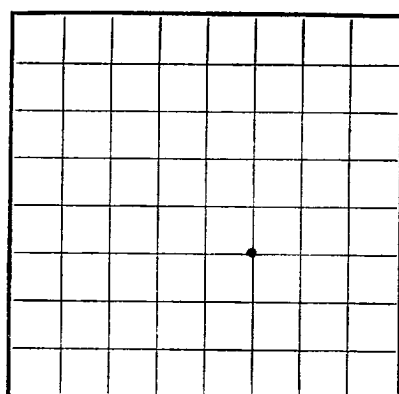


Indian Agency - Window Rock,
U. S. LAND OFFICE Ariz.SERIAL NUMBER 14-20-603-5025LEASE OR PERMIT TO PROSPECT _____
Navajo Tract #23UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Amerada Petroleum Corporation Address Box 1469, Durango, Colorado
Lessor or Tract Federal Gov't. (Navajo) Field Pajarito Area State New Mexico
Well No. 1 Sec. 36 T. 29N R. 18W Meridian NMPM County San Juan
Location 1980 ft. N. of N. Line and 1980 ft. E. of W. Line of Sec. 36 Elevation 5247'
(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 D. F. FurseDate August 10, 1963 Title Foreman

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

Commenced drilling June 6, 1963 Finished drilling July 29, 1963

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from None to _____ 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 540' to 629' No. 3, from _____ to _____
No. 2, from 1700' to 2000' 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>32.3</u>	<u>8-RT</u>	<u>H-40</u>	<u>1637'</u>	<u>Halliburton</u>	<u>See P&A Report On Back</u>			
<u>7"</u>	<u>23</u>	<u>8-RT</u>	<u>J-55</u>	<u>5720'</u>	<u>Halliburton</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>1637'</u>	<u>650</u>	<u>Halliburton</u>	<u>Cement Circulated</u>	
<u>7"</u>	<u>6196'</u>	<u>150</u>	<u>Halliburton</u>		

PLUGS AND ADAPTERS

Heaving plug—Material See Back F/Plug Length _____ Depth set _____
Adapters—Material Record. Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
<u>None</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

None, 19____ Put to producing No P&A, 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 _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

R. Hutsenbiller, Driller Glen Sanford, Driller
Clair Wilson, Driller John W. Justis, Jr., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0'</u>	<u>684'</u>	<u>684'</u>	<u>Sand & shale</u>
<u>684'</u>	<u>1275'</u>	<u>591'</u>	<u>Shale</u>
<u>1275'</u>	<u>5165'</u>	<u>3890'</u>	<u>Sand & shale</u>
<u>5165'</u>	<u>5742'</u>	<u>577'</u>	<u>Sand, shale & anhydrite</u>
<u>5742'</u>	<u>6150'</u>	<u>408'</u>	<u>Sand & shale</u>
<u>6150'</u>	<u>6191'</u>	<u>41'</u>	<u>Sand, shale & lime</u>
<u>6191'</u>	<u>6408'</u>	<u>217'</u>	<u>Sand & shale</u>
<u>6408'</u>	<u>6840'</u>	<u>432'</u>	<u>Sand, shale & lime</u>
<u>6840'</u>	<u>7089'</u>	<u>249'</u>	<u>Lime</u>
<u>7089'</u>	<u>7247'</u>	<u>158'</u>	<u>Shale & lime</u>
<u>7247'</u>	<u>7439'</u>	<u>192'</u>	<u>Sand, shale & lime</u>
<u>7439'</u>	<u>7541'</u>	<u>102'</u>	<u>Shale & lime</u>

CORE #1 - Cut core from 7215' to 7247'; cut 32' recovered 24'-5". Geological Disc. -
From 7215' to 7233' Brown Micro Crystalline, Fossiliferous, Hard & Tight.
7233' to 7239' Lime Stone Light Brown, Micro Crystalline, Fossiliferous
w/scattered fluorescence & fuzzy porosity. Bleeding oil in part w/salty
taste. 7239' to 7247' no recovery. Coring time - Total 5 hrs. & 6 Min.,
Average coring time 10.5 Min. per ft..

