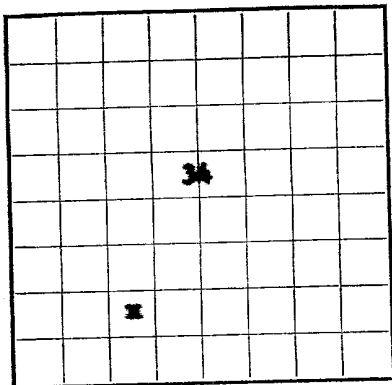


U. S. LAND OFFICE Jicarilla
SERIAL NUMBER _____
LEASE OR PERMIT TO PROSPECT _____
Contract #117

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 "E" Field Tapscote PC Sect State New Mexico
Well No. 3-34 Sec. 34 T. 26N R. 3W Meridian NMPN County Rio Arriba
Location 1090 ft. [N.] of S Line and 1650 ft. [E.] of W Line of Section 34 Elevation 7342 mgs
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 RAY PHILLIPS
Date April 18, 1957 Title Asst Mgr, Prod Operations

The summary on this page is for the condition of the well at above date.
Commenced drilling December 23, 1956 Finished drilling March 25, 1957

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

No. 1, from 3936 to 3960 G No. 4, from 5614 to 5624 G
No. 2, from 5578 to 5586 G No. 5, from 5836 to 5846 G
No. 3, from 5590 to 5602 G No. 6, from 5852 to 5860 G
(Continued)

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		Purpose
							From—	To—	
10-3/4	32.75	8-ED	180.47	Baker guide					
7-5/8	26.40	8-ED	417.40	Baker guide					
5-1/2	15.90	8-ED	282.40	Baker guide					
5-1/8	12.00	8-ED	157.40	Baker guide					
2-3/8	4.7	8-ED	365.72	Baker guide					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity
10-3/4	194.72	200 w/2% CaCl	Howe	
7-5/8	4130.0	150 w/8% & 50 neat	Howe	
5-1/2	6252.0	185	Howe	

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 6260 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

MESEVERDE April 5, 1957 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, _____ per 24 hours CACT 513 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 51 TP 10037. 51 CP 10306. 51 9 days. (Continued)

EMPLOYEES

L. E. Gilbert, Brig Supt Driller _____
_____, Driller _____

FORMATION RECORD

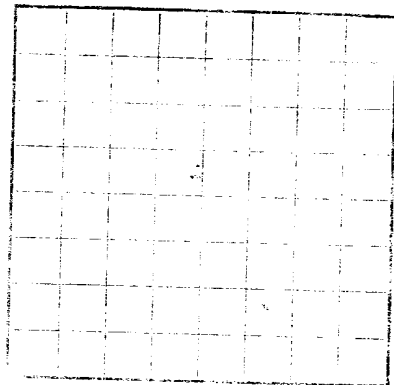
FROM—	TO—	TOTAL FEET	FORMATION
0	3613	3613	Surface
3613	3672	59	Ojo Alamo - Sand
3672	3760	88	Kirtland - Shale
3760	3908	148	Fruitland - Interbedded sand, shale & coal
3908	3983	75	Pictured Cliffs - Sand
3983	5560	1577	Lewis - Shale
5560	5680	120	Cliff House - Sand
5680	6037	357	Manatee - Interbedded sand, shale & coal
6037	6214	177	Faint Lockout - Sand
6214	6260	46	Mancos - Shale

LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES

Learn Permit to Prospect
Bureau of Land Management
U.S. Land Office



LOCATE WELL CORRECTLY

Company Name
Location
The information given herein is a complete and correct record of the work done in this well.
No fact can be determined from all available records.
Signature
Date

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

OIL OR GAS SANDS OR ZONES

Number of feet from top of zone to bottom of zone
No. 1, from _____ to _____
No. 2, from _____ to _____
No. 3, from _____ to _____
No. 4, from _____ to _____
No. 5, from _____ to _____
No. 6, from _____ to _____
No. 7, from _____ to _____
No. 8, from _____ to _____
No. 9, from _____ to _____
No. 10, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____
No. 2, from _____ to _____
No. 3, from _____ to _____
No. 4, from _____ to _____
No. 5, from _____ to _____
No. 6, from _____ to _____
No. 7, from _____ to _____
No. 8, from _____ to _____
No. 9, from _____ to _____
No. 10, from _____ to _____

