



STATE OF ALASKA 85835  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND & WATER  
Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Started: 7 / 7 / 2025 Completed: 7 / 19 / 2025 Pump Install: / /

|              |             |       |     |                                                   |
|--------------|-------------|-------|-----|---------------------------------------------------|
| City/Borough | Subdivision | Block | Lot | Property Owner Name & Address                     |
|              |             |       |     | State Of Alaska Department Of Natural Resources , |

Well location: Latitude 64.569167 Longitude -149.510722  
Meridian F Township 004S Range 010W Section 14 , NW 1/4 of SW 1/4 of SE 1/4 of NW 1/4

**BOREHOLE DATA:** (from ground surface)  
Suggest T.M. Hanna's hydrogeologic classification system\*  
[https://my.ngwa.org/NC\\_Product?id=a185000000BYub3AAD](https://my.ngwa.org/NC_Product?id=a185000000BYub3AAD)

|                                               | Depth |     |
|-----------------------------------------------|-------|-----|
|                                               | From  | To  |
| sand: medium to fine, brown, dry              | 0     | 103 |
| silty sand: wet, brown                        | 103   | 114 |
| sand: silty, brown, dry                       | 114   | 151 |
| sand: silty, some small gravel                | 151   | 188 |
| silt: grey, wet                               | 188   | 228 |
| sand: some gravel, silty, wet                 | 228   | 249 |
| Sand: water bearing, medium, heaving          | 249   | 255 |
| water gravel: medium to coarse, sandy heaving | 255   | 268 |
| clay: silty, brown                            | 268   | 270 |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |
|                                               |       |     |

Drilling method: ☒ Air rotary, ☐ Cable tool, ☐ Other \_\_\_\_\_  
Well use: ☐ Public supply, ☐ Domestic, ☐ Reinjection, ☐ Hydrofracking  
☒ Commercial, ☐ Observation/Monitoring, ☐ Test/Exploratory, ☐ Cooling,  
☐ Irrigation/Agriculture, ☐ Grounding, ☐ Recharge/Aquifer Storage,  
☐ Heating, ☐ Geothermal Exploration, ☐ Other \_\_\_\_\_

Fluids used: \_\_\_\_\_

Depth of hole: 270 ft Casing stickup: 3 ft

Casing type: A53B Steel Casing thickness: .322 inches

Casing diameter: 8 inches Casing depth: 255 ft

Liner type: \_\_\_\_\_ Depth: \_\_\_\_\_ ft Diameter: \_\_\_\_\_ inches

Note: \_\_\_\_\_

Well intake opening type: ☐ Open end, ☐ Open hole, ☒ Other screened

Screen type: stainless steel, Screen mesh size: .02

Screen start: 255 ft, Screen stop: 270 ft, Perforated ☐ Yes ☒ No

Perforation description: \_\_\_\_\_ Perf from: \_\_\_\_\_ ft, Perf

to: \_\_\_\_\_ ft, Perf from: \_\_\_\_\_ ft, Perf to: \_\_\_\_\_ ft

Gravel packed ☐ Yes ☒ No Gravel start: \_\_\_\_\_ ft, Gravel stop: \_\_\_\_\_ ft

Note: .020 slot ss screen: 254.72' to 259.88'; .040 slot ss screen: 259.88' to 270.18'

Static water (from top of casing): 103 ft on / / Artesian well ☐

Pumping level & yield: 35.35 feet after 24 hours at 350 gpm

Method of testing: \_\_\_\_\_

Development method: air surge Duration: \_\_\_\_\_

Recovery rate: \_\_\_\_\_ gpm

Grout type: bentonite Volume 150lbs

Depth: From \_\_\_\_\_ ft, To \_\_\_\_\_ ft

Include description or sketch of well location (include road names, buildings, etc.):

Final pump intake depth: \_\_\_\_\_ ft Model: \_\_\_\_\_

Pump size: \_\_\_\_\_ hp Brand name: \_\_\_\_\_

Was well disinfected upon completion? ☐ Yes ☒ No

Method of disinfection: \_\_\_\_\_

Was water quality tested? ☐ Yes ☒ No

Water quality parameters tested: \_\_\_\_\_

Well driller name: \_\_\_\_\_

Company name: M-W Drilling, Inc.

Mailing address: \_\_\_\_\_

City: \_\_\_\_\_ State: AK Zip: \_\_\_\_\_

Phone number: ( ) -

Driller's signature: \_\_\_\_\_

Date: / /

Anchorage Municipal Code 15.55.060(I) and North Pole Ordinance 13.32.030(D) require that a copy of this well log be submitted to the Development Services Department/City within 30 days of well completion.

