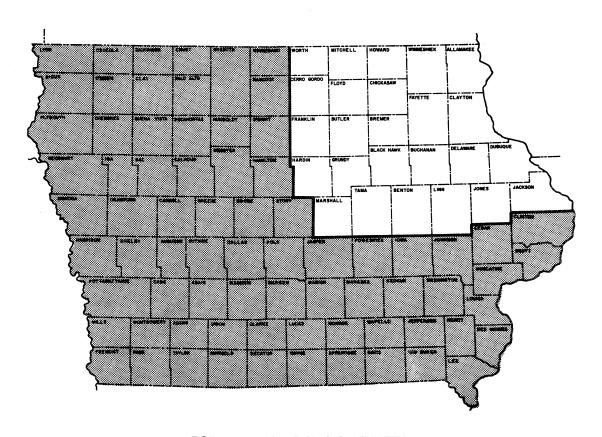
SELECTED GEOLOGIC INFORMATION FROM DRILL HOLES IN NORTHEASTERN IOWA

DANIEL J. GOCKEL



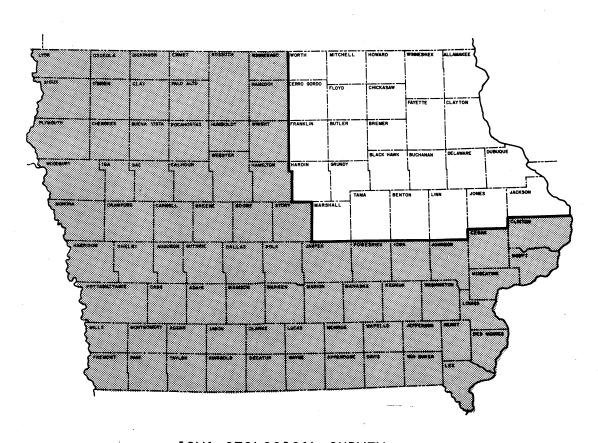
IOWA GEOLOGIC SURVEY

DR. STANLEY C. GRANT Director and State Geologist 123 North Capitol Street Iowa City, Iowa 52242

TECHNICAL INFORMATION SERIES JULY 1976 Number 2

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SELECTED GEOLOGIC INFORMATION FROM DRILL HOLES IN NORTHEASTERN IOWA

Daniel J. Gockel

U.S. Geological Survey

ABSTRACT

This report presents selected geologic information derived from wells in a 25-county area of northeastern Iowa. The information was extracted from the Automatic Data Processing (ADP) geologic file of the Iowa and U.S. Geological Surveys. The data presented include location, well identification number, and elevation of the well sites, depth and stratigraphic classification of the bedrock top, stratigraphic classification of the bottom rock unit penetrated by the well, and the total depth of the well.

More detailed information about the wells may be obtained from the files of the Iowa and U.S. Geological Surveys in Iowa City, Iowa.

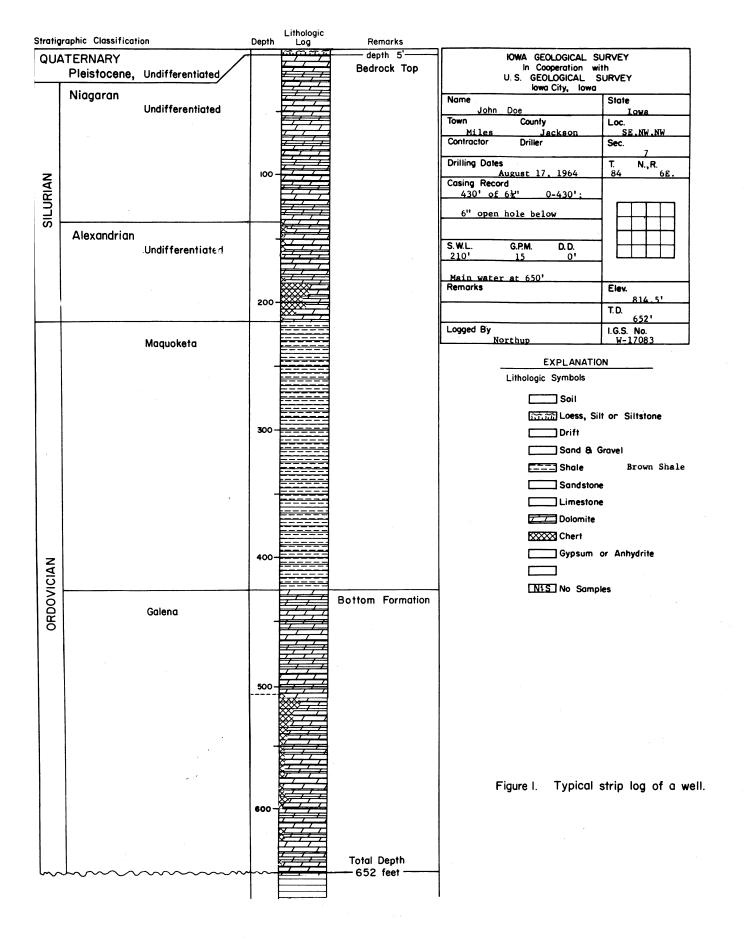
INTRODUCTION

The primary source of geologic data in Iowa is rock cuttings from wells and test holes that provide information about the lithology, depth, and thickness of the various geologic units penetrated. Most of these samples are provided voluntarily by Iowa's water-well drillers, whose cooperation is gratefully acknowledged. The samples are analyzed by geologists of the Iowa Geological Survey, who identify and descriptively record the various lithologic units on strip logs (fig. 1). The lithologic units shown on the strip log are stratigraphically classified according to system, series, group and/or formation rankings shown in

table 1. Data derived from about 20,000 drill holes in Iowa are recorded on strip logs.

To alleviate the recurring and time-consuming task of extracting information from strip logs manually, an automatic data processing (ADP) file containing geologic information was established in 1966 through a cooperative program between the Iowa Geological Survey and the U.S. Geological Survey. This file contains most of the information recorded on the strip logs.

The purpose of this basic-data report is to make readily available to the public selected parts of the voluminous data contained in the ADP geologic file. The data are presented for a 25-county area in northeastern Iowa; data for the other areas of the state will be forthcoming. The information extracted from the ADP file and printed in table 3 of this report consists of the following items: location, well identification number, and elevation of the well site, the depth (bedrock top) and stratigraphic classification of the bedrock unit in the well, the stratigraphic classification of the lowermost rock unit penetrated, and the total depth of the well. Only the top and bottom rock units penetrated in a well are given in table 3; possible intervening strata are shown in table 1. Moreover, some idea of the water-bearing characteristics of all rock units penetrated in a well (bedrock top, bottom formation, and the intervening strata) can be determined from table 1.



An example utilizing data from the well log shown in figure 1 should be helpful in understanding the meaning and use of tables 1 and 3. The log shown in figure 1 is for a well located in SE4 of the NW4 of the NW4 of sec. 7, T. 84N., R. 6 E. of Jackson County. The log shows the lithology, depth, and classification of the rock units penetrated in the well. Also shown, under the remarks column, is the information that subsequently was extracted from the ADP geologic file and printed in table 3 (the second well listed in the Jackson County data). Note that the information in table 3 agrees with the information on the well log: namely, the bedrock top is 5 feet below land surface, and the bedrock unit is undifferentiated Niagaran strata of the Silurian System; the bottom formation penetrated is Galena strata of the Ordovician System; the total depth of the well is 652 feet below land surface. Note also that the auxiliary information on well-identification number and the location and elevation of the well site agree with the data in the heading of the well log. Table 1 indicates the intervening rock units to be Alexandrian strata of the Silurian System and Maquoketa strata of the Ordovician System; however, the thicknesses or depths of these rock units cannot be determined from table 1, because only the maximum thickness of each unit is given. Table 1 also indicates that the Silurian strata and the Galena strata are water bearing.

More detailed geologic and hydrologic information can

be obtained from the ADP files of the Iowa and U.S. Geological Surveys upon request. Additional drill hole data, which is not included in the ADP files, is also available. (See table 2.)

HOW A WELL IS LOCATED IN THIS REPORT

The public-land survey divisions form the basis for locating wells in this report. These divisions are illustrated in figure 2, which shows the sizes and relationships of idealized townships, ranges, sections and fractional parts of a section. Government townships are designated by their positions relative to north-south lines of longitude, called principal meridians, and east-west latitude lines, called base lines. For example, the abbreviation T. 65N., R. 8W., refers to a township lying in the sixty-fifth tier of townships north of a certain base line and the eighth township west of a principal meridian. All Iowa townships extend northward from a parallel of latitude passing through central Arkansas and thus have a north designation. Fifth Principal Meridian passes through eastern Iowa from southeastern Muscatine County to central Dubuque County; therefore Iowa ranges are designated as east or west depending on their position relative to this meridian.

An ideal government township is 6 miles long by 6 miles wide and each contains 36 sections numbered in east-west rows, alternately west and east, starting with 1 in the northeast corner and ending with 36 in the southeast corner (see below). An ideal section encompasses an area 1 mile

square or 640 acres.

Political townships can be of various shapes and sizes and are given proper names such as Beaver Township rather than numerical designations. Government and political townships occasionally encompass the same area, but it should be emphasized that a government township does not necessarily have the same area and boundaries as a political township.

The section can be subdivided to provide a very convenient system for designating locations. The abbreviated location of area 3 (fig. 2) is designating as NW NE NE sec. 36, T. ln., R. 2E. The expanded version of this abbreviation reads as follows: the northwest quarter of the northeast quarter of the northeast North, Range 2 East.

EXPLANATION OF TERMS AND ABBREVIATIONS USED IN TABLE 3

TWP	Township	as	described	l above.
RGE	Range as	des	scribed ab	ove.

SEC Section in surveys of U.S. public lands is an area of one square mile (640 acres) -- 1 mile

square mile (640 acres) -- l mile on each side.

QUARTERS

Quarter section is a fourth part of a section (160 acres)

part of a section (160 acres) or the fourth part of a next larger quarter. Designations may be to the nearest ½ (160 acres, Fig. 2, no. 1); or nearest ¼ (40 acres, Fig. 2, no. 2); or ¼, ¼, ¼, (10 acres, Fig. 2, no. 3); or ¼, ¼, ¼, ¼, ¼, ¼, ¼, ½, (2.5 acres, Fig. 2, no. 4).

A unique number assigned to each drill hole by the Iowa Geological Survey for cross-

WELL NO.

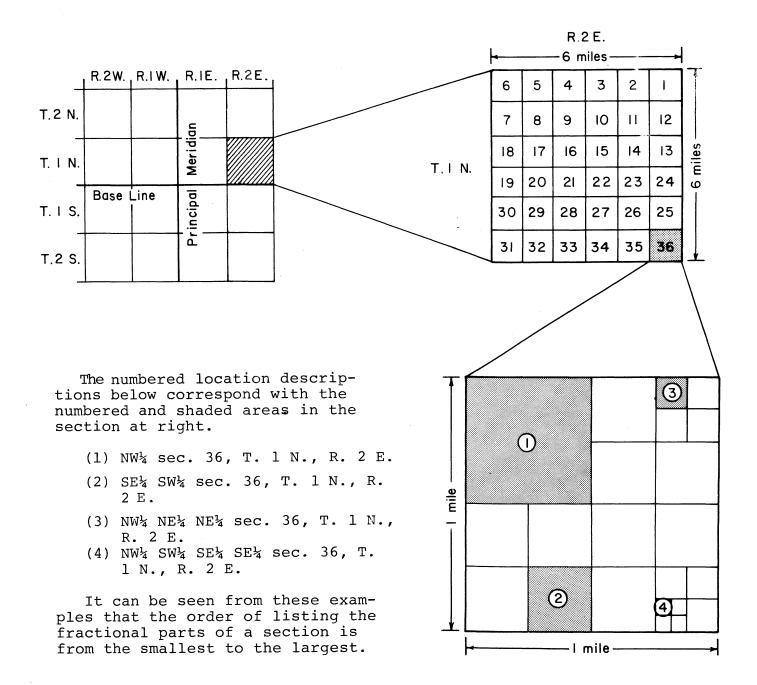


Figure 2. Public-land survey divisions.

reference purposes.

ELEVATION

The height above mean sea level of the land surface at the drill hole.

BEDROCK TOP

The system and unit names of the first solid-rock formation (or group) encountered in the drill hole.

DEPTH

The depth, in feet, to the bedrock top measured from the land surface. (See fig. 1.)

BOTTOM FORMATION

The system and unit name of the lowermost formation (or group) penetrated. (see fig. 1.)

TOTAL DEPTH

The depth, in feet, to the bottom of the drill hole measured from land surface. (See fig. 1.)

MISS

Abbreviation for Mississippian System (table 1).

PENN

Abbreviation for Pennsylvanian System (table 1).

UNDIFF

Abbreviation for undifferentiated. The rock units of a system are not differentiated into lower stratigraphic rankings. For example, Silurian undiff means the geologist analyzing the samples could identify the rock units to be in the Silurian System, but could not identify the series or formational ranking.

UND

Abbreviation for undifferentiated. The rock units of a series or group are not differentiated into formational ranking. For example, Niagaran und means the geologist could identify the series rank of the rock units, but not the formational rank.

Table 2. Number of Drill Holes by County

County	Drill-Hole Data in ADP file	Total Drill-Hole Data on file*
	•	
Allamakee	75	87
Benton	120	130
Blackhawk	200	280
Bremer	92	115
Buchanan	86	91
Butler	56	92
Cerro Gordo	96	114
Chickasaw	95	111
Clayton	143	151
Delāware	285	297
Dubuque	435	505
Fayette	70	91
Floyd	106	135
Franklin	79	93
Grundy	82	190
Hardin	69	188
Howard	114	137
Jackson	195	206
Jones	331	348
Linn	287	384
Marshall	112	184
Mitchell	60	70
Tama	113	132
Winneshiek	41	200
Worth	77	105

^{*}Drill holes without accurate locations or elevations, and some drill holes with large sample gaps or very poor samples are not included in the ADP file. Data from many shallow alluvial drill holes and data from confidential drill holes are not included.

Table 3. Basic data by counties

	TOTAL DEPTH	401 141 549 1114 993	235 234 320 500 115	205 800 701 662 910	721 796 665 90 540	349
	FORMATION UNIT	TREMPEALEAU JORDAN ST PETER TREMPEALEAU	DRESBACH DRESBACH PR DU CHIEN TREMPEALEAU	PR DU CHIEN FRANCONIA TREMPEALEAU TREMPEALEAU FRANCONIA	FRANCONIA PR DU CHIEN FRANCONIA	TREMPEALEAU
•	BOTTOM SVSTEM	CAMBRIAN CAMBRIAN ORDOVICIAN CAMBRIAN	CAMBRIAN CAMBRIAN ORDOVICIAN CAMBRIAN ORDOVICIAN	ORDOVICIAN CAMBRIAN CAMBRIAN CAMBRIAN CAMBRIAN	PRECAMB PRECAMB CAMBRIAN ORDOVICIAN CAMBRIAN	CAMBRIAN
	DEPTH	20 35 72	55 55 50 51	20 11 18 20 20 20 20	2 2 E	0
COON I	BEDROCK TOP UNIT	ST PETER PR DU CHIEN MAQUOKETA	FRANCONIA FRANCONIA DECORAH GALENA	DECORAH GALENA GALENA GALENA GALENA	FRANCONIA ST PETER ST PETER	ORDOVICIAN PR DU CHIEN
ALLAMAKEE	SYSTEM	ORDOVICIAN ST PETER ORDOVICIAN PR DU CHI	CAMBRIAN CAMBRIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	CAMBRIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN
	ELEVA- TION	990 690 1216 1207 1191	635 635 1190 1270	1240 1290 1290 1290	643 700 1250 1105	1166
	VELL NO.	12632 07386 01306 05040 03994	02759 02760 16408 07189 07065	12158 11314 20250 08170 00056	01681 21728 08282 06878 06989	01503
	LOCATION E SEC QUARTERS	08 NE NW SW SE 34 NW SE SW NW 31 NE SE SE 32 SW NW 32 NE NE SE	005 005 005 005	03 SV SV NV SE 30 SE SV SV NE 30 SE SV SV NE 30 SE SV NE 30 SE SV NE	29 NW NE SE 32 NW NW SW NE 33 NW SW SW NE 18 SW NV SE NE	23 SW SW NE NE
	LOC	96N 03W 96N 06W 96N 06W 96N 06W	98N 03W 98N 03W 98N 05W 98N 05W	98N 05W 98N 05W 98N 05W 98N 05W	099N 03W 099N 04W 099N 04W 099N 04W	MS0 N001

	TOTAL DEPTH	442 3 2 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0460 403 3603 456	4 4 4 8 8 4 4 4 4 8 8 8 8 8 8 8 8 8 8 8	550 520 552 555 528	32 32 32 32 32 32 32 36	158 748 710 535 540	449 1503 651 291 465	448 888 844 944 000
	FORMATION Unit	NIAGARA UND NIAGARA UND CEDAR VALLEY WAPSIPINICON	UNDIFF WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON UNDIFF WAPSIPINICON NIAGARA UND UNDIFF	UNDIFF WAPSIPINICON WAPSIPINICON UNDIFF	UNDIFF CEDAR VALLEY Y PLEIST UND UNDIFF D MOINES UND	PLEIST UND MAQUOKETA UNDIFF WAPSIPINICON CEDAR VALLEY	CEDAR VALLEY I PR DU CHIEN NIAGARA UND PLEIST UND	KANKAKEE EDGEWOOD LAPORTE CITY
	BOTTOM	STURIAN SILURIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	SILURIAN DEVONIAN DEVONIAN PENN SILURIAN	SILURIAN DEVONIAN QUATERNARY SILURIAN PENN	QUATERNARY ORDOVICIAN SILURIAN DEVONIAN	DEVONIAN ORDOVICIAN SILURIAN QUATERNARY SILURIAN	SILURIAN SILURIAN DEVONIAN
	DEPTH	228 280 170 280 360	215 150 200 230	170 220 155 197 183	205 215 135 150	103 178 183 70	170 90 190 263	246 287 250 550	83 80 125 225
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	LIME CREEK LIME CREEK CHEROKEE LIME CREEK	UNDIFF UNDIFF UNDIFF LIME CREEK UNDIFF	UNDIFF LIME CREEK D MOINES UND UNDIFF	LIME CREEK UNDIFF UNDIFF D MOINES UND	UNDIFF UNDIFF UNDIFF LIME CREEK	LIME CREEK LIME CREEK LIME CREEK CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY LIME CREEK
BENTON	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN PENN DEVONIAN	PENN DEVONIAN PENN DEVONIAN	PENN DEVONIAN PENN PENN	DEVONIAN PENN PENN	PENN PENN PENN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	88 855 855 835 1	870 863 825 901 885	88 88 88 88 89 89 89 89 89 89 89 89 89 8	878 853 875 886 872	8 8 8 8 8 8 8 8 8 8 9 8 9 8 9 8 9 8 9 8	875 875 935 887 945	88 88 88 88 88 88 88 88 88 88 88 88 88	8833 8818 861 950
	WELL NO.	20321 08374 01984 21196 04400	18371 01898 02113 01119 01661	18318 08586 03988 03159	03321 02347 20310 09266 02137	02191 04878 09296 01700	01697 01763 15355 02704 19407	18904 00105 08409 01276 01869	00973 18068 03653 03686 09200
	LOCATION RGE SEC QUARTERS	09W 01 SE SE NE SE 09W 03 SW SE SE 09W 05 SE SE SE 09W 14 SE SE NE SE 09W 23 NW NW SW	09W 29 09W 31 09W 33 10W 03	10W 19 NW SW NE 10W 21 NW NE NE 110W 23 NW SW SW 110W 30 NW SW NW	1 10W 30 NW SW NW 10W 31 NW SE NE 110W 35 SE SE SW NE 110W 35 SW SE NW 11W 02 SE NE NE	111W 02 SE SE SE 111W 03 SW SW SW 111W 10 NE SE SE 111W 11 SE SE NW 11W 13 SW SE SE	11W 14 SE SE SE 11W 14 SE SE SE 11W 22 SW SE SW 11W 25 NE NE NW NE 11ZW 05 NE SE SW	12W 07 NE NE NW NE 12W 20 NW NW SW 11ZW 23 SW SW NE 11ZW 34 NE NW SE 09W 13 NW NW SE	1 09W 14 NW NW SE 1 09W 14 SE NW SE 1 09W 21 NE NE NE 1 09W 36 NE NE SE 1 10W 03 NW NE NE
	TWP	082N 082N 082N 082N	0 8 2 N 0 8 2 N 0 8 2 N 0 8 2 N 0 8 2 N	082N 082N 082N 082N	082N 082N 082N 082N	082N 082N 082N 082N	082N 082N 082N 082N	082N 082N 082N 082N 083N	00000 00000 00000

	TOTAL DEPTH	675 230 215 325 325	5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	520 520 500	500 512 567 575	279 500 169 538 215	518 4 4 51 5 1 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1870 510 2340 184 580	6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	FORMATION	EDGEWOOD CEDAR VALLEY LAPORTE CITY CEDAR VALLEY	LAPORTE CITY WAPSIPINICON NIAGARA UND UNDIFF WAPSIPINICON	UNDIFF NIAGARA UND UNDIFF UNDIFF LAPORTE CITY	NIAGARA UND UNDIFF UNDIFF UNDIFF CEDAR VALLEY	CEDAR VALLEY NIAGARA UND UNDIFF UNDIFF CEDAR VALLEY	LAPORTE CITY LAPORTE CITY LAPORTE CITY WAPSIPINICON	TREMPEALEAU WAPSIPINICON FRANCONIA PLEIST UND LAPORTE CITY	LAPORTE CITY UNDIFF WAPSIPINICON
	BOTTOM SYSTEM	SILURIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN SILU AN SILURIAN DEVONIAN	SILURIAN SILURIAN SILURIAN SILURIAN DEVONIAN	SILURIAN SILURIAN SILURIAN SILURIAN DEVONIAN	DEVONIAN SILURIAN PENN SILURIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	CAMBRIAN DEVONIAN CAMBRIAN QUATERNARY DEVONIAN	DEVONIAN SILURIAN DEVONIAN
	DEPTH	230 200 200 273	2222 2230 240 0044	1168 1198 230	150 195 155 243 210	228 40	225 240 275 275	230	295 265 277 250
COUNTY	BEDROCK TOP UNIT	LIME CREEK CEDAR VALLEY LIME CREEK CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY D MOINES UND CEDAR VALLEY LIME CREEK	CEDAR VALLEY CEDAR VALLEY LIME CREEK UNDIFF CEDAR VALLEY	LIME CREEK LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	UNDIFF CEDAR VALLEY	LIME CREEK LIME CREEK LIME CREEK CEDAR VALLEY	LIME CREEK	LIME CREEK CEDAR VALLEY LIME CREEK D MOINES UND
BENTON	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN PENN DEVONIAN	DEVONIAN DEVONIAN PENN IAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	PENN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	0 0 0 0 0 0 0 0 0 0 0 0 1 4 4 0 0 0 0 0 0	99999999999999999999999999999999999999	888879479	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	00000000000000000000000000000000000000	000000 7400000 4400014	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000 410000 600000
	WELL NO.	22133 09188 04027 03995	11588 21167 17201 04779 05139	01126 08596 02181 04798	08181 01286 01900 20290 09039	01899 09214 05012 06092 05142	22667 22973 00367 14455	07384 08479 00031 17602 02033	01053 17591 02283 03062 09338
	LOCATION WP RGE SEC QUARTERS	83N 10W 03 NW SW SW SW 10W 03 NE NE SE S3N 10W 04 NE SE NE NE SE SE NE SE NE SE SE SE SE NE SE	83N 10W 07 SE SW S 83N 10W 07 SE SE S 83N 10W 08 SW SE S 83N 10W 09 SE NE N 83N 10W 10 SW SE S	183N 10W 13 SW NE SW 183N 10W 13 NE SE SW 183N 10W 15 NE NW NW 183N 10W 16 NE NW NE 183N 10W 17 NW NW NE	083N 10W 20 NE NW NW NE 083N 10W 20 NE NW SW 083N 10W 20 SW SW SE 083N 10W 24 SE NW NW SW 083N 10W 24 NE NE SE	183N 10W 25 SE NW NW 183N 10W 26 NW SE NE 183N 10W 28 NE NW NE 183N 10W 29 SW NW NW 183N 10W 36 SE NE SE)83N 11W 01 SW SW SW SESSN 11W 03 SW SE SE SW SE SESN 11W 09 SE NE	083N 11W 11 SW SE N NW NW SW NW 083N 11W 14 NW NE NE NE SSN 11W 20 NE NW NW NW NW NS SW 11W 20 SW SE SW	83N 11W 21 NE NE SE SE 83N 11W 22 NE NE SE SE 83N 11W 24 SW NW SW 83N 11W 27 NW NE NW NW 83N 11W 28 SE SE
	-	00000	00000	00000	00000	00000	00000	00000	00000

	TOTAL DEPTH	780 550 488 246 235	108 128 105 1519 376	3335 305 135 346	305 220 190 143 295	230 230 230 256	321 250 273 350 210	312 170 245 115	210 155 175 170
	FORMATION UNIT	MAQUOKETA WAPSIPINICON UNDIFF CEDAR VALLEY	CEDAR VALLEY WAPSIPINICON WAPSIPINICON TREMPEALEAU NIAGARA UND	WAPSIPINICON NIAGARA UND CEDAR VALLEY WAPSIPINICON BERTRAM	WAPSIPINICON CEDAR VALLEY CEDAR VALLEY RAPID WAPSIPINICON	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY WAPSIPINICON	LAPORTE CITY LAPORTE CITY NIAGARA UND CEDAR VALLEY WAPSIPINICON	WAPSIPINICON WAPSIPINICON CEDAR VALLEY WAPSIPINICON NIAGARA UND
	BOTTOM	ORDOVICIAN DEVONIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN CAMBRIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN
	DEPTH	165 245	65 31 102	13 83 13 85 13 85 13 85	183 183 155	2222 2442 2443 243 200	2112 2191 2095 605 605	40 50 118 26 115	155 1115 142 140
COUNTY	BEDROCK TOP UNIT	LIME CREEK CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY LIME CREEK CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK CEDAR VALLEY LIME CREEK LIME CREEK	LIME CREEK CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	CEDAR VALLEY WAPSIPINICON CEDAR VALLEY CEDAR VALLEY LAPORTE CITY
BENTON	SYSTEM	DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	898 845 785 788 850	891 818 915 944	939 918 902 875 942	919 957 944 945	979 955 893 885	875 785 865 935	815 787 905 865 789
i a	WELL NO.	07342 08188 01628 19157 18931	19861 20374 21111 00001 09618	00732 17431 20309 20330 22652	04593 04668 04667 16263 19802	03641 04877 04876 04879 03180	01814 17589 15032 20503 20343	21405 19406 21112 21113 22463	18053 18054 22289 21115 21114
	LOCATION TWP RGE SEC QUARTERS	083N 11W 31 NW NW SW 083N 11W 36 SE SE SE SW 083N 12W 31 NE SW SW NW 083N 12W 36 NE NE NW	084N 09W 02 NE NE NE NW 084N 09W 13 NE NE NE 084N 09W 15 NE SE NW NE 084N 09W 15 NE SW SW NE	084N 09W 30 NE NE NE 084N 10W 02 SW SW SW 084N 10W 15 NE NE SE SE 084N 10W 19 NE NE SE SE	084N 10W 21 SW NW SW 084N 10W 29 SW SE SE 084N 10W 34 SW NW SW 084N 11W 15 SW SE SW 084N 11W 18 NW NW NE	084N 11W 21 NE NE SE 084N 11W 29 SW SW NW 084N 11W 30 NW SW SW 084N 11W 31 NW SW SW 064E 11W 32 SW SE SW	084N 11W 35 NE NE SE 084N 12W 01 NE NE SE 084N 12W 20 NW NW SW 084N 12W 29 NW NW NE 085N 09W 02 NW NW NE SE	085N 09W 05 NE NW SW SW 085N 09W 11 NE NW SE NW 085N 09W 13 SW SW SK SE 085N 09W 14 NW NW NW NW 085N 09W 15 SW NW SW SW	085N 09W 24 NE SE SE 085N 09W 32 NE NE NE NE NE NE O85N 09W 33 NW NW NW NW 085N 10W 06 NE NE SW