CASING RECORD

Depth of casing, feet
Type of casing, feet
Date of casing, feet
Name of casing, feet
Location of casing, feet
Depth of casing, feet
Type of casing, feet
Date of casing, feet
Name of casing, feet
Location of casing, feet

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 added, state 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.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE

DATE	DEPTH OF WELL, FEET	DEPTH OF CASING, FEET	DEPTH OF WATER, FEET	DEPTH OF OIL, FEET	DEPTH OF GAS, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET

PLUGS AND ADAPTERS

Material
Size
Depth of plug, feet
Depth of adapter, feet
Date of plug, feet
Date of adapter, feet
Name of plug, feet
Name of adapter, feet
Location of plug, feet
Location of adapter, feet

SHOOTING RECORD

DATE	DEPTH OF WELL, FEET	DEPTH OF CASING, FEET	DEPTH OF WATER, FEET	DEPTH OF OIL, FEET	DEPTH OF GAS, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET

TOOLS USED

Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____
Tools used from _____ to _____

DATES

Production for the first _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the second _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the third _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the fourth _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the fifth _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the sixth _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the seventh _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the eighth _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the ninth _____ months was _____ barrels of oil and _____ barrels of gas.
Production for the tenth _____ months was _____ barrels of oil and _____ barrels of gas.

EMPLOYEES

Name of employee
Position of employee
Date of employment
Date of termination
Name of employee
Position of employee
Date of employment
Date of termination
Name of employee
Position of employee
Date of employment
Date of termination
Name of employee
Position of employee
Date of employment
Date of termination

FORMATION RECORD

FORMATION	DEPTH OF WELL, FEET	DEPTH OF CASING, FEET	DEPTH OF WATER, FEET	DEPTH OF OIL, FEET	DEPTH OF GAS, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET	DEPTH OF SAND, FEET	DEPTH OF ZONE, FEET

LOG OF OIL OR GAS WELL

WELL "E" 3-34

PAGE 2

OIL OR GAS SANDS OR ZONES (CONTD)

From 5864 to 5878	G
5886	5896 G
5942	5950 G
6050	6088 G
6092	6110 G
6118	6126 G
6170	6178 G
6182	6186 G

MUDDING AND CEMENTING RECORD (CONTD)

Drld plug in 7-5/8" casing and encountered moisture. Set retrr at 3992' and sqsd shoe w/150 sx w/1/4" flocele/sx. BD on vacuum. Final and holding 700#. Job comp 12:40 am 1-12-57. Drld retrr.

TESTS (CONTD)

Tested Pictured Cliffs formation 4-12-57 thru 3/4" choke on casing. SI TP 1125#. SI CP 1040#. CAOP 1,261 MCF.

HISTORY OF OIL OR GAS WELL

TD 6260'. FMD 6252'. MI & RU compl rig 3-13-57. Perf 5 1/2" liner w/3 SPF from 6050-88, 6092-6110, 6118-26, 6170-78, 6182-86. Frac lower Mesaverde w/75,000 gals water. BD 1600#. Avg 1700#. Max 1800#. To vacuum. IR 93.3 BPM. Used 183 ball sealers. Perf 4 SPF from 5578-86, 5590-5602, 5614-24, 5836-46, 5852-60, 5864-78, 5886-96, 5942-50. Set BP at 6000' and frac upper Mesaverde w/75,000 gals water. BD 2000#. Avg 1800#. Max 3000#. IR 78 BPM. Used 340 ball sealers and had 3 press breaks. Overall IR 72 BPM. Retrv BP. Perf 3936-60 w/4 SPF. Set BP at 4043' and frac Pictured Cliffs w/33,000 gals water and 25,000# 20-40 sd. BD 2600#. Avg 2800#. Max 3100#. Used 90 ball sealers and obtained complete shut off. IR 47 BPM. Retrv BP. Set 5659.73' of 2-3/8" OD J-55 4.7# 8-ED tubing at 5669.23' w/Baker EOJ packer at 5479.24' and Otis side-door choke w/straight thru mandril at 5478'. Released rig 8 am 3-25-57. Completed well to produce the Mesaverde thru the tubing and the Pictured Cliffs thru the tubing-casing annulus. Well SIFIP.

THEORY OF THE EARTH

1871-1872

THEORY OF THE EARTH

1871-1872

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