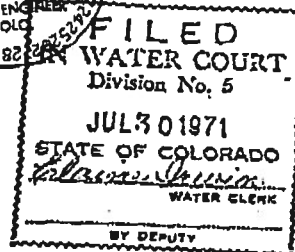
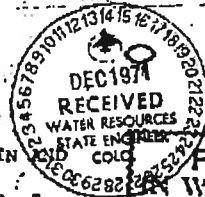


IN THE DISTRICT COURT IN  
FOR WATER DIVISION NO. 5  
STATE OF COLORADO

Application No. W-307



Best Copy Available

SEP 2 1971  
TWEEDY & MOSLEY

IN THE MATTER OF THE APPLICATION  
FOR WATER RIGHTS OF THE OIL SHALE  
CORPORATION IN THE WHITE RIVER OR  
ITS TRIBUTARIES  
TRIBUTARY INVOLVED: PICSANCE CREEK  
IN RIO BLANCO COUNTY

RULING OF  
REFEREE

RECEIVED  
SEP - 3 1971

TOSCO-DENVER

The above entitled matter having been referred to the under-  
signed as Water Referee for Water Division No. 5, State of Colorado,  
by the Water Judge of said Court on the 26th day of April, 1971, in  
accordance with Article 21 of Chapter 148, Colorado Revised Statutes  
1963, as amended (Chapter 373 S.L. Colo. 1969), known as The Water  
Rights Determination and Administration Act of 1969.

And the undersigned Referee having made such investigations  
as are necessary to determine whether or not the statements in the  
application are true and having become fully advised with respect to  
the subject matter of the application does hereby make the following  
determination and ruling as the Referee in this matter, to-wit:

1. The statements in the application are true.
2. The name of claimant and address is: The Oil Shale Corporation, 1700 Broadway, Denver, Colorado 80202.
3. The source of water is a well having a depth of 2,395 feet.
4. The legal description of point of diversion is: The well is located 630 feet South and 530 feet West of the Northeast corner of Section 10 in the NE 1/4 NE 1/4 of Section 10, T.3S., R.96W. of the 6th P.M. in Rio Blanco county, Colorado.
5. The proposed use of the water is irrigation, domestic, and industrial.
6. The date of initiation of appropriation is June 22, 1964.
7. The amount of water claimed in cubic feet per second of time is 0.5 cubic feet per second of time.
8. A permit to drill a well was issued to the Oil Shale Corporation by the Office of the State Engineer on January 10, 1966, No. 10537-F.



Best Copy Available

The Referee does therefore conclude that the above entitled application should be granted and that 0.5 cubic feet of water per second of time hereby is awarded to the Oil Shale Corporation Well for irrigation, industrial, and domestic uses, with appropriation date of the 22nd day of June, 1964, absolutely and unconditionally, subject, however, to all earlier priority rights of others and to the integration and tabulation by the Division Engineer of such priorities and changes of rights in accordance with law as may be determined in pending supplemental general adjudication proceedings.

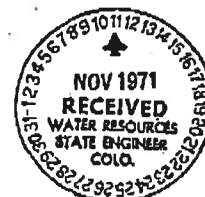
It is accordingly ORDERED that this ruling shall be entered by the Referee in his records and shall become effective upon such entry, subject to judicial review as provided by law.

It is further ORDERED that a copy of this ruling shall be filed with the appropriate Division Engineer and the Water Clerk of said Court.

Done at the City of Glenwood Springs, Colorado, this 30<sup>th</sup> day of July, 1971.

BY THE REFEREE:

James Cole  
Water Referee  
Water Division No. 5  
State of Colorado



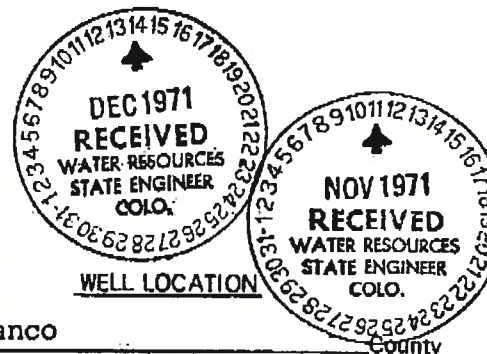
No protest was filed in this matter. The foregoing ruling is confirmed and approved, and is made the judgment and Decree of this court.

