION RECORD-Continued

FROM-	TO-	TOTAL FEET	FORMATION
			FORMATION TIPS BY LANE-WELLS
			Lower Gallup - 5682' +898'
			Sanaslee - 6075' +505'
			Lower Mancos - 6178' +402'
			Greenhorn - 6390' +190'
			Graneros - 6445' +135'
			Upper Dakota - 6584' + 4'
			Lower Dakota - 6696' -116'
			Morrison - 6801' -221'
			1946' +637'
			2220' +4360'
			2336' +4244'
			3044' +3536'
			3740' +2840'
			4376' +2204'
			4610' +1970'
			5476' +1104'
			Upper Gallup
			Mancos
			Point Lookout
			Allison-Clearly
			La Ventana "A"
			Levels
			Platoned cliffs
			Kirtland-Fruitland

3/30/62 - Ran D.S.T. #1 - from (4235'-4350') Mesaverde Zone, Dbl. packers, 1 1/2 Hrs. Test, 4" DP, 3/4" Bottom & 1" Top Chokes, opened tool at 3:30 PM, with very light blow air for 1/2 hr. and died.
Closed tool at 5 PM for 1-1/2 Hrs. bldg. up.
Recovered - 40' of drilling mud, no show oil or gas.
IHP-2360', RHP-2260', ITP-156', FFP-904', 1/2 Hr. bldg. up Press-260//, 1 Hr. - 605#, 1-1/2 Hrs.-815#.

4-6-62 - Ran D.S.T. #2 from (5469'-5605') Gallup Zone, Dbl. packers, 2 Hrs. Test, 4" DP, 3/4" Bottom and 1" Top Choke; opened tool at 12:50 H., light blow air, increased to good blow in 3 min. and remained constant to end of test, Gas to surface in 1 1/2 hours, (Actual measurement of gas 6,000 cuft. per day)
Closed tool at 2:50 PM for 1 1/2 Hrs. Build up.
Recovered 860' of drilling mud, top 460' slightly gas cut and bottom 400' red. to heavy gas cut.
IHP-2890', RHP-2890', ITP-360', FFP-405', 1/2 Hr. bldg. up Press-1395#, 1 Hr. bldg. up-1865#, 1 1/2 Hrs. 2025#.

HISTORY OF OIL OR GAS WELL

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.