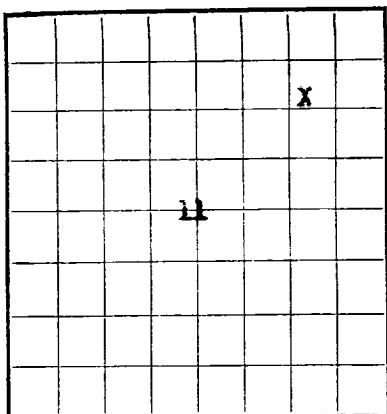


Acctg - 1
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Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

Form 9-330

U. S. LAND OFFICE
SERIAL NUMBER Jicarilla
LEASE OR PERMIT TO PROSPECT
Contract #120



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Northwest Production Corporation Address 520 Sims Bldg., Albuquerque, N.M.
Lessor or Tract S Field Wildcat (PC) State New Mexico
Well No. 11-11 Sec. 11 T. 24N R. 4W Meridian NMPM County Rio Arriba
Location 1090 ft. N of sec. Line and 1090 ft. E of Sec. Line of Sec. 11 Elevation 4623 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 October 11, 1956 Title Asst. Mgr., Prod. Opers.

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

Commenced drilling 8-12-56, 19 Finished drilling 9-29-56, 19

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

No. 1, from 2984 to 3000 G No. 4, from _____ to _____
No. 2, from 3014 to 3030 G 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		Purpose
							From—	To—	
9-5/8	32.30	8.00	Howco	121.23	Howco	guide			
7	30.5	8.00	Howco	3219.79	Howco	guide			
5	17.5	8.00	Howco	281.04	Howco	float			
2-3/8	4.7	8.00	Howco	3015.0	Tubing				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8	135.18	150	Howco		
7	3233.21	200	Howco		
5	7400	215	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 5400 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

October 8, 1956, 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, None ft. per 24 hours CAOT 1956 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. SI TP 9967. SI CP 9967. SI 8 days.

EMPLOYEES

L. A. Bedford, Driller Edna Drlg. Engr., Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2503	2503	Surface
2503	2650	147	Ojo Alamo - Sand w/ some shale
2650	2810	160	Kirtland - Shale & sand.
2810	2983	173	Fruitland - Interbedded sands, shales & coals.
2983	3057	74	Pictured Cliffs - Sand.
3057	4619	1562	Levis - Shale & sand
4619	4657	38	Cliff House - Sand
4657	5149	492	Mansfee - Interbedded sands, shales & coals.
5149	5285	136	Point Lookout - sand w/ some shale.
5285	5400 TD	115	Mancos - Shale.

FORMATION RECORD—Continued

FROM-	TO-	TOTAL FEET	FORMATION
CORING RECORD			
Cut core #1 from 2983-3038.	Rec 55' of PC sand.		
Cut core #2 from 3038-3072.	Rec 7' of sand & 24' shale.		
Cut core #3 from 3840-3855.	Rec 6' of sand & shale & 16 1/2' sand.		
Cut core #4 from 3865-3887.	Rec 19' of shale w/sand stringers, 1' shaley sand.		
Cut core #5 from 4618-4666.	Rec 18' of shale & 19' sand w/trace of porosity.		
DST RECORD			
DST #1 from 5180-5280. TO 2 1/2 hrs & SI 30 mins. Weak air flow thru out. Rec 15' drlg mud. IF & FF 85%. SIP 425#. IH 2585#. PH 2515#.			
LEGS -	NO-	SOUTH EASY	LOCATION
ROBIVISION RECORD			
DATE TIME DRILLER LOGGERS WORK DONE AND PREPARED BY REMARKS			
TOOLS USED			
SHOOTING RECORD			
HITS AND ADVANCES			
MIXING AND CHANGING RECORD			

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.

TD 5400'. PHD 5380'. ME & RU compl rig. Tstd casing w/1000' 30 mins. OK. Perf 5' thinner. CI 5184-92 5224-36 5276-84 w/3 SFF. Frac UPL w/3,000 gals wtr & 40,000' 20-40 sd. BD 2000'. Avg 2200'. Max 2250'. Stgd 1500'-1300' in 30 mins. IR 45.3 BPM. Started swbg 9:30 p.m. 9-19. Could not swbg. Casing dry. Jetted w/gas for 48 hrs- unable to dry. No gas from form. Set CI 5184-92 & perf 5152-66 w/6 SFF. Frac UPL w/10,000 gals wtr & 15,000' 20-40 sd. BD 2400' to 1650'. Avg 1800'. Stgd 1800' in 15 mins. IR 42.4 BPM. Jetted w/gas. No form gas.

IMPORTANT AVIATION STANDS

Spotted 10 sz cement plug on Point Lookout, perf 5152-5166. Set CP @ 3100' & dumped 1 sz calceal on top of plug.

Perf casing fr 3014-3030 w/6 SPF. Frac PC w/25,000 gals wtr & 40,000' 20-40 sz BD 25/5. Avg 1500'. Stdg 750' in 5 mins. IR 67.3 BPM. Set Baser rety BP & perf 2984-3000 w/6 SPF. Frac PC w/25,000 gals wtr & 40,000' 20-40 sz BD 25/5. Avg 1400'. Stdg 750' in 5 mins. IR 67.3 BPM. Set BP & cleaned out to 3095. Set 3015' of 2-3/8 OD 3-55 4.75 8-BD tubing @ 3025' & subg well in. Released rig 12 noon 9-29 & shut well in for gage.

THE UNIVERSITY OF CHICAGO PRESS

D940

1. *Phragmites australis* (Cav.) Trin. ex Steud.

Договор № _____ от «___» ____ 20__ г.

1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

[illegible]

$\mathcal{G}(\mathbf{p}, \mathbf{q}) = \mathcal{G}(\mathbf{p}, \mathbf{q}^*) = \mathcal{G}(\mathbf{p}^*, \mathbf{q}) = \mathcal{G}(\mathbf{p}^*, \mathbf{q}^*)$

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ГЕОЛОГИЧЕСКОЕ ОБРАЗОВАНИЕ

DEPARTMENT OF THE INTERIOR
UNITED STATES

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FORM 8-324

716-089-0000 (M-F)
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