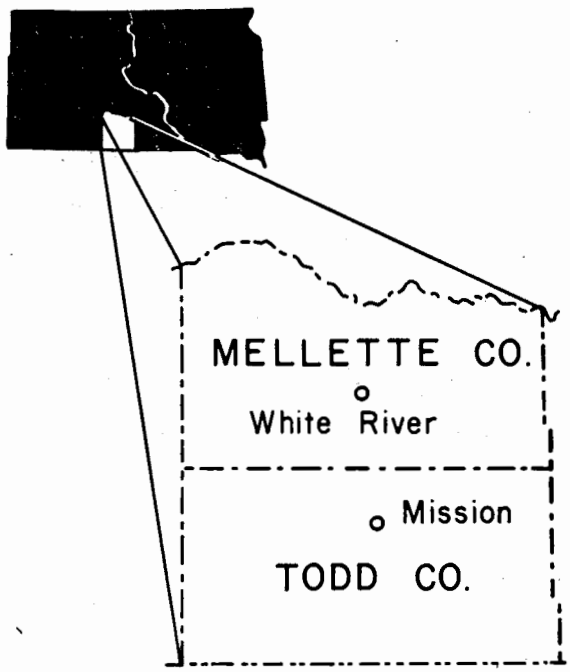
SOUTH DAKOTA GEOLOGICAL SURVEY
AND
SOUTH DAKOTA WATER RESOURCES COMMISSION

WATER RESOURCES REPORT NO. 6



BASIC HYDROGEOLOGIC DATA ROSEBUD INDIAN RESERVATION SOUTH DAKOTA

by

M. J. Ellis, D. G. Adolphson, and J. H. Ficken

U. S. Geological Survey

Vermillion, 1972

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Science Center
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INTRODUCTION

This report is intended to serve two purposes: (1) to make basic hydrologic data available for planning and studying water resources development and (2) to supplement the interpretive report of M. J. Ellis, J. H. Ficken, and D. G. Adolphson which describes the hydrogeology of the Rosebud Indian Reservation, South Dakota. The interpretive report will be published by the U. S. Geological Survey as Hydrologic Atlas HA-355.

The data contained in this basic-data report were collected as part of a 3-year hydrogeologic inventory and evaluation of the water resources of the Rosebud Indian Reservation, Mellette and Todd Counties. (See fig. 1) The investigation was conducted by the U. S. Geological Survey, at the request of the Bureau of Indian Affairs, as part of the program of the United States Department of the Interior for development of the Missouri River Basin.

The data contained in the 6 tables can be helpful both in locating the site for a single well and in planning large-scale water-supply developments. The data, however, will be most helpful if they are used together with U. S. Geological Survey Hydrologic Atlas HA 355, which discusses the rock units pertinent to water supply, the occurrence and availability of ground water supplies, and the chemical quality of the ground water.

Table 1 lists all ground-water-data sites and can be used as an index to more specific data such as well logs, water-level records, or water-quality records given in tables 2-6.

In addition to the basic data, this report contains a list of selected references that provides information on previous investigations and on literature pertaining to the geology or water resources of the region.

Stratigraphic nomenclature used in this report follows that of the South Dakota Geological Survey, which differs somewhat from the usage adopted by the U. S. Geological Survey.

Well-numbering system

Each data-collection site listed in this report has been assigned an identifying number based on its location with respect to the Federal landsurvey system as it applies to South Dakota.

The first numeral of a location number indicates the township, the second the range, and the third the section in which the point is located. Lowercase letters after the section number indicates the location within the section; the first letter denotes the 160-acre tract, the second the 40-acre tract, the third the 10-acre tract, and the fourth the 2½-acre tract. The letters a, b, c, and d are assigned in a counterclockwise direction, beginning in the northeast corner of each tract. The number of lowercase letters indicates the accuracy of the location number; if a point can be located within a 2½-acre tract, four lowercase letters are shown in the location number. For example, a data-collection point located in the NE¼NE¼SE¼, section 15, T. 40 N., R. 28 W. would have the location number 40-28-15daa. (See fig. 2.) Two or more data-collection points located within the smallest tract indicated by the lowercase letters are distinguished by consecutive numbers, beginning with 1, following the lowercase letters.

Latitude and longitude

In addition to the location number, the latitude and longitude of each data-collection point are given in either table 1 (ground-water data) or in table 7 (surface-water data). The latitude is given as a 6 digit number; the first 2 numbers indicate the degrees north, the second 2 the minutes, and the last 2 the seconds. The longitude is given as a 7 digit number; the first 3 numbers indicate the degrees west, the next 2 the minutes, and the last 2 the seconds. Thus for well 40-28-15daa, the latitude is given as 432624 (43° 26' 24" North) and the longitude as 1003647 (100° 36' 47" West). Most of the latitudes and longitudes listed were determined by computer and are for the center of the smallest tract designated by the location number.

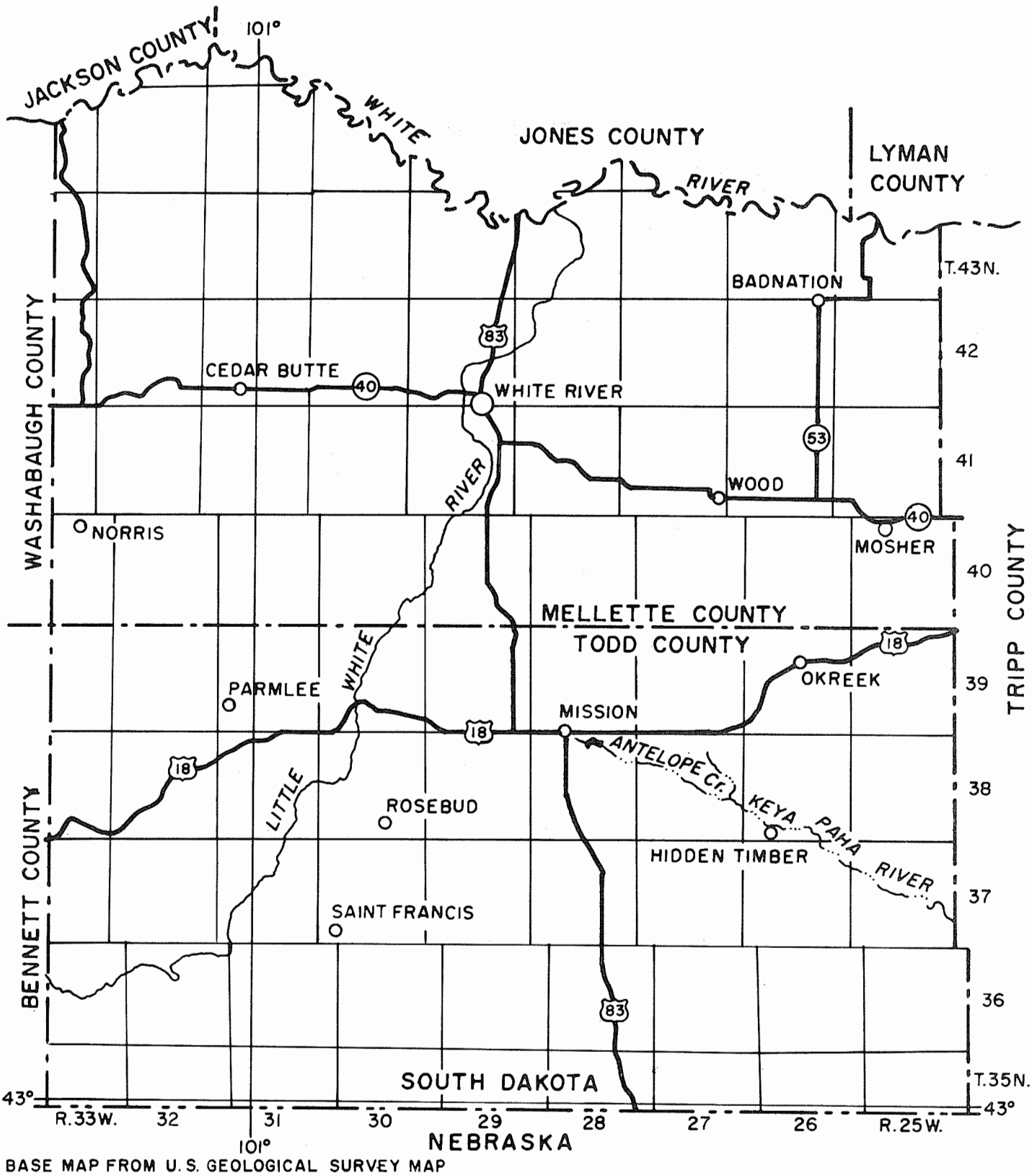

Figure 1. Map showing location of Rosebud Indian Reservation, Mellette and Todd Counties.

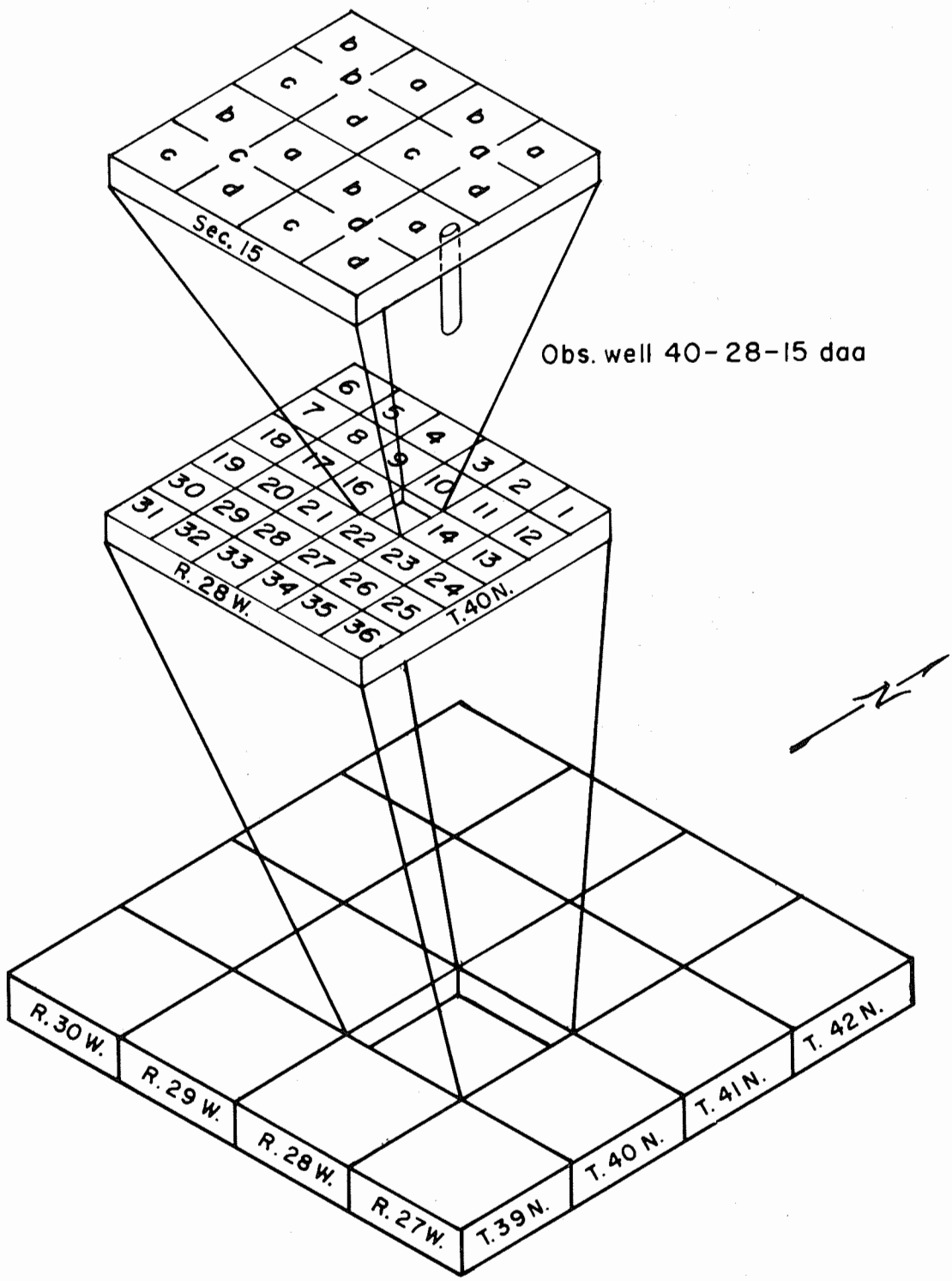

Figure 2. Sketch showing well-numbering system.

BASIC DATA TABLES

The following 6 tables contain all of the basic geologic and hydrologic data collected during the 3-year study. A short discussion or explanation precedes each table.

Table 1. – Records of ground-water-data sites

Data on all ground-water-data sites are summarized in the following table. In addition to the location, latitude, and longitude the following information is given:

Owner, tenant, or source of data - The first initial and last names of individuals are given; for governmental agencies and companies the following abbreviations are used:

B. I. A. - well or test hole owned by or drilled for the U. S. Bureau of Indian Affairs.

C. & N. W. Ry. Co. - well drilled for and owned by the Chicago and North Western Railway Co.

S. D. H. D. - test hole or well drilled for or owned by the South Dakota Department of Highways.

S. D. W. R. C. - observation well drilled for and measured periodically by the South Dakota Water Resources Commission.

Tribal - well drilled for and owned by the Rosebud Sioux Tribe.

U. S. B. R. - test hole drilled by the U. S. Bureau of Reclamation.

U. S. G. S. - test hole drilled by the U. S. Geological Survey

Depth of well or test hole - All depths reported are in feet below land surface. Depths reported by owners and drillers and depths determined in drilling are reported to the nearest foot. Depths of wells which were measured are reported to the nearest tenth of a foot.

Type and diameter - The following abbreviations are used to indicate the type of well: **B** - bored well, **Dn** - driven well, **Dr** - drilled well or test hole, and **Du** - dug well.

Depth of water below land surface - Reported or estimated water levels are recorded to the nearest foot; measured water levels are recorded to the nearest tenth of a foot. All water levels are below land surface, except flowing artesian wells (indicated by a "+").