	TOTAL DEPTH	1508 1508 1000 855	1505 120 265 95 320	1125 165 330 45	215 300 405 145	200 104 1622 226	636 434 136 157	205 256 170 195 215	115 245 560 200 266
	FORMATION UNIT	WAPSIPINICON TREMPEALEAU WAPSIPINICON WAPSIPINICON	ST LAWRENCE WAPSIPINICON NIAGARA UND CEDAR VALLEY	WAPSIPINICON LAPORTE CITY CEDAR VALLEY LAPORTE CITY CEDAR VALLEY	CEDAR VALLEY LAPORTE CITY LAPORTE CITY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON CEDAR VALLEY TREMPEALEAU CEDAR VALLEY	N MAGUOKETA WAPSIPINICON CEDAR VALLEY CEDAR VALLEY Y PLEIST UND	CEDAR VALLEY LAPORTE CITY CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	WAPSIPINICON NIAGARA UND EDGEWOOD WAPSIPINICON
	BOTTOM SYSTEM	DEVONIAN CAMBRIAN DEVONIAN DEVONIAN QUATERNAR	CAMBRIAN DEVONIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN CAMBRIAN DEVONIAN	ORDOVICIA DEVONIAN DEVONIAN DEVONIAN QUATERNAR	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN SILURIAN DEVONIAN
	DEPTH	115 95 90	94 118 170 75	72 185 95 90	165 117 117 90	148 39 25 130	178 180 122 75	160 100 105 120	220 150 180 180
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON WAPSIPINICON LAPORTE CITY CEDAR VALLEY	WAPSIPINICON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON CEDAR VALLEY LIME CREEK CEDAR VALLEY	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
BENTON	SYSTEM	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	835 788 783 783	790 791 810 850 813	784 925 842 864 854	99999999999999999999999999999999999999	829 870 958 974	99999999999999999999999999999999999999	978 950 938 900	8 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	WELL NO.	19479 00219 12278 12279 12280	00025 07414 22729 22691 00276	19857 08959 22630 19476 C0084	01294 19799 22707 22171 22326	22193 00758 03239 22766 12668	01689 02776 02821 21109 01887	09067 04370 05042 19481 20327	19856 19439 11586 21149 07164
	LOCATION TWP RGE SEC QUARTERS	085N 10W 15 NW NW NE 085N 10W 16 NW NW SW 085N 10W 16 NE SW SW 085N 10W 16 NE SW SW 085N 10W 16 NE SW SW	085N 10W 16 NW NW SE SW 085N 10W 17 SE NW SE 025N 10W 17 SW SE NW 085N 10W 18 NW NE SE 085N 10W 21 SW NE NE	085N 10W 22 NE NE SW 085N 10W 31 NW NW NW 085N 10W 32 SW NE NW 085N 10W 34 NE NW SW 085N 11W 07 SE NW NW SW	085N 11W 09 SW NW SW 085N 11W 11 SW NE SE 025N 11W 19 SW NE NW 025N 11W 20 SW SE SE 085N 11W 20 NW SW SW SW	085N 11W 24 SW SW SE 085N 11W 29 NE NE SE 085N 11W 29 NW NE SE 085N 11W 31 SW NW SW 085N 12W 13 SE SE	085N 12V 18 SV SV NV 085N 12W 19 SV SV O85N 12W 22 SW SV O85N 12W 23 NV NV NE 085N 12W 32 NV NV NV	085N 12W 36 SE SW SE 086N 09W 03 SE SE NE 086N 09W 10 NE NE SE 086N 09W 14 SW SE NE 086N 09W 17 SE SE	086N 09W 24 SE SE SE

	TOTAL DEPTH	265 230 112 205 205 205	240 635 155 125 128	175 251 120 38
	FORMATION UNIT	WAPSIPINICON BERTRAM WAPSIPINICON CEDAR VALLEY WAPSIPINICON	WAPSIPINICON MAQUOKETA CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON LAPORTE CITY WAPSIPINICON CEDAR VALLEY
ě	BOTTOM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN ORDOVICIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	DEPTH	150 120 155 110	100 90 70 85 49	2 8 4 4 4 8 4 4 8 4 8 8 8 8 8 8 8 8 8 8
COUNTY	BEDROCK TOP UNIT	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	CEDAR VALLEY CEDAR VALLEY WAPSIPINICON CEDAR VALLEY
	BEDROCH	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR WAPSI
BENTON	SYSTEM	DECONIAN DECONIAN DECONIAN DECONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	885 877 875 865 870	876 924 849
	VELL NO.	19492 19489 06605 20344 22641	19482 00431 19485 01368	04669 01932 19457 C0033
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TOTAL DEPTH	35 270 100 165 170	84 175 70 128 115	2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	123 155 315 97	200 220 265 167 181	143 110 207 167 296	209 209 209 258 258	208 240 220 200 200 8
-ORMATION UNIT	CEDAR VALLEY LAPORTE CITY CEDAR VALLEY WAPSIPINICON	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY MAQUOKETA	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	LAPORTE CITY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
BOTTOM P SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
DEPTH	165 80 40 25	W 4 4 4 4 4 TO O O	38 55 7 95	25 75 98 112 75	207 210 105 126	110 100 161 155 194	160 112 145 220	22 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
X T0P	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY
BEDROC	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CÉDAR CEDAR CEDAR CEDAR LAPORT	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR R
SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
ELEVA- TION	851 893 822 874	870 892 853 875	812 828 802 838 815	99999999999999999999999999999999999999	877 1005 994 905	8899 935 991 991	965 910 964 1003 997	991 1011 974 949 1015
WELL NO.	15981 15308 16046 13639 09381	09334 15976 14699 16010	17923 14373 C0087 15970 03419	14372 05625 14454 08515 05785	06585 14457 08652 08579 01970	02782 09293 17608 04592	15794 09211 02020 03135 02779	15263 14098 03629 01985 15972
	SERES	SES &	S S	NA NA SV	SER	SE	SES	S Sam
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	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION WELL ELEVA- SYSTEM UNIT BEDROCK TOP BEDROCK TOP BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPT N 11W 03 SE SE NE SE 15981 851 DEVONIAN CEDAR VALLEY 7 DEVONIAN CEDAR VALLEY 3 N 11W 08 SW NW SW NW 15308 893 DEVONIAN CEDAR VALLEY 165 DEVONIAN CEDAR VALLEY 3 N 11W 09 NE NW NW SW NW SW NG 13639 822 DEVONIAN CEDAR VALLEY 40 DEVONIAN WAPSIPINICON 16 N 11W 11 NW SW NW SW NG 9381 874 DEVONIAN CEDAR VALLEY 25 DEVONIAN WAPSIPINICON 17	LOCATION WELL ELEVA- SYSTEM BEDROCK TOP BEDROCK TOP BOTTOM FORMATION TOTA N 11W 03 SE SE NE SE 15981 851 DEVONIAN CEDAR VALLEY 7 DEVONIAN CEDAR VALLEY 3 N 11W 08 SW NW SW NW 15308 893 DEVONIAN CEDAR VALLEY 80 DEVONIAN CEDAR VALLEY 80 DEVONIAN CEDAR VALLEY 3 DEVONIAN CEDAR VALLEY 40 DEVONIAN CEDAR VALLEY 10 DEVONIAN CEDAR VALLEY 40 DEVONIAN MAPSIPINICON 15 N 11W 11 NW SW NW SW NW SW NW SW NW NW 12W 12W 12W 12W 12W 12W 12W 12W 12W 12	LOCATION REE ELEVA SYSTEM NIT LOCATION SYSTEM NIT LOCATION SYSTEM NIT LOCATION LOCAT	LOCATION REE SE SE SE SE SE SE S	COLONIAR SEE NO. SEE	LOCATION NEEL ELEVA	No. 10 10 10 10 10 10 10 1

DEPTH	335 335 335 335 335		107 108 108 195	1 4 5 0 1 1 2 5 0 5 1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	92 200 210 222	275 200 90 80 128	95 202 151 125 162	200 200 100 100 100
FORMATION UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON WAPSIPINICON WAPSIPINICON WAPSIPINICON CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY NIAGARA UND	WAPSIPINICON CEDAR VALLEY WAPSIPINICON LAPORTE CITY UNDIFF	UNDIFF CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY LAPORTE CITY
BOTTOM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
DEPTH	201 201 201 101 101 101	736 736 780 780 780	110 110 110 165	130 190 165 20	27 90 25 15	10 44 52 110	160 160 78 54	152 152 154 154 83
CK TOP T	VALLEY CREEK VALLEY VALLEY CREEK	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY PINICON	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY
BEDROC	CEDAR LIME C CEDAR CEDAR LIME	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR WAPSI	CEDAR CEDAR CEDAR UNDIF	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR
SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
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ELEVA- TION	988 1006 1014 984 1007	926 913 932 936	ម្ភា ១១១១១១ ១១១៩១១ ១១១៩១	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	8 8 3 5 8 3 5 8 3 5 8 8 8 8 8 8 8 8 8 8	837 835 918	900 928 938 910	99999999999999999999999999999999999999
VELL NO.	01735 08837 08250 16166 02148	05810 08179 15939 18682	18684 09295 16062 15961 09270	09336 16072 15284 15960	06586 06598 09333 09277 10616	11169 04778 13093 07718	05779 05006 02351 04413 08185	12674 08196 13538 01922
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BLACK HAWK COUNTY

	TOTAL DEPTH	210 226 222 250 150	150 135 140 147 220	271 145 234 166 208	185 165 70 200 198	210 185 130 150	110 145 105 225 67	279 200 135 960 246	220 178 178 178 165
	FORMATION UNIT	UNDIFF CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	MIDDLE UND CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON WAPSIPINICON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY WAPSIPINICON CEDAR VALLEY UNDIFF	N MAQUOKETA UNDIFF CEDAR VALLEY N PR DU CHIEN N MAQUOKETA	CEDAR VALLEY NIAGARA UND UNDIFF UNDIFF NIAGARA UND
	BOTTOM SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	ORDOVICIAN SILURIAN DEVONIAN ORDOVICIAN ORDOVICIAN	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	190 215 170 217 132	11.00 12.00 15.00 15.00	215 120 160 70 145	155 90 149 175	168 125 115 60	82 75 80 165 55	215 175 110 115 80	1 1 4 0 6 1 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4
AK COUNTY	BEDROCK TOP UNIT	UNDIFF CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	MIDDLE UND CEDAR VALLEY CEDAR VALLEY LIME CREEK CEDAR VALLEY	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON WAPSIPINICON CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY UNDIFF WAPSIPINICON	UNDIFF UNDIFF CEDAR VALLEY MIDDLE UND NIAGARA UND	CEDAR VALLEY WAPSIPINICON UNDIFF NIAGARA UND
BLACK HAWK	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	SILURIAN SILURIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN DEVONIAN SILURIAN SILURIAN
	ELEVA- TION	967 965 960 919	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1010 935 980 890 960	972 915 974 982 1002	9900 962 990 980	987 903 972 931 884	901 952 940 869	863 920 956 875
	WELL NO.	02362 09599 04602 12354	12355 16167 06940 18577 01938	16093 08849 10419 01736	08338 04007 05826 02480 08860	02653 10628 06941 03982 03952	10108 16341 08184 14445 16069	01754 04601 09970 05370 08189	06069 09172 06068 03955 06629
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	BOTTOM	ILURIA	SILURIAN	EVONIA	EVONI	ILURIA	DEVONIAN	EVON I A	EVONIA	SILURIAN	EVONIA	AMBRIAN	CAMBRIAN	ILURIA	EVONIA	DEVONIAN	FVONTA	EVONIA	EVONIA	E VON IA	DEVONIAN		DEVONIAN	EVONIA	EVONIA EVONIA		DEVONIAN	EVONIA FVONIA	EVONIA
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COUNTY	OCK TOP	VALLEY	VALLEY	VALLEY	VALLEY	7 7	VALLEY	VALLEY		L E		VALLEY	7 7 1	VALLEY	LLE	VALLEY	ר ר ה	VALLEY	LE	ш — —	VALLEY VALLEY	ר ר ח	VALLEY	ALLE	A L L EI	i i i .	VALLEY VALLEY		1 11
HAWK	BEDRO UNI	CEDAR	CEDAR	CEDAR	CEDAR	7	CEDAR	CEDAR	EDA	EDA		CEDAR	E DA	CEDAR	EDA	EDA	1 Z C Z	CEDAR	EDA	EDA A C	CEDAR	1 2 1	CEDAR	EDA	EDA FDA	, (C	CEDAR CEDAR	и С С С	E CA
BLACK H	SYSTEM	DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN	¥ 1 20 4 1	DEVONIAN	DEVONIAN	EVONIA	EVONIA		DEVONIAN	EVONIA	DEVONIAN	EVONIA	EVONIA	E VON I A	DEVONIAN	EVONIA	EVONIA	DEVONIAN	E	DEVONIAN	EVONIA	EVONIA FVONIA		DEVONIAN	EVONIA	EVONIA
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`	FORMATION UNIT	MAQUOKETA UNDIFF UNDIFF UNDIFF MAQUOKETA	UNDIFF MAQUOKETA PR DU CHIEN KANKAKEE MAQUOKETA	EDGEWOOD MAGUOKETA MAQUOKETA ST PETER UNDIFF	MACUOKETA UNDIFF WAPSIPINICON WAPSIPINICON PR DU CHIEN	MIDDLE UND UNDIFF WAPSIPINICON UNDIFF	MAGUOKETA VAPSIPINICON NIAGARA UND UNDIFF	NIAGARA UND NIAGARA UND DRESBACH ST LAVRENCE HOPKINTON	WAPSIPINICON NIAGARA UND MAGUOKETA CEDAR VALLEY CEDAR VALLEY
	BOTTOM SYSTEM	ORDOVICIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN ORDOVICIAN	SILURIAN GRDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN	ORDOVICIAN SILURIAN DEVONIAN DEVONIAN ORDOVICIAN	DEVONIAN SILURIAN DEVONIAN SILURIAN ORDOVICIAN	ORDOVICIAN PEVONIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN CAMBRIAN CAMBRIAN SILURIAN	DEVONIAN SILURIAN ORBOVICIAN DEVONIAN
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COUNTY	BEDROCK TOP UNIT	MAQUOKETA WAPSIPINICON UNDIFF UNDIFF MAQUOKETA	UNDIFF KANKAKEE CEDAR VALLEY KANKAKEE CEDAR VALLEY	KANKAKEE MACUCKETA UNDIFF NIAGARA UND	MAGUOKETA CEDAR VALLEY WAPSIPINICON CEDAR VALLEY CEDAR VALLEY	MIDDLE UND WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	CEDAR VALLEY NIAGARA UND CEDAR VALLEY WAPSIPINICON CEDAR VALLEY	CEDAR VALLEY VAPSIPINICON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
BREMER	SYSTEM	ORDOVICIAN DEVONIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN DEVONIAN SILURIAN DEVONIAN	SILURIAN OREOVICIAN SILURIAN SILURIAN DEVONIAN	CRDOVICIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
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TOTAL DEPTH	103 36 220 113 150	65 215 129 102 116	129 310 195 195 372	2557 226 87 352 365	205 220 820 95 87	129 123 86 60 130	145 73 51 62 133	135 175 137 137 137
FORMATION UNIT	WAPSIPINICON NIAGARA UND MAQUOKETA CEDAR VALLEY MAQUOKETA	CEDAR VALLEY MAQUOKETA WAPSIPINICON UNDIFF	UNDIFF MAGUOKETA MAGUOKETA MAGUOKETA MAGUOKETA	MAGUOKETA MAGUOKETA CEDAR VALLEY MAGUOKETA MAGUOKETA	MAGUOKETA MAGUOKETA CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY WAPSIPINICON	UNDIFF CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY MAQUOKETA	WAPSIPINICON MAGUOKETA CEDAR VALLEY CEDAR VALLEY MAGUOKETA
BOTTOM. SYSTEM	DEVONIAN SILURIAN ORDOVICIAN DEVONIAN ORDOVICIAN	DEVONIAN ORDOVICIAN DEVONIAN SILURIAN	SILURIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN DEVONIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN DEVONIAE	DEVONIAN ORDOVICIAN DEVONIAN DEVONIAN ORDOVICIAN
DEPTH	24 72 15 35	155 155 74 883	205 205 85 110 270	127 170 55 210 183	8008 8008	വന പേരമ 4 ഗോസത	20 20 30 10	30 11 160 160
BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY MACUOKETA CEDAR VALLEY UNDIFF	UNDIFF NAGUOKETA UNDIFF MAGUOKETA MAGUOKETA	MAQUOKETA MAQUOKETA CEDAR VALLEY MAQUOKETA EDGEVOOD	WAPSIPINICON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
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LOCATION TWP RGE SEC QUARTERS	091N 14W 11 SW SW 091N 14W 13 SE SE NE NE 091N 14W 15 SW SW SE 091N 14W 21 SW SW NE SE 091N 14W 35 SE SE NE	091N 14W 35 NW NW SE NW 092N 11W 03 SE SE SE NW 092N 12W 04 SE SE NE NE NE 092N 12W 05 SW NW SW 092N 12W 28 SW SE SE	092N 12W 31 NF NE NE 092N 13W 04 NW NW 092N 13W 04 SE SE SE 092N 13W 08 SE NE 092N 13W 08 SW SW	092N 13W 15 NW NW 092N 13W 15 NW NW 092N 13W 15 SW NE SE 092N 13W 16 SW SW 092N 13W 16 SW SW	092N 13W 24 NW NW SE 092N 13W 28 SE SE SW 052E 13W 32 NW SW SW NW- 092N 14W 09 NW SE SE NE 092N 14W 08 NE NW	092N 14W 11 NW SW 095N 14W 11 SW SW 092N 14W 16 SE SE NE SE 092N 14W 27 NW NW NW NW 092N 14W 28 SE SW NW	092N 14V 29 NE SE NE SE 092N 14V 34 SE SE SE NW 092H 14V 35 SE NW 092H 14V 35 SW SE NW 092H 14V 35 NW NW NE SW	092N 14W 35 SW SE SW 092N 14W 35 SW SE SW 092N 14W 23 SW SE SW 092N 14W 24 NE NE SE 093N 11W 03 SW SE NE
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	BOTTOM		DEVONIAN DEVONIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN	EVONIA	DEVONIAN DEVONIAN	EVONIA	EVON IA IL URIA	DEVONIAN DEVONIAN DEVONIAN	EVONIA	DEVONIAN	EVONIA	EVONIAN RDOVICIA	DECONIAN	EVONIA	DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	EVONIA	SILUKIAN SILURIAN DEVONIAN
	DEPTH	181	14 30 45	34	15	0 to	88 2 5 2	116	135	187	ល	0	O 11	210	83		140	28	ဝေသ
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BUCHANAN	SYSTEM	DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN	DEVONIAN	DEVONIAN DEVONIAN	DEVONIAN DEVONIAN	EVONIA	DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN	EVONIA	DEVONIAN		DEVONIAN	DEVONIAN	DEVONIAN DEVONIAN
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	WELL NO.	600	05883 03486 06848	04399 02918 04164	101 283	615	07094 06302	427	13185 03179 04368	740	06074	000	000	04162	489	117	03829 07178 02837	461 102	01147 04874 C0143
	LOCATION TWP RGE SEC QUARTERS	87N 07W 04 SW NW S	087N 07W 12 NW SW SW 087N 07W 27 SE SW SE 087N 07W 32 SE SW SE	087N 08W 05 SW SW SW 087N 08W 07 NE NE SE 087N 08W 08 SW SW	87N 08V 08 SE S 87N 08W 14 SW S	87N 08W 21 NE NE 87N 08W 26 SE SW	087N 08W 33 SE SE 087N 08W 33 SE SE 087N 08W 35 SE NW NE	87N 09W 12 NE NW	087N 09W 12 SW NW NW 087N 09W 15 SW SW NW 087N 09W 24 SW SW SW SE	87N. 09W 33 SW SW SE	087N 10W 05 NW NW NW NW 08 087N 10W 23 SW SE NW	87N 10W 25 5W 5E 87N 10W 26 SW SW	87N 10W 26 NE S	088N 07W 03 SW SE	88N 07W 27 NE NW	88N 08W 02 SE SW	085N 08W 12 SE SE NE 085N 08W 13 SE SW SE 085N 08W 23 NE SW SW	88N 08W 29 SW NV 88N 08W 34 NE SW NE	

	OTAL EPTH	355 352 114 180	2330 100 100 100 100 100	172 159 194 100 230	200 230 126 86	190 100 293 307 58	242 180 380 160	151 205 180 107 93	78 37 37 200
	FORMATION T	MAQUOKETA MAQUOKETA UNDIFF UNDIFF	CEDAR VALLEY WAPSIPINICON UNDIFF CEDAR VALLEY	CEDAR VALLEY UNDIFF WAPSIPINICON CEDAR VALLEY NIAGARA UND	WAPSIPINICON NIAGARA UND WAPSIPINICON CEDAR VALLEY	WAPSIPINICON NIAGARA UND EDGEWOOD MAQUOKETA CEDAR VALLEY	NIAGARA UND WAPSIPINICON MAGUOKETA MAGUOKETA NIAGARA UND	UNDIFF KANKAKEE KANKAKEE UNDIFF MAQUOKETA	WAPSIPINICON UNDIFF WAPSIPINICON UNDIFF KANKAKEE
	BOTTOM SYSTEM	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	DEVONIAN DEVONIAN SILURIAN DEVONIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN SILURIAN ORDOVICIAN DEVONIAN	SILURIAN DEVONIAN ORDOVICIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	DEVONIAN SILURIAN DEVONIAN SILURIAN
	DEPTH	155 155 160 40	60 20 78 75 60	150 160 95	150 199 65 75 108	80 11 46 46	06 80 80 80 80 80 80 80	80 155 160 40	77 50 9 26 17
COUNTY	BEDROCK TOP UNIT	WAPSIPINICON LAPORTE CITY WAPSIPINICON	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	UNDIFF CEDAR VALLEY CEDAR VALLEY	NIAGARA UND CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY KANKAKEE LAPORTE CITY	WAPSIPINICON KANKAKEE UNDIFF KANKAKEE	WAPSIPINICON UNDIFF WAPSIPINICON UNDIFF CEDAR VALLEY
BUCHANAN	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN SILURIAN DEVONIAN
	ELEVA- TION	9999 981 940	976 935 978 927	1083 1073 1088 1094 1024	1072 1044 970 1008 1021	1017 993 943 935	975 970 979 1043	1089 1149 1153 1119	1000 1002 1095 1002 993
	WELL NO.	16147 01578 07093 09469 12678	02845 06575 05783 08183 01879	05008 02506 05404 08987 04116	08187 10161 04618 11123 10758	04619 08195 03714 01856	09432 11590 09382 05557 09094	13111 17897 10637 11894 06098	06216 06208 C0115 04614 09352
	LOCATION TWP RGE SEC QUARTERS	088N 09W 04 NE NW NE O8BN 09W 08 SE NW NW 08BN 09W 09 SW SE NE O8BN 09W 19 NW NE NE O8BN 09W 21 NW NE NE	088N 09W 23 NE SW NE 088N 09W 26 SW SE NE 088N 10W 17 NE NE NW NW 088N 10W 21 NE SW SE SE 088N 10W 27 SW SE NE	085N 10W 34 NE NW SW 089N 07W 24 SW NE SE 089N 07W 28 NW NE SE 089N 08W 01 NW SE SE 089N 08W 20 SE SW	089N 08W 24 NW SE SW 089N 08W 35 NW SE SE 089N 09W 08 SE NE SE 089N 09W 10 NW SW NE 089N 09W 12 SW NW SE	089N 09W 13 SW NW SW 089N 09W 24 NE SW SW 089N 09W 34 SW SE NE 085N 09W 34 SW SE SE 089N 10W 10 NE NW SW	089N 10W 26 NE SE NE 089N 10W 27 SW SE SE 085N 10W 31 NW NE NE 090N 07W 23 NW NW NE 090N 07W 31 SE SW NW	090N 07W 32 SW NW NW 090N 08W 06 NE NE SW 090N 08W 10 NW SE NE 090N 08W 12 NW NW SW 090N 09W 10 NW SW NW	090N 09W 10 SW SW NW 090N 09W 11 SW NW SW 090N 09W 11 SW NW NE 090N 09W 17 NW NW 090N 10W 05 SE NE NE

	TOTAL DEPTH	1292 43 75 175
	FORMATION UNIT	CEDAR VALLEY CEDAR VALLEY HOPKINTON
	BOTTOM	DEVONIAN DEVONIAN SILURIAN
	DEPTH	004 800
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
BUCHANAN	SYSTEM	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	994 972 1005 991
 	WELL NO.	14135 03658 04617 03637
	LOCATION TWP RGE SEC QUARTERS	090N 10W 05 SW SE NE 090N 10W 05 NE NW SW 090N 10W 14 SE SW SW 090N 10W 22 NW NW NE

