FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
5910	6023	113	Cored (See record of Cores & DST)
6023	6600	577	Shale & Sand
6600	6615	15	Sand & Shale. Set 5½" csg. @ 6615' w/90
6615	6670	55	Cored (See record of Cores & DST) sx.
6670	6677	7	Sand & Shale
6677	6723	46	Cored (See record of Cores & DST.)
6723	6724	1	Sand
6724	6755	31	Cored (See record of Cores & DST.)
6755	6758	3	Sand
6758	6767	9	Cored (See record of Cores & DST.)
6767	6768	1	Sand
6768	6788	20	Cored (See record of Cores & DST.)
6788	6789	1	Sand

TOPS OF GEOLOGIC FORMATIONS

FORMATION	TOP
Pictured Cliffs	2175
Mesa Verde or Cliff House	3845
Point Lookout	4490
Mancos Shale	4860
Tosito	5977
Sand Stringers	6520
Green Horn Lime	6450
Dakota	6613

16—43094-1 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.

TEST ON WELL: COMPLETION

Test completed on April 28, 1952 in Dakota formation, zone 6615-6789, Open Hole. Well produced on open flow for 24 hours, at a rate of 75 MCF per day. Shut in pressure 5 Tubing 2200, Casing 2250#. Shut In.

DRILL STEM TESTS

FROM	TO	RESULTS
2176	2274	Pictured Cliffs, 1 packer, 1-½ hrs. 5/8" BHC and 1" SC, No WC, Rec. 90' slightly gas cut drlg. mud, BHPP 45-45# 15 min. S-I BHP 135# HH 1050-965#.
3290	3390	Lewis Shale, Stray sand, 2 packers, 1 hr. 5/8" BHC and 1" SC, No WC, Rec. 30' [illegible] mud, no shows, BHPP 0-0#, 15 min. S-I BHP 0#, HH 1745-1675#.
3545	3591	Lewis Shale, Stray sand, 2 packers, 1 hr. 5/8" BHC and 1" SC, No WC, Rec. 20' Drlg. mud, no shows, BHPP 25#, 15 min. S-I BHP 1030, HH 1765-1740#.
4432	4574	Point Lookout, 1 packer, 2 hrs. 5/8" BHC and 1" SC, No WC, Rec. 310' heavy gas cut drlg. mud W/slight oil stain. BHPP 190-205#, 30 min. S-I BHP 435#, HH 2150-2150#.
4574	4670	Point Lookout, 1 packer, 4 min. 5/8" BHC and 1" SC, No WC, Rec. 190' slightly gas cut drlg. mud, no oil or water, BHPP 0-20#, 30 min. S-I BHP 110# HH 2540-2540#
5835	5908	Mancos Shale, 2 packers would not seat.
5918	5928	Mancos Shale, 2 packers, packers would not hold.
5983	6008	Mancos Shale, 2 packers, 3 hrs. 5/8" BHC and 1" SC, No WC, Gas 35 min. Too small to measure, Rec. 1800' heavily gas cut drlg. mud, no oil or water BHPP 370-620#, 30 min, S-I BHP 1520#, HH 2730-2730#.
6545	6600	Graneros Shale, Greenhorn, 2 packers, 2 hrs. 5/8" BHC and 1" SC, No WC, Gas 37 min. Too small to measure, Rec. 310' heavy gas cut drlg. mud, BHPP 185-235#, 30 min. S-I BHP 2075#, HH 3300-3280#.

DRILL STEM TESTS (Cont'd.)

FROM	TO	RESULTS
6608	6675	Dakota, 2 packers, 2 hrs. 15 min. 5/8" BHC and 1" SC, No

			%C, Gas 3 min. Est. 100 MCF/2½ hrs. slight spray distillate in 45 min. Rec. 300' gas and distillate cut drlg. oil, no water, BHFP 120-130# 15 min. S-I BHP 1710#, HH 2335-2335#.
6679	6691		Dakota, 2 packers, 1 hr. 5/8" BHC and 1" SC, no NC Gas 40 min. Too small to measure, Rec. 125' gas cut drlg. oil BHFP 0#, 30 min. S-I BHP 115# HH 2330-2330#.
6685	6703		Dakota, 2 packers, 2 hrs. 5/8" BHC and 1" SC, No NC, Gas 1 ½ hrs. Too small to measure, Rec. 130' gas cut drlg. oil, BHFP 600-630#, 30 min. S-I BHP 740#, HH 2390-2390#.
6698	6723		Dakota, 2 packers, 2 hrs. 5/8" BHC and 1" SC, No NC, Gas 15 min. 8.43 MFG/2½ hrs. Rec. 105' drlg. oil and 270' fresh water, analysis: same as tank water, BHFP 40-90#, 30 Min S-I BHP 1455#, HH 2598-2598#.
6720	6755		Dakota, 2 packers, 1½ hrs. 5/8" BHC and 1" SC, No NC, Rec. 93' drlg. mud, no shows, BHFP zero, 20 min. S-I BHP zero, HH 3050-3050#.
6753	6767		Dakota, 2 packers, 45 min. 5/8" BHC and 1" SC No NC, Rec. 30' drlg. mud, no shows, BHFP 0#- 15min. S-I BHP 0#, HH 3100-3100#.
6763	6779		Dakota, 2 packers, 1½ hrs. 5/8" BHC and 1" SC, No NC, Gas 2 min. Est. 741 MFG/2½ hrs. Rec. 275' heavy gas cut drlg. mud, no oil or water, BHP 0-100 BHP 310-225#, 30 min. S-I BHP 2590#. HH2985-2985#.