Date of visit - Generally the date given is when the well owner was contacted during the well canvass which was made as part of the investigation. The dates given for test holes and for some wells are the date when they were drilled or the date the well was visited during some previous well canvass.

Use - The general use of a well is indicated by one or more of the following letter designations: **D** - domestic or household use, **I** - irrigation, **N** - not used or abandoned, **O** - observation well, **P** - public supply, **S** - livestock watering, and **T** - test hole. Many wells have more than a single use; these used are designated by a combination of the above letters--for example a well used for domestic supply and for livestock watering would be designated **DS**.

Remarks - In addition to short, pertinent, self-explanatory notes, reference to other tables containing specific data is indicated by the following abbreviations:

Log - log of well or test hole is given in table 2.

WL - water level in observation wells given in table 3.

AW - data on artesian well given in table 4.

CA - results of chemical analysis given in table 5.

FQW - results of field test for chemical quality of water given in table 6.
If the temperature of the water was measured during the visit, it is given in degrees Fahrenheit. A plus symbol after the temperature indicates that it was above the limits of the thermometer used (110°F).

Table 1.--Continued

Well location number (1)	Latitude (2)	Longitude (3)	Owner, tenant, or source of data (4)	Depth of well or test hole (feet) (5)	Type and diameter (inches) (6)	Depth to water below land surface (feet) (7)	Date of visit (8)	Use (9)	Remarks (10)
				JACKSON COUNTY					
3-24-									
10acad	434807	1011343	USGS	49	Dr	---	8-11-66	T	Log
10adc	434803	1011338	USGS	49	Dr	27	8-11-66	T	Log
10daad	434756	1011325	USGS	34	Dr	21.6	8-11-66	T	Log
11cbcb	434753	1011323	USGS	33	Dr	14	8-11-66	T	Log
				JONES COUNTY					
2-26-									
20bbdb	435140	1010227	USGS	48	Dr	---	8-18-66	T	Log
20bcca	435134	1010231	USGS	28	Dr	14	8-18-66	T	Log
20ccda	435109	1010222	USGS	32	Dr	11	8-18-66	T	Log
3-29-									
34dcdb	434427	1003814	USBR	23	Dr 2½	10.6	5-19-64	T	Log
3-30-									
19cddd	434548	1003434	USBR	30	Dr 2½	9.6	5-19-64	T	Log
4-29-									
8bbd	434301	1004830	USGS	25	Dr	9.9	8- 9-66	T	Log
8bcc	434301	1004812	USGS	24	Dr	11	8- 9-66	T	Log
8bdb	434257	1004045	SDHD	--	Dr 3	--	7- 6-66	P	CA
8bdc	434314	1004821	USGS	20	Dr	10.5	8- 9-66	T	Log
				LYMAN COUNTY					
103-79-									
21bbb	434257	1001753	USGS	25	Dr	14	8-17-65	T	Log

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				MELLETTE COUNTY					
40-25-									
2dac	432803	1001416	G. Schilling	30	Dr	20	7-28-65	S	
4a	432826	1001644	T. Herrmann	40	Du 36	——	8- 3-66	D	
5adc	432816	1001751	H. Richter	35	Dr	——	7-27-65	D	CA, 52°F
5ca	432810	1001820	C.&N.W. Ry. Co.	56	B 20	29.5	12-16-29	D	Log
5da	432810	1001733	C.&N.W. Ry. Co.	60	B 20	29.5	12- 1-29	N	Log
5db	432810	1001802	C.&N.W. Ry. Co.	55	B 20	29.5	12-20-29	N	Log
9a	432735	1001645	BIA	40	B 24	18	——	—	Log
12bd	432727	1001336	C.&N.W. Ry. Co.	1,681	Dr 8	88.0	7-25-57	N	Log,AW, CA, plugged
15bcd1	432631	1001612	A. Sampson	22	Dr	——	7-27-65	D	
15bcd2	432631	1001612	A. Sampson	22	Dr	——	7-27-65	D	
15bcd3	432631	1001612	A. Sampson	22	Dr	——	7-27-65	S	
15cdd1	432605	1001554	F. Horstman	80	Dr	——	7-27-65	SD	
15cdd2	432605	1001554	F. Horstman	20	Dr	——	7-27-65	D	
15cdd3	432605	1001554	F. Horstman	20	Dr	——	7-27-65	D	
17aad	432645	1001742	C. Weaver	45	Dr	11	7-27-65	D	
18aaa	432651	1001853	C. Griffis	60	Dr	——	7-27-65	S	
20aaa1	432559	1001742	C. Sills	50	Dr	25	7-27-65	I	
20aaa2	432559	1001742	C. Sills	50	Dr	25	7-27-65	S	
20cdb	432519	1001827	B. Mills	1,692	Dr	220	7-29-66	SD	Log, AW, CA, 75°F
20cdc1	432513	1001827	B. Mills	90	Dr	30	7-27-65	S	
30cad1	432434	1001929	F. Weaver	65	Dr	——	7-27-65	SD	
30cad2	432434	1001929	F. Weaver	70	Dr	——	7-27-65	N	
30cad3	432434	1001929	F. Weaver	70	Dr	——	7-27-65	N	
31abb1	432414	1001920	E. Hanson	60	Dr	——	7-28-65	DS	
31abb2	432414	1001920	E. Hanson	28	Dr	——	7-28-65	S	
31cdd	432328	1001929	C. Hanson	30	Dr	15	7-28-65	S	
32ccd	432328	1001835	C. Hanson	80	Dr	60	7-28-65	S	
32cdc	432328	1001827	C. Hanson	100	Dr	60	7-28-65	DS	
32dcb	432335	1001809	C. Hanson	60	Dr	48	7-28-65	S	
40-26-									
3adc1	432816	1002239	G. Golder	40	Dr	——	7-27-65	S	
3adc2	432816	1002239	G. Golder	25	Dr	——	7-27-65	S	
3dac	432803	1002239	G. Golder	40	Dr	——	7-27-65	N	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
14bcc	432631	1002221	F. Weaver	20	Dr	5	7-27-65	S	
15baa	432651	1002306	F. Weaver	50	Dr	25	7-27-65	S	
16adb	432638	1002351	F. Weaver	50	Dr	——	7-27-65	S	
18aaa	432651	1002606	W. Bachman	45	Dr	——	7-27-65	S	
21bbd	432552	1002437	F. Weaver	40	Dr	——	7-27-65	S	
23add	432539	1002117	E. Hanson	40	Dr	——	7-28-65	S	
24ddb	432519	1002014	E. Hanson	60	Dr	——	7-28-65	S	
25bcc	432446	1002108	F. Weaver	50	Dr	30	7-27-65	N	
26aaa	432506	1002117	W. Bachman	45	Dr	——	7-27-65	S	
26cbb	432439	1002221	C. Hanson	70	Dr	20	7-28-65	S	
27abb	432506	1002257	F. Weaver	65	Dr	——	7-27-65	S	
33bbc	432407	1002446	C. Hanson	30	Dr	15	7-28-65	S	
33dcb	432334	1002410	C. Hanson	30	Dr	15	7-28-65	N	
35ddd	432327	1002117	C. Hanson	30	Dr	15	7-28-65	S	
36adc	432354	1002014	C. Hanson	30	Dr	15	7-28-65	S	
40-27-									
1aa	432832	1002706	L. Galbraith	50	Dr	——	7-27-65	S	
2ddd1	432750	1002812	R. Galbraith	35	Dr	——	7-22-65	D	
2ddd2	432750	1002812	R. Galbraith	30	Dr	——	7-22-65	D	
2ddd3	432750	1002812	R. Galbraith	80	Dr	——	7-22-65	S	
2ddd4	432750	1002812	R. Galbraith	80	Dr	——	7-22-65	N	
3aaa1	432836	1002922	E. Dickson	60	Dr	——	7-23-65	D	
3aaa2	432836	1002922	E. Dickson	56	Dr	——	7-23-65	S	
4ad	432819	1003037	E. Dickson	60	Dr	——	7-23-65	S	
5abc	432830	1003221	O. Siegmund	43	B	——	7-07-66	D	CA, 60°F
5acb1	432823	1003210	O. Siegmund	40	Dr	27	7-23-65	D	
5acb2	432823	1003210	O. Siegmund	40	Dr	——	7-23-65	S	
5acb3	432823	1003210	O. Siegmund	40	Dr	——	7-23-65	S	
5acb4	432823	1003210	O. Siegmund	40	Dr	——	7-23-65	S	
9acb	432730	1003059	O. Siegmund	40	Dr	——	7-23-65	N	
9cb	432714	1003130	O. Siegmund	40	Dr	——	7-23-65	N	
9dd	432701	1003037	O. Siegmund	40	Dr	——	7-23-65	N	
10bba1	432743	1003015	A. Tucker	54	Dr	——	7-27-65	D	
10bba2	432743	1003015	A. Tucker	54	Dr	——	7-27-65	S	
11adb1	432731	1002829	L. Galbraith	54	Dr	——	7-27-65	SD	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11adb2	432731	1002829	L. Galbraith	54	Dr	——	7-27-65	SD	
11adb3	432731	1002829	L. Galbraith	45	Dr	——	7-27-65	S	
13dba	432627	1002726	L. Galbraith	60	Dr	——	7-27-65	S	
14cdd1	432609	1002900	J. Welsh	43	Dr	35	7-22-65	D	FQW
14cdd2	432609	1002900	J. Welsh	41	Dr	29	7-22-65	S	
14cdd3	432609	1002900	J. Welsh	43	Dr	35	7-22-65	S	
14cdd4	432609	1002900	J. Welsh	31	Dr	24	7-22-65	S	
14cdd5	432609	1002900	J. Welsh	41	Dr	36	7-22-65	S	
14cdd6	432609	1002900	J. Welsh	35	Dr	——	7-22-65	N	
14dbc	432612	1002850	J. Welsh	35	Dr	——	7-22-65	N	
16ba	432639	1003127	A. Tucker	54	Dr	——	7-27-65	S	
19abd	432555	1003322	W. Gifford	46	Dr	——	7-21-65	S	
19dab	432531	1003316	W. Gifford	46	Dr	——	7-21-65	SD	
21acd	432540	1003103	W. Gifford	46	Dr	——	7-21-65	S	
21cc	432518	1003143	V. Piper	40	Dr	——	7-22-65	S	
21c	432519	1003135	F. Brunning	40	Dr	20	8-03-66	D	
22bbb1	432558	1003024	C. Lauritsen	60	Dr	——	7-22-65	D	
22bbb2	432558	1003024	C. Lauritsen	60	Dr	——	7-22-65	S	
22bbb3	432558	1003024	C. Lauritsen	60	Dr	——	7-22-65	S	
22bbb4	432558	1003024	C. Lauritsen	90	Dr	——	7-22-65	D	
27bbb	432506	1003024	V. Piper	50	Dr	20	7-22-65	DS	
27cd	432423	1003002	V. Piper	40	Dr	——	7-22-65	S	
27dc	432423	1002944	V. Piper	40	Dr	——	7-22-65	S	
29ddd1	432420	1003143	S. Jaiser	40	Dr	18	7-22-65	S	
29ddd2	432420	1003143	S. Jaiser	40	Dr	34	7-22-65	D	
30bdc	432446	1003351	D. Dvorak	50	Dr	37	7-21-65	S	
30cbc	432433	1003413	D. Dvorak	120	Dr	115	7-21-65	S	
30dbb	432429	1003329	D. Dvorak	30	Dr	20	7-21-65	S	
32aaa1	432413	1003143	E. Piper	16	Dr	7	7-22-65	S	
32aaa2	432413	1003143	E. Piper	22	Dr	18	7-22-65	D	
40-28-									
2bab	432836	1003620	J. Drain	70	Dr	61	7-22-65	S	
2cbc	432803	1003638	J. Drain	38	Dr	21	7-21-65	D	
3cbc1	432803	1003749	G. Mitchell	40	Dr	——	7-21-65	S	
3cbc2	432803	1003749	G. Mitchell	48	Dr	——	7-21-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3cbc3	432803	1003749	G. Mitchell	40	Dr	——	7-21-65	D	
3cbc4	432803	1003749	G. Mitchell	40	Dr	——	7-21-65	S	
4aca1	432823	1003816	R. Lahave	35	Dr	9	7-21-65	D	
4aca2	432823	1003816	R. Lahave	50	Dr	25	7-21-65	DS	
4aca3	432823	1003816	R. Lahave	42	Dr	25	7-21-65	S	
4ddc1	432750	1003807	T. Schmidt	28	Dr	8	7-21-65	DS	FQW
4ddc2	432750	1003807	T. Schmidt	45	Dr	Dry	7-21-65	N	
4ddc3	432750	1003807	T. Schmidt	70	Dr	10	7-21-65	S	No pump
5aaa1	432836	1003910	J. Rholoff	40	Dr	——	7-22-65	DS	
5aaa2	432836	1003910	J. Rholoff	40	Dr	——	7-22-65	S	
5aaa3	432836	1003910	J. Rholoff	40	Dr	——	7-22-65	S	
5aaa4	432836	1003910	J. Rholoff	40	Dr	——	7-22-65	S	
7bbd	432737	1004115	T. Schmidt	45	Dr	——	7-22-65	S	CA, 55°F
10bbd	432737	1003740	V. Chapin	40	Dr	——	7-21-65	DS	
15daa	432624	1003647	D. Chapin	55	Dr	10	7-21-65	D	
17dcb1	432611	1003937	R. Massingale	62	Dr	29	7-22-65	D	
17dcb2	432611	1003927	R. Massingale	42	Dr	30	7-22-65	S	
17dcb3	432611	1003927	R. Massingale	28	Dr	——	7-22-65	S	
19cdd	432512	1004057	W. Gifford	46	Dr	——	7-21-65	S	
20ddb	432518	1003919	W. Gifford	46	Dr	——	7-21-65	S	
22daa1	432532	1003647	R. Perry	60	Dr	——	7-21-65	D	
22daa2	432532	1003647	R. Perry	60	Dr	——	7-21-65	S	
25bac	432459	1003500	D. Devorak	55	Dr	40	7-21-65	S	
25dba	432439	1003441	D. Devorak	65	Dr	57	7-21-65	SD	
25dbb	432439	1003450	D. Devorak	140	Dr	130	7-21-65	N	
36dba	432346	1003441	D. Devorak	105	Dr	25	7-21-65	S	
40-29-									
3aaa	432836	1004358	G. Mitchell	61	Dr	51	7-21-65	S	
8a	432733	1004636	L. Krogman	1,980	Dr 2	220	9-06-63	S	AW
34b	434454	1004553	L. Krogman	65	Dr 24	——	8-03-66	S	
40-30-									
3ac	432806	1005145	L. Krogman	2,205	Dr 2	398.10	8-14-66	S	AW
9bcb	432730	1005319	R. Adrian	60	Dr	——	7-21-65	D	
22baa1	432558	1005140	H. Krogman	60	Dr	——	7-20-65	SD	
22baa2	432558	2005140	H. Krogman	60	Dr	——	7-20-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
22baa3	432558	1005140	H. Krogman	60	Dr	——	7-20-65	I	
33c	432337	1005305	H. Krogman	42	Dr 24	39	8-03-66	S	
34ad	432356	1005109	H. Krogman	80	Dr	——	7-20-65	S	
40-31-									
5cbb1	432809	1010131	T. Karlin	65	Dr	26	7-19-65	S	
5cbb2	432809	1010131	T. Karlin	105	Dr	26	7-19-65	D	CA, 55°F
5cbb3	432809	1010131	T. Karlin	15	Du	5	7-19-65	S	
6dbc	432803	1010158	T. Karlin	105	Dr	20	7-19-65	S	
7daa1	432717	1010138	J. Deiss	110	Dr	——	7-20-65	D	
7daa2	432717	1010138	J. Deiss	90	Dr	——	7-20-65	S	
12bdb1	432730	1005629	C. Krogman	89	Dr	30	7-21-65	D	
12bdb2	432730	1005629	C. Krogman	89	Dr	70	7-21-65	S	
12bdb3	432730	1005629	C. Krogman	40	Dr	35	7-21-65	S	
21ada1	432545	1005917	J. Karlin	180	Dr	90	7-16-65	S	
21ada2	432545	1005917	J. Karlin	190	Dr	90	7-16-65	D	
21bcd1	432539	1010011	J. Littau	90	Dr	15	7-16-65	D	
21bcd2	432539	1010011	J. Littau	90	Dr	15	7-16-65	N	
22bac	432552	1005851	J. Karlin	175	Dr	90	7-16-65	S	
24ccc1	432512	1005647	E. Adrian	120	Dr	50	7-19-65	SD	
24ccc2	432512	1005647	E. Adrian	120	Dr	50	7-19-65	S	
31dcc1	432327	1010158	O. Huber	150	Dr	——	7-19-65	I	
31dcc2	432327	1010158	O Huber	150	Dr	10	7-19-65	D	
40-32-									
3cda	432757	1010525	A. Schmidt	256	Dr	——	7-15-65	S	
5bba	432836	1010801	J. Ring	19	Du	5	7-14-65	S	
6dbb	432810	1010847	J. Ring	96	Dr	16	7-14-65	S	
8ccc1	432658	1010810	J. Ring	100	Dr	16	7-14-65	SDI	
8ccc2	432658	1010810	J. Ring	100	Dr	16	7-14-65	SD	
8ccc3	432658	1010810	J. Ring	145	Dr	18	7-14-65	N	
9baa1	432743	1010635	E. Ring	100	Dr	40	7-14-65	DS	
9baa2	432743	1010635	E. Ring	135	Dr	40	7-14-65	DS	
9baa3	432743	1010635	E. Ring	135	Dr	40	7-14-65	S	
9cad	432711	1010635	E. Waack	102	Dr	8	7-15-65	S	
10aca	432730	1010508	M. Schmidt	100	Dr	15	7-15-65	S	Caved in to 30'