	TOTAL DEPTH	3595 315 220 198 160	176 165 145 306 180	226 319 202 230 216	300 230 332 187 120	440 83 47 122 150	138 198 186 230 95	90 110 100 205 255	180 182 205 88 70
	FORMATION	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY UNDIFF CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY LIME CREEK	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
	BOTTOM SYSTEM	PRECAMB DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	122 290 197 190 75	90 065 105 688 140	196 258 190 120 96	50 79 110 95 70	45 20 41 105	75 85 160 35 36	65 80 90 173 180	160 145 37
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY LIME CREEK LIME CREEK	LIME CREEK LIME CREEK CEDAR VALLEY SHEFFIELD CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY UNDIFF LIME CREEK	LIME CREEK LIME CREEK LIME CREEK SHEFFIELD SHEFFIELD	SHEFFIELD CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
BUTLER	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEV & MISS DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEV & MISS DEV & MISS	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	896 1070 986 962 918	927 891 1002 1027 970	1005 1005 1010 966	966 950 1033 1039	1039 942 932 999	942 973 972 935	936 984 948 1056 1082	1039 1036 1047 982 995
	WELL NO.	14428 14877 16319 17203 09350	02479 07854 18046 08841 18101	01802 13572 12153 12325	07043 14853 02024 08955 11589	08598 03981 17509 15462	02482 13479 12971 00824 03630	13821 15746 14020 17937 18692	20256 16133 14016 11768 00165
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	TOTAL DEPTH	198 178 143 88 161	130	153	140	120	115	114	101	106	150	122	175
	NO.	VALLEY VALLEY VALLEY VALLEY	VALLEY	VALLEY									
	FORMATION UNIT	CEDAR CEDAR CEDAR CEDAR	CEDAR	CEDAR									
	BOTTOM	DECONIAN DECONIAN DECONIAN DECONIAN	DEVONIAN	DEVONIAN									
	DEPTH	440 400 800 800 800 800		115				105					100
COUNTY	BEDROCK TOP UNIT	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY	LIME CREEK									
BUTLER	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	NAT NO YEAR	DEVONIAN	DEVONIAN								
	ELEVA- TION	1021 1040 1051 983	1001	1033	1012	1002	1013	998	994	962	1000	266	1089
	VELL NO.	08325 08994 20988 01738	0 2 0 2 0	16459	17222	11365	09209	15827	15765	09213	11918	08674	08386
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DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN CAMBRIAN DEAMBRIAN DEVONIAN CAMBRIAN ORDOVICIAN
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SHEFFIELD LIME CREEK LIME CREEK CEDAR VALLEY LIME CREEK SHELL ROCK SHELL ROCK SHELL ROCK SHELL ROCK CEDAR VALLEY CEDAR VALLEY
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12822 12822 12822 10922 10922 1092 1086 11114
09006 09565 11779 13009 08902 09781 09781 00316 05628
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	TOTAL DEPTH	585 1765 110 265 225	810 207 1200 815 1473	1278 620 1297 1305 1585	1369 1425 244 977 103	28 328 432 80 80	310 170 120 212 125	263 250 302 142	160 150 240 267 230
	FORMATION UNIT	GALENA CEDAR VALLEY CEDAR VALLEY	PR DU CHIEN TREMPEALEAU ST PETER DRESBACH	TREMPEALEAU GALENA TREMPEALEAU TREMPEALEAU	TREMPEALEAU TREMPEALEAU CEDAR VALLEY SI PETER LIME CREEK	CEDAR VALLEY CEDAR VALLEY MAQUOKETA CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY PLEIST UND CEDAR VALLEY LIME CREEK	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
	BOTTOM SYSTEM	ORDOVICIAN PRECAMB DEVONIAN DEVONIAN	ORDOVICIAN CAMBRIAN ORDOVICIAN CAMBRIAN	CAMBRIAN ORDOVICIAN CAMBRIAN CAMBRIAN PRECAMB	CAMBRIAN CAMBRIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN ORDOVICIAN DEVONIAN	DEVONIAN DEVONIAN QUATERNARY DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	DEPTH	9 0 0 0 G	880 0	4 110 10 7	იც ი ი ი ი 4 ი	15 15 140	110 125 120 95	85 125 100 130	30 30 45 70
GORDO COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY LIME CREEK CEDAR VALLEY SHELL ROCK LIME CREEK	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY SHELL ROCK LIME CREEK LIME CREEK	LIME CREEK LIME CREEK LIME CREEK LIME CREEK	LIME CREEK LIME CREEK LIME CREEK	LIME CREEKCEDAR VALLEY LIME CREEK	LIME CREEK LIME CREEK LIME CREEK LIME CREEK	LIME CREEK CEDAR VALLEY LIME CREEK CEDAR VALLEY
CERRO GO	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1081 1098 1141 1129	1128 1117 1106 1105	1120 1082 11114 1166	1160 1192 1194 1181	1186 1191 1189 1169	1228 1217 1251 1248 1238	1235 1253 1256 1250 1259	1236 1157 1135 1166
	WELL NO.	00064 00115 10503 12133	01489 00631 00759 00251	13493 08079 00528 02971	08116 06163 09954 00306	19340 13988 11777 01742 10504	11693 11694 10084 12729 17250	09022 05203 12964 01022 09335	00143 10693 13078 13981 13113
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	LOC.	200V 200V 200V 200V	20V 20V 20V 20V	200V 200V 200V	200V 200V 200V 21V	221K	222V 222V 222V 222V	22V 22V 22V 22V 22V	22V 19V 20V 20V 20V
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	TOTAL DEPTH	210 1260 406 1215 153	80 230 250 135	122 111 160 182
	NOI	CEDAR VALLEY MAQUOKETA TREMPEALEAU CEDAR VALLEY	PLEIST UND CEDAR VALLEY CEDAR VALLEY	VALLEY VALLEY VALLEY VALLEY
	FORMATION UNIT		PLEIS CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR
	BOTTOM	DEVONIAN ORDOVICIAN CAMBRIAN DEVONIAN	QUATERNARY PLEIST UND DEVONIAN CEDAR VALLEY DEVONIAN CEDAR VALLEY DEVONIAN CEDAR VALLEY	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	33 10 10 10 10	6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	75 130 105 105
COUNTY	BEDROCK TOP UNIT	VALLEY VALLEY VALLEY ROCK VALLEY	LIME CREEK DAKOTA CEDAR VALLEV LIME CREEK	VALLEY VALLEY VALLEY VALLEY
	BEDROCK UNIT	CEDAR CEDAR CEDAR SHELL CEDAR		CEDAR CEDAR CEDAR CEDAR
CERRO GORDO	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN CRETACEOUS DEVONIAN DEVOKIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1118 1128 1128 1125	1205 1240 1224 11999	1222 1232 1271 1255
w."	VELL NO.	10629 00019 00103 08289 16110	01488 09308 12604 01478	13221 12178 15160 17294
		NE SE	AS	ESSEN ESSEN
	N QUARTERS	N N N N N N N N N N N N N N N N N N N	SA SE	5552
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	RGE	2000 2000 2000 2000 2000 2000	2000 2000 2000 2000 2000 2000 2000 200	222 227 227 227 227
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	TOTAL DEPTH		153 273 227	192 216 269 569	4	110			67 58 50	00 C			100 165 132	4 m	150 305 1300	120 240 240 240 250	o .
	FORMATION UNIT	EDAR VAL	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	PLEIST UND CEDAR VALLEY CEDAR VALLEY	EDAR VA	PLEIST UND CEDAR VALLEY	EDAR VAL	EDAR VALLE	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY PLETST HND	EDAR VAL	EDAR VALLE	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	EDAR VA EDAR VA	ш ⇒	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	
	BOTTOM SYSTEM	VONIA		QUATERNARY DEVONIAN DEVONIAN	EVONIAN	ATERN YONIA	NIAN NIAN	E VON I A	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN OHATERNARV	ONIAN	E VON I A	DEVONIAN DEVONIAN DEVONIAN	EVONIA	DEVONIAN ORDOVICIAN CAMBRIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	OK LERIKAN
	DEPTH	202	145 244 145	205 235	239	38	127 125		3.55 4.05 5.05 5.05 5.05 5.05 5.05 5.05 5	355 39	156 5		13 130 14	~ ∞	135 107 115	118 86 130 270	
COUNTY	K 10P	VALLEY	VALLEY VALLEY VALLEY	VALLEY VALLEY	VALLEY	VALLEY	VALLEY VALLEY	ALLE ALLE	VALLEY VALLEY VALLEY	VALLEY VALLEY	VALLEY VALLEY	1 1 1 1 1	VALLEY VALLEY VALLEY	VALLEY VALLEY	VALLE VALLE	VALLEY VALLEY VALLEY VALLEY	
	BEDROCK UNIT	CEDAR	CEDAR CEDAR CEDAR	CEDAR	CEDAR	CEDAR	CEDAR CEDAR	E D A E D A	CEDAR CEDAR CEDAR	CEDAR	CEDAR CEDAR	EDA	CEDAR CEDAR CEDAR	E D A E D A	CEDAR UNDIFF CEDAR	CEDAR CEDAR CEDAR CEDAR	
CHICKASAW	SYSTEM	DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN	DEVONIAN	DEVONIAN	DEVONIAN DEVONIAN	EVONIA EVONIA	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN	DEVONIAN DEVONIAN	EVONIA	DEVONIAN DEVONIAN DEVONIAN	EVONIA	DEVONIAN CRETACEOUS DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	
	ELEVA- TION	8	1152 1115 1104 1072	1090 1116 1072	90	တထ	020 020 020	⊿ 60	970 979 977	72 70 70 70		V 9	1020 1076 1046	70 12	1115 1142 1140	1141 1158 1235 1535	υ Ω
Pc.	VELL NO.	455	14506 16449 10618	10507	746 746	687 567	16088 17492 13956	368	11348 17638 15653	794		557	13070 14460 14468	574	13961 03534 22759	03523 02316 14463 15425	, 55 50
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	TOTAL DEPTH	1325 107 162 95 230	74 130 88 955 148	108 252 90 80 80	250 128 230 148	172 230 172 240 258	101 105 228 163 121	ααυ αα οω4 υο	110 110 130 130
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	FORMATIONIT	CEDAR CEDAR CEDAR CEDAR UNDIF	Y PLEIS CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	UNDIFF CEDAR UNDIFF CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR
	SYSTEM	CAMBRIAN DEVONIAN DEVONIAN DEVONIAN	QUATERNAR DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	167 156 156 205	60 60 68 134	6 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	165 70 215 100 95	163 214 155 218 240	77 90 219 153	7 4 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 26 101 101
COUNTY	CK TOP T	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY
	BEDRO(UNI	CEDAR CEDAR CEDAR CEDAR UNDIFI	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR UNDIF	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR
CHICKASAW	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1160 1104 1132 1073 1115	1060 1101 1060 1068 1120	1075 1110 1141 1035 1012	1150 1035 1092 1183	1173 1210 1161 1225 1243	1160 1178 1236 1197 1160	1120 1122 1160 1115	1134 1137 1149 1188
	WELL NO.	15936 10614 17209 13062 04461	13947 12163 10706 16090	16059 17051 12996 12172 13201	04872 14996 13128 13500 17223	17219 05027 10619 15465 1486	11366 15525 12157 14468	16391 12995 12155 17473 13060	16598 17472 17520 13103 11364
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	OCAT	122 122 127 127	28 7 0 6 7 0 5 1 13	16 10 120 121 121	24 27 29 30 30 10	05 05 15 16 22	24 24 35 05 06	000	20 20 110 110 110 110 110 110 110 110 11
	LO RGE	13V 13V 13V 13V	13W 14W 14W 14W	148 148 148 148 148 148	14V 14V 11V 12V	12W 12W 12W 12W	12V 12V 13V 13V	138K 138K 138K	130V 140V 140V 140V
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	TOTAL DEPTH	140 75 144 500 50	138 319 119 210	149 170 107 107	000 000
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	FORMATION UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY I GALENA CEDAR VALLEY	CEDAR MAGUOK CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR
	BOTTOM: SYSTEM	DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN DEVONIAN	DEVONIAN ORDOVICIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	DEPTH	107 67 60 70 37	995 1995 75	2 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	10 6 42
COUNTY	к тор	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY
	BEDROCK Unit	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR
CHICKASAW	SVSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1170 1142 1154 1157 1063	1138 1190 1192 1245 1171	1205 1205 1233 1171	1125 1124 1162
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CLAYTON	SYSTEM	ORDOVICIAN	SILURIAN	LURIA DOVIC	URIAN	LURIA	SILURIAN	ILURIA	SILURIAN	SILURIAN	ILURIA	SILURIAN SILURIAN	ILURIA	ILURIA	SILURIAN	ILUKIA	RDOVICIA	ORDOVICIAN		OVICIA	OVICIA OVICIA	ORDOVICIAN	OVICIA	DOVICIA	ORDOVICIAN ORDOVICIAN
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	LOCATION P RGE SEC QUARTERS	1N 01W 36 SW SW 1N 02W 16 NE NE	IN 02W 28 SE NE SW IN 02W 33 SE SW NW	1N 03W 26 SE SW S	IN 04W 21 NW NW NE	1N 05W 15 SE SW S	IN OSW 27 SE SE S	1N 05W 35 SW SW SW	IN 05W 35 SW SE S IN 06W 19 NE SW S	1N 06W 22 SW N	IN 06W 22 NE NW	IN 06W 22 NE NW IN 06W 22 NE SE SW	1N 06W 22 NE SE S	1N 06W 22 SE NW NE S	IN OGW 30 NW NE NW NE	1N 06W 35 NW SE SE	1N 06W 35 NE NE SE SE 2N 02W 05 NE SE NW SW	2N 02W 05 SW SW SW	2N 02W 08 NE SW NW	ZN 02W 08 SE SW	ZN 02W 17 NE SE NE	2N 03W 03 NE SW NW SE 2N 03W 04 NW NW NW NW	ZN 03W 10 SE SE NE	N 03W 13 SW SE N 03W 35 SE SE	2N 04W 21 NE NW SW 2N 04W 36 SE NE SE NW
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	FORMATION Unit	GALENA GALENA GALENA GALENA	ST PETER PR DU CHIEN GALENA ST PETER	TREMPEALEAU I DECORAH TREMPEALEAU I GALENA	ST PETER GALENA MAGUOKETA ST PETER	PLATTEVILLE ST PETER ST PETER PR DU CHIEN	PR DU CHIEN GALENA PR DU CHIEN ST PETER	PLATTEVILLE PR DU CHIEN PR DU CHIEN PR DU CHIEN GALENA	PLATTEVILLE GALENA ST PETER ST PETER TREMPEALEAU
	BOTTOM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	CAMBRIAN ORDOVICIAN CAMBRIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN CAMBRIAN
	DEPTH	2 2 2 1 2 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 3 3 2 3 3	1 3 2 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 10 10 5	១ ១ ១ ១	00 10 10 10 10	115 10 20 20 20	10 30 20
COUNTY	BEDROCK TOP UNIT	MAQUOKETA MAQUOKETA GALENA MAQUOKETA MAQUOKETA	KANKAKEE MAQUOKETA GALENA MAQUOKETA	GALENA GALENA GALENA MAQUOKETA MAQUOKETA	MAQUOKETA MAQUOKETA MAQUOKETA MAQUOKETA GALENA	GALENA GALENA GALENA GALENA	DECORAH KANKAKEE KANKAKEE GALENA	GALENA GALENA GALENA MAQUOKETA	GALENA MAQUOKETA MAQUOKETA GALENA
CLAYTON	SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	SILURIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN
	ELEVA- TION	950 828 785 875 970	1135 640 1060 860 1062	1025 1035 980 1031	1045 980 805 900 790	805 840 770 780	757 995 1180 1190 1040	1080 1085 1065 1005 1080	1080 1095 1125 1060
	VELL NO.	10003 08168 11604 17504	17346 15711 17229 12925 03713	07810 11684 17211 01891	17613 16149 20773 17609 18866	17446 16464 13616 18420 00037	04928 13686 13532 10982 17940	14524 15163 16022 11788 16481	16006 16465 17435 20898 00994
	RTERS	E NV NV E NE NV V SV NE V SE SE	E NE NW E SW SW E SW SW	W NW SW NE SW NE SE NW	W WE SE NE SE NE SE NE SE	W SW SW E SW NW W NW NE	E N NE	E NW SE NE NW SW NW SW NW SW NW SW	K K K K K K K K K K K K K K K K K K K
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	TOTAL	ຫຄ	390 190 260	ഗര	275 165 6 24	378	σn 1	90	332	200	130	N	က ထ	360 116	130645	mc	^	200 630	~ ₹	rω	320 222 131	300	S)
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	BOTTOM SYSTEM	RDOVICIA	ORDOVICIAN ORDOVICIAN ORDOVICIAN	RDOVIC RDOVIC	ORDOVICIAN ORDOVICIAN CAMBRIAN	RDOVICI	RDOVICIA	ORDOVICIAN ORDOVICIAN	RDOVICIA	RDOVIC	OVICIA BRIAN	RDOVIC	AMBK IA AMBR IA	CAMBRIAN		RDOVIC	RDOVICIA	RDOVI	C	RDOVICIA	ORDOVICIAN ORDOVICIAN	RDOVICIA	RDOVICIA
	DEPTH	24	15 20 67	4 25	110	20		22 22	25		09		4 t	000	,20	24			252		0,		20
COUNTY	BEDROCK TOP UNIT	MAQUOKETA	MAQUOKETA. MAQUOKETA MAQUOKETA	MAQUOKETA MAQUOKETA	E E	LENA	QUOKE	MAQUOKETA MAQUOKETA	0:	LENA	GALENA TREMPEALEAU	ALE	ALENA R DU CHIE	PR DU CHIEN TREMPEALEAU	PR DU CHIEN TREMPEALEAU	12 14	GALENA	ALE	G S L E L S S S S S S S S S S S S S S S S	A L E	GALENA	() () () () () () () () () ()	MAQUOKETA
CLAYTON	SYSTEM	ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN	RDOVICIA RDOVICIA	RDOVICIA	RDOVICIA	ORDOVICIAN ORDOVICIAN	OVICIA	27.70	ORDOVICIAN CAMBRIAN	RDOVICIA	ORDOVIC ORDOVIC	ORDOVICIAN CAMBRIAN	ORDOVICIAN CAMBRIAN	RDOVIC	RDOVICIA	RDOVICIA	ORDOVICIAN	RDOVICIA	ORDOVICIAN	2010000	ORDOVICIAN
	ELEVA- TION	80	1050 1020 1070	OU	1010 855 855	800	0	970	w	707	795 631	80	0 4	638	759 625	ω <	90	10	1127	20	1190	ດມ ຜ	13
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	TOTAL DEPTH	162 212 347	328	300 814 815 206 458	2000 2000 2000 2000 2000 2000 2000	107 115 190 315 274
	FORMATION TO	GALENA GALENA DECORAH	DECORAH	GALENA TREMPEALEAU TREMPEALEAU GALENA ST PETER	PR DU CHIEN ST PETER GALENA ST PETER GALENA	MAQUOKETA MAQUOKETA GALENA GALENA GALENA
	BOTTOM FOR		ORDOVICIAN DE	ORDOVICIAN GAL CAMBRIAN TRE CAMBRIAN TRE ORDOVICIAN GAL	ORDOVICIAN PR ORDOVICIAN ST ORDOVICIAN ST ORDOVICIAN ST ORDOVICIAN GA	ORDOVICIAN MA ORDOVICIAN GA ORDOVICIAN GA ORDOVICIAN GA
	DEPTH	001	30 24	100 100 100 100 100 100	32 30 10	20 130 20
LOON	BEDROCK TOP UNIT	MAQUOKETA MAQUOKETA	MAGUOKETA MAGUOKETA MAGUOKETA	MAQUOKETA GALENA MAQUOKETA MAQUOKETA	MAQUOKETA MAQUOKETA MAQUOKETA MAQUOKETA	MAQUOKETA MAQUOKETA MAQUOKETA MAQUOKETA
CLAYTON	SYSTEM	ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN MAQUOKETA ORDOVICIAN MAQUOKETA ORDOVICIAN MAQUOKETA ORDOVICIAN MAQUOKETA
	ELEVA- TION	1138	1134 1140 1142	1147 1216 1216 1094 1151	1161 1095 1110 1200	1180 1189 1161 1114
	VELL.	15990	09689 08283 14376	01502 00207 00997 10800 17050	16120 09342 15169 17877 17499	09140 16591 17512 15482 09850
	OCATION SEC QUARTERS	OG SE NW	W W W W W W W W W W W W W W W W W W W	09 SW SW SW SW 11 SW NE SE SE 11 SW NW NW SW 11 SW NE SE SE 15 SW NW NW SW 21 SW SW NE NE	7 23 SE SE NW 7 25 NE NE SW SW 7 34 SE NW NW SW 7 02 SE SE SW 7 03 SE SE SW	4 03 NW NW SW SE 4 06 SW SW SW NW 4 08 SE SE SW 4 16 NE NE NE NW 4 30 NW SW SE NW
	LC TWP RGE	95N 0	095N 05W 095N 05W 095N 05W	095N 05W 095N 05W 095N 05W 095N 05W	790 NS60 790 NS60 790 NS60 790 NS60	M90 N960 M90 N960 M90 N960 M90 N960

	TOTAL DEPTH	231 230 230 102	11 19 19 19 19 19 19 19 19 19 19 19 19 1	250 1215 76 150	125 125 116 116	166 110 100 175	1 1 2 7 1 1 1 0 5 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1111 124 120 120 120 120 140 150 150 150 150 150 150 150 150 150 15	1111 1211 1011 1011 1011
	FORMATION UNIT	HOPKINTON KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE HOPKINTON KANKAKEE NIAGARA UND KANKAKEE	UNDIFF TREMPEALEAU KANKAKEE MAQUOKETA MAQUOKETA	KANKAKEE FLEIST UND KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE HOPKINTON KANKAKEE	PLEIST UND KANKAKEE KANKAKEE GALENA GALENA	EDGEWOOD KANKAKEE EDGEWOOD KANKAKEE	EDGEWOOD MAQUOKFTA EDGEWOOD EDGEWOOD EDGEWOOD
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN CAMBRIAN SILURIAN ORDOVICIAN	SILURIAN QUATERNARY SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	QUATERNARY SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN SILURIAN
	DEPTH	220 220 30 30	190 96 55 50 93	23 35 39 39	109 505 555	130 20 35 0	40 57 15 120	00004	000000
COUNTY	BEDROCK TOP UNIT	HOPKINTON KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE HOPKINTON HOPKINTON NIAGARA UND KANKAKEE	UNDIFF KANKAKEE KANKAKEE NIAGARA UND	KANKAKEE KANKAKEE HOPKINTON	KANKAKEE NIAGARA UND NIAGARA UND HOPKIMTON	HOPKINTON KANKAKEE KANKAKEE MAQUOKETA	KANKAKEE HOPKINTON NIAGARA UND	NIAGARA UND KANKAKEE KANKAKEE KANKAKEE
DELAWARE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	S S S S S S S S S S S S S S S S S S S	SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	0 0 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 4 0	980 945 975 917	00000000000000000000000000000000000000	8867 9962 9940	971 917 917 930	945 959 912 947 866	996 960 978 920	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	WELL NO.	08861 05565 03778 03992 03690	03701 07873 04151 12578 09775	06395 14650 03118 12684 12521	08814 14978 09412 09729 02507	03698 09167 08034 09424 02396	04003 03687 06094 09357 10964	03537 03703 03793 06791 11171	10567 10924 03340 04594 03571
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	TOTAL DEPTH	89 76 100 100	124 152 130 70	111 200 102 200 260	175 155 46 180 230	140 75 85 183 126	212 230 150 103	233 170 361 183 186	200 110 210 210 278
	FORMATION	EDGEWOOD KANKAKEE KANKAKEE KANKAKEE EDGEWOOD	EDGEWOOD KANKAKEE KANKAKEE HOPKINTON HOPKINTON	KANKAKEE HOPKINTON KANKAKEE KANKAKEE KANKAKEE	HOPKINTON NIAGARA UND NIAGARA UND HOPKINTON HOPKINTON	HOPKINTON HOPKINTON NIAGARA UND HOPKINTON NIAGARA UND	HOPKINTON UNDIFF NIAGARA UND HOPKINTON	NIAGARA UND NIAGARA UND KANKAKEE HOPKINTON HOPKINTON	NIAGARA UND EDGEWOOD NIAGARA UND UNDIFF
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	30 30 12 52	30 110 20 20	7000 7000 7000	160 110 0 155 205	50 45 65 170	198 205 125 50	210 70 345 105 135	173 118 110 105
COUNTY	BEDROCK TOP UNIT	KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE HOPKINTON HOPKINTON	HOPKINTON HOPKINTON KANKAKEE HOPKINTON HOPKINTON	HOPKINTON NIAGARA UND NIAGARA UND HOPKINTON HOPKINTON	HOPKINTON HOPKINTON NIAGARA UND HOPKINTON NIAGARA UND	HOPKINTON UNDIFF HOPKINTON NIAGARA UND	NIAGARA UND NIAGARA UND KANKAKEE HOPKINTON HOPKINTON	NIAGARA UND WAPSIPINICON WAPSIPINICON WAPSIPINICON WAPSIPINICON
DELAWARE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN ILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVÀ- TION	930 930 918 918	965 849 979 1005	991 1024 921 950	1004 1029 1009 972	975 951 942 1010	978 1050 1023 964 992	1013 1095 1013 1050	1076 1027 1035 1052 1045
•	WELL NO.	04800 03141 02503 05194 04288	04987 02384 04178 08813 03120	04804 05933 04211 09958 01289	04994 09980 10556 03706	06613 06363 10063 07348	04991 18693 02397 09292 07359	16874 10011 11995 07355 09998	09789 02242 15117 05201 15684
	LOCATION TWP RGE SEC QUARTERS	087N 04W 19 NW NE 087N 04W 19 SE NE NW 087N 04W 20 NW NW 087N 04W 20 SW NW NW 087N 04W 21 SE SW NW	087N 04W 21 NE NE NE SW 087N 04W 24 SE SE NW 087N 04W 27 NW NW 087N 04W 28 SE NW NW 087N 04W 29 NW NW NE	087N 04W 30 SE NE 087N 04W 31 NE SE SW 087N 04W 32 SE SW NE 087N 04W 35 SW SE SW 087N 04W 35 NW SE SE	087N 05W 07 NE NW NE 087N 05W 07 SE SW NW 087N 05W 08 NE NE 087N 05W 09 WE SE NE 087N 05W 09 NW SE SE	087N 05W 13 SE NE SE 087N 05W 13 HW SE SE 087N 05W 14 SW NW NW 087N 05W 14 SW SE SW 087N 05W 18 SE NW SW	087N 05W 21 NE NW 087N 05W 22 NW NW SE 087N 05W 23 NE NE NW 087N 05W 24 NE SE NW 087N 05W 25 NE NE NW	087N 05W 27 NE NE SE 087N 05W 31 NE NW NW 087N 05W 34 NW SW SE 087N 05W 36 NW NE NW 087N 06W 10 SE SE NE	087N 06W 13 NE SW SW 087N 06W 13 NE NW SE 087N 06W 14 NW NE NE 087N 06W 14 NW NW SW 087N 06W 15 NE SE SE

	TOTAL DEPTH	200 1120 1196 1196	157 204 250 214 102	200 110 130 225	100 390 200 228 180	88 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	142 105 70 116	80 60 140 70	103 103 1188 1288
	FORMATION	NIAGARA UND UNDIFF HOPKINTON HOPKINTON	HOPKINTON NIAGARA UND UNDIFF UNDIFF	UNDIFF HOPKINTON NIAGARA UND HOPKINTON	WAPSIPINICON GALENA KANKAKEE PLEIST UND KANKAKEE	GALENA GALENA MAQUOKETA MAQUOKETA GALENA	UNDIFF MAGUOKETA KANKAKEE HOPKINTON EDGEWOOD	KANKAKEE HOPKINTON MAGUOKETA MAGUOKETA EDGEWOGD	KANKAKEE KANKAKEE HOPKINTON UNDIFF KANKAKEE
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	DEVONIAN ORDOVICIAN SILURIAN QUATERNARY SILURIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	SILURIAN ORDOVICIAN SILURIAH SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	70 80 110 40 65	115 1240 195 005 105	15 15 15 15 15 15	85 182 160	165 165 165 165 165	133 70 40 15	no nn	107 60 10 70
COUNTY	BEDROCK TOP UNIT	WAPSIPINICON WAPSIPINICON HOPKINTON WAPSIPINICON HOPKINTON	HOPKINTON NIAGASA UND UNDIFF	WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAP SIP INICON HOPKINTON KANKAKEE KANKAKEE	MAQUOKETA UNDIFF MAQUOKETA MAQUOKETA	UNDIFF EDGEWOOD KANKAKEE HOPKINTON KANKAKEE	KANKAKEE HOPKINTON HOPKINTON KANKAKEE	KANKAKEE HOPKINTON HOPKINTON UNDIFF KANKAKEE
DELAWARE	SYSTEM	DEVONIAN DEVONIAN SILURIAN DEVONIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN	SICURIAN SICURIAN SICURIAN SICURIAN SICURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	1013 1016 1017 959	9953 1027 1032 937	948 982 1019 988	1015 1008 1032 1002	950 935 953 945	944 944 1008 965	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1042 1042 956 930
	WELL NO.	09206 06332 08211 17617 02830	03491 10154 06858 04293 06614	06149 05667 09384 07641 05751	09406 04805 14962 15398	14648 15441 02139 09731 06884	14578 11132 10048 02509 02703	16421 04986 15666 04803 04560	09461 10139 07883 16056 04257
	LOCATION TWP RGE SEC QUARTERS	087N 06W 22 NE SE SE 087N 06W 23 SW SW SW 087N 06W 24 SE NW SW 067N 06W 25 SE SW SE 087N 06W 30 SE NE NE	087N 06W 30 SW SW SW 067N 03W 31 SE NE NE 087N 06W 32 NW NW SW 087N 06W 32 SW SE SW 087N 06W 33 SW SW NW	087N 06% 34 SE SE NE 067N 06% 34 SW SE SE 087N 06W 35 NE SE NE 087N 06W 35 NE NE NW 06W 35 NE SE SW	087N 06W 36 SW NE NW 08BN 03W 01 SE NE 086N 03W 03 SW NE NW 08BN 03W 03 NE NE SW 005N 03W 04 NE NE NE	088N 03W 06 NE NW NW 088N 03W 07 NW NE NE NE O88N 03W 12 NE SW SW NE 085N 03W 12 NE NE SE SE	088N 03W 17 NE NE NE 086N 03W 17 SE SE SE 086N 03W 22 SE NW NE 086N 03W 22 SE SE SE 088N 03W 23 SE SE NW	088N 03W 25 NW NW NE 088N 03W 25 SW NE 088N 03W 25 SE SE 088N 03W 27 SW NE 088N 03W 27 NW SW	088N 03W 27 NE SW SW 088N 03W 34 SE NE NE O88N 03W 34 SE NE NE O88N 03W 35 SW SE NW

	TOTAL	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	105 230 100 100 44	0000	92 78 75 75 126	80 110 76 278 80	100 78 103 605 262	96 70 111 105 005	80 85 100 105 149
	FORMATION UNIT	KANKAKEE KANKAKEE EDGEWOOD HOPKINTON	HOPKINTON HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON HOPKINTON MAQUOKETA HOPKINTON	HOPKINTON NIAGARA UND HOPKINTON GALENA MAQUOKETA	HOPKINTON HCPKINTON HOPKINTON HOPKINTON NIAGARA UND	HOPKINTON HOPKINTON HOPKINTON NIAGARA UND PLEIST UND
	BOTTOM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN QUATERNARY
	DEPTH	30 60 150 0	100	30 30 30 22 22	8	35 10 10 10	021 04 04 0	# # # # # # # # # # # # # # # # # # #	0 t 0 t
COUNTY	BEDROCK TOP UNIT	KANKAKEE HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON	HOPKINNTONN HOPKINNTONN HOPKINNTONN	HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON HOPKINTON	HOPKINTON NIAGARA UND HOPKINTON NIAGARA UND HOPKINTON	HOPKINTON HOPKINTON HOPKINTON	HOPKINTON HOPKINTON NIAGARA UND
DELAWARE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	S S S S S S S S S S S S S S S S S S S	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SSILLURILLURILLURILLURILLURILLURILLURILL	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	918 1028 997 1042 1038	1043 1056 1044 1025	1022 1014 1032 1038	1025 1021 1020 1025 1011	1024 1000 1028 1025 1025	1046 1031 1030 1030	954 1045 1050 1031	1025 1017 1035 1022 1032
e"	VELL NO.	09194 04428 05384 07886 06857	07368 11160 06306 06609 03540	03488 03692 02501 03944	06100 04997 02510 05879 04799	05935 06758 03465 10437 04989	06307 06958 03998 17420	03337 17483 04191 03680	02511 05878 05877 04424 00167
!	ATION EC QUARTERS	36 NE NE SE 04 SE NW NW 09 NE NW SE 15 SW SE NE 16 NE SW SW	16 SW SW SW 16 SW NE SE 17 SW SE NE 17 NE NE SW 17 NE NE SW 17 NE NE SW 17 NE NE SW	33833 33833	17 SW NW SE 17 SE NW SE 17 SE NW SE 17 SE NW SE 17 SW SE	17 NE SW SE 17 NW SW SE 17 SE SW SE 17 NW SE SE 17 NW SE SE	17 SE SE SE 17 SE SE SE 17 SE SE SE SE 118 SE SE NW 18 SE SE NW 18 SW SE SE NW	19 SV SW SW 19 NV SE SW 20 NE NE NE 20 NE NE NE 20 NW NE NE	20 SW NE NE 20 NE NW NE 20 NE NW NW 20 NE NW NW 21 NW NW NW
	LOCA	088N 03W 088N 04W 088N 04W 088N 04W	088N 04W 088N 04W 088N 04W 088N 04W	00000 2222	ထောက္ကလေးတ	088N 04W 088N 04W 068N 04W 088N 04W 088N 04W	088N 04W 088N 04W 088N 04W 088N 04W	088N 04W 088N 04W 088N 04W 088N 04W 088N 04W	088N 04W 088N 04W 088N 04W 088N 04W

