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

GROUND WATER

#1

Town Avoca County Pottawattamie Date January 12, 19 52

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

LOCATION: Street Sec. 17 T. N.R. East: West

Lot Block Township Knox

OWNERSHIP Municipal Date Installed June 21, 19 48

CONTRACTOR Layne Western Company Address 4450 Commercial Avenue, Omaha, Nebr.

DATE RECONDITIONED 19 Contractor Address

CONSTRUCTION EMPLOYED: Blind Casing Method

CURB ELEVATION REFERENCE

TYPE OF CONSTRUCTION Gravel Pack Depth 56 ft. Diameter 16 in. 6"

CASING: Material 6 Gauge Armco Iron Condition New

SCREEN: Material Everdur Bronze Length 15 ft. Diameter 18 in. Slot Opening .04 ~~XXXX~~

WELL SEALED Yes How 11' - 6" Clay Pack Approved

WELL VENTED Yes How Usual Approved

TYPE OF PUMP V. Turbine Make Layne Capacity 140 GPM Lubricated Water

DEPTH TO CYLINDER 50 ft. Tail Pipe 4 ft.

PUMP CONTROL: Manual X Automatic Electrodes Semi-Automatic suspended in well can prevent excessive drawdown

STATIC LEVEL 12'-6" ft. Pumping Level 18 ft. Drawdown 5' - 6" ft.

OPTIMUM SPECIFIC YIELD 120 GPM Drawdown 18 ft. Time 8 hrs.

RATE OF DRAWDOWN Rate of Recovery Full in 6 min. 5' - 6"

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

DRAWDOWN GAUGE INSTALLED Yes

TOPOGRAPHICAL POSITION OF WELL Valley of Nishnabotna river

WELL SITE INVESTIGATED Yes Approved Yes Why not

WELL CONSTRUCTION REVIEWED No Approved 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 Blue Clay @ 56' Depth to Water-bearing Stratum 12 ft.

SOURCE OF WATER: Principal Formation Alluvial Deposit Other Blue Sand

Total Hardness 405 ppm. Total Iron 0.96 ppm. Sulfates 161.3 ppm. Fluorine 0.3 ppm.

Manganese 0.9 ppm. pH 7.3 CO_2 ppm.

REMARKS: Mineral Sample collected 8-10-49

Well is not protected from flooding by fill around the pump casing.

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 ____ Vertical ____	Position of seals, screens, static level, etc.
0 - 10	Gumbo				
10 - 12	Brown Clay				
12 - 13	Medium Blue Sand				
13 - 19	Coarse Blue Sand Gravel Rock & Base of Fine Blue Sand				
19 - 23	Coarse Blue Sand & Gravel				
23 - 27	Coarse Brown Sand				
27 - 29½	Coarse Blue Sand Gravel & Rocks				
29½ - 31½	Blue Clay				
31½ - 33	Fine Blue Sand				
33 - 34½	Coarse Blue Sand - Small to Large Gravel Rocks & Clay				
34½ - 36	Coarse Blue Sand, Small to Large Gravel				