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
10ccb	432704	1010551	M. Schmidt	120	Dr 3	30	7-15-65	S	
10ccd	432658	1010543	M. Schmidt	110	Dr	20	7-15-65	DS	
10dca	432704	1010508	A. Schmidt	120	Dr	45	7-15-65	DS	FQW
11dca	432704	1010359	A. Schmidt	135	Dr	——	7-15-65	S	
12aaa	432743	1010232	O. Huber	130	Dr	——	7-16-65	S	
14cdd1	432605	1010416	W. Kary	140	Dr	65	7-16-65	DS	
14cdd2	432605	1010416	W. Kary	170	Dr	65	7-16-65	N	
15bbc	432645	1010551	W. Schmidt	130	Dr	30	7-15-65	S	
16cad	432618	1010635	E. Waack	130	Dr	40	7-15-65	S	
16cca	432612	1010652	E. Waack	30	Dr	20	7-15-65	D	
16dad	432618	1010600	E. Waack	108	Dr	20	7-15-65	S	
17abb	432651	1010735	W. Schmidt	100	Dr	——	7-15-65	S	Caved in to 60'
17bba	432651	1010801	W. Schmidt	120	Dr	18	7-15-65	D	
18bcb1	432638	1010925	J. Kaufman	100	Dr	18	7-15-65	D	
18bcb2	432638	1010925	J. Kaufman	100	Dr	18	7-15-65	S	
19baa1	432559	1010857	B. Kaufman	100	Dr	35	7-14-65	S	
19baa2	432559	1010857	B. Kaufman	100	Dr	35	7-14-65	D	
19baa3	432559	1010857	B. Kaufman	130	Dr	40	7-14-65	I	
19bcc1	432539	1010925	H. Waack	100	Dr	20	7-15-65	N	
19bcc2	432539	1010925	H. Waack	120	Dr	70	7-15-65	DS	
20acb	432546	1010735	H. Ring	90	Dr	17	7-14-65		
21aaa	432559	1010600	E. Hill	120	Dr	45	7-15-65	D	
21abb	432559	1010626	E. Hill	120	Dr	60	7-15-65	S	
24dbb1	432533	1010258	O. Huber	152	Dr	20	7-16-65	D	
24dbb2	432533	1010258	O. Huber	125	Dr	20	7-16-65	DS	
24dbb3	432533	1010258	O. Huber	125	Dr	20	7-16-65	DS	
32ccc1	432329	1010810	H. Weiss	140	Dr	——	7-15-65	DS	
32ccc2	432329	1010810	H. Weiss	140	Dr	——	7-15-65	S	
35cbd	432342	1010434	R. Heinert	150	Dr	80	7-16-65	S	
35cdd	432329	1010416	R. Heinert	100	Dr	30	7-16-65	DS	
35ddb	432335	1010350	G. Letellier	90	B	65	7-20-65	S	
36cd	432332	1010311	O. Huber	180	Dr	60	7-16-65	S	
40-33-									
1cda	432753	1011010	K. Taft	100	Dr	50	7-15-65	S	
1cdc	432747	1011019	K. Taft	50	Dr	30	7-15-65	D	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1cdd	432747	1011010	K. Taft	95	Dr	——	7-15-65	DS	
1dcd	432747	1010952	K. Taft	80	Dr	50	7-15-65	N	
2aab	432833	1011054	K. Barney	110	Dr	20	7-13-65	D	
2aad	432826	1011045	K. Barney	30	Dr	7	7-13-65	S	
2cbc	432800	1011147	K. Taft	80	Dr	——	7-15-65	N	
3ad	432816	1011218	Norris School	150	Dr	35	7-13-65	P	CA, 65°F
3a	432822	1011205	BIA(Norris)	120	Dr	——	4-27-37	——	Log
3bdd	432813	1011231	L. Letellier	80	Dr	40	7-13-65	D	
3cda	432753	1011231	L. Letellier	70	Dr	35	7-13-65	S	
3da	432803	1011200	G. Gibson	80	Dr	23	7-13-65	D	
3db	432803	1011218	L. Letellier	110	Dr	40	7-13-65	S	
9ddd	432655	1011307	B. Letellier	120	Dr	50	7-15-65	DS	
10aac	432734	1011205	B. Letellier	124	Dr	74	7-15-65	DS	
10ddb	432701	1011205	B. Letellier	35	Dr	15	7-15-65	S	
12dcd1	432655	1010952	J. O'Bryan	40	Dr	——	7-15-65	DS	
12dcd2	432655	1010952	J. O'Bryan	20	Dr	10	7-15-65	N	
14acc	432628	1011112	K. Taft	100	Dr	60	7-15-65	S	
23aac1	432549	1011054	R. Ring	90	Dr	——	7-15-65	D	
23aac2	432549	1011054	R. Ring	80	Dr	——	7-15-65	S	
24aaa	432556	1010934	Kaufman School	50	Dr 4	9.3	7-13-65	P	53°F
24abb	432556	1011001	B. Kaufman	100	Dr	35	7-14-65	D	
24acc	432536	1011001	H. Waack	108	Dr	20	7-15-65	S	
25dac1	432431	1010943	H. Tarr	125	Dr	——	7-15-65	D	
25dac2	432431	1010943	H. Tarr	125	Dr	——	7-15-65	DS	
28ad1	432447	1011311	B. Letellier	110	Dr	50	7-15-65	S	
28ad2	432447	1011311	B. Letellier	60	Dr	40	7-15-65	S	
36cda	432332	1011010	H. Tarr	125	Dr	——	7-15-65	S	
41-25-									
6c	433312	1002042	A. Eklund	32	Dr 24	8	8-11-66	S	
7b1	433246	1002042	F. Robinson	35	Dr 24	15	8-11-66	S	
7b2	433246	1002042	F. Robinson	35	Dr 24	6	8-11-66	S	
11aac	433249	1001515	M. Dreyer	60	B 24	——	7-08-66	DS	FQW
11caa	433230	1001542	M. Dreyer	60	B 24	25	7-08-66	S	Pumps dry
11dbb	433230	1001533	M. Dreyer	35	Du 24	3	7-08-66	S	
14bd	433147	1001546	L. Tuttle	40	Du 24	12	7-08-66	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
14ddd	433118	1001506	L. Tuttle	35	B 24	9	7-08-66	DS	Pumps dry
18ddd	433118	1001953	F. Robinson	35	Du 36	——	7-08-66	D	
31cab	432852	1002042	A. Pearsall	1,775	Dr 2	140	9-09-63	S	AW, CA
35ccd	432842	1001600	H. Richter	1,700	Dr2½	180	7-08-66	DS	AW, CA, 87°F
36cab	432902	1001439	G. Schilling	37	Dr	20	7-28-65	N	
36cdd	432842	1001430	G. Schilling	30	Dr	20	7-28-65	N	
41-26-									
1bbc1	433343	1002208	D. Robinson	35	Dr 24	12	8-11-66	S	
1bbc2	433343	1002208	D. Robinson	60	Dr 24	18	8-11-66	S	
8aa	433254	1002557	W. Dimond	2,875	Dr 2½	1.10	8-11-66	DS	AW, CA
11bbc	433251	1002320	J. Strimer	30	Dr 24	——	8-10-66	DS	
12	433234	1002136	A. Eklund	32	Dr 24	10	8-11-66	S	
13cdc	433120	1002150	W. Harvey	40	Dr 36	16	8-11-66	S	
13cdd	433120	1002141	W. Harvey	45	Dr 36	15	8-11-66	S	
13c	433130	1002154	W. Harvey	45	Du 36	——	8-03-66	S	
20cda	433034	1002629	K. Burkinshaw	75	Dr 36	30	8-10-66	DS	
22dcd	433028	1002347	D. Lookabill	45	Dr 24	22	8-11-66	S	
24b	433104	1002154	W. Harvey	12	Du 24	3	8-11-66	S	
27	432959	1002400	D. Lookabill	1,960	Dr 2	173.7	8-11-66	DS	AW, CA
28b	433012	1002530	D. Lookabill	40	Dr 24	——	8-11-66	S	
30ddc	432936	1002714	S. Galbraith	1,804	Dr 4	156.57	7-16-63	DSO	AW, CA, 93°F
33aa	432926	1002445	D. Lookabill	40	Dr 24	——	8-11-66	DS	Pumps dry
34ba	432926	1002409	D. Lookabill	40	Dr 24	20	8-11-66	S	
35caa	432904	1002253	D. Lookabill	40	Dr 24	15	8-11-66	S	
41-27-									
5bb	433345	1003402	P. Reutter	29	Du 18	18	9-09-66	S	
10aa1	433253	1003045	L. Brown	21.0	Dr 18	18.2	9-15-66	DS	FQW
10aa2	433253	1003045	L. Brown	60.0	Dr 36	39.3	9-15-66	DS	FQW
12daa	433230	1002816	R. Perry	50	B 24	——	7-06-66	DS	CA, 58°F
16aab	433204	1003201	L. Kingsbury	60	Dr 24	10	9-13-66	S	
16abb	433204	1003219	L. Kingsbury	50	Dr 24	30	9-13-66	S	
16baa	433204	1003228	L. Kingsbury	50	Dr 36	30	9-13-66	DS	
17caa	433128	1003340	L. Kingsbury	50	Dr 24	12	9-12-66	S	
18bbb	433204	1003519	O. Iverson	20	Du 60	12	9-08-66	N	
20cdb1	433034	1003349	K. Burkinshay	42	B 24	42	9-12-66	N	Almost no water

