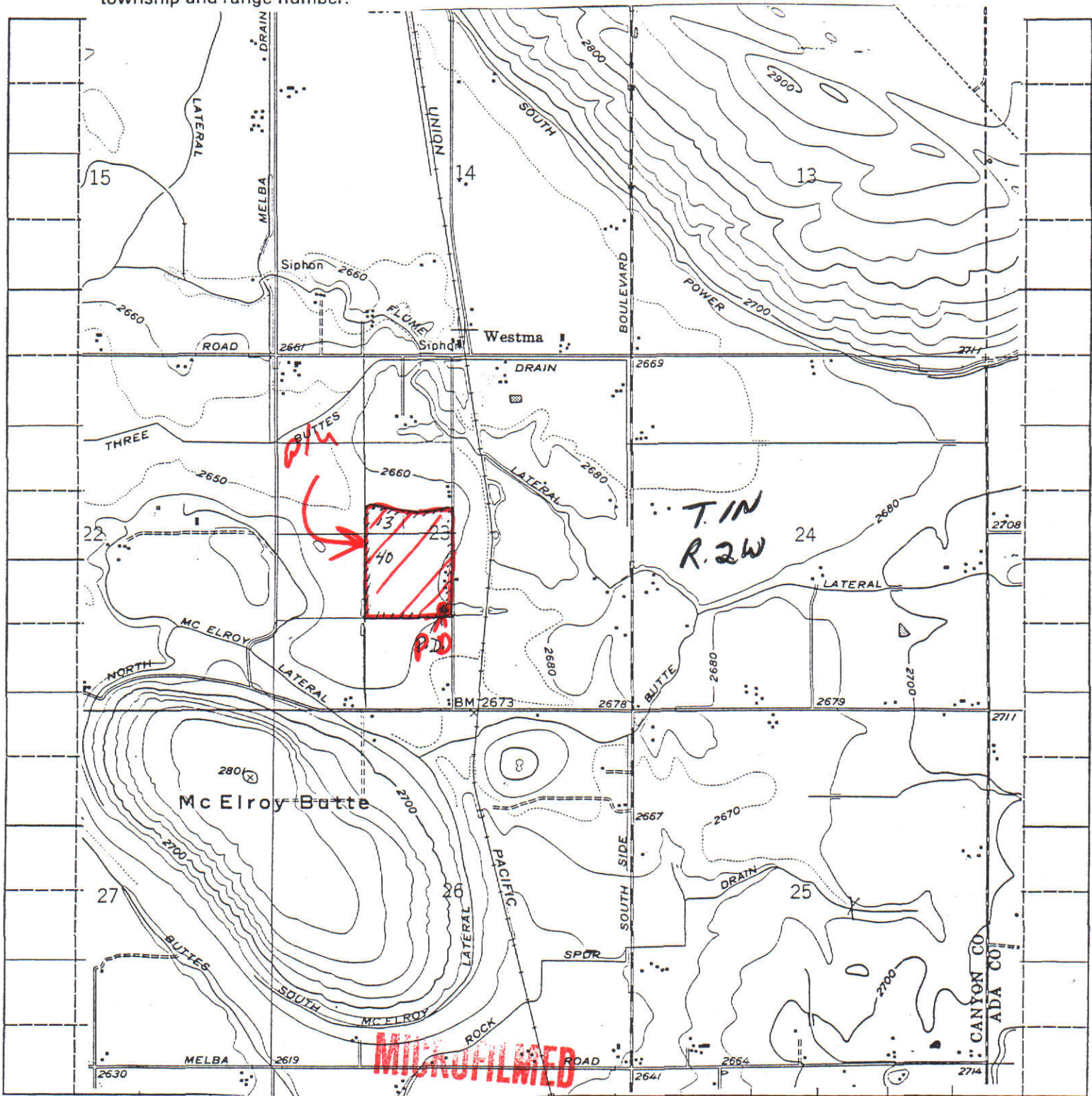


63-11088

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

APR 19 1990

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

MAP OBTAINED FROM  
PERMIT 63-10562, which  
has lapsed.

*Floyd Tomlinson*  
(Applicant)

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**RECEIVED**  
JUL 30 1991

Department of Water Resources

**A. GENERAL INFORMATION**

Permit No. 63-11088

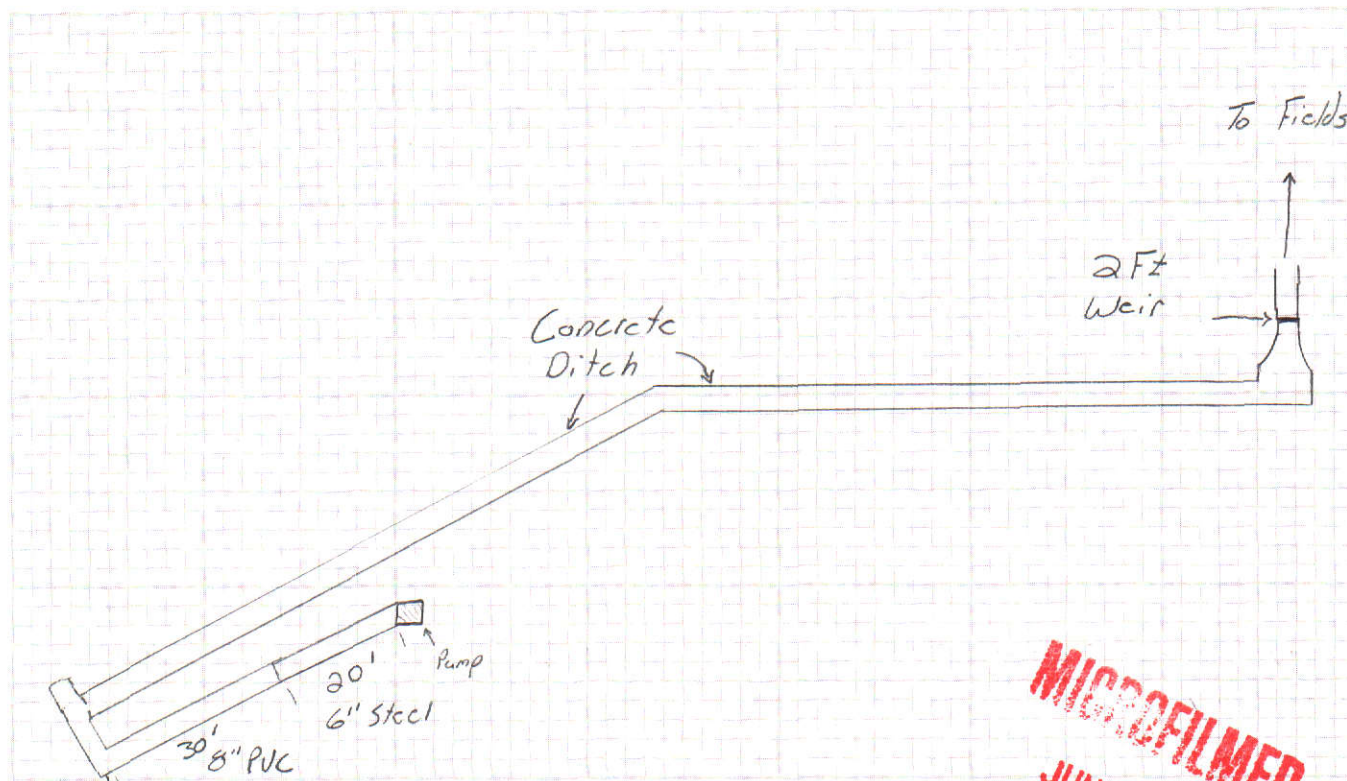
1. Owner: Floyd Tomlinson Phone No. 495-2705  
Current Address: 2629 Track Road Melba, ID 83641  
2. Accompanied by: Floyd Tomlinson EXAM. DATE: 5-23-91  
Address: Same Phone No. Same  
Relationship to Permit Holder: OWNER  
3. Source: Groundwater tributary to NONE

**B. OVERLAP REVIEW**

1. Other water rights with same place of use: None ☐ Copies Attached  
2. Other water rights with same point of diversion: None ☐ Copies Attached ☐ Copies of Field Exam's Attached

**C. SYSTEM DESCRIPTION**

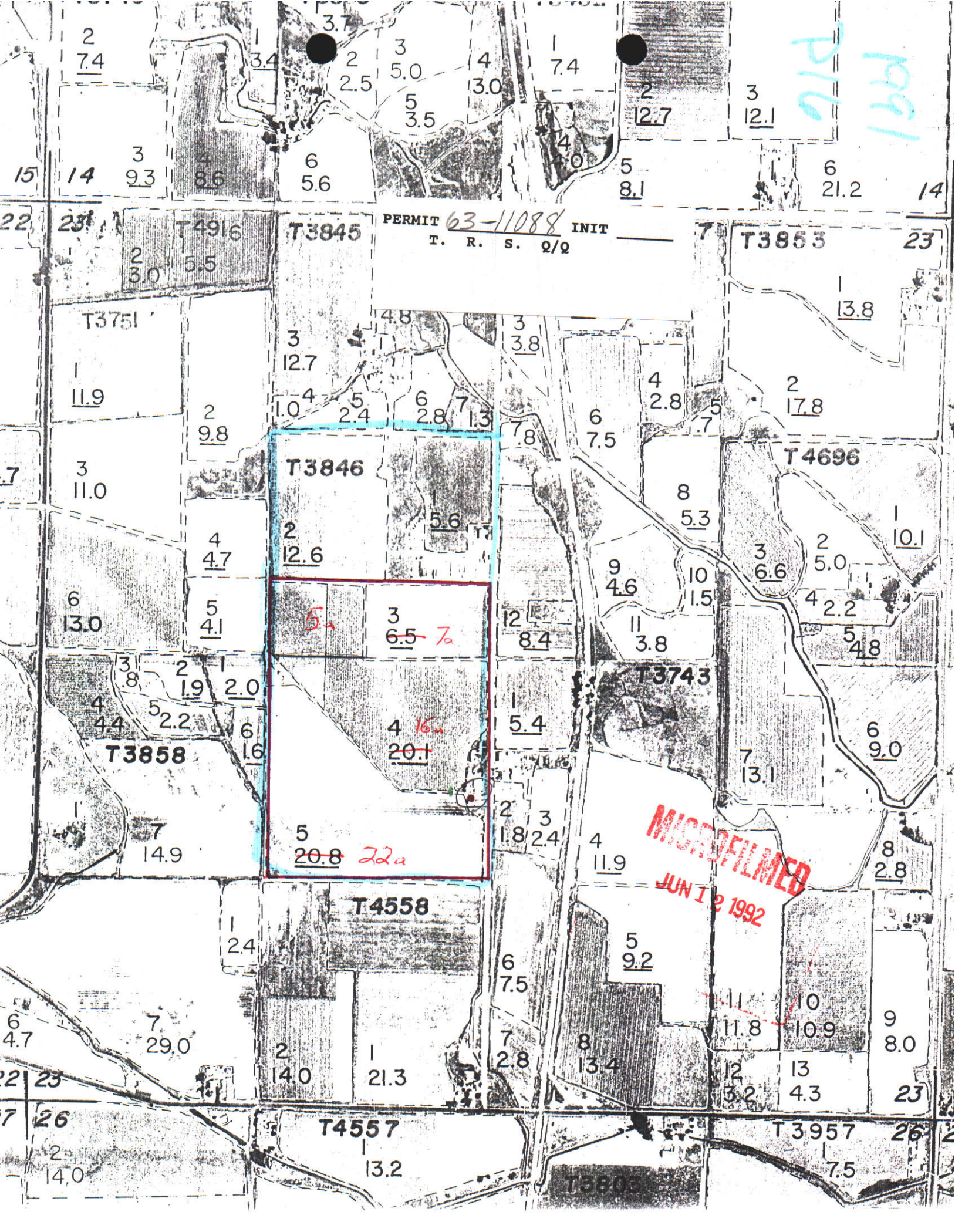
1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = \_\_\_\_\_

2. ☒ Copy of U.S.G.S. Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).  
☒ Photo of Diversion and System Attached (required for all but single household domestic groundwater, and stockwater).  
☒ Aerial Photo Attached (required for irrigation of 10 acres or more).