City Permit Number: \_\_\_\_\_

Date of Issue: / /

Parcel Identification Number: - -

AS 41.08.020(b)(4) and AAC 11 AAC 93.140(a) require that a copy of the well log be submitted to the Department of Natural Resources within 45 days of well completion. Well logs may be submitted using the online well log reporting system available at:

<https://dnr.alaska.gov/welts/>

OR email electronic well logs to

[dnr.water.reports@alaska.gov](mailto:dnr.water.reports@alaska.gov)

# M-W Drilling, Inc.

◆ P.O. Box 110389 ◆ Anchorage, AK 99511 ◆  
◆ 907-345-4000 ◆

Job No.:25-102-3

WELTS ID 85835

## GROUNDWATER WELL LOG

|                           |                                                            |                     |            |
|---------------------------|------------------------------------------------------------|---------------------|------------|
| <b>Well Owner:</b>        | State of Alaska, Dept of Natural Resources                 | <b>Use of Well:</b> | Commercial |
| <b>Site Description:</b>  | Nenana-Totchaket Road, Well #3                             |                     |            |
| <b>Legal Description:</b> | Township 4S, Range 9W, Fairbanks Meridian, State of Alaska |                     |            |
| <b>Well Coordinates:</b>  | 64°34'9"N -149°30'38.6"W                                   |                     |            |

## CONSTRUCTION

|                                                                       |  |                                                                       |  |                                                                            |  |                                          |  |
|-----------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|----------------------------------------------------------------------------|--|------------------------------------------|--|
| <b>Drill Method:</b>                                                  |  | Air rotary                                                            |  | <b>Hole Size:</b> 8"                                                       |  | <b>Well Depth:</b> 273'                  |  |
| <b>Casing Material:</b>                                               |  | A53B steel                                                            |  | <b>Casing Size:</b> 8"                                                     |  | <b>Wall:</b> .322                        |  |
|                                                                       |  |                                                                       |  |                                                                            |  | <b>Cased to:</b> 255'                    |  |
| <b>Well Completion:</b>                                               |  | <b>Open end:</b>                                                      |  | <b>Screen:</b> X                                                           |  | <b>Liner:</b>                            |  |
| <b>Screen/Perforation Description:</b>                                |  |                                                                       |  | <b>Perforated:</b>                                                         |  | <b>Method:</b>                           |  |
|                                                                       |  |                                                                       |  | K-packer & riser pipe:250.62' to 254.72';                                  |  |                                          |  |
|                                                                       |  |                                                                       |  | 0.020 slot ss screen: 254.72' to 259.88'; 0.040 slot ss screen: 259.88' to |  |                                          |  |
|                                                                       |  |                                                                       |  | 270.18'; Tail pipe & butt plate: 270.18' to 273.21'                        |  |                                          |  |
| <b>Grout Notes:</b>                                                   |  | 3 sacks (50#ea) of bentonite; dry grouted around outside of 8" casing |  |                                                                            |  |                                          |  |
|                                                                       |  |                                                                       |  |                                                                            |  |                                          |  |
|                                                                       |  |                                                                       |  |                                                                            |  |                                          |  |
| <b>Well Development:</b>                                              |  | Air surge                                                             |  |                                                                            |  |                                          |  |
| <b>Well Disinfected:</b> no                                           |  | <b>Method:</b>                                                        |  |                                                                            |  |                                          |  |
| <b>Yield Test at</b> 350 <b>GPM for</b> 24 <b>hour(s) with</b> 35.35' |  | <b>of drawdown (DD) from static level (SWL).</b>                      |  |                                                                            |  |                                          |  |
| <b>Method:</b> Submersible pump                                       |  |                                                                       |  |                                                                            |  | <b>Static Water Level (SWL):</b> 103.15' |  |
| <b>Start Date:</b> 7/7/25                                             |  | <b>Completion Date:</b> 7/19/25                                       |  |                                                                            |  |                                          |  |
| <b>Test Pump Date:</b> 7/18/25-7/19/25                                |  | <b>Final Pump Install Date:</b> n/a                                   |  |                                                                            |  |                                          |  |
|                                                                       |  | <b>Pump Installation Notes:</b>                                       |  |                                                                            |  |                                          |  |
|                                                                       |  |                                                                       |  |                                                                            |  |                                          |  |

## WELL LOG

| Depth in feet from top of casing. | Details of formations penetrated, size of material, color and miscellaneous details.   |
|-----------------------------------|----------------------------------------------------------------------------------------|
| 0 TO 3                            | Casing stick up                                                                        |
| 3 TO 106                          | Sand: medium to fine, brown, dry                                                       |
| 106 TO 117                        | Silty sand: wet, brown                                                                 |
| 117 TO 154                        | Sand: silty, brown, dry                                                                |
| 154 TO 191                        | Sand: silty, some small gravel                                                         |
| 191 TO 231                        | Silt: grey, wet                                                                        |
| 231 TO 252                        | Sand: some gravel, silty, wet                                                          |
| 252 TO 258                        | Sand: water bearing, medium, heaving                                                   |
| 258 TO 271                        | Water gravel: medium to coarse, sandy heaving                                          |
| 271 TO 273                        | Clay: silty, brown                                                                     |
|                                   | <i>Kris G. Westberg</i><br>President, M-W Drilling, Inc.<br>Alaska Gen Contr Lic #1000 |

