

SINCE 1934

Winslow Drilling Co.

Industrial, Municipal, Farm and Home
Cable Tool and Rotary Well Drilling

5 TO 30 INCH

PHONE, DAV. (319) 391-5740

P.O. BOX 162, WALCOTT, IOWA, R.R. 1 52773

For City of Worthington Located at Worthington, Iowa
 Make, Kind and Size of Power GZ-145 Waukesha
 Bowl No. Size 7-15/16" Stages 8"
 Column Setting 405 Ft. Size 5" Shaft Size 1-1/16"
 Static Level Before Pumping 280' After Pumping Temperature

Date	Time	Engine R.P.M.	G.P.M.	Pumping Level	Draw Down	Air Gauge	Remarks
9-25-80	A.M. 8:45		200	290'	10'		
	8:46		200	290'	10'		
	8:47		200	295'	15'		
	8:48		200	295'	15'		
	8:49		200	295'	15'		
	8:50		200	293'	13'		
	8:52		200	294'	14'		
	8:54		200	294'	14'		
	8:56		200	294'	14'		
	8:58		200	294'	14'		
	9:00		200	294'	14'		
	9:02		200	294'	14'		
	9:04		200	294'	14'		
	9:05		200	294'	14'		
	9:10		200	294'	14'		
	9:15		200	296'	16'		
	9:20		205	296'	16'		
	9:25		205	297'	17'		
4	9:30		305	298'	18'		
	9:35		205	298'	18'		

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 Make, Kind and Size of Power _____
 Bowl No. _____ Size _____ Stages _____
 Column Setting _____ Ft. Size _____ Shaft Size _____
 Static Level Before Pumping _____ After Pumping _____ Temperature _____

Date	Time	Engine R.P.M.	G.P.M.	Pumping Level	Draw Down	Air Gauge	Remarks
9-25-80	10:05		205	298'	18'		
	10:20		205	298'	18'		
	10:35	110	205	298'	18'		
	10:50		205	300'	20'		
	11:20		205	300'	20'		
	11:50		205	300'	20'		
	12:20	215	205	301'	21'		
	12:50		205	301'	21'		
	1:20		205	302'	22'		
	1:50		205	302'	22'		
	2:20	325	205	302'	22'		
	2:50		205	302'	22'		
	3:20	395	205	302'	22'		
	3:50		205	302'	22'		
	4:20	455	205	302'	22'		
	4:50		205	302'	22'		
	5:20	515	205	303'	23'		
	5:50		205	303'	23'		
	6:20		205	303'	23'		
	6:50		205	303'	23'		

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 Make, Kind and Size of Power _____
 Bowl No. _____ Size _____ Stages _____
 Column Setting _____ Ft. Size _____ Shaft Size _____
 Static Level Before Pumping _____ After Pumping _____ Temperature _____

Date	Time	Engine R.P.M.	G.P.M.	Pumping Level	Draw Down	Air Gauge	Remarks
9-25-80	P.M. 7:50		205	304'	24'		
	8:20	695	205	304'	24'		
	8:45		205	305'	25'		
	8:45		104	305'	25'		Start pumping 100 GPM
	9:15		104	292'	12'		
	9:45		104	292'	12'		
	10:15		104	292'	12'		
	10:45		104	292'	12'		
	11:15		104	292'	12'		
	11:45		104	292'	12'		
9-26-80	A.M. 12:15		104	292'	12'		
	12:45		104	292'	12'		
	1:15		104	292'	12'		
	1:45		104	292'	12'		
	2:15		104	292'	12'		
	2:45		104	292'	12'		
	3:15		104	292'	12'		
	3:45		104	292'	12'		
	4:15		104	292'	12'		
	4:45		104	292'	12'		

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For City of Worthington Located at Worthington, Iowa
Make, Kind and Size of Power
Bowl No. Size Stages
Column Setting Ft. Size Shaft Size
Static Level Before Pumping After Pumping Temperature

Date	Time	Engine R.P.M.	G.P.M.	Pumping Level	Draw Down	Air Gauge	Remarks
9-26-30	5:45		104	292'	12'		
	6:15		104	292'	12'		
	6:45		104	292'	12'		
	7:15		104	292'	12'		
	7:45		104	292'	12'		
	8:15		104	290'	10'		
	8:45		104	290'	10'		
	9:05		104	290'	10'		
	9:06	START RECOVERY					
	9:06			283'			
	9:07			285'			
	9:08			284'			
	9:09			284'			
	9:10			284'			
	9:11			284'			
	9:12			284'			
	9:13			284'			
	9:14			284'			
	9:15			283'			
	9:16			283'			

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For City of Worthington

Located at Worthington, Iowa

Make, Kind and Size of Power

Bowl No.