CORE RECORD

FROM	TO	REC	DESCRIPTION OF CORE
2181	2235	54'	Pictured Cliffs, 2 MPF Medium grain to coarse grain salt and pepper quartz sand, slight bleeding gas and slight odor thru-out.
2235	2274	39	Pictured Cliffs, Top 37' medium grain to coarse grain salt and pepper quartz sand, bottom 2' gray shale, sandstone and odor thru-out.
3850	3892	5	Core catcher in bad order - Mesa Verde Top 5' coarse grain white salt and pepper quartz sand, 2' gray shale, bottom 1' coarse grain white salt and pepper quartz sand.
3892	3934	39	Mesa Verde, Top 4½' medium grain to coarse grain white salt and pepper quartz sand w/white clay matrix, bottom 37½' gray shale w/streaks of coal.
4525	4574	49	Point Lookout, 4525-4562 ½ Medium grain to coarse [illegible] gray sand, [illegible] black shale, 4562-4564 coarse grain angular [illegible] salt and pepper quartz sand, fair fluorescence and odor, 4564-4574 black shale, 4565-4574 medium grain to coarse grain white salt and pepper quartz sand, good fluorescence and odor.
4574	4621	47	Point Lookout 15-25 MPF. 4574-4596 gray sand, medium grain to coarse grain angular

siliceous cement but fair porosity, good fluorescence and odor, bleeding gas slightly 4596-4600 black shale w/thin interbedded gray sand, 4600-4621 fine grain tight sand, slight fluorescence and faint odor.

CORE RECORD (Cont'd.)

FROM	TO	REC.	DESCRIPTION OF CORE
4621	4670	49	Point Lookout, 25 MPF, 4621-4630 sand fine grain to medium grain gray tight siliceous cement, 4630-4633 black shale, 4633-4639 sand fine grain gray tight calcareous cement, 4639-4644 balck shale w/thin interbedded gray sand streaks, 4644-4647 gray and black banded sand, tight calcareous cement, 4647-4651 gray sandy shale w/thin interbedded gray sand, 4651-4655 medium grain gray calcareous tight sand, 4655-4656 black shale, 4656-4660 fine grain gray calcareoussand, 4660-4670 black shale.
5837	5857	20	Mancos Shale, Top 3' dark gray fractured shale w/thin limestone stringers Bottom 17' dark gray fractured shale.
5857	5878	20	Mancos Shale, 45 MPF. Dark gray fractured limey shale.
5878	5908½	30½	Mancos Shale, Top 9' fine grain gray limey shaley quartz sand, fair fluorescence, 4' gray shale, 4' fine grain gray limey shaley sand, no shows, 13½' gray limey shale.
5910	5959	49	Mancos Shale, 35-40 MPF, Dark gray fractured shale with thin lime stringers.
5959	6003	49	Mancos Shale, 12-50 MPF, Top 14' gray shale, calcareous and fractured w/abundant stringers fine grain to coarse grain sand, angular and sub-round, glauconitic and calcareous matrix, bleeding oil and gas, 23' sand medium grain gray angular to sub-round calcareous matrix w/glauconitic and scattered shale partings bleeding oil and gas, Bottom 8' gray medium grain sand, shaley sand, calcareous and glauconitic, brown clay like material inclusions, scattered stain, faint odor, but not bleeding.
6003	6023	15	Tosito, Gray calcareous shale.
6615	6670	51	Dakota, 8-15 MPF, 6615-6635 fine to coarse grain hard gray quartz sand, trace blue fluorescence, light staining, 6635-6661 fine grain gray to brown quartz sand, 6661-6666 gray shale.
6677	6691	13½	Dakota, 6677-6680 gray sandy shale, 6680-6686 fine grain gray hard quartz sand, 6686-6690¹ gray sandy shale.
6691	6702	10	Dakota, 6691-6692½ dark gray to brown shaley quartz sand, trace blue fluorescence, 6692½ to 6693½ gray shale, 6693½ - 6701

fine to medium grain tan quartz sand, trace blue fluorescence.

