# Groundwater Transfer Review Summary Form

**Transfer/PA # T-** **13808**

**GW Reviewer** **Gerald H. Grondin** **Date Review Completed:** **7 June 2022**

**Summary of Same Source Review:**

☐ The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

**Summary of Injury Review:**

☐ The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

**Summary of GW-SW Transfer Similarity Review:**

☐ The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

☒ **None of the Above**

**Note:** The existing POA/POD well (LAKE 1986) and the proposed APOA well (not drilled) locations noted in the proposed transfer are within an area addressed by OAR 690-513-0030 (d). However, neither well appear to trigger OAR 690-513-0030 (d) given they are more than 1,000 feet distance from Thomas Creek.

*This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.*

**Oregon Water Resources Department**
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900
www.wrd.state.or.us

# Ground Water Review Form:

- ☒ **Water Right Transfer**
- ☐ **Permit Amendment**
- ☐ **GR Modification**
- ☐ **Other**

Application: T-**13808** Applicant Name: **Justin R. & Jayna L. Ferrell**

Proposed Changes: ☐ POA ☒ APOA ☐ SW→GW ☐ RA
☐ USE ☒ POU ☐ OTHER

Reviewer(s): **Gerald H. Grondin** Date of Review: **7 June 2022**

Date Reviewed by GW Mgr. and Returned to WRSD: JTI 10/7/2022

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

☐ The water well reports provided with the application do not correspond to the water rights affected by the transfer.

☐ The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.

☐ Other _____

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1. Basic description of the changes proposed in this transfer:

**Transfer application T- 13808 relates to certificate 46978 (priority date 16 October 1974) that authorizes irrigation of 320.8 POU acres in T38S/R19E-sec 24 & 25 with groundwater from POD/POA well LAKE 1986 (Bridgman Well) in T38S/R19E-sec 25 with a maximum allowable rate of 3.2 cfs (0.01 cfs/acre, 1,436.26 gpm) and a maximum allowable duty of 3 feet-acre per year (962.40 acre-feet/year total).**

**Wheel lines were the original irrigation system design. Two center pivots were subsequently installed.**

**Transfer application T- 13808 proposes moving 82.62 POU acres total (corners outside the center pivot circles) to a rectangular area in the SW quarter of T38S/R20E-sec 31 to be irrigated by groundwater from a proposed well not yet drilled.**

**The existing POD/POA well LAKE 1986 (Bridgman Well) is 400-feet total depth and obtains groundwater from predominantly basin-fill sediment deposits that overlie predominantly volcanic rock and sediments deposits. The proposed POA/POD well is anticipated to be 500-feet total depth and obtain groundwater from predominantly basin-fill sediment deposits (the application says "valley fill").**

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments:

**The existing POD/POA well LAKE 1986 (Bridgman Well) obtains groundwater from predominantly basin-fill sediment deposits that overlie predominantly volcanic rock and sediments deposits. The proposed POA/POD well is anticipated to obtain groundwater from predominantly basin-fill sediment deposits (the application says "valley fill").**

3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No

**See comments for question 2 above.**

b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.):

**Not applicable.**

4. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another ground water right**?
☒ Yes ☐ No Comments:

**The proposed change to irrigate the transferred 82.62 POU acres with groundwater from an additional POA/POD well (APOA well) would move groundwater pumping (about 0.83 cfs maximum rate and about 247.86 acre-feet/year maximum) to a location closer to other POA/POD wells authorized for other groundwater rights. The two POA/POD wells closest to the proposed APOA well location are 2,625 feet northeast (no well log found authorized under certificate 89417) and 3,010 feet south (well LAKE 4177 authorized under permit G-12945) respectively.**

b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?
☐ Yes ☒ No If yes, explain:

**The additional seasonal drawdown at the two POA/POD wells closest to the proposed APOA well location is calculated to be less than 5-feet by the end of the irrigation season. The wells should be able to accommodate the additional drawdown.**

5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?

☒ Yes ☐ No Comments:

**The proposed change would move groundwater pumping (about 0.83 cfs maximum rate and about 247.86 acre-feet/year maximum) to a location about 90-feet closer to Thomas Creek (1,405 feet distance at existing well location versus 1,315 feet distance at proposed APOA well location) resulting in a calculated increased interference with Thomas Creek of about 0.001 cfs (0.45 gpm) by the end of the irrigation season.**

**The proposed change does not appear to trigger OAR 690-513-0030 (d) given the "from" and "to" well locations are greater than 1,000 feet distance from Thomas Creek.**

b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?

Stream: **Thomas Creek** ☒ Minimal ☐ Significant

Stream: _____ ☐ Minimal ☐ Significant

Provide context for minimal/significant impact:

**See discussion in part a above.**

6. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?

☐ Yes ☐ No Comments:

**Not applicable. No SW-GW transfer**

7. What conditions or other changes in the application are necessary to address any potential issues identified above:

**The following are technical groundwater review recommendations. It is recognized that one or more technically recommended conditions may or may not be allowed under the transfer process rules and statutes. This technical groundwater review relies on other appropriate and authorized Department staff to make that determination.**

**"Large" flow meter condition for any proposed "To" POA and/or APOA well. Require the flow meter for any POA and/or APOA well to be properly installed and maintained. Each meter shall be either within 50 feet of the well head with a clearly visible monument adjacent to the meter or a surveyed location shall be provided and a clearly visible monument adjacent to the meter shall be installed for each meter more than 50 feet from the well head.**