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
20cdb2	433034	1003349	K. Burkinshay	78	Dr 36	12	9-12-66	D	FQW
20cdb3	433034	1003349	K. Burkinshay	35	Dr 24	Dry	9-12-66	N	
21cc	433030	1003250	F. Bruning	40	Dr 24	15	8-10-66	S	
21db1	433043	1003214	F. Bruning	32	Dr 24	18	8-10-66	DS	
21db2	433043	1003214	F. Bruning	34	Dr 24	18	8-10-66	S	
21ddd	433027	1003152	F. Bruning	21	Dr 24	18	8-10-66	D	
23aaa	433113	1002928	D. Shaeffer	40	B 24	36	9-13-66	DS	
23aad	433106	1002928	D. Shaeffer	42	B 24	25	9-13-66	DS	
25cb	432951	1002857	C.&N.W. Ry. Co.	1,866	Dr 8	177.44	2-28-57	N	Log, AW, CA, plugged
25c	432949	1002858	C.&N.W. Ry. Co.	40	D 24	22	1-05-30	N	Log
25da	432949	1002832	Wood School	1,779	Dr	——	11-20-65	DPS	AW, CA
25dca	432940	1002835	C.&N.W. Ry. Co.	46	B 24	28	1-15-30	D	Log
25ddd	432940	1002820	C.&N.W. Ry. Co.	44	B 24	28	1-10-30	D	Log
30b	433011	1003505	A. Sorenson	60	Dr 24	50	8-10-66	S	
34b	432919	1003130	D. Laron	50	Dr 24	——	8-03-66	D	
35ccd1	432843	1003022	L. McDonald	20	Dr	——	7-22-65	D	
35ccd2	432843	1003022	L. McDonald	20	Dr	——	7-22-65	S	
36cab	432903	1002901	B. Leat	40	Dr	19	7-22-65	D	
36ddd	432843	1002816	B. Leat	30	Dr	7	7-22-65	S	
41-28-									
1aaa1	433351	1003528	F. Krogman	30	Du 24	24	9-08-66	S	
1aaa2	433351	1003528	F. Krogman	30	Dr 24	24	9-08-66	DS	
5a	433341	1004030	A. Tucker	36	Dr 24	——	8-03-66	D	
6bbb1	433351	1004231	F. Ellis	45	Dr 24	22	8-09-66	S	
6bbb2	433351	1004231	F. Ellis	50	Dr 24	22	8-09-66	D	
6bbb3	433351	1004231	F. Ellis	45	Dr 24	22	8-09-66	S	
7ccc1	433213	1004231	D. Bechtold	34	Du 36	13	8-10-66	D	
7ccc2	433213	1004231	D. Bechtold	54	Dr 24	13	8-10-66	S	
7ccc3	433213	1004231	D. Bechtold	42	Dr 18	10	8-10-66	S	
7c	433223	1004218	J. Dolezal	14	Dr 24	——	8-03-66	S	
7	433236	1004200	J. Dolezal	14	Dr 24	——	8-12-66	S	
9a1	433249	1003918	A. Tucker	31	Dr 24	——	8-03-66		
11db	433230	1003702	F. Valburg	33	Du 24	30	9-08-66	S	
14aab	433207	1003649	F. Valburg	30	Du 36	6	9-08-66		
14bbb	433207	1003743	R. Valburg	47	Du 24	30	9-08-66	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
18baa	433207	1004204	D. Bechtold	36	Dr 24	——	8-10-66	S	
24b	433105	1003617	A. Sorenson	8	Du 60	Flow	8-10-66	DS	
24ca	433046	1003608	R. Valburg	47	Du 24	30	9-08-66	S	
24dcd	433030	1003546	A. Anderson	70	Dr 18	——	8-10-66	D	Pumps dry
24	433052	1003559	A. Anderson	40	B 24	10	8-10-66	S	
25b	433014	1003617	A. Sorenson	9	Du 60	Flow	8-10-66	S	
26a	433014	1003653	A. Sorenson	10	Du 60	1.5	8-10-66	S	
26dcc	432938	1003707	R. Bechtold	30	Dr	10	7-21-65	DS	
34acd	432912	1003810	R. Lahave	32	Dr	7	7-21-65	S	
41-29-									
3ccc	433305	1004607	USGS	24	Dr	15	8-12-66	T	Log
20ddd	433030	1004727	C. Gunner	70	Dr	60	7-13-65	D	
20dd	433033	1004732	C. Gunner	55	Dr	50	7-13-65	S	
27abb1	433023	1004531	H. Amber	30	Dr	——	7-20-65	N	Five 30' wells, all pump dry.
27abb2	433023	1004531	Amber Bros.	1,885	Dr 2	180	9-06-63	S	AW
28bdc	433004	1004700	Roy Ozanne	25	Dr	Dry	7-20-65	D	
41-30-									
1bda	433336	1005026	L. Krogman	25	Du 24	15	8-01-66	S	
1bdd1	433330	1005026	L. Krogman	36	Dr 24	12	8-01-66	DS	
1bdd2	433330	1005026	L. Krogman	30	Dr 24	12	8-01-66	S	
3ca	433320	1005255	K. Winchell	40	Dr	——	7-20-62	S	
7acd	433238	1005558	J. Carr	40	Du 24	25	7-14-65	D	
11aa	433254	1005107	L. Krogman	25	Dr 24	15	8-01-66	S	
17bdc	433146	1005523	J. Carr	28	Du 30	5.8	7-14-65	N	
25da	432952	1004955	H. Krogman	30	Dr	——	7-20-65	S	
26ba	433018	1005143	H. Krogman	30	Dr	——	7-20-65	S	
41-31-									
8bdd	433236	1010142	Carr & Carr	25	Dr	19	7-20-65	DS	
20dab	433046	1010116	A. Deutsch	63	Dr	41	7-20-65	N	
21bdb1	433059	1010041	A. Deutsch	40	Dr	——	7-20-65	DS	
21bdb2	433059	1010041	A. Deutsch	16	Dr	14	7-20-65	N	
21cca	433033	1010050	A. Deutsch	25	Dr	——	7-20-65	S	
22ddc	433026	1005857	A. Deutsch	16	Dr	——	7-20-65	N	
26bab	433020	1005823	A. Deutsch	40	Dr	14	7-20-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
41-32-									
6a	433335	1010953	M. Starkjohann	42	Du 24	——	8-03-66	S	
21cdb	433030	1010801	G. Letellier	136	Dr	70	7-20-65	S	
28ccd	432931	1010810	G. Letellier	125	Dr	60	7-20-65	DS	
29ccb1	432938	1010931	W. Letellier	100	Dr	60	7-20-65	D	
29ccb2	432938	1010931	W. Letellier	100	Dr	60	7-20-65	S	
29ccb3	432938	1010931	W. Letellier	100	Dr	60	7-20-65	S	
35dcb	432840	1010519	G. Letellier	130	Dr	70	7-20-65	S	
41-33-									
2dab	433319	1011213	S. Bear	39	Dr 4	6.5	7-14-65	P	CA, FQW 53°F
22c	433033	1011406	L. Letellier	150	Dr 5	——	8-03-66	S	
26aaa	433017	1011204	K. Berry	90	Dr 4	30	7-14-65	DS	
42-25-									
1ca	433830	1001435	P. McDill	1,342	Dr 2	+78.6	9-13-56	S	AW, 112°F
4dcc	433814	1001756	L. Peacock	60	Dr 24	10	8-11-66	DS	
8b	433758	1001930	L. Peacock	60	Dr 24	8	8-11-66	S	
11abc	433801	1001533	J. Till	60	Dr 24	30	9-14-66	S	
11baa	433807	1001542	J. Till	60	Dr 24	30	9-14-66	S	
32cc	433357	1001939	G. Anderson	2,690	Dr 2½	+78.59	7-29-66	S	Log, AW, CA, 132°F
34cc	433404	1001707	G. Anderson	1,567	Dr 2	Flow	9-05-63	S	Log, AW, CA, 90°F
42-26-									
6ddd	433815	1002705	M. Williams	70	Du 24	35	9-07-66	S	
7ac	433752	1002727	H. Sherwood	20	Du 36	14	9-13-66	S	
13ab	433713	1002127	H. Sherwood	40	Du 24	15	9-13-66	S	
14aad	433710	1002217	H. Sherwood	50	Du	35	9-13-66	S	
14bbb	433717	1002320	H. Sherwood	21	Du 48	16	9-13-66	DS	
14bca	433704	1002311	M. Koskan	30	Dr 24	8	9-13-66	S	
14bc	433700	1002315	M. Koskan	33	Dr 24	18	9-13-66	D	
15aac	433710	1002338	M. Koskan	40	Dr 24	20	9-13-66	D	
15ad	433700	1002333	M. Koskan	35	Dr 24	10	9-13-66	D	
19a	433615	1002718	M. Brown	55	Dr 24	——	8-03-66	S	
21cdc	433539	1002526	G. Bachman	2,730	Dr 2	+41.58	9-13-66	DS	Log, AW, CA, 110°F+
26ccc	433447	1002320	C. Hight	45	Dr 24	40	8-11-66	S	
27ba	433530	1002409	D. Brown	60	Dr 24	25	9-14-66	N	
27bda	433520	1002405	D. Brown	2,000	Dr 2½	250	9-14-66	DS	AW, CA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
27da	433504	1002333	L. Humphrey	45	Dr 24	40	8-12-66	S	Pumps dry
27	433510	1002400	L. Humphrey	23	Dr 24	2.0	8-12-66	DS	
33bdc	433421	1002526	W. Dimond	30	Dr 24	20	9-14-66	N	
34ab	433438	1002351	M. Kosken	2,934	Dr 2	+73.92	8-03-66	S	Log, AW, CA, 142°F
36aa	433440	1002110	D. Robinson	45	Dr 30	16	8-11-66	S	
36a	433431	1002118	D. Robinson	47	Dr 30	16	8-03-66	S	
42-27-									
1aaa	433900	1002816	H. Sherwood	1,600	Dr	Flow	9-13-66	S	AW, CA, 110°F+
1cdd	433814	1002852	H. Sherwood	40	Du 36	20	9-13-66	S	
2ccdc	433814	1003013	B. Ryno	1,998	Dr 2	180	9-09-66	DS	AW, CA, 110°F+
14dbb	433650	1002955	R. Ryno	45	B 24	10	9-09-66		
15ba	433713	1003121	A. Jans	45	Du 24	7	9-13-66	DS	FQW
18bc	433700	1003514	M. Neilson	30	B 24	20	9-08-66	S	
18da	433647	1003420	Agolston	20	B 24	8	9-08-66	S	
19dd	433542	1003420	J. Riley	48	Dr 24	25	9-08-66	S	
21bab	433624	1003237	C. Kimball	24	Du 24	8	9-08-66	N	
21bc	433608	1003250	C. Kimball	36	Du 24	10	9-08-66	S	
21cb	433555	1003250	C. Kimball	24	Dr 24	18	9-08-66	S	
23acb	433611	1002955	R. Ryno	36	B 24	10	9-09-66	D	
23adc	433605	1002937	R. Ryno	60	Dr 24	40	9-09-66	N	
23bdd	433605	1003004	R. Ryno	1,993	Dr 4	225	9-09-66	S	AW, CA, 110°F+
27b	433522	1003130	T. Novotny	30	Dr 18	18	9-08-66	S	
27c	433456	1003130	T. Novotny	80	Dr 24	--	9-08-66	S	
27ddb	433453	1003049	L. Kingsbury	30	B 24	4	9-13-66	S	
27d1	433456	1003054	T. Novotny	80	Dr 24	--	9-08-66		
27d2	433456	1003054	T. Novotny	60	Dr 18	--	9-08-66	S	
29a	433522	1003317	B. Sherwood	45	Dr 24	--	8-03-66	S	
30a	433522	1003429	S. Endes	38	Dr 24	20	9-08-66	S	
30cbd	433500	1003510	W. Egleston	45	Du 24	14	9-13-66	S	
30cb	433503	1003514	W. Egleston	70	B 24	5	9-13-66	DS	
30da	433503	1003420	L. Kingsbury	46	B 24	6	9-13-66	S	
32ad	433424	1003308	P. Reutter	40	B 18	35	9-09-66	S	
32bbc	433434	1003407	S. Endes	44	Dr 24	20	9-08-66	DS	
32cc	433358	1003402	L. Brown	30.1	Dr 18	20.2	9-15-66	S	
33dcc	433355	1003219	L. Kingsbury	55	Dr 24	15	9-13-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
34aaa	433440	1003040	L. Kingsbury	30	B 24	20	9-13-66	S	
42-28-									
1aaa	433901	1003528	M. Williams	70	Dr 24	25	9-07-66	S	
1bbbb	433903	1003633	USGS	25	Dr	5	8-16-66	T	Log
5bad	433855	1004052	L. Hutchinson	15	Dn 2	10	9-07-66	S	
5bcd	433848	1004119	L. Hutchinson	55	Dr 24	10	9-07-66	S	
5bd1	433845	1004115	L. Hutchinson	14	D 36	12	9-07-66	D	
5bc2	433845	1004115	L. Hutchinson	45	Dr 36	12	9-07-66	S	
5bc3	433845	1004115	L. Hutchinson	50	Dr 24	10	9-07-66	DS	
6bba	433901	1004222	L. Hutchinson	60	Dr 24	6	9-07-66	S	
6bb	433858	1004227	L. Hutchinson	60	Dr 24	8	9-07-66	N	
8abb	433809	1004043	USGS	25	Dr	5	8-10-66	T	Log
8cbc	433737	1004119	E. Strain	50	Dr 24	12	8-12-66	S	
11b	433800	1003729	R. Archer	23	B 24	8	9-08-66	S	
18cdbb	433640	1004216	USGS	6	Dr	Dry	8-10-66	T	Log
18cdbd	433637	1004211	USGS	7	Dr	Dry	8-10-66	T	Log
18cddb	433634	1004207	USGS	17	Dr	--	8-10-66	T	Log
18cdd	433632	1004204	USGS	52	Dr	--	8-10-66	T	Log
21bc	433610	1004003	C. Hight	55	Dr 24	5	9-07-66	DS	
22b	433603	1003823	W. Krogman	2,360	Dr 2½	+55.44	9-09-66	S	Log, AW, CA, 140°F
23db	433557	1003702	W. Krogman	40	Dr 24	10	9-07-66	D	
24ca	433557	1003608	W. Krogman	60	Dr 24	16	9-07-66	S	
25acc	433508	1003604	W. Egleston	26	Du 72	10	9-13-66	N	
25cda	433501	1003604	W. Egleston	12	Du 48	0	9-13-66	S	
30dca	433455	1004146	J. Dolezal	20	Du 24	10	8-09-66	S	
30bbb	433534	1004231	L. Iwan	2,400	Dr 2½	+17.56	8-04-66	S	AW, CA, 137°F
42-29-									
7c	433734	1004928	C. Jensen	2,460	Dr 2½	6.00	8-05-66	S	Log, AW, CA
20c	433550	1004816	R. Raffensperger	35	Du 24	--	8-03-66	S	
22dca	433547	1004522	H. Stromer	50	Dr 36	8	9-07-66	DS	
22dd1	433544	1004508	H. Stromer	30	Du 24	8	9-07-66	N	
22dd2	433544	1004508	H. Stromer	30	Du 36	8	9-07-66	N	
23cbb	433600	1004455	USGS	8	Dr	Dry	8-12-66	T	Log
23cbcc	433552	1004457	USGS	26	Dr	20	8-12-66	T	Log
23cbcd	433552	1004453	USGS	16	Dr	12	8-12-66	T	Log