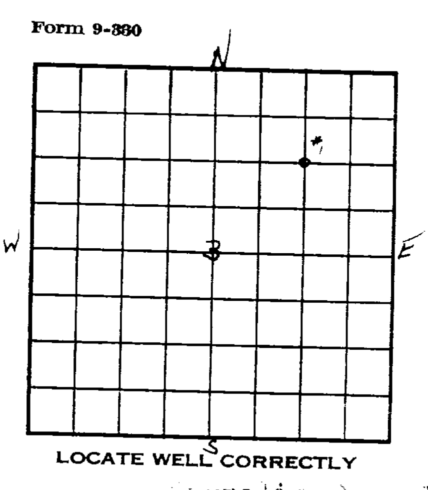
6705	6723	18	Dakota 8-16 MPF, 6705-6708 fine to medium grain gray quartz sand, trace blue fluorescence, 6708-6709 black shale, 6709-6721 fine grain gray shaley quartz sand, 6721-6723 medium to coarse grain light gray quartz sand, trace yellow fluorescence.
6724	6755	30	Dakota, 6724-6728½ fine grain gray to brown hard quartz sand, 6728½ to 6731 black shale and coal, 6731-6743 fine grain gray to brown quartz sand, trace yellow fluorescence, 6743-6748 dark gray sandy shale and shaley sand, 6748-6750 black shale, 6750-6754 fine grain medium gray quartz sand.
6756	6767	11	Dakota, 6756-6758 dark gray sandy shale, 6758-6763 fine to medium grain gray shaley sand, trace blue fluorescence 6763-6767 black shale.

CORE RECORD (Con't)

FROM	TO	REC.	DESCRIPTION OF CORE
6768-	6788	19'	Dakota. With 40 stands out, well started kicking mud, unloaded mud thru test line, Est. 560 MFC/24 hrs. Dry rerun and condition mud, pulled core. 6768-6772½ black shale, 6772½ to 6779½ fine to medium grain gray shaley sand, 6779½ to 6787 medium to coarse grain white quartz sand, trace blue fluorescence.

[redacted]

Form 9-330



LOCATE WELL CORRECTLY

RECEIVED
JUL 16 1952
OIL CON. COM.
DIST. 3

Budget Bureau No. 42-R355.1.
Approval expires 11-30-49.

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078135
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Magnolia Petroleum Company Address P.O.Box 633 - Midland, Texas
Lessor or Tract Crandell-Federal Field Wildcat State New Mexico
Well No. 1 Sec. 3 T. 26N R. 9W Meridian N.M. P.M. County San Juan
Location 660 ft. N. of N Line and 660 ft. E. of E Line of Sec. 3 Elevation 6403 'G' (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 R. T. German
Date May 21, 1952 Title Division Superintendent

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

Commenced drilling December 13, 1951 Finished drilling March 14, 1952

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

G No. 1, from 6615 to 6789 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 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
9-5/8				304					
5-1/2				6615					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8	304	200 sacks	Pump Plug		
5-1/2	6615	90 sacks	" "		

FOLD | MARK

PLUGS AND ADAPTERS

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

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
None						

TOOLS USED

Rotary tools were used from 0 feet to 6789 feet, and from - feet to - feet
Cable tools were used from None feet to ____ feet, and from ____ feet to ____ feet

DATES

____, 19__ Put to producing Tested & Shut In April 28, 1952

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 75 MCF Gallons gasoline per 1,000 cu. ft. of gas ____

Rock pressure, lbs. per sq. in. 225 psi

EMPLOYEES

Denman Drilling Company, Driller ____, Driller
Wichita Falls, Texas (Rotary), Driller ____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	213	213	Sand
213	332	119	Sand & Shale. Set 9-5/8" Casing @ 304' with 200 sacks cement. Csg. tested w/500# for 30 minutes before & after drilling plug - no break.
332	1453	1121	Sand & Shale
1453	1992	539	Shale
1992	2181	189	Coal, Shale & Sand
2181	2274	93	Cored (See record of Cores & DST)
2274	2303	29	Sand & Shale
2303	3110	807	Shale
3110	3310	200	Shale & Sand
3310	3384	74	Shale
3384	3390	6	Shale & Sand
3390	3424	34	Shale & Sand
3424	3536	112	Shale
3536	3591	55	Shale & Sand
3591	3850	259	Sand & Shale
3850	3934	84	Cored (See record of Cores & DST.)
3934	4525	591	Shale & Sand
4525	4670	145	Cored (See record of Cores & DST.)
4670	4720	50	Sand & Shale
4720	4767	47	Shale & Lime
4767	5837	1070	Shale & Sand
5837	5908	71	Cored (See record of Cores & DST.)
5908	5910	2	Shale & Sand

(OVER)

16—43094-2