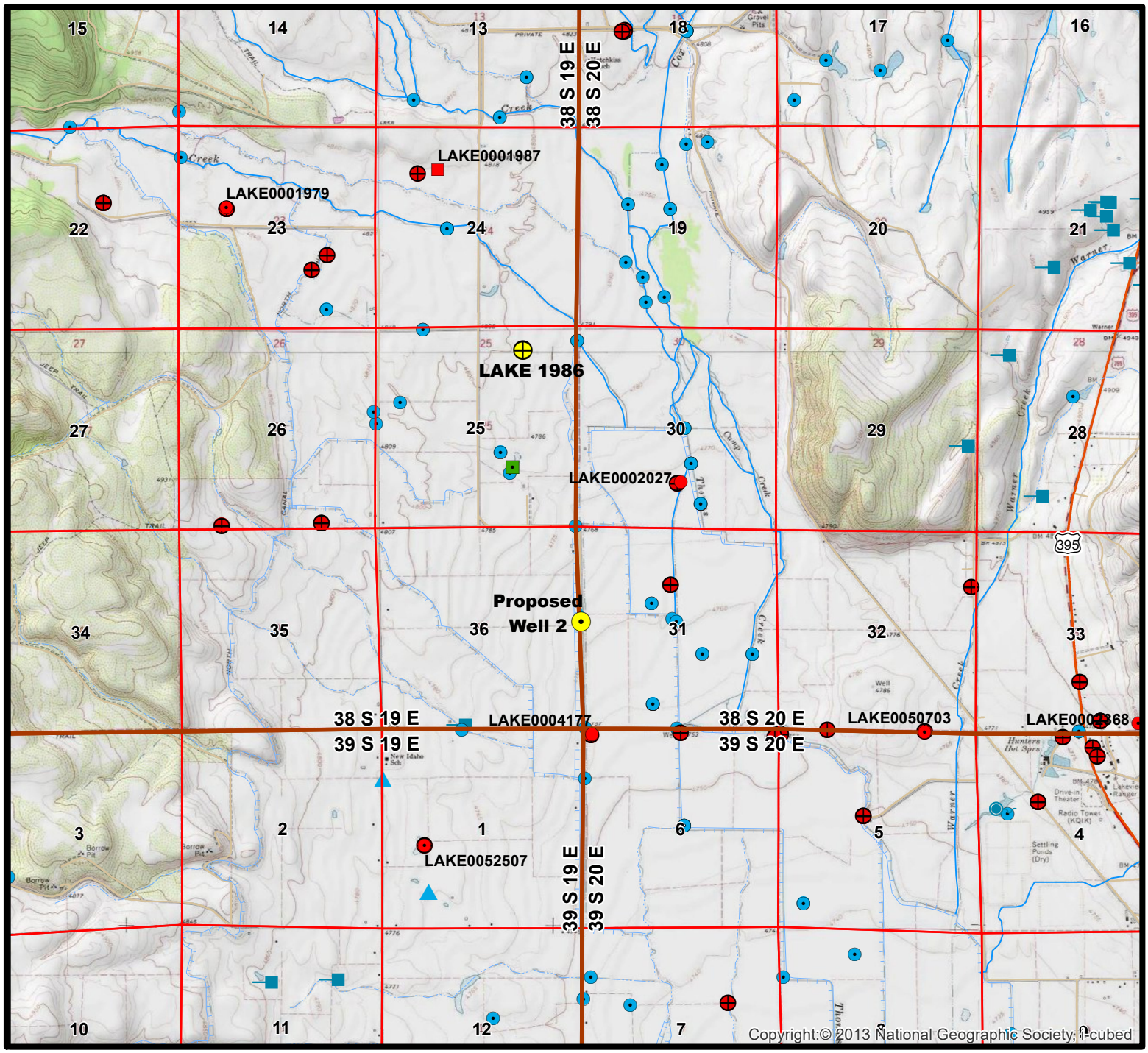
**Condition 7P (well tag condition) for all the "To" and "From" POA wells.**

**Condition 7T (modified) for all "To" POA wells: "Prior to use, all POA wells shall be configured to allow a strictly clean water (no oil) static water level measurements with an electric-tape. That can include measurement access via an unobstructed vertical discharge pipe that allows the groundwater level to fluctuate freely within the discharge pipe (no valves, etc.). Otherwise, a dedicated measuring tube must be installed prior to use. The tube must be unobstructed, have a diameter of ¾ inch (0.75 inch) or greater, and pursuant to figure 200-5 in OAR 690-200."**

8. Any additional comments:

**No additional comments.**

# Groundwater Transfer Application T-13808
# Justin R. & Jayna L. Ferrell




0 0.5 1 2 3 4
Miles

**Yellow = Existing & Proposed POD/POA Wells**
**Red = Groundwater PODs or Other Wells**
**Blue & Green = Surface Water PODs**

N

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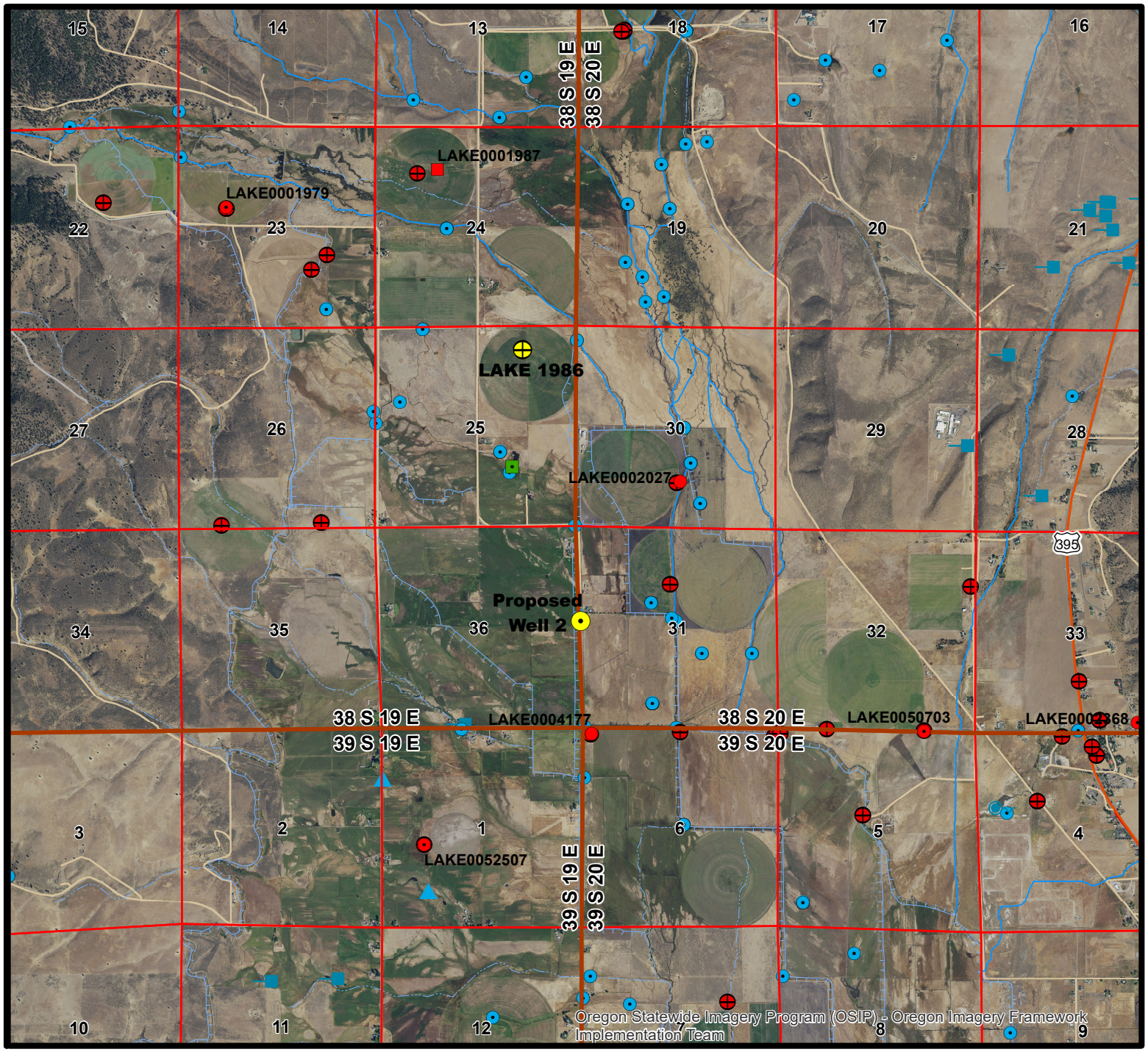


