WRD Exp. (GW)
April 1966

Well No. 083 - 10W - 13 CDA

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

MASTER CARD

Record by KARSTEN Source of data FILE Date 6/26/64 Map BENTON CO HWY

State IOWA [16] County (or town) BENTON [06]

Latitude: [41 59 44 N] Longitude: [091 57 35] Sequential number: [1]

Lat-long accuracy: [2] T. 83 N, R 10 W, Sec 13, NE ¼, SE ¼, SW ¼ 5

Local well number: [083 10W 13 CDA] Other number: W-8596 B & M

Local use: [08596] Owner or name: NEWHALL CITY #2

Owner or name: [NEWHALL CITY #2] Address: NEWHALL, IA

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist [P]

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Z) Desal-other, Other [H]

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed [W]

DATA AVAILABLE: Well data [1] Freq. W/L meas.: [0] Field aquifer char. [ ]

Hyd. lab. data: [ ]

Qual. water data; type: [C]

Freq. sampling: [I] Pumpage inventory: yes / no, period: [ ]

Aperture cards: yes [ ]

Log data: GEOLOGIST [G]

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 478 ft [478] Meas. rept [3]

Depth cased; (first perf.) 322 ft [322] Casing type: STEEL; Diam. 12 in [12]

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., screen, sd. pt., (S) shored, (W) open hole, (Z) other [X]

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other [C]

Date Drilled: 5/25/57 [957] Pump intake setting: ft [ ]

Driller: HOEG - AMES (name), LINCOLN, IA (address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other [ ] Deep [ ] Shallow [ ]

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; nat LP H.P. [ ] Trans. or meter no. [ ]

Descrip. MP LSB ft above/below LSD, Alt. MP 879

Alt. LSD: 879 [879] Accuracy: (source) ALT [7]

Water Level 130 ft above/below MP; Ft above/below LSD [130] Accuracy: [D]

Date meas: 5/25/57 [5 5 7] Yield: 125 gpm [125] Method determined [4]

Drawdown: 58 ft [58] Accuracy: [3] Pumping period hrs [ ]

QUALITY OF WATER DATA: Iron 0.96 ppm [4] Sulfate 187 ppm [5] Chloride 1 ppm [0] Hard. 368 ppm [7]

Sp. Conduct 950 K x 10^6 [4] Temp. °F [ ] Date sampled 4/23/63 [463]

Taste, color, etc.

Well No. 083 - 10W - 13 CDA

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Latitude-longitude 41 d 59 m 44 s N 091 d 57 m 35 s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD (1–19) | Physiographic Province: CENT. L. L. PLAIN [E] (22) | [1 2] (20–21) Section: DISS. TILL | Drainage Basin: CEDAR | [2 5 E] (23–25) Subbasin: [ ] (26)

Topo of well site: (D) depression, (C) stream channel, (E) dunes, (F) flat, (H) hilltop, (K) sink, (L) swamp, (Ø) offshore, (P) pediment, (S) hillside, (T) terrace, (U) undulating, (V) valley flat — [ ] (27)

MAJOR AQUIFER: SIL (system), NIA (series) [S N] (28–29) aquifer, formation, group [X X] (30–31)

Lithology: CHERTY DOL [Q D] (32–33) Origin: MARINE [6] (34) Aquifer Thickness: 132 ft

[1 3 2] (35–37) Length of well open to: ft [ ] (38–40) Depth to top of: ft [ ] (41–43)

MINOR AQUIFER: DEV. (system), MID (series) [D M] (44–45) WAPSI aquifer, formation, group [M W] (46–47)

Lithology: MED GR. DOL [3 D] (48–49) Origin: MARINE [6] (50) Aquifer Thickness: 24 ft

[2 4] (51–53) Length of well open to: ft [ ] (54–56) Depth to top of: ft [ ] (57–59)

Intervals Screened:

Depth to consolidated rock: 165 ft [1 6 5] (60–63) Source of data: [C] (64)

Depth to basement: ft [ ] (65–68) Source of data: [ ] (69)

Surficial material: [ ] (70–71) Infiltration characteristics: [ ] (72)

Coefficient Trans: gpd/ft [ ] (73–75) Coefficient Storage: [ ] (76–78)

Coefficient Perm: gpd/ft^2; Spec cap: gpm/ft; Number of geologic cards: [ ] (79)

CASING:

12" 0 - 266'

10" 220' - 478'

PERF. 322' - 355' & 385' - 478'



MAIN H_2O

320' - 345' - DEVONIAN

405 - 468 - SILURIAN

Well No. 083-10W-13 CDA

GPO 857-700

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL

W 8596

Location:

Town: NEWHALL (N E) (S W) :County BENTON

NE SE SW sec. 13 T. 83 N., R. 10 W. S. Twp.