RIAN KANKAKEE 165 RIAN HOPKINTON 120 RIAN NIAGARA UND 165 RIAN HOPKINTON 160 RIAN HOPKINTON 170 RIAN NIAGARA UND 157 RIAN NIAGARA UND 157
RIAN KANKAKEE RIAN HOPKINTON RIAN NIAGARA UN RIAN HOPKINTON RIAN HOPKINTON RIAN NIAGARA UN
RRR RRIR RRIPA PA RIPA PA
SILUU SILUU SILUU SILUU SILUU SILUU SILUU SILUU
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
HOPKINTON HOPKINTON HOPKINTON LAPORTE CITY HOPKINTON NIAGARA UND VAPSIPINICON
SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN DEVONIAN
1047 1072 1072 1072 1018 1018
06003 10951 05753 17622 05109 09725 13613
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TOTAL DEPTH	132 132 198 159	270 180 64 74	180 125 100 129	177 131 183 685 241	135 805 125 127 160	165 130 125 125	11500	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FORMATION UNIT	LAPORTE CITY HOPKINTON KANKAKEE KANKAKEE HOPKINTON	MAGUOKETA KANKAKEE UNDIFF HOPKINTON HOPKINTON	KANKAKEE KANKAKEE KANKAKEE KANKAKEE NIAGARA UND	KANKAKEE NIAGARA UND MAQUOKETA 'PLEIST UND	KANKAKEE ST PETER KANKAKEE EDGEWOOD KANKAKEE	KANKAKEE NIAGARA UND KANKAKEE KANKAKEE HOPKINTON	HOPKINTON KANKAKEE HOPKINTON NIAGARA UND	HOPKINTON HOPKINTON HOPKINTON HOPKINTON
BOTTOM	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN QUATERNARN	SILURIAN ORDOVICIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
DEPTH	130 173 145 145	120 165 165 340 35	4 7 8 8 9 5 8 8 7 7	110 110 240	100200 10020	2 2 2 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	00 n n n	20000 20000 20000
BEDROCK TOP UNIT	WAPSIPINICON KANKAKEE KANKAKEE HOPKINTON	KANKAKEE KANKAKEE UNDIFF HOPKINTON	KANKAKEE NIAGARA UND KANKAKEE NIAGARA UND	KANKAKEE NIAGARA UND HOPKINTON MAQUOKETA	KANKAKEE NIAGARA UND KANKAKEE HOPKINTON UNDIFF	NIAGARA UND NIAGARA UND HOPKINTON NIAGARA UND	HOPKINTON HOPKINTON HOPKINTON NIAGARA UND	NIAGARA UND HOPKINTON HOPKINTON HOPKINTON HOPKINTON
SYSTEM	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
ELEVA- TION	1075 1048 1080 1068	1073 1104 999 998 1002	1104 1020 1038 982 1035	1008 1048 1012 1022 1020	1082 1094 1079 1022 1096	1087 1140 1085 1068	1070 1081 1080 1082 1061	938 1063 1054 1054
WELL NO.	09693 06340 07636 05684 05881	01671 07177 04425 04423 02917	09373 12767 10113 06606 09385	05403 10573 08029 01509 07344	15287 17860 13886 05391 03990	09159 18386 10143 17459 03689	02727 03490 03504 03682 09983	09718 02615 07635 03947 04068
LOCATION TWP RGE SEC QUARTERS	088N 06W 20 SW NW SE 088N 06W 26 SW NE SE 089N 03W 03 NW SE SW 089N 03W 04 SE NW NE 089N 03W 04 SE NW NW	089N 03W 05 NE NE NE NE 089N 03W 05 NW SE NE 089N 03W 11 SE SW NE 089N 03W 11 NW SE NW	089N 03W 13 SE NW NW 089N 03W 16 SW NW SE NE 089N 03W 20 NW SE SE 089N 03W 28 SW SE SE	089N 03W 29 SE SE SW 089N 03W 33 SE NE NE 085N 03W 33 SW SW SE 089N 03W 34 SW SE	089N 04W 03 SE SW NE 089N 04W 04 SW SW SE 089N 04W 06 SW SE SW 089N 04W 11 NW NE SW 089N 04W 17 SE SE NE	089N 04W 21 SW NE NW 090N 04W 34 SE SW NW 089N 04W 27 SE NE NE NE 089N 04W 27 NE SW SW 089K 04W 31 NE SE SE	089N 04W 32 NE NE SW 089N 04W 32 SW NW SW 089N 04W 32 SE NW SW 089N 04W 32 NW SW SW 085N 04W 35 NW NW NW	089N 05W 36 SW SE SE 089N 05W 05 SE SW NW 089N 05W 06 NW SE NW 089N 05W 11 NW NE 089N 05W 11 SE SE SE
	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMATION TOTA PRGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION WELL ELEVA- SYSTEM UNIT DEPTH SILURIAN KANKAKEE 123 SILURIAN KANKAKEE 124 SILURIAN KANKAKEE 125 SILURIAN KANKAKEE 125 SILURIAN HOPKINTON 145 SILURIAN HOPKINTON 155 SILURIAN HOPK	LOCATION WELL ELEVA- SYSTEM BEDROCK TOP BOTTOM FORMATION TOTA SN GE SEC QUARTERS OLORATERS NO. TION WAPSIPINICON 130 DEVONIAN LAPOPTE CITY 16 SN GE SEC QUARTERS OSG 30 1075 DEVONIAN WAPSIPINICON 130 DEVONIAN LAPOPTE CITY 16 SN GE SE SW NE SE SW OF 36 NW SE SW NE NO 30 NW SE NW OF 36 NW SE NW OF 37 NW SE NW OF 34 NW OF 34 NW SE NW OF 34 N	LOCATION WELL PLOAT STEEN OLD	Parch Parc	LOCATION Vell ELEVA	Coloniar Coloniar	Color

	TOTAL DEPTH	96 798 1798 335	120 1870 117 125	145 149 60 175 153	8 2 2 4 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	152 215 200 135 100	269 150 169 110	1100 1100 1100 1100 1100 1100	22 23 23 13 13 18 18 18
	FORMATION UNIT	NIAGARA UND NIAGARA UND EDGEWOOD UNDIFF	KANKAKEE DPESBACH UNDIFF HOPKINTON	UNDIFF HOPKINTON HOPKINTON NIAGARA UND UNDIFF	ST PETER KANKAKEE MAQUOKETA KANKAKEE EDGEWOOD	HOPKINTON KANKAKEE KANKAKEE KANKAKEE KANKAKEE	MAQUOKETA KANKAKEE KANKAKEE KANKAKEE HOPKINTON	NIAGARA UND KANKAKEE EDGEWOOD	UNDIFF KANKAKEE N MAQUOKETA KANKAKEE KANKAKEE
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN CAMBRIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN SILURIAN
	DEPTH	35 20 137 145 13	10 105 80 85	70 75 22 141 132	1 85 1 92 1 92 1 80	140 45 90 20 60	130 130 30 10	30 30 7 21 0	21 15 10 17
COUNTY	BEDROCK TOP UNIT	NIAGARA UND NIAGARA UND NIAGARA UND UNDIFF HOPKINTON	HOPKINTON UNDIFF HOPKINTON HOPKINTON	UNDIFF HOPKINTON NIAGARA UND UNDIFF	HOPKINTON KANKAKEE NIAGARA UND KANKAKEE EDGEWOOD	HOPKINTON KANKAKEE NIAGARA UND KANKAKEE NIAGARA UND	HOPKINTON KANKAKEE HOPKINTON UNDIFF	NIAGARA UND KANKAKEE HOPKINTON HOPKINTON	UNDIFF HOPKINTON HOPKINTON HOPKINTON
DELAWARE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	99999999999999999999999999999999999999	1030 923 941 941	1065 1080 1080 1033	1140 1150 1094 1047	1116 1148 1101 1130	1165 1160 1139 1109	1073 998 1103 1062 1018	1019 1105 1059 1065
	WELL NO.	04471 03712 14995 11730 03221	09063 00085 04296 07134 03675	09105 04427 09092 10752 09982	01067 03495 17713 07361 04609	03974 12553 04294 10155 14851	05650 06101 09343 09305	04992 00270 00271 00565 01522	00172 16835 08865 07627 09356
	LOCATION TWP RGE SEC QUARTERS	089N 05W 27 SE SW SW 089N 05W 28 SE NW SW 089N 05W 29 SW NE SW 085N 05W 29 NW SW SW 089N 05W 29 SE NE SE	089N 05W 31 SE SW SW 089N 05W 32 SE NE NW 089N 05W 32 NE SW SW 089N 05W 33 NE NE NW 089N 05W 33 NW NE NW	089N 06W 04 NE SW NE 085N 06W 04 SE NW NE NW 089N 06W 11 SE NE NE 089N 06W 14 SE SE SW 089N 06W 31 SE SE NE	090N 03W 04 NE SE NE 090N 03W 08 SE SE NW 090N 03W 13 SE SE NE 090N 03W 28 SW NE NE 090N 03W 25 SE SE NE	090N.03W 31 SW SW NW 090N 04W 20 SW SE SW 090N 04W 25 SE SE SE 090N 04W 29 SW SW NE 090N 04W 33 SE SE SW	090N 05W 02 NW NW NE 090N 05W 10 SW NW NE 090N 05W 24 NE NE 090N 05W 25 NE NW NW 090N 05W 26 SW SW SE	090N 05W 27 SW SW SW NW 090N 06W 04 SW NW NE SW 090N 06W 04 NW NW NW SE 090N 06W 15 SW SW SE NW	090N 06W 15 SE SE 090N 06W 15 SW NW NW 090N 06W 17 SE SW NW 090N 06W 23 SW NE NE 090N 06W 23 SE SE NW

	TOTAL DEPTH	200
	ROTTOM FORMATION	EDGEWOOD HOPKINTON
	ROTTOM SYSTEM	SILURIAN
	DEPTH	OR
NTX	dO L	ON D
COUNTY	BEDROCK TOP UNIT	NIAGARA UND
DELAWARE	SYSTEM	SILURIAN
	WELL ELEVA- NO. TION	09358 1005 06093 1015
	VELL NO.	09358 06093
	LOCATION TWP RGE SEC QUARTERS	090N 06W 27 SW SW SE NW 090N 06W 28 SE NE NE

	TOTAL DEPTH	3 3 5 0 1 2 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5	167 210 210 184 265	141 230 231 130 125	100 110 125 255 250	111 118 119 119 119 119 119 119 119 119	1 90 90 1 1 0 2 1 0 2 1 0 2 2 1 0 2 2 1 0 2 2 1 0 4 4 1 0 4 4 1 0	420 175 196 196	170 210 220 220 200 200
	ORMATION UNIT	GALENA GALENA GALENA GALENA EDGEWOOD	EDGEWOOD MAQUOKETA KANKAKEE EDGEWOOD KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE EDGEWOOD	NIAGARA UND KANKAKEE EDGEWOOD KANKAKEE EDGEWOOD	KANKAKEE KANKAKEE KANKAKEE MAQUOKETA GALENA	EDGEWOOD KANKAKEE KANKAKEE KANKAKEE KANKAKEE	GALENA MAQUOKETA MAQUOKETA UNDIFF	KANKAKEE EDGEWOOD KANKAKEE KANKAKEE
	BOTTOM F SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	0 1 1 0 4 5 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	13 02	თ ი 4 ი ი ი ი	ល ១លល ១២៧	20 117 70 63	10 10 10 30 21	20 0 177 12	60 18 62 180
COUNTY	BEDROCK TOP UNIT	NIAGARA UND KANKAKEE KANKAKEE KANKAKEE NIAGARA UND	HOPKINTON NIAGARA UND	KANKAKEE NIAGARA UND NIAGARA UND KANKAKEE	NIAGARA UND KANKAKEE NIAGARA UND HOPKINTON	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	KANKAKEE KANKAKEE NIAGARA UND KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND UNDIFF	KANKAKEE NIAGARA UND NIAGARA UND KANKAKEE
DUBUQUE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	1094 1014 945 918	1045 965 1125 1062	907 1100 1085 1019	920 945 962 1000 1042	1066 1072 1064 1016 1026	893 891 962 936 1008	945 926 1020 1024 817	956 948 970 962 915
	WELL NO.	08692 08720 08728 17495	09073 17706 09217 10118	09793 18979 11155 15203 05216	11207 07520 09150 07542 08359	09193 17490 17127 09797	09975 12110 16643 07631	11139 14577 12115 15161 14800	11326 10153 14583 15771 14557
	LOCATION TWP RGE SEC QUARTERS	087N 02E 01 NW NE NW 087N 02E 01 SE NE SE 087N 02E 04 NE NE NW SW NW 087N 02E 09 SE SE SW SW	087N 02E 10 SW NW NE 087N 02E 10 SW SE NE SE 087N 02E 13 SW NW SE 087N 02E 14 SE SW SW 067N 02E 18 SE SE	087N 02E 21 SW SE NW 087N 02E 23 NW NE NW 087N 02E 27 SE NW SE 087N 02E 33 NE SW NE 087N 02E 34 NW SE SE	087N 02E 35 SE NE SE 087N 01E 02 BB NE SE 087N 01E 03 SE SW WW 087N 01E 10 NE SW NW 087N 01E 11 SE NW NW	087N 01E 11 SW SE SW 087N 01E 11 SE SW SE O87N 01E 14 NE NW NE 087N 01E 14 NE SE SE NE	187N 01E 19 SW SW SW 187N 01E 23 SE SE SW 187N 01E 26 NE NW SE SE NW SE SE NW NE SE SE NW NW NE	187N 01E 29 SE SW SW 187N 01E 34 NE NE NW 187N 01E 34 SW SW SW 187N 01W 03 NW NE NE NW 187N 01W 04 NE SE NW	87N 01W 15 SE SW NW 787N 01W 19 NE SW NE SW NE SW NE SW NE SW SW SW SW SW SW NW NE SE SW NW NE SE
	•						00000	00000	00000

	TOTAL DEPTH	999	207	4	122	0		103	N L	n N	215	00	196 193	N -	200	വം	278	10 0	סס		725	0 0	$\circ \circ$	9 4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	FORMATION UNIT	EDGEWOO	KANKAKEE MAQUOKETA	m	EDGEWOOD KANKAKEE	NIAGARA UND	KANKAKEE	KANKAKEE		KANKAKEE EDGEWOOD	KANKAKEE	<u></u>	EDGEWOOD KANKAKEE	ST PETER	T		LATT	GALENA	ALEN		PETER	GALENA	ᄪᄱ	GALENA GALENA GALENA
	BOTTOM	ILURIA		ILURIA	SILURIAN SILURIAN	ILURIA	ILURIA	SILURIAN	ILURIA	ILURIA	ILURIA	ILURIA	SILURIAN SILURIAN	RDOVIC		RDOVIC RDOVIC	RDOVICIA	ORDOVICIAN	RDOVICIA	ORDOVICIAN	RDOVICIA	ORDOVICIAN	RDOVICIA RDOVICIA	ORDOVICIAN ORDOVICIAN ORDOVICIAN
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DUBUQUE	SYSTEM	SILURIAN	SILURIAN	ILURIA	SILURIAN	ILURIA	ILURIA	ILURIA	SILURIAN	ILURIA	ILURIA	ILURIA ILURIA	SILURIAN	ORDOVICIA	ORDOVICIAN		RDOVI	ORDOVICIAN	RDOVICIA	SILURIAN	ILURIA	SILURIAN	SILURIAN	SILURIAN
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or *	VELL NO.	567	03588 10568 09786	788	369	683	09414 11738	803	323	09377 09162	788	102 308	03142		09491 08696	003 530	869	898	08709	872	02758	482	190	08684 08729 08722
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TOTAL DEPTH	200 363 285 200 150	185 205 131 186	230 230 230 200 200	200 1233 1250 220 170	285 200 200 62 185	220 105 210 69 225	185 225 225 225 255	225 200 150 400
FORMATION UNIT	GALENA GALENA GALENA EDGEWOOD	UNDIFF ST PETER KANKAKEE MAQUOKETA	EDGEWOOD EDGEWOOD MAQUOKETA KANKAKEE	MAGUOKETA TREMPEALEAU MAGUOKETA MAGUOKETA	MAGUOKETA GALENA MAGUOKETA EDGEWOOD KANKAKEE	MAGUOKETA UNDIFF MAGUOKETA KANKAKEE	EDGEWOOD KANKAKEE MAQUOKETA PR DU CHIEN EDGEWOOD	MAQUOKETA MAQUOKETA KANKAKEE EDGEWOOD GALENA
BOTTOM	ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN ORDOVICIAN SILURIAN	ORDOVICIAN CAMBRIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN	ORDOVICIAN SILURIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN
DEPTH	00	ង ជ	35 35 19	20 30 75	205	75 75	ដ	
BEDROCK TOP UNIT	KANKAKEE. UNDIFF	GALENA KANKAKEE ·	KANKAKEE NIAGARA UND	NIAGARA UND KANKAKEE	EDGEWOOD KANKAKEE	NIAGARA UND UNDIFF KANKAKEE	HOPKINTON	
SYSTEM	SILURIAN	ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN	
ELEVA- TION	838 1043 913 1104 1071	1030 1061 1126 984 1040	1010 1106 1096 1012 1059	1093 1111 1112 1047 994	1058 1074 1111 976 1082	1112 1029 1082 999 1022	1052 993 1095 1105	1132 1135 1100 1101 985
WELL NO.	05905 08727 09799 10729	15174 06303 15703 14565		11317 17980 22979 17109 10711	01725 09556 13015 03991 07887	10138 14616 10553 03082 10546	10146 05385 10120 09551 10130	11119 07894 15721 07020 12098
LOCATION TWP RGE SEC QUARTERS	088N 02E 34 SE NW NW 088N 02E 35 SW SW SW 088N 01E 03 NW SE SE 088N 01E 04 NW SW SE 088N 01E 09 NE SE NW	88N 01E 12 NE NE NE NE SEN 01E 15 NW NE NE SEN 01E 15 NE SE SEN 01E 18 SE SE SEN 01E 18 NW NE SEN 01E 18 NW	88N 01E 19 NE NW N 88N 01E 20 NE NE S 88N 01E 22 SW SE S 88N 01E 35 NW SE 86N 01E 36 SE S	088N 01W 06 SE NE SW 088N 01W 07 NE SE SW 088N 01W 07 NE NW NW SE 088N 01W 11 NW NW SW 088N 01W 11 SE NE NE	088N 01W 14 NE SW 088N 01W 16 NW NE SW 088N 01W 19 NW NW NW 088N 01W 22 SE SW NW 088N 01W 32 SW SE NE	088N 02W 01 NW NE SE 088N C2W 02 NW NW NW 088N 02W 02 SW SW SW 088N 02W 04 NW NW NW	088N 02W 05 NW NE SW 088N 02W 06 SE SE NE 088N 02W 11 SE SW NE 088N 02W 11 NW NW SE 088N 02W 12 SE SW NE	088N 02W 13 NE SE SW 088N 02W 13 NE NE SE SW 088N 02W 14 SE NW NE OBSN 02W 15 SW NE NW SW
	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION WELL ELEVA- SYSTEM BEDROCK TOP BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPTH N 02E 34 SE NW NW 05905 838 SILURIAN KANKAKEE 0 ORDOVICIAN GALENA 20 N 02E 35 SW SW SW 09799 913 SILURIAN KANKAKEE 0 ORDOVICIAN GALENA 28 N 01E 03 NW SE SE 10729 1104 SILURIAN EDGEWOOD 20 N 01E 04 NW SW SE NW 14967 1071 SILURIAN EDGEWOOD 15	LOCATION WELL ELEVA- SYSTEM UNIT DEPTH BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPTH N OZE 34 SE NW NW 052 35 SW SW SW 08727 1043 838 SILURIAN KANKAKEE 0 ORDOVICIAN GALENA 28 20 N OZE 35 SW SW SW 08727 10729 1104 110729 1104 SILURIAN UNDIFF 0 ORDOVICIAN GALENA 28 28 N OZE 35 SW SW SW SE 10729 1104 110729 1104 SILURIAN GALENA 28 20 N OZE 12 NW SW SE NW SE NW SE NW SE NW SE NW SE NW 16 1030 ORDOVICIAN GALENA 51 SILURIAN KANKAKEE 18 N OZE 12 NW NE NE SE SW 15703 1126 ORDOVICIAN KANKAKEE 15 SILURIAN KANKAKEE 16 N OZE 18 NW NE SW 11027 1040 SILURIAN KANKAKEE 15 15	Color Colo	Colombia Colombia	Colombie Colombie	COLONION COLONION	Color Colo

TOTAL DEPTH	0 8 9 9 8 9 9 8 9 9 9 9 9 9 9 9 9 9 9 9	200 120 212 212 25	200 140 160 100	96 110 91 64	11 60 30 11 00 00	9 9 100 100 100 100	1111 1210118 1210120	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FORMATION UNIT	EDGEWOOD MAQUOKETA EDGEWOOD KANKAKEE EDGEWOOD	MAQUOKETA MAQUOKETA MAQUOKETA EDGEVOOD MAQUOKETA	KANKAKE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE UNDIFF KANKAKEE	HOPKINTON KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE
BOTTOM SYSTEM	SILURIAN ORDOVICIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN CILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
DEPTH	32 00 00 00	0 4	11 13 13 13	2 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	100 35 45 105	ក្ន 4 ម 1 ម 1 ម	35 25 10 10	000000000000000000000000000000000000000
BEDROCK TOP UNIT	KANKAKEE HOPKINTON KANKAKEE KANKAKEE	HOPKINTON	NIAGARA UND KANKAKEE KANKAKEE	KANKAKEE HOPKINTON KANKAKEE KANKAKEE KANKAKEE	KANKAKEE UNDIFF KANKAKEE KANKAKEE	HOPKINTON KANKAKEE HOPKINTON KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE
SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
ELEVA- TION	1112 1030 1025 1005 1025	1085 1002 1125 1109	1102 992 1049 1045	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 1 3 2 8 9 1 9 1 9 1 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 9 3 1 1 1 8 8 8 8 8 1 1 1 1 1 8 8 8 8 1	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
WELL NO.	07888 06130 06935 06896 04646	10112 09168 14960 03341 09163	14702 07019 06899 07356 17206	04058 09917 12076 16085 07629	07633 13683 17216 04256	04647 14013 04210 16094 07876	10254 10559 11129 11745	03123 07628 11709 06792 07352
LOCATION TWP RGE SEC QUARTERS	088N 02W 18 SE SW NE NE 088N 02W 19 SE SW NE NE 088N 02W 19 SE SW NE NE 088N 02W 19 NE NE SW NE 088N 02W 20 NW NE	088N 02W 21 NE SE NE 088N 02W 21 SE SW SW 088N 02W 24 NW NE NE 086N 02W 24 SW SW NE 088N 02W 24 NE SE NW	083N 02W 24 NW SW SE 088N 02W 28 SE SE NE 088N 02W 28 SE SE SE 088N 02W 28 NE SE SE 065K 07W 29 SW SW SE SW	088N 02W 29 SW SW SE SE 088N 02W 30 NW NW SW 088N 02W 30 SE NE SW SE 085N 02W 30 NW SW SW SE 088N 02W 30 NE SE SW SE	088N 02W 30 NE SE SW SE 066K CZW 30 NE SE SV SE 086M 02W 30 SE SE SW SE 088N 02W 30 NW SE SE 088N 02W 30 SW NW SE SE	085N 02W 30 SE SE SE 085N 02W 31 NE NE NE 086N 02W 31 NW NE 088N 02W 31 NW NE 088N 02W 31 NW NE NW NE	085N 02W 31 SW NE NW NE 085N 02W 31 SW NE NW NE 085N 02W 31 SW NE NW NE 085N 02W 31 SW NE NW NE	08EN 02W 31 NW NW NE 08EN 02W 31 NW NW NE 08EN 02W 31 NW NW NE 083N 02W 31 NW NW NW NE 08EN 02W 31 NW NW NE
	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMATION TOTA P RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION WELL ELEVA- SYSTEM UNIT DEPTH BOTTOM FORMATION TOTA 88N 02W 18 SE SE SW 07688 1112 07688 1112 SILURIAN KANKAKEE 35 ORDOVICIAN MAGUOKETA 15 SILURIAN KANKAKEE 10 SILURIAN EDGEWOOD 12	LOCATION WELL ELEVA- SYSTEM DEPTH BOTTOM FORMATION TOTA 88N 02W 18 SE SE W NE NE 06130 02W 19 SE SW NE	WP RGE SEC QUARTERS WELL ELEVA- SYSTEM UNIT DEPTH SYSTEM UNIT DEPTH 88N 02W 18 SE SC QUARTERS NO. 710N 710	Per Per	UP REF SEC OUARTERS WELL FLEVA- SYSTEM UNIT PEPT NOTE 68N 02W 16 SE SE SW NE NE OF 058 B 112 112 SILURIAN RANKAKEE 35 SILURIAN PORKUTAN PORKUNDO PORT NATION PORT NATION PORKUNDO PORT NATION PORKUNDO PORT NATION PORT NATI	Partial Color Partial Colo	Coloration Col

	TOTAL DEPTH	65 101 80 112 145	100 83 81 446	56 60 73 75	200 100 134	115 1560 1811 1504 1782	1522 1343 20 190 170	2235 235 235 255 255 255	250 250 250 250 250
	FORMATION UNIT	KANKAKEE KANKAKEE KANKAKEE KANKAKEE N MAQUOKETA	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE EDGEWOOD	KANKAKEE DRESBACH DRESBACH	DRESBACH MT SIMON N ST PETER N ST PETER N ST PETER	DRESBACH N ST PETER N DECORAH	N DECORAH N GALENA N PLATTEVILLE N PLATTEVILLE N DECORAH
	BOTTOM	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIA	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN CAMBRIAN PRECAMB CAMBRIAN PRECAMB	CAMBRIAN CAMBRIAN ORDOVICIAN ORDOVICIAN	CAMBRIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN
	DEPTH	200 200 200 200 200 200 200 200 200 200	320 320 320	35 15 57 110	28 28 28 28 28	65 104 107 137	225 337 13	100 10	0000 400000
COUNTY	BEDROCK TOP UNIT	KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE	UNDIFF KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE HOPKINTON HOPKINTON KANKAKEE	KANKAKEE GALENA ST PETER ST PETER ST PETER	PR DU CHIEN PR DU CHIEN GALENA	DEC-PLATTE GALENA GALENA	GALENA GALENA GALENA GALENA GALENA
DUBUQUE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	PENN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN
,	ELEVA- TION	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	921 931 920 915	911 912 921 922	933 941 991 1017	1008 631 614 610	612 605 620 721 717	6 6 6 8 8 5 5 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	84 8 8 4 1 8 6 3 3 8 6 3 1 8 6 1 1 1 8 6 1 1 1 8 6 1 1 1 1
. '-	VELL NO.	16106 11994 07365 17655	07630 11201 06897 09715 07675	11683 18122 09724 17204 13895	03338 10256 10141 11224 06593	09972 00974 00121 00087 02363	03101 00129 06581 13013	01709 07513 07524 05686 05685	05687 05688 05295 05434 05433
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	ION QUART	SZZZZ	SNSS	SSSSS	N N N N N N N N N N N N N N N N N N N	S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	SEE	SZESZ
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	TWP R	N N N N N N N N N N N N N N N N N N N	N N N N N S S S S S S S S S S S S S S S	088N 088N 088N 088N 088N	N N N N N N N N N N N N N N N N N N N	N N N S S S S S S S S S S S S S S S S S	00000000000000000000000000000000000000	N N N N N S S S S S S S S S S S S S S S	00 80 00 00 00 00 00 00 00 00 00 00 00 0