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Miles

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NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED APR 21 1975 STATE ENGINEER SALEM, OREGON

# WATER WELL REPORT
STATE OF OREGON

RECEIVED AUG 9 1974 STATE ENGINEER SALEM, OREGON

State Well No. 38S/19E-24d

(Please type or print) (Do not write above this line)

State Permit No. .....

Lake 1986

## (1) OWNER:
Name Jack Bridgemon
Address Lakeview, Oregon

## (2) TYPE OF WORK (check):
New Well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]
If abandonment, describe material and procedure in Item 12.

## (3) TYPE OF WELL:
Rotary [X] Driven [ ]
Cable [ ] Jetted [ ]
Dug [ ] Bored [ ]

## (4) PROPOSED USE (check):
Domestic [ ] Industrial [ ] Municipal [ ]
Irrigation [X] Test Well [ ] Other [ ]

## (5) CASING INSTALLED:
Threaded [ ] Welded [X]
12-3/4" Diam. from 0 ft. to 400 ft. Gage .250
..... " Diam. from ..... ft. to ..... ft. Gage .....
..... " Diam. from ..... ft. to ..... ft. Gage .....

## (6) PERFORATIONS:
Perforated? [X] Yes [ ] No
Type of perforator used Factory (sawed)
Size of perforations 1/4 in. by 2 1/4 in.
no perforations from 0 ft. to 80 ft.
..... perforations from 80 ft. to 400 ft.
..... perforations from ..... ft. to ..... ft.

## (7) SCREENS:
Well screen installed? [ ] Yes [X] No
Manufacturer's Name .....
Type ..... Model No. .....
Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.
Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

## (8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? [X] Yes [ ] No If yes, by whom? Interstate Pump Co.
Yield: 2000 gal./min. with 180 ft. drawdown after ..... hrs.
" " "
" " "
Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.
Artesian flow ..... g.p.m.
Temperature of water ..... Depth artesian flow encountered ..... ft.

## (9) CONSTRUCTION:
Well seal—Material used Cement grout
Well sealed from land surface to 20 (24" Pipe) ft.
Diameter of well bore to bottom of seal 32 in.
Diameter of well bore below seal 22 in.
Number of sacks of cement used in well seal 1 1/4 yards sacks
Number of sacks of bentonite used in well seal ..... sacks
Brand name of bentonite .....
Number of pounds of bentonite per 100 gallons of water ..... lbs./100 gals.
Was a drive shoe used? [ ] Yes [X] No Plugs ..... Size: location ..... ft.
Did any strata contain unusable water? [ ] Yes [ ] No
Type of water? ..... depth of strata .....
Method of sealing strata off .....
Was well gravel packed? [X] Yes [ ] No Size of gravel: 3/8 to 3/4
Gravel placed from 0 ft. to 400 ft.

## (10) LOCATION OF WELL:
County Lake Driller's well number .....
1/4 SE 1/4 Section 24 T. 38 R. 19E W.M.
Bearing and distance from section or subdivision corner .....

## (11) WATER LEVEL: Completed well.
Depth at which water was first found ..... ft.
Static level ..... ft. below land surface. Date .....
Artesian pressure ..... lbs. per square inch. Date .....

## (12) WELL LOG:
Diameter of well below casing 22!
Depth drilled 400 ft. Depth of completed well 400 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. *Report each change in position of Static Water Level and indicate principal water-bearing strata.*

| MATERIAL | From | To | SWL |
|---|---|---|---|
| Top soil | 0 | 2 | |
| Sand stone streaks & Gravel | 2 | 20 | |
| Grey clay | 20 | 26 | |
| Coarse gravel | 26 | 60 | |
| Grey clay | 60 | 72 | |
| Sand | 72 | 77 | |
| Grey clay | 77 | 85 | |
| Brown clay | 85 | 107 | |
| Gravel (3/4) | 107 | 109 | |
| Brown Sandstone | 109 | 113 | |
| Gravel | 113 | 148 | |
| Sandy brown clay | 148 | 160 | |
| Sandy brown clay | 160 | 328 | |
| Brown clay & gravel | 328 | 340 | |
| Coarse Sand | 340 | 349 | |
| Grey-Blue clay gravel & sand | 349 | 400 | |