**MICROFILMED**  
JUN 12 1992



p/c  
p/q

PERMIT 63-11088 INIT  
T. R. S. Q/Q

MICROFILMED  
JUN 12 1992

T3845

T3853

T3751

T3846

T4696

T3858

T3743

T4558

T4557

T3957

PERMIT 03-11088 INIT MS

T. R. S. Q/Q

P/D IN 2W 23 NESW

SCALE

PHOTO ID. Y6

P/U

P/D

McElroy Butte

NOT FILMED  
JUN 12 1992

63-11088



#1

30 H.P. pump  
with 6" discharge  
at P/O.



#2

Pump discharges  
into steel pipe  
in Fore ground.  
Steel pipe joins  
with 8" PVC  
pipe.

Place of  
use.

MICROFILMED  
JUN 1 2 1992



#3

PVC pipe  
discharges into  
concrete ditch.  
Flows to the  
right in ditch.



#4

Water measured  
at weir.  
Irrigation done  
by siphon tubes.

MICROFILMED  
JUN 12 1992



#5

Place of  
use.

**MICROFILMED**  
JUN 12 1992

State of Idaho  
Department of Water Resources

# WATER RIGHT LICENSE

WATER RIGHT NO. 63-11088

Priority: December 28, 1989

Maximum Diversion Rate: 1.00 CFS  
Maximum Diversion Volume: 225.0 AF

This is to certify, that FLOYD TOMLINSON  
JULIA TOMLINSON

2629 TRACK RD  
MELBA ID 83641

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated December 28, 1989; and has submitted Proof of Beneficial Use on May 7, 1990. An examination indicates that the works have a diversion capacity of 1.320 cfs of water from a **GROUNDWATER** source, and a water right has been established as follows:

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>RATE OF DIVERSION</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|--------------------------|----------------------|
| IRRIGATION            | 03/15 to 11/15       | 1.00 CFS                 | 225.0 AF             |

LOCATION OF POINT(S) OF DIVERSION:

NESW , Sec. 23, Township 01N, Range 02W  
CANYON County

PLACE OF USE: IRRIGATION

| <u>TWN</u> | <u>RGE</u> | <u>SEC</u> | <u>ACRES</u> | <u>ACRES</u> | <u>ACRES</u> | <u>TOTAL</u> |
|------------|------------|------------|--------------|--------------|--------------|--------------|
| 01N        | 02W        | 23         | SENW 12      | NESW 38      |              | 50           |

Total number of acres irrigated: 50

CONDITIONS/REMARKS:

1. The maximum diversion volume is defined as the maximum allowable volume of water that may be diverted annually from the source under this right. The use of water confirmed by this right is limited to the amount that can actually be beneficially used. The maximum diversion volume may be adjusted to more accurately describe the beneficial use or to implement accepted standards of diversion and use efficiency.
2. This water right is appurtenant to the described place of use.
3. This right is subject to all prior water rights and may be forfeited by five years of non-use.
4. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
5. This right when combined with all other rights shall provide no more than .02 cfs per acre nor more than 4.5 afa per acre for the lands above.

RECORDED

JUN 12 1992

State of Idaho  
Department of Water Resources

# WATER RIGHT LICENSE

WATER RIGHT NO. 63-11088

This license is issued pursuant to the provisions of Section 42-219, Idaho Code.  
Witness the seal and signature of the Director, affixed at Boise, this 28<sup>th</sup>  
day of MAY, 1992.

Acting for R. Keith Higginson, Director

RECEIVED  
JUN 2 1992

State of Idaho  
Department of Water Resources

# Permit To Appropriate Water

NO. 63-11088

Proposed Priority: December 28, 1989 Maximum Diversion Rate: 1.06 CFS

This is to certify, that JULIA TOMLINSON  
FLOYD TOMLINSON  
2629 TRACK RD.  
MELBA, ID 83641

has applied for a permit to appropriate water from: GROUNDWATER  
and a permit is APPROVED for development of water as follows:

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>RATE OF DIVERSION</u> |
|-----------------------|----------------------|--------------------------|
| IRRIGATION            | 03/15 to 11/15       | 1.06 CFS                 |

LOCATION OF POINT(S) OF DIVERSION: NESW Sec. 23, Township 01N, Range 02W  
CANYON County

PLACE OF USE: IRRIGATION

| <u>TWN</u>                       | <u>RGE</u> | <u>SEC</u> | <u>ACRES</u> | <u>ACRES</u> | <u>ACRES</u> | <u>TOTAL</u> |
|----------------------------------|------------|------------|--------------|--------------|--------------|--------------|
| 01N                              | 02W        | 23         | SENW 13      | NESW 40      |              | 53           |
| Total number of acres irrigated: |            |            |              |              |              | 53           |

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before May 1, 1993.
2. Subject to all prior water rights.
3. Permit holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
4. Permit holder shall commence the excavation or construction of diverting works within one year of the date this permit is issued and shall proceed diligently until the project is complete.
5. Prior to the diversion of water under this permit a flow measurement port or other device as specified by the Department shall be installed to provide for the installation of measuring equipment and the determination of the rate of diversion by the Department.
6. The rate of diversion of water for irrigation under this permit and all other water rights on the same land shall not exceed 0.02 cubic feet per second for each acre of land.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.  
Witness the seal and signature of the Director, affixed at Boise, this

3<sup>rd</sup> day of April 1990

MICROFILMED

APR 19 1990

for *[Signature]*  
R. Keith Higginson, Director

Ident. No. 63-11088

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name: JULIA TOMLINSON 208-495-2705  
Address: 2629 TRACK RD.  
MELBA, ID 83641  
AND/OR  
Name: FLOYD TOMLINSON 208-495-2705  
Address: 2629 TRACK RD.  
MELBA, ID 83641

2. Source: GROUNDWATER Trib. to:  
3. Location of Point of Diversion: NESW Sec. 23, Township 01N, Range 02W  
CANYON County

4. Water will be used for the following purposes:

| Purpose    | From  | To    | CFS   | (or) | AF |
|------------|-------|-------|-------|------|----|
| IRRIGATION | 03/15 | 11/15 | 1.060 |      |    |

5. Total quantity to be appropriated is:  
1.060 CFS (and/or) AF

6. Proposed diverting works:  
a. Description of ditches, flumes, pumps, headgates, etc.  
WELL, PUMP, GRAVITY DITCH IRRIGATION  
b. Height of storage dam feet; active reservoir capacity  
acre-feet; total reservoir capacity acre-feet; period of  
year when water will be diverted to storage: to inclusive.  
c. Proposed well diameter is inches; proposed depth of well is  
feet.  
d. Is groundwater with a temperature greater than 90F being sought? NO

7. Time required for the completion of the works and application of  
the water to the proposed beneficial use is 3 years.

8. Description of proposed uses:  
IRRIGATION FOR 53 ACRES

9. Place of Use: IRRIGATION

| TWN RGE SEC                      | ACRES   | ACRES   | ACRES | TOTAL |
|----------------------------------|---------|---------|-------|-------|
| 01N 02W 23                       | SENW 13 | NESW 40 |       | 53    |
| Total number of acres irrigated: |         |         |       | 53    |

10. Describe any other water rights used for the same purposes.  
BOISE-KUNA IRRIGATION DISTRICT

11. a. Who owns the property at the point of diversion?  
APPLICANT

b. Who owns the land to be irrigated or place of use?  
APPLICANT

c. If the property is owned by a person other than the applicant,  
describe the arrangement enabling the applicant to make this filing.

\* 12. Remarks:

~~REPLACES LAPSED PERMIT 63-10562.~~

13. Map of proposed point of diversion and place of use attached? ☒

BE IT KNOWN that the undersigned hereby makes application for permit to  
appropriate the public waters of the State of Idaho as herein set forth.

Floyd Tomlinson  
Applicant

Received by SL Date 12/28/89 Time 10:15 Preliminary check by GP

Fee \$ 65<sup>00</sup> Receipted by SL # W006278 Date 12/28/89

Publication prepared by GG Date 1-10-90 Published in Press-Tribune

Publication approved SL Date 1/17 & 1/24/90  
2/16/1990

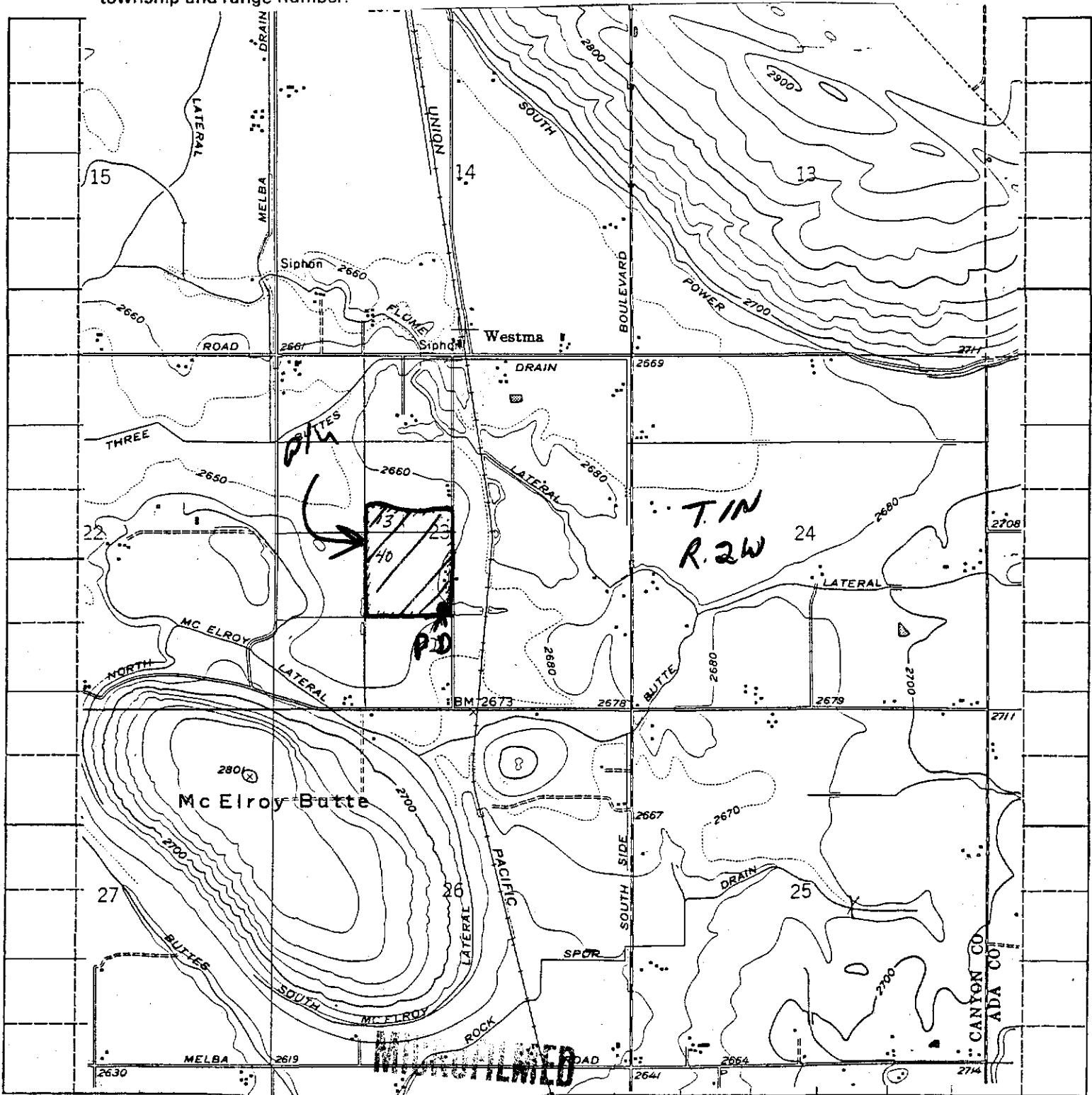
\* DELETED in DATA BASE 1-3-90 RS

MICROFILMED

APR 19 1990

63-11088

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

APR 19 1990

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

MAP OBTAINED FROM  
PERMIT 63-10562, which  
has lapsed.

*Floyd Tomlinson*  
(Applicant)

AFFIDAVIT OF PUBLICATION

**RECEIVED**

JAN 30 1990

STATE OF IDAHO )  
 ) ss.  
County of Canyon )

Department of Water Resources  
Western Regional Office

Rebecca Stiehl

of Nampa, Canyon County, Idaho, being first duly sworn, deposes and says:

1. That I am a citizen of the United States of America, and at all times hereinafter mentioned was over the age of eighteen years, and not a party to the above entitled action.