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
32ccb	433403	1004830	USGS	26	Dr	18.6	8-12-66	T	Log
34ac			White River No. 1	18	Du 60	--	11-20-65	P	CA, 50°F
36c	433407	1004330	J. Dolezal	30	Dr 24	8	8-09-66	S	
36	433420	1004312	J. Dolezal	35	Dr 24	24	8-12-66	DS	
42-30-									
12cb	433739	1005053	W. Jensen	2,110	Dr 1½	+39.27	11-19-65	S	Log, AW, CA, 115°F
13dbb	433648	1005001	W. Jensen	2,125	Dr 2	180	1-18-60	S	AW, CA
15b	433707	1005304	W. Jensen	2,430	Dr 1½	14	7-30-64	S	Log, AW, CA, 87°F
27acd	433513	1005232	K. Winchell	40	Dr	--	7-20-65	S	
28dbc	433500	1005353	K. Winchell	--	Dr	40	7-20-65	S	
31bdc1	433421	1005613	W. Shouldis	14	Du 24	6	7-14-65	D	
31bdc2	433421	1005613	W. Shouldis	24	Dr 24	8.76	7-14-65	S	
34abd	433434	1005232	K. Winchell	--	Dr	--	7-20-65	S	
34cbb1	433415	1005317	K. Winchell	40	Dr	--	7-20-65	D	
34cbb2	433415	1005317	K. Winchell	40	Dr	--	7-20-65	S	
42-31-									
3cbb	433833	1005949	D. Tompkins	35	Dr 24	20	8-04-66	S	
11ccb1	433728	1005840	O. Jarl	20	Dr 24	--	8-04-66	S	
11ccb2	433728	1005840	O. Jarl	65	Dr 18	--	8-04-66	DS	
14b	433706	1005827	O. Jarl	20	Dr 24	6	8-04-66	S	
17b	433706	1010155	D. Tompkins	40	Dr 24	20	8-04-66	S	
18cb	433646	1010325	D. Tompkins	25	Dr 36	20	8-04-66	S	
18d	433640	1010233	G. Hutchinson	40	Du 24	20	2-16-66	S	
19a	433614	1010233	G. Hutchinson	30	Du 24	18	2-16-66	DS	51°F
19b	433614	1010314	G. Hutchinson	40	Du 24	20	2-16-66	S	
19c	433548	1010314	G. Hutchinson	25	Du 24	17	2-16-66	S	
33bb	433430	1010002	Cedar Butte Store	--	--	--	11-19-65	N	FQW
34aba	433436	1005853	C. Chamberlain	2,300	Dr 2½	275	8-04-66	DS	Log, AW, CA
42-32-									
2d	433822	1010505	D. Glynn	40	Dr 24	30	8-02-66	N	
3bbd1	433851	1010658	D. Glynn	43	Du 24	20	8-02-66	S	
3bbd2	433851	1010658	D. Glynn	12	Du 18	10	8-02-66	D	
9c	433730	1010805	O. Rasmussen	308	Dr 6	--	2-15-66	DS	FQW
14bc	433657	1010550	O. Rasmussen	50	Du 24	8	2-15-66	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
19	433559	1011011	S. Anderson	50	Dr	--	2-15-66	DS	
42-33-									
2	433835	1011236	B. Berry	6	Du	3.3	8-02-66	D	Dry in 1933 & 1965
24bd	433605	1011132	D. Phipps	60	Dr 2½	--	2-15-66	S	
26a	433520	1011218	D. Phipps	Spring	--	Flow	2-15-66	DS	44°F
34cd	433355	1011357	M. Olson	60	Du 24	--	2-15-66	DS	
35d	433402	1011218	BIA	25	Du 2½	18	2-15-66	D	
43-25-									
7dbbb	434255	1002022	USGS	22	Dr	--	8-17-66	T	Log
9caac	434301	1001804	USBR	30	Dr 2½	17.0	5-21-64	T	Log
9caba	434256	1001804	SDWRC	30	Dr 1½	16.2	8-10-66	O	Log, WL
9cada	434248	1001803	USGS	34	Dr	7	8-17-66	T	Log
9cba	434253	1001823	C. Schervem	12	Dn 1¼	10	8-10-66	DS	CA, 49°F
9cdba	434242	1001803	USGS	27	Dr	14	8-17-66	T	Log
9cdcb	434235	1001817	USGS	37	Dr	15	8-17-66	T	Log
13acc1	434208	1001421	W.R. Grazing Assoc.	13	Dn 1¼	10	8-10-66	S	
13acc2	434208	1001421	W.R. Grazing Assoc.	13	Dn 1¼	10	8-10-66	D	
16bbab	434229	1001825	USGS	55	Dr	14	8-17-66	T	Log
16bbda	434222	1001821	USGS	32	Dr	--	8-17-66	T	Log
24	434126	1001425	P. McDill	--	Dr	Flow	4-03-53	S	AW, CA
29abbb	434045	1001910	USGS	22	Dr	--	8-17-66	T	Log
32dddd	433904	1001839	USGS	102	Dr	--	8-17-66	T	Log
33ddd	433906	1001729	L. Peacock	60	Dr 24	25	8-11-66	S	
43-26-									
3cab	434346	1002414	W. Bennett	16	Du 1½	10	9-14-66	S	
6ccca	434334	1002807	USBR	30	Dr 2½	12.0	5-21-64	T	Log
14bcc	434208	1002320	W. Bennett	36	Du 24	26	9-14-66	S	
14daa	434202	1002217	K. Kemnitz	40	Du 36	21.9	7-06-66	D	CA, FQW, 51°F
15bdd1	434208	1002405	W. Bennett	50	Dr 24	30	9-14-66	D	
15bdd2	434208	1002405	W. Bennett	50	Dr 24	20	9-14-66	S	
16ca	434159	1002521	R. Edwards	1,515	Dr 2	+101.64	9-13-56	DS	AW, 104°F
24d	434100	1002118	W. Bennett	40	Du 24	12	9-14-66	S	
32bbc	433946	1002656	M. Dubrey	28	Du 36	20	9-14-66	D	
33add	433933	1002441	J. Till	2,172	Dr 2½	+256.41	9-14-66	S	Log, AW, CA, 128°F
33bd1	433936	1002521	W. Dimond	22	Du 48	10	9-14-66	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
33bd2	433936	1002521	W. Dimond	22	Du 72	15	9-14-66	S	
33bd3	433936	1002521	W. Dimond	60	Du 24	35	9-14-66	D	
34a	433942	1002342	W. Dimond	60	Dr 24	30	9-14-66	S	
35aaa1	433952	1002217	F. Vesely	30	Dr 24	20	8-10-66	D	
35aaa2	433952	1002217	F. Vesely	35	Dr 24	29	8-10-66	S	
35	433929	1002248	F. Vesely	35	Dr 24	2	8-10-66	S	
36	433929	1002136	F. Vesely	65	Dr 24	--	8-10-66	S	Pumps dry
43-27-									
3ca	434342	1003121	R. Edwards	1,585	Dr 2	+4	8-31-61	S	AW, CA, 129°F
5cab	434345	1003349	V. Harrison	20	Du 36	18	9-08-66	N	
6cc	434329	1003514	V. Harrison	30	Du 24	20	9-08-66	D	
7add1	434300	1003416	V. Harrison	50	Du 36	20	9-08-66	S	
7add2	434300	1003416	V. Harrison	20	Du 48	18	9-08-66	S	
11ad	434303	1002933	R. Edwards	1,700	Dr 2	Flows	9-14-56	S	AW, FQW, 122°F
12bba	434319	1002910	R. Edwards	14	Dn 1¼	9	9-08-66	S	
14dbb	434205	1002930	R. Edwards	1,605	Dr 3	+14.32	8-31-61	SO	AW, CA, 112°F
20dd	434100	1003450	E. Draine	26	Dr 24	10	10- 5-66	DS	FQW
27ccc	433958	1003143	H. Sherwood	55	Dr 24	45	9-13-66	S	
28ac	434027	1003214	J. Wang	40	Dr 24	40	9-13-66	N	
28ca	434014	1003232	J. Wang	80	Dr 24	40	9-13-66	DS	
32bb	433948	1003402	R. Weeks	35	Du 24	12	9-08-66	S	
32ca	433922	1003344	R. Weeks	32	Du 24	4	9-08-66	S	
32cc1	433909	1003402	R. Weeks	30	Du 24	12	9-08-66	S	
32cc2	433909	1003402	R. Weeks	30	Du 24	18	9-08-66	DS	
34b	433942	1003130	J. Wang	60	Du 24	30	9-13-66	S	
32	433929	1003335	R. Weeks	15	Du 36	2	9-08-66	S	
43-28-									
1bccc	434351	1003633	USGS	30	Dr	--	8-16-66	T	Log
2bdd	434353	1003716	H. Peck	19	Du 36	17.8	7-06-66	DS	CA, FQW, 54°F
3dccc	434325	1003821	USGS	39	Dr	33	8-15-66	T	Log
8cca1	434241	1004110	USGS	24	Dr	10.5	8-09-66	T	Log
8cca2	434244	1004107	SDWRC	30	Dr 1½	14.0	8-16-66	O	Log, WL
8ccd	434235	1004110	USGS	25	Dr	11.1	8-09-66	T	Log
9add	434301	1003904	USGS	22	Dr	4	8-10-66	T	Log
9dbd	434248	1003922	USGS	27	Dr	--	8-10-66	T	Log