# M-W Drilling, Inc.

## TEST PUMP REPORT

Sheet 1 of 1

Date: 7/18/25

|                                                         |                             |  |                                          |  |        |                         |               |
|---------------------------------------------------------|-----------------------------|--|------------------------------------------|--|--------|-------------------------|---------------|
| Conducted by: M-W Drilling: Walter & Don                |                             |  |                                          |  |        | M-W Job #: 25-102-3     |               |
| Owner: State of Alaska, Department of Natural Resources |                             |  |                                          |  |        |                         |               |
| Address: Nenana-Totchaket Road, Well #3                 |                             |  |                                          |  |        |                         |               |
| Well Location: 64°34'9"N -149°30'38.6"W                 |                             |  |                                          |  |        |                         |               |
| Well Info:                                              | Total Depth: 273"           |  | Depth of Casing: 255"                    |  |        | Casing Size: 8"         |               |
|                                                         | Screen Slot: 0.020; 0.040   |  | Screen: From 254.72' to 270.18'          |  |        | Screen Diameter: 6"     |               |
| Pump Info:                                              | Make: Berkeley              |  | Model: 6TMH-300                          |  | HP: 20 | Volts: 460              | Pump Diam: 6" |
| Test Info:                                              | Intake Depth: 203'          |  | Water level meas.: Water Level Indicator |  |        |                         |               |
|                                                         | Pump on: Time: 10:00        |  | Date: 7/18/25                            |  |        |                         |               |
|                                                         | Pump off: Time: 10:00       |  | Date: 7/19/25                            |  |        |                         |               |
|                                                         | Static water level: 103.15' |  | Max. drawdown from SWL: 35.35'           |  |        | Avg. discharge: 350 GPM |               |

| Time  |             | Water Level | Flow GPM | Remarks      | Time  |             | Water Level | Flow GPM | Remarks        |
|-------|-------------|-------------|----------|--------------|-------|-------------|-------------|----------|----------------|
| Clock | Mins. Elpsd |             |          |              | Clock | Mins. Elpsd |             |          |                |
| 10:00 | 0           | 103.1       | 350      | Turn pump on | 19:00 | 540         | 137.65      | 350      |                |
| 10:01 | 1           | 137.0       | 350      |              | 20:00 | 600         | 137.65      | 350      |                |
| 10:02 | 2           | 137.5       | 350      |              | 21:00 | 660         | 137.7       | 350      |                |
| 10:03 | 3           | 137.7       | 350      |              | 22:00 | 720         | 137.7       | 350      |                |
| 10:04 | 4           | 137.8       | 350      |              | 23:00 | 780         | 137.6       | 350      |                |
| 10:05 | 5           | 137.85      | 350      |              | 00:00 | 840         | 137.65      | 350      | 7/19/25        |
| 10:06 | 6           | 137.9       | 350      |              | 01:00 | 900         | 137.65      | 350      |                |
| 10:07 | 7           | 137.9       | 350      |              | 02:00 | 960         | 137.7       | 350      |                |
| 10:08 | 8           | 137.91      | 350      |              | 03:00 | 1020        | 137.7       | 350      |                |
| 10:09 | 9           | 137.95      | 350      |              | 04:00 | 1080        | 137.65      | 350      |                |
| 10:10 | 10          | 137.95      | 350      |              | 05:00 | 1140        | 137.7       | 350      |                |
| 10:15 | 15          | 138.0       | 350      |              | 06:00 | 1200        | 137.65      | 350      |                |
| 10:20 | 20          | 138.5       | 350      |              | 07:00 | 1260        | 137.65      | 350      |                |
| 10:25 | 25          | 138.5       | 350      |              | 08:00 | 1320        | 137.65      | 350      |                |
| 10:30 | 30          | 138.1       | 350      |              | 09:00 | 1380        | 137.7       | 350      |                |
| 10:40 | 40          | 138.15      | 350      |              | 10:00 | 1440        | 137.7       | 350      | Shut pump off  |
| 10:50 | 50          | 138.2       | 350      |              |       |             |             |          |                |
| 11:00 | 60          | 138.3       | 350      |              | 10:01 | 1           | 105.4       |          | Begin recovery |
| 11:15 | 75          | 138.3       | 350      |              | 10:02 | 2           | 103.75      |          | readings       |
| 11:30 | 90          | 138.3       | 350      |              | 10:03 | 3           | 103.15      |          |                |
| 12:00 | 120         | 137.6       | 350      |              | 10:04 | 4           | 103.15      |          |                |
| 13:00 | 180         | 137.7       | 350      |              | 10:05 | 5           | 103.15      |          |                |
| 14:00 | 240         | 137.7       | 350      |              | 10:10 | 10          | 103.15      |          |                |
| 15:00 | 300         | 137.65      | 350      |              | 10:20 | 20          | 103.15      |          |                |
| 16:00 | 360         | 137.6       | 350      |              | 11:00 | 60          | 103.15      |          | End of Test    |
| 17:00 | 420         | 137.65      | 350      |              |       |             |             |          |                |
| 18:00 | 480         | 137.7       | 350      |              |       |             |             |          |                |