2. That I am the Principal Clerk of the Idaho Press-Tribune, a daily, (except Saturday) newspaper published in the City of Nampa and Caldwell, in the County of Canyon, State of Idaho; that the said newspaper is in general circulation in the said County of Canyon, and in the vicinity of Nampa and Caldwell, and has been uninterruptedly published in said County during a period of seventy-eight consecutive weeks prior to the first publication of the notice, a copy of which is hereto attached.

3. That the notice, of which the annexed is a printed copy, was published in said newspaper two times —in the regular and entire issue of said paper, and was printed in the newspaper proper, and not in a supplement.

4. That said notice was published the following dates:

January 22, 29, 1990

STATE OF IDAHO )  
 )  
COUNTY OF CANYON )

On this 29th day of January in the year of 1990, before me, a Notary Public, personally appeared Rebecca Stiehl, known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that he/she executed the same.

Donna Lusk  
Notary Public for Idaho  
Residing at Nampa

MY COMMISSION EXPIRES  
JULY 12th, 1991

NOTICE OF APPLICATION FOR WATER RIGHT

The Following application(s) have been filed to appropriate the public waters of the State of Idaho:

63-11074

KARCHER RANCHETTES WATER CORP.  
C/O JAMES FINGERLOS  
13711 JARETT ST.  
CALDWELL, ID 83605  
Source: GROUNDWATER  
Diversions Pt: SENW Sec 14 T 03N R 03W  
Use: IRRIGATION (.600 CFS)  
DOMESTIC (.400 CFS)  
Total Diversion: (1.000 CFS)

Date Filed: 12/06/1989  
In: T03N R03W S14  
30.0 ACRES TOTAL

SENW

63-11088

TOMLINSON, JULIA  
TOMLINSON, FLOYD  
2629 TRACK RD.  
MELBA, ID 83641  
Source: GROUNDWATER  
Diversions Pt: NESW Sec 23 T 01N R 02W  
Use: IRRIGATION (1.060 CFS)  
Total Diversion: (1.060 CFS)

Date Filed: 12/28/1989  
In: T01N R02W S23  
53.0 ACRES TOTAL  
DILLON, THOMAS E.  
RT. 1 BOX 310  
MIDDLETON, ID 83644

SENW

63-11089

Source: WASTE WATER  
Diversions Pt: SENWSE Tributary: WILLOW CREEK  
Use: IRRIGATION (.900 CFS) Sec 28 T 05N R 02W  
IRRIGATION STORAGE (20.00 AF)  
IRRIGATION FROM STORAGE (20.00 AF)  
Total Diversion: (.900 CFS) (20.00 AF)

Date Filed: 12/28/1989  
In: T05N R02W S28  
45.0 ACRES TOTAL

SENW

63-11093

CLIFFORD, DONNA R.  
8001 BUTTE RD.  
MELBA, ID 83641  
Source: SPRING  
Diversions Pt: NWNENE Tributary: SNAKE RIVER  
Use: IRRIGATION (.200 CFS) Sec 10 T 01S R 02W  
STOCKWATER (.020 CFS)  
RECREATION (.200 CFS)  
Total Diversion: (.200 CFS)

Date Filed: 12/29/1989  
In: T01S R02W S10  
10.0 ACRES TOTAL

NENE

63-11094

LOWE, DERALD W.  
RT. 1, S. ROBINSON RD.  
KUND, ID 83634  
Source: GROUNDWATER  
Diversions Pt: NESE Sec 31 T 02N R 01W  
Use: IRRIGATION (1.680 CFS)  
Total Diversion: (1.680 CFS)

Date Filed: 12/29/1989  
In: T02N R01W S31  
84.0 ACRES TOTAL

NESE

NWSE

SESE

The permit(s) will be subject to all prior water rights. Protests must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705 on or before FEBRUARY 8, 1990.

R. KEITH HIGGINSON, Director  
January 22, 29, 1990

JAN 19 1990

May 28, 1992

FLOYD TOMLINSON  
JULIA TOMLINSON  
2629 TRACK RD  
MELBA ID 83641

RE: WATER RIGHT NO. 63-11088

Dear Water Right Holder(s):

Enclosed herewith is a copy of the Water Right License issued on the above referenced permit.

Sincerely,

PAMELA SKAGGS  
Water Resource Agent

PS:cz

Enclosure

MAILED  
JUN 12 1992

April 30, 1992

FLOYD TOMLINSON  
JULIA TOMLINSON  
2629 TRACK RD  
MELBA ID 83641

RE: WATER RIGHT NO. 63-11088

Dear Water Right Holder(s):

Enclosed is a draft copy of the license proposed to be issued on the above referenced water right.

This right is currently being reviewed by this office for licensing. The enclosed preliminary copy is subject to change upon further administrative review.

We ask that you review the proposed license and if you do not concur with the information, please let us know within 10 days.

Sincerely,

SHARLA CURTIS  
Water Resource Agent

SC:clh

Enclosure

RECEIVED  
JUN 12 1992

# LICENSE REVIEW CHECKLIST

Date 04-29-92

Permit # 63-11088

38

|                        |            |            |                                                                                 |
|------------------------|------------|------------|---------------------------------------------------------------------------------|
|                        | <u>Yes</u> | <u>No</u>  |                                                                                 |
| NAME                   | <u>   </u> | <u>✓</u>   | Address Change?                                                                 |
| PRIORITY DATE          | <u>   </u> | <u>✓</u>   | Advance?                                                                        |
|                        | <u>   </u> | <u>✓</u>   | Memo to Advance                                                                 |
|                        | <u>   </u> | <u>✓</u>   | Order to Reinstate Needed?                                                      |
| TOTAL CFS              | <u>   </u> | <u>✓</u>   | Incorrect Fee for rate recommended?                                             |
|                        | <u>   </u> | <u>✓</u>   | Disagree with Actual Measurement? $50 \times .02 = 1.00 \text{ cfs (IRR)}$      |
|                        | <u>   </u> | <u>   </u> | Disagree with Theoretical? $30 \times 8.8 \times .7 = 1.32 \text{ cfs}$         |
|                        | <u>   </u> | <u>   </u> | Limited by Capacity? $1.32 \text{ cfs} / 40' (2.31 \times 0)$<br>open Discharge |
| TOTAL VOLUME           |            |            | Rate/ac <u>4.5</u> AFA Irr. Season <u>D</u>                                     |
|                        |            |            | <u>3-15 to 11-15</u> Standard Irr. Season                                       |
|                        |            |            | <u>Same per Permit</u> Season Recommended                                       |
|                        | <u>   </u> | <u>✓</u>   | Disagree with Examiner's Calculations?                                          |
|                        | <u>   </u> | <u>✓</u>   | $50 \times 4.5 = 225 \text{ AFA (IRR)}$                                         |
|                        | <u>   </u> | <u>   </u> | Limited by Flow? $1 \times 245 \times 1.9835 = 486 > 225$                       |
| SOURCE                 | <u>   </u> | <u>✓</u>   | Changes? Clarification of <u>Originally</u>                                     |
|                        | <u>   </u> | <u>✓</u>   | <u>Intended source</u>                                                          |
|                        | <u>   </u> | <u>   </u> | Notice of Intent to Void.                                                       |
| P/D                    | <u>   </u> | <u>   </u> | Verify with Map                                                                 |
|                        | <u>   </u> | <u>✓</u>   | Amendment Needed?                                                               |
|                        | <u>   </u> | <u>✓</u>   | Is Overlap Analysis a Consideration?                                            |
| P/U                    | <u>   </u> | <u>   </u> | Verify with Map                                                                 |
|                        | <u>   </u> | <u>✓</u>   | Amendment Needed?                                                               |
|                        | <u>   </u> | <u>✓</u>   | Is Overlap Analysis a Consideration?                                            |
|                        |            |            | <u>No Overlap</u>                                                               |
| USES                   | <u>✓</u>   | <u>   </u> | Changes required to be compatible with                                          |
|                        |            |            | Maps, Data Entry Standards, etc?                                                |
|                        |            |            | <u>Reduce Acres + Rate</u>                                                      |
|                        | <u>   </u> | <u>✓</u>   | Change(s) in Nature of Use?                                                     |
|                        | <u>   </u> | <u>✓</u>   | Amendment Needed?                                                               |
| REMARKS                | <u>   </u> | <u>✓</u>   | Multiple P/Ds in 1/4 1/4?                                                       |
|                        | <u>   </u> | <u>✓</u>   | Non-Irrigation Uses                                                             |
|                        | <u>   </u> | <u>✓</u>   | Special Overlap Condition                                                       |
|                        | <u>   </u> | <u>✓</u>   | Other                                                                           |
| CONDITIONS             | <u>   </u> | <u>✓</u>   | Measuring Device                                                                |
|                        | <u>   </u> | <u>✓</u>   | W/Master Control                                                                |
|                        | <u>R32</u> | <u>   </u> | Overlap                                                                         |
|                        | <u>   </u> | <u>✓</u>   | Water Quality                                                                   |
|                        |            |            | DATES/MISC                                                                      |
|                        |            | <u>✓</u>   | Water Dist.                                                                     |
|                        |            | <u>   </u> | App Rec'd                                                                       |
|                        |            | <u>   </u> | Exam Made                                                                       |
| COMMENTS/MEMOS NEEDED: |            |            | <u>Reduce Rate + Acres</u>                                                      |
| License                | <u>   </u> | <u>✓</u>   | 10-Day                                                                          |
|                        | <u>   </u> | <u>   </u> | 15-Day                                                                          |
|                        | <u>   </u> | <u>   </u> | Special Correspondence                                                          |

WR0749NP  
No. L63-11088

IDAHO DEPARTMENT OF WATER RESOURCES  
WATER RIGHT PROFILE REPORT  
(REGIONAL)

DATE: 04/29/92  
PAGE: 1

| OWNER<br>CODE | NAME & ADDRESS  | PRIORITY<br>DATE | WATER USE  | USE PERIOD<br>FROM TO | DIVERSION<br>RATE | DIVERSION<br>VOLUME |
|---------------|-----------------|------------------|------------|-----------------------|-------------------|---------------------|
| C             | FLOYD TOMLINSON | 12/28/1989       | IRRIGATION | 03-15 11-15           | 1.00 CFS          | 225.0 AFA           |
| C             | JULIA TOMLINSON |                  |            |                       |                   |                     |
|               | 2629 TRACK RD   |                  |            |                       |                   |                     |
|               | MELBA ID 83641  |                  |            |                       |                   |                     |
|               | (208) 495-2705  |                  |            |                       |                   |                     |
|               |                 |                  |            | TOTAL DIVERSION:      | 1.00 CFS          | 225.0 AFA           |

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion Capacity: 1.32 CFS

Point(s) of Diversion: T01N R02W S23 NE SW

Place of use Legal Description for: IRRIGATION

|     |     |    |   | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    |             |      |
|-----|-----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------|------|
| T   | R   | S  | : | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | :           | SUM  |
| 01N | 02W | 23 | : |    |    |    |    |    |    |    |    | 12 |    | 38 |    |    |    |    |    | :           | 50.0 |
|     |     |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | TOTAL ACRES | 50.0 |

Pou County: CANYON

Other Water Rights with Same Point(s) of Diversion and Source:  
63-11088

Other Water Rights Listing Overlapping Place(s) of use:  
63-11088

Conditions of Approval:

- R32 - This right when combined with all other rights shall provide no  
- more than .02 cfs per acre nor more than 4.5 afa per acre for the  
- lands above.

|        |                 |            |                    |            |
|--------|-----------------|------------|--------------------|------------|
| Dates: | App. Received:  | 12/28/1989 | Priority Date:     | 12/28/1989 |
|        | Proof Due Date: | 05/01/1993 | Proof Made Date:   | 05/07/1990 |
|        | Exam Made Date: | 05/23/1991 | Exam Sent to S.O.: |            |
|        | Licensed Date:  |            |                    |            |

Misc: Water District Number: Field Exam Fee: R (Received)