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
10bcc	434301	1003855	USGS	24	Dr	6.8	8-10-66	T	Log
11aaaa	434322	1003637	USGS	47	Dr	--	8-15-66	T	Log
11ddb	434241	1003649	B. Strait	20	Dr 24	18	9-08-66	S	
11dd	434238	1003644	B. Strait	30	Dr 24	25	9-08-66	DS	
12ad	434304	1003532	V. Harrison	30	Dr 36	21	9-08-66	S	
12bccc	434259	1003633	USGS	27	Dr	--	8-16-66	T	Log
12cccc	434235	1003633	USGS	42	Dr	20	8-16-66	T	Log
17bba	434228	1004110	USGS	27	Dr	11.6	8-09-66	T	Log
18cbc	434159	1004227	H. Bucholz	70	Dr 24	52	9-07-66	DS	CA, 62°F
18dbc	434156	1004155	USGS	37	Dr	--	8-16-66	T	Log
19cd	434055	1004209	T. Bucholz	70	Dr 34	10	9-07-66	S	
23bb	434133	1003738	A. Anderson	25	Du 24	15	9-08-66	S	
24bb	434133	1003626	J. Strait	45	Dr 24	40	9-08-66	DS	
28da	434016	1003909	C. Gregg	24	Du 36	7	9-07-66	DS	
28dcb	434006	1003931	C. Gregg	12	Du 36	7	9-07-66	N	
29bb	434042	1004115	C. Pigg	29	Du 36	4	9-07-66	N	
29cca1	434006	1004110	C. Pigg	21	Du 24	9	9-07-66	D	
29cca2	434006	1004110	C. Pigg	18	Du 60	10	9-07-66	S	
30ac	434029	1004151	C. Pigg	9	Du 48	3	9-07-66	D	
31ad	433937	1004133	L. Hutchinson	Spring	--	Flow	9-07-66	S	Spring
33bdd	433934	1003940	L. Stromer	8	Dn 1¼	5	9-08-66	D	
36ac	433937	1003550	M. Williams	1,992	Dr 2	-170	9-07-66	DS	AW, CA, 112°F
43-29-									
1ad	434356	1004245	D. Strain	Spring	--	Flow	9-07-66	S	
2	434349	1004423	R. Olsen	20	Dn 1¼	16	8-04-66	S	
3	434349	1004535	R. Olsen	28	Dr 24	16	8-04-66	S	
6bba	434412	1004933	E. Bachelor	50	Dr 36	20	8-03-66	S	
11c	434258	1004423	R. Olsen	20	Dn 1¼	16	8-04-66	DS	
14	434206	1004423	R. Olsen	50	Du 36	12	8-03-66	DS	
14b1	434206	1004423	R. Olsen	40	Dr 24	17	8-03-66	N	
14c1	434153	1004441	R. Olsen	40	Du 24	20	8-03-66	S	
14d1	434201	1004415	Gulf Olson No. 1	3,196	Dr	--	8-10-64	--	Log, Oil Test
15	434206	1004535	R. Olsen	62	Dr 24	40	8-03-66	N	
17	434206	1004738	R. Olsen	40	Du 24	18	8-03-66	S	
18add1	434209	1004839	A. Ryberg	60	Dr 24	35	8-03-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
18add2	434209	1004839	A. Ryberg	55	Dr 24	35	8-03-66	D	
23dc	434102	1004425	Gulf Sioux Tribal No. 1	3,276	Dr	——	8-20-66	——	Log, Oil Test
25a	434035	1004254	T. Bucholz	60	Dr 24	8	9-07-66	S	
28b	434035	1004705	R. Rada	80	Dr 24	40	8-03-66	S	
29aaa1	434045	1004727	R. Rada	60	Dr 24	30	8-03-66	S	
29aaa2	434045	1004727	R. Rada	60	Dr 24	30	8-03-66	DS	
29ccc1	434000	1004830	E. Green	50	Dr 24	20	8-03-66	S	
29ccc2	434000	1004830	E. Green	40	Dr 30	29	8-03-66	D	
30acd	434025	1004857	E. Green	45	Du 24	20	8-03-66	S	
30dac1	434012	1004848	E. Green	40	Du 24	20	8-03-66	D	
30dac2	434012	1004848	G. Green	50	Dr 30	30	8-03-66	S	
32db1	433940	1004812	E. Green	50	Dr 24	——	8-03-66	S	
32bdb2	433940	1004812	E. Green	46	Du 30	12	8-03-66	S	
36ac	433937	1004303	L. Hutchinson	60	Dr 24	40	9-07-66	S	
43-30-									
4bdb	434359	1005411	C. Medansky	40	Du 24	9	8-03-66	S	
4bdc	434352	1005411	C. Medansky	36	Du 24	24	8-03-66	S	
4daa	434346	1005326	C. Medansky	40	Du 24	17	8-03-66	S	
4dad	434339	1005326	C. Medansky	42	Du 24	25	8-03-66	S	
5cac	434339	1005523	H. Peterson	2,015	Dr 2	94.92	9-06-63	DSO	AW, CA, 74°F
11aa	434316	1005107	W. Astleford	40	Dr 24	6	8-03-66	DS	
14bcc	434208	1005205	E. Bachelor	25	Du 30	20	8-03-66	DS	
15daa	434202	1005214	E. Bachelor	50	Du 24	25	8-03-66	S	
16bc	434212	1005425	W. Astleford	40	Dr 24	25	8-03-66	S	
29a	434034	1005452	W. Jensen	2,555	Dr 2½	153	7-09-66	S	Log, AW, CA, 89°F
34ccc	433907	1005317	D. Glynn	8	Du 48	6	8-02-66	S	
43-31-									
22c	434059	1005936	England Ranch	60	Du 24	25	2-16-66	S	
44-28-									
4b	434913	1003954	B. Strait	12	Dn 3	10	9-08-66		
36cbbc	434436	1003633	USGS	34	Dr	——	8-16-66	T	Log
36	434441	1003559	V. Harrison	30	Du 36	21	9-08-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
44-29-									
29cdc	434510	1004812	L. Hutchinson	20	Du 36	14	9-07-66	DS	
30bdd	434536	1004915	L. Hutchinson	24	Dr 24	14	9-07-66	S	
30dbb	434530	1004906	L. Hutchinson	40	Dr 24	10	9-07-66	S	
32cda	434425	1004803	E. Bachelor	25	Du 24	10	8-03-66	S	
44-30-									
5bbc	434916	1005541	F. Brink	21	Dn 2	21	8-02-66	S	
7bdd	434811	1005608	P. Sandy	22	Dr 24	8	8-02-66	S	
22aa	434644	1005219	A. Burnette	36	Du 36	28	8-03-66	S	
22bdc	434628	1005259	A. Burnette	34	Dr 24	20	8-03-66	S	
23bd	434311	1005143	A. Burnette	28	Du 24	22	8-03-66	D	
28acb	434542	1005353	J. Novey	29	Du 24	16	8-03-66	S	
28da1	434526	1005331	J. Novey	42	Du 24	20	8-03-66	DS	
28da2	434526	1005331	J. Novey	32	Dr 1½	10	8-03-66	S	
28da3	434526	1005331	J. Novey	40	Du 24	20	8-03-66	S	
28da4	434526	1005331	J. Novey	20	Du 24	10	8-03-66	I	
33bbb	434503	1005429	J. Novey	40	Du 24	16	8-03-66	S	
33dbbd	434500	1005427	USBR	30	Dr 2½	10.0	5-20-64	T	Log
34cb	434434	1005313	W. Astleford	38	Dr 24	20	8-03-66	S	
34dd	434421	1005219	W. Astleford	32	Dr 24	12	8-03-66	S	
44-31-									
6cab	434857	1010309	England Ranch	60	——	——	7-07-66	S	CA, 54°F
6d	434847	1010233	England Ranch	60	Du 24	15	2-16-66	S	
7c	434755	1010314	England Ranch	30	Du 18	15	2-16-66	S	
15acc	434719	1005915	R. Chamberlain	Spring	——	Flow	8-02-66	DS	
18a	433729	1010233	England Ranch	40	Du 24	20	2-16-66	S	
19a	434637	1010233	England Ranch	70	Du 36	65	2-16-66	S	
20bbb	434647	1010208	G. England	2,315	Dr 2½	314.0	8-02-66	S	Log, AW, CA, 95°F
21d	434611	1010011	L. Krogman	38	Dr 24	——	8-03-66	S	
22c	434611	1005936	L. Krogman	39	Dr 24	——	8-03-66	S	
23cdc	434601	1005823	BIA	37	Dr 24	36.4	8-02-66	N	
27b	434545	1005936	L. Krogman	36	Dr 24	——	8-03-66	S	
27d	343519	1005902	L. Krogman	56	Dr 24	——	8-03-66	S	
28a	434545	1010011	L. Krogman	28	Dr 24	——	8-03-66	S	
28bbdb	434550	1010052	USGS	27	Dr	——	8-18-66	T	Log
30b	434545	1010314	L. Manke	Spring	——	Flow	2-16-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
44-32-									
4d	434847	1010729	Iwan's Inc.	37	Du 24	18	2-17-66	S	
30a	434545	1010953	Iwan's Inc.	40	Du 24	24	2-17-66	S	
44-33-									
10ddca	434747	1011323	USGS	29	Dr	——	8-11-66	T	Log
14bcbc	434724	1011310	USGS	34	Dr	——	8-11-66	T	Log
15aaab	434740	1011319	USGS	32	Dr	——	8-18-66	T	Log
15aada	434734	1011314	USGS	27	Dr	——	8-18-66	T	Log
22acab	434633	1011344	USGS	32	Dr	——	8-18-66	T	Log
22acb	434635	1011337	USGS	22	Dr	11.1	8-18-66	T	Log
22adba	434635	1011323	USGS	32	Dr	——	8-18-66	T	Log
27aadc	434546	1011319	USGS	14	Dr	——	8-18-66	T	Log
45-30-									
32dcc1	434926	1015557	F. Brink	21	Du 24	21	8-02-66	DS	
32dcc2	434926	1015557	F. Brink	21	Du 24	21	8-02-66	S	
45-31-									
31b1	435004	1010437	Iwan Inc.	32	Du 24	22	2-17-66	S	
31b2	435004	1010437	Iwan Inc.	32	Du 24	22	2-17-66	D	
32b1	435004	1010325	Iwan Inc.	35	Du 24	20	2-17-66	S	
32b2	435004	1010325	Iwan Inc.	35	Du 24	20	2-17-66	D	
33d	434938	1010136	L. Manke	12	Du 36	8	2-16-66	S	
34c1	434938	1010101	L. Manke	37	Du 24	20	2-16-66	DS	
34c2	434938	1010101	L. Manke	Spring	——	Flow	2-16-66	D	45°F
34c3	434938	1010101	L. Manke	42	Du 24	20	2-16-66	DS	50°F
35a	435004	1005914	L. Manke	20	Du 24	15	2-16-66	S	
35d	434938	1005914	L. Manke	37	Du 24	20	2-16-66	S	
45-32-									
36b	435004	1010547	H. Iwan	2,387	Dr 2½	+138.6	8-02-66	S	Log, AW, CA, 136°F
				TODD COUNTY					
35-25-									
5aa	430223	1001642	D. Rock	100	Dr 4	16	7- 7-66	S	
5bb	430223	1001735	D. Rock	72	Dr 2	7	7- 7-66	DS	
5dd	430144	1001642	D. Rock	100	Dr 4	4	7- 7-66	S	
6bb	430223	1001845	D. Rock	100	Dr 4	9.6	7- 7-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
8bb	430131	1001735	D. Rock	90	Dr 4	16	7- 7-66	S	
35-26-									
5ba	430223	1002423	D. Dam	60	Dr 4	30	7- 7-66	S	
9bd	430118	1002312	D. Dam	100	Dr 2	25	7- 7-66	DS	
14dd	430000	1002014	R. Shelborn	28	B 3	8	7- 7-66	DS	
17ad	430026	1002348	D. Dam	60	Dr 1¼	5	7- 7-66	DS	
19bbb	430000	1002557	F. Tobien	130	Dr 4	35	7-12-66	S	
35-27-									
2ab	430223	1002739	M. Barnes	120	Dr 4	70	7-12-66	DS	
2db	430157	1002739	F. Tobien	135	Dr 5	35	7-12-66	S	
3bcc	430207	1002930	L. Pierce	180	Dr 5	20	7-12-66	S	
3da	430157	1002832	F. Tobien	115	Dr 4	25	7-12-66	S	
4	430204	1003010	L. Pierce	180	Dr 5	25	7-12-66	DS	
6aac	430220	1003209	T. Harvey	110	Dr 5	30	7-11-66	S	
6adc	430207	1003209	T. Harvey	70	Dr 5	10	7-11-66	N	Capped
6dbd	430154	1003218	T. Harvey	70	Dr 5	10	7-11-66	S	
7ca	430105	1003240	T. Harvey	120	Dr 4½	25	7-11-66	S	
7da	430105	1003205	T. Harvey	120	Dr 5	25	7-11-66	S	
9b	430125	1003027	F. Tobien	135	Dr 4	30	7-12-66	S	
10cb	430105	1002925	F. Tobien	125	Dr 5	30	7-12-66	S	
11cc	430052	1002814	F. Tobien	120	Dr 4	30	7-12-66	S	
11dd1	430052	1002721	F. Tobien	80	Dr 5	12	7-12-66	S	
11dd2	430052	1002721	F. Tobien	120	Dr 5	20	7-12-66	DS	
11dd3	430052	1002721	F. Tobien	120	Dr 4	25	7-12-66	S	
12b	430125	1002654	F. Tobien	85	Dr 5	15	7-12-66	S	
14daa	430017	1002716	F. Tobien	50	Dr 5	8	7-12-66	S	
15bc	430026	1002925	E. Benham	55	Dr 3	15	7-11-66	S	
16a	430033	1002952	E. Benham	378	Dr	——	7-11-66	T	Log
16bd	430026	1003018	E. Benham	55	Dr 3	16	7-11-66	S	
18a	430033	1003214	E. Benham	55	Dr 3	15	7-11-66	S	
18dd	430000	1003205	E. Benham	190	Dr 4	17	7-11-66	DS	
22	430000	1002859	E. Benham	75	Dr 3	10	7-11-66	S	
23	430000	1002748	E. Benham	75	Dr 3	28	7-11-66	S	
35-28-									
1abd	430220	1003329	T. Harvey	110	Dr 5	10	7-11-66	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1b	430217	1003400	T. Harvey	120	Dr 3	10	7-11-66	S	
1dc	430145	1003333	T. Harvey	100	Dr 5	10	7-11-66	S	
4acc	430207	1003709	C. Kalbinger	140	Dr 2½	35	9-30-64	S	54°F