	TOTAL DEPTH	2225 225 210 215 215 216	2280 2560 255 255	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23 11 10 10 10 10 10 10 10 10 10 10 10 10	2220 305 205 210	2210 210 135 327	2200 200 200 200 200	00000 00000 00000
	BOTTOM FORMATION SYSTEM UNIT	ORDOVICIAN PLATTEVILLE ORDOVICIAN PLATTEVILLE ORDOVICIAN PLATTEVILLE ORDOVICIAN DECORAH	ORDOVICIAN DECORAH ORDOVICIAN PLATTEVILLE ORDOVICIAN PLATTEVILLE ORDOVICIAN PLATTEVILLE ORDOVICIAN GALENA	ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN PLATTEVILLE	ORDOVICIAN GALENA ORDOVICIAN DECORAH ORDOVICIAN DECORAH ORDOVICIAN GALENA	ORDOVICIAN GALENA ORDOVICIAN DECORAH OREOVICIAN DECORAH ORDOVICIAN DECORAH ORDOVICIAN GALENA	ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN BECORAH	ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN DECORAH ORDOVICIAN GALENA ORDOVICIAN GALENA	ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN GALENA ORDOVICIAN GALENA
	DEPTH	112 0 10 10	1110 09800	20 5	ក្រ ក្រ ក ១១១១ ១១១១	10 10 20	8 10	6 10	19 25
COUNTY	BEDROCK TOP UNIT	GALENA GALENA GALENA GALENA GALENA	GALENA GALENA GALENA GALENS GALENS	MAQUOKETA GALENA	GALENA GALENA GALENA GALENA	MAQUOKETA GALENA MAGUCKETA GALENA	GALENA MAQUOKETA	MAQUOKETA MAQUOKETA	МАФИОКЕТА
DUBUQUE	SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN	ORDOVICIAN
	ELEVA- TION	8 5 5 1 8 5 1 8 5 1 8 8 1 1 1 8 0 4 4	806 805 811 7931	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	288 286 444 444 444 444 444 444 444 444 444 4	80 00 00 00 00 00 00 00 00 00 00 00 00 0	9017 9015 9039 9039	88 8 8 7 5 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	WELL NO.	05297 05296 05274 05274 05279	05278 05277 05277 05276 05276	07522 07538 14953 15130	07528 14681 14798 14580 02365	14703 05207 05272 05908 06576	06577 07529 09755 05429 05909	07532 07545 05902 07537 13400	10996 08686 15620 11003 06583
	LOCATION TWP RGE SEC QUARTERS	89N 02E 06 NW NW SW SE 889N 02E 06 SW NW SW SE 889N 02E 08 SW NE NE NW 889N 02E 08 NW NW NW 885N 02E 08 NE NW NW	89N 02E 08 NE NW NW NW NW 889N 02E 08 NE NW NW NW 889N 02E 08 NE NW NW NW 889H 02E 08 NE NW NW NW NW NW NW	185N 02E 09 SE SW 189N 02E 09 SE SW 65N 02E 09 NW SW SE 185N 02E 09 SE SW SE 185N 02E 10 NW NE SW	89N 02E 10 SW SW SW 6EN 02E 11 SV SE SV 6EN 02E 11 SV SE SF SW 665N 02E 11 SE SE SE SW 89N 02E 12 SE SE NV	189N 02E 15 SE NW NW 185% 02E 16 SW NE NE 185% 02E 16 NE SW NE NE 189N 02E 16 SE NE NE 185N 02E 16 SE NE	189N 02E 16 SE NE 185N 02E 16 SE NE 185N 02E 16 NW SE NE 189N 02E 16 SW NE SE 189N 02E 16 SW SE	89N 02E 17 NZ SW 89N 02E 17 NW SW 89N 02E 17 NW SW SE 69N 02E 18 SE NE 89N 02E 19 SE SW NW NE	89N 02E 19 NE SW NE 3689N 02E 20 NE NE NW SW SW 899N 02E 20 NE NW NE 898N 02E 20 NE NW
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	TOTAL DEPTH	152 153 250 200 200	1478 900 1900	00	1115 3000 128 490	20 88 8900 8900 890	1350 1300 106 235 202	180 200 150 148	124 135 155 165	163 225 200 200
	FORMATION UNIT	N GALENA N GALENA N GALENA N DECORAH N GALENA	DRESBACH DRESBACH	N PR DU CHIEN N PR DU CHIEN	PLEIST UND PLEIST UND PR DU CHIEN PLEIST UND TREMPEALEAU	Y PLEIST UND TREMPEALEAU N PR DU CHIEN TREMPEALEAU	DRESBACH DRESBACH N GALENA N GALENA N DECORAH	N GALENA N GALENA N GALENA N GALENA N GALENA	N GALENA N PROSSER N GALENA N GALENA	N GALENA N DECORAH N GALENA TREMPEALEAU N GALENA
	BOTTOM	ORDOVICIA ORDOVICIA ORDOVICIA ORDOVICIA ORDOVICIA	CAMBRIAN	4 4	QUATERNARY QUATERNARY ORDOVICIAN QUATERNARY CAMBRIAN	QUATERNARY PRECAMB CAMBRIAN ORDOVICIAN CAMBRIAN	CAMBRIAN CAMBRIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN CAMBRIAN
	DEPTH	25.55	175	125 155	143	154 156 155	193 170 10 15	15	25	22
COUNTY	BEDROCK TOP UNIT	MAGUOKETA Galena	PR DU CHIEN	PLATTEVILLE PR DU CHIEN	PLATTEVILLE	PR DU CHIEN ST PETER PR DU CHIEN	ST PETER PR DU CHIEN GALENA MAQUOKETA GALENA	MAQUOKETA	MAQUOKETA	MAQUOKETA
DUBUQUE	SYSTEM	ORDOVICIAN ORDOVICIAN	ORDOVICIAN	ORDOVICIAN ORDOVICIAN	ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	GRDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN MAQUOKETA	ORDOVICIAN	ORDOVICIAN MAQUOKETA
	ELEVA- TION	890 931 919 830 881	~ დ.	638 624	60366666666666666666666666666666666666	613 608 607 626 606	607 770 824 840	808 826 826 826	8 8 8 8 2 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8	888888 8888 8888 8888 8888
and the	VELL NO.	06578 07063 11315 05430 05427	142	06042 00762 00767	08002 08003 00756 03498 01083	02946 00008 10710 00793 00562	00911 00109 09977 00206 08706	07512 16004 07509 07511 10882	07534 07530 12518 07517 10905	13385 05975 10040 08708 12093
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	TOTAL DEPTH	247 231 295 288	2265 1985 1986 1986	. കയക്ക	240 225 255 148	2 8 8 8 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	404 112 137 140 130	1230 1230 2655 1300 1300	70000000000000000000000000000000000000
	FORMATION UNIT	DECORAH GALENA DECORAH PLATTEVILLE	DECORAH GALENA GALENA GALENA	DECORAH DECORAH PLATTEVILL DECORAH PLATTEVILL	DECORAH DECORAH GALENA PLATTEVILLE	GALENA GALENA GALENA GALENA EDGEWOOD	GALENA EDGEWOOD EDGEWOOD GALENA GALENA	GALENA DRESBACH GALENA GALENA GALENA	GALENA GALENA MAQUOKETA MAQUOKETA MAQUOKETA
	BOTTOM SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	RDOVICIA RDOVICIA RDOVICIA RDOVICIA RDOVICIA	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN	ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	ORDOVICIAN CAMBRIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN
	DEPTH	55 17 35 12	65 15 15	000000 00000	3 1 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ນ ຕ ສ	10 40 25	2 5 5	<u>က</u>
COUNTY	BEDROCK TOP UNIT	GALENA MAQUOKETA GALENA GALENA GALENA	GALENA GALENA GALENA	GALENA GALENA GALENA GALENA GALENA	GALENA MAQUOKETA MAQUOKETA GALENA GALENA	МАQUOKETA МАQUOKETA	KANKAKEE KANKAKEE KANKAKEE	MAQUOKETA MAQUOKETA	KANKAKEE
DUBUQUE	SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORBOVICIAN ORBOVICIAN ORBOVICIAN ORBOVICIAN ORBOVICIAN	. ORDOVICIAN	SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN	SILURIAN
	ELEVA- TION	755 825 763 817 761	795 821 770 770	⊣ ოოით თ	805 808 805 713	884 1030 1048 1009	1120 1121 1131 772 774	1098 889 883 1131	1125 1118 1138 1185 1201
·	WELL NO.	08691 08716 C0081 C0082 05270	05428 15039 10883 10886	75 2 533 523 523 530 530 530	05301 02859 07518 05904 05910	11602 07519 07536 14843 18937	10135 10009 03973 11311 07892	00660 02767 02712 07064 09272	09371 09271 15386 04984 10549
	LOCATION TWP RGE SEC QUARTERS	089N 02E 33 SW NW 089N 02E 33 SE NE SW 089N 02E 33 SE NE SW 089N 02E 33 NE NE SE 089N 02E 33 SW SE	089N 02E 33 SE SW SE 089N 02E 34 NE SE SE NW 089N 02E 35 NE SE SE SW 069N 02E 35 NW SW SV SE	89N 02E 36 NE N 89N 01E 01 SE S 89N 01E 01 SV S 89N 01E 01 NE N 89N 01E 01 NE N	89N 01E 01 NE NE SW S 89N 01E 05 SW SW SW N 89N 01E 10 SE SW NE N 89N 01E 11 SE SE SE 89N 01E 12 NE NE NE	089N 01E 13 NW SE NW 085N 01E 13 NW SW 089N 01E 14 NE SE SE 089N 01E 17 SW NW 089N 01E 20 NE SW NW	089N 01E 27 NE SW NW 089N 01E 27 NW SE SW 089N 01E 28 NW SE 089N 01E 29 NW SE NW 089N 01E 32 SE SE	089N 01E 35 SE SE NW 089N 01E 36 SW NW NE 089N 01E 36 NW SW NE 085N 01W 09 SE NW SW 089N 01W 09 NW NW SE	089N 01W 10 NW SE NE 089N 01W 14 NW SW NE 089N 01W 15 SE NE NE 089N 01W 17 SE NE 089N 01W 17 SW NW SE

	TOTAL DEPTH	000000 0000000000000000000000000000000	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	၁ဝ	TU:	< €	2000 2000 4000	288	(1) (2) (a)	9.4 6.30		447- 9000-	~ 4	200 000 000	177 E.	146 200 133 167 270
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	BOTTOM SYSTEM	ORDOVICIA ORDOVICIA ORDOVICIA ORDOVICIA ORDOVICIA	CAMBRIAN	1/1		ORDOVICIA	ORDOVICIA ORDOVICIA ORDOVICIA	ORDOVICIAL ORDOVICIAL	RDOVICIA RDOVICIA	ORDOVICIAN ORDOVICIAN STIMBIAN	OVICIA	ORDOVICIAL ORDOVICIAL ORDOVICIAL	DOVICIA	4 I A	SILURIAN	QUATERNAR SILURIAN SILURIAN SILURIAN ORDOVICIAN
	DEPTH	158		e -	15	15	30 3	15 O	មួយ	52.		10	10	107	95	80 105 15
COUNTY	BEDROCK TOP UNIT	PR DU CHIEN	PR DU CHIEN		MAQUOKETA	MAQUOKETA	MAQUOKETA GALENA MAQUOKETA	MAGUOKETA GALENA	KANKAKEE HOPKINTON	KANKAKEE Kankakee	KANKAKEE	KANKAKEE KANKAKEE	KANKAKEE	KANKAKEE HOPKINTON	KANKAKEE KANKAKEE	KANKAKEE HOPKINTON HOPKINTON
DUBUQUE	SYSTEM	ORDOVICIAN	ORDOVICIAN	SILURIAN	ORDOVICIAN	ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN	SILURIAN	SILURIAN SILURIAN	ILURIA	SILURIAN SILURIAN	SILURIAN	SILURIAN	SILURIAN SILURIAN	SILURIAN , SILURIAN SILURIAN
	ELEVA- TION	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	63 1222 522	18	0	0.0	9 9 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	838 795	000	1102	111	1145 1100 950	V	1153	2 I I	1173 1141 1158 1160 1161
	WELL NO.	07539 06295 01142 10453 15000	02138 12516	100 109	873	0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43	07515 07515 05406 04999	05903	0000	446 270	၁ယတ	09549 09794 11324	757 923	04076	5 4 4 5 4 4 5 4 7	03133 10217 05564 05561 04069
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	TOTAL DEPTH	132
	BOTTOM FORMATION SYSTEM UNIT	KANKAKEE V PLEIST UND
	BOTTOM SYSTEM	SILURIAN
	DEPTH	80
COUNTY	BEDROCK TOP UNIT	KANKAKEE
DUBUQUE	SYSTEM	SILURIAN
	ELEVA- TION	03075 1009 04065 1011
· ·	WELL NO.	03075 04065
	LOCATION TWP RGE SEC QUARTERS	090N 02W 31 NW SE SW 090N 02W 31 SW SE

	TOTAL DEPTH	130 130 200 14 205 205	1328 1315 1315 1417	104 104 157	155 1312 170 153 156	150 224 150 126 850	115 175 90 216 175	2 2 2 2 2 2 2 4 4 4 5 5 4 5 5 4 5 5 4 5 5 4 5 5 5 4 5	123 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	FORMATION UNIT	KANKAKEE MAQUOKETA MAQUOKETA HOPKINTON UNDIFF	HOPKINTON TREMPEALEAU TREMPEALEAU TREMPEALEAU	KANKAKEE MAGUOKETA UNDIFF KANKAKEE	MAQUOKETA TREMPEALEAU KANKAKEE EDGEWOOD KANKAKEE	EDGEWOOD MAQUOKETA KANKAKEE HOPKINTON PR DU CHIEN	CEDAP VALLEY KANKAKEE WAPSIPINICON GALENA MAQUOKETA	PR DU CHIEN GALENA MAGUOKETA MAGUOKETA ST PETER	TREMPEALEAU MAGUOKETA MAGUOKETA MAGUOKETA
	BOTTOM	SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN CAMBRIAN CAMBRIAN CAMBRIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN	ORDOVICIAN CAMBRIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	DEVONIAN SILURIAN DEVONIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	CAMBRIAN ORDOVICIAN ORDOVICIAN
	DEPTH	152 130 125 175 61	120 290 44 7	0 m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	66 55 95 65 95 65 65 65 65 65 65 65 65 65 65 65 65 65	45 70 135 5	1558 82 1250 125	15 60 67	220 220 55 55
COUNTY	BEDROCK TOP UNIT	KANKAKEE NIAGARA UND KANKAKEE HOPKINTON WAPSIPINICON	HCFKINTON HOPKINTON NIAGARA UND HOPKINTON NIAGARA UND	KANKAKEE KANKAKEE UNDIFF KANKAKEE	KANKAKEE HOPKINTON KANKAKEE	KANKAKEE CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY KANKAKEE WAPSIPINICON MAQUOKETA KANKAKEE	MAOUOKETA KANKAKEE CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY MAQUOKETA MAQUOKETA CEDAR VALLEY
FAYETTE	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN DEVONIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN DEVONIAN	DEVONIAN SILURIAN DEVONIAN ORDOVICIAN SILURIAN	ORDOVICIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN ORDOVICIAN ORDOVICIAN DEVONIAN
	ELEVA- TION	1166 1129 1128 1119 1066	1072 1052 1045 1042 1120	1005 1001 1063 1043	1094 1147 1143 1111	1104 1154 1163 1093	1104 1111 1010 1184 1195	1130 872 870 1169 1182	1068 1159 1072 1032 1129
	WELL NO.	02842 10988 14099 01246 14481	02786 01511 04631 10708	12789 03638 02781 02777 04037	01277 07201 06142 01896 03299	03323 01937 13037 02407 08873	04948 16863 04875 12148 17233	10025 15826 17468 02847 01715	17046 20131 18145 17237 16023
	LOCATION RGE SEC QUARTERS	N 07W 17 SW NE NE SE N 07W 22 NE NE NW N 07W 22 NE NE NW N 08W 32 NE SE SW N 09W 08 NW NE NW NE	N 09W 19 SE SE SE N 09W 21 NW SW NW N 09W 21 NW SE N N 09W 21 NW SE N 09W 22 SW SE	N 09W 33 SE SE N 10W 33 SW SW NW N 10W 36 NE NW NW N 10W 36 SW SE E 07W 07 NW SE SW	N 07W 17 SE SE SE N 07W 27 NW SW N 07W 28 SW SW SW N 07W 28 NE SE N 07W 28 SW NE NE SE	N 07W 28 NW NW SE R 07W 28 SW SW SE N 07W 32 NW NE SW N 09W 15 NE SE SE N 09W 23 NW NW	H 09W 32 SW NW NW NW 110W 28 SW NW NW NW NW 07W 02 NW SE NW NW NW NW 07W 05 NW 05 NW NE	N 07W 09 NE NW NE N 07W 27 SE SE NW N 07W 27 NW SW SW SW N 08W 03 SW SW SW N 08W 06 SW SW SW NE	N 08W 29 NW SW SW NV 10W 19 SE SW
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	TOTAL DEPTH	2 9 9 4 4 1 5 0 0 1 5 0 0 1 1 5 0 0 1 1 5 0 0 1 1 1 1	158 120 229 959	83 117 275 225	266 3195 101 282	78 78 78 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2007 2007 2008 2008 2008	672
	FORMATION UNIT	NIAGARA UND MAQUOKETA MAQUOKETA WAPSIPINICON EDGEWOOD	HOPKINTON CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	PLEIST UND GALENA MAQUOKETA GALENA GALENA	GALENA GALENA GALENA MAQUOKETA GALENA	GALENA ST PETER GALENA GALENA MAQUOKETA	MAGUOKETA MAGUOKETA PR DU CHIEN MAGUOKETA UNDIFF	ST PETER TREMPEALEAU
	BOTTOM	SILURIAN ORDOVICIAN ORDOVICIAN DEVONIAN SILURIAN	SILURIAN DEVONIAN DEVONIAN DEVONIAN	QUATERNARY ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN	ORDOVICIAN CAMBRIAN
	DEPTH	20 20 40 77	93 117 200 78	15 16 16	2 8 4 0 8 3 12 18	4 42± 00 7 8 8 0	13 4 4 0 2 1 4 0 2 0 0 1	122
COUNTY	BEDROCK TOP UNIT	NIAGARA UND KANKAKEE WAPSIPINICON CEDAR VALLEY KANKAKEE	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	MAQUOKETA MAQUOKETA MAQCOKETA	MAQUOKETA MAQUOKETA MAQUOKETA MAQUOKETA MAQUOKETA	MAQUOKETA EDGEWOOD MAQUOKETA UNDIFF	MAQUOKETA CEDAR VALLEY CEDAR VALLEY WAPSIPINICON	UNDIFF CEDAR VALLEY
FAYETTE	SYSTEM	SILURIAN SILURIAN DEVONIAN SILURIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	CORDOVICIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN DEVONIAN DEVONIAN SEVONIAN	SILURIAN DEVONIAN
	ELEVA- TION	1111 1111 1040 1184 1059	1092 1219 1225 1241 1184	11.67 11.192 11.17 10.62	1010 921 1031 1157 1150	1117 1182 1068 1151 1070	1085 1151 1227 1047 1034	1034
	WELL NO.	08614 08616 12643 02843 16859	19618 16865 02844 02846 12627	03353 08349 08339 04564 08473	16134 16036 17436 12620 18392	17244 11327 11980 12798 12798	16099 17463 04512 03354 19577	04637 02810
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	LOCATION E SEC QUARTE	NONS	N N N N N N N N N N N N N N N N N N N	N S S N N N N N N N N N N N N N N N N N	N N N N N N N N N N N N N N N N N N N	SEE	NNSSE	S S E E
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	BOTTOM	EVONIA	DEVONIAN DEVONIAN DEVONIAN	EVONTA	DEVONIAN DEVONIAN		EVONIA	DEVONIAN	EVONIA	EVONIA	DEVONIAN	CAMBRIAN	EVONIA	EVONIA	DE VON I AN DE VON I AN	DEVONIAN	EVONIAN	DEVONIAN	EVONIA	EVONIA	DEVONIAN DEVONIAN	DEVONIAN DEVONIAN	DEVONIAN DEVONIAN
	DEPTH	87	4 K (a N 4		6.50			30 20		2 7 2 0		t CO	4 4		185	15	γω (Ο Ο (100	20		10 40	R 4	135 75
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FLOYD	SYSTEM	EVONIA	DEVONIAN DEVONIAN DEVONIAN	EVONIA EVONIA	DEVONIAN	EVONIA	EVONIA	DEVONIAN DEVONIAN	EVONIA	EVONI	VONIA	RETACE	, DEVONIAN	DEVONIA	DEVONIAN DEVONIAN	EVONIA	DEVONIAN	EVONIA	EVONIA	EVONIA	DEVONIAN DEVONIAN	EVONIA	DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	44	986 1065 1052	80 03	1079	0 0	000	1046 1034	04	1025	120	0 0 0	0.7	107	1127	0 3	1020	0 0 4	0 0	0 0	1010	00	1013 1013 1014
	WELL NO.	549 594	13096 15671 10969	216	15031	283	321 868	15182 08581	182	20364		237	213	184	11368	177	06338	007	102	688	13948	556 471	04869 15317 02751
	LOCATION TWP RGE SEC QUARTERS	94N 15W 01 SE NE N 94N 15W 04 SE SE N	094N 15W 12 NE NW SE 094N 15W 21 SE SE NE 094N 15W 22 SW SW NW	94N 15V 26 NV NE 94N 15V 28 NE NE	094N 15W 31 NE NE NE 094N 15W 31 SE SE NE	94N 16W 10 SW NW	94N 16V 21 SE SV 94N 16W 25 NE NE	094N 16W 30 SE SE SW 094N 17W 07 NW NW NE	94N 17W 07 SW SW	94N 17W 10 SE S 94N 18W 04 NE N	13u	95N 15W 06 SE NW	95N.15W 09 SW SE SW	95N 15W 11 NW NW	095N 15W 13 NE NW NE 095N 15W 15 SW SW SW	95N 15W 16 SW NW	095N 15W 20 NW NE SW	95N 15W Z1 NE NE 95N 15W Z3 NW SW	95N 15W 23 SW SW S	95N 15W 26 NE NE N	095N 15W 29 NE NE NE 095N 15W 35 NE NE SE	95N 15W 35 NE NW N 95N 16W 01 NW NE N	095N 16W 01 NW NE NE 095N 16W 01 NW NE NE 095N 16W 01 SE NE SE

	TOTAL DEPTH	55 65 110 105	3336 3346 3466 3466	1587 1385 1355 250 159	260 120 160 75	171 68 160 40 300	232 232 286 136	22 000 011 0000 0000	1220 1220 1220 1220 1220 1220 1220 1220
	ORMATION	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY MAQUOKETA MAQUOKETA MAQUOKETA	TREMPEALEAU TREMPEALEAU CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY SHELL ROCK CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	PLEIST UND PLEIST UND CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
	BOTTOM F SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	CAMBRIAN CAMBRIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	QUATERNARY QUATERNARY DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	DEPTH	22 4 4 5 5 4 8 8 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 4 0 0	30 152 83	4 8 8 5 6 0 13 18 0 8	238 238 20 20 20	170 211 3 220 85	35 107 252	110 105 125 36 7
COUNTY	К T0P	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	REEK VALLEY ROCK VALLEY	VALLEY ROCK REEK REEK	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY
S	BEDROCK UNIT	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	LIME CI CEDAR UNDIFF SHELL CEDAR	CEDAR SHELL UNDIFF LIME C	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR
FLOYD	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN CRETACEOUS DEVONIAN DEVONIAN	DEVONIAN DEVONIAN CRETACEOUS DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1011 1013 1046 1051 1068	1035 1038 1038 1037	1007 998 1048 1105	1093 1085 1033 1055	1033 1035 1027 1117 1097	1165 1173 1081 1168	1160 1122 1052 1054 1133	1132 1106 1124 1098
	WELL NO.	11135 12146 17479 17481	11797 15853 02803 05271 06570	000114 00020 06937 17471 17507	09198 15755 17056 09155 13008	09282 20986 01768 08903 11541	12151 14462 17432 11799	21031 12495 11358 17218 13082	12167 11227 11206 13048 11793
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	BOTTOM	EEEEE SS S S S S S S S S S S S S S S S S	MISS MISS DEV & MISS DEV & MISS	M M M M M M M M M M M M M M M M M M M	MISS MISS MISS MISS MISS DEVONIAN	DEVONIAN DEV & MISS DEVONIAN DEV & MISS MISS	M ISS SS SS S	MISS QUATERNARY MISS MISS	MISS MISS QUATERNARY MISS MISS
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FRANKL IN	SYSTEM	W W W W W W W W W W W W W W W W W W W	MISS MISS DEV & MISS MISS MISS	MISS SMISS S	MISS MISS PENN MISS DEV & MISS	DEV & MISS MISS DEV & MISS MISS MISS	XXXXX NN NN N NN NN N NN NN N	NO SON NO N	M MINS S S S S S S S S S S S S S S S S S S
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	VELL NO.	12735 08871 10767 12432 11167	17636 20363 12746 03269 02342	09040 17627 17634 12748 12443	15527 12738 12901 12342 17320	08358 12384 03913 10786	19343 12913 11564 14856 11464	02311 12343 11568 09571 11211	11147 15623 12797 12918
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BOTTOM SYSTEM	EVONIAN EVONIAN HATERNAR	EVONIAN	2 × × × × × × × × × × × × × × × × × × ×	ISS MIS	EV & M	EVONIA	CAMBRIAN	QUATERNARY MISS MISS	SS	V & MIS	EVONIA EVONIA	EVONIA	SIS	EV & MIS ISS UATERNAR	ISS UATERNAR	QUATERNARY DEV & MISS MISS
DEPTH	350	65 125	300	909											133	138
BEDROCK TOP UNIT	SHEFFIELD SHEFFIELD	LIME CREEK LIME CREEK	HEFFIEL PLINGTO	AMPTON AMPTON	AMPTO	AMPTO AMPTO	AMPTON	KOSP HIL AMPTON AMPTON	AMPTON	ROSP HI	IME CREE	IME CREE HEFFIELD	AMP TO AMP TO	PLING AKOTA	HAMPTON	DAKOTA HAMPTON
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	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMATION TOTA RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION PRGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT SYSTEM UNIT DEPTH UNIT SYSTEM UNIT UNIT DEPTH UNIT SYSTEM UNIT UNIT DEPTH SYSTEM UNIT UN	LOCATION WELL ELEVA- SYSTEM UNIT DEPTH BOTTOM FORMATION TOTA 2N 19W 08 SW NW SW SE SE 11613 1044 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 15 2N 19W 16 SE SE SE SE 16854 1034 DEVONIAN LIME CREEK 16 2N 19W 16 SW SW SE SE 16854 1034 DEVONIAN LIME CREEK 16 2N 19W 22 SW SE NE	LOCATION WELL ELEVA- SYSTEM UNIT DEPTH PORMATION TOTAL 92N 19W 05 SW NW SW 14859 1151 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 151 92N 19W 05 SW NW SW SE SE 11613 1044 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 151 92N 19W 15 SW SW SE SE 16854 1034 DEV & MISS SHEFFIELD 35 DEVONIAN LIME CREEK 156 92N 19W 22 SW SE NE	LOCATION WELL ELEVA- SYSTEM UNIT DEPTT PORMATION TOTA ZN 19W 0S SW NW SW SE SE 11613 104. DEV & MISS SHEFIELD 35 DEVONIAN LIME CREEK 15 ZN 19W 16 SE SE SE SE 16854 1034 DEV & MISS SHEFFIELD 35 DEVONIAN LIME CREEK 16 ZN 19W 22 SW SE NE I 6854 1034 DEV & MISS SHEFFIELD 65 DEVONIAN LIME CREEK 15 ZN 19W 22 SW SE NE NE NE I 6854 1040 DEV & MISS SHEFFIELD 65 DEVONIAN LIME CREEK 15 ZN 19W 22 SW SE NE NE NE I 1502 1050 DEV ONIAN LIME CREEK 155 DEVONIAN LIME CREEK 165 ZN 19W 22 SW SE NE NE NE NE I 1502 1050 DEV & MISS SHEFFIELD 30 DEV & MISS SHEFFIELD 477 ZN 20W 02 SW SE NE	UDCATION WELL ELEVA- SYSTEM UNIT DEPTH SYSTEM TOTA 92N 19W 05 SW NW SW SW 14659 1151 1163 1044 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 15 92N 19W 05 SW NW SW SW 14659 1151 1163 1044 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 16 92N 19W 16 SE SE SE SE 16854 1034 DEV & MISS SHEFFIELD 35 DEVONIAN LIME CREEK 16 92N 19W 16 SE SE SE SE 16854 1034 DEV & MISS SHEFFIELD 36 DEVONIAN LIME CREEK 16 92N 19W 22 SW SW SE SE SE SE SE 16854 1034 DEV & MISS SHEFFIELD 36 DEVONIAN CEDAR VALLEY 26 92N 19W 22 SW	LOCATION WELL ELEVA- SYSTEM BOTTOM FORMATION TOTAL 92N 19W 08 SW NW SW SW 14659 1151 DEV & MISS SHEFFIELD 40 DEVONIAN LIME CREEK 159 92N 19W 08 SW NW SW SW SE	UCCATION WELL ELEVA- SYSTEM UNIT DEPTH SYSTEM TOTAL UVB NG TION SYSTEM UNIT DEVONIAN LOCATION TOTAL 92N 19W 0S SW NW SW SE SE 11613 1044 DEV MISS SHEFFIELD 40 DEVONIAN LIME CREEK 159 92N 19W 0S SW SE SE 16163 1044 DEV MISS SHEFFIELD 35 DEVONIAN LIME CREEK 159 92N 19W SE SE 1040 DEV MISS SHEFFIELD 35 DEVONIAN LIME CREEK 159 92N 19W 20 NW NW	UDCATION WELL ELEVA- SYSTEM UNIT DEPTH POPTH FORMATION TOTA 92N 19W 05 SW NW SW SW 165 E SE S	Column	UP REGE SEC OLARTERS WELL FLEVA- TION SYSTEM FORMATION FOTATION FO	Value Colon Value Care Care	Value Valu	Part Part	Coloration	### PROPORTIES P