Audit: 04/29/92 SKAGGS

(WATER RIGHT NUMBERS THAT BEGIN WITH AN '\*\*' ARE ADJUDICATION CLAIMS)

| WR-NUMBER  | SOURCE        | NE          |    |    |    |    |    |    |    | NW |    |    |    |    |    |    |    | SW   |    |    |    |    |    |    |    | SE   |    |    |    |    |    |    |   | SUM |  |    |
|------------|---------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|----|----|----|----|----|----|----|------|----|----|----|----|----|----|---|-----|--|----|
|            |               | NE          |    | NW |    | SW |    | SE |    | NE |    | NW |    | SW |    | SE |    | NE   |    | NW |    | SW |    | SE |    | NE   |    | NW |    | SW |    | SE |   |     |  |    |
|            |               | Lt          | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt   | Ac | Lt | Ac | Lt | Ac | Lt | Ac | Lt   | Ac | Lt | Ac | Lt | Ac |    |   |     |  |    |
| L6311088   | T01N R02W S23 | GROUNDWATER |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |      |    |    |    |    |    |    |    |      |    |    |    |    |    |    |   |     |  |    |
|            | :             |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 12 : |    |    |    |    |    |    |    | 38   | :  |    |    |    |    |    |   |     |  | 50 |
| 6302388    | BOISE RIVE :  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |      |    |    |    |    |    |    |    |      |    |    |    |    |    |    |   | :   |  |    |
| A6302388   | BOISE RIVE :  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |      |    |    |    |    |    |    |    |      |    |    |    |    |    |    |   | :   |  |    |
| 6311088    | GROUNDWATE :  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 13 ✓ |    |    |    |    |    |    |    | 40 ✓ | :  |    |    |    |    |    |   |     |  | 53 |
| --86 MAP-- | C27Q-Y 6 :    | 40          |    | 36 |    | 37 |    | 41 | :  | 36 |    | 39 |    | 39 |    | 42 | :  | 40   |    | 39 |    | 39 |    | 42 | :  | 42   |    | 40 |    | 36 |    | 36 | : | 624 |  |    |

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES

Staff Analysis Sheet  
for  
Beneficial Use Field Report

A. Prior to Conducting the Exam, the File Contains:

- ☒ Blank Field Report Form
- ☒ Copy of Permit
- ☒ Copies of any Amendments/Orders with Conditions of Approval
- ☒ Well Inspection Form (If Needed)
- ☒ Aerial Photo Required? ☒ yes ☐ no If yes:      copy attached
- ☒ SRBA Attachment A Submitted to Adjudication Section
- SRBA Claim Check Received                                  (initial & date)
- N/A      Applicable, See Attachment A
- ☒ Copy of U.S.G.S. Quad
- NA Check for Government Lots. If so, make a copy of government plat
- ☒ Check of P/D index 4-24-91 MTS (initial & date)
- Overlap      yes ☒ no If yes:      copy of exam(s) attached?
- Type of Overlap?      Add acres or uses to existing system
- Increase rate of flow or volume
- Other:
- ☒ Check of P/U index 4-24-91 MTS (initial & date)
- Overlap?      yes ☒ no If yes:      copy of water right(s) attached?
- Type of Overlap?      Increase rate of flow or volume
- Add P/D's
- Increase number of acres within tracts
- Other:
- Scheduling Letter Sent?                                  (initial & date)
- ☒ Appointment Made and Telephone Conversation Memo Attached

B. After Conducting the Exam, the File Contains:

- ☒ Fully Completed and Signed Field Report Form
- ☒ Photographs of Point of Diversion and Place of Use
- Not Completed Copy of SRBA Claim Verification Sheet /      Original Returned to Adjudication Section

C. Review and Processing:

- Exam Completed Mark Smith 5-28-91 (signature of examiner & date)
- Exam Reviewed by Senior Water Resource Agent                                  (initial & date) MTS 7-12-91
- Exam Reviewed by Manager of Regional Office Dm7/17/91 (initial & date)
- Exam Sent to State Office 7-29-91 MT (initial & date)

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**RECEIVED**  
JUL 30 1991

Department of Water Resources

**A. GENERAL INFORMATION**

Permit No. 63-11088

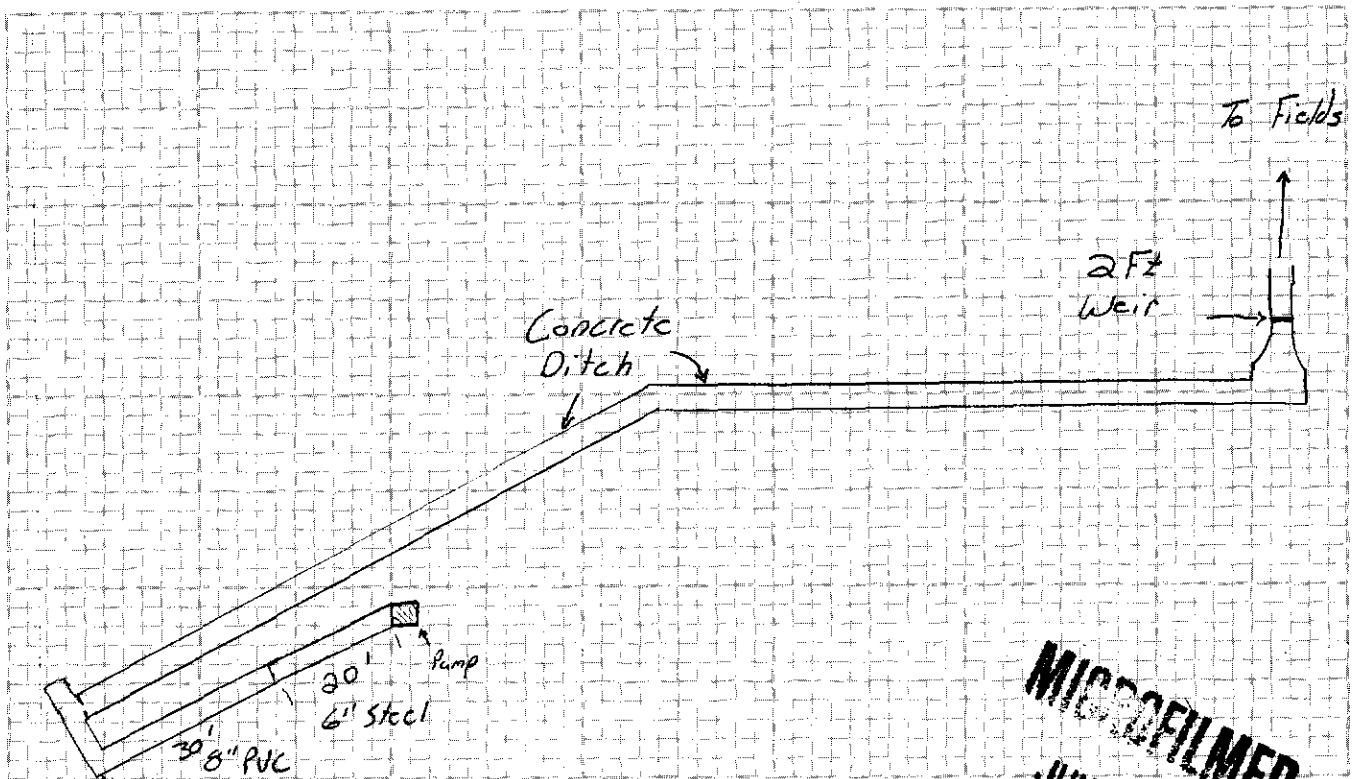
1. Owner: Floyd Tomlinson Phone No. 495-2705  
Current Address: 2629 Track Road McIba, ID 83641  
2. Accompanied by: Floyd Tomlinson EXAM. DATE: 5-23-91  
Address: Same Phone No. Same  
Relationship to Permit Holder: OWNER  
3. Source: Groundwater tributary to NONE

**B. OVERLAP REVIEW**

1. Other water rights with same place of use: None ☐ Copies Attached  
2. Other water rights with same point of diversion: None ☐ Copies Attached ☐ Copies of Field Exam's Attached

**C. SYSTEM DESCRIPTION**

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = \_\_\_\_\_

2. ☒ Copy of U.S.G.S. Quadrangle Attached  
Showing location(s) of point(s) of diversion and  
place(s) of use (required).  
☒ Photo of Diversion and System Attached  
(required for all but single household domestic groundwater, and stockwater).  
☒ Aerial Photo Attached  
(required for irrigation of 10 acres or more).

**MICROFILMED**  
JUN 12 1992

**System Description (continued)**

3. Narrative: Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

*A 30HP pump with a 6" steel discharge tube led into an 8" PVC pipe, which discharged into a concrete irrigation ditch. A 2 foot  <sup>Cipolletti</sup> weir was located approx. 175' from the discharge point. The weir was ~~horizontal~~ and vertical and operating properly. The head measured .32 Feet. The weir was constructed by the owner and in place prior to exam. The weir pool was approx 15' long.*

☐ See Remarks on page 4 for continuation

4.

| Well or Diversion Identification No.* | Motor Make | Hp   | Motor Serial No. | Pump Make | Pump Serial No. or Discharge Size |
|---------------------------------------|------------|------|------------------|-----------|-----------------------------------|
|                                       | Unknown    | 30HP | Unknown          | Wet-Rite  | 6" / 75-500 R755TA                |
|                                       |            |      |                  |           |                                   |
|                                       |            |      |                  |           |                                   |
|                                       |            |      |                  |           |                                   |

\*Code to correspond with No. on map and aerial photo

5. Point(s) of Diversion:

| Ident. No. | Gov't. Lot | 1/4 | 1/4 | 1/4 | Sec. | Twp. | Rge. | County | Method of Determination/Remarks      |
|------------|------------|-----|-----|-----|------|------|------|--------|--------------------------------------|
|            |            |     | NE  | SW  | 23   | 1N   | 2W   | Canyon | U.S. Photo Quad / Confirmed by owner |
|            |            |     |     |     |      |      |      |        |                                      |
|            |            |     |     |     |      |      |      |        |                                      |
|            |            |     |     |     |      |      |      |        |                                      |

6. Place(s) of Use:

Indicate Method of Determination *Aerial Photo / Measuring*

| Twp. | Rge. | Sec. | NE 1/4 |        |        |        | NW 1/4 |        |        |        | SW 1/4 |        |        |        | SE 1/4 |        |        |        | Totals |
|------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      |      |      | NE 1/4 | NW 1/4 | SW 1/4 | SE 1/4 | NE 1/4 | NW 1/4 | SW 1/4 | SE 1/4 | NE 1/4 | NW 1/4 | SW 1/4 | SE 1/4 | NE 1/4 | NW 1/4 | SW 1/4 | SE 1/4 |        |
| 1N   | 2W   | 23   |        |        |        |        |        |        |        | 12     | 38     |        |        |        |        |        |        |        | 50     |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|      |      |      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

Do not use this space

**FILED**  
JUN 12 1982

Do not use this space

**D. FLOW MEASUREMENTS**

☐ Additional Data Sheets Attached

1.

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|------|------|-----------|------------|------|-------------|
| Cipolletti Weir       |      |      |           |            |      |             |
|                       |      |      |           |            |      |             |
|                       |      |      |           |            |      |             |
|                       |      |      |           |            |      |             |

2. Measurements:

Head = 3.2 Feet Crest = 2 Feet

**E. FLOW CALCULATIONS**

☒ Additional Computation Sheets Attached

1. Measured Method:

From Cipolletti Table 1.21 cfs

2. Alternate Method for Checking Purposes:

Theoretical HP 1.32 cfs

**F. PUMP EFFICIENCY DATA (Optional)**

Discharge Pressure: \_\_\_\_\_ psi x 2.31 = \_\_\_\_\_ ft (1); Dynamic pumping level: \_\_\_\_\_ ft (2)

Total Head: (1) + (2) = \_\_\_\_\_ (3) ; Flow rate: \_\_\_\_\_ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = \_\_\_\_\_ (5)

Meter Input KW: 3.6 x \_\_\_\_\_ KH x \_\_\_\_\_ CTR or \_\_\_\_\_ MULT x \_\_\_\_\_ PTR x \_\_\_\_\_ N/ \_\_\_\_\_ T = \_\_\_\_\_ (6)

Meter Input HP: (6) x 1.34 = \_\_\_\_\_ (7)

Panel Input KW: \_\_\_\_\_ Ave PF x \_\_\_\_\_ Ave Volts x \_\_\_\_\_ Ave Amps x .001732 = \_\_\_\_\_ (6)

Panel Input HP: (6) x 1.34 = \_\_\_\_\_ (7) Efficiency: (5)/(7) x 100 = \_\_\_\_\_ %

**G. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 50 \times 4.5 = 225 \text{ aF}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.21 \text{ cfs} \times 246 \times 1.9835 = 590 \text{ aF}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 225 \text{ aF}$

2. Volume Calculations for Other Uses:

MICROFILMED  
JUN 12 1992

## H. REMARKS AND OVERLAP REVIEW ANALYSIS

The owner disagreed with the aerial photos. Based on the owner's own measurements of the land, he calculated 50 acres of irrigated land. We agreed to use 50 acres and confirmed that amount on the aerial photo. He agreed to disregard the 53 acres stated in the permit. Fields watered by siphon tubes - Fields were measured for alfalfa seed contract.