4bdd	430207	1003718	C. Kalbinger	130	Dr	——	9-30-64	S	
10ccc	430049	1003634	Splichal & Petr. Co.	125	Dr	——	9-30-64	DS	CA, 60°F
10	430112	1003603	Splichal & Petr. Co.	145	Dr	——	9-30-64	S	
35-29-									
4aa	430224	1004349	M. Jackson	50	Dr 4	20	7-12-66	S	
5a	430215	1004455	D. Shelburn	89	Dr	——	10-14-59	T	
5b	430215	1004600	D. Shelburn	94	Dr	——	10-14-59	T	Log
5ddd	430142	1004455	E. Kuepker	135	Dr	100	9-29-64	DS	
6c	430152	1004653	E. Meaham	100	Dr 4	35	7-13-66	S	
7bbb	430135	1004707	J. Biittler	153	Dr	60	9-29-64	D	
8ddd	430050	1004455	M. Muckey	175	Dr	——	9-29-64	DS	
11abb1	430135	1004151	G. Cady	110	Dr	20	9-30-64	S	
11abb2	430135	1004151	G. Cady	65	Dr	20	9-30-64	D	51°F
16cca	430005	1004438	W. Hronek	150	Dr 4	40	7-12-66	S	
17aa	430040	1004459	W. Lucht	190	Dr 4	85	7-12-66	DS	
17ddd1	430000	1004455	W. Lucht	140	Dr 4	30	7-12-66	S	
17ddd2	430000	1004455	SDWRC	200	Dr 1¼	84.7	11- 3-59	O	Log, WL
35-30-									
1dda1	430149	1004715	J. Biittler	136	Dr	70	9-29-64	D	57°F
1dda2	430149	1004715	J. Biittler	150	Dr 4	70	9-29-64	S	54°F
5ca	430159	1005236	A. Lanz	105	Dr 4	20	7-13-66	S	
6caa	430202	1005348	A. Lanz	105	Dr 4	40	7-13-66	S	
12aaa	430150	1004715	SDWRC	200	Dr 1¼	65.7	11- 4-59	O	Log, WL
12abb	430136	1004742	J. Biittler	160	Dr	60	9-29-64	S	
12bcc	430117	1004817	H. Taylor	140	Dr	——	9-30-64	DS	
13abb	430045	1004742	R. Parvik	140	Dr 2½	——	9-30-64	DS	
13add	430025	1004715	H. Taylor	140	Dr	65	9-30-64	S	
15bcd	430025	1005029	H. Parvik	160	Dr	15	9-30-64	S	
23a	425943	1004839	H. Parvik	180	Dr	23	9-30-64	S	
35-31-									
1bac	430222	1005454	S. Calver	110	Dr 4	——	1-06-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3bc	430212	1005744	A. Peterson	—	Dr 4	—	1-05-65	S	
3c	430153	1005736	L. Homan	108	Dr 4½	—	1-06-65	S	
5ab1	430225	1005929	A. Peterson	70	Dr 4	16	1-05-65	D	
5ab2	430225	1005929	A. Peterson	70	Dr 4	16	1-05-65	S	FQW
5ab3	430225	1005929	A. Peterson	80	Dr 4	16	1-05-65	S	
6cb	430159	1010114	A. Peterson	90	Dr 4	—	1-05-65	S	
6db	430159	1010039	S. Redbird	90	Dr 4	—	1-05-65	S	
6	430205	1010048	L. Homan	85	Dr 4	—	1-06-65	S	
12ddc	430051	1005436	H. Coleman	100	Dr 4	60	1-05-65	S	
12dd	430005	1005432	H. Coleman	100	Dr 4	60	1-05-65	D	FQW
13dac	430013	1005436	H. Coleman	100	Dr 4	60	1-05-65	S	
35-32-									
3ac	430212	1010412	T. Arnold	110	Dr	—	11-17-65	DS	CA
7bd	430121	1010804	G. Barnes	50	Dr 4	Flow	1-13-65	S	FQW, 54°F
8d	430101	1010625	Arnold Corp.	86	Dr 3	—	1-06-65	S	
10d	430101	1010403	C. Peterson	70	Dr 4½	—	1-06-65	S	
18cb	430016	1010823	G. Barnes	50	Dr 2	Flow	1-13-65	S	
35-33-									
1cab	430203	1010921	G. Barnes	50	Dr 4	—	1-13-65	S	
2bcd	430209	1011041	G. Barnes	50	Dr 2	Flow	1-13-65	S	
13bc	430030	1010934	G. Barnes	50	Dr 4	Flow	1-13-65	S	
15acd	430027	1011117	G. Barnes	30	Dr 4	Flow	1-13-65	S	
16cba	430020	1011304	G. Barnes	60	Dr 3	—	1-13-65	S	
17d	430010	1011335	G. Barnes	60	Dr 4	—	1-13-65	S	
36-25-									
5dbd1	430707	1001656	T. Grandsinger	85	Dr	20	8-11-65	S	
5dbd2	430707	1001656	T. Grandsinger	45	Dr	10	8-11-65	S	
7adb	430634	1001757	M. Haase	30	Dr	—	8-11-65	DS	
8cdd1	430602	1001713	M. Haase	100	Dr	—	8-11-65	S	
8cdd2	430602	1001713	M. Haase	100	Dr	—	8-11-65	S	
9cad	430615	1001603	T. Grandsinger	135	Dr	50	8-11-65	S	
13bac	430549	1001241	L. Huggins	70	Dr	—	8-11-65	S	
14dbb1	430529	1001334	L. Huggins	140	Dr	—	8-11-65	D	
14dbb2	430529	1001334	L. Huggins	140	Dr	—	8-11-65	S	55°F
16ada1	430542	1001528	T. Grandsinger	185	Dr	60	8-11-65	DS	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
16ada2	430542	1001528	T. Grandsinger	160	Dr	60	8-11-65	S	
18aaa	430555	1001748	M. Haase	100	Dr	——	8-11-65	S	
18dbb	430529	1001815	M. Haase	100	Dr	——	8-11-65	S	
23bbb	430503	1001409	L. Huggins	140	Dr	——	8-11-65	S	
28bd	430354	1001607	D. Rock	180	Dr 4	130	7-07-66	S	
29cd	430328	1001718	D. Rock	120	Dr 4	46.0	7-07-66	S	
31bc	430302	1001845	D. Rock	70	Dr 4	20	7-07-66	S	
33aa	430315	1001532	D. Rock	130	Dr 4	70	7-07-66	S	
34cc	430236	1001515	D. Rock	170	Dr 4	70	7-07-66	S	
36-26-									
2abb	430739	1002036	M. Haase	100	Dr	——	8-11-65	S	
4cd	430657	1002312	P. Hoefs	160	Dr	——	7-07-66	S	
7dd	430605	1002459	G. Lamoureaux	80	Dr 5	20	7-07-66	S	
9ab	430644	1002254	G. Lamoureaux	120	Dr 5	4	7-07-66	S	
9db	430618	1002254	G. Lamoureaux	100	Dr 5	30	7-07-66	S	
11dcc	430602	1002036	M. Haase	65	Dr	——	8-11-65	S	
14bca	430542	1002103	M. Haase	100	Dr	——	8-11-65	S	
15aa	430552	1002125	C. Bachelor	100	Dr 5	50	7-07-66	S	
16cca	430516	1002325	C. Bachelor	100	Dr 5	35	7-07-66	S	
17bbb	430555	1002445	G. Lamoureaux	90	Dr 5	30	7-07-66	DS	
17cd	430513	1002423	C. Bachelor	50	Dr 3	18	7-07-66	DS	
19bbc	430456	1002557	G. Lamoureaux	120	Dr 5	40	7-07-66	S	
21aab	430503	1002241	C. Bachelor	120	Dr 5	40	7-07-66	S	
27ab	430408	1002143	C. Bachelor	130	Dr 5	40	7-07-66	S	
36-27-									
3ca	430710	1002907	G. Lamoureaux	150	Dr 5	60	7-07-66	S	
5ddd	430653	1003049	A. Slaughter	120	Dr 4	20	7-12-66	S	
10ca	430618	1002907	G. Lamoureaux	150	Dr 5	60	7-07-66	S	
15ca	430526	1002907	G. Lamoureaux	90	Dr 5	25	7-07-66	S	
15cc	430513	1002925	G. Lamoureaux	150	Dr	75	7-07-66	S	
20c	430427	1003138	A. Slaughter	120	Dr 4	30	7-12-66	S	
21bd	430427	1003018	G. Lamoureaux	90	Dr 5	50	7-07-66	S	
22ca	430434	1002907	G. Lamoureaux	75	Dr 5	8	7-07-66	DS	
28dd	430329	1002943	M. Lein	147	Dr 4	32	8-18-65	S	
30bda	430358	1003236	W. Niehus	140	Dr 4	20	7-12-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31a	430309	1003214	T. Harvey	—	Dr 5	5	7-11-66	S	
32b	430309	1003138	W. Niehus	140	Dr 4	15	7-12-66	S	
33bcc	430259	1003041	M. Lein	120	Dr 4	25	8-18-65	D	
33ddb	430240	1002947	U. Shelbourn	140	Dr 4	30	8-18-65	S	
34add	430259	1002847	T. Wade	100	Dr 4	30	8-18-65	DS	
34caa	430253	1002903	T. Wade	110	Dr 4	30	8-18-65	S	
35bbd	430312	1002810	T. Wade	100	Dr 4	30	8-18-65	S	
35dcd	430233	1002734	U. Shelbourn	144	Dr 4	25	8-18-65	D	
36-28-									
1bbb	430739	1003413	C. Holle	80	Dr 4	65	7-12-66	S	
2bab1	430739	1003506	G. Schemm	140	Dr 4	108	7-13-66	S	
2bab2	430739	1003506	G. Schemm	167	Dr 5	96	7-13-66	DS	
3dbb	430713	1003559	G. Schmidt	160	Dr 4	100	7-13-66	DS	
5ddb	430700	1003802	M. Reagle	140	Dr 4	35	9-23-64	S	FQW, 55°F
7dd1	430604	1003908	F. Lutter	214	Dr 14	26	9-21-55	I	Log, CA
7dd2	430604	1003908	F. Lutter	72	Dr 4	42	9-22-64	DS	CA, FQW, 55°F
8ada	430634	1003753	M. Reagle	140	Dr 4	—	9-23-64	DS	FQW
8caa	430621	1003829	E. Pahlke	80	Dr 4	—	9-22-64	S	FQW, 53°F
9aca	430634	1003701	T. Schubauer	70	Dr 2	40	7-12-66	DS	
9cba	430621	1003736	Mary Reagle	140	Dr 4	40	9-22-64	S	FQW, 58°F
11abb	430647	1003448	G. Schemm	140	Dr 4	100	7-13-66	S	
11dd	430604	1003426	G. Schemm	160	Dr 4	120	7-13-66	S	
12dd	430604	1003316	W. Niehus	60	Dr 4	6	7-12-66	S	
16a	430545	1003656	M. Schubauer	40	Dr 2	25	7-12-66	S	
17bb	430551	1003851	E. Pahlke	72	Dr 2	42	9-22-64	DS	FQW, 51°F
17b	430545	1003842	E. Pahlke	80	Dr 4	—	9-22-64	S	FQW, 53°F
18acc	430535	1003930	G. Eagles	120	Dr 4	—	9-22-64	S	FQW, 58°F
18cd	430512	1003944	J. Taylor	48	Dr 3½	—	9-22-64	DS	FQW, 53°F
24aa1	430459	1003316	W. Niehus	140	Dr 4	20	7-12-66	D	
24aa2	430459	1003316	W. Niehus	200	Dr 5	20	7-12-66	D	
24aa3	430459	1003316	W. Niehus	40	Dr 4	10	7-12-66	S	
24ada	430450	1003311	W. Niehus	140	Dr 4	20	7-12-66	D	
24ad1	430447	1003316	W. Niehus	140	Dr 4	10	7-12-66	S	
24ad2	430447	1003316	W. Niehus	140	Dr 4	15	7-12-66	S	
29ab	430408	1003815	L. Wrage	30	Dr 3	12	9-21-64	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
29ac1	430355	1003815	L. Wrage	30	Dr 3	15	9-22-64	DS	FQW, 54°F
29ac2	430355	1003815	L. Wrage	30	Dr 3	10	9-21-64	S	
29bb	430408	1003851	L. Wrage	30	Dr 3	13	9-21-64	S	
29db	430342	1003815	L. Wrage	30	Dr 3	10	9-22-64	S	FQW, 52°F
30b	430401	1003952	S. Kalbingler	100	Dr 4	20	9-23-64	S	FQW, 54°F
30dd1	430329	1003908	S. Kalbingler	110	Dr 4½	35	9-23-64	DS	FQW, 56°F
30dd2	430329	1003908	S. Kalbingler	100	Dr 4½	20	9-23-64	S	FQW
31a	430309	1003917	S. Kalbingler	90	Dr 4½	20	9-23-64	S	FQW, 55°F
31dd	430237	1003908	C. Kalbingler	180	Dr	——	9-30-64	S	
33dbd	430246	1003701	C. Kalbingler	160	Dr	——	9-30-64	S	
35cdc	430233	1003506	H. Hewitt	——	Dr 3	2.30	8-17-65	N	
36-29-									
5ca	430709	1004535	H. Gunnick	140	Dr 4	40	7-13-66	S	
8abb1	430646	1004521	H. Gunnick	140	Dr 4	40	7-13-66	DS	
8abb2	430646	1004521	H. Gunnick	150	Dr 3	40	7-13-66	SN	
9aa1	430643	1004349	H. Gunnick	200	Dr 2	70	7-13-66	S	
9aa2	430643	1004349	H. Gunnick	140	Dr 4	70	7-13-66	S	
9dad	430614	1004345	H. Gunnick	209	Dr 4	70	7-13-66	S	
11dc	430604	1004146	R. Hill	102	Dr 4	——	1-06-65	S	
13dcc	430509	1004041	J. Taylor	48	Dr	——	9-22-64	S	FQW, 52°F
15aca	430542	1004252	W. Hronek	160	Dr 4	20	7-12-66	S	
15bbb	430555	1004336	W. Hronek	160	Dr 4	20	7-12-66	DS	CA
20ca	430434	1004535	H. Gunnick	140	Dr 4	25	7-13-66	S	
22ad	430447	1004239	J. Hronek	180	Dr 4	60	7-12-66	S	
22c	430427	1004323	W. Hronek	180	Dr 4	60	7-12-66	S	
32bb	430316	1004552	R. Epke	60	Dr 4	8	7-12-66	S	
32cb	430250	1004552	R. Epke	60	Dr 4	12	7-12-66	S	
32cd	430237	1004535	R. Epke	60	Dr 4	12	7-12-66	DS	
32c	430250	1004545	R. Epke	100	Dr	——	9-15-59	T	Log
32dd	430237	1004459	T. Epke	60	Dr 4	10	7-12-66	DS	
34ab	430316	1004257	J. Jackson	100	Dr 4	20	7-12-66	S	
34cc	430237	1004332	J. Jackson	40	Dr	20	7-12-66	DS	
34cd	430237	1004314	J. Jackson	100	Dr 4	10	7-12-66	S	
35da	430250	1004129	L. Wrage	30	Dr 3	16	9-22-64	S	FQW