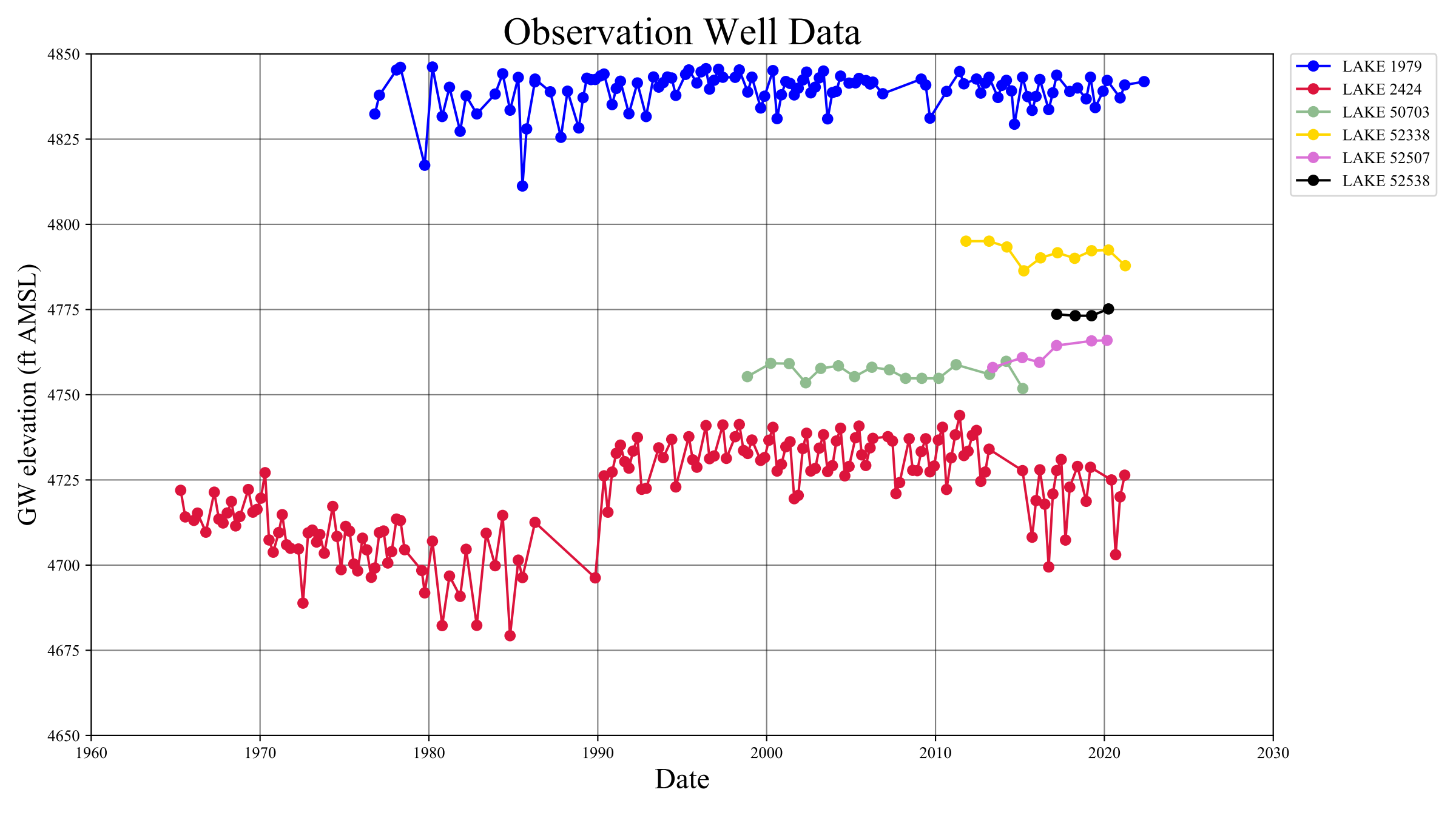
Work started 6/17 19 74 Completed 7/18 19 74
Date well drilling machine moved off of well 7/18 19 74

**Drilling Machine Operator's Certification:**
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Ken Reynolds (Drilling Machine Operator) Date 8/15, 1974
Drilling Machine Operator's License No. 947

**Water Well Contractor's Certification:**
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name C & C Enloe Drilling Co. (Person, firm or corporation) (Type or print)
Address .....
[Signed] Carl V. Enloe (Water Well Contractor)
Contractor's License No. 503 Date 8/5, 19 74

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119


Observation Well Data
GW elevation (ft AMSL)
Date
4850
4825
4800
4775
4750
4725
4700
4675
4650
1960
1970
1980
1990
2000
2010
2020
2030
LAKE 1979
LAKE 2424
LAKE 50703
LAKE 52338
LAKE 52507
LAKE 52538

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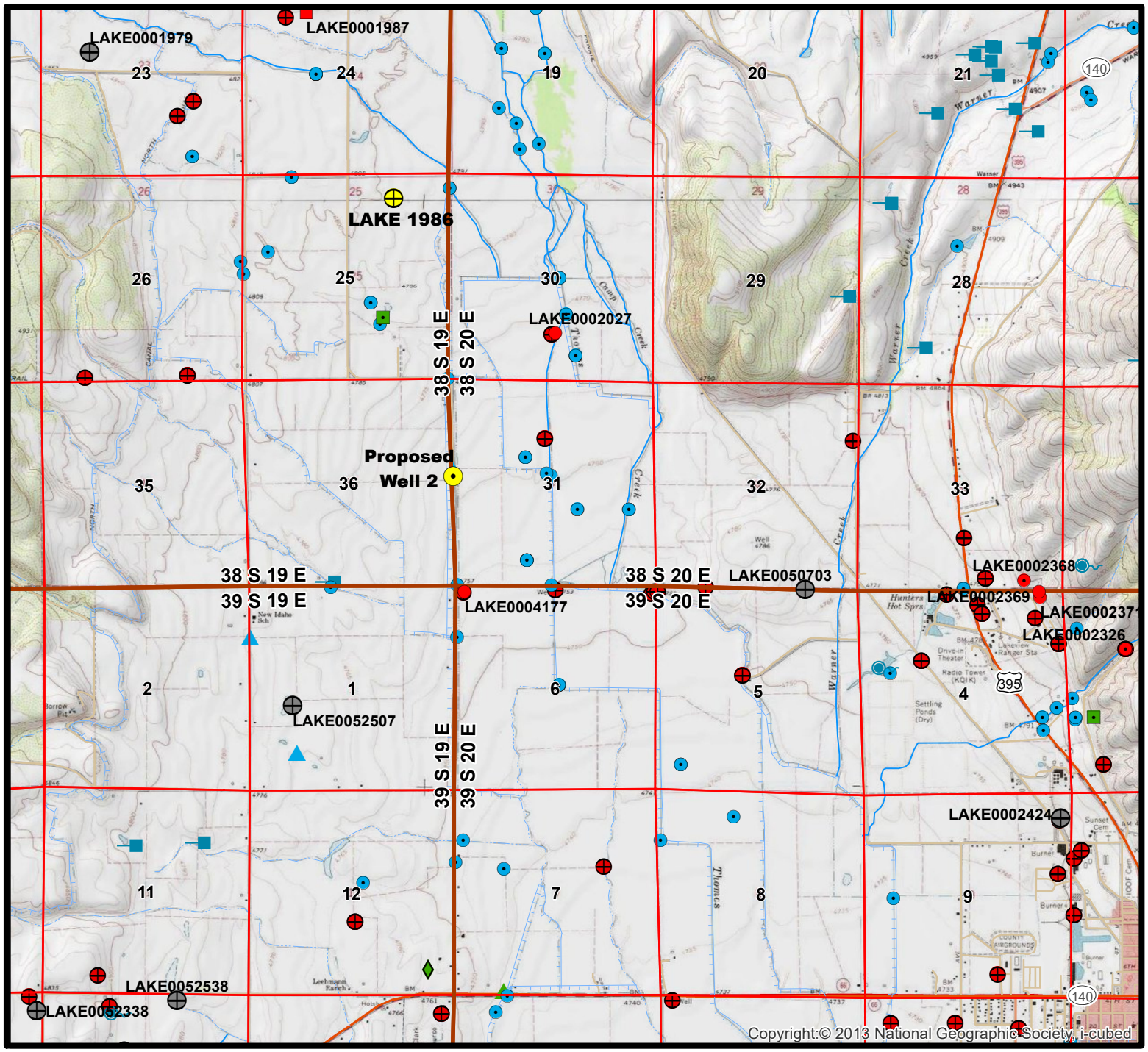