Dated: August 27, 1971.  
Edward H. Dawson  
Water Judge

Index No. \_\_\_\_\_  
 IDWD \_\_\_\_\_  
 Completion \_\_\_\_\_  
 Yield \_\_\_\_\_  
 Checked By \_\_\_\_\_

STATE OF COLORADO  
 DIVISION OF WATER RESOURCES  
 OFFICE OF THE STATE ENGINEER

MAP AND STATEMENT FOR WATER WELL FILING  
 PERMIT NUMBER 10537-F



STATE OF COLORADO ) SS

**THE OIL SHALE CORPORATION**

CLAIMANT (X)

Lawrence M. Wert

being duly sworn upon oath deposes and says that he (they) is (are)  
 the owner (s) of the well described hereon; the total number of acres

of land irrigated from this well is 5<sup>+</sup> or more acres;  
 work was commenced on this well by actual construction on the

22nd day of June 1964; the sustained

yield from said well is 230 gpm, for which claim is hereby made

for irrigation, domestic & industrial purpose (s);

the average annual amount to be diverted is 361.98  
 acre-feet; this map and statement is filed in compliance with law;  
 he (they) has (have) read the statements made hereon; knows the  
 content thereof; and that the same are true of his (their) own  
 knowledge. **THE OIL SHALE CORPORATION**

Signature (s) By: Lawrence M. Wert  
Lawrence M. Wert

Address: 1600 Broadway

Denver, Colorado 80202

Subscribed and sworn to before me on this 10<sup>th</sup> day

of November, 19 71

My Commission expires: December 1, 1973  
 (Seal)

Natalie Gauer  
 Notary Public

WELL DATA

Date Completed July 6, 1964

Static Water Level 45 feet below top of casing

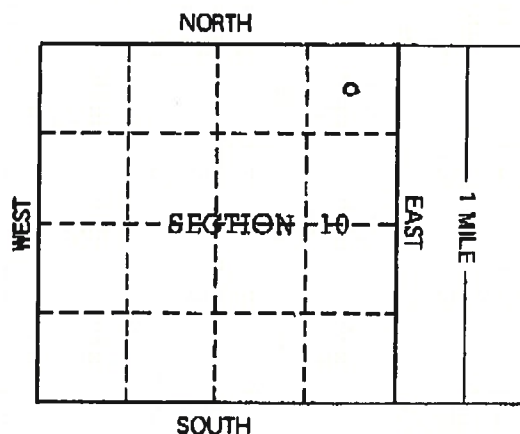
Total Depth of Well 2395 feet

Rio Blanco

NE 1/4 of NE 1/4, sec. 10

T. 3 South R. 96 West, 6th P.M.

INDICATE WELL LOCATION ON DIAGRAM



WELL SHALL BE LOCATED WITH REFERENCE TO  
 GOVERNMENT SURVEY CORNERS OR MONUMENTS,  
 OR SECTION LINES BY DISTANCE AND BEARING.

630 ft. from north section line.  
 (North or South)

530 ft. from east section line.  
 (East or West)

Ground Water Basin Piceance Creek

Water Management  
 District \_\_\_\_\_

Domestic wells may be located by the following:

LOT \_\_\_\_\_, BLOCK \_\_\_\_\_

SUBDIVISION \_\_\_\_\_

FILING # \_\_\_\_\_

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF COLORADO ON THIS \_\_\_\_\_ DAY

OF \_\_\_\_\_, 19 \_\_\_\_\_

STATE ENGINEER

[Signature]

FORM TO BE MADE OUT IN QUADRUPLICATE: WHITE FORM must be an original copy on both sides and signed.  
 WHITE AND GREEN copies must be filed with the State Engineer within 30 days after the well is completed or within 7 days  
 after expiration date of the permit, whichever is sooner; PINK COPY is for the Owner and YELLOW COPY is for the Driller.