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
36-30-									
1a	430728	1004729	S. Pavelka	185	Dr 5		1-06-65	S	
4db	430709	1005108	L. Markus	235	Dr	108	9-29-64	S	
5db	430709	1005219	B. Donovan	324	Dr 4		1-06-65	S	
9ddd	430601	1005046	W. Walkling	150	Dr		9-30-64	S	
10aaa	430646	1004936	L. Markus	235	Dr 4	——	9-29-64		
12ddd	430601	1004715	B. Schellhaas	235	Dr	135	9-29-64	DS	
13aac	430548	1004724	B. Schellhaas	170	Dr 3	——	9-29-64	S	FQW
23ddb	430424	1003835	R. Tinant	50	Dr	——	9-29-64	S	
24ccd	430418	1004808	R. Tinant	80	Dr	——	9-29-64	DS	CA, FQW, 53°F
26ddd	430326	1004826	R. Tinant	50	Dr	10	9-30-64	S	
28ad	430355	1005051	T. Rasmussen	60	Dr 5	10	7-13-66	S	
28ddd	430326	1005046	T. Rasmussen	50	Dr 5	20	7-13-66	DS	
29ac	430355	1005219	M. Nollett	60	Dr 4	24	7-13-66	S	
31da	430250	1005313	W. Lanz	80	Dr 4	20	7-13-66	S	
31ddd	430234	1005308	W. Lanz	40	Dr 4	16	7-13-66	DS	
31dd	430238	1005313	W. Lanz	50	Dr 4	20	7-13-66	S	
32a	430310	1005210	M. Nollett	180	Dr 4	——	7-13-66	S	
32da	430250	1005201	W. Lanz	115	Dr 4	30	7-13-66	S	
33baa	430320	1005122	M. Nollett	170	Dr 4	——	7-13-66	N	
33ba	430316	1005126	M. Nollett	180	Dr	92	7-13-66	DS	
33bb	430316	1005144	M. Nollett	110	Dr 4	54	7-13-66	S	
33c	430244	1005135	M. Nollett	50	Dr 4	24	7-13-66	S	
36-31-									
1c	430702	1005516	W. Donovan	258	Dr 4	——	1-06-65	S	
2bc	430721	1005634	K. Churchill	200	Dr 4	15	1-05-65	S	
2c	430702	1005626	L. Churchill	200	Dr 4	——	1-06-65	S	
2d	430702	1005551	K. Churchill	180	Dr 4	——	1-05-65	S	
8ca	430617	1005947	H. Horselucking	180	Dr 4	——	1-12-65	S	
14ab	430551	1005559	K. Churchill	244	Dr 4	164	1-05-65	S	
14c	430519	1005626	K. Churchill	240	Dr 4	——	1-06-65	S	
14db	430525	1005559	K. Churchill	140	Dr 2	100	1-05-65	S	
15a1	430545	1005701	J. Face	220	Dr 3	——	1-12-65	S	
15a2	430545	1005701	J. Face	310	Dr 4	90	1-12-65	DS	FQW
16ddd	430509	1005757	L. Churchill	148	Dr 4	——	1-06-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
18abc	430548	1010044	K. Churchill	98	Dr 4	39	1-05-65	DS	
18ca	430525	1010057	S. Carver	148	Dr 4	——	1-06-65	S	
19ddd	430418	1010017	S. Redbird	90	Dr 4	——	1-05-65	S	
20ddb	430424	1005916	A. Peterson	——	Dr 4	——	1-05-65	S	
21ccd	430418	1005850	A. Peterson	100	Dr 4	——	1-05-65	S	
22cc	430421	1005744	A. Peterson	135	Dr 4	——	1-05-65	S	FQW, 54°F
23b	430453	1005626	J. Face	220	Dr 4	——	1-12-65	S	
26c	430336	1005626	J. Face	220	Dr 4	——	1-12-65	S	
27a	430401	1005701	J. Face	160	Dr 4	——	1-12-65	S	
30cdc	430326	1010101	S. Redbird	90	Dr 4	——	1-05-65	S	
31bab	430320	1010101	S. Redbird	90	Dr 4	——	1-05-65	DS	
31d	430244	1010031	G. Brookey	63	Dr 4	——	1-06-65	S	
33cc	430238	1005854	Rosebud Ed. Soc.	146	Dr 4	——	1-06-65	S	
34	430257	1005718	Rosebud Ed. Soc.	190	Dr 4	——	1-06-65	S	
35d	430244	1005551	R. Hill	140	Dr 4	——	1-06-65	S	
36-32-									
1cd	430655	1010217	Spring Cr. School (BIA)	60	Dr	10	11-17-65	DP	CA, 58°F
2caa	430711	1010314	J. Whitehat	50	Dr 4		1-13-65	S	
9cda	430607	1010536	K. Simmons	Spring	——	Flow	1-13-65	S	FQW, 54°F
11caa	430620	1010314	L. Churchill	160	Dr 4		1-13-65	N	
12aab	431200	1010125	USGS	50	Dr	20	10-29-64	T	Log
12abb	431200	1010155	USGS	72	Dr	20	10-29-64	T	Log
12bbb	431200	1010225	USGS	42	Dr	35	10-29-64	T	Log
13a	430544	1010141	H. Pavlik	148	Dr 4		1-06-65	S	
20bcc	430443	1010714	Arnold Corp.	75	Dr 4		1-13-65	S	
22caa	430437	1010425	J. Whitehat	40	Dr 2	30	1-07-65	S	
25baa	430411	1010203	J. Whitehat	55	Dr 2	35	1-07-65	D	
25c	430336	1010216	Arnold Corp.	——	Dr 4	——	1-13-65	S	
26acc	430352	1010305	A. Peterson	90	Dr 4	——	1-05-65	S	
26bdd	430352	1010314	H. Peterson	180	Dr 4	——	1-13-65	S	
30aa	430408	1010727	K. Simmons	75	Dr 4	——	1-13-65	S	
35c	430244	1010327	C. Peterson	85	Dr 4½	——	1-06-65	S	
36-33-									
4c	430701	1011259	Arnold Corp.	45	Dr 5½	——	1-06-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
10ab	430642	1011121	Arnold Corp.	65	Dr 4	——	11-17-65	DS	CA, 49°F
11c	430610	1011037	Arnold & Brown Co.	105	Dr 4	——	1-06-65	S	
14b	430544	1011037	Arnold Corp.	100	Dr 5	——	1-06-65	S	
15b	430544	1011148	Arnold & Brown Co.	112	Dr 5	——	1-06-65	S	
21c	430427	1011259	Arnold & Brown Co.	105	Dr 5	——	1-06-65	S	
22c	430427	1011148	Arnold & Brown Co.	112	Dr 5	——	1-06-65	S	
28b	430402	1011259	Arnold & Brown Co.	165	Dr 5	——	1-06-65	S	
31a	430310	1011446	Arnold Corp.	90	Dr 3	——	1-06-65	S	
32	430255	1011340	Arnold Corp.	170	Dr	——	————	T	Log
33c	430245	1011259	Arnold & Brown Co.	99	Dr 5	——	1-06-65	S	
35b	430310	1011037	Arnold Corp.	80	Dr 3	——	1-06-65	S	
37-25-									
3aaa	431254	1001519	J. Dvorak	40	Du	30	8-06-65	DS	
4bcc	431234	1001733	J. Dvorak	100	Dr	80	8-05-65	S	
5cac	431221	1001827	A. Dvorak	180	Dr	40	8-05-65	S	
6abd1	431247	1001911	C. McCormick	120	Dr	35	8-05-65	S,I	
6abd2	431247	1001911	C. McCormick	120	Dr	35	8-05-65	DS	
6ccc1	431208	1001956	C. Chauncey	80	Dr	20	8-06-65	D	
6ccc2	431208	1001956	C. Chauncey	80	Dr	20	8-06-65	S	
6ccc3	431208	1001956	C. Chauncey	80	Dr	20	8-06-65	S	
6ccc4	431208	1001956	C. Chauncey	80	Dr	20	8-06-65	S	
10bcb1	431148	1001621	A. Dvorak, Jr.	110	Dr	80	8-05-65	DS	
10bcb2	431148	1001621	A. Dvorak, Jr.	110	Dr	——	8-05-65	DS	
11cbb	431135	1001510	E. Novotny	70	Dr	50	8-06-65	S	
15dac	431036	1001528	J. Dvorak	110	Dr	50	8-05-65	DS	55°F
16dac	431036	1001639	J. Dvorak	90	Dr	40	8-05-65	DS	
19adc	430957	1001902	G. McCormick	130	Dr	50	8-11-65	S	
20dbc	430944	1001809	G. McCormick	130	Dr	40	8-11-65	S	
23aaa	431017	1001400	SDWRC	35	Dr 1¼	10.3	————	O	Log, WL
23cbb1	430951	1001510	F. Menke	185	Dr	18	8-11-65	D N	
23cbb2	430951	1001510	F. Menke	125	Dr	12	8-11-65	DS	
23	431000	1001402	SDHD	48	Dr	——	————	T	Log
25ddc1	430839	1001304	C. Diez	110	Dr	30	8-11-65	S	
25ddc2	430839	1001304	C. Diez	110	Dr	30	8-11-65	D	
28bbb	430924	1001733	D. Turney	110	Dr	25	8-10-65	D	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
29aac1	430918	1001751	G. McCormick	60	Dr	12	8-11-65	D	59°F
29aac2	430918	1001751	G. McCormick	30	Dr	——	8-11-65	DN	
37-26-									
2add1	431231	1002117	L. Drey	109	Dr	30	8-04-65	S	
2add2	431231	1002117	L. Drey	105	Dr	30	8-04-65	D	
2add3	431231	1002117	L. Drey	106	Dr	30	8-04-65	S	
3cda	431211	1002306	S. Whiting	95	Dr	40	8-03-65	S	
4bbd	431244	1002437	L. Klein	60	Dr	——	8-29-65	SN	
5acc1	431231	1002522	C. Klein	70	Dr	20	7-29-65	DS	
5acc2	431231	1002522	C. Klein	108	Dr	18	7-29-65	DS	
5bdd1	431231	1002531	L. Klein	150	Dr	30	7-29-65	S	
5bdd2	431231	1002531	L. Klein	100	Dr	30	7-29-65	D	
5bdd3	431231	1002531	L. Klein	70	Dr	25	7-29-65	S	
5bdd4	431231	1002531	L. Klein	104	Dr	20	7-29-65	DS	
6add1	431231	1002606	O. Daywitt	90	Dr	35	8-04-65	D	
6add2	431231	1002606	O. Daywitt	100	Dr	35	8-04-65	S	
6add3	431231	1002606	O. Daywitt	70	Dr	35	8-04-65	D	
9bad	431152	1002419	S. Whiting	70	Dr	12	7-29-65	S	
9bbb1	431158	1002446	S. Whiting	70	Dr	12	7-29-65	D	CA, 53°F
9bbb2	431158	1002446	S. Whiting	70	Dr	——	7-29-65	N	
9bbb3	431158	1002446	S. Whiting	77	Dr	——	7-29-65	D	
9bbb4	431158	1002446	S. Whiting	70	Dr	12	7-29-65	S	
9dac	431125	1002351	S. Whiting	80	Dr	30	8-03-65	S	
10baa	431158	1002306	C. Harp	120	Dr	——	8-06-65	DS	
19dcc	430927	1002627	T. Whiting	160	Dr	70	8-05-65	S	
20caa1	430947	1002531	T. Whiting	130	Dr	40	8-05-65	S	
20caa2	430947	1002531	T. Whiting	130	Dr	40	8-05-65	D	
20caa3	430947	1002531	T. Whiting	130	Dr	30	8-05-65	S	
20cab	430947	1002540	T. Whiting	130	Dr	30	8-05-65	S	
20cdd	430927	1002531	T. Whiting	140	Dr	45	8-05-65	S	
23dd	430931	1002122	G. Lamoureaux	140	Dr 5	40	7-07-66	S	
24aaa	431031	1002005	W. Pierce	110	Dr	15	8-06-65	S	
24daa	430947	1002005	G. Lamoureaux	90	Dr 5	30	7-07-66	S	
25dab	430854	1002014	G. Lamoureaux	140	Dr 5	40	7-07-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
26abd	430914	1002135	M. Haase	100	Dr	——	8-11-65	S	
26ddd	430835	1002117	G. Lamoureaux	140	Dr 5	40	7-07-66	S	
34ccc	430742	1002333	J. Morgan	110	Dr 5	25	7-07-66	DS	
35dd	430746	1002122	G. Lamoureaux	140	Dr 5	40	7-07-66	S	
37-27-									
5a	431241	1003157	H. Lamoureaux	60	Dr 4	10	7-13-66	S	
14acd	431046	1002830	C. Harp	150	Dr	50	8-06-65	S	
15add	431046	1002922	C. Harp	150	Dr	50	8-06-65	S	
20bc	430957	1003241	H. Lamoureaux	80	Dr 4	10	7-13-66	DS	
26bab	430921	1002856	C. Harp	250	Dr	120	8-06-65	S	
30	430858	1003334	H. Lamoureaux	150	Dr 5	60	7-13-66	S	
33bd	430812	1003113	A. Slaughter	120	Dr 4	15	7-12-66	S	
37-28-									
18acc	431043	1004048	R. Brinda	165	Dr 4	34	9-23-64	S	FQW
19ac	430954	1004044	R. Brinda	120	Dr 4	28	9-23-64	S	FQW, 53°F
24dd	430928	1003428	H. Lamoureaux	80	Dr 5	12	7-13-66	S	
29bcd	430858	1004003	R. Brinda	120	Dr 4	13	9-23-64	DS	FQW
30add	430858	1004021	R. Brinda	80	Dr 4	16	9-23-64	S	FQW, 53°F
30caa	430852	2004057	M. Reagle	140	Dr	35	8-22-64	DS	FQW
31daa	430759	1004021	M. Reagle	120	Dr 4	——	9-22-64	N	
35dcc	430739	1003602	G. Schmidt	110	Dr 4	65	7-13-66	S	
37-29-									
8bbc	431149	1004726	J. Epke	125	Dr 6	——	9-29-64	S	Never gone dry
9ccc	431110	1004614	J. Epke	100	Dr 6	——	9-29-64	S	
10dbb	431130	1004425	K. Fernen	150	Dr 4	65	7-13-66	S	
12bc	431139	1004232	K. Fernen	150	Dr 4	65	7-13-66	DS	
13cbb	431037	1004236	K. Fernen	150	Dr 4	65	7-13-66	S	
15ac	431047	1004420	K. Fernen	150	Dr 4	65	7-13-66	S	
15ad	431047	1004402	K. Fernen	248	Dr	——	7-13-66	IT	
15c	431035	1004435	B. Quigley	264	Dr	——	————	T	Log
16daa	431037	1004510	J. Epke	100	Dr	——	9-29-64	DS	
17caa	431037	1004659	E. Vavra	180	Dr 4	80	7-13-64	S	
21baa	431011	1004547	Brady	154	Dr	134	9-29-64	DS	FQW, 52°F
21ddd1	430925	1004510	E. Vavra	180	Dr 4	80	7-13-66	DS	
21ddd2	430925	1004510	E. Vavra	180	Dr 4	80	7-13-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
22baa	431011	1004434	E. Vavra	180	Dr 4	60	7-13-66	S	
23aac	431004	1004254	Fernen	150	Dr 4	65	7-13-66	S	
23cbb	430944	1004349	Fernen	150	Dr 4	65	7-13-66	S	
24cdd	430925	1004209	Fernen	150	Dr 4	65	7-13-66	S	
24	430948	1004204	Fernen	150	Dr 4	65	7-13-66	S	
27bb	430915	1004457	M. Schubauer	190	Dr 4	70	7-12-66	S	
27bc	430902	2004457	M. Schubauer	140	Dr 4	18	7-12-66	S	
27da	430848	1004402	M. Schubauer	180	Dr 4	60	7-12-66	DS	
28acc	430858	1004538	T. Hornstra	150	Dr 6	80	9-29-64	D	FQW, 53°F
28bcd	430858	1004605	T. Hornstra	110	Dr 6	50	9-29-64	S	
28ccd	430832	1004605	T. Hornstra	150	Dr 6	