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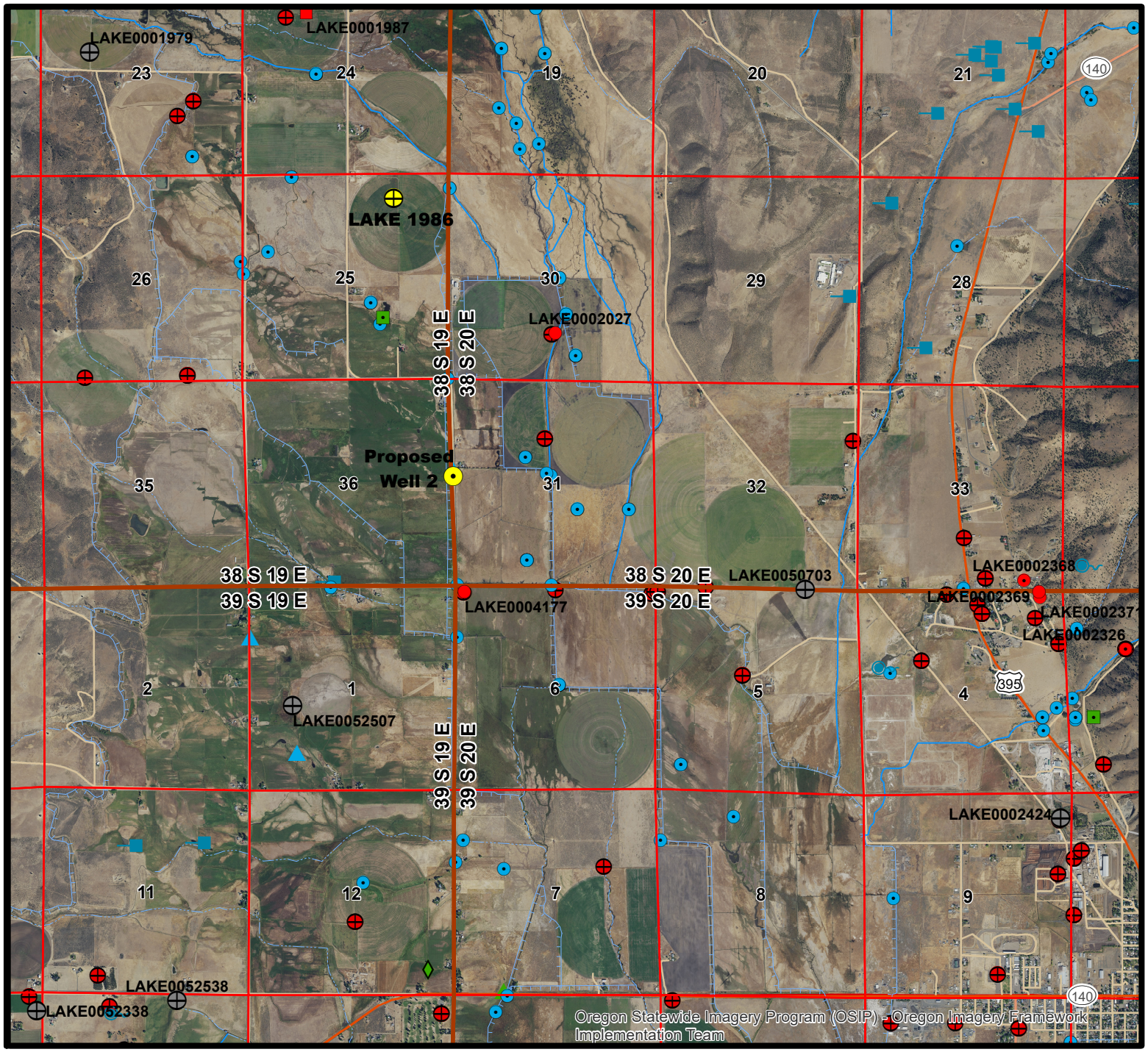


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Miles

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**Drawdown Calculations Using Theis Equation**