## WELL LOG

From	To	Type & Color of Material	Water Loc.
---		First Water	485 ft.
---		Estimated source of present flow	600 to 650
---		Last Water	911 ft.
Use additional paper if necessary to complete log.			

## WELL DATA

Type Drilling \_\_\_\_\_

## HOLE DIAMETER:

17 in. from KB ft. to 44 ft.

11-1/4 in. from 44 ft. to 465 ft.

7-7/8 in. from 465 ft. to 2395 ft.

## CASING RECORD

Plain Casing

13-3/8 surface Size, kind KB ft. to 44 ft.

8-5/8 Size, kind from 44 ft. to 462 ft.

Open Size, kind from 462 ft. to 2395 ft.

Perforated Casing NONE

Size, kind from ft. to ft.

Size, kind from ft. to ft.

Size, kind from ft. to ft.

GROUTING RECORD NONE

Material \_\_\_\_\_

Intervals \_\_\_\_\_

Placement Method \_\_\_\_\_

GRAVEL PACK RECORD NONE

Size \_\_\_\_\_ Interval \_\_\_\_\_

## TEST DATA

Date Tested Sept. 29, 1965Type of Pump ---Length of Test 24 hoursSustained Yield (Metered) 230 gpmDrawdown 400 feet

## WELL DRILLERS STATEMENT

The undersigned, being duly sworn, deposes and says: he is the driller of the well hereon described; he has read the statement made hereon; knows the content thereof, and the same is true of his own knowledge.

X \_\_\_\_\_

License No. \_\_\_\_\_

State of Colorado, County of \_\_\_\_\_) ss

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

My Commission expires \_\_\_\_\_, 19\_\_\_\_.

Notary Public

2 8 1966

**STATE OF COLORADO**  
**DIVISION OF WATER RESOURCES**  
**OFFICE OF THE STATE ENGINEER**  
**GROUND WATER SECTION**

DEC 22 1965  
 GROUND WATER SECT.  
 COLORADO  
 STATE ENGINEER

Index No. 78  
 IDWD 6-43  
 Use 6 9  
 Registered 12-22-65

(For State Engineer's Use)

**LOG AND HISTORY OF WELL**PERMIT NO. 10537-F**WELL LOCATION**Driller Equity Oil Company Lic. No. \_\_\_\_\_
 Owner The Oil Shale Corporation, et al  
1600 Broadway, Suite 1120  
 Street 1700 Broadway City Denver 2, Colo.

Rio Blanco County

Tenant Reuben OldlandTwp. 3 S. Rge. 96 W. 6th PMUse of Water Irrigation, Commercial, Industrial
 On or By NENE, Sec. 10, T. 3 S., R. 96 W. Acres \_\_\_\_\_  
 (description of site or land)
Date Started June 22, 1964Date Completed July 6, 1964Yield 230 GPM or \_\_\_\_\_ CFS**WELL DESCRIPTION:**
 Depth to Water \_\_\_\_\_ ft. Total Depth 2395 ft.  
 (measured from ground surface)

 Hole Diameter { in. 17 from K.B. ft. to 44 ft.  
                   in. 11 1/4 from K.B. ft. to 465 ft.  
                   in. 7 7/8 from K.B. ft. to 2395 ft.
**TEST DATA:**How Tested \_\_\_\_\_ Pump or \_\_\_\_\_ Bailed flowDate Tested 9/29, 1965 Length 24 hrs.Rate 230 GPM Drawn Down 400 ft.**PUMP DATA:**

Pump Type \_\_\_\_\_ Outlet Size \_\_\_\_\_ in.

