Budget Bureau No. 42-R355.5.
Approval expires 12-31-55.

Form 9-330

U. S. Land Office Santa Fe

Serial Number LC 079699

Lease or Permit to Prospect Jaramerson-Federal #1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Nicholls Petroleum Company Address Box 1313 - Midland, Texas

Lessor or Tract Jaramerson-Federal Field Wildcat State New Mexico

Well No. 1 Sec. 20 T. 21S. R. 12E. Meridian N.M.P.M. County Los Arriba

Location 660 ft. [N.] of S. Line and 1980 ft. [W.] of W. Line of Section 20 Elevation 7137'
(Give date when completed, see instructions on reverse side)

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.

Signature Wm. Berman
Title Division Superintendent

Date Mar. 13, 1954

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

Commenced drilling December 3, 1953 Finished drilling (attached T. D. 8,000) Jan. 16, 1954

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

Gas Verde No. 1, from 4492 to 5200 No. 4, from 3330 to 3402
Dakota No. 2, from 7165 to 7717 Entrada No. 5, from 3402 to 3463
Cerrillos No. 3, from 7717 to 8000 No. 6, from to

Water shaded into location.

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 From	Perforated To	Purpose
9-5/8"	36#	8RT	J-55	506'	Halliburton				
7"	26#	8RT	J-55	821'	Halliburton				
7"	23#	8RT	J-55	5084'					
7"	23#	8RT	J-55	5214'					
7"	26#	8RT	J-55	8000'					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	506'	350 sacks	Pump & Plug		
7"	5214'	150 sacks	Pump & Plug		

FOLD THIS MARK

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 0 feet to 8000' feet, and from feet to feet

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

DATES

Temporarily abandoned Jan. 24, 1954 Put to producing

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

Claude D. Carroll Drilling Co., Driller Driller

Pete Cox Driller Driller

FORMATION RECORD

Jaramerson, New Mexico

FROM-	TO-	TOTAL FEET	FORMATION
0	515	515	Surface Hole
515	1196	681	Sandy Shale
1196	2361	1165	Sandy Shale
2361	3330	969	Sand and Shale
3330	3403	73	Shale
3403	6375	2972	Sand & Shale
6375	6392	17	Shale & Sand
6392	7365	973	Sand & Shale
7365	7657	292	Shale
7657	7710	53	Shale & Sand
7710	7766	56	Fresh Shale
7766	7875	109	Shale & Sand
7875	7928	53	Sand & Shale
7928	7965	37	Sand

GEOLOGICAL TOPS

Dakota	7165
Kirtland-Fruitland	2730
Pictured Cliffs	3003
Lewis	3100
Gas Verde	4492
Point Lookout	5200
Mancos	5214
Dakota	7165
Garrison	7717
Cerrillos	8000
Entrada	3402

Cont'd. on back

No.	From	To	Thickness of stratum	Description
4.	7965	7977	12'	Sand & Shale, as shown.
5.	7977	8000	23'	Sand & Shale, as shown.
6.	7965	8000	35'	Total Cerrillos Formation Sandy Sand, as shown.
				TD 7965'-7977' Fine to medium to coarse salt sand / scattered blue fluorescence.
				TD 7977'-8000' Dark Shale / scattered pink sandy shale, as shown.
7.	8000	8000	0'	Total Depth 8000' Dark Shale / scattered pink sandy shale, as shown.
				TD 7977'-8000' Dark Shale / scattered pink sandy shale, as shown.
8.	7977	7977	0'	Total Cerrillos Formation Sandy Shale, as shown.
				TD 7965'-7977' Fine to medium to coarse salt sand / scattered blue fluorescence.
9.	7965	7965	0'	Total Cerrillos Formation Sandy Shale, as shown.
				TD 7928'-7965' Fine to medium to coarse salt sand / scattered blue fluorescence.
10.	7928	7928	0'	Total Sand & Shale, as shown.
				TD 7875'-7928' Fine to medium to coarse salt sand / scattered blue fluorescence.
11.	7875	7875	0'	Total Sand & Shale, as shown.
				TD 7766'-7875' Fine to medium to coarse salt sand / scattered blue fluorescence.
12.	7766	7766	0'	Total Shale, as shown.
				TD 7710'-7766' Fine to medium to coarse salt sand / scattered blue fluorescence.
13.	7710	7710	0'	Total Shale, as shown.
				TD 7657'-7710' Fine to medium to coarse salt sand / scattered blue fluorescence.
14.	7657	7657	0'	Total Shale, as shown.
				TD 7392'-7657' Fine to medium to coarse salt sand / scattered blue fluorescence.
15.	7392	7392	0'	Total Sand & Shale, as shown.
				TD 7365'-7392' Fine to medium to coarse salt sand / scattered pink sandy shale.
16.	7365	7365	0'	Total Shale, as shown.
				TD 6375'-7365' Fine to medium to coarse salt sand / scattered pink sandy shale.
17.	6375	6375	0'	Total Sand & Shale, as shown.
				TD 3403'-6375' Fine to medium to coarse salt sand / scattered pink sandy shale.
18.	3403	3403	0'	Total Shale, as shown.
				TD 3330'-3403' Fine to medium to coarse salt sand / scattered pink sandy shale.
19.	3330	3330	0'	Total Sand & Shale, as shown.
				TD 2361'-3330' Fine to medium to coarse salt sand / scattered pink sandy shale.
20.	2361	2361	0'	Total Sandy Shale, as shown.
				TD 1196'-2361' Fine to medium to coarse salt sand / scattered pink sandy shale.
21.	1196	1196	0'	Total Sandy Shale, as shown.
				TD 515'-1196' Fine to medium to coarse salt sand / scattered pink sandy shale.
22.	515	515	0'	Total Surface Hole, as shown.
				TD 0'-515' Fine to medium to coarse salt sand / scattered pink sandy shale.