**Theis Equation:** $s = [Q/(4*T*pi)][W(u)]$

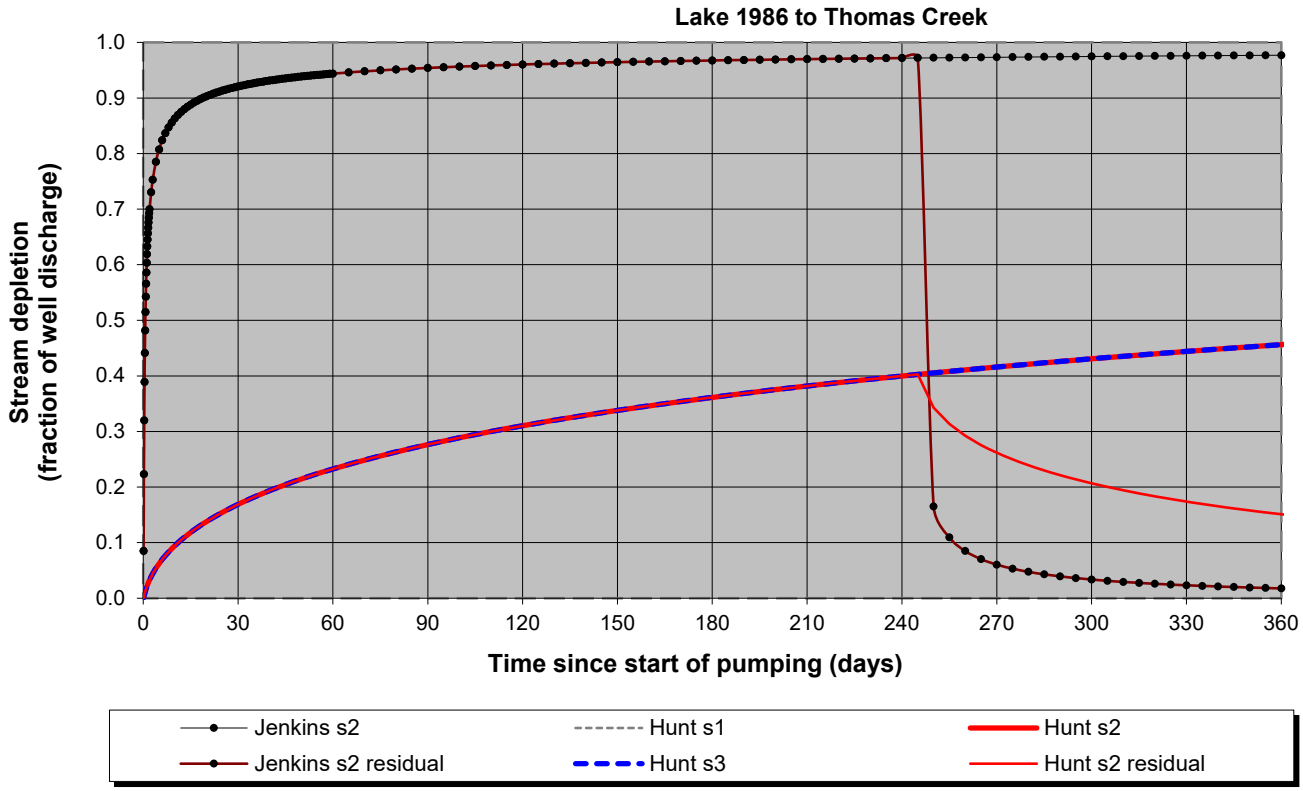
$u = (r*r*S)/(4*T*t)$

$W(u) = (-\ln u)-(0.5772157)+(u/1*1!)-(u*u/2*2!)+(u*u*u/3*3!)-(u*u*u*u/4*4!)+...$

s = drawdown (L)
T = transmissivity (L*L/T)
S = storage coefficient (dimensionless)
pi = 3.141592654
r = radial distance (L)
t = time (T)
u = dimensionless
W(u) = well function

| Transmissivity T (gpd/ft) | Transmissivity T (ft2/day) | Storage Coefficient S | Pumping Rate Q (gal/min) | Pumping Rate Q (ft3/sec) | Time t (days) | Distance r (feet) | pi | u | W(u) | Drawdown s (feet) | Drawdown Difference (feet | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Note : W(u) calculation valid when u < 7.1 | | | | |
| Note: yellow grid areas are where values are calculated | | | | | | | | 7.0000 | 1.1545E-04 | | | W(u) calculation test |
| **Existing Well (LAKE 1986) to Nearest Groundwater Right Well northeast(certificate 89417) Transmissivity is averaged from area pump test and specific capacity data** | | | | | | | | | | | | |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 30.00 | 7,355.00 | 3.14 | 0.1356 | 1.5521 | 2.6638 | | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 245.00 | 7,355.00 | 3.14 | 0.0166 | 3.5376 | 6.0713 | | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 30.00 | 7,355.00 | 3.14 | 0.1356 | 1.5521 | 1.6370 | | Pro-Rated Pumping Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 245.00 | 7,355.00 | 3.14 | 0.0166 | 3.5376 | 3.7311 | | Pro-Rated Pumping Rate |
| **Proposed Well (not drilled) to Nearest Groundwater Right Well northeast (certificate 89417) Transmissivity is averaged from area pump test and specific capacity data** | | | | | | | | | | | | |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 30.00 | 2,625.00 | 3.14 | 0.0173 | 3.4988 | 6.0048 | 3.3410 | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 245.00 | 2,625.00 | 3.14 | 0.0021 | 5.5838 | 9.5831 | 3.5117 | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 30.00 | 2,625.00 | 3.14 | 0.0173 | 3.4988 | 3.6902 | 2.0532 | Pro-Rated Pumping Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 245.00 | 2,625.00 | 3.14 | 0.0021 | 5.5838 | 5.8892 | 2.1581 | Pro-Rated Pumping Rate |
| **Existing Well (LAKE 1986) to Nearest Groundwater Right Well south (LAKE 4177, certificate 12945) Transmissivity is averaged from area pump test and specific capacity data** | | | | | | | | | | | | |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 30.00 | 10,365.00 | 3.14 | 0.2693 | 0.9870 | 1.6940 | | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 245.00 | 10,365.00 | 3.14 | 0.0330 | 2.8676 | 4.9216 | | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 30.00 | 10,365.00 | 3.14 | 0.2693 | 0.9870 | 1.0410 | | Pro-Rated Pumping Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 245.00 | 10,365.00 | 3.14 | 0.0330 | 2.8676 | 3.0245 | | Pro-Rated Pumping Rate |
| **Proposed Well (not drilled) to Nearest Groundwater Right Well south (LAKE 4177, certificate 12945) Transmissivity is averaged from area pump test and specific capacity data** | | | | | | | | | | | | |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 30.00 | 3,010.00 | 3.14 | 0.0227 | 3.2304 | 5.5442 | 3.8502 | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 372.52 | 0.83 | 245.00 | 3,010.00 | 3.14 | 0.0028 | 5.3107 | 9.1145 | 4.1929 | Continuous Pumping at Full Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 30.00 | 3,010.00 | 3.14 | 0.0227 | 3.2304 | 3.4072 | 2.3661 | Pro-Rated Pumping Rate |
| 24,872.73 | 3,325.00 | 0.00100 | 228.93 | 0.51 | 245.00 | 3,010.00 | 3.14 | 0.0028 | 5.3107 | 5.6012 | 2.5767 | Pro-Rated Pumping Rate |

