Form 9-330

Budget Bureau No. 42-R-355.3.
Approval expires 12-31-55.

U. S. LAND OFFICE .....
SERIAL NUMBER .....
LEASE OR PERMIT TO PROSPECT .....

RECEIVED JAN 30 OIL CON. COM. DIST.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED JAN 29 1959 GEOLOGICAL SURVEY NEW MEXICO

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company O. A. Larrazolo Address 253 Korber Bldg., Albuquerque, N. M.

Lessor or Tract Navajo No. I-149-Ind.,7973 Field Torreon State New Mexico.

Well No. 22-4 Sec. 22 T. 18N R. 4W Meridian N. M. P. M. County Sandoval

Location 660 ft. {N. / S.} of X Line and 1980 ft. {E. / W.} of W Line of Sec. 22 Elevation 6402 Gr.
(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 O. A. Larrazolo

Date January 23, 1959 Title Operator.

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

Commenced drilling Dec. 2, 58 Finished drilling January 19 59

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1058 to 1075 G No. 4, from ..... to .....
1100 1110 G

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

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from None 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
7"		Surface.		32'	cemented to top				
4½"	12.5#	8 Round	Nat.	1124'	Larkin		With 3/ft. 1056 1072 1103 1109		Tent Gas.
Ran 2" tubing to 1054 and set packer at 1051'									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
4½"	1124'	50	Halliburton		

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
	Plan hydrafracking when Navajo 21-1 is completed and treating both wells at same time.					

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

....., 19..... Put to producing ....., 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

....., Driller Contractors: Stewart Brothers and Parker., Driller

....., Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
32	35	3	Medium gray shale with dark quartz crystals.
35	45	10	Sandy gray shale.
45	50	5	Lignitic shale.
50	55	5	Coal.
55	60	5	Lignitic medium grained sandstone and gray shale.
60	65	5	Lignitic shale.
65	75	10	Hard fine grained gray sandstone.
75	100	25	Soft very fine grained sandstone.
100	105	5	Medium grained gray carboniferous sandstone.
105	110	5	Dark gray sandy shale,
110	120	10	Dark gray medium grained sandstone.
120	125	5	Dark gray sandstone and carbonaceous shale 50-50
125	130	5	Sandy lignitic shale.
130	140	10	Medium grained dark gray sandstone.
140	145	5	Very sandy dark gray lignitic shale.
145	150	5	Fine grained lignitic sandstone.
150	155	5	Lignitic shale.
155	160	5	Blue somewhat lignitic shale.
160	170	10	Hard dark gray sandy shale.
170	175	5	Fine grained dark gray sandstone.

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FOLD MARK

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
1750	1900	15	Gray shale.
1900	1950	5	Gray shale 25%; Gray sandstone 75%.
1950	2000	5	Gray sandstone and dark bituminous sh.
2000	2100	10	" " " " " "
2100	2200	10	Dark gray bituminous shale and some coal
2200	2450	25	Medium grained gray sandstone
2450	2650	20	Gray shale and streaks of coal
2650	2750	10	Dark gray sandstone--trace coal.
2750	3300	55	Blue gray shale.
3300	3650	35	Light gray sandstone with shale streaks
3650	4000	35	Dark gray lignitic shale.
4000	4250	25	Dark and light gray sandstone.
4250	4350	10	Dark gray sandy shale-somewhat lignitic.
4350	4800	45	D ark and light shaly sandstone.
4800	5150	35	Light and dark gray somewhat sandy shale
5150	5200	5	Fine grained light gray sandstone and sandy gray shale.
5200	6900	170	Alternating gray shaly sandstone and sandy gray shale.
6900	6950	5	Carbonaceous shale.
6950	8650	170	Sandy gray shale alternating of gray shaly sandstone.
8650	9500	85	Sandy gray shale and shaly sandstone-shale predominating.
9500	9600	10	Lignitic shale.
9600	10150	55	Alternating gray shale and gray sandston
10150	10250	10	Cored. Recovered9' 11" fine grained sandstone. Strong odor gas.
10250	10950	70	Gray sandstone and gray shale.
10950	11070	12	C ored. Recovered 10' fine grained sand stone. Very strong odor gas.
11070	12000	93	Sandy gray shale. T. D.

I. P. Estimated 300,000 CFGD. No gauge made. It is planned to hydrafrac this w well at the same time the next well is completed and treated.

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

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.