STATE OF NORTH DAKOTA

BOARD OF WATER WELL CONTRACTORS

900 E. BOULEVARD • BISMARCK, NORTH DAKOTA 58501

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Board of Water Well Contractors within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name: OTTERTAIL POWER CO.

Address: FERGUS FALLS, MN.

2. WELL LOCATION

Sketch map location must agree with written location.

NORTH

1 Mile

County: STUTSMAN → w/o w.g.? 2000! (SP 581)

NE¼ NE¼ NE¼ Sec. 11 Twp. 140 N. Rg. 62 W.

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☒ Industrial
☐ Stock ☐ Municipal ☐ Test Hole

4. METHOD DRILLED

☐ Cable ☐ Reverse Rotary ☐ Bored
☒ Forward Rotary ☐ Jetted ☐ Other

If other, specify

5. WATER QUALITY

Was a water sample collected for chemical analysis?

☒ Yes ☐ No

If so, to what laboratory was it sent: I.D.I.

6. WELL CONSTRUCTION

Diameter of hole: 24+ inches. Depth: 263 feet.

Casing: ☒ Steel ☐ Plastic ☐ Concrete
☐ Threaded ☒ Welded ☐ Other

If other, specify

Pipe Weight:	Diameter:	From:	To:
78.6 lb/ft.	20 inches	+2.0 feet	-158 feet
49.6 lb/ft.	12 inches	+2.0 feet	-180 feet
lb/ft.	inches	feet	feet
lb/ft.	inches	feet	feet

Was perforated pipe used? ☐ Yes ☒ No

Length of pipe perforated feet

Was casing left open end? ☐ Yes ☒ No

Was a well screened installed? ☒ Yes ☐ No

Material: S.S. Diameter: 12 P.S. inches
(stainless steel, bronze, etc.)

Slot size .080 set from 187 feet to 192 feet

Slot size .080 set from 214 feet to 259 feet

Slot size set from feet to feet

Slot size set from feet to feet

Was a packer or seal used? ☐ Yes ☒ No

If so, what material

Type of well: Straight screen ☐ Gravel packed ☒

Was the well grouted? Yes ☒ No ☐

To what depth? 158 feet

Material used in grouting: NEAT GROUT

Well head completion: Pitless adapter

12" above grade: CAPPED Other

If other, specify

Was well disinfected upon completion? ☒ Yes ☐ No

7. WATER LEVEL

Static water level: 48 feet below land surface

If flowing: closed-in pressure psi

GPM flow through inch pipe

Controlled by: ☐ Valve ☐ Reducers ☐ Other

If other, specify

8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Other

Pumping level below land surface:

60 ft. after 5 hrs. pumping 250 gpm

ft. after hrs. pumping gpm

ft. after hrs. pumping gpm

9. WELL LOG

Formation	Depth (ft.) From	Depth (ft.) To
CLAY	0	15
SAND & GRAVEL	15	55
FINE SAND	55	77
BOULDERS	77	79
BLUE CLAY	79	185
SAND & GRAVEL (SI 187 to 192)	185	190
CLAY & BOULDERS	190	208
GRAVEL & BOULDERS (SI 214-259)	208	257
CLAY W/ BOULDERS	257	263

(Use separate sheet if necessary.)

10. DATE COMPLETED 7/24/81

11. WAS WELL PLUGGED OR ABANDONED?

☐ Yes ☒ No

If so, how

12. REMARKS: 22' S.S. BLANK FROM 192 TO 214 AND 5' S.S. BLANK 182 – 187

13. DRILLER'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

LAYNE MINNESOTA CO. 172

Driller's or Firm's Name Certificate No.

3147 CALIFORNIA ST., NE. MPLS.

Address

Brian Middeke 7/27/81

Signed by Date

DUPLICATE — BOARD'S COPY