## Transient Stream Depletion (Jenkins, 1970; Hunt, 1999)

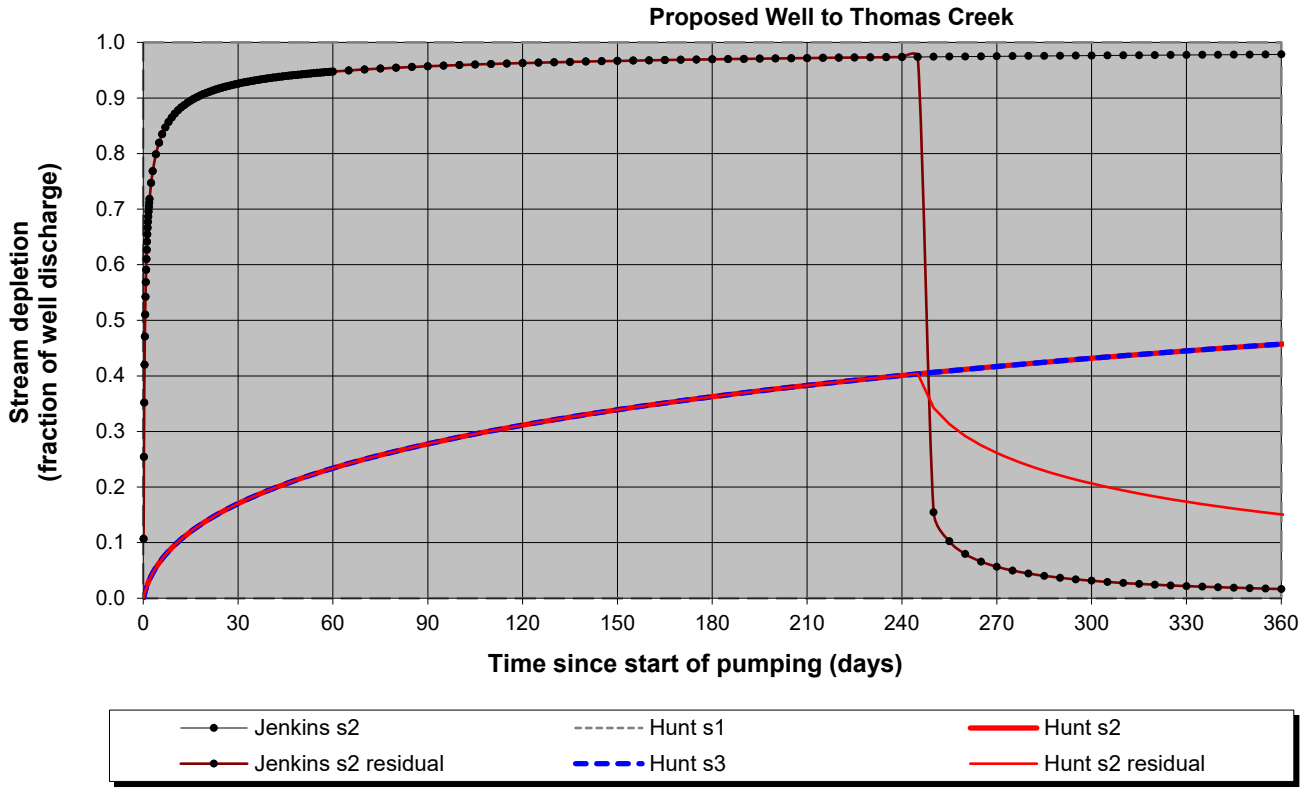



**Output for Hunt Stream Depletion, Scenerio 2 (s2): Time pump on = 245 days**

| Days | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 360 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qw, cfs | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 |
| Jenk SD % | 0.921 | 0.944 | 0.954 | 0.960 | 0.965 | 0.968 | 0.970 | 0.972 | 0.060 | 0.033 | 0.023 | 0.018 |
| Jen SD cfs | 0.764 | 0.783 | 0.792 | 0.797 | 0.801 | 0.803 | 0.805 | 0.807 | 0.050 | 0.028 | 0.019 | 0.015 |
| Hunt SD % | 0.169 | 0.233 | 0.277 | 0.310 | 0.338 | 0.362 | 0.382 | 0.400 | 0.262 | 0.207 | 0.174 | 0.151 |
| Hunt SD cfs | 0.140 | 0.193 | 0.230 | 0.258 | 0.281 | 0.300 | 0.317 | 0.332 | 0.217 | 0.172 | 0.144 | 0.125 |

| **Parameters:** | | **Scenario 1** | **Scenario 2** | **Scenario 3** | **Units** |
|---|---|---|---|---|---|
| Net steady pumping rate | Qw | 0.83 | 0.83 | 0.83 | cfs |
| Distance to stream | a | 1405 | 1405 | 1405 | ft |
| Aquifer hydraulic conductivity | K | 6.65 | 6.65 | 6.65 | ft/day |
| Aquifer thickness | b | 500 | 500 | 500 | ft |
| Aquifer transmissivity | T | 3325 | 3325 | 3325 | ft*ft/day |
| Aquifer storage coefficient | S | 0.001 | 0.001 | 0.001 | |
| Stream width | ws | 20 | 20 | 20 | ft |
| Streambed hydraulic conductivity | Ks | 0.0665 | 0.0665 | 0.0665 | ft/day |
| Streambed thickness | bs | 10 | 10 | 10 | ft |
| Streambed conductance | sbc | 0.133 | 0.133 | 0.133 | ft/day |
| Stream depletion factor (Jenkins) | sdf | 0.593691729 | 0.593691729 | 0.593691729 | days |
| Streambed factor (Hunt) | sbf | 0.0562 | 0.0562 | 0.0562 | |

## Transient Stream Depletion (Jenkins, 1970; Hunt, 1999)




**Output for Hunt Stream Depletion, Scenerio 2 (s2): Time pump on = 245 days**

| Days | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 360 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qw, cfs | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 | 0.830 |
| Jenk SD % | 0.926 | 0.948 | 0.957 | 0.963 | 0.967 | 0.970 | 0.972 | 0.974 | 0.056 | 0.031 | 0.022 | 0.016 |
| Jen SD cfs | 0.768 | 0.786 | 0.794 | 0.799 | 0.802 | 0.805 | 0.807 | 0.808 | 0.047 | 0.026 | 0.018 | 0.014 |
| Hunt SD % | 0.170 | 0.234 | 0.278 | 0.312 | 0.339 | 0.363 | 0.383 | 0.401 | 0.261 | 0.206 | 0.174 | 0.151 |
| Hunt SD cfs | 0.141 | 0.194 | 0.231 | 0.259 | 0.282 | 0.301 | 0.318 | 0.333 | 0.217 | 0.171 | 0.144 | 0.125 |

| **Parameters:** | | **Scenario 1** | **Scenario 2** | **Scenario 3** | **Units** |
|---|---|---|---|---|---|
| Net steady pumping rate | Qw | 0.83 | 0.83 | 0.83 | cfs |
| Distance to stream | a | 1315 | 1315 | 1315 | ft |
| Aquifer hydraulic conductivity | K | 6.65 | 6.65 | 6.65 | ft/day |
| Aquifer thickness | b | 500 | 500 | 500 | ft |
| Aquifer transmissivity | T | 3325 | 3325 | 3325 | ft*ft/day |
| Aquifer storage coefficient | S | 0.001 | 0.001 | 0.001 | |
| Stream width | ws | 20 | 20 | 20 | ft |
| Streambed hydraulic conductivity | Ks | 0.0665 | 0.0665 | 0.0665 | ft/day |
| Streambed thickness | bs | 10 | 10 | 10 | ft |
| Streambed conductance | sbc | 0.133 | 0.133 | 0.133 | ft/day |
| Stream depletion factor (Jenkins) | sdf | 0.520067669 | 0.520067669 | 0.520067669 | days |
| Streambed factor (Hunt) | sbf | 0.0526 | 0.0526 | 0.0526 | |