No overlaps

## I. RECOMMENDATIONS

### 1. Recommended Amounts

| Beneficial Use | Period of Use |       | Rate of Diversion<br>Q (cfs) | Annual Volume<br>V (afa) |
|----------------|---------------|-------|------------------------------|--------------------------|
|                | From          | To    |                              |                          |
| Irrigation     | 3/15          | 11/15 | 1.00 cfs                     | 225 afa                  |
|                |               |       |                              |                          |
|                |               |       |                              |                          |
|                |               |       |                              |                          |

Totals: 1.00 cfs. 225 afa

### 2. Recommended Amendments

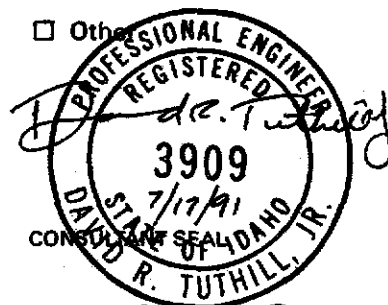
- ☐ Change P.D. as reflected above ☐ Add P.D. as reflected above  
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above

☒ None

☐ Other

## J. AUTHENTICATION

Field Examiner's Name Mark Senior  
Signature Mark Senior  
Certification Date \_\_\_\_\_  
Field Report Preparation Date 5-28-91



K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

RECEIVED

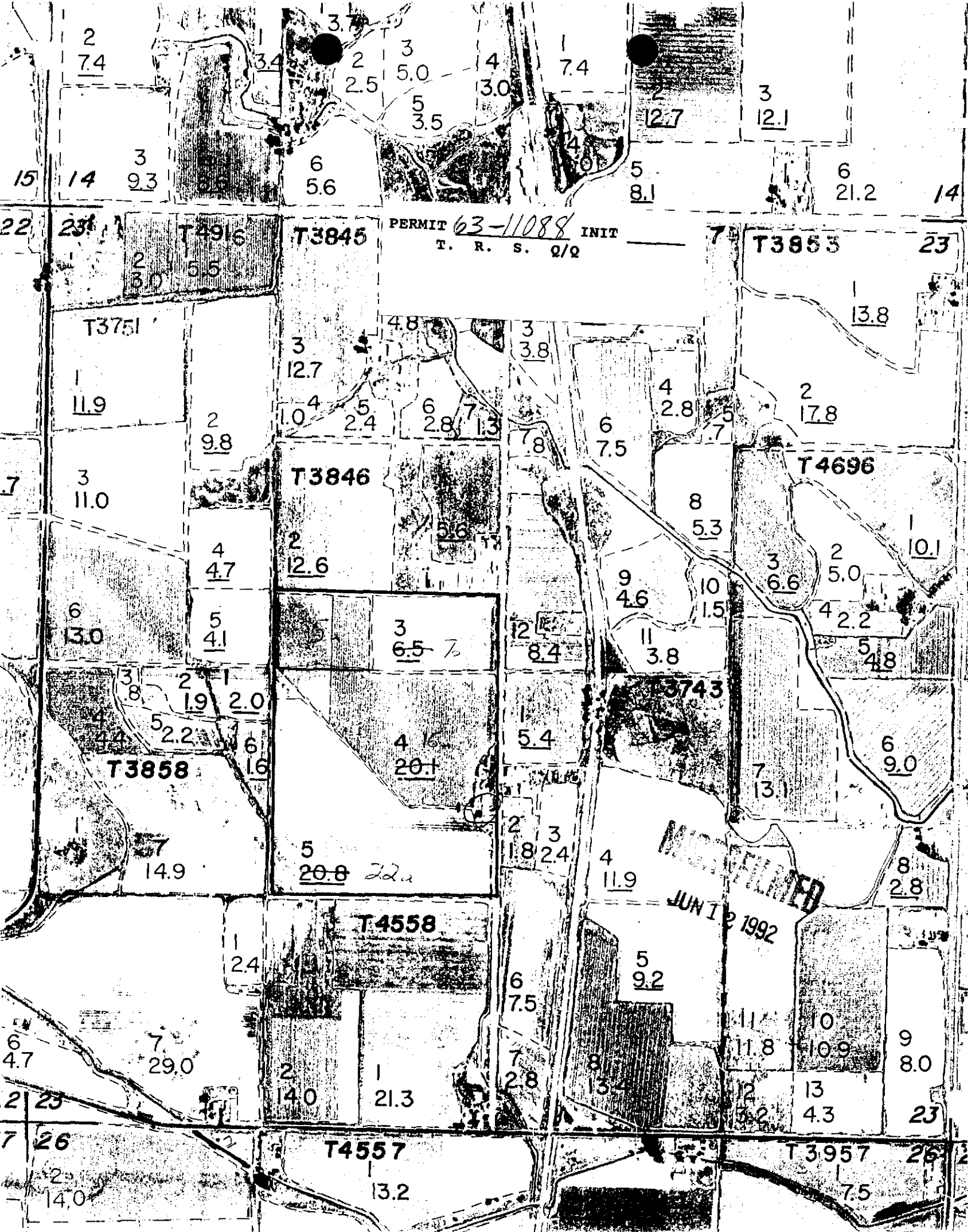
JUN 12 1992

Flyod Tomlinson

9. LITHOLOGIC LOG Cont.

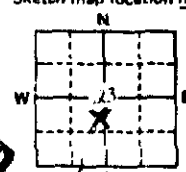
| Bore<br>Diam. | Depth |     | Material                        | WATER |    |
|---------------|-------|-----|---------------------------------|-------|----|
|               | From  | To  |                                 | Yes   | No |
| 10"           | 252   | 254 | Basalt                          |       |    |
|               | 254   | 255 | Soft Basalt                     | ?     |    |
|               | 255   | 256 | Broken Basalt with cinders      | ✓     |    |
|               | 256   | 262 | Basalt                          |       |    |
|               | 262   | 263 | Soft Basalt                     | ?     |    |
|               | 263   | 265 | Basalt                          |       |    |
|               | 265   | 269 | Soft Basalt                     | ?     |    |
|               | 269   | 290 | Basalt                          |       |    |
|               | 290   | 301 | Hard Basalt                     |       |    |
|               | 301   | 315 | Basalt                          |       |    |
|               | 315   | 334 | Soft grey sandy ash             |       |    |
|               | 334   | 345 | Sticky Brown Clay               |       |    |
|               | 345   | 348 | Brown clay with cinder pebbles  |       |    |
|               | 348   | 350 | Stickey Brown Clay              |       |    |
|               | 350   | 351 | Brown Clay with cinder klinkers |       |    |
|               | 351   | 354 | Brown Clay with less gravel     |       |    |

MICROFILMED  
JUN 12 1992



T. R. S. Q/Q  
P/D IN 24 23 NESW  
SCALE  
PHOTO ID. Y6

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
WELL DRILLER'S REPORTState law requires that this report be filed with the Director, Department of Water Resources  
within 30 days after the completion or abandonment of the well.RECEIVED  
DEPARTMENT OF WATER RESOURCES  
BALLPOINTE  
OCT 31 1990