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	FORMATION UNIT	HAMPTON HAMPTON HAMPTON HAMPTON MAPLE MILL	SHEFFIELD HAMPTON MAPLE MILL MAPLE MILL MCCRANEY	HAMPTON HAMPTON CEDAR VALLEY CEDAR VALLEY	PLEIST UND CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY UNDIFF CEDAR VALLEY CEDAR VALLEY	MAPLE MILL HAMPTON CEDAR VALLEY CEDAR VALLEY
	BOTTOM	E E E E E E E E E E E E E E E E E E E	DEV MISS MISS MISS MISS	MISS MISS DEVONIAN DEVONIAN	QUATERNARY DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN MISS DEVONIAN	MISS MISS DEVONIAN DEVONIAN
	DEPTH	103 103 105 105 105 105 105 105 105 105 105 105	325 4 5 0 7 2 5 5 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6	11 90 1114 120 182	245 233 205 205	160 200 220 225 240	210 191 153 223	255 220 220 142 142 140	1 1111 40004 00000
COUNTY	BEDROCK TOP UNIT	HAMPTON HAMPTON UNDIFF HAMPTON	HAMPTON HAMPTON HAMPTON HAMPTON	HAMPTON LIME CREEK CEDAR VALLEY CEDAR VALLEY	LIME CREEK CEDAR VALLEY LIME CREEK LIME CREEK	LLIMMEN CREEKK C	LIME CREEK LIME CREEK LIME CREEK LIME CREEK SHEFFIELD	LIME CREEK SHEFFIELD UNDIFF MAPLE MILL HAMPTON	HAMPTON HAMPTON LIME CREEK CEDAR VALLEY LIME CREEK
GRUNDY	SYSTEM	MAPATI NON NON NON NON NON NON NON NON NON NO	XXXXX XXXXX XXXXX XXXXX XXXXX XXXX XXXX XXXX	MISS MISS DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEV & MISS MISS MISS	MISS MISS DEVONIAN DEVONIAN
	ELEVA- TION	1070 1065 1065 1050 1034	1004 1001 995 988	1024 1053 920 912 965	000 000 000 0000 0000 0000	575 996 1006 976 989	1048 1023 1009 948	1019 1082 1083 1098	1093 1082 1014 953 970
	WELL NO.	02486 02127 02193 07620	13238 08352 02235	02224 02109 03262 15094	02128 09260 01987 06984	00210 01878 02485 14038	02173 01698 17954 01691	01897 01772 13188	03136 01827 01673 02149
	LOCATION PRGE SEC QUARTERS	6N 17W 14 NE SW NE 6N 17W 16 SE SE SW 6N 17W 16 SW SW SE 6N 17W 20 NW NW 6N 17W 30 SE SE NW SE	6N 17W 30 SW SW SW SE 6N 17W 31 NE NW NW NE 6N 17W 31 NE SE NW 6N 17W 34 NW SE NW	6N 18W 21 SW SE SE 6N 18W 22 NE NE NW 7N 15W 01 SW NE NE 7N 15W 02 SW SW SE 7N 15W 02 SW SW SE	7N 15W 05 SW SW SW 7R 15W 07 SE SW SW 7N 15W 08 NE NE NE 7N 15W 15 NW NW SE NE 7N 15W 20 SW SE SE SE	78 15W 28 NE NW NE 77 15W 31 SW SE SW 7N 15W 33 NW NE NE 7N 15W 34 SE SE NE 7N 15W 36 NW NW SW NW	7N 16W 19 SW NW NE 7N 16W 27 SE SW SE 7N 16W 36 NW NE NE 7N 16W 36 SW SW 7N 17W 11 SE SW NW	7N 17W 12 SW SE NE 7N 17W 21 SE NE SE 7N 17W 29 SW NW NE 7K 17W 33 SW SW NW 7N 18W 04 SE SE NW	7N 18W 04 NE NW SW 7N 18W 26 NE SE NE EN 15W 02 NE NE NE EN 15W 05 NW NW NW 8N 15W 14 SE SW SW NW
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	TOTAL DEPTH	2240 2220 3076	371 340 434 2050 765	175 745 49 280 213	99 160 260 171 250	245 245 230 269 250	200 172 182 252 245	で 1000014 70455	00040 00004 00008
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	FORMATIC UNIT	CEDAR CEDAR PLEIS CEDAR CEDAR	CEDAR CEDAR WAPSI TREMP	S SHEFF WAPSI V PLEIS LIME S APLIN	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR
	BOTTOM	DEVONIAN DEVONIAN QUATERNARY DEVONIAN	DEVONIAN DEVONIAN CAMBRIAN DEVONIAN	DEV & MISS DEVONIAN QUATERNARY DEVONIAN DEV & MISS	DEVONÍAN DEVONÍAN DEVONÍAN DEVONÍAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	162 146 120	302 220 185 160	115 122 175	80 87 53 88 125	130 120 100 150	80 90 11 10 10 10 10 10 10 10 10 10 10 10 10	170 135 136 120	175 175 135 135
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY LIME CREEK	CEDAR VALLEY LIME CREEK LIME CREEK APLINGTON APLINGTON	MAPLE MILL APLINGTON APLINGTON	CEDAR VALLEY CEDAR VALLEY LIME CREEK LIME CREEK	LIME CREEK LIME CREEK LIME CREEK LIME CREEK	LIME CREEK LIME CREEK CEDAR VALLEY LIME CREEK LIME CREEK	LIME CREEK LIME CREEK CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK LIME CREEK LIME CREEK LIME CREEK
GRUNDY	SYSTEM	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEV & MISS DEV & MISS	MISS DEV & MISS DEV & MISS	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	981 938 1002 1019 1023	1034 1055 1005 1129	1098 1101 1083 1053 1075	922 932 932 989	1006 984 970 1027 988	1000 1000 1000 1000 1000	100 000 000 000 000	932 1020 1049 1024 1013
	VELL NO.	13822 12482 13045 01825 02630	02229 02108 10984 01244	01304 08322 01305 03747 01817	04555 04745 02586 02378 02484	04873 02261 13129 04611	14504 13080 08656 08285 12061	02141 15078 03169 02124 02152	01815 12801 12485 08098 04610
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	M FORMATION TOTAL	IN CEDAR VALLEY 415 IN CEDAR VALLEY 295 IN CEDAR VALLEY 350 IN CEDAR VALLEY 339 IN CEDAR VALLEY 339	IN CEDAR VALLEY 420 IN CEDAR VALLEY 420 IN LIME CREEK 172 IN LIME CREEK 127 IN CEDAR VALLEY 350	IN CEDAR VALLEY 335 IN LIME CREEK 250 IN LIME CREEK 207
	BOTTOM SYSTEM	219 DEVONIAN 150 DEVONIAN 183 DEVONIAN 202 DEVONIAN 200 DEVONIAN	260 DEVONIAN 70 DEVONIAN 105 DEVONIAN 105 DEVONIAN	23 DEVONIAN 200 DEVONIAN 162 DEVONIAN
COUNTY	BEDROCK TOP UNIT DE	LIME CREEK LIME CREEK LIME CREEK LIME CREEK LIME CREEK	LIME CREEK SHEFFIELD LIME CREEK LIME CREEK SHEFFIELD	SHEFFIELD SHEFFIELD TASE CREEK
GRUNDY	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEV & MISS DEVONIAN DEVONIAN DEV & MISS	DEV & MISS
	ELEVA- TION	1058 1034 1053 1053	1053 990 1012 1009	1076
·	WELL B	02719 05834 01611 01616	04025 02037 13794 01765	02052
	LOCATION RGE SEC QUARTERS	16W 17 SW SE 16W 18 SE NE 16W 19 NE NW 16W 19 NW NW SW 16W 22 NE SE SE	16W 31 NE NE NE 17W 04 SE SW SW 17W 10 NW NW NE 17W 14 SE SW SE 17W 09 SE SE NE	17W 09 SE NE SE 17W 26 SW SW SW SE
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	TOTAL DEPTH	208 340 190 615 271	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8888 8888 8888 8888 8888	3333 335 205 1889 1889	245 1649 345 115	106 310 165 180	3315 345 160 480 248	288 365 285 370 115
	FORMATION T	KINDERHK UND MAPLE MILL PROSP HILL CEDAR VALLEY HAMPTON	PROSP HILL BURLINGTON HAMPTON HAMPTON	HAMPTON BURLINGTON BURLINGTON BURLINGTON HAMPTON	GILMORE CITY VARSAW CHEROKEE S APLINGTON PROSP HILL	MAPLE MILL N ST PETER S SHEFFIELD HAMPTON PROSP HILL	HAMPTON WAPSIPINICON HAMPTON HAMPTON	HAMPTON GILMORE CITY GILMORE CITY HAMPTON GILMORE CITY	GILMORE CITY MAPLE MILL HAMPTON S SHEFFIELD HAMPTON
	BOTTOM SYSTEM	MISS MISS MISS DEVONIAN	M M M M M M M M M M M M M M M M M M M	MEME SISSIN SIN	MISS MISS PENN DEV & MISS MISS	MISS ORDOVICIAL DEV & MISS MISS	MISS DEVONIAN MISS MISS MISS	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	MISS MISS MISS DEV & MISS
	DEPTH	125 180 124 85	3 2 2 2 4 5 4 5 5 5 5 5 6 9 7 7 7 8 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	210 210 310 350	1205 1505 150 150 150 150	100 105 35 77	120 120 120 120 120	202 270 220 242	3 1 8 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
COUNTY	BEDROCK TOP UNIT	KINDERHK UND BURLINGTON GILMORE CITY GILMORE CITY KEOKUK	BURLINGTON BURLINGTON GILMORE CITY CHEROKEE	CHEROKEE BURLINGTON BURLINGTON BURLINGTON	CHEROWEE CHEROWEE CHEROKEE CHEROKEE CHEROKEE	CHEROKEE CHEROKEE CHEROKEE CHEROKEE HAMPTON	HAMPTON CHEROKEE GILMORE CITY HAMPTON C	CHEROKEE CHEROKEE GILMORE CITY UNDIFF GILMORE CITY	GILMORE CITY GILMORE CITY GILMORE CITY MAPLE MILL
HARDIN	SYSTEM	EZZZZZ SZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	M M M M M M M M M M M M M M M M M M M	P MISS MISS S	P P P P P P P P P P P P P P P P P P P	F A B A B A B A B A B A B A B A B A B A	E E E E E E E E E E E E E E E E E E E	M P P P P P P P P P P P P P P P P P P P	EEEEE SSISS SSIS SSISS SSISS SSISS SSISS SSISS SSISS SSISS SSISS SSISS SSISS SSISS SSIS SSIS SSISS SSISS SSIs SSIs SSIs SSIs Ssis Ssi
	ELEVA- TION	1044 1050 937 939	1121 1100 1040 1089	1050 1117 1124 1161	1102 1142 1099 990	1073 1079 1086 0973	1011 1077 1105 1113	1112 1123 1087 1094 1096	1093 1180 1220 1102 1031
	WELL NO.	02178 02419 17236 02175	02364 02323 10670 02744 02744	06845 02529 02388 04032 03322	03450 02212 03228 18686 00278	11987 01764 00279 20387	01826 01383 03683 04031 03342	04043 02715 02225 02162 02457	02226 08549 19983 03343 05188
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	I UAR	SKENK	SZZZZ	N S S S S S S S S S S S S S S S S S S S	SEE	S S S S S S S S S S S S S S S S S S S	S S S S S S S S S S S S S S S S S S S	SERVE	SEE
	TION	N N N N N N N N N N N N N N N N N N N	S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	N S S S S S S S S S S S S S S S S S S S	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	93575 S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	A C C C C C C C C C C C C C C C C C C C
	OCATION SEC QUART	33333	00 00 00 00 00 00 00 00 00 00 00 00 00	00000 EEEEE	00000 EEEE	33333		MMMNN EEEEE	NWWNW EEEEE
	RGE	99999	00000	22222	12001		19 20 21 21	2222	22222
	ξ	086N 086N 086N 086N 086N	086N 085N 085N 086N 086N	086N 086N 086N 086N	086N 086N 085N 085N	087N 087N 087N 087N	087N 087N 087N 087N	0878 0878 0878 0878 0878	087N 087N 087N 087N 088N

	TOTAL DEPTH	750 90 150 190	961 1919 140 134 274	20 8 8 3 5 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2232 2232 233 260 66	203 200 400 1865 124	141
	FORMATION	WAPSIPINICON HAMPTON PROSP HILL CHEROKEE	TREMPEALEAU SHEFFIELD MAPLE MILL LIME CREEK	TREMPEALEAU SHEFFIELD LAPORTE CITY SHEFFIELD MAPLE MILL	MAPLE MILL MAPLE MILL MAPLE MILL MAPLE MILL	SHEFFIELD MAPLE MILL LIME CREEK TREMPEALEAU GILMORE CITY	GILMORE CITY
	BOTTOM	DEVONIAN MISS MISS PENN MISS	CAMBRIAN DEV & MISS MISS DEVONIAN	CAMBRIAN DEV & MISS DEVONIAN DEV & MISS	MMMMM NN NN NN NN NN NN	DEV & MISS MISS DEVONIAN CAMBRIAN MISS	MISS
	DEPTH	100 51 46 124 125	160 63 60 55 115	145 142 125 26	223 223 0	44 33 88 11	125
COUNTY	BEDROCK TOP UNIT	HAMPTON HAMPTON HAMPTON DAKOTA GILMORE CITY	UNDIFF HAMPTON HAMPTON HAMPTON MAPLE MILL	HAMPTON HAMPTON HAMPTON HAMPTON	HAMPTON HAMPTON HAMPTON HAMPTON	HAMPTON HAMPTON HAMPTON HAMPTON GILMORE CITY	GILMORE CITY
HARDIN	SYSTEM	MISS MISS MISS CRETACEOUS MISS	M M M M M M M M M M M M M M M M M M M	MEMINS SSIns SSINS SSIns SSINS SSIns SSINS SSIns SSIns SSIns SSIns Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins Ssins	M M M M M M M M M M M M M M M M M M M	E E E E E E E E E E E E E E E E E E E	MISS
	ELEVA- TION	1070 1020 1020 1108 1158	1152 1110 1101 1085 1151	1125 1128 1122 1143	1069 1075 1069 1072	1061 1081 1091 1093	1144
	VELL NO.	03420 01055 01055 00242 00478	03785 08169 01576 06097	14102 14102 14389 01720 08088	08138 09059 08350 08057 08114	08117 01507 01470 01575 02256	03162
	OUARTERS	NE SE NE	N N N N N N N N N N N N N N N N N N N	NE SE NE NE SE NE SE SE NE SE NE SE NE	NE NW SE NW NW NW SW SW		NE NW
	NO C	N S S S S S S S S S S S S S S S S S S S	SSES	SEREN	Saman	N S S S S S S S S S S S S S S S S S S S	SE
	LOCATION	9K 27 9W 28 9W 28 2W 178	2000 2000 3000 3000 3000 3000 3000 3000	00 00 00 00 00 00 00 00 00 00 00 00 00		1W 13	2W 31
	2	20000 20000 20000	NNNN	NNNNN	NNNR	NUNNN	21
	₹	8880 0880	1680 1680	1680 1680 1680	00000	000000	ъ́80

	TOTAL DEPTH	20.45 20.65 20.65 20.65 20.65	150 150 150 250 250	210 105 170 132	175 70 66 33 1065	113 3210 106 94	220 158 177 190 168	212218 14831 14831 14831	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	FORMATION UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY PR DU CHIEN CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	SOLON CEDAR VALLEY PLEIST UND CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY TREMPEALEAU	CEDAR VALLEY CEDAR VALLEY GALENA PLEIST UND CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY MAQUOKETA CEDAR VALLEY GALENA	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
	BOTTOM	DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN QUATERNARY DEVONIAN	DEVONIAN DEVONIAN DEVONIAN CAMBRIAN	DEVONIAN DEVONIAN ORDOVICIAN QUATERNARY	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN ORDOVICIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	1115 115 115 140	85 100 180 135	95 60 130 115	995 10 75 5	165 100 80	145 145 150 165 155	130 1130 1155 1155	040 107 111 35
COUNTY	EDROCK TOP UNIT	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY AQUOKETA EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY	EDAR VALLEY EDAR VALLEY EDAR VALLEY EDAR VALLEY
HOWARD	SYSTEM	DEVONIAN CODEVONIAN CO	DEVONIAN CODEVONIAN CO	DEVONIAN C DEVONIAN C DEVONIAN C	DEVONIAN CC DEVONIAN CC DEVONIAN CC DEVONIAN CC	DEVONIAN CORDOVICIAN M	DEVONIAN CODEVONIAN CO	DEVONIAN CODEVONIAN CODEVO	DEVONIAN C DEVONIAN C DEVONIAN C DEVONIAN C DEVONIAN C
	ELEVA- TION	1198 1235 1194 1181 1236	1248 1232 1209 1214	1277 1195 1288 1250	1220 1210 1212 1236 1275	1261 1206 1233 1197	1232 1267 1284 1290 1282	1259 1229 1232 1255 1255	1193 1276 1281 1284 1186
	WELL NO.	11977 16872 19776 04001 16151	16095 16460 11823 11352 09236	09663 16037 16410 17243 14464	08872 09133 09847 C0086 12099	09843 12141 14482 09114	08904 16082 12559 16140 16153	14488 12136 16138 06866 12208	17902 14550 17859 15985 12169
	LOCATION TWP RGE SEC QUARTERS	097N 11W 02 SE SE NW 097N 11W 04 SE NW NW 097N 11W 05 SE NE NW 097N 11W 13 SW NW SE 097N 11W 15 NW NW NE	097N 12W 09 SE SE NE SE 097N 12W 10 SE SW SW SE 097N 12W 11 SE NW SE SE 097N 12W 18 SE SW NW NW 097N 13W 04 NW SE NE	097N 13W 04 NW SE WE 097N 13W 08 SE SW SE SW 097N 13W 09 SE SW SE SE 097N 13W 13 NE NE NW 0657N 15W 17 NW NW NW NW NE	097N 14W 13 NE NE NE NE O98N 11W 05 SE SW NW 096N 11W 05 NW NE SW 096N 11W 11 SW NE SE 098N 11W 15 NW SE SW	096N 11W 27 NE NE NE O98N 11W 31 SE NE NE O98N 11W 34 SE NE NE O98N 12W 02 SE SW SE O5CH 12W 02 SE SE	098N 12W 12 SE SW SE 098N 12W 13 NW SW SW 098N 12W 13 SE SW SW 096N 12W 18 NE SE NE 098N 12W 19 SE NE	098N 12W 27 NE NW NE 09EN 12W 31 SE NE NE 09EN 12W 32 SE NW SW 09EN 12W 36 NW NE NW 09EN 13W 01 NE NE	098N 13W 04 NE NW NW 098N 13W 08 SW NW NE 098N 13W 09 NE NE SE 098N 13W 10 SE SE NE

	TOTAL DEPTH	154 154 170 170	1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	265 151 90 287 87	105 1145 670 260 72	94 1134 70 137	145 109 709 465	11224 2021 2021 2023 243	46-100 46-000 000000
	NOIT TI	R VALLEY R VALLEY R VALLEY R VALLEY	R VALLEY R VALLEY R VALLEY R VALLEY ST UND	R VALLEY OKETA OKETA R VALLEY	AR VALLEY MPEALEAU DU CHIEN ENA AR VALLEY	AR VALLEY NOKETA MPEALEAU AR VALLEY	R VALLEY R VALLEY R VALLEY PEALEAU NA	R VALLEY R VALLEY R VALLEY R VALLEY R VALLEY	R VALLEY R VALLEY R VALLEY R VALLEY R VALLEY
	FORMATIC UNIT	CEDA CEDA CEDA CEDA	CEDA CEDA CEDA CEDA	CEDA MAQU MAQU CEDA	CED CED CED	CED AAA AAAA	CEDA CEDA CEDA TREM GALE	CEDA CEDA CEDA CEDA	CEDA CEDA CEDA CEDA CEDA
	BOTTOM SYSTEM	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN ORDOVICIAN ORDOVICIAN DEVONIAN	DEVONIAN CAMBRIAN ORDOVICIAN ORDOVICIAN DEVONIAN	DEVONIAN ORDOVICIAN CAMBRIAN DEVONIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN CAMBRIAN ORDOVICIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	DEPTH	120 135 140	63 60 185 110	258 60 50 001 80	. Oun	0 0 22 0 0	7 4 6 6 6 5 5 6 5 5 6 5 5 6 5 6 5 6 5 6 5	100 100 165 55	110 175 168 270 220
COUNTY	7 TOP	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY VALLEY	VALLEY VALLEY VALLEY VALLEY
	BEDROC	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR CEDAR	CEDAR CEDAR CEDAR CEDAR
HOWARD	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	1234 1264 1310 1265 1324	1271 1261 1336 1246	1224 1217 1275 1268 1285	1287 1314 1301 1269 1288	1296 1298 1296 1185	1227 1277 1223 1273 1273	1276 1258 1273 1244 1234	1252 1303 1386 1386
	VELL NO.	10089 11351 16155 17228 09235	16021 18156 17440 18140 13034	18380 13101 20779 C0004 09126	16107 17075 00004 08497 09113	09115 12791 08083 09840 16461	16491 11650 19767 11580 11969	17232 16154 16828 09858 11972	16077 20147 18146 16443 16034
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	JARTEI	SKE	N N N N N N N N N N N N N N N N N N N	SNSNS	N N N N N N N N N N N N N N N N N N N	NSSS	SSSS	SEES	SSSSE
	NO TO	SESSE	SSSS	SSSSS	N N N N N N N N N N N N N N N N N N N	NONNE	N N N N N N N N N N N N N N N N N N N	ZNZNZ Zmzmm	N S S N N N N N N N N N N N N N N N N N
	OCATION SEC QUAR	15 17 20 27 27	29 32 01 17	32 01 02 11 20	2222 1223 144	22 33 34 44 35 44 35	35 31 32 32	20 m m m m m m m m m m m m m m m m m m m	001
	- 5	38€ 138€ 138€	13W 13W 14W 14W	33333		2222	12V 12V 12V 12V	12W 13W 13W 13W	33411 33411 33411
	TWP R	N8800000000000000000000000000000000000	N N N N N N N N N N N N N N N N N N N	N 660 N 660 N 660	00000 00000 00000 00000	N 6 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	X Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

	TOTAL DEPTH	2557 2557 2557 255 255	215 83 206 190 450	100 74 87 75 75	112 210 125 181 86	29 110 140 142 87	2000 2000 2000 2000 2000 2000 2000 200	24400 24400 20000
	FORMATION UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY N MADUOKETA CEDAR VALLEY	CEDAR VALLEY N MAGUOKETA N GALENA N MAGUOKETA N MAGUOKETA	N MACUOKETA CEDAR VALLEY N MAQUOKETA CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY N MAQUOKETA CEDAR VALLEY N GALENA CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY N GALENA N MAGUOKETA N GALENA	N MAGUOKETA CEDAR VALLEY CEDAR VALLEY N MAGUOKETA
	BOTTOM SYSTEM	DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN	DEVONIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN DEVGNIAN ORDOVICIAN DEVONIAN	DEVONIAN ORDOVICIAN DEVONIAN ORDOVICIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN DEVONIAN DEVONIAN ORDOVICIAN
	DEPTH	222 232 230 200 200 200	205 0 15 10 26	0 7 1 4 0 0 0 0	លឧប ល	6 6 6 G	145 145 272 285 0	185 113 223 260
COUNTY	BEDROCK TOP UNIT	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY MAQUOKETA CEDAR VALLEY	CEDAR VALLEY MAGUOKETA KAGUOKETA CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	GEDAR VALLEY CEDAR VALLEY CEDAR VALLEY MAQUOKETA GALENA	MAGUOKETA CEDAR VALLEY CEDAR VALLEY MAGUOKETA
HOWARD	SYSTEM	DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN DEVONIAN	DEVONIAN ORDOVICIAN ORDOVICIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN ORDOVICIAN	ORDOVICIAN DEVONIAN DEVONIAN ORDOVICIAN
	ELEVA- TION	1312 1328 1331 1304 1234	1367 1153 1288 1302 1266	1266 1268 1250 1240	1289 1272 1246 1223 1267	1217 1292 1304 1301 1260	1257 1245 1268 1269 1293	1316 1317 1140 1324 1300
	WELL NO.	12958 18139 16471 12135 10663	17866 06856 16445 09131 16115	09137 08334 11974 09838 08868	08340 09138 14037 15104 08664	C0033 16030 16413 16817 20144	12623 08896 01836 16096 17234	17862 17862 14528 16569
	LOCATION TWP RGE SEC QUARTERS	099N 14W 17 SE NE SE SW 099N 14W 23 SW SE SE 099N 14W 26 SE SE NE 095N 14W 28 SE SE SW NE 099N 14W 31 NW NW NW SE	099N 14W 35 NE NW. SE 105H 11W 12 NE SW NE 106H 11W 15 NW NE 100N 11W 19 SW SW NW	100N 11W 27 SW SE 100N 11W 29 SE NE 100N 11W 29 NE SE SE 100N 11W 32 NE SW NE 100N 12W 08 SE NE SE	100N 12W 08 NW NW SE 100N 12W 13 NE NW NW SW 100N 12W 15 SE SE 160N 12W 17 NE NW NW	100N 12W 21 SW NE NW 100N 12W 25 SW RE SW 100N 12W 26 SW SE NE 100N 12W 27 SE NE NE 100N 12W 28 NW NE SW	100N 12W 28 SW SW SW 100N 12W 29 SW NW NW NE 100N 12W 29 SW SE NW SE 100N 13W 15 NW NW NE 100N 13W 28 SW SE	100N 13W 30 SW SE SW 100N 14W 14 SE NW NW 100N 14W 29 NE NE NE NW 100N 14W 34 NE NW NE 100N 14W 36 SW SW SE

	TOTAL DEPTH	6.52 6.52 7.08 7.08 6.00 6.00	100 329 131 565	6. 0.0 40.40.0 40.80.8	463 150 120 60 1243	95 128 628 461	200 200 200 200 200	315 140 135 172	1715 1715 165 145
	FORMATION UNIT	GALENA GALENA PLATTEVILLE MAQUOKETA GALENA	EDGEWOOD EDGEWOOD EDGEWOOD	EDGEWOOD GALENA KANKAKEE KANKAKEE MAQUOKETA	GALENA MAQUOKETA MAQUOKETA HOPKINTON DRESBACH	PLEIST UND ST PETER PLEIST UND ST PETER GALENA	EDGEWOOD NIAGARA UND NIAGARA UND GALENA MAQUOKETA	GALENA NIAGARA UND KANKAKEE KANKAKEE	KANKAKEE DRESBACH KANKAKEE KANKAKEE KANKAKEE
	BOTTOM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN SILURIAN CAMBRIAN	QUATERNARY ORDOVICIAN QUATERNARY ORDOVICIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	ORDOVICIAN SILURIAN SILURIAN	SILURIAN CAMBRIAN SILURIAN SILURIAN SILURIAN
	DEPTH	1 18 10 2 20 2	00000	2 7 8 2 0 2 0	10 20 10 10 10	വന	610 50 50 50	0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
COUNTY	BEDROCK TOP UNIT	MAGUOKETA NIAGARA UND NIAGARA UND KANKAKEE KANKAKEE	KANKAKEE KANKAKEE NIAGARA UND ALXNDRIA UND	KANKAKEE KANKAKEE KANKAKEE NIAGAKA UND	NIAGARA UND MAQUOKETA MAQUOKETA HOPKINTON MAQUOKETA	KANKAKEE KANKAKEE	KANKAKEE NIAGARA UND NIAGARA UND KANKAKEE	KANKAKEE NIAGARA UND NIAGARA UND NIAGARA UND HOPKINTON	NIAGARA UND NIAGARA UND NIAGARA UND
JACKSON	SYSTEM	ORDOVICIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN ORDOVICIAN	SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	664 793 782 335	767 743 837 835 795	744 841 720 793 812	689 682 701 866 559	654 746 750 760	/ 88888 80998 80088 8008 800 800	777 837 820 793 792	729 760 714 712 691
	WELL NO.	10128 17083 09805 08911 17714	10037 17747 09220 15717 07664	10957 08828 17156 09438 14779	13031 11024 15378 19065	18861 17615 16638 00548 15948	00349 18052 11697 09943 11891	08867 17744 15520 10115 08381	17493 00044 13820 08199 09210
	LOCATION PP RGE SEC QUARTERS	34N 06E 13 SE NE NW 34N 06E 07 SE NW NW 34N 06E 13 SE NW NW 34N 06E 26 NE SW NW 34N 06E 27 NW SE SE	4N 06E 28 NE NW. 4N 06E 29 SE NE 4N 06E 30 NW SW 4N 06E 30 NE SW 4N 06E 31 SE NW	34N 06E 32 NW SW NW 34N 06E 34 SE NE NW NW 34N 06E 35 NE NW NE 34N 05E 09 SW SW NE 34N 05E 14 SE SE NW	84N 05E 20 SW NW SW 84N 05E 21 SW SE SE 84N 05E 22 SW SE NW 84N 05E 24 SW SW NE 84N 05E 29 SE SE	84N 05E 30 NE SW NW 84N 05E 32 NE NE NE 84N 05E 32 NE NW NW 84N 05E 33 SE NW NW 84N 05E 34 NE NW NW	54N 05E 36 SE SE NW 34N 04E 29 SE SE SW 34N 04E 30 NW NE SE 34N 04E 31 SW SE NW SW 34N 04E 32 NE SW SW	34N 04E 32 SE SE SW 34N 03E 03 NW SE NW 34N 03E 04 SW NW NW 34N 03E 05 NE NE NE 34N 03E 05 SE SW NE	34N 03E 06 SW SW SW SA 34N 03E 11 SE SE NW NW 34N 03E 16 SW SW SE 34N 03E 16 SE SW SW
	7	8888 0000		8 888 9	00000	00000	00000	00000	00000