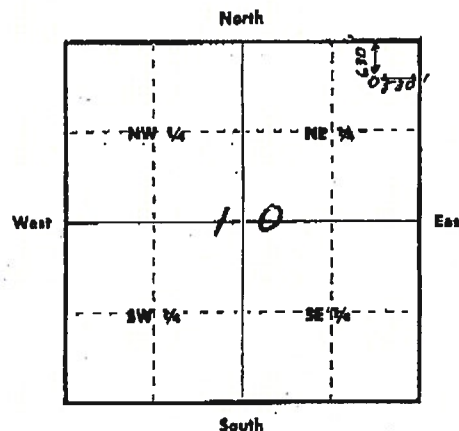
Driven by \_\_\_\_\_ HP \_\_\_\_\_

**CASING RECORD:****Plain Casing**Size 13 3/8, Kind surf. from K.B. ft. to 43 ft.Size 8 5/8, Kind \_\_\_\_\_ from K.B. ft. to 462 ft.Size Open, Kind \_\_\_\_\_ from \_\_\_\_\_ ft. to 2395 ft.**Perforated Casing**

Size \_\_\_\_\_, Kind \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Size \_\_\_\_\_, Kind \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Size \_\_\_\_\_, Kind \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.



ABOVE DIAGRAM REPRESENTS ONE FULL SECTION. LOCATE WELL ACCURATELY IN SMALL SQUARE REPRESENTING 40 ACRES.

or

If the above is not applicable fill in:

No. \_\_\_\_\_ Street \_\_\_\_\_

City or Town \_\_\_\_\_

or

Lot \_\_\_\_\_, Block \_\_\_\_\_

 \_\_\_\_\_ Subdivision  
 (Include filing or number)
**TO BE MADE OUT IN QUADRUPLICATE:**

Original Blue (both sides) and Duplicate Green Copy must be filed with the State Engineer within 30 days after well is completed. White copy is for the Owner and Yellow copy for the Driller. **SIGN BLUE COPY**

## WELL LOG

Ground Elevation\_\_\_\_\_ (if known)

How Drilled Rotary[illegible]

(if more space is required use additional sheet)

## WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed THE OIL SHALE CORPORATION

By Angela E Nelson

Dated 12/22/25



Form C Rev.  
9-62/10M

STATE OF COLORADO

APPLICATION FOR:

☒ A PERMIT TO USE GROUND WATER  
☒ A PERMIT TO CONSTRUCT A WELL

RECEIVED

DEC 22 1965

GROUND WATER SECT  
COLORADO

Applicant The Oil Shale Corporation

P.O. Address 1700 Broadway, Denver

Quantity applied for 230 gpm or  
AF Storage

Used for Irrigation, industrial commercial and  
Purposes

on/at NE NE, Sec. 10. T. 3 S., R. 96 W.  
(legal description of land site)

Total acreage irrigated and other rts.

ESTIMATED DATA OF WELL

Hole size: 11 1/4 in. to 462 ft.

7 7/8 in. to 2395 ft.

Casing Plain 33/8 in. from KB to 43 ft.

8 5/8 in. from KB to 462 ft.

Open or Perf 7 7/8 in. from 462 to 2395 ft.

in. from to ft.

PUMP

DATA: Type Flowing HP Size

Use initiation date 19

(Use Supplemental pages for additional data)

Oil Well Conversion

Driller to furnish Log and History (Form E)  
within 30 days after completion of well.

County Rio Blanco

LOCATION OF WELL

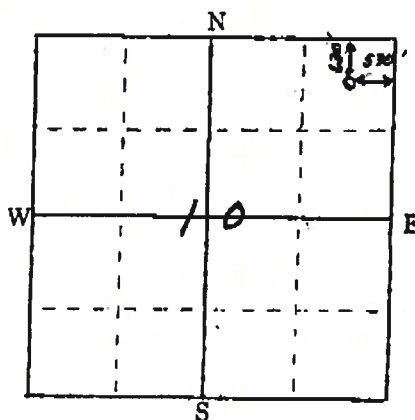
STATE ENGINEER

NE 1/4 of NE 1/4 of Sect. 10, Twp. 3 S.