Well name and number

Owner NEWHALL CITY WELL #2 (1957) Address

Tenant Address

Contractor HOEG & AMES Address LINCOLN

Drillers

Drilling dates APRIL 25 - MAY 25, 1957

Well data:

Altitudes: Drilling curb feet; Land surface 878.5 feet

Determined by Altimeter, 1967

Topographic position SIDE HILL

Total depth: Reported 478' feet, Measured feet

Drilling method CABLE TOOLS

Hole and casing data 167' 10" OF 16" CASING - REMOVED

266' OF 12" CASING

220' OF 10" CASING 258'-278'

PERFORATED 322'-355' AND 385'-478'

Original depth to water 130 ft. above below Date

Source of data

Sources of water: Principal 320'-345'

Others

Production Data

Date				
Static water level	130			
Measuring point				
Pumping water level	188			
Yield (g. p. m.)	125			
Duration of pumping				
Specific capacity				

Pump Data

Type pump _____ Column diameter and length _____

Cylinder or bowls diameter and length _____

Suction pipe _____ Airline _____

Power _____ Production _____ g. p. m. for _____ hours per day

Use of water _____

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled				
Sampled by				
Silica (SiO_2)				
Iron (Fe)				
Manganese (Mn)				
Calcium (Ca)				
Magnesium (Mg)				
Potassium (K)				
Sodium (Na)				
Carbonate (CO_3)				
Bicarbonate (HCO_3)				
Sulfate (SO_4)				
Chloride (Cl)				
Fluoride (F)				
Nitrate (NO_3)				
Dissolved solids				
Hardness (as $CaCO_3$)				
Total				
Grains per gallon				
Noncarbonate				
Alkalinity (as $CaCO_3$)				
pH				
Specific conductance (micromhos at 25°C)				
Temperature (°F)				
Analysis No.				

Laboratory Data

EK 9-13

Well No. W 8596 Sample range 0 - 478 No. of samples 93

No. of dupls. and cond. 93 - Good Washed range 155 - 478

Samples prepared by C. Winkel Date 8-7-57

Logged by NORTHUP Date 2/20/57

Correlations by " Date 2/20/57

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

GROUND WATER

Town Newhall County Benton Date July 13 1961

WELL NO. 2 Active ✓ Standby Abandoned Replaced by No.

LOCATION: Street Railway Sec. T. N.R. East: West

Lot Block Township

OWNERSHIP Municipal Date Installed April 1954

CONTRACTOR Hoag & Ames Address Lincoln, Iowa

DATE RECONDITIONED 19 Contractor Address

CONSTRUCTION EMPLOYED:

CURB ELEVATION REFERENCE

TYPE OF CONSTRUCTION Drilled Well Depth 478 ft. Diameter Top 12 in.

CASING: Material Condition

SCREEN: Material Length ft. Diameter in. Slot Opening in.

WELL SEALED yes How Neat cement Approved yes

WELL VENTED How Approved

TYPE OF PUMP Turbine Make Fairbanks-Morse Capacity 50 GPM Lubricated water

DEPTH TO CYLINDER ft. Tail Pipe ft.

PUMP CONTROL: Manual Automatic Semi-Automatic

STATIC LEVEL 138 ft. Pumping Level ft. Drawdown ft.

OPTIMUM SPECIFIC YIELD GPM Drawdown ft. Time hrs.

RATE OF DRAWDOWN Rate of Recovery

TEMPERATURE OF WATER °F Where Measured Temp. of Atmosphere °F

DRAWDOWN GAUGE INSTALLED

TOPOGRAPHICAL POSITION OF WELL

WELL SITE INVESTIGATED yes - 2/21/57 Approved yes Why not

WELL CONSTRUCTION REVIEWED Permit #57-35-W Approved yes Why not

PIT CONSTRUCTION: Purpose Size and Description

CONDITION: Drainage Facilities

PUMP INSTALLATION: Approved Why Not

CUTTINGS FROM WELL PRESERVED: Where

DEPTH TO BED ROCK Depth to Water-bearing Stratum

SOURCE OF WATER: Principal Formation Other

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 1" = 2" Vertical 1" = 10'	Position of seals, screens, static level, etc.

