

835961

County Anoka  
Quad Circle Pines  
Quad ID 119B

MINNESOTA DEPARTMENT OF HEALTH  
WELL AND BORING REPORT  
Minnesota Statutes Chapter 1031

Entry Date 09/10/2018  
Update Date 12/18/2019  
Received Date

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------|-------|----------|------|---|----|-------|------|------|----|----|------|------|------|----|----|------|--------|---------------|----|-----|-----|--------|------------------|-----|-----|--|------|----------|-----|-----|------|------|----------|-----|-----|-------|--------|-----------------------------------------------------------------------------------------------------------------------------|--|--|
| <b>Well Name</b><br>STRAND, JASON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Township</b><br>32                       | <b>Range</b><br>23                                                                | <b>Dir Section</b><br>W 25 | <b>Subsection</b><br>DCDDBA | <b>Well Depth</b><br>350 ft.                                                                                                                                                                                                                                                                                                                                                       | <b>Depth Completed</b><br>350 ft.            | <b>Date Well Completed</b><br>09/18/2018 |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Elevation</b><br>906 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Elev. Method</b><br>LiDAR 1m DEM (MNDNR) |                                                                                   |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    | <b>Drill Method</b><br>Multiple methods used | <b>Drill Fluid</b><br>Qwik gel           |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Address</b><br>C/W 4752 141ST LA NE HAM LAKE MN 55304                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                             |                                                                                   |                            |                             | <b>Use</b><br>domestic                                                                                                                                                                                                                                                                                                                                                             | <b>Status</b><br>Active                      |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Stratigraphy Information</b> <table><tr><td>Geological Material</td><td>From</td><td>To (ft.)</td><td>Color</td><td>Hardness</td></tr><tr><td>SAND</td><td>0</td><td>22</td><td>BROWN</td><td>SOFT</td></tr><tr><td>SAND</td><td>22</td><td>48</td><td>GRAY</td><td>SOFT</td></tr><tr><td>CLAY</td><td>48</td><td>51</td><td>GRAY</td><td>MEDIUM</td></tr><tr><td>CLAY &amp; GRAVEL</td><td>51</td><td>120</td><td>RED</td><td>MEDIUM</td></tr><tr><td>SAND AND GRAVEL,</td><td>120</td><td>301</td><td></td><td>SOFT</td></tr><tr><td>SANDROCK</td><td>301</td><td>341</td><td>BLUE</td><td>HARD</td></tr><tr><td>SANDROCK</td><td>341</td><td>350</td><td>WHITE</td><td>MEDIUM</td></tr></table> |                                             |                                                                                   |                            |                             | Geological Material                                                                                                                                                                                                                                                                                                                                                                | From                                         | To (ft.)                                 | Color | Hardness | SAND | 0 | 22 | BROWN | SOFT | SAND | 22 | 48 | GRAY | SOFT | CLAY | 48 | 51 | GRAY | MEDIUM | CLAY & GRAVEL | 51 | 120 | RED | MEDIUM | SAND AND GRAVEL, | 120 | 301 |  | SOFT | SANDROCK | 301 | 341 | BLUE | HARD | SANDROCK | 341 | 350 | WHITE | MEDIUM | <b>Well Hydrofractured?</b><br><b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>From</b> <b>To</b> |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | Geological Material                                                                                                                                                                                                                                                                                                                                                                | From                                         | To (ft.)                                 | Color | Hardness |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | SAND                                                                                                                                                                                                                                                                                                                                                                               | 0                                            | 22                                       | BROWN | SOFT     |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | SAND                                                                                                                                                                                                                                                                                                                                                                               | 22                                           | 48                                       | GRAY  | SOFT     |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | CLAY                                                                                                                                                                                                                                                                                                                                                                               | 48                                           | 51                                       | GRAY  | MEDIUM   |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | CLAY & GRAVEL                                                                                                                                                                                                                                                                                                                                                                      | 51                                           | 120                                      | RED   | MEDIUM   |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | SAND AND GRAVEL,                                                                                                                                                                                                                                                                                                                                                                   | 120                                          | 301                                      |       | SOFT     |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | SANDROCK                                                                                                                                                                                                                                                                                                                                                                           | 301                                          | 341                                      | BLUE  | HARD     |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | SANDROCK                                                                                                                                                                                                                                                                                                                                                                           | 341                                          | 350                                      | WHITE | MEDIUM   |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Casing Type</b><br>Single casing                                                                                                                                                                                                                                                                                                                                                | <b>Joint</b><br>Threaded                     |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Drive Shoe?</b><br><b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Above/Below</b>                          |                                                                                   |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Casing Diameter</b><br>4 in. To                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Weight</b><br>307 ft. lbs./ft.           | <b>Hole Diameter</b><br>8 in. To 50 ft.<br>6.7 in. To 307 ft.<br>4 in. To 350 ft. |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Open Hole</b><br>From 307 ft. To 350 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                             |                                                                                   |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
| <b>Screen?</b> <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Type</b>                                 | <b>Make</b>                                                                       |                            |                             |                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Static Water Level</b><br>39 ft. land surface Measure 09/10/2018                                                                                                                                                                                                                                                                                                                |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Pumping Level (below land surface)</b><br>30 ft. 2 hrs. Pumping at 35 g.p.m.                                                                                                                                                                                                                                                                                                    |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Wellhead Completion</b><br>Pitless adapter manufacturer SNAPPY Model<br><input type="checkbox"/> Casing Protection <input checked="" type="checkbox"/> 12 in. above grade<br><input type="checkbox"/> At-grade (Environmental Wells and Borings ONLY)                                                                                                                           |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Grouting Information</b><br>Well Grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Specified<br>Material Amount From To<br>well grouted, type unknown 7 Sacks ft. 50 ft.                                                                                                                                                |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Nearest Known Source of Contamination</b><br>85 feet South Direction Septic tank/drain field Type<br>Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                      |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Pump</b> <input type="checkbox"/> Not Installed Date Installed 09/18/2018<br>Manufacturer's name FLOWISE<br>Model Number 2 WIRE HP 0.75 Volt 230<br>Length of drop pipe 40 ft Capacity 12 g.p. Typ Submersible                                                                                                                                                                  |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Abandoned</b><br>Does property have any not in use and not sealed well(s)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                  |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Variance</b><br>Was a variance granted from the MDH for this well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                          |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Miscellaneous</b><br>First Bedrock Tunnel City Group Aquifer Tunnel City<br>Last Strat Tunnel City Group Depth to Bedrock 301 ft<br>Located by Minnesota Geological Survey<br>Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or<br>System UTM - NAD83, Zone 15, Meters X 488376 Y 5008103<br>Unique Number Verification Information from Input Date 09/10/2018 |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Angled Drill Hole</b>                                                                                                                                                                                                                                                                                                                                                           |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                   |                            |                             | <b>Well Contractor</b><br>Sampson Well Co. 1863 SAMPSON, B.<br>Licensee Business Lic. or Reg. No. Name of Driller                                                                                                                                                                                                                                                                  |                                              |                                          |       |          |      |   |    |       |      |      |    |    |      |      |      |    |    |      |        |               |    |     |     |        |                  |     |     |  |      |          |     |     |      |      |          |     |     |       |        |                                                                                                                             |  |  |

**Remarks**  
GAMMA LOGGED ON 9-10-2018 FOR STRAT.