

IOWA GEOLOGICAL SURVEY
TABULATION OF WATER ANALYSIS.
(Dissolved constituents in parts per million)

[illegible]

NOTES:

IOWA GEOLOGICAL SURVEY
TABULATION OF WATER ANALYSIS
(Dissolved constituents in parts per million)

Town - Well No. Owner	DATE OF COLL.	Depth (ft.)	Geol. Source	OF	Diss. Solids	Fe	Mn	Ca	Mg	K	Na	CO ₃	HCO ₃	SO ₄	Cl	F	NO ₃	Hardness cal as CaCO ₃			pH	Cond
																		tot.	carb.	non carb		
an Horne town (1956)	2/28/68	1870	Galena Pr. du Ch. Jordan St. Law.	57	721	2.1	<.05	88	44	16	120	0	364	340	9	1.2	0.4	400	298	102	7.3	1100
inton city No. 2	5/57	1505	"		579	5.5	.12	70	36	15	68	0	349	174	9	1.1	2.2	323	286	37	7.4	827
Dysart town No. 2	10/23/70	1805	Pr. du Ch. Jordan St. Law.		670	2.7	<.05	96	46	15	68	0	386	270	7	1.0	0.2	430	316	114	7.2	1000
raer town No. 3 (1964)	8/8/66	1813	"	54	698	3.1	<.05	96	44	14	61	0	397	242	8	1.1	0.5	420	326	94	7.5	1060
ledo city No. 1 (1961)	3/22/65	2016	"	66	705	1.7	<.05	104	37	17	77	0	388	257	8	1.3	0.1	410	318	92	7.5	1090
ama Central Fibre Products Co. No. 1 (1959)	5/2/60	1872	"	66	731	.30	<.05	88	47	20	80	0	378	265	9.0	1.2	.44	413	310	103	7.5	1060
laverly city No. 1 (1999 recased 1927)	5/9/57	1300	Jordan		383	.06	<.05	59	30	3.0	34	0	332	69	6.0	1.7	2.7	271	271	0	7.9	640
elwein city (1942)	8/22/60	1400	Galena PDC-Jordan St. Law.	68	325	.28	<.05	48	29	8.9	18	0	289	44	2.	1.0	0.5	240	237	3	7.8	520

NOTES:

Capacity of Jordan Wells in the La Porte City Area

Well Name	Static Water Level (ft. below surface)	Pumping Water Level (ft. below surface)	Production (gallons per minute)	Specific Capacity (gpm/ft. dd)
Dysart town (1961)	221	346	600	4.8
Traer town (1963)	146	199	400	7.5
Van Horne town (1955)	250	343	270	3.3
Toledo town (1961)	163	365	900*	4.4
Oelwein city (1942)	220	329	750	7.0

* Well was acidized

LaPorte City Silurian Well, drilled by
Layne Western, August 1971

John Masters (Layne Western) has just
completed drilling and test pumping a
new well for the town. Production
is not adequate even after acidizing.
Data is as follows:

0 - 50 medium to fine sand
50 - 232 Limestone and dolomite
232 - 251 TD Shale

16" csg set at 93'
15" open hole 93-251'

Before acidizing:

SWL 35' PL 165' @ 82 GPM

After acidizing with 1000 gal (mixed):
130 GPM PL 151 (not stabilized)

R

CUSTOMER

L. W.
AMES

LaPORTE CITY,

DATE 4-17-72

ADDRESS

IOWA

Not Acidized

SAMPLE NUMBER		72150				
DATE COLLECTED		4-7-72				
DATE RECEIVED		4-17-72				
SAMPLING POINT		Jordan sandstone well				
CALCIUM	PPM AS	192				
	CACO3					
MAGNESIUM	PPM AS	148				
	CACO3					
SODIUM	PPM AS	156				
	CACO3					
ALKALINITY (M)	PPM AS	310				
	CACO3					
ALKALINITY (P)	PPM AS	0				
	CACO3					
SULFATE	PPM AS	175				
	CACO3					
CHLORIDE	PPM AS	11				
	CACO3					
TOTAL HARDNESS	PPM AS	340				
	CACO3					
NON CARBONATE HARD	PPM AS	30				
	CACO3					
FREE CARBON DIOXIDE	PPM AS	46				
	CO2					
IRON	PPM AS	1.93				
	FE					
MANGANESE	PPM AS	less than 0.02				
	MN					
SILICA	PPM AS	---				
	SiO2					
pH		7.1				
TURBIDITY JTU	PPM AS	15				
	SiO2					
COLOR	AWWA	---				

REMARKS:

Dennis DeBoer

CHEMIST

LKS