10 AL DEPTH	11880 1980 90	150 235 144 144	22 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	78 131 165 170	180 75 105 100	135 125 166 2140 2310	24 1124 1183 106 56	150 7 70 108 140
FORMATION	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE	NIAGARA UND HOPKINTON N MAGUOKETA NIAGARA UND KANKAKEE	EDGEWOOD KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE N MAQUOKETA N MAQUOKETA NIAGARA UND KANKAKEE	KANKAKEE KANKAKEE N MAQUOKETA KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND KANKAKEE DRESBACH DRESBACH	N MAGUOKETA KANKAKEE KANKAKEE EDGEWOOD UNDIFF	NIAGARA UND KANKAKEE KANKAKEE KANKAKEE
BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVIJA SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN ORDOVICIA ORDOVICIA SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIA SILURIAN	SILURIAN SILURIAN SILURIAN CAMBRIAN	ORDOVICIA SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
DEPTH	70 15 37 140 27	10 20 39 122	8 4 8 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	67 15 77 40	30 10 10 10 10 10 10 10 10 10 10 10 10 10	35 40 80 107 156	115 76 45 30 240	ស ល ល ល ល ល ល ល
BEDROCK TOP UNIT	KANKAKEE NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND EOPKINTON HOPKINTON NIAGARA UND NIAGARA UND	HOPKINTON NIAGARA UND NIAGARA UND NIAGARA UND	KANKAKEE KANKAKEE NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND EDGEWOOD KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND KANKAKEE KANKAKEE	HOPKINTON NIAGARA UND NIAGARA UND KANKAKEE UNDIFF	NIAGARA UND KANKAKEE KANKAKEE NIAGARA UND
SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
ELEVA- TION	674 725 747 764 674	782 851 703 677 688	804 843 957 900	912 688 676 847	780 710 736 733	749 754 740 645 738	747 778 785 762 839	687 730 761 734 826
WELL NO.	17125 11322 16092 10608 11321	12523 11183 07751 15565 04426	10541 10518 09782 08197 11740	14863 17700 14705 15710	16146 14861 10856 14532 11759	10583 14664 06822 07966 13997	08255 12101 08815 08378 11340	13215 10047 10576 09189 14542
LOCATION TWP RGE SEC QUARTERS	084N 03E 17 SW SE SW 084N 03E 18 NW NW SE 084N 03E 18 NW SW SE 064N 03E 18 NE SE SE 084N 03E 20 NE NE SW	084N 03E 24 SE SE NW 084N 03E 26 SE SE NW 084N 03E 30 NW SW SW 084N 03E 30 SE SE SE 084N 03E 31 SW SW SW	054K 02E 03 NW NW NE 054K 02E 03 SW SW SW 084N 02E 07 NE NE 084N 02E 07 SE NE NE 084N 02E 07 NW SE NW	084N 02E 08 NW NW SW 084N 02E 11 SE SE NW 080N 02E 13 NW SW SE 084N 02E 14 SE NW SW 054N 02E 14 SW NE SE	084N 02E 14 SW SE SE 084N 02E 17 SW NW SE 084N 02E 19 SW NE SW 084N 02E 20 SW NW SW 084N 02E 23 SE SE SW	084N 02E 23 NW SE SE 084N 02E 23 SE SE 084N 02E 23 NW NW SE 084N 02E 24 NE NE 084N 02E 24 SW SE SW	084N 02E 25 NE NW NW 084N 02E 28 NE SW NW 084N 02E 28 SE SW NW 084N 02E 30 NW SE NW 084N 02E 32 NE SW SE	084N 01E 05 SE NE NE 084N 01E 05 SE NE NE 084N 01E 05 SW SE SE 084N 01E 10 SE NW SW 084N 01E 12 NE NE NE
	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMALIUN 101A GE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SYSTEM UNIT DEPT	LOCATION WELL ELEVA- BEDROCK TOP BOTTOM FORMALIUN TORALIUN RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SVSTEM UNIT DEPTH N 03E 17 SW SYSTEM NUIT DEPTH SVSTEM UNIT DEPTH N 03E 17 SW SILURIAN KANKAKEE 13 SILURIAN KANKAKEE 16 N 03E 18 NW SW SE 10608 764 SILURIAN NIAGARA UND 37 SILURIAN KANKAKEE 15 N 03E 18 NE SE SE SILURIAN NIAGARA UND 37 SILURIAN KANKAKEE 15 N 03E 18 NE SE SE SILURIAN NIAGARA N	LOCATION WELL ELEVA- SYSTEM UNIT BEDROCK TOP BOTTOM FORMALION TOTAL RGE SEC QUARTERS NO. TION SYSTEM UNIT DEPTH SVSTEM UNIT DEPTH N 03E 17 SW SEC QUARTERS 70 SILURIAN KANKAKEE 13 N 03E 18 NW SE 16092 747 SILURIAN NIAGARA UND 37 SILURIAN KANKAKEE 15 N 03E 18 NE SE SE 10608 764 SILURIAN NIAGARA UND 140 SILURIAN KANKAKEE 19 N 03E 20 NE SE NW 11321 674 SILURIAN NIAGARA UND 27 SILURIAN KANKAKEE 19 N 03E 26 SE NW 11323 654 SILURIAN NIAGARA UND 27 SILURIAN HOPKINTON 39 ORDOVICIAN HOPKINTON 39 ORDOVICIAN	COUNTIES COUNTIES	LOCATION WELL ELEVA	COUNTERS WELL ELEVA- SYSTEM UNIT SUTTOM FORMALION UNIT SUSTEM TOTAL	COATION COATERS COAT	COMPRESS COMPRESS

	TOTAL DEPTH	130 200 90 65	75 75 65 50	75 181 75 210 130	310 377 460 190 245	255 1054 1957 455	190 275 275 194 195	220 205 110 278 247	850 209 780 90 175
	FORMATION UNIT	KANKAKEE KANKAKEE KANKAKEE NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND KANKAKEE KANSAN PLEIST UND	KANKAKEE KANKAKEE MAQUOKETA MAQUOKETA GALENA	GALENA GALENA GALENA GALENA GALENA	GALENA ST PETER GALENA KANKAKEE	KANKAKE EDGEWOOD KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE KANKAKEE EDGEWOOD	ST PETER KANKAKEE PR DU CHIEN KANKAKEE UNDIFF
	BOTTOM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN QUATERNARY	SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN ORDOVICIAN SILURIAN
	DEPTH	748 748 788 788 888 888	27 to 4 72 0 to	79 4 E H B B B B B B B B B B B B B B B B B B	202 200 200 200 201	142	27.4 ក លល់ល ក	0 84 0 8 8 8	50 20 20 20 20 20
COUNTY	BEDROCK TOP UNIT	NIAGARA UND NIAGARA UND KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND KANKAKEE	KANKAKEE NIAGARA UND EDGEWOOD HOPKINTON MAQUOKETA	MAQUOKETA KANKAKEE MAQUOKETA MAQUOKETA KANKAKEE	NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND KINGARA UND KANKAKEE NIAGARA UND NIAGARA UND	NIAGARA UND HOPKINTON KANKAKEE NIAGARA UND HOPKINTON	HOPKINTON NIAGARA UND NIAGARA UND UNDIFF
JACKSON	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	ORDOVICIAN SILURIAN ORDOVICIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	798 858 727 746	744 760 736 702 713	716 839 650 620	673 835 605 605	605 843 868 813 764	0.000000 4.00000 0.00444	88 55 0 4 4 2 0 8 2 0 8 2 0 0 0 0 0 0 0 0 0 0 0 0 0	864 840 800 758 874
·	WELL NO.	12097 09215 09223 17518 17157	15633 15634 17140 06890 06893	09899 15484 15438 10116 12100	12514 08831 17698 17712	17668 11312 12515 14694 15329	12096 15185 14669 08824 10531	12109 11695 12526 17662 06141	00980 14686 18105 17470 11842
	LOCATION P RGE SEC QUARTERS	14N 01E 13 NE NE SE 14N 01E 14 NW NW 14N 01E 15 NW SE SE 14N 01E 17 SE SW SW 14N 01E 17 SE SW SW	4N 01E 19 NE NE NE 4AN 01E 19 NE NW NW 4AN 01E 20 SE NW NW 14N 01E 24 SE SE 14N 01E 24 NW SE SE	14N 01E 24 SW SE SE 14N 01E 31 SW NW SW 15N 06E 28 NE NW SW 15N 06E 29 SE NW SE 15N 05E 04 NE NW SW	SEN 05E 04 SE SE SW SEN 05E 15 SW NW SE SEN 05E 15 NW SE SW SEN 05E 24 SE NW SE SEN 05E 24 SE NW SE	SSN 05E 24 SE NW SE SSN 04E 15 SE NW SE SSN 04E 19 NW SE SE NE SSN 04E 31 NW NE SW SSN 04E 34 SE NE SE	155N 03E 01 NE SW SE 155N 03E 04 SW NE 15N 03E 05 SE SW SW 15N 03E 17 NE SW NW 15N 03E 17 SE SW SW	15N 03E 18 SW NE NE 15N 03E 20 NE SW NW 15N 03E 21 NE SW NE 15N 03E 22 SW NW 15N 03E 22 NE NE SE	15N 03E 22 NW SE SE 55N 03E 23 NE SW 5W 5N 03E 25 NE NE SE 5N 03E 33 NW NE NW 5N 03E 35 SE SE NE
	Ţ		00000	88888	8 3 3 6 6	00000	0000	88888	00000

	TOTAL DEPTH	242 75 75 105 85	665 80 110 225 50	12124 600001 600001	170 210 85 155 1500	1140 365 60 116	262 330 110 416	11 19 1000 11 800 1000	1730 2 730 2 88
	FORMATION UNIT	KANKAKEE EDGEWOOD EDGEWOOD KANKAKEE	KANKAKEE KANKAKEE KANKAKEE KANKAKEE EDGEWOOD	KANYAKEE KANKAKEE NIAGARA UND KANKAKEE MAQUOKETA	NIAGARA UND KANKAKEE HOPKINTON NIAGARA UND DRESBACH	DRESBACH GALENA GALENA GALENA	MAQUOKETA MAQUOKETA KANKAKEE GALENA KANKAKEE	KANKAKEE KANKAKEE KANKAKEE MAQUOKUTA EDGEWOOD	KANKAKEE KANKAKEE KANKAKEE KANKAKEE KANKAKEE
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	STLURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN CAMBRIAN	CAMBRIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN SILURIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	47 30 105 30	824 78 8 3 5 6 8 7 8 7 8 9 7 8 9 9 9 9 9 9 9 9 9 9 9 9	48448 08708	55 57 87 81	0 1 4 4 L L C C C C C C C C C C C C C C C C	10 10 25 005	22 8000	8 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
COUNTY	BEDROCK TOP	NIAGARA UND KANKAKEE KANKAKEE KANKAKEE KANKAKEE	KANKAKEE KANKAKEE NIAGARA UND NIAGARA UND	HOPKINTON NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND HOPKINTON NIAGARA UND GALENA	GALENA KANKAKEE GALENA GALENA MAQUOKETA	KANKAKEE KANKAKEE HOPKINTON KANKAKEE NIAGARA UND	KANKAKEE KANKAKEE NIAGARA UND	KANKAKEE NIAGARA UND KANKAKEE NIAGARA UND
JACKSON	SYSTEM	STLURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	927 738 839 714	737 708 695 731	99999999999999999999999999999999999999	99 90 90 80 80 80 80 80 80 80 80 80 80 80 80 80	60 00 00 00 00 00 00 00 00 00 00 00 00 0	955 955 1005 1015	1045 910 880 910	88 99 98 45 75 99 99 99 99 99 99 99 99 99 99 99 99 99
	WELL NO.	09192 13102 13577 09492 14854	14543 13088 18801 17119	06376 17709 14709 10841 08669	15269 15416 08360 09997 03236	00083 12923 15969 17124 15709	12532 17465 10947 18097 17144	11344 111149 15052 14649 16028	14679 05853 11685 11612 16136
	LOCATION TWP RGE SEC QUARTERS	085N 02E 02 NE SW SW 085N 02E 05 SE SW SW 085N 02E 10 NW NE 085N 02E 13 NE NW NE	085N 02E 15 NW SE NW 085N 02E 24 KW NE SW 085N 02E 24 NW SE SW 085N 02E 24 SW NW SE 085N 02E 25 SW NE SE	005N 02E 30 ME NE SE 005N 02E 30 ME NW SE 08EN 02E 31 SW NW NE 08EN 02E 33 SE SW NW 085N 01E 15 MW SW NE	005N 01E 22 SE NE 008N 01E 22 SE SE NW 008N 01E 31 SE SW NE 005N 01E 34 SW NE NE NE 005N 05E 07 SE SW SW	086N 05E 19 NE NW NE 086N 05E 19 SW SW NW 086N 05E 19 SE NE SE 086N 05E 19 NE SE SE 086N 05E 33 SE SE NW	086N 04E 12 SW NW NW 086% 04E 16 SE SE NW 086N 04E 19 NW NW SW 086N 04E 27 SE NE NE 086N 03E 04 NE SW NE	086N 03E 04 SE SE NE 086N 03E 06 SE SW SW 086N 03E 08 SE NW SW 086N 03E 08 SE NE SE 086N 03E 09 NW SW SW	086N 03E 20 NE NW SW 7. 086N 03E 22 SE SE SW 086N 03E 25 NE NE SE 086N 03E 30 SW SE NE

	TOTAL DEPTH	255 125 135 710 60	215 225 255 136	265 205 305 310	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	115 216 161 180 170	287 287 305 305	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	# \$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	FORMATION UNIT	MADUOKETA KANKAKEE KANKAKEE ST PETER KANKAKEE	MAQUOKETA GALENA MAQUOKETA UNDIFF EDGEWOOD	EDGEWOOD GALENA KANKAKEE UNDIFF MAQUOKETA	KANKAKEE NIAGARA UND NIAGARA UND	KANKAKEE NIAGARA UND HOPKINTON NIAGARA UND NIAGARA UND	DECORAH GALENA GALENA GALENA PLATTEVILLE	PLATTEVILLE PLATTEVILLE ST PETER PLATTEVILLE PLATTEVILLE	PLATTEVILLE PLATTEVILLE PLATTEVILLE GALENA GALENA
	BOTTOM	ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN SILURIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN ORDOVICIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN
	DEPTH	30 110 110 110	237 237 24	4 % % % % % % % % % % % % % % % % % % %	81 80 0 50 4	7 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	31112 320 320	3 2 3 1 2 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	220 200 200 200
COUNTY	BEDROCK TOP UNIT	NIAGARA UND KANKAKEE KANKAKEE	KIAGARA UND NIAGARA UND UNDIFF KANKAKEE	NIAGARA UND HOPKINTON NIAGARA UND UNDIFF	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	HOPKIRTON NIAGARA UND HOPKINTON NIAGARA UND	GALENA GALENA GALENA GALENA GALENA	GALENA GALENA GALENA GALENA GALENA	GALENA MADUOKETA GALENA MADUOKETA MADUOKETA
JACKSON	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN
	ELEVA- TION	1020 965 965 925 850	923 929 925 1045 785	914 1015 1032 920 1077	939 939 1014 1014 1080	977 1053 960 1002	689 680 735 665	720 735 702 730 720	734 732 718 675 730
	WELL NO.	11179 11334 17137 17033 15549	11159 11190 09973 14630	11756 01270 11355 11758	09798 09798 10850 17151	08021 15092 07637 10890 14704	05291 13627 05293 05217 05217	05267 05292 05281 05281 05282	05286 05285 05288 10137 05273
	LOCATION TWP RGE SEC QUARTERS	86N 02E 01 NE NE SW 86N 02E 02 NE NE NE 86N 02E 02 NE NE NE 86N 02E 02 NW NW NE 86N 02E 03 SW SW SE	86N 02E 09 NE NW NW 86N 02E 10 SE NW NW NW 86N 02E 10 SE SE SW 86N 02E 13 NE NW NW 86N 02E 16 SW NE SW	86N 02E 20 NE NW SE 86N 02E 23 NE NE SW 86N 02E 24 SE SW NW 86K 62E 29 SW SE KW 86N 01E 03 SE SE NW	86N 01E 09 NE SE SW 86N 01E 09 NE SE SW 86N 01E 10 SW SE SW 86N 01E 15 SE NE NW 86N 01E 15 NE NW SW	36N 01E 17 3W NW NE 86N 01E 21 SE NW NW 86N 01E 25 SW SW SE 86N 01E 27 SE NE NW 86N 01E 36 NE NW	87N 04E 07 NW SE NE NE 87N 04E 07 SE SW NE 87N 04E 07 NE SE NE NE 87N 04E 07 SW SW NE 87N 04E 08 SE SW SW NE	87N 04E 08 NW NE NE NW 857N 04E 08 NW NW NW NW NW 87N 04E 08 NW SE NW 87N 04E 08 NW SE NW	87N 04E 08 NV SE NV 65N 04E 08 SV SE NV 87N 04E 08 NE NE NE SV 87N 04E 14 SV SV NV NV 87N 04E 15 SV NE NE SE
	F	00000	ö ööö ö	00000	00000	60000	00000	00000	00000

	TOTAL DEPTH	3 4 4 10 10 10 10 10	1 G	0 0 0 0 0 0 0 0 0 0 0 0	(C) (C) (N)	160	27.0 86.6
	FORMATION UNIT	GALENA GALENA GALENA GALENA	GALENA	CALENA OALENA AHTE AHTE	MAGUOKETA	EDGEWOOD	ORDOVICIAN MACUOKETA ORDOVICIAN PR DU CHIEN
	BOTTOM SYSTEM	ORDOVICIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN	ORDOVICIAN	ORDOVICIAN	SILURIAN	ORDOVICIAN ORDOVICIAN
	DEPTH	7 188 55	C	ப	വ	10	ក
COUNTY	BEDROCK TOP UNIT	KANKAKEE Kankakee Galena Galens	CALENA.	ORDOVICIÁN GALENA	מוס למנסנים		KANKAKTE Kankakte
JACKSON	SYSTEM	SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN	ORDGVICIAN	SILURIAN	SILURIAN	SILURIAN SILURIAN
	ELEVA- TION	971 1012 708 630	634	2020	1025	096	0 0 0 0 1 1
	. WELL NO.	08366 02294 08890 17145	12920	11337	11760	14682	01291
	LOCATION E SEC QUARTERS	21 SE NE NV 23 SW NE SW 36 SV NK SE	S NE SW	07 SW SW RS 12 SE NE SW SE	u ⊠ o ≃	1 SW SE	33 SW SE 33 SE SE SW
	LOCA TWP RGE SE	087N 04E 2 087N 04E 2 087N 04E 2	270	0078 03H 0	11 EU	360	057N 03E 0

	TOTAL DEPTH	120 175 230 199 147	130 105 141 138 100	96 95 208 130 175	1 200 200 200	120 64 180 230 180	210 225 220 214 181	1141 1166 1166 1166 1166 1166 1166 1166	00 - 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		ON O	UND UND			UND UND UND		O C C C	a aa N D C C
	FORMATION	NIAGARA HOPKINTO N MAQUOKET N MAQUOKET NIAGARA	KANKAKEE Y PLEIST U NIAGARA UNDIFF NIAGARA	NIAGARA NIAGARA NIAGARA NIAGARA NIAGARA	NIAGARA GOWER NIAGARA NIAGARA NIAGARA	NIAGARA NIAGARA NIAGARA GOWER NIAGARA	NIAGARA NIAGARA NIAGARA UNDIFF NIAGARA	NIAGARA GOWER NIAGARA NIAGARA NIAGARA	GOWER NIAGARA GOWER NIAGARA NIAGARA
	BOTTOM SYSTEM	SILURIAN SILURIAN ORDOVICIA ORDOVICIA SILURIAN	SILURIAN QUATERNAR SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAE SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAK SILURIAK SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	30 80 160	85 110 113	15 20 1 40 20	20 57 5 40 110	80 20 160 100	2 45 200 203 1705 173	125 124 65 50 15	88 70 102 107
COUNTY	T0P	QND NO.	OND UND		OND OND OND	OND OND		O O O O	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
noo	BEDROCK UNIT	NIAGARA HOPKINTO UNDIFF NIAGARA	KANKAKEE NIAGARA UNDIFF NIAGARA	NIAGARA NIAGARA NIAGARA NIAGARA NIAGARA	NIAGARA GOWER NIAGARA NIAGARA UNDIFF	NIAGARA NIAGARA NIAGARA GOWER	NIAGARA NIAGARA NIAGARA UNDIFF	NIAGARA GOWER NIAGARA NIAGARA NIAGARA	GOWER NIAGARA GOWER NIAGARA NIAGARA
JONES	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN PENN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	785 865 790 716	728 727 792 804	794 798 785 801 835	873 860 831 817	777 768 923 906	362 768 854 815	766 772 807 806 797	800 900 908 900 900
. '	VELL NO.	08588 08585 08662 06030 07364	17133 17155 17210 05362 17117	15636 17752 18397 16078 15093	10150 03219 13983 14022 08830	10572 11633 16142 07354 08809	07650 14574 10560 15074 06789	07885 07349 13900 09709	07634 15901 0230 09458 04985
	S	шшш≲ш	ស្នាស់ ស្នា ស	E Eumm	w m ≥ m ≥	ஙங≯யய	w3w3>	NN NN N N N N N N N N N N N N	NV N
	ARTE	N N N N N N N N N N N N N N N N N N N	S N N N N N N N N N N N N N N N N N N N	SEVEN	S Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	NNNN NNNN NNNN	S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	N N N N N N N N N N N N N N N N N N N
	ON	S S S S S S S S S S S S S S S S S S S	Samme Samme	SEVEN	NSSS M	NSKE	SSE	SKERK	M S M S M
	AT I	07 13 15 22 25	28 36 07 07	10 11 17	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	000 000 000 000	00 112 115 120 120	3222 326 35	00010 84008
	LOC.	33333	01W 02W 02W	02W 02W 02W 02W 02W	02V 02V 02V 02V	780 780 780 780	750 750 750	780 780 780 780	00000 0000 0400 0400
	TWP R	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	NN	NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	00000 00000 00000 00000 00000	22 N N N N N N N N N N N N N N N N N N	2	NN	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

	TOTAL DEPTH	220 164 210 200 125	137 105 120 195	76 76 185 100 345	00000 00000 00000 00000	105 228 223 130 180	164 1933 127 312 330	00000 00000 400000	220 238 225 247 247
	FORMATION UNIT	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND KANKAKEE KANKAKEE	NIAGARA UND GOWER NIAGARA UND KANKAKEE	KANKAKEE UNDIFF Y PLEIST UND NIAGARA UND	UNDIFF NIAGARA UND NIAGARA. UND UNDIFF GOWER	UNDIFF NIAGARA UND UNDIFF NIAGARA UND KANKAKEE	GOWER PLEIST UND NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND N GALENA GOWER NIAGARA UND
	BOTTOM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN OUATERNARN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN QUATERNARY SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN SILURIAN
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JONES	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
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	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN CAMBRIAN SILURIAN	QUATERNARY CAMBRIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
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JONES	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN PENN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	750 752 775 841 879	766 748 799 812 868	871 841 970 826 827	788 816 843 926 932	902 931 792 928	0 0 0 0 0 0 0 0 0 0 0 1 0 1 0 0 0 1 0	9557 978 979 972	983 978 977 970 851
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	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN ORDOVICIA SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
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COUNTY	BEDROCK TOP UNIT	UNDIFF WAPSIPINICON NIAGARA UND NIAGARA UND	NIAGARA UND KANKAKEE NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND UNDIFF KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND HOPKINTON UNDIFF HOPKINTON	NIAGARA UND HOPKINTON NIAGARA UND NIAGARA UND	UNDIFF NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND NIAGARA UND UNDIFF NIAGARA UND
JONES	SVSTEM	SILURIAN DEVONIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN PENN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
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	WELL NO.	02903 04189 05193 09514 17461	15685 12645 11763 09792 11150	15631 09390 03541 12603	08584 09722 15219 13912 02905	09366 02502 10995 13925 06029	13922 08592 09708 10030	14634 12419 13849 02900 02902	09372 09383 10569 09665 11790
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	TOTAL DEPTH	100 100 60 185 249	320 020 020 020 03 03	215 100 165 168 203	1326 1336 100 80	106 120 1111 190 304	300 205 170 150 88	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	250 150 170 28
	FORMATION	NIAGARA UND HOPKINTON NIAGARA UND HOPKINTON UNDIFF	NIAGARA UND NIAGARA UND UNDIFF NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND UNDIFF GOWER	UNDIFF NIAGARA UND NIAGARA UND GOWER NIAGARA UND	HOPKINTON NIAGARA UND NIAGARA UND NIAGARA UND KANKAKEE	KANKAKEE NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	KANKAKEE KANKAKEE KANKAKEE GOWER NIAGARA UND	UNDIFF NIAGARA UND NIAGARA UND GOWER
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	20 65 0 152 230	275 40 180 95	200 300 300 300 300 300	210 20 65 115	45 65 100 157 291	267 185 95 72	2888 0888 00884 0088	22 242 242 135 0
COUNTY	BEDROCK TOP UNIT	NIAGARA UND HOPKINTON NIAGARA UND HOPKINTON UNDIFF	NIAGARA UND NIAGARA UND UNDIFF NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND UNDIFF GOWER	UNDIFF RIAGARA UND NIAGARA UND	HOPKINTON RIAGARA UND NIAGARA UND NIAGARA UND KANKAKEE	KANKAKEE NIAGARA UND NIAGARA UND NIAGARA UND	UNDIFF KANKAKEE KANKAKEE GOWER NIAGARA UND	GOWER UNDIFF NIAGARA UND WAPSIPINICON
JONES	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN DEVONIAN SILURIAN
	ELEVA- TION	882 874 877 920 1024	1026 873 860 874 846	9936 8669 9069 9184 818	884 876 885 921	907 927 934 970	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1032 1032 1026 1059 835	1060 1028 963 1031 873
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	FORMATION UNIT	UNDIFF Undiff Gower Kankakee	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND GOWER	NIAGARA UND KANKAKEE UNDIFF EDGEWOOD	EDGEWOOD KANKAKEE EDGEWOOD EDGEWOOD KANKAKEE	N MAGUOKETA EDGEWOOD KANKAKEE KANKAKEE KANKAKEE	N MAQUOKETA N ST PETER KANKAKEE EDGEWOOD	N MAGUOKETA KANKAKEE N MAGUOKETA KANKAKEE EDGEWOOD	KANKAKEE KANKAKEE EDGEWOOD EDGEWOOD KANKAKEE
	BOTTOM SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN ORDOVICIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	95 105 220 150	75 100 212 40	274 170 95 225 75	103 107 60 40 15	30 45 110 225 17	70 65 53 15	20202	8 4 R + W
COUNTY	BEDROCK TOP UNIT	WAPSIPINICON GOWER KANKAKEE GOWER	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND GOWER	NIAGAPA UND NIAGARA UND KANKAKEE UNDIFF HOPKINTON	KANKAKEE KANKAKEE NIAGARA UND	NIAGARA UND KANKAKEE KANKAKEE KANKAKEE NIAGARA UND	NIAGARA UND NIAGARA UND HOPKINTON NIAGARA UND	NIAGARA UND HOPKINTON NIAGARA UND HOPKINTON	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND KANKAKEE
JONES	SYSTEM	SILURIAN DEVONIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	9939 440 9939 789	80 00 00 00 00 00 00 00 00 00 00 00	947 936 936 972 935	1001 917 916 1021 955	989 864 881 946	954 1020 1020 978 995	957 930 1045 912	1024 930 969 977 932
	WELL NO.	04431 03460 04156 09667 03700	08816 14003 02921 13033 08198	12323 15333 09287 14689 03336	08663 09450 12644 17708 08811	11771 10854 06953 04012 09166	11773 09674 17885 09710 09685	17171 04993 16617 04792 08821	09386 11677 13074 09379 11140
	LOCATION TWF RGE SEC QUARTERS	085N 04W 21 NE NW 085N 04W 23 SE NE SE NW 0685N 04W 24 NE NE SE NW 0685N 04W 25 SW SW NW	085N 04W 26 SE NW NE 085N 04W 26 NE NW SW 085N 04W 26 NE NW SE 085N 04W 26 NE SW SE 085N 04W 27 NE SW SW	085K 04K 34 KT SE SE 065K 04K 35 KT SE SV 086N 01W 04 NW NW NW NW 086N 01W 07 SE SW NE 086N 01W 09 SE SW NE	086N 01W 16 NE SE SE 086N 01W 17 NW SW NE 086N 01W 17 NE SE SE 086N 01W 24 NE NE SW 051R 01W 26 SE NW SW	086N 01W 27 SW NW SE 086N 01W 29 NW SW SE 086N 01W 29 SW SW SE 086N 01M 29 NE SE 086N 01W 32 NW NE SE	086N 01W 35 NW NE SE 085E 02W 05 SE SW SE 085E 02W 05 SE SW SE 086N 02W 07 SW NW SE 086N 02W 08 NW SE NE	086% 02W 08 SE SW SE 086N 02W 11 SE SE 086N 02W 16 NW NE NE 086N 02W 18 SE NE 086N 02W 20 SW SE SE	086N 02W 23 SE NW NE 78 086N 02W 28 SE SE NW 086N 02W 32 NE SW SW 086N 03W 01 SE SE SE 086N 03W 03 NW NE

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CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	NIAGARA UND CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY NIAGARA UND GALENA CEDAR VALLEY CEDAR VALLEY	WAPSIPINICON WAPSIPINICON SPRING GROVE NIAGARA UND UNDIFF	KANKAKEE KANKAKEE WAPSIPINICON CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY PLEIST UND UNDIFF CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	PLEIST UND PLEIST UND PLEIST UND	FORMATION UNIT
155 107 105	155 155 176 155	155 172 680 85	127 125 177 272 122	236 236 201 32 162	11212 50000 00000	150 135 205 235	0 U U O U	TOTAL DEPTH

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COUNTY

	TOTAL DEPTH	185 170 180 202 200	195 184 37 225 125	166 65 245 117 61	168 125 70 130	150 124 90 90 80	120 120 104 145	00 7 cm o	148 1125 1130
	FORMATION UNIT	EDGEWOOD KANKAKEE EDGEWOOD KANKAKEE EDGEWOOD	KANKAKEE KANKAKEE HOPKINTON EDGEWOOD KANKAKEE	KANKAKEE Y PLEIST UND EDGEWOOD NIAGARA UND	KANKAKEE NIAGARA UND UNDIFF HOPKINTON NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND UNDIFF NIAGARA UND HOPKINTON	KANKAKEE HOPKINTON HOPKINTON KANKAKEE NIAGARA UND	KANKAKEE NIAGARA UND HOPKINTON HOPKINTON KANKAKEE
	BOTTOM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN QUATERNAR SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH		R O R 8 O	21 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	155 75 25 35 35	0 4 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20 20 0	11 99 99 99	55 80 55 7
COUNTY	BEDROCK TOP UNIT	NIAGONA UND HOPKINYON NIAGAKA UND NIAGARA UND NIAGARA UND	HOPKINTON KIAGARA UND HOPKINTON NIAGARA UND	HOPKINTON NIAGARA UND NIAGARA UND	KANKAKEE NIAGARA UND UNDIFF HOPKINTON NIAGARA UND	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND	NIAGARA UND UNDIFF NIAGARA UND UNDIFF	HOPKINTON HOPKINTON HOPKINTON HOPKINTON NIAGARA UND	HOPKINTON NIAGARA UND HOPKINTON HOPKINTON
JONES	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	88 89 6 7 8 9 8 9 6 7 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8813 820 825 842	89 99 99 99 99 99 99 99 99 99 99 99 99 9	88886 8886 888 888 868 868	8 8 8 8 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4	8999 887 1002 924 840	800008 800048 90808
	WELL NO.	04289 07165 04432 13472 16084	11021 14675 11148 16838 02826	07357 11969 00917 11223 09297	15139 13880 02471 07681 16418	16620 16609 16868 09290 18960	17755 13889 16621 02513 12302	03331 06308 07871 02312 08810	06096 09726 03483 08025 04465
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	TERS	33333	SSSSSS	S S S S B S S B S S B S S B S S S B S S S B S S S B S S S S B S	NNSNS NESSEE	SSESS	SKEZS	N N N N N N N N N N N N N N N N N N N	SEE
	UAR	NZZZZ MZZZZ MZZZZZ	S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	SEE	SESSE	NZNZN	NNNNN	SZZONO
	S O	N W W N	M Z Z Z Z Q	S S S S S S S S S S S S S S S S S S S	N N N N N N N N N N N N N N N N N N N	SEEKE	SERSE	NNNN	SZSZZZ
	CATI(22333 223333	2233	2001 1001 1001 1001	00000 00000	33333 33333 3444	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	36 7 03 7 08 7 10	113
	LO RGE	3333 3360 3600 3600	7880 7880 7880 7880	780 780 780	77.00 77.00 78.00 78.00 78.00 78.00	750 750 750 750 750	7880 7880 7880 7880	0 3 3 4 4 0 0 4 4 4 4 4 4 4 4 4 4 4 4 4	0000 3440 3440 344
	TWP	N N N N 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N M M 98 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00868 00868 00868 00868	M N N N N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00800000000000000000000000000000000000	000000 00000 00000 00000 00000	N N N N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	086N 085N 085N 085N