Rge. 96 W., 6th P.M. OR

Street Address or Lot & Block No.

Town or Subdivision



Locate  
well in  
40 acre  
(small)  
square  
as near  
as possible.  
Large square  
is one section.

\$25.00 fee required for uses other  
than Domestic or Livestock.

Applicant The Oil Shale Corporation

Agent or by Douglas E. Nelson

Driller No.

Address 1700 Broadway, Denver Colo

NOTE - SATISFACTORY COMPLETION REQUIRED FOR APPROVAL OF APPLICATION

No apparent interference RE

THIS APPLICATION APPROVED

PERMIT NO. 10537-F

ISSUED:

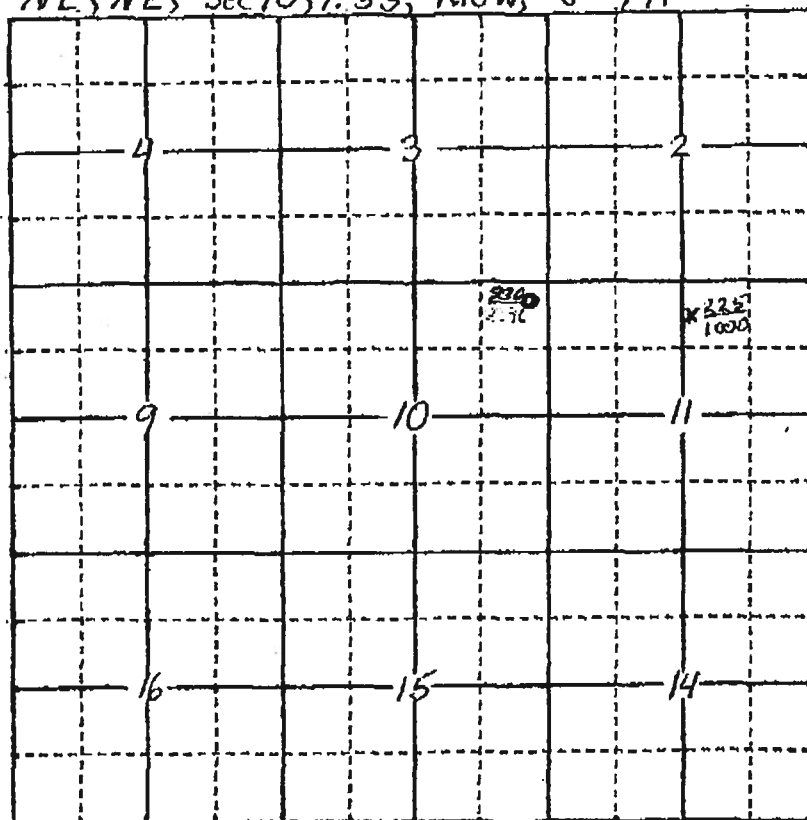
DATE JAN 10 1966 19

Rio Blanco Co #52

6-43

NE, NE, Sec 10, T. 35, R. 16 W, 6th PM

Sec 11



0 FLOW  
2016

no well within  
1/2 mile

12-23-65  
aH



THE OIL SHALE CORPORATION  
1700 BROADWAY  
DENVER 2, COLORADO

December 28, 1965

Oil and Gas Conservation Commission  
of the State of Colorado  
State Services Building - No. 312  
Denver, Colorado

Re: Applications for Water Well

Gentlemen:

Under the date of December 22, 1965, we made application with the State Engineer for a water well permit for a well located in the NE/4 NE/4 of Sec. 10, T. 3 S., R. 96 W., Rio Blanco County, Colorado.

The present owners of this land are The Oil Shale Corporation, Sohio Petroleum Company and Shell Oil Company. The former owners, Reuben Oldland, et al, now occupy this land under a surface lease agreement granted by the present owners.

