

IOWA STATE DEPARTMENT OF HEALTH
DIVISION OF PUBLIC HEALTH ENGINEERING AND INDUSTRIAL HYGIENE

GROUND WATER

Town Decorah County Winneshiek Date July 2 1958
WELL NO. 4 Active ☒ Standby ☐ Abandoned ☐ Replaced by No. ☐
LOCATION: Street W. End Water St. Sec. 16 T. 98 N.R. 8 East: West
Lot ☐ Block ☐ Township Decorah
OWNERSHIP Municipal Date Installed June 1958
CONTRACTOR Thorpe Well Co. Address D.M.
DATE RECONDITIONED 19 Contractor ☐ Address ☐
CONSTRUCTION EMPLOYED: ☐

CURB ELEVATION 866+ REFERENCE U.S.G.S.
TYPE OF CONSTRUCTION Screen Well in Natural S.G. Depth 58'9" ft. Diameter 16 in.
CASING: Material Steel Condition New
SCREEN: Material Johnson's Stainless Steel Length 15'2" ft. Diameter 16 in. Slot Opening 60 ~~in~~
WELL SEALED yes How welded steel plate Approved ☐
WELL VENTED yes How 2" vent, turned down & screened Approved yes
TYPE OF PUMP Turbine Make Fairbanks-Morse Capacity 500 GPM Lubricated water
DEPTH TO CYLINDER 44' To bottom (9' bowl sect.) Tail Pipe none ft.
PUMP CONTROL: Manual ☒ Automatic ☐ Semi-Automatic ☐
* STATIC LEVEL 13'4" (Ground Level) Pumping Level * Approx. 35 ft. Drawdown * 21'8" ft.
OPTIMUM SPECIFIC YIELD 600 GPM Drawdown 21.7 ft. Time hrs.
RATE OF DRAWDOWN Rapid Rate of Recovery Rapid
TEMPERATURE OF WATER 46 °F Where Measured Pump Temp. of Atmosphere °F
DRAWDOWN GAUGE INSTALLED yes - 42' air line
TOPOGRAPHICAL POSITION OF WELL Low Level (Protected by River Dike.)
WELL SITE INVESTIGATED Yes (4-24-58) Approved Yes Why not ☐
WELL CONSTRUCTION REVIEWED Yes (4-28-58) Approved Yes Notice No 58-27-W. Why not ☐
PIT CONSTRUCTION: Purpose None Size and Description ☐

CONDITION: ☐ Drainage Facilities okay
PUMP INSTALLATION: Approved yes Why Not ☐
CUTTINGS FROM WELL PRESERVED: Yes Where City
DEPTH TO BED ROCK Above Rock Depth to Water-bearing Stratum 45' to 58'9" (Water first encountered @ 30')
SOURCE OF WATER: Principal Formation Sand & Gravel Other ☐

DATE RECONDITIONED..... 19..... Contractor..... Address.....

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DEPTH TO BED ROCK Above Rock Depth to Water-bearing Stratum 45' to 58'9" (Water first encountered @ 30')

SOURCE OF WATER: Principal Formation Sand & Gravel Other

Total Hardness..... ppm. Total Iron..... ppm. Sulfates..... ppm. Fluorine..... ppm.

Manganese..... ppm. pH..... CO₂..... ppm.