DRILL STEM TEST #1 - From 6772' to 6841'; Paradox Zone, 1 hr. test, 3 1/2" D.P., no
water cushion, 3/4" atm. choke & 1 1/2" top choke; Opened tool and had a very weak
blow of air for 4 min. & died. Pump for 36 min. Closed tool for 1 1/2 hr. BHP..
Had in annulus went out of sight in 6 min. after tool was opened, this indicated
lost circulation above packer. Recovered 10' of drilling mud in DC'S, no show
of oil, gas or water. IHP 3237#, FHP 3208#, IFP 14.7# & FFP 14.7#, 90 Min. BHP
29.5#

LOGS BY LOKVALIUM LOVERI RECORD CONTINUED

(Continued on back)

U. S. GOVERNMENT PRINTING OFFICE

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.

FROM—	TO—	TOTAL FEET	FORMATION	
DRILL STEM TEST #2 - From 7218' to 7247', Paradox "C" zone, top a 6953', 4 hr. test, 3 1/2" D.P., 5/8" bit. opening & 3/4" top opening in tool. Opened tool & had a weak blow immediately, increased to fair blow in 25 min., increased to strong blow in 30 min. continued strong blow throughout one remainder of test. Closed tool for 1 1/2 hr. BHP. Pulled packers free, recovered 2883' of salt water w/ the top 180' mud cut, 21.39 bbl 60,000 ppm chloride content & 99,000 ppm salt. No show of oil or gas. IHP 4232#, IFF 1451#, BHP 10 min. 3799#, 20 min. 3799#, 30 min. 3799#, 40 min. 3799#, 50 min. 3799#, 60 min. 3799#, 70 min. 3799#, 80 min. 3799#, 90 min. 3799#, IHP 4232#, BHP 4232#.	DRILL STEM TEST #3 - From 7328' to 7347', Paradox "C" zone, top a 6953', 4 hr. test, 3 1/2" D.P., no water cushion, 5/8" bit. opening & 1" top opening in tool. Opened tool & strong blow of air immediately, gas to surface in 30 min., not enough to measure. Closed tool for 90 min. BHP. Pulled tool free, recovered 1000' of fluid as follows: 30' 50% oil & 50% mud, 100' gas cut mud, 870' of salt water, 7.42 bbls., chloride content of water 69,000 ppm & 315,000 ppm salt content. IHP 4159#, IFF 97#, BHP 43 1 1/2 hr. BHP - 30 min. 276#, 60 min. 2904#, 90 min. 3614#, BHP 4159#.	DRILL STEM TEST #4 - From 7369' to 7410', Paradox "C" zone, top a 6953', 1 hr. & 5 min. test, 3 1/2" D.P., no water cushion, 3/4" bit. opening & 1" top opening in tool. Opened tool and had very weak blow for 5 min., & died. Dead for 1 hr., closed tool for 1 1/2 hr. BHP. Pulled tool free, recovered 5' of drilling mud. No show of oil, gas or salt water. IHP 4223#, IFF 0#, BHP 4.4#, 1 1/2 hr. BHP 13.2#, BHP 4222#.	PLUG AND ABANDON 7/29/63 - Total depth 7547'. Plugged and abandoned. Cement plugs spotted in well as follows: 60 sacks cement from 7400' to 7425' - 3500' - 3500' " 75 " " " 6700' " 6350' - 3500' " Perforated 7" casg. at 2500' w/ 4 holes by McCullough and circulated 11# mud thru these perforations and outside of 7" casg., to control water flow and condition hole for pulling 7" casg.. Worked casing and ran McCullough free-point indicator found pipe free to 1975' and tight below that point. Cut casg. at 1975' with McCullough (Chemical) Cutter and pulled same. Spotted 22 sacks cement in 7" casg. from 2550' to 2650' to cover perforations. Spotted 24 sacks cement from 2050' casg. to 1950' (20' above casg. stub). Left well in condition to be used as water well, as requested by Navajo Tribal Office at Shiprock, New Mexico.	SCHUMBERGER TOPS Paradox "C" Lower Helms Moles 6954' 7379' 7533' -1705' -2130' -2287' GEOLOGICAL SAMPLE TOPS Lower Helms Moles 7380' 7533' -2131' -2287'