The subject well was drilled by Equity Oil Company for the purpose of discovering oil and gas. Equity has now surrendered its oil and gas lease and a copy of this instrument was filed with the State Engineer together with our water well application.

Equity Oil Company has been released from all obligations in connection with this well. The Oldlands' no longer have any ownership in this land. The present owners accept full responsibility with regard to the said well.

RECEIVED  
STATE ENGINEER  
OF COLORADO

Oil and Gas Conservation Commission

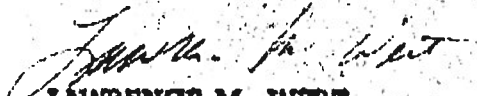
December 28, 1965

Page 2

Enclosed herewith please find a copy of a letter from Donald L. Coffin of the Geological Survey together with copies of its attachments. These materials are all that we have in the nature of test data.

We trust that this is the material which you need in this connection and we hope that it satisfies Rule 330(g) of your Rules and Regulations.

Very truly yours,

  
LAWRENCE M. WERT  
Land Department

LMW/ks  
Encs.

cc: State Engineer of the State of Colorado w/encs.



UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY  
FEDERAL CENTER, DENVER 25, COLORADO

December 2, 1965

IN REPLY REFER TO  
Donald L. Coffin  
Ground Water Branch

*OLDLAND  
WATER*

Mr. L. M. Wert  
The Oil Shale Corp.  
Room 1112  
1700 Broadway  
Denver, Colorado

Dear Mr. Wert:

Enclosed are plots of the data obtained during pump tests of two wells at the Ruben Oldland ranch near Rio Blanco. The data are probably not complete enough to determine the actual maximum yield of the wells, however, the data indicate at least the order of magnitude of the potential yield. Further testing probably would be necessary before the wells were put into operation.

Because the value of specific capacity usually declines with time, the discharge of a well as computed from specific capacity should not be projected for periods of pumping longer than for the period of test that was used to determine the specific capacity. Therefore, the values for the theoretical maximum discharge of the wells would be for periods of pumping that are less than one day.

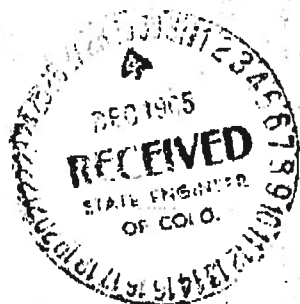
If you have any questions about the tests I will be glad to try to answer them. Many thanks for your cooperation during the pump tests.

Sincerely yours,

*Don Coffin*

Donald L. Coffin  
Geologist

*94* Enclosures



RECEIVED

DEC 3 1965

TOSCO-DENVER



Flowing artesian well in sec. 10, T.3S., R.96W.

Sept. 29 to Oct. 1, 1965

Head after well is shut in for 20 days = 100.1 ft. above land surface

Three valves were opened and well flowed for 1 day at an average rate of 230 gallons per minute

Valves were closed and the recovery of head was measured

Specific capacity at 1330 minutes = 2.5 gallons per minute per foot of drawdown

Theoretical maximum discharge of well, assuming well is pumped and water level is drawn down to 400 feet below land surface = 1,000 gallons per minute