| Theis_Equation_specific_capacity_to_transmissivity | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| **Basin_Fill** | | | | | | | | | | | | |
| **Well County** | **Well Num** | **Total Depth** | **Rate** | **Total Time** | **Drawdown** | **Diameter** | **GW** | **Transmissivity** | **Open Interval** | **Conductivity** | **Data** | |
| | | **feet** | **gpm** | **hours** | **feet** | **inches** | **Source** | **ft2/day** | **feet** | **ft/day** | **Source** | |
| LAKE | 1977 | 234 | 1200 | 24 | 90 | 12 | Basin Fill | 3,527.69 | 108 | 32.66 | Well Log | |
| LAKE | 1986 | 400 | 2000 | 4 | 180 | 12 | Basin Fill | 3,031.94 | 320 | 9.47 | Well Log | No total time recorded, used 4-hr default |
| LAKE | 1987 | 500 | 1800 | 48 | 124 | 16 | Basin Fill | 3,888.47 | 60 | 64.81 | Well Log | |
| LAKE | 1987 | 500 | 905 | 4 | 87.62 | 16 | Basin Fill | 2,289.82 | 60 | 38.16 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 1992 | 800 | 1100 | 15 | 52 | 12 | Basin Fill | 5,593.91 | 740 | 7.56 | Well Log | |
| LAKE | 2027 | 440 | 1400 | 4 | 180 | 16 | Basin Fill | 1,687.96 | 400 | 4.22 | Well Log | No total time recorded, used 4-hr default |
| LAKE | 2035 | 509 | 4000 | 77 | 86 | 16 | Basin Fill | 13,692.85 | 449 | 30.50 | Well Log | |
| LAKE | 2038 | 200 | 120 | 8 | 95 | 12 | Basin Fill | 262.68 | 48 | 5.47 | Well Log | |
| LAKE | 2184 | 61 | 37.5 | 1 | 39 | 6 | Basin Fill | 162.23 | 1 | 162.23 | Well Log | |
| LAKE | 2202 | 370 | 520 | 4.5 | 36.17 | 14 | Basin Fill | 2,300.00 | ? | ? | Pump Test | Jacob-Cooper semi-log analysis |
| LAKE | 2216 | 295 | 94 | 4 | 11 | 8 | Basin Fill | 1,200.00 | 252 | 4.76 | Pump Test | Jacob-Cooper semi-log analysis |
| LAKE | 2340 | 70 | 37.5 | 4 | 10.08 | 6 | Basin Fill | 882.20 | ? | ? | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 2364 | 100 | 20 | 3 | 18 | 6 | Basin Fill | 236.15 | 58 | 4.07 | Well Log | |
| LAKE | 2398 | 165 | 930 | 4 | 49.5 | 14 | Basin Fill | 6,000.00 | 55 | 109.09 | Pump Test | Jacob-Cooper semi-log analysis |
| LAKE | 2398 | 165 | 600 | 24 | 80 | 14 | Basin Fill | 1,876.37 | 55 | 34.12 | Well Log | |
| LAKE | 2403 | 210 | 1890 | 4 | 85 | 14 | Basin Fill | 5,306.71 | 90 | 58.96 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 2408 | 500 | 2250 | 40 | 86 | 16 | Basin Fill | 7,181.07 | 460 | 15.61 | Well Log | |
| LAKE | 2424 | 800 | 600 | 10 | 183 | 12 | Basin Fill | 745.42 | 63 | 11.83 | Well Log | |
| LAKE | 2507 | 1020 | 995 | 4 | 55 | 10 | Basin Fill | 4,455.66 | 420 | 10.61 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 2507 | 1020 | 1700 | 4 | 140 | 10 | Basin Fill | 2,911.55 | 420 | 6.93 | Well Log | No total time recorded, used 4-hr default |
| LAKE | 3017 | 360 | 800 | 97 | 75 | 12 | Basin Fill | 3,025.26 | 180 | 16.81 | Well Log | |
| LAKE | 3047 | 410 | 1850 | 16 | 105 | 12 | Basin Fill | 4,625.27 | 330 | 14.02 | Well Log | |
| LAKE | 4012 | 110 | 200 | 4 | 22.33 | 10 | Basin Fill | 2,102.92 | 50 | 42.06 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 4012 | 110 | 120 | 8 | 21.75 | 10 | Basin Fill | 1,314.25 | 50 | 26.29 | Well Log | |
| LAKE | 4177 | 570 | 2000 | 5 | 32 | 13 | Basin Fill | 16,349.19 | 450 | 36.33 | Well Log | |
| LAKE | 4177 | 570 | 1661.25 | 3 | 98.8 | 12 | Basin Fill | 3,168.00 | 450 | 7.04 | Pump Test | Jacob-Cooper semi-log analysis |
| LAKE | 4460 | 540 | 1900 | 25 | 138 | 16 | Basin Fill | 3,530.13 | 500 | 7.06 | Well Log | |
| LAKE | 50441 | 545 | 1100 | 1 | 180 | 14 | Basin Fill | 1,188.65 | 140 | 8.49 | Well Log | Assume basin-fill |
| LAKE | 50703 | 400 | 400 | 24 | 58 | 10 | Basin Fill | 1,791.61 | 130 | 13.78 | Well Log | |
| LAKE | 50703 | 400 | 401.3 | 24 | 44.94 | 10 | Basin Fill | 2,357.32 | 130 | 18.13 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 50960 | 350 | 950 | 4 | 131.55 | 10 | Basin Fill | 1,670.07 | 152 | 10.99 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 51612 | 602 | 175 | 32 | 24 | 10 | Basin Fill | 1,934.99 | 200 | 9.67 | Well Log | |
| LAKE | 52507 | 380 | 325 | 23 | 30.35 | 10 | Basin Fill | 1,798.00 | 240 | 7.49 | Pump Test | Jacob-Cooper semi-log analysis |
| LAKE | 52507 | 380 | 350 | 24 | 21 | 10 | Basin Fill | 4,568.73 | 240 | 19.04 | Well Log | |
| LAKE | 52538 | 387 | 800 | 4 | 73.67 | 12 | Basin Fill | 2,519.02 | 140 | 17.99 | Pump Test | Transmissivity from pump test specific capacity |
| LAKE | 52784 | 247 | 300 | 4 | 34.75 | 12 | Basin Fill | 540.00 | 140 | 3.86 | Pump Test | Jacob-Cooper semi-log analysis |
| | | | | | | | | | | | | |
| | | | | | | | **Min** | **162.23** | **1.00** | **3.86** | | |
| | | | | | | | **Max** | **16,349.19** | **740.00** | **162.23** | | |
| | | | | | | | **Mean** | **3,325.45** | **222.97** | **25.59** | | |
| | | | | | | | **Median** | **2,328.66** | **146.00** | **13.90** | | |
| | | | | | | | **25 percentile** | **1,403.21** | **60.00** | **7.38** | | |
| | | | | | | | **50 percentile** | **2,328.66** | **146.00** | **13.90** | | |
| | | | | | | | **75 percentile** | **4,313.86** | **405.00** | **33.03** | | |