Size

Stages

Column Setting

Ft. Size

Shaft Size

Static Level Before Pumping

After Pumping

Temperature

Date	Time	Engine R.P.M.	G.P.M.	Pumping Level	Draw Down	Air Gauge	Remarks
9-26-80	9:18			283'			
	9:19			283'			
	9:20			283'			
	9:21			283'			
	9:23			283'			
	9:25			283'			
	9:27			283'			
	9:29			283'			
	9:31			283'			
	9:33			283'			
	9:35			283'			
	9:37			283'			
	9:47			282'			
	9:57			282'			
	10:07			282'			
	10:17			281'			
	10:27			282'			
	10:37			282'			
	10:47			282'			
	10:57			282'			

Central Laboratory:
Oakdale Campus
Iowa City, Iowa 52242
319/353-5990

UNIVERSITY HYGIENIC LABORATORY
The University of Iowa

Branch Laboratory:
Henry A Wallace Bldg.
E. 9th & Grand
Des Moines, Ia. 50319
515/281-5371
Send Samples Here.

COMPLETE MINERAL ANALYSIS

GENERAL INFORMATION

TOWN Worthington

COUNTY Dubuque

REPORT TO: Winslow Drilling Company

PO Box 162 RR 1

Walcott

IA 52773

DATE

RECEIVED: 9/29/80

Laboratory Number 1962

(Zip)

Mineral Number 16561

WELL DATA

Well Number 1

Date of
Construction

Depth ft.

Hours Pumped

Rate Pumped gpm.

FIELD DATA

Collector's Name Winslow Drilling

Source of Sample

Date of Collection unknown

Date of
Previous Sample

Sampling Point:

Was sample free of Turbidity when collected? ☐ Yes ☐ No

Was Polyphosphate used? ☐ Yes ☐ No

Temperature °C

pH Alkalinity mg/liter as CaCO₃ P T

Specific Conductance @ 25°C (77°F) micromhos.

LABORATORY ANALYSIS

Specific Conductance @ 25°C (77°F) 590

Soluble Iron 0.40 mg/L Total Iron 0.40 mg/L Silica (SiO₂) 7.5 mg/L pH 7.7

Filterable Residue 342 mg/L @ 103°C. Total Residue 342 mg/L @ 103°C. Hardness as CaCO₃ 228 mg/L

Alkalinity as CaCO₃ P none mg/L T 228 mg/L Hardness as CaCO₃ 13.3 gpg

CATIONS: (mg/liter)

Potassium 10
Sodium 35
Calcium 48
Magnesium 26
Manganese 0.02

TRACE METALS: (mg/liter)

Arsenic <0.01 Silver <0.01
Barium 0.2 Zinc 0.02
Cadmium <0.001 Nickel
Chromium <0.01 Strontium
Copper <0.01 Aluminum
Lead <0.01
Mercury <0.001
Selenium <0.01

PESTICIDES: (mg/liter)

Chlorinated Hydrocarbons:

Organophosphates and Carbamate

ANIONS: (mg/liter)

Nitrate <0.1
Fluoride 2.0
Chloride 5.5
Sulfate 78
Bicarbonate 278
Carbonate none

RADIOACTIVITY: (picocuries/liter)

Gross Alpha
226Radium
228Radium
Gross Beta
90Strontium

HERBICIDES:

ORGANICS:

COMMENTS:

One of the gallon containers was leaking and contents were transferred to another bottle on receipt.

Turbidity 5.2

Date of Preliminary Report OCT 24 1980

Date of Final Report

W. J. Hausler, Jr. Ph.D.

IOWA GEOLOGICAL SURVEY

123 North Capitol St.
Iowa City, Iowa 52242
Phone (319) 338-1173

Job Worthington Town
Location Pumping Test

Well no. 1980 Date Tested 9/25/80
(Jordan well) Tested by Winslow

Date and Time	Time Accumulative	Piezometer Reading(in.)	G.P.M.	Air Gauge Reading (ft.)	P.W.L. (ft.)	Drawdown (ft.)	Remarks
9/25		SWL 280'					Airline 399' Pump set 405'
			200	102		18	
8:45 AM	Pump on		200				1300 RPM
8:46	1		"	49	290	10	
47	2		"	46	295	15	
48	3		"	46	295	15	
49	4		"	"	295	15	
50	5		"	47	293	13	
52	7	36	"	45	294	14	
54	9	"	"	"	294	14	
56	11	"	"	"	"	"	
58	13	"	"	"	"	"	
9:00	15	"	"	"	"	"	Water clear
02	17	"	"	"	"	"	
04	19	"	"	"	"	"	
05	20	"	"	"	"	"	
10	25	"	"	"	"	"	
15	30	"	"	44	296	16	
20	35	38	205	"	"	16	
25	40	"	"	"	297	17	
30	45	"	"	43	298	18	
35	50	"	"	"	"	18	
50	65	"	"	"	"	18	
10:05	80	"	"	"	"	18	
10:20	95	"	"	"	"	18	

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Job Worthington

Location

Tested by _____

Sp. cap. = 9.0 gpm/ft dd