| <b>1. WELL OWNER</b><br>Name <u>Floyd Tomlinson</u><br>Address <u>2629 Track Rd. Melba Id. 83641</u><br>Owner's Permit No. <u>63-90-W-003</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  | <b>7. WATER LEVEL</b><br>Static water level <u>139'</u> feet below land surface.<br>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____<br>Artesian closed-in pressure _____ p.s.i.<br>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug<br>Temperature <u>65</u> °F. Quality <u>good</u><br><small>Describe artesian or temperature zones below.</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------------|-------------------|------------------|---------------|----------------|--------------|--------------|------------|------------|----------------------|--------------|------------|------------|----------------|--------------|------------|------------|---------------|------|----|--------------------|-----------------------------|------------|--------------------|------------|------------|--------------------|------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|-------|-------------------|--|----|-------|--------|--|----|-------|-------------------|--|----|-------|--------|--|----|-------|-------------------|--|----|-------|--------|--|----|-------|----------------|--|----|--------|------------|--|----|---------|----------------|--|----|---------|-------------|--|----|---------|--------|--|----|---------|---------------------|---|----|---------|--------|--|----|---------|---------------------------------|---|----|---------|-------------|--|----|---------|---------------|---|----|---------|--------|--|----|---------|-------------|--|----|---------|-------------|--|----|---------|--------|--|----|---------|------------------------|---|----|---------|--------|--|----|---------|-------------|--|----|---------|--------|--|----|---------|-------------|---|----|---------|--------|--|----|---------|-------------|---|----|---------|--------|--|----|---------|-------------|---|
| <b>2. NATURE OF WORK</b><br><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement<br><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  | <b>8. WELL TEST DATA</b><br><input checked="" type="checkbox"/> Pump <input type="checkbox"/> Bailor <input type="checkbox"/> Air <input type="checkbox"/> Other <u>not tested</u><br><table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>65</u></td><td><u>139'</u></td><td><u>48</u></td></tr></tbody></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                 | Discharge G.P.M. | Pumping Level    | Hours Pumped      | <u>65</u>        | <u>139'</u>   | <u>48</u>      |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| Discharge G.P.M.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Pumping Level    | Hours Pumped                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <u>65</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <u>139'</u>      | <u>48</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <b>3. PROPOSED USE</b><br><input type="checkbox"/> Domestic <input checked="" type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal<br><input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection<br><input type="checkbox"/> Other _____ (specify type)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  | <b>9. LITHOLOGIC LOG</b> <table border="1"><thead><tr><th>Bore<br/>Diam.</th><th>Depth<br/>From To</th><th>Material</th><th>Water<br/>Yes No</th></tr></thead><tbody><tr><td>12"</td><td>0 5</td><td>Top Soil</td><td></td></tr><tr><td>12</td><td>5 13</td><td>Broken Basalt &amp; Dirt</td><td></td></tr><tr><td>12</td><td>13 17</td><td>Dusty Clinders</td><td></td></tr><tr><td>12</td><td>17 25</td><td>Broken Basalt</td><td></td></tr><tr><td>12</td><td>25 30</td><td>Hard Basalt with salt spots</td><td></td></tr><tr><td>10"</td><td>30 48</td><td>"</td><td></td></tr><tr><td>10</td><td>48 63</td><td>Normal Basalt</td><td></td></tr><tr><td>10</td><td>63 65</td><td>Ultra hard Basalt</td><td></td></tr><tr><td>10</td><td>65 66</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>66 71</td><td>Ultra hard Basalt</td><td></td></tr><tr><td>10</td><td>71 72</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>72 78</td><td>Ultra hard Basalt</td><td></td></tr><tr><td>10</td><td>78 79</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>79 98</td><td>Soft Brown Ash</td><td></td></tr><tr><td>10</td><td>98 103</td><td>Brown clay</td><td></td></tr><tr><td>10</td><td>103 113</td><td>Soft Brown Ash</td><td></td></tr><tr><td>10</td><td>113 115</td><td>Soft Basalt</td><td></td></tr><tr><td>10</td><td>115 162</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>162 163</td><td>CRACK with clinders</td><td>✓</td></tr><tr><td>10</td><td>163 193</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>193 197</td><td>Broken Basalt with red clinders</td><td>✓</td></tr><tr><td>10</td><td>197 200</td><td>Firm Basalt</td><td></td></tr><tr><td>10</td><td>200 208</td><td>Broken Basalt</td><td>✓</td></tr><tr><td>10</td><td>208 210</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>210 212</td><td>Hard Basalt</td><td></td></tr><tr><td>10</td><td>212 213</td><td>Soft Basalt</td><td></td></tr><tr><td>10</td><td>213 214</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>214 216</td><td>Soft Basalt &amp; clinders</td><td>✓</td></tr><tr><td>10</td><td>216 227</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>227 231</td><td>Hard Basalt</td><td></td></tr><tr><td>10</td><td>231 237</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>237 243</td><td>Soft Basalt</td><td>?</td></tr><tr><td>10</td><td>243 245</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>245 246</td><td>Soft Basalt</td><td>?</td></tr><tr><td>10</td><td>246 251</td><td>Basalt</td><td></td></tr><tr><td>10</td><td>251 252</td><td>Soft Basalt</td><td>?</td></tr></tbody></table> |                 | Bore<br>Diam.    | Depth<br>From To | Material          | Water<br>Yes No  | 12"           | 0 5            | Top Soil     |              | 12         | 5 13       | Broken Basalt & Dirt |              | 12         | 13 17      | Dusty Clinders |              | 12         | 17 25      | Broken Basalt |      | 12 | 25 30              | Hard Basalt with salt spots |            | 10"                | 30 48      | "          |                    | 10         | 48 63      | Normal Basalt                                                                                                                                                                                                                                                                                                                                                     |  | 10 | 63 65 | Ultra hard Basalt |  | 10 | 65 66 | Basalt |  | 10 | 66 71 | Ultra hard Basalt |  | 10 | 71 72 | Basalt |  | 10 | 72 78 | Ultra hard Basalt |  | 10 | 78 79 | Basalt |  | 10 | 79 98 | Soft Brown Ash |  | 10 | 98 103 | Brown clay |  | 10 | 103 113 | Soft Brown Ash |  | 10 | 113 115 | Soft Basalt |  | 10 | 115 162 | Basalt |  | 10 | 162 163 | CRACK with clinders | ✓ | 10 | 163 193 | Basalt |  | 10 | 193 197 | Broken Basalt with red clinders | ✓ | 10 | 197 200 | Firm Basalt |  | 10 | 200 208 | Broken Basalt | ✓ | 10 | 208 210 | Basalt |  | 10 | 210 212 | Hard Basalt |  | 10 | 212 213 | Soft Basalt |  | 10 | 213 214 | Basalt |  | 10 | 214 216 | Soft Basalt & clinders | ✓ | 10 | 216 227 | Basalt |  | 10 | 227 231 | Hard Basalt |  | 10 | 231 237 | Basalt |  | 10 | 237 243 | Soft Basalt | ? | 10 | 243 245 | Basalt |  | 10 | 245 246 | Soft Basalt | ? | 10 | 246 251 | Basalt |  | 10 | 251 252 | Soft Basalt | ? |
| Bore<br>Diam.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Depth<br>From To | Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Water<br>Yes No |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 12"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0 5              | Top Soil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5 13             | Broken Basalt & Dirt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 13 17            | Dusty Clinders                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 17 25            | Broken Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 25 30            | Hard Basalt with salt spots                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 30 48            | "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 48 63            | Normal Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 63 65            | Ultra hard Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 65 66            | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 66 71            | Ultra hard Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 71 72            | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 72 78            | Ultra hard Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 78 79            | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 79 98            | Soft Brown Ash                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 98 103           | Brown clay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 103 113          | Soft Brown Ash                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 113 115          | Soft Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 115 162          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 162 163          | CRACK with clinders                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ✓               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 163 193          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 193 197          | Broken Basalt with red clinders                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ✓               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 197 200          | Firm Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 200 208          | Broken Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ✓               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 208 210          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 210 212          | Hard Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 212 213          | Soft Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 213 214          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 214 216          | Soft Basalt & clinders                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ✓               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 216 227          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 227 231          | Hard Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 231 237          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 237 243          | Soft Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ?               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 243 245          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 245 246          | Soft Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ?               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 246 251          | Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 251 252          | Soft Basalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ?               |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <b>4. METHOD DRILLED</b><br><input type="checkbox"/> Rotary <input type="checkbox"/> Air <input type="checkbox"/> Hydraulic <input type="checkbox"/> Reverse rotary<br><input checked="" type="checkbox"/> Cable <input type="checkbox"/> Dug <input type="checkbox"/> Other _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  | <b>10.</b><br>Work started <u>1-20-90</u> finished <u>3-10-90</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <b>5. WELL CONSTRUCTION</b><br>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____<br><table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>250</u> inches</td><td><u>10</u> inches</td><td><u>1</u> feet</td><td><u>31</u> feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table><br>Was casing drive shoe used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch<br>Size of perforation _____ inches by _____ inches<br><table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table><br>Well screen installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Manufacturer's name _____<br>Type _____ Model No. _____<br>Diameter _____ Slot size _____ Set from _____ feet to _____ feet<br>Diameter _____ Slot size _____ Set from _____ feet to _____ feet<br>Gravel packed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Size of gravel _____<br>Placed from _____ feet to _____ feet<br>Surface seal depth <u>30'</u> Material used in seal: <input type="checkbox"/> Cement grout<br><input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Puddling clay <input type="checkbox"/> _____<br>Sealing procedure used: <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temp. surface casing<br><input checked="" type="checkbox"/> Overbore to seal depth<br>Method of joining casing: <input type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Solvent Weld<br><input type="checkbox"/> Cemented between struts<br>Describe access port <u>plug in well cage</u> |                  | Thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Diameter        | From             | To               | <u>250</u> inches | <u>10</u> inches | <u>1</u> feet | <u>31</u> feet | _____ inches | _____ inches | _____ feet | _____ feet | _____ inches         | _____ inches | _____ feet | _____ feet | _____ inches   | _____ inches | _____ feet | _____ feet | Number        | From | To | _____ perforations | _____ feet                  | _____ feet | _____ perforations | _____ feet | _____ feet | _____ perforations | _____ feet | _____ feet | <b>11. DRILLERS CERTIFICATION</b><br>I/We certify that all minimum well construction standards were<br>complied with at the time the rig was removed.<br>Firm Name <u>Johnson Drilling</u> Firm No. <u>92</u><br>Address <u>395 S. S. Rd. Melba</u> (Date _____)<br>Signed by (Firm Official) <u>Elmer D. Johnson</u><br>and<br>(Operator) <u>Russell Johnson</u> |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| Thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Diameter         | From                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | To              |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <u>250</u> inches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <u>10</u> inches | <u>1</u> feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>31</u> feet  |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ inches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _____ inches     | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet      |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ inches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _____ inches     | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet      |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ inches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _____ inches     | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet      |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | From             | To                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ perforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet       | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ perforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet       | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| _____ perforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | _____ feet       | _____ feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |
| <b>6. LOCATION OF WELL</b><br>Sketch map location must agree with written location.<br><br>Subdivision Name _____<br>Lot No. _____ Block No. _____<br>County <u>Canyon</u><br>NE 1/4 SW 1/4 Sec. 23 T. 1 N. R. 2 E. (W)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                 |                  |                  |                   |                  |               |                |              |              |            |            |                      |              |            |            |                |              |            |            |               |      |    |                    |                             |            |                    |            |            |                    |            |            |                                                                                                                                                                                                                                                                                                                                                                   |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                   |  |    |       |        |  |    |       |                |  |    |        |            |  |    |         |                |  |    |         |             |  |    |         |        |  |    |         |                     |   |    |         |        |  |    |         |                                 |   |    |         |             |  |    |         |               |   |    |         |        |  |    |         |             |  |    |         |             |  |    |         |        |  |    |         |                        |   |    |         |        |  |    |         |             |  |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |    |         |        |  |    |         |             |   |

MICROFILMED  
JUN 12 1992

# DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

JUN 31 1990

Department of Water Resources

## 1. WELL OWNER

495-2705

Name Floyd TomlinsonAddress 2629 Track Rd. Melba Id. 83641Owner's Permit No. 63-90-W-003

## 7. WATER LEVEL

Static water level 139 feet below land surface.Flowing? ☐ Yes ☒ No G.P.M. flow \_\_\_\_\_

Artesian closed-in pressure \_\_\_\_\_ p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ PlugTemperature 65 °F. Quality good

Describe artesian or temperature zones below.

## 2. NATURE OF WORK

- ☒ New well ☐ Deepened ☐ Replacement  
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 3. PROPOSED USE

- ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal  
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection  
☐ Other \_\_\_\_\_ (specify type)

## 4. METHOD DRILLED

- ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary  
☒ Cable ☐ Dug ☐ Other \_\_\_\_\_

## 5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other

| Thickness          | Diameter           | From          | To             |
|--------------------|--------------------|---------------|----------------|
| <u>.250</u> inches | <u>10</u> inches + | <u>1</u> feet | <u>31</u> feet |
| _____ inches       | _____ inches       | _____ feet    | _____ feet     |
| _____ inches       | _____ inches       | _____ feet    | _____ feet     |
| _____ inches       | _____ inches       | _____ feet    | _____ feet     |

Was casing drive shoe used? ☐ Yes ☒ NoWas a packer or seal used? ☐ Yes ☒ NoPerforated? ☐ Yes ☒ NoHow perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation \_\_\_\_\_ inches by \_\_\_\_\_ inches

| Number             | From       | To         |
|--------------------|------------|------------|
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☒ No

Manufacturer's name \_\_\_\_\_

Type \_\_\_\_\_ Model No. \_\_\_\_\_

Diameter \_\_\_\_\_ Slot size \_\_\_\_\_ Set from \_\_\_\_\_ feet to \_\_\_\_\_ feet

Diameter \_\_\_\_\_ Slot size \_\_\_\_\_ Set from \_\_\_\_\_ feet to \_\_\_\_\_ feet

Gravel packed? ☐ Yes ☒ No ☐ Size of gravel \_\_\_\_\_

Placed from \_\_\_\_\_ feet to \_\_\_\_\_ feet

Surface seal depth 30 Material used in seal: ☐ Cement grout☐ Bentonite ☒ Puddling clay ☐Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing☒ Overbore to seal depthMethod of joining casing: ☐ Threaded ☒ Welded ☐ Solvent

Weld

☐ Cemented between strataDescribe access port plug in well cap

## 8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other not tested

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|------------------|---------------|--------------|
| <u>65</u>        | <u>139</u>    | <u>48</u>    |
| _____            | _____         | _____        |
| _____            | _____         | _____        |

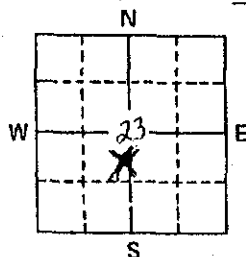
## 9. LITHOLOGIC LOG

| Bore Diam. | Depth |     | Material                       | Water |    |
|------------|-------|-----|--------------------------------|-------|----|
|            | From  | To  |                                | Yes   | No |
| 12"        | 0     | 5   | Top Soil                       |       |    |
| 12         | 5     | 13  | Broken Basalt & Dirt           |       |    |
| 12         | 13    | 17  | Heavy Cinders                  |       |    |
| 12         | 17    | 25  | Broken Basalt                  |       |    |
| 12         | 25    | 30  | Hard Basalt with salt spots    |       |    |
| 10"        | 30    | 48  | "                              |       |    |
| 10         | 48    | 63  | Normal Basalt                  |       |    |
| 10         | 63    | 65  | ultra hard Basalt              |       |    |
| 10         | 65    | 66  | Basalt                         |       |    |
| 10         | 66    | 71  | ultra hard Basalt              |       |    |
| 10         | 71    | 72  | Basalt                         |       |    |
| 10         | 72    | 78  | ultra hard Basalt              |       |    |
| 10         | 78    | 79  | Basalt                         |       |    |
| 10         | 79    | 98  | soft Brown Ash                 |       |    |
| 10         | 98    | 103 | Brown clay                     |       |    |
| 10         | 103   | 113 | Soft Brown Ash                 |       |    |
| 10         | 113   | 115 | Soft Basalt                    |       |    |
| 10         | 115   | 162 | Basalt                         |       |    |
| 10         | 162   | 163 | CRACK with cinders             | ✓     |    |
| 10         | 163   | 193 | Basalt                         |       |    |
| 10         | 193   | 197 | Broken Basalt with red cinders | ✓     |    |
| 10         | 197   | 200 | Firm Basalt                    |       |    |
| 10         | 200   | 204 | Broken Basalt                  | ✓     |    |
| 10         | 204   | 210 | Basalt                         |       |    |
| 10         | 210   | 212 | Hard Basalt                    |       |    |
| 10         | 212   | 213 | Soft Basalt                    |       |    |
| 10         | 213   | 214 | Basalt                         |       |    |
| 10         | 214   | 216 | Soft Basalt or cinders         | ✓     |    |
| 10         | 216   | 227 | Basalt                         |       |    |
| 10         | 227   | 231 | Hard Basalt                    |       |    |
| 10         | 231   | 237 | Basalt                         |       |    |
| 10         | 237   | 243 | Soft Basalt                    | ?     |    |
| 10         | 243   | 245 | Basalt                         |       |    |
| 10         | 245   | 246 | Soft Basalt                    | ?     |    |
| 10         | 246   | 251 | Basalt                         |       |    |
| 10         | 251   | 252 | Soft Basalt                    | ?     |    |

## 10.

Work started 1-20-90 finished 3-10-90

## 6. LOCATION OF WELL

Sketch map location must agree with written location.Subdivision Name Payson

Lot No. \_\_\_\_\_ Block No. \_\_\_\_\_

County CanyonNE 1/4 SW 1/4 Sec. 23, T. 1, N. S. R. 2 E(W)

## 11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Johnson Drilling Firm No. 92Address 375 E So. Blvd. Melba Date \_\_\_\_\_Signed by (Firm Official) Elmer W. Johnson

and

(Operator) Russell Johnson

Flyad Taulinson

LITHOLOGIC LOG Cont.

| BORE<br>DIAM. | DEPTH |     | MATERIAL                    | WATER |    |
|---------------|-------|-----|-----------------------------|-------|----|
|               | FROM  | TO  |                             | YES   | NO |
|               | 354   | 363 | Brown Clay with much gravel |       |    |
|               | 363   | 367 | Soft Brown Clay             |       |    |
|               | 367   | 370 | Hard shell clay             |       |    |
|               | 370   | 372 | Sticky clay                 |       |    |
|               | 372   | 373 | cinders ? very soft         |       |    |
|               | 373   | 375 | Firming up                  |       |    |
|               | 375   | 380 | Basalt                      |       |    |
|               | 380   | 387 | GREEN ROCK                  |       |    |
|               | 387   | 395 | BR soft ROCK                |       |    |
|               | 395   | 400 | Basalt                      |       |    |
|               | 400   | 403 | Sticky clay + cinders       |       |    |
|               | 403   | 410 | Basalt                      |       |    |
|               | 410   | 431 | GREY ROCK                   |       |    |
|               | 431   | 432 | GOOD BLACK CINDERS          |       | ✓  |
|               | 432   | 435 | Broken Soft Basalt          |       | ✓  |
|               | 435   | —   | HARD BASALT                 |       |    |

PHOTOFILMED

JUN 12 1992

63-11088



#1

30 H.P. pump  
with 6" discharge  
at P10.

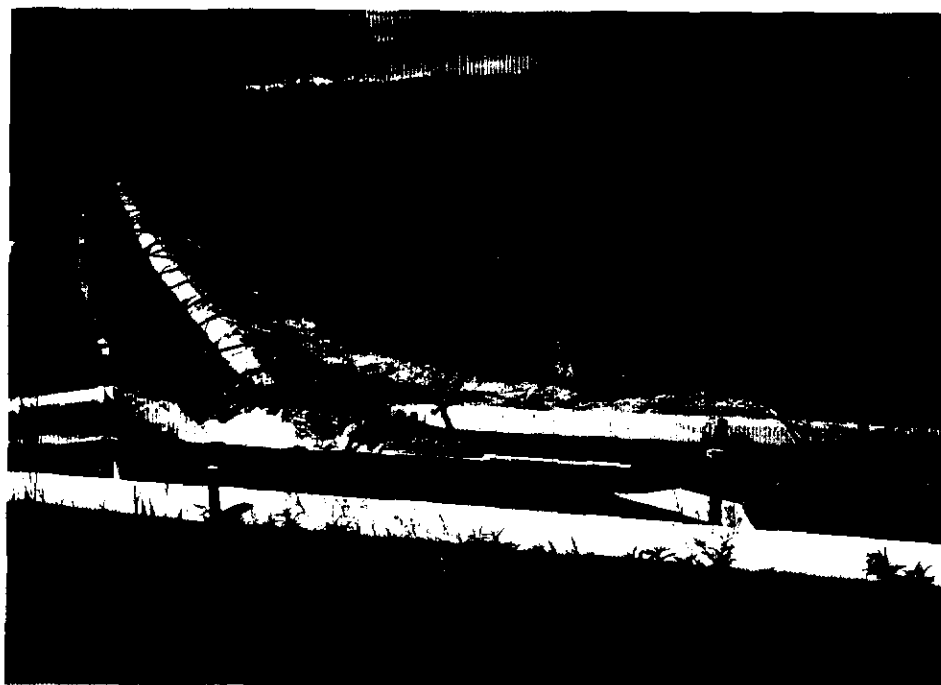


#2

Pump discharges  
into steel pipe  
in foreground.  
Steel pipe joins  
with 8" PVC  
pipe.

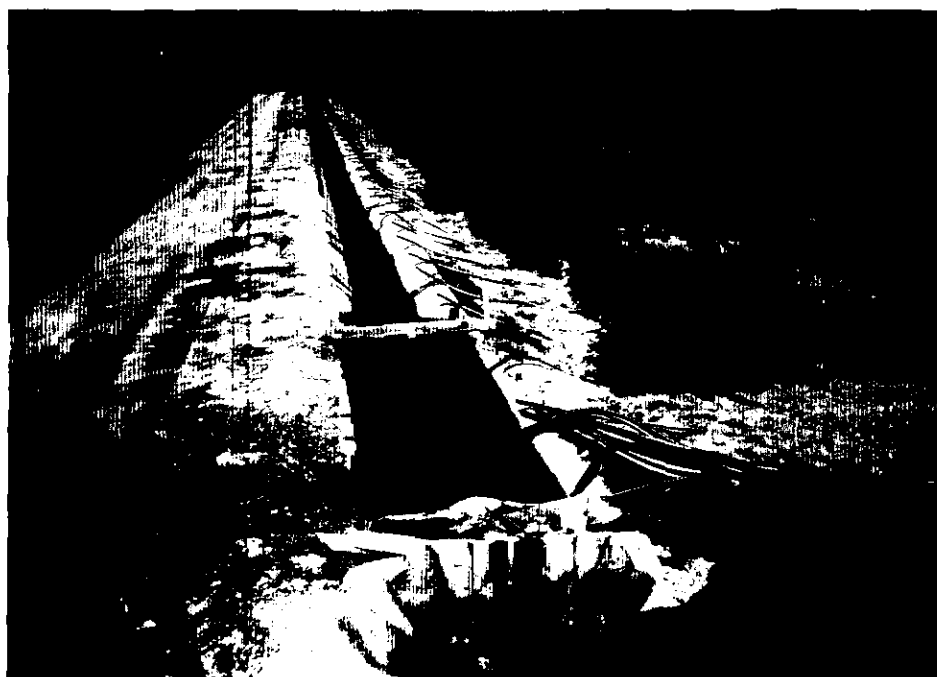
Place of  
use.

MICROFILMED  
JUN 12 1992



#3

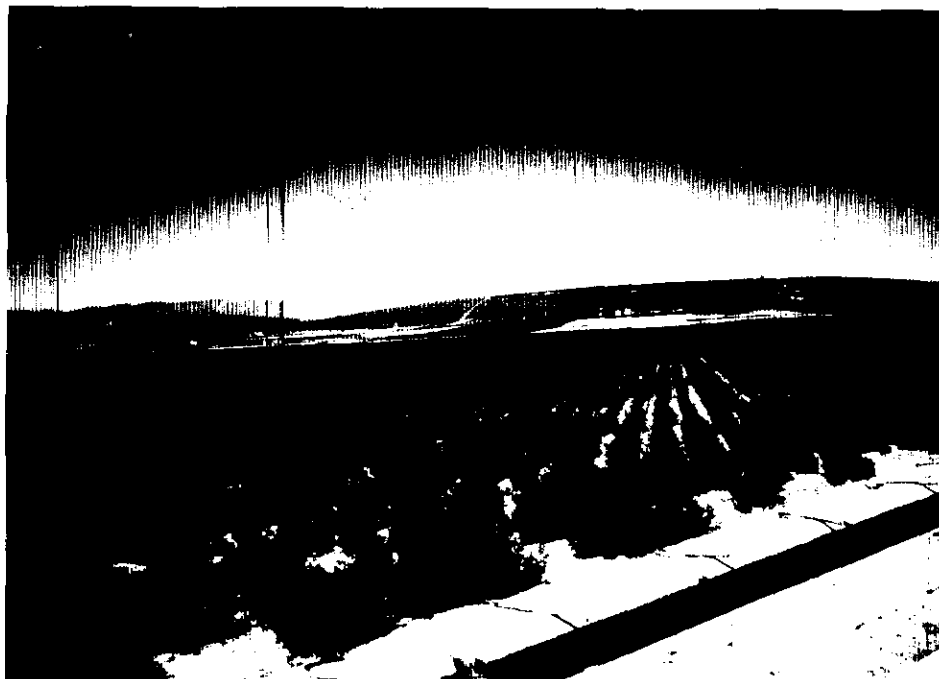
PVC pipe  
discharges into  
concrete ditch.  
Flows to the  
right in ditch.



#4

Water measured  
at weir.  
Irrigation done  
by siphon tubes.

REPROFILMED  
JUN 12 1992



#5

Place of  
use.

MICROFILMED  
JUN 12 1992

2629 Truck Rd  
Melba Id 83641  
Dec 22, 1990

Dept of Water Resources  
Boise Id.

Re: Lloyd Tomlinson  
Permit No. 63-11088

Dear Madam,

In answer to your letter of December 17<sup>th</sup>  
we have installed the flow measurement.  
We installed this measurement the day  
after we filed the form.

Yours truly,

Lloyd Tomlinson  
Julia Tomlinson

**MICROFILMED**

JUN 12 1992

**RECEIVED**

DEC 24 1990

Lloyd Tarnhisen  
2629 track Rd  
Melba Id 83641



Department of Water Resources  
1301 No. Orchard St.  
Statehouse Mail

RECEIVED  
JUN 1 2 1992

Boise

Id 837200-9000

December 17, 1990

JULIA TOMLINSON  
FLOYD TOMLINSON  
2629 TRACK RD.  
MELBA, ID 83641

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 63-11088

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit. The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water.

I note that the permit issued to you by the department requires the installation of a flow measurement port to allow the department to determine the rate of diversion. The proof which you submitted does not show that you have installed this equipment.

The installation of the flow measurement port must be complete by the time the department representative conducts the examination of your system unless the department has rescinded the requirement prior to the field examination. In some cases, the equipment requirement can be rescinded because the equipment cannot be physically installed, is not appropriate or can be accommodated with other measuring methods.

If you have questions concerning this matter, please feel free to contact the WESTERN Regional Office in Boise at (208)334-2190.

Sincerely,

Rita Fleck  
Secretary/Records Manager

c: IDWR - Region

**MICROFILMED**

JAN 10 1991

1/88

PROOF OF BENEFICIAL USE

ANALYSIS SHEET

Permit No. 63-11088

Date: 7-16-90

General Considerations:

☒ Name same as permit  
☒ Signature the same as permit holder  
☒ Address change NO If yes, prepare a data entry  
☒ Proof received timely  
☐ Reinstated

Source of Water:

☐ Surface water  
☒ Groundwater  
    1. well log in file  
    2. drilling permit  
    A. amount of drilling fee paid for proposed uses

Extent of Use and Rate of Diversion:

☒ Rate of diversion appropriate for uses  
    ☒ Is rate or volume and fee appropriate?  
☒ Has permit holder indicated when water was first put to a beneficial use?

Measuring Device:

☒ Is a measuring device or access port required?  
☒ Has one been installed?  
☐ Waiver or modification of measuring device requested

Remarks:

*Flow measurement needed*  
*needs D.P. & W.L.*

Priority Calculation:

|                     |           |   |
|---------------------|-----------|---|
| Date proof received | <u>NA</u> |   |
| Date proof due      |           | - |
| No. of days late    |           | = |
| Priority date       |           | + |
| NEW PRIORITY DATE   |           | = |

SEND FILES TO DATA ENTRY AND THEN TO MICROFILM

**RECEIVED**  
MAY 07 1990

For Office Use Only  
Amt. of Fee \$ 125  
Date 5-4-90  
Receipt No. W012341  
Received by SL

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
Department of Water Resources  
PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources will consider this form as a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee or a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

Permit No. 63. 11088 Telephone No. 495-2705

Name(s) of Permit Holder(s): Juke & Floyd Tomlinson

Post Office Address: 2629 Track Rd. Melba ID. 83641

Source of Water: groundwater

If ground water, well driller's name: Russell Johnson Date drilled: Jan-April 1990

Extent of Use:  
Domestic \_\_\_\_\_ (No. of households) Irrigation 53 (No. of acres)  
Stockwater \_\_\_\_\_ (No. and type of stock) Other \_\_\_\_\_

Total rate and/or volume for which proof is submitted 1.06 cfs \_\_\_\_\_ acre/feet

Show date water was first diverted and beneficially used under this permit: 4/20/90

One of the following may be a condition of approval of your permit:

Measuring device: Required? ☒ Yes ☐ No Installed? ☐ Yes ☒ No

OR

Flow Measurement Port: Required? ☒ Yes ☐ No Installed? ☐ Yes ☒ No

*Installing a weir in cement ditch*

Fee Enclosed: \$ 125 (See License Examination Fee Schedule)

Person to contact to accompany the Department representative during the field examination:

AS ABOVE  
Name Telephone No.

Address

The above information is my true statement of the extent to which the above numbered permit has been completed and I relinquish any undeveloped portion of the permit to the state of Idaho.

**MICROFILMED**

JAN 10 1991

Date 5/4/90 Signature Floyd Tomlinson  
(and title if on behalf of a company or organization)

9/89

Drilling Permit No. 63-90-W-003Water Right Permit No. 63-11088 (pending)

Injection Permit No. \_\_\_\_\_

State of Idaho  
Department of Water Resources

## D R I L L I N G   P E R M I T

**RECEIVED**  
JAN 9 1990

Department of Water Resources

1. Applicant Floyd Tomlinson
2. Mailing Address 2629 Track Rd Melba ID 83641  
Telephone 495-2705
- ☒ Well Owner    ( ) Well Operator    ( ) Other, specify \_\_\_\_\_
3. Proposed well location NE 1/4 SW 1/4, or Gov't lot No. \_\_\_\_\_,  
Sec. 23, Twp. 1N, Rge. 2W, County Canyon,  
Street Address of Well Site \_\_\_\_\_,  
Lot, block and subdivision \_\_\_\_\_
4. Proposed use of well:  
( ) Single family or stockwater use (less than 13,000 gallons per day)  
☒ Irrigation (more than 1/2 acre)  
( ) Monitoring - A well bore schematic and map is required for each well.  
No. of proposed wells: \_\_\_\_\_  
( ) Other (describe fully) \_\_\_\_\_
5. Well construction information:  
A. ☒ New well                      ( ) Deepen                      ( ) Replace - See Condition 9.  
B. Proposed surface diameter 10"                      Maximum depth 200'  
C. Anticipated bottom hole temperature:  
☒ 85°F or less (Cold water well)  
( ) 85°F to 212°F (Low temp. geothermal well)  
( ) 212°F or more (Geothermal well)
6. Construction Start Date \_\_\_\_\_
7. Anticipated Well Driller Riverside Drilling #333 Dwane Daugherty  
NOTE: The actual well driller must be identified prior to drilling.
8. Applicant's signature Floyd Tomlinson                      Date 1/8/90  
Title Well owner  
(Owner, Firm Representative, Other)

**MICROFILMED**

JAN 10 1991

## ACTION OF DEPARTMENT OF WATER RESOURCES

This Permit is ApprovedDate 1/8/1990

If approved, this permit authorizes the construction of a well subject to the following conditions. READ CAREFULLY!

GENERAL CONDITIONS:

1. The well must be constructed in compliance with the applicable statutes, specific conditions of approval shown on the water right permit, injection well permit, transfer or amendment and the rules and regulations of the Department for water appropriation, injection wells and well construction standards.
2. This drilling permit is valid for two (2) months from the above approval date for the start of construction and is valid for one (1) year from the approval date for completion of the well unless an extension has been granted.
3. This permit does not constitute the approval of the District Health Department or the Idaho Department of Health and Welfare which may be required before construction of this well.
4. The well shall be constructed by a driller currently licensed in the State of Idaho who must maintain a copy of the drilling permit at the drilling site.
5. Approval of this drilling permit does not authorize trespass on the land of another party.
6. This permit does not constitute other local, county, state or federal approvals which may be required for construction of a well.
- \* 7. This drilling permit does not represent a right to divert and use the water of the State of Idaho.
8. If a bottom hole temperature of 85°F or greater is encountered, well construction shall cease and the well driller and the well owner shall contact the Department immediately.
9. If this permit is for a replacement well, the well being replaced must be abandoned in accordance with Department Rules and Regulations.

SPECIFIC CONDITIONS:

David R. Tutthill  
Signature of Authorized Department Representative

Mgr, Western Regional Off  
Title

Receipt No. W007416 Received by RW Fee 100.00 Date 1-8-90

EXTENSION OF DRILLING PERMIT

Extension approved by \_\_\_\_\_ Approval Date JAN 10 1991

This extension is good for 60 days beyond the above extension approval date.

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
COMMENCEMENT OF WORKS

Permit No. 63-11088  
Name(s) of Permit Holder(s): Floyd + Julia Tomlinson  
Post Office Address: 2629 Snake Rd. P.O. Box Idaho  
495-2705

☒ I hereby certify that construction of diversion works for the above referenced permit began on 1/18/90 (date). I understand that I must continue to develop the water system with due diligence to maintain a valid permit.

☐ I hereby certify that construction of diverting works on the above referenced project has not yet begun due to the following reason beyond my control\*:

\*Note: A financing difficulty is not an acceptable reason.

4/8/90  
Date

Floyd Tomlinson  
Signature of Permit Holder



S T A T E   O F   I D A H O

DEPARTMENT OF WATER RESOURCES

---

Statehouse  
Boise, Idaho 83720  
(208) 327-7900  
April 3, 1990

JULIA TOMLINSON  
FLOYD TOMLINSON  
2629 TRACK RD.  
MELBA, ID 83641

PERMIT APPROVAL NOTICE

RE: PERMIT NO.      P63-11088

Dear Permit Holder:

Enclosed is a copy of your approved application for permit. We direct your attention to the conditions of approval on the final page.

You should be aware that the groundwater you propose to divert is located within a drainage basin where surface waters are regulated during the months of low flow. It is possible that diversion of groundwater may have an adverse impact on these surface water flows. Information available to us at this time does not warrant refusing to issue permits in your area, but we do caution that diversions of groundwater are not allowed to deplete flows available for surface water users with earlier priority dates. Siting your well as far from surface sources as possible and casing out upper water producing zones may reduce the potential of interference.

Section 42-235, Idaho Code, requires that a "drilling permit" must be obtained from the department for all wells constructed after July 1, 1987. A drilling permit is a separate permit that must be issued in addition to your permit to appropriate water. Commencement of well construction or diversion of water under your permit to appropriate water is prohibited unless a drilling permit is obtained.

Be sure to note the special condition requiring you to install a measuring device, or a flow measurement port to provide for the installation of measuring equipment by the Department. Enclosed please find a list of measuring device options, and specifications for the installation of the flow measurement port.

**MICROFILMED**

APR 19 1990

Please note the requirement that as a permit holder you must commence the excavation or construction of diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The enclosed blue card must be completed and returned to this office as soon as you commence construction, no later than one year from the date the permit was approved.

We have enclosed a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit into a license.

Sincerely,

GARY SPACKMAN, Supervisor  
Water Right Permits Section

GS: SC  
Enclosures

RECEIVED

APR 19 1990

Form No. 202a.  
3/89

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
APPROPRIATION APPLICATION ANALYSIS SHEET

INITIAL REVIEW BY: GP

DATE: 1-3-90

APPLICATION: 63-11088

REQUIRED INFORMATION

- ☒ Name: (If applicant is a corporation or partnership, names and addresses for the director, officers, and other partners must be included.)  
☒ Address:  
☒ Source: (See USGS Quad for names of water sources)  
☒ Point of Diversion: (10 acres for spring, lot & block descriptions for Subdivisions, local name)  
☒ County:  
☒ Quantity: (flow and/or volume)  
☒ Period of use:  
☒ Nature of proposed use: (Include description of use)  
☒ Description of diverting works:  
☒ Time required for beneficial use of water:  
☒ Place of use or acres irrigated:  
☒ Map:  
☒ Signature: (If applicant is corp., partnership, or municipality, title of signatory is required)  
☒ Fee:  
☒ Yes ☐ No\* In form to receipt:

Gov't. Lots:

N/A P/D

N/A P/U

ADDITIONAL INFORMATION

YES NO

- ☒ ☐ Overlapping place of use: (Describe source & relationship to present application on the back.)  
☒ ☐ Overlapping point of diversion:  
☐ ☐ Field check required: Field check by: \_\_\_\_\_  
☐ ☐ Field report attached:  
☐ ☒ Critical groundwater area:  
☐ ☒ Groundwater management area:  
☐ ☒ Diversion within interim protected river area  
☐ ☒ Send dam safety information:  
☐ ☒ Send power requirement letter:  
☐ ☒ Send fish farm requirement letter:  
☐ ☒ Power residency affidavit:  
☐ ☒ Power efficiency form:  
☐ ☒ Within trust water boundary: (If yes, attach Trust Water Supplementary Analysis Sheet.)  
☐ ☒ Diversion greater than 5 cfs or 500 af: (If yes, attach Large Diversion supplementary analysis sheet.)  
☐ ☒ \*REQUEST ADDITIONAL INFORMATION FROM THE APPLICANT

DATE REQUESTED: \_\_\_\_\_

☒ ☐ Additional information on reverse side:

MAR 10 1990  
Department of Water Resources

## PROCESSING

APPLICATION NO. 63-11088

YES NO

☒ ☐

In form for advertising:

☐ ☒

Statewide advertising:

☒ ☐

Fee amount, receipt number and date recorded on application:

## SEND COPIES TO

YES NO

☐ ☒

I.D. Health and Welfare

☐ ☒

I.D. Fish and Game

☐ ☒

I.D. Lands

☐ ☒

Adjudication Bureau

YES NO

☐ ☒

U.S. BLM

☐ ☒

U.S. Forest Svc.

☐ ☒

Water Dist. #

☐ ☒

Other

## FINAL REGIONAL PROCESSING REVIEW

YES NO

☒ ☐

Affidavit of publication received:

☒ ☐

Application published correctly: If not, record action taken.

Paper Called Advertised on Jan. 22 & 29, 1990.Changing the date of protest to February 8, 1990.☒ ☐Publication dates and paper recorded on application: February 8, 1990☒ ☐Protests received. Final date for protest February 5, 1990☒ ☐

Protest dates, resolution of protest recorded on application:

☒ ☐Recommendations attached: Approve, DRC☒ ☐

Measuring device required:

☒ ☐

Measuring port required:

☒ ☐Water delivered by water master? District # 63-P05☒ ☐

Special conditions of approval or cover letter:

01G, 26A (Allow 3 years)

See below for additional information

Recommended Date or Priority 12/28/1989Recommended by: DRCDate 3/1/1990

## STATE OFFICE REVIEW

P05, P23, P03, P1746 26 01G

See below for additional information. By

KWDate 3-27-90

## ADDITIONAL INFORMATION

Lapsed Permit 63-10562 is for Same Legal Land Description, Purpose, and Source.

\_\_\_\_\_

TOMLINSON, JULIA  
TOMLINSON, FLOYD  
2629 TRACK RD.  
MELBA, ID 83641

Source: GROUNDWATER

Diversion Pt:            NESW        Sec 23 T 01N R 02W

```

Use: IRRIGATION          ( 1.060 CFS)
      Total Diversion: ( 1.060 CFS)

```

Date Filed: 12/28/1989

In: T01N R02W S23                      SENW                      NESW

53.0 ACRES TOTAL

*Journal of Management Education* 30(6)

2014年12月15日

| Year | Percentage |
|------|------------|
| 1950 | 7          |
| 1960 | 10         |
| 1970 | 12         |
| 1980 | 14         |
| 1990 | 16         |
| 2000 | 17         |
| 2010 | 18         |
| 2020 | 19         |
| 2030 | 20         |
| 2040 | 20         |
| 2050 | 18         |