	TOTAL DEPTH	160	123	129	ວາ ານ	00	145	155	220	182	128
	FORMATION UNIT	KANKAKEE		HOPKINTON	NIAGARA UND	HOPKINTON	HOPKINTON	NIAGARA UND	NIAGARA UND	NIAGARA UND	UNDIFF
	BOTTOM	SILURIAN		SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN
	DEPTH	137	വ	45	ល	20	135	115	120	100	86
COUNTY	BEDROCK TOP UNIT	KANKAKEE	NIAGARA UND	HOPKINTON	NIAGARA UND	HOPKINTON	HOPKINTON	NIAGARA UND	NIAGARA UND	NIAGARA UND	UNDIFF
JONES	SYSTEM	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN	SILURIAN
	ELEVA- TION	960	948	954	888	924					996
	VELL NO.	02324	06095	04802	15682	02904	02649	17691	09713	09989	11848
	LOCATION P RGE SEC QUARTERS	04W 20 SE SE	04W 21 SE SE	04W 23 SW NE	04W 24 SE NW	04W 25 SW NW	04W 28 NE		04W 30 SW SW	04W 32 NE NW	04W 36 SW SE
	Ş	80	80	80	08	086N	08	08	80	03	08

	TOTAL DEPTH	350 1557 405 150	200 206 457 375 632	212 313 415 434 430	0 439 275 405 004	13 26 26 26 26 26 26 26 26 26 26 26 26 26	255 269 890 240 180	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	200 200 200 200 71 71
	FORMATION UNIT	MAQUOKETA TREMPEALEAU KANKAKEE NIAGARA UND	NIAGARA UND RIAGARA UND KANKAKEE NIAGARA UND GALENA	NIAGARA UND KANKAKEE MAQUOKETA MAQUOKETA MAQUOKETA	MAGUOKETA MAGUOKETA NIAGARA UND MAGUOKETA MAGUOKETA	BERTRAM UNDIFF NIAGARA UND MAGUOKETA NIAGARA UND	UNDIFF UNDIFF DECORAH UNDIFF PLEIST UND	MAGUOKETA WAPSIPINICON WAPSIPINICON UNDIFF	NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND NIAGARA UND
	BOTTOM	ORDCVICIAN CAMBRIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN ORDOVICIAN	SILURIAN SILURIAN ORDOVICIAN ORDOVICIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN SILURIAN ORDOVICIAN ORDOVICIAN	DEVONIAN SILURIAN SILURIAN ORDOVICIAN SILURIAN	SILURIAN SILURIAN ORDOVICIAN SILURIAN QUATERNARY	ORDOVICIAN DEVONIAN DEVONIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN
	DEPTH	31 147 147 18	70 144 115 83	100 35 36 36	64 77 78 12 65	55 121 105 215 114	1123 1123 1323 1323	105 121 107 177 123	100 160 272 208 270
COUNTY	T0P		N NN N NN C CC	N C N C C D C C C C C C C C C C C C C C C C C	NICON	NICON UND UND	NICON NICON NICON	NICON ALLEY ALLEY NICON NICON	N I CON C C C C C C C C C C C C C C C C C C
വാ	BEDROCK UNIT	NIAGARA NIAGARA NIAGARA NIAGARA UNDIFF	NIAGARA NIAGARA NIAGARA UNDIFF	NIAGARA HOPKINTO NIAGARA WAPSIPIN BERTRAM	BERTRAM WAPSIFIN BERTRAM NIAGARA	WAPSIPIN UNDIFF NIAGARA NIAGARA NIAGARA	WAPSIPIN WAPSIPIN WAPSIPIN	WAPSIPII CEDAR W CEDAR W WAPSIPII	WAPSIPIN NIAGARA NIAGARA NIAGARA NIAGARA
LINN	SYSTEM	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN SILURIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN
	ELEVA- TION	888888 88988 6996 600	8 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	707 810 722 722 710	722 722 725 748 738	200 80 80 80 80 80 80 80 80 80 80 80 80 8	857 799 847 816	88 88 88 88 88 88 88 88 88 88 88 88 88	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	WELL NO.	20008 23181 09254 08637 04996	14670 16159 16128 01506	16330 1581 22720 03639 21580	18974 08004 11339 22542 21719	11986 12953 12954 05062	05124 12915 07547 05793	01976 14279 22034 22659 21202	19278 09634 08921 09638 21947
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	ERS	SEE	SSEE	NE SEE	SE SE	N N N N N N N N N N N N N N N N N N N		AN AN AN	NE SE
	R	SNZNN		SCHER	N N N N N N N N N N N N N N N N N N N	SSSSE	SAZES	SNEN	N N N N N N N N N N N N N N N N N N N
	ON QUA	NESSEE	SOSOS	E E E E E E E E E E E E E E E E E E E	S S S E E	SZNES	N N N N N N N N N N N N N N N N N N N	NSSSS	N N N N N N N N N N N N N N N N N N N
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	LOC GE S		00 00 00 00 00 00 00 00 00 00 00 00 00	7.7.7.7.7.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	0077 0077 0077 0077 0077	77.00 00	33333	XXXXX 822X 822X 822X 822X 822X 822X 822	33333
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	TOTAL DEPTH	. 249 242 205 170 338	410 229 210 230 250	76 180 172 289 175	235 1663 183 248 217	445 208 245 390 164	120 90 82 1565 441	4434 434 435 630 600	140 275 460 1560 295
	FORMATICA UNIT	NIAGARA UND UNDIFF PLEIST UND PLEIST UND GOWER	KANKAKEE VAPSIPINICON NIAGARA UND NIAGARA UND	BERTRAM NIAGARA UND UNDIFF NIAGARA UND UNDIFF	UNDIFF TREMPEALEAU UNDIFF NIAGARA UND	MAGUOKETA UNDIFF NIAGARA UND KANKAKEE UNDIFF	BERTRAM NIAGARA UND WAPSIPINICON TREMPEALEAU MAQUOKETA	MAQUOKETA KANKAKEE WAPSIPINICON PLEIST UND MAQUOKETA	CEDAR VALLEY NIAGARA UND MAQUOKETA TREMPEALEAU NIAGARA UND
	BOTTOM	SILURIAN SILURIAN QUATERNARY QUATERNARY SILURIAN	SILURIAN DEVONIAN SILURIAN SILURIAN SILURIAN	DEVONIAN SILURIAN SILURIAN SILURIAN SILURIAN	SILURIAN CAMBRIAN SILURIAN SILURIAN SILURIAN	ORDOVICIAN SILURIAN SILURIAN SILURIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN CAMBRIAN ORDOVICIAN	ORDOVICIAN SILURIAN DEVONIAN QUATERNARY ORDOVICIAN	DEVONIAN SILURIAN ORDOVICIAN CAMBRIAN SILURIAN
	DEPTH	213 203 235	35 130 70 77 75	125 126 126 127 127 137 137 137 137 137 137 137 137 137 13	65 70 40 160	38 85 70 15	223330 023330	35	04044
COUNTY	BEDROCK TOP UNIT	NIAGARA UND UNDIFF GOWER	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY NIAGARA UND BERTRAM	BERTRAM NIAGARA UND BERTRAM WAPSIPINICON	WAPSIPINICON WAPSIPINICON WAPSIPINICON	BERTRAM WAPSIPINICON BERTRAM BERTRAM BERTRAM	BERTRAM NIAGARA UND WAPSIPINICON WAPSIPINICON	WAPSIPINICON WAPSIPINICON WAPSIPINICON	CEDAR VALLEY WAPSIPINICON WAPSIPINICON WAPSIPINICON
LINN	SYSTEM	SILURIAN SILURIAN SILURIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN SILURIAN	DEVONIAN ST DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN
	ELEVA- TION	828 824 732 730 755	772 832 863 929	8697 9957 839 849	840 890 849 849	812 886 818 740 778	806 731 724 795	786 826 848 721 855	857 779 793 798
•	WELL NO.	19477 01756 01919 01916 01870	11597 20893 16890 12566	02593 09518 12650 09817 04430	09747 08478 04369 11010	19519 05212 01722 22540 02467	05106 06633 17979 05741	01333 01313 05209 13137 07998	05016 21675 01409 01726 01819
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	L C	88888	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	055 055 055 055 055	9000	9000	06 06 07 07	0 0 0 0 0 0 0 0 0 0 0 0	0770
	ξ	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 8 2 N 0 8 2 N 0 8 3 N 0 8 3 N	0 8 3 N N 0 8 3 N N 0 8 3 N N N N N N N N N N N N N N N N N N	X X X X X X X X X X X X X X X X X X X	80000000000000000000000000000000000000	00000000000000000000000000000000000000	00000000000000000000000000000000000000	083N 083N 083N 083N

	TOTAL DEPTH	140 301 530 310	224 4225 4418 2118	420 2525 430 405 1462	430 421 1495 420 100	320 275 210 415 425	1494 1494 1493 1493 1493 174	4422 4422 564 7667 7667	350 1490 1490 405 405
	FORMATION UNIT	WAPSIPINICON NIAGARA UND NIAGARA UND MAGUOKETA NIAGARA UND	VAPSIPINICOM MAQUOKETA MAQUOKETA MAQUOKETA	MAGUOMETA DRESBACH KANKAKEE KANKAKEE TREMPEALEAU	N MAQUOKETA KANKAKEE TREMPEALEAU KANKAKEE WAPSIPINICON	NIAGARA UND UNDIFF NIAGARA UND N MAQUOKETA N MAQUOKETA	TREMPEALEAU N MAQUOKETA TREMPEALEAU KANKAKEE N MAQUOKETA	N MAQUOKETA N MAQUOKETA EDGEVOOD NIAGARA UND TREMPEALEAU	NIAGARA UND TREMPEALEAU NIAGARA UND N MAQUOKETA N MAQUOKETA
	BOTTOM SYSTEM	DEVONIAN SILURIAN SILURIAN ORDOVICIAN SILURIAN	DEVONTAN ORDOVICIAN PRECAMB ORDOVICIAN ORDOVICIAN	ORDOVICIAN CAMBRIAN SILURIAN SILURIAN CAMBRIAN	ORDOVICIAN SILURIAN CAMBRIAN SILURIAN DEVONIAN	SILURIAN SILURIAN SILURIAN ORDOVICIAN	CAMBRIAN ORDOVICIAN CAMBRIAN SILURIAN ORDOVICIAN	ORDOVICIAN ORDOVICIAN SILURIAN SILURIAN CAMBRIAN	SILURIAM CAMERIAN SILURIAN ORDOVICIAN
	DEPTH	70 85 90 117 80	60 10	0 3 1	24 20 20 20	130 81 43 10	72 75 25 10	V V V V V V V V V V V V V V V V V V V	50 78 78
COUNTY	BEDROCK TOP UNIT	WAPSIPINICON VAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON WAPSIPINICON NIAGARA UND	WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON WAPSIPINICON WAPSIPINICON	WAPSIPINICON WAPSIPINICON WAPSIPINICON BERTRAM	UNDIFF UNDAGARA UND BERTRAM WAPSIFINICON	NIAGARA UND UNDIFF WAPSIFINICON	BERTRAM WAPSIPINICON BERTRAM NIAGARA UND
LINN	SYSTEM	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN. DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN	SILURIAN SILURIAN DEVONIAN	SILURIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN DEVONIAN SILURIAN
	ELEVA- TION	888888 588989 687888	770 770 733 725	723 723 725 725	716 729 733 729 815	885 895 720 725	719 715 716 705 728	728 723 718 727 729	731 719 753 737 721
	WELL NO.	04160 22522 04163 01767 02328	01667 01551 00015 01388	01408 06811 01065 01031 00059	00331 03163 01132 00379 01721	05213 11018 05080 02058 13183	01455 13184 01654 13182 01154	1146 01974 00970 02460 01499	02464 17180 05083 22356 02282
	LOCATION P RGE SEC QUARTERS	3N 07W 11 SE SW NE SE 3N 07W 13 SE NW SE NE 3N 07W 13 NW NW SE 3N 07W 13 NE SE SE 3N 07W 14 SE SE SE	2M 07W 15 SW NW SW SM 07W 15 NW NE SW SW 3M 07W 21 NE SW 3M 07W 21 NE SW NW SW 3M 07W 21 NW SW NW SW	3N 07W 21 SW SW SW 3N 07W 21 NW NE SE SW 3N 07W 21 NW SE SW 3N 07W 21 NW SE SW 3H 07W 21 SE SE SW	3N 07W 21 SE SE SW 3N 07W 21 SW SE 5N 07W 21 SE SW SE 3N 07W 21 SE SE 3N 07W 24 SE SW	3N 07W 24 SE SE SE 3N 07W 25 SE NV NE 3N 07W 26 SW NE SE SW 3N 07W 27 SW SW NW 3N 07W 27 SW SW NW	3N 07V 27 NV SW NE SW 3N 07W 27 SE SW NE SW 3N 07W 27 SE NE NW SW 3N 07W 27 NE NW SW 3N 07W 28 SW NW NE NE	3N 07W 28 NE NV NW NE 3N 07W 28 NE SW NE 5N 07W 28 SE SE NE 3N 07W 28 SE NW NE NW 3N 07W 28 NE NE NE SW	3N 07W 28 NW SW NW SE SE SW 07W 29 NW SE SE SW 3N 07W 29 NW SE SE SW 3N 07W 29 NW SW SE SW 07W 29 NE NW SW SE
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TOTAL DEPTH	370 370 321 3921	r (. co. 4 co			O 1 (3) (4)	သက္လ	<u>ت</u> د	വ .	- 2	$\sim \infty$	ထာဝက	~ P~ -	::.	1660 1660 1660 188
FORMATION UNIT	WAPSIPINICON BERTRAM NIAGARA UND MAQUOKETA	PLEIST UND	WAPSIPINICON BERTRAM BERTRAM	AGARA UN	AGARA UN PSIPINIC AGARA UN	PLEIST UNIAGARA	PKINTC AGARA AGARA	IAGARA UN	IAGARA UN	IAGARA UN ERTRAM	AGARA UN	MAQUOKETA NIAGARA UN WAPSIPINIC	SIPINIC	AGARA UN AGARA UN PSIPINIC	WAPSIPINICON BERTRAM TREMPEALEAU NIAGARA UND CEDAR VALLEY
BOTTOM	DEVONIAN DEVONIAN SILURIAN ORDOVICIAN	QUATERNARY	DEVONIAN DEVONIAN DEVONIAN	ILURIA	ILURIA ILURIA ILURIA	UATERNAR ILURIAN	ILURIA ILURIA ILURIA	ILURIA	ILURIA	ILURIA EVONIA	ILURIA	RDOVICIA ILURIAN EVONIAN	EVONIA	ILURIA ILURIA EVONIA	DEVONIAN DEVONIAN CAMBRIAN SILURIAN DEVONIAN
DEPTH	305 305 125 125	•	D L L L	80	204 182 0			LO U	ထ ထ	Ō	274	195 224 70			105 209 75
BEDROCK TOP UNIT	WAPSIPINICON WAPSIPINICON NIAGARA UND NIAGARA UND WAPSIPINICON		PSIPINICO PSIPINICO DAR VALLE DAR VALLE	CEDAR VALLEY	NIAGARA UND WAPSIPINICON NIAGARA UND	SARA UN	KINTON SARA UN TRAM	SARA UN	IAGARA UN IAGARA UN	IAGARA UN	NIAGARA UND	NIAGARA UND WAPSIFINICON WAPSIPINICON	PSIPINIC	PSIPINIC AGARA UN	WAPSIPINICON WAPSIPINICON CEDAR VALLEY
SYSTEM	DEVONIAN SILURIAN SILURIAN DEVONIAN		EVONI EVONI EVONI	DEVONIAN	SILURIAN DEVONIAN SILURIAN	ILURIA	ILURIA ILURIA EVONIA	ILURIA	ILURIA ILURIA	ILURIA	SILURIAN	SILURIAN DEVONIAN DEVONIAN	EVONIA	EVONIA ILURIA	DEVONIAN DEVONIAN DEVONIAN
ELEVA- TION	798 830 840 811	N	N 00 00 N	ω.	- O 13 O	173	ထေတထ	(1)	2 5	90	₩ 0	200	NN	- 3 N	88888 822 925 101 101
WELL NO.	02400 03889 01771 02356 16975	138	228 508 508 153	128	5013 5013 501 501	250	014 014 368	261	764 346	346	667	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	489 446	899 398	05566 03467 23249 04892 04892
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E S	SEESEE	X X	M Z Z Z M M M	NE	w Z Z w	SE	333	, ж ы	3	N N	33	SEE S	SE	S S S	N S S S S S S S S S S S S S S S S S S S
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TOTAL DEPTH	101 101 203	305 305 710 366 231	329 233 340 727 217	90 2200 645 436	245 253 250 210 150	175 175 201 163	130 140 162 200 161	2213 7833 180
FORMATION UNIT	BURLINGTON OSAGE UND OSAGE UND OSAGE UND	CEDAR VALLEY OSAGE UND CEDAR VALLEY UNDIFF	WARSAW UNDIFF BURLINGTON CEDAR VALLEY PROSP HILL	HAMPTON HAMPTON TREMPEALEAU CEDAR VALLEY CEDAR VALLEY	PLEIST UND PLEIST UND PLEIST UND HAMPTON UNDIFF.	MAPLE MILL PLEIST UND UNDIFF MAPLE MILL	HAMPTON PROSP HILL HAMPTON PLEIST UND MAPLE MILL	UNDIFF MAPLE MILL UNDIFF CEDAR VALLEY PROSP HILL
BOTTOM	NAMA SON SON SON SON SON SON SON SON SON SON	DEVONIAN MISS DEVONIAN MISS MISS	MISS MISS MISS DEVONIAN	MISS MISS CAMBRIAN DEVONIAN	QUATERNARY QUATERNARY QUATERNARY MISS	MISS QUATERNARY MISS MISS	MISS MISS MISS QUATERNARY MISS	MISS MISS MISS DEVONIAN
DEPTH	137 81 48 34 131	140 180 150 170	205 180 195 195 97	71 83 90 220	166 90	30 154	108 115 77 50	44 93 70 22 25
BEDROCK TOP	BURLINGTON OSAGE UND UNDIFF OSAGE UND	D MOINES UND OSAGE UND UNDIFF UNDIFF	UNDIFF UNDIFF D MOINES UND MAPLE MILL BURLINGTON	GILMORE CITY BURLINGTON GILMORE CITY SHEFFIELD	HAMPTON UNDIFF	MAPLE MILL UNDIFF HAMPTON	HAMPTON HAMPTON GILMORE CITY GILMORE CITY	UNDIFF GILMORE CITY UNDIFF UNDIFF
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	TOTAL DEPTH	14 8 2 0 8 8 8 5 0 8 0 5 7	295 1855 7227 100	140 1745 125 162	30 11 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	200 141 177 113	, 11123 1118 1285 1285	242 1560 150 375	2000 3112 433
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	BOTTOM SYSTEM	MISS DEVONIAN MISS QUATERNARY	MISS QUATFANARY MISS DEVONIAN MISS	MISS DEVONIAN ORDOVICIAN MISS MISS	M M M M M M M M M M M M M M M M M M M	$\begin{array}{c} \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \\ \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \\ \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z} \mathbb{Z}$	MAMA SANA SANA SANA SANA SANA SANA SANA	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M
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MARSHALL	SYSTEM	M M M M M M M M M M M M M M M M M M M	W W W W W W W W W W W W W W W W W W W	MISS DEV & MISS MISS MISS MISS	W W W W W W W W W W W W W W W W W W W		M M M M M M M M M M M M M M M M M M M	A P P P P P P P P P P P P P P P P P P P	M M M M M M M M M M M M M M M M M M M
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<u>.</u>	WELL NO.	03397 01934 05791 06530	04861 05792 08293	03695	01655 08648 02231	08491	03795 03394 01679	02019 01680	03389
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	BOTTOM SYSTEM	EVONIA		DEVONIAN QUATERNARY QUATERNARY QUATERNARY	DEVONIAN DEVONIAN SILURIAN QUATERNARY ORDOVICIAN	EVONIA	QUATERNARY DEVONIAN QUATERNARY	DEVONIAN DEVONIAN CAMBRIAN	DEVONIAN DEVONIAN ORDOVICIAN DEVONIAN	DE VON I AN DE VON I AN DE VON I AN CAMBRIAN	CAMBRIAN DEVONIAN QUATERNARY QUATERNARY DEVONIAN
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	LOCATION TWP RGE SEC QUARTERS	82N 13W 29 SW NE	082N 14W 19 SE NE SW 082N 14W 25 NE SW NE 082N 14W 36. NW SE SW 082N 15W 16 SW SE SW	082N 15W 19 NE NE SW 082N 15W 34 NE NW NE 082N 16W 22 NE NW NW 082N 16W 24 NE SE SE 082N 16W 25 SE NW NW	083N 13W 01 NW SW SW 083N 13W 03 SE SW SE 083N 13W 12 SW SW SW 083N 13W 25 NE	MS MS FE MEI NES	083N 14W 03 NW NE OB3N 14W 17 SE SE SE OB3N 14W 21 SE NW NW 083N 14W 23 SW NW NW	83N 14V 36 SE NW 83N 15V 02 SE NE 83N 15V 15 NE SE 83N 15V 15 NE SE 83N 15V 15 SE SE	083N 15W 15 SE SE SW 083N 15W 19 NE SW SW 083N 15W 19 SE SW SE 083N 15W 19 SE SW SE 083N 15W 19 SE SW SE	083N 15W 22 SE NW NE 083N 15W 23 SE SE NW 083N 15W 26 SE NE 063N 15W 29 SW NE NW 083N 15W 34 NE NW	083N 15W 34 NE SW NW 083N 15W 34 SE SW NW

	TOTAL DEPTH	320 1262 510 410	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4444 60999 70999	171 171 279 361 210	1800 1800 320 252 52	275 234 350 1813 285	310 310 765 280	046 044 044 044 044
	FORMATION I	LIME CREEK GALENA CEDAR VALLEY CEDAR VALLEY LIME CREEK	CEDAR VALLEY CEDAR VALLEY UNDIFF CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	LIME CREEK LIME CREEK CEDAR VALLEV CEDAR VALLEY	TREMPEALEAU CEDAR VALLEY TREMPEALEAU CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY TREMPEALEAU	CEDAR VALLEY CEDAR VALLEY PLEIST UND CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY
	BOTTOM SYSTEM	DEVONIAN ORDOVICIAN DEVONIAN DEVONIAN DEVONIAN	DEVONIAN DEVONIAN SILURIAN DEVONIAN	DEVONTAN DEVONTAN DEVONTAN DEVONTAN	DEVONIAN DEVONIAN DEVONIAN DEVONIAN	CAMBRIAN DEVONIAN CAMBRIAN DEVONIAN	DEVONTAN DEVONTAN CAMBRIAN DEVONTAN	DEVONIAN DEVONIAN QUATERNARY DEVONIAN	DEVONIAN DEVONIAN DEVONIAN
	DEPTH	267 265 160 104	197 245 215 350	80000 00000 00000	1100 1100 1100 1100 1100 1100 1100 110	1387 1380 1385 235	195 195 231 232	23 85 251 251 251 251	2227 235 235 555 55
COUNTY	BEDROCK TOP UNIT	LIME CREEK SHEFFIELD LIME CREEK SHEFFIELD LIME CREEK	CEDAR VALLEY LIME CREEK UNDIFF CEDAR VALLEY	LIME CREEK LIME CREEK LIME CREEK LIME CREEK	SHEFFIELD SHEFFIELD LIME CREEK LIME CREEK LIME CREEK	LIME CREEK LIME CREEK LIME CREEK LIME CREEK	CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY CEDAR VALLEY	CEDAR VALLEY CEDAR VALLEY SHEFFIELD CEDAR VALLEY	LIME CREEK CEDAR VALLEY LIME CREEK LIME CREEK
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Table I. GENERALIZED STRATIGRAPHIC COLUMN OF IOWA

SYSTEM	SERIES	GROUP	GEOLOGIC UNIT or FORMATION	MAX. THICK(ft)	LITHOLOGY	HYDROGEOLOGIC UNIT				
	Holocene		Recent deposits	20-30	Soils, alluvial clays, silts, and fine sands	Alluvial Aquifer				
			Wisconsin							
Quaternary	Pleistocene		Illinoian		Loess, glacial till, & inter- bedded sand & grave!	Regional Confining Be containing local aquifer				
4.000	1 10101000110		Kansan	500						
			Nebraskan	1						
	İ	-	Carlile		Shale					
		Colorado	Greenhorn	350	Limestone & shale	Confining Bed				
Cretaceous	,		Graneros	1	Shale					
	, <u> </u>	Dakota		200	Sandstone & shale	Dakota Aquifer				
Jurassic(?)			Fort Dodge	50	Gypsum & shale	Confining Bed				
		Wabaunsee		300	Shale & Limestone					
	Virgil	Shawnee		250	Limestone & Shale	·				
		Douglas		115	Shale	Regional Confining Be containing some				
Pennsylvanian		Lansing		280	Limestone & shale	local aquifers				
	Missouri	Kansas City		200						
		Pleasanton		90	Shale, limestone, sandstone, & thin coal					
	Des Moines	Marmaton		175	Limestone, shole, & thin cool					
		Cherokee		775	Shale, sandstone, & thin coal					
			Ste. Genevieve St. Louis	50	Shale & limestone Sandy limestone					
	Meramec		St. Louis Spergen	100	Limestone					
			Warsaw	75	Dolomite & shale					
	Osage		Keokuk Burlington	200	Dolomite & limestone, cherty					
Mississippian			Gilmore City	155	Limestone, o o litic	Mississippian Aquifer				
			Hampton	150	Dotomite Limestone					
	Kinderhook			<u></u>	Dolomite with chert	1				
		No de OPH	Starrs Cave	75	Limestone, colitic					
		North Hill	Prospect Hill McCraney	70	Limestone					
			English River	25	Sittstone Shale					
		Yellow Spring	Maple Mill Aplington	300 40	Dolomite					
	l .		Sheffield	. 90	Shale	Devonian Confining Be				
	Upper		Lime Creek	190	Dolomite Dolomite & shale Shale					
			Shell Rock	65	Limestone Limestone					
Devonian										
			Cedar Valley	500	Limestone Dolomite					
	Middle			 	Limestone Limestone	Silurian — Devonian				
	Wildale			240	Dolomite	Aquifer				
			Wapsipinicon		Dolomite, silty Lithographic limestone					
			<u> </u>	<u> </u>	Dolomite					
	Lower		LaPorte City	140	Chert & limestone					
Silurian	Niagaran		Gower Hopkinton	300	Dolomite					
ondi idil	Alexandrian		Kankakee Edgewood	155 55	Dolomite with chert bonds Dolomite, sandy					
	† · · · ·			T	Shale					
	Cincinnatian		Maquoketa	300	Dolomite & shale Shale	Maquoketa Confining Bed				
	-	-	 	-	Limestone, some shale					
			Galena	230	Limestone & dolomite Dolomite & limestone, some chert	Locally, an aquifer o minor importance				
Ordovician	Mohawkian		Decorah		Shale & Timestone Limestone Shale & Timestone					
			Platteville	170	Limestone & shale Dolomite	Confining Bed				
	Chazyan		St. Peter	110	Shale & sandstone Sandstone					
					Sandy delemite					
	Beekmantown		Prairie du Chien	650	Sandstone Cherty dolomite	Cambrian-Ordovicia Aquifer				
		Trampasias	Madison Jordan	120	Sandstone with some dolomite					
		Trempealeau	Lodi	270	Dolomite					
Cambrian	St. Croixan		St. Lawrence Franconia	280	Sandstone, siltstone, and shale, sandy; :ume	Confining Bed				
					dolomite and limestone Sandstone					
		_	Galesville		Sandstone	Dresbach Aquifer				
	1	Dresbach	Eau Claire Mt. Simon		Sandstone & shale, dolomitic Sandstone	mitic Dresbuch Aquiter				
(?)	Red Clastics	1	MI, SIMOI	†	Coarse red sandstone &					
(?) (?) Precambrian			Sioux		Coarse red sandstone B shole Quartzite	Base of Ground-Water Reserve				

The stratigraphic nomenclature in this report is that used by the lowa Geological Survey and does not conform in every detail with the nomenclature used by the U.S. Geological Survey.