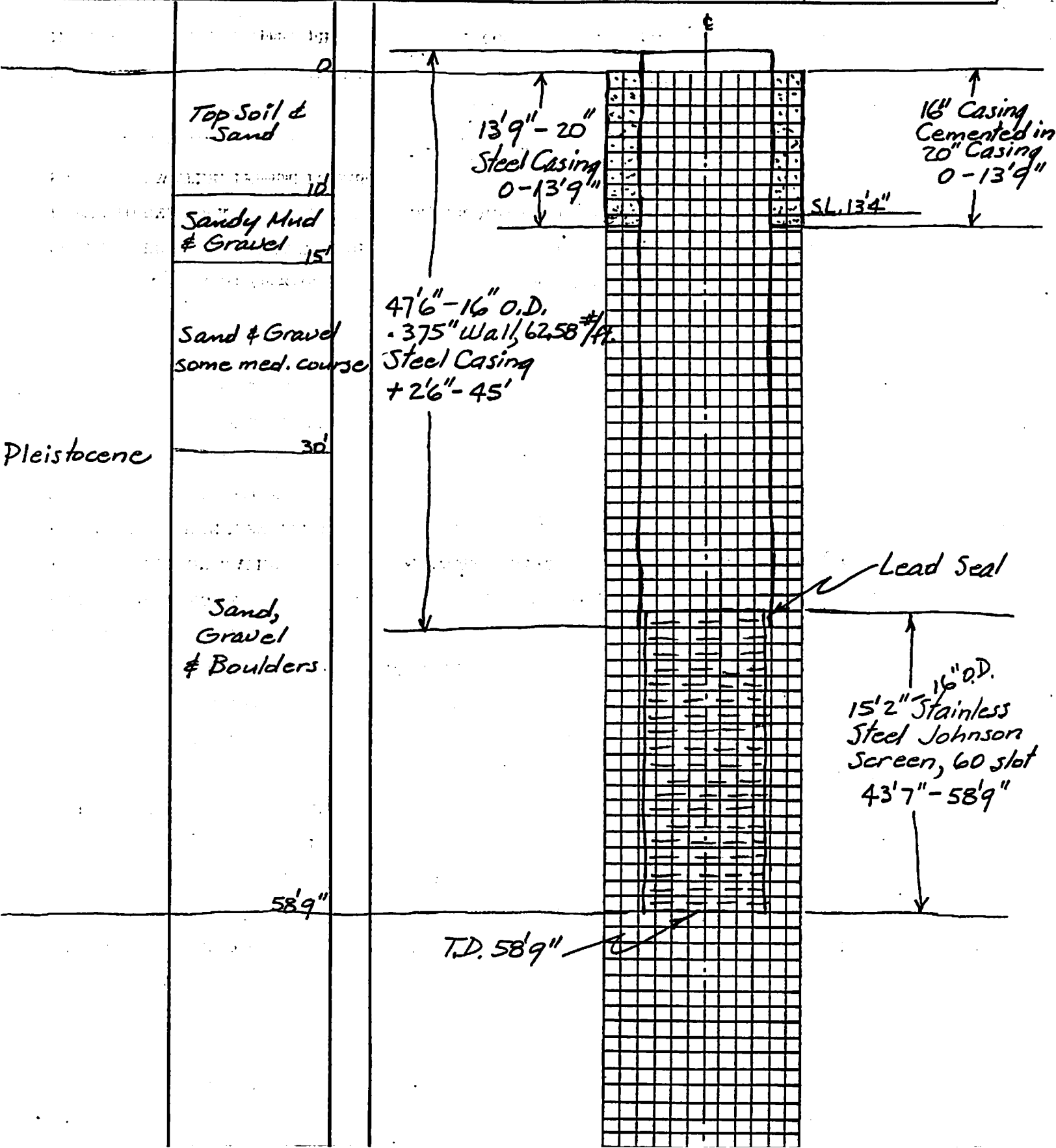
REMARKS:

* At approx. 600 gpm - pump test June 20 & 21, 1958

Info from L. P. Erdman, City Engineer.

Motor on pump - 50 HP, 1800 rpm

GEOLOGICAL DATA			CASING DATA	WELL DATA	
Formation	Material and distance from surface in ft.	Series	Position, kind and extent of casing, liners, shoes, etc.	Scale: Horizontal <u>None</u> Vertical <u>None</u>	Position of seals, screens, static level, etc.



Municipal Water-Supply Inventory

DATA FOR: DECORAH #4
WNUMBER: 39058

PWSID\SEQ#: 9630012- 94
USGS ID: 0

GENERAL INFORMATION

LOCATION: T 98N R 8W Sec 16SWNENWSE COUNTY: WINNESHIEK
TOPOGRAPHIC MAP: DECORAH
ELEVATION: 865 feet SITE TYPE: Drilled hole TOTAL DEPTH: 59 feet BEDROCK DEPTH: 0 feet
DRILLER: [103] Thorpe Well Co. DRILL DATE: 06/01/58 DRILLING METHOD:
WELL TYPE: Municipal WELL DEPTH: 58.75 feet AQUIFER: Alluvium

STATUS: Plugged ON LINE: / / ABANDONED: 01/01/69 PLUGGED: 01/01/72
LOG TYPE: LOG QUALITY: SAMPLE TYPE: BEDROCK DEPTH: 0 feet STRIP LOG BY:
LOG TYPE2: LOG QUALITY2: BASIN: 7060002
STRIP LOG DATE: / /
SUPPLY PERCENT: 0.00%

COMMENTS:
**Abandoned circa-1969, but not filled properly until circa-1972 (if
done)**
Depth also reported 59', 60'

EDIT DATE: 09/07/99

VULNERABILITY: 1

LOCATION: WEST END OF WATER STREET

WELL CONSTRUCTION DATA FOR DECORAH #4

HOLE SCHEDULE:

WELL CONSTRUCTION DATE: 06/01/58

CASING SCHEDULE:

(1) Diameter:	20 inches	Type:	Depth top:	feet	Depth bottom:	14 feet	Amount:
(2) Diameter:	16 inches	Type:	Depth top:	feet	Depth bottom:	45 feet	Amount:

GROUT SCHEDULE:

(1) Grout type:	CEMNT	Grout top:	feet	Depth bottom:	14 feet
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SCREEN OR PERFORATED CASING SCHEDULE:

(1) Diameter:	16 inches	Slot:	inches	Depth top:	44
feet	Depth bottom:	59 feet	Amount:	feet	

GRAVEL-PACKED: False Gravel-packed top: feet Gravel-packed bottom: feet

PUMP SCHEDULE:

Pump type: TURB	Diameter:	inches	Depth to intake:	44 feet
Rated capacity:	gpm			

COMMENTS:

1963: 225 gpm.

Municipal Water-Supply Inventory

HYDROGEOLOGIC INFORMATION FOR DECORAH #4

MAIN WATER: SAND & GRAVEL 45'-58'9"
Main water top: 45 feet Main water bottom: 59 feet Pump rating: 0 gpm Pump yield: 0 gpm

DATE PUMPED: 01/01/58 TIME PUMPED:
STATIC WATER LEVEL: 13.0 feet PUMPING WATER LEVEL: 36.0 feet YIELD:
600.0 gpm DURATION:
AQUIFER PUMPED: Alluvium PUMP TEST: False PUMP METHOD:
MEASUREMENT:

COMMENTS:

DRILLER'S LOG FOR DECORAH #4

0'-10' top soil and sand
10'-15' sandy mud & gravel
15'-30' sand & gravel, some medium coarse
30'-58'9" sand, gravel, boulders

WATER QUALITY DATA FOR DECORAH #4

WATER QUALITY INFORMATION

FIELD DATA

DATE OF COLLECTION: 12/21/59 TIME: COLLECTOR: Bern Witzke MINERAL NUMBER: 1714
SOURCE: New Well #4 58'9"
SAMPLING POINT:
WAS SAMPLE FREE TURBIDITY WHEN COLLECTED? No IS A POLYPHOSPHATE BEING USED?
No
TEMPERATURE: 0.0 C pH: 0.000 ALKALINITY mg/l CaCO3 P: ----- mg/l T: ----- mg/l
SPECIFIC CONDUCTANCE: ----- micromhos HOURS PUMPED: 1:00
PUMPING RATED: 500.000 gpm

LABORATORY ANALYSIS

SPECIFIC CONDUCTANCE: 502.000 micromhos pH: 7.700 SILICA (SiO2):
10.400 mg/l
SOLUBLE IRON (Fe): <0.020 mg/l TOTAL IRON (Fe):
<0.020 mg/l
FILTERABLE RESIDUE: 291.000 mg/l TOTAL RESIDUE:
291.000 mg/l
HARDNESS as CaCO3: 264.000 mg/l
ALKALINITY mg/l CaCO3 P: 0.000 mg/l T: 230.000 mg/l

CATIONS (mg/l):

ANIONS (mg/l)

POTASSIUM (K+): 2.300

NITRATE (NO3-): 0.400

Municipal Water-Supply Inventory

SODIUM (Na+): 2.900
CALCIUM (Ca++): 72.200
MAGNESIUM (Mg++): 20.300
MANGANESE (Mn++) soluble: <0.050
MANGANESE (Mn++) total: -----

FLUORIDE (F-): 0.150
CHLORIDE (Cl-): 4.000
SULFATE (SO4--): 28.400
BICARBONATE (HCO3-): 281.000
CARBONATE (CO3--): 0.000

TRACE METALS (mg/l)

ARSENIC (As): -----
BARIUM (Ba): -----
CADMIUM (Cd): -----
CHROMIUM (Cr): -----
COPPER (Cu): -----
LEAD (Pb): -----
MERCURY (Hg): -----
SELENIUM (Se): -----
SILVER (Ag): -----
ZINC (Zn): -----

RADIOACTIVITY (pCi/l)

GROSS ALPHA: -----
226RADIUM: -----
228RADIUM: -----
GROSS BETA: -----
90STRONTIUM: -----
222RADON: -----

COMMENTS:

FROM THE MINERAL ANALYSIS

FIELD DATA:

Was Sample Free Of Turbidity When Collected: Not Stated.

LABORATORY ANALYSIS:

"Comments": Sample clear on receipt in lab.