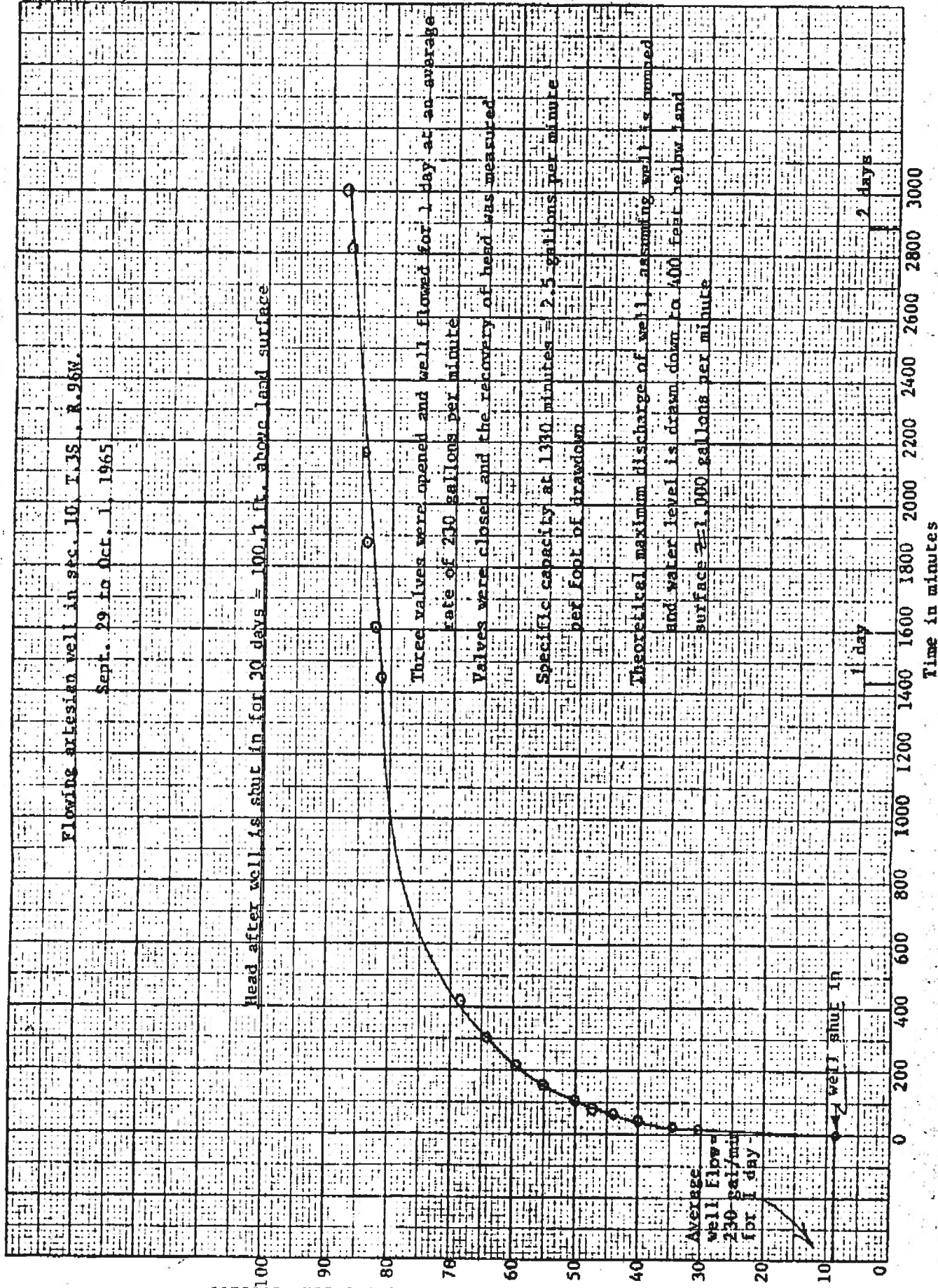
Average well flow = 230 gal/min for 1 day

Well shut in

1 day

2 days

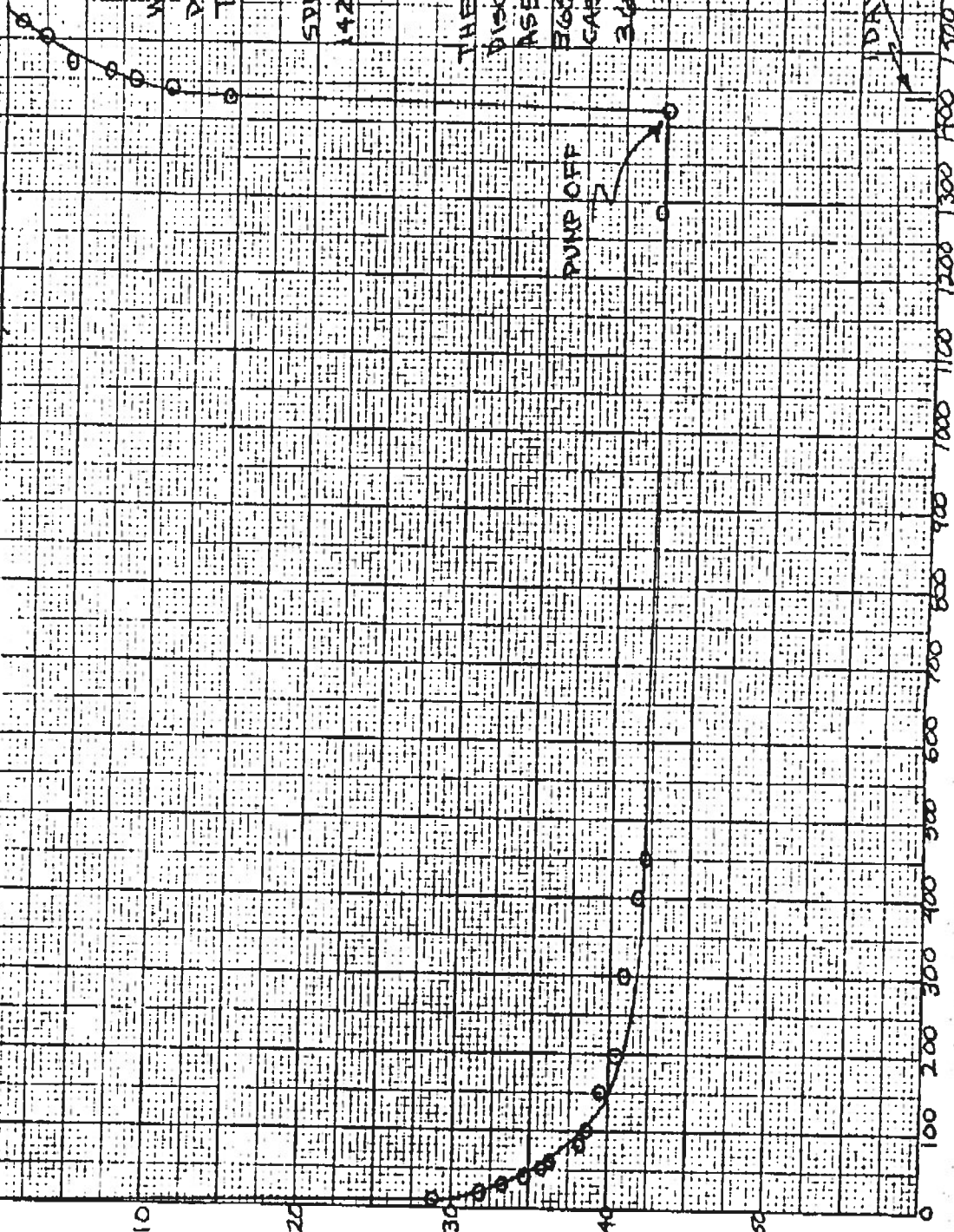
Time in minutes



OLDLAND NO. 1, OCT 1-2, 1965  
SEC. 11, T 35, R 96W

PUMP ON

TOP OF CASING



WELL FLOWS - 20 gal/min  
PUMPING RATE = 44 gal/min  
TOTAL DISCHARGE = 64 gal/min

SPECIFIC CAPACITY AT  
1420 MIN = 1 gal/min  
ft. of drawdown

THEORETICAL MAXIMUM  
DISCHARGE OF WELL,  
ASSUMING PUMP INTAKE SET  
365 FT. BELOW TOP OF  
CASING =  
365 ft. x 1 gal/min = 365 gal/min  
= 365 gal/min

DRY

Time in minutes