Cont'd. on back

No. 1. 14-3/4" to 515', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit and held water well. Drilled 515' in 14 hrs. Used 11 min. to 1350' and 2330' in 1 min. each.

2. 14-3/4" to 1196', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hr. used 2 packers, as he surface in 1 min. He built up mud. Drilled 681' in 14 hrs. Used 30 min. at 1175' and 1190' in 1 min. each. Drilled 681' in 14 hrs.

3. 14-3/4" to 2361', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 1165' in 14 hrs. Used 30 min. at 2330' and 2350' in 1 min. each. Drilled 1165' in 14 hrs.

4. 14-3/4" to 3330', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 969' in 14 hrs. Used 30 min. at 3300' and 3320' in 1 min. each. Drilled 969' in 14 hrs.

5. 14-3/4" to 3403', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 73' in 14 hrs. Used 30 min. at 3403' and 3403' in 1 min. each. Drilled 73' in 14 hrs.

6. 14-3/4" to 6375', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 2972' in 14 hrs. Used 30 min. at 6375' and 6375' in 1 min. each. Drilled 2972' in 14 hrs.

7. 14-3/4" to 6392', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 17' in 14 hrs. Used 30 min. at 6392' and 6392' in 1 min. each. Drilled 17' in 14 hrs.

8. 14-3/4" to 7365', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 973' in 14 hrs. Used 30 min. at 7365' and 7365' in 1 min. each. Drilled 973' in 14 hrs.

9. 14-3/4" to 7657', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 292' in 14 hrs. Used 30 min. at 7657' and 7657' in 1 min. each. Drilled 292' in 14 hrs.

10. 14-3/4" to 7710', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 53' in 14 hrs. Used 30 min. at 7710' and 7710' in 1 min. each. Drilled 53' in 14 hrs.

11. 14-3/4" to 7766', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 56' in 14 hrs. Used 30 min. at 7766' and 7766' in 1 min. each. Drilled 56' in 14 hrs.

12. 14-3/4" to 7875', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 109' in 14 hrs. Used 30 min. at 7875' and 7875' in 1 min. each. Drilled 109' in 14 hrs.

13. 14-3/4" to 7928', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 53' in 14 hrs. Used 30 min. at 7928' and 7928' in 1 min. each. Drilled 53' in 14 hrs.

14. 14-3/4" to 7965', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 37' in 14 hrs. Used 30 min. at 7965' and 7965' in 1 min. each. Drilled 37' in 14 hrs.

15. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 35' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 35' in 14 hrs.

16. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

17. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

18. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

19. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

20. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

21. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

22. 14-3/4" to 8000', open hole, mud 8.8#, 12" x 1" x 3/4" cs, 4 water cushion, 1 hour, used 2 packers, which he inflated, spaced 12" below bit. Drilled 0' in 14 hrs. Used 30 min. at 8000' and 8000' in 1 min. each. Drilled 0' in 14 hrs.

Cont'd. on back

No.	From	To	Size	Type
1.	7977	8000	2"	Halliburton Measuredrop
2.	7965	7977	1-1/2"	Schlumberger Measuredrop
3.	7928	7965	1-1/2"	Schlumberger Measuredrop
4.	7875	7928	1-1/2"	Schlumberger Measuredrop
5.	7766	7875	1-1/2"	Schlumberger Measuredrop
6.	7710	7766	1-1/2"	Schlumberger Measuredrop

(All measurements measured from the bucket with water on hand at surface. Temporarily abandoned Jan. 24, 1954.)

Perforated Gas Verde Formation 4492'-5200' (Dakota) with 4 holes per foot. Halliburton Perforated 7" casing with perf. 4492'-4520' 28 holes, 4520'-4550' 30 holes, 4550'-4580' 30 holes, 4580'-4610' 30 holes, 4610'-4640' 30 holes, 4640'-4670' 30 holes, 4670'-4700' 30 holes, 4700'-4730' 30 holes, 4730'-4760' 30 holes, 4760'-4790' 30 holes, 4790'-4820' 30 holes, 4820'-4850' 30 holes, 4850'-4880' 30 holes, 4880'-4910' 30 holes, 4910'-4940' 30 holes, 4940'-4970' 30 holes, 4970'-5000' 30 holes, 5000'-5030' 30 holes, 5030'-5060' 30 holes, 5060'-5090' 30 holes, 5090'-5120' 30 holes, 5120'-5150' 30 holes, 5150'-5180' 30 holes, 5180'-5200' 20 holes. Cleaned perf. 7" casing with perf. 4492'-4520' 28 holes, 4520'-4550' 30 holes, 4550'-4580' 30 holes, 4580'-4610' 30 holes, 4610'-4640' 30 holes, 4640'-4670' 30 holes, 4670'-4700' 30 holes, 4700'-4730' 30 holes, 4730'-4760' 30 holes, 4760'-4790' 30 holes, 4790'-4820' 30 holes, 4820'-4850' 30 holes, 4850'-4880' 30 holes, 4880'-4910' 30 holes, 4910'-4940' 30 holes, 4940'-4970' 30 holes, 4970'-5000' 30 holes, 5000'-5030' 30 holes, 5030'-5060' 30 holes, 5060'-5090' 30 holes, 5090'-5120' 30 holes, 5120'-5150' 30 holes, 5150'-5180' 30 holes, 5180'-5200' 20 holes. Spotted 500 gal. mud acid and fresh water, with 3 gals. of 30-60 mesh sand. Pressure up to 1000#. Left 1000# on tool. Pressure dropped to 500#. Pressure up to 1000# again