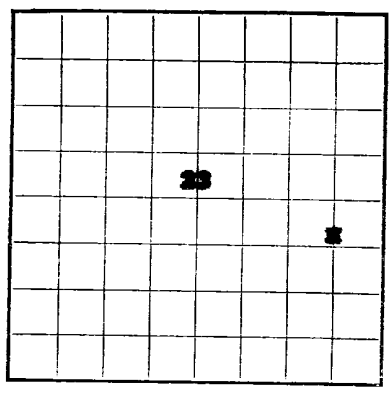
Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.



LOCATE WELL CORRECTLY

USGS-5
Remsky-1
Accounting-1
File-1
Nat'l Coop Rfg-1

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-080697
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Northwest Production Corporation Address 520 Simms Bldg, Albuquerque, N. M.
Lessor or Tract Sandoval 29-7 Field Wildcat (Gallup) State New Mexico
Well No. 1-23 Sec. 23 T. 22N R. 7W Meridian NMP County Sandoval
Location 1980 ft. {N.} of S Line and 660 ft. {E.} of E Line of Section 23 Elevation 6801 unGr grnd
(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.

RAY PHILLIPS
Signed Ray Phillips

Date August 29, 1957 Title Asst Mgr, Prod Operations

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

Commenced drilling June 11, 1957 Finished drilling August 9, 1957

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 4730 to 4742 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 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
10-3/4	32.75	8-RD	Repb.	200.57	Baker Guide				
5½	15.50	8-RD	[illegible]	1190.00	Baker Guide				
5½	14.00	8-RD	CF&I	4750.72			4730	4742	Comp'l
2-3/8	4.7	8-RD	—	4730.50					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	212.17	300	Howco		
5½	5967.62	250	Howco		

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 5975 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

August 23, 1957 Put to producing , 19

The production for the first 24 hours was 34.8 barrels of fluid of which 99 % was oil; % emulsion; 1 % water; and % sediment. Gravity, °Bé. 35

If gas well, cu. ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in.

EMPLOYEES

L. F. Stone, Drlg Mgr, Driller
, Driller
, Driller
, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	651	651	Surface
651	851	200	Ojo Alamo - Sand
851	1180	329	Kirtland - Fruitland - Shale w/coal streaks
1180	1300	120	Pictured Cliffs - Sand
1300	1574	274	Lewis - Shale
1574	1896	322	Chacra - Sand
1896	2600	704	LaVentana - Sand
2600	3538	938	Allison - Gibson - Sand, shale & coal
3538	3712	174	Point Lookout - Sand
3712	4557	845	Mancos - Shale
4557	5520	963	Gallup - Sand w/shaley streaks
5520	5580	60	Greenhorn - Sand
5580	5660	80	Graneros - Shale
5660	5935	275	Dakota - Sand w/shale streaks
5935	5975	40	Morrison - Shale

FOLD | MARK

[OVER]

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

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 the 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.

CORING RECORD

#1 from 3478-3480'. Cut 2' and rec 1½' shale.
#2 from 3480-3508'. Cut 28' and rec 28' shale and coal.
#3 from 3508-3543'. Cut 35' and rec 18' shale with sand stringers.
#4 from 3543-3549'. Cut 6' and rec 6' sand.
#5 from 3549-3569'. Cut 20' and rec 17' - 6' sand and 11' coal and shale.
#6 from 3569-3620'. Cut 51' and rec 51' - 10' coal and shale, 13' sand, 10' coal and shale, 18' sand.
#7 from 3620-3669'. Cut 49' and rec 49' sand.
#8 from 4638-4691'. Cut 53' and rec 53' sand and shaley sand.

#9 from 4691-4741'. Cut 50' and rec 50' sand and shale.
#10 from 4741-4794'. Cut 53' and rec 53' sand with shale streaks.
#11 from 4794-4845'. Cut 51' and rec 51' sand and shaley sand.
#12 from 4845-4898'. Cut 53' and rec 53' - 47' sand and 6' shale.
#13 from 4898-4929'. Cut 31' and rec 31' shaley sand.
#14 from 5595-5635'. Cut 40' and rec 40' shale.
#15 from 5730-5783'. Cut 53' and rec 53' - 27' sand and shale and 26' sand.
#16 from 5783-5836'. Cut 53' and rec 45' water saturated sand.
#17 from 5836-5865'. Cut 29' and rec 29' - 5' hard sand, 6' shale and 18' soft sand.
#18 from 5865-5917'. Cut 52' and rec 35' soft sand.
#19 from 5917-5940'. Cut 23' and rec 20' - 13' sand and 7' shale.

DRILL STEM TEST RECORD

#1 from 3579-3592'. TO 4 hrs & SI 30 mins. Med air blow immed. Sli blow thru out test. IF 95#. IM 1800#. FF 705#. FM 1800#. SIP 1295#. Rec 1600' salt water.

#2 from 3603-3619'. TO 1¼ hours and SI 30 mins. Fair air blow immed - died in 8 mins. IF 15#. IM 1785#. FF 50#. FM 1785#. SIP 1040#. Rec 100' drlg mud.

#3 from 4670-4691'. TO 2 hrs & SI 40 mins. Sli air blow immed - died in 15 mins. IF 0. IM 2415#. FF 0. FM 2395#. SIP 0. Rec 20' drlg mud.

#4 from 4734-4794'. TO 4 hrs and SI 1 hr. Sli air blow immed - died in 12 mins. IF 50#. IM 2550#. FF 50#. FM 2470#. SIP 70#. Rec 3' sli gas-cut mud.

#5 from 2816-2897'. TO 4¼ hrs & SI 30 mins. Fair air blow immed - died after 3 hrs. IF 520#. IM 1470#. FF 580#. FM 1445#. SIP 860#. Rec 720' drlg mud and 390' muddy water.

#6 from 2244-2407'. TO 2 hrs and SI 30 mins. Weak air blow immed - died in 1 hour. IF 450#. IM 1230#. FF 550#. FM 1210#. SIP 550#. Rec 1310' fresh water.

HISTORY OF WELL

MI & RU completion unit 7-26-57. Perf 5½" casing from 5814-20 with 8 shots/foot. Ran 2" tubing and swabbed dry. Treated perfs with 28 barrels diesel oil and Hy-flow. BD 3800#. IR 1 BPM at 2500#. Stdg 1100#. Swabbed load oil and formation water.

Pulled 2" tbg and set CI retnr at 5795'. Sqzd perfs 5814-20 with 45 sx reg cement. BD 3000#. Min 2500#. Max, Final and Stdg 4000#. Job comp 6:30 am 7-31-57.

Perf 2 holes at 4758', set Baker retnr at 4752' and sqzd with 150 sx reg cmt. BD 2600#. IP 1500#. Final and Stdg 2000#. Cement circ to surf. Job comp 5 PM 8-1-57. Drld retnr at 4752' and cleaned out to 5795'.

Perf 4730-42 with 8 shots/ft. Frac w/23,100 gals crude and 20,000# 20-40 sd. BD 3150#. IP 1800#. Avg 1700#. Final 1750#. Stdg 800# after 2 hours. Used 125 balls with press break from 1800# to 1500#. IR 49.6 BPM. Set 2-3/8" OD tubing at 4710' and swabbed load oil. Pulled tubing and reran 4730.50' of 2-3/8" OD J-55 4.7# 8-RD tubing with 4' perfed for production. Tubing hung at 4744.50' with top of perf at 4706.44'. Swab tested 24 hours after all load oil recovered. On swab test recovered 34.51 barrels of 35° Gravity oil. Released completion unit 12 noon 8-9-57.