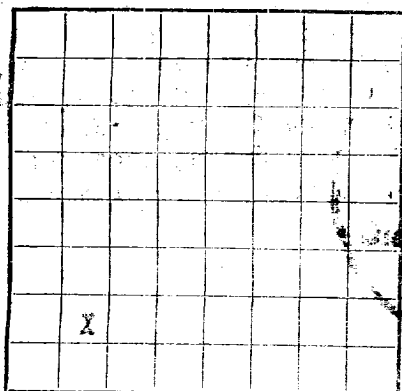




LOCATE WELL CORRECTLY

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 674905
LEASE OR PERMIT TO PROSPECTUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company San American Petroleum Cor. Address Box 487, Farmington, New Mexico
Lessor or Tract McManus Field East Ritz, Santa Fe State, New Mexico
Well No. 1 Sec. 22 T. 28-N R. 12-W Meridian N.M.P.M. County Santa Fe
Location 1065 ft. N of S Line and 890 ft. E of W Line of Section 22 Elevation 5606
(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 _____

Date March 26, 1960Title Area Engineer

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

Commenced drilling January 11, 1960 Finished drilling March 27, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1427 to 1545 (G) No. 4, from _____ to _____
No. 2, from 5398 to 5428 (G) No. 5, from _____ to _____
No. 3, from 6039 to 6080 (G) 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>13-3/8"</u>	<u>48</u>	<u>8.25</u>	<u>National</u>	<u>95'</u>	<u>Common</u>				<u>Surface</u>
<u>9-5/8"</u>	<u>40</u>	<u>8.25</u>	<u>National</u>	<u>910'</u>	<u>Common</u>				<u>Intermediate</u>
<u>7"</u>	<u>20</u>	<u>8.25</u>	<u>National</u>	<u>1533'</u>	<u>Common</u>				<u>Oil String</u>
<u>7"</u>	<u>20</u>	<u>8.25</u>	<u>National</u>	<u>4294'</u>	<u>Common</u>				<u>Oil String</u>
<u>7"</u>	<u>20</u>	<u>8.25</u>	<u>National</u>	<u>1533'</u>	<u>Common</u>				<u>Oil String</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>13-3/8"</u>	<u>95'</u>	<u>200 sacks of cement</u>	<u>Common</u>		
<u>9-5/8"</u>	<u>910'</u>	<u>125 sacks of cement</u>	<u>Common</u>		
<u>7"</u>	<u>1533'</u>	<u>150 sacks of cement</u>	<u>Common</u>		
<u>7"</u>	<u>4294'</u>	<u>150 sacks of cement</u>	<u>Common</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

TOOLS USED

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

DATES

First new oil produced from _____
Put to producing area 6, 1960

The production for the first 24 hours was 52 barrels of fluid of which 77.7% was oil; _____% emulsion; _____% water; and 3.3% sediment. Gravity, °Bé. 29

If gas well, 89 ft. per 24 hours 1727 Gallons gasoline per 1,000 cu. ft. of gas

Rock pressure, lbs. per sq. in. 1927 psi (omit in tubing pressure logs, etc.)

EMPLOYEES

Joe F. Cortez, Driller A. J. Wheeler, Driller
Joe F. Cortez, Driller C. J. Fickens, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	95	95	Surface sands and shales.
95	105	105	Surface sands and shales.
105	140	140	Surface sand.
140	170	170	Surface sand.
170	197	197	Surface sand, shales and coals.
197	218	218	Surface sand, shales and coals.
218	260	260	Surface sand and shale.
260	298	298	Surface sand and shale.
298	328	328	Surface sand, sand and coal.
328	367	367	Surface sand and shale.
367	397	397	Surface sand.
397	427	427	Surface sand and shale.
427	457	457	Surface sand.
457	487	487	Surface sand.
487	517	517	Surface sand.
517	547	547	Surface sand.
547	577	577	Surface sand.
577	607	607	Surface sand.
607	637	637	Surface sand.
637	667	667	Surface sand.
667	697	697	Surface sand.
697	727	727	Surface sand.
727	757	757	Surface sand.
757	787	787	Surface sand.
787	817	817	Surface sand.
817	847	847	Surface sand.
847	877	877	Surface sand.
877	907	907	Surface sand.
907	937	937	Surface sand.
937	967	967	Surface sand.
967	997	997	Surface sand.
997	1027	1027	Surface sand.
1027	1057	1057	Surface sand.
1057	1087	1087	Surface sand.
1087	1117	1117	Surface sand.
1117	1147	1147	Surface sand.
1147	1177	1177	Surface sand.
1177	1207	1207	Surface sand.
1207	1237	1237	Surface sand.
1237	1267	1267	Surface sand.
1267	1297	1297	Surface sand.
1297	1327	1327	Surface sand.
1327	1357	1357	Surface sand.
1357	1387	1387	Surface sand.
1387	1417	1417	Surface sand.
1417	1447	1447	Surface sand.
1447	1477	1477	Surface sand.
1477	1507	1507	Surface sand.
1507	1537	1537	Surface sand.
1537	1567	1567	Surface sand.
1567	1597	1597	Surface sand.
1597	1627	1627	Surface sand.
1627	1657	1657	Surface sand.
1657	1687	1687	Surface sand.
1687	1717	1717	Surface sand.
1717	1747	1747	Surface sand.
1747	1777	1777	Surface sand.
1777	1807	1807	Surface sand.
1807	1837	1837	Surface sand.
1837	1867	1867	Surface sand.
1867	1897	1897	Surface sand.
1897	1927	1927	Surface sand.
1927	1957	1957	Surface sand.
1957	1987	1987	Surface sand.
1987	2017	2017	Surface sand.
2017	2047	2047	Surface sand.
2047	2077	2077	Surface sand.
2077	2107	2107	Surface sand.
2107	2137	2137	Surface sand.
2137	2167	2167	Surface sand.
2167	2197	2197	Surface sand.
2197	2227	2227	Surface sand.
2227	2257	2257	Surface sand.
2257	2287	2287	Surface sand.
2287	2317	2317	Surface sand.
2317	2347	2347	Surface sand.
2347	2377	2377	Surface sand.
2377	2407	2407	Surface sand.
2407	2437	2437	Surface sand.
2437	2467	2467	Surface sand.
2467	2497	2497	Surface sand.
2497	2527	2527	Surface sand.
2527	2557	2557	Surface sand.
2557	2587	2587	Surface sand.
2587	2617	2617	Surface sand.
2617	2647	2647	Surface sand.
2647	2677	2677	Surface sand.
2677	2707	2707	Surface sand.
2707	2737	2737	Surface sand.
2737	2767	2767	Surface sand.
2767	2797	2797	Surface sand.
2797	2827	2827	Surface sand.
2827	2857	2857	Surface sand.
2857	2887	2887	Surface sand.
2887	2917	2917	Surface sand.
2917	2947	2947	Surface sand.
2947	2977	2977	Surface sand.
2977	3007	3007	Surface sand.
3007	3037	3037	Surface sand.
3037	3067	3067	Surface sand.
3067	3097	3097	Surface sand.
3097	3127	3127	Surface sand.
3127	3157	3157	Surface sand.
3157	3187	3187	Surface sand.
3187	3217	3217	Surface sand.
3217	3247	3247	Surface sand.
3247	3277	3277	Surface sand.
3277	3307	3307	Surface sand.
3307	3337	3337	Surface sand.
3337	3367	3367	Surface sand.
3367	3397	3397	Surface sand.
3397	3427	3427	Surface sand.
3427	3457	3457	Surface sand.
3457	3487	3487	Surface sand.
3487	3517	3517	Surface sand.
3517	3547	3547	Surface sand.
3547	3577	3577	Surface sand.
3577	3607	3607	Surface sand.
3607	3637	3637	Surface sand.
3637	3667	3667	Surface sand.
3667	3697	3697	Surface sand.
3697	3727	3727	Surface sand.
3727	3757	3757	Surface sand.
3757	3787	3787	Surface sand.
3787	3817	3817	Surface sand.
3817	3847	3847	Surface sand.
3847	3877	3877	Surface sand.
3877	3907	3907	Surface sand.
3907	3937	3937	Surface sand.
3937	3967	3967	Surface sand.
3967	3997	3997	Surface sand.
3997	4027	4027	Surface sand.
4027	4057	4057	Surface sand.
4057	4087	4087	Surface sand.
4087	4117	4117	Surface sand.
4117	4147	4147	Surface sand.
4147	4177	4177	Surface sand.
4177	4207	4207	Surface sand.
4207	4237	4237	Surface sand.
4237	4267	4267	Surface sand.
4267	4297	4297	Surface sand.
4297	4327	4327	Surface sand.
4327	4357	4357	Surface sand.
4357	4387	4387	Surface sand.
4387	4417	4417	Surface sand.
4417	4447	4447	Surface sand.
4447	4477	4477	Surface sand.
4477	4507	4507	Surface sand.
4507	4537	4537	Surface sand.
4537	4567	4567	Surface sand.
4567	4597	4597	Surface sand.
4597	4627	4627	Surface sand.
4627	4657	4657	Surface sand.
4657	4687	4687	Surface sand.
4687	4717	4717	Surface sand.
4717	4747	4747	Surface sand.
4747	4777	4777	Surface sand.
4777	4807	4807	Surface sand.
4807	4837	4837	Surface sand.
4837	4867	4867	Surface sand.
4867	4897	4897	Surface sand.
4897	4927	4927	Surface sand.
4927	4957	4957	Surface sand.
4957	4987	4987	Surface sand.
4987	5017	5017	Surface sand.
5017	5047	5047	Surface sand.
5047	5077	5077	Surface sand.
5077	5107	5107	Surface sand.
5107	5137	5137	Surface sand.

FROM	TO	LEGAL COUNSEL	NOTIFICATION
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FORM 100-10

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of reworking, 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, or shooting.

U. S. GOVERNMENT PRINTING OFFICE 14-63694-2

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of reworking, 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 balling, or shooting.

MOVED TO CONNECTION WITH ON JANUARY 11, 1960 AND KILLED WELL. JAN 2-7/88 4 1/2" PIPE
WITH PACKER LOGS IN THE LOG AND TELL SOME COMMENTS. SET BRIDGE PING AT
5960' and packer at 5965'. Checked 7% casing below packer with 2000 psi for 30 minutes,
which held ok. Last bridge ping at 5971' and packer at 5960'. Tested casing below
packer with 2000 psi for 30 minutes, held ok. Attempted to set bridge ping at 5960'
and failed. Set bridge ping at 5956' and packer at 5957'. Tested below packer with
2000 psi with leakage oil. No gas release from and injection and set bridge ping at 5960'
and packer at 5957'. Pressures up and leaked off. Test showed 2% casing in good
condition between Dakota and Gallup, but leaking 5957'-5960'. Spotted 500 gallons 15%
acid followed by 10 barrels water and squeezed perforations at 5950' with 2% brine
cement. Filled cement 5074'-5960'. Perforated 1-1/2 hours and tested squeezed per-
forations at 5950' with 2000 psi. In Baker tool bit was removed and set at 5950'.
Squeezed perforation at 5950' with 50 sacks cement and leaked with 2500 psi and held ok.
Original bridge ping was cleaned out to bring back depth at 6103'. Drilled cement plug
6103'-6181'. Van carrier log thru open hole section 5959'-6182' and found medium hole
diameter 2 1/2" with no liner or liner on drill pipe with brush hose
best seat type casing hanger and set 5957'-6103' with 75 sacks neat cement. At 1-1/2
pounds - reading but log bar sank. Sealed top of liner with 2500 psi which held ok.
Spotted 250 gallons 15%. Perforated above with a grate for foot 6039'-6047', 6070'-6080'.
Van carrier tool bore diameter and set at 5960'. Attempted to cement water/Dakota.
Pumped 50 barrels water at 1.1 psi at 4000 psi. Spotted 500 gallons 15% acid sand water
fracked with 10,500 gallons water and 8000 pounds sand. Minimum pressure 314 psi,
average pressure 3700 psi, maximum pressure 4000 psi. Injection rate 8.6 barrels per
minute. Graded with 2100 gallons at 4000 psi. Pumped 6000 gallons water after finish
in attempt to wash out sand. Positioning with 300 gallons NCA. Attached to surface
using 10,700 gallons water and 8000 pounds of sand. Minimum pressure 3700 psi, maximum
pressure 4500 psi. Injection rate 6 barrels per minute. Graded out. Pumped with 2100
gallons water. Set packer 5960' and tubing at 6047'. After 30 hours flow 1005 bbl/d.
Failed packer. Van carrier today. Perforation packer and set at 5960' with 50 sacks plug.
Leaked oil "see set at 5963". Perforated injection packer with 2500 psi which held ok.
Spotted 500 gallons 15% acid. Perforated Gallup 5946'-5951' with a grate for foot. Casing
oil fracked Gallup with 43,350 gallons at 40,000 pounds sand. Maximum pressure
pressure 4750 psi, minimum pressure 4250 psi. Average injection rate 5.4 barrels per
minute. Set Dakota tubing at 5961' with Baker tool bit assembly. Set Gallup
tubing at 5959'. Well recompleted as dual well and has well underground Gallup-west Kutiz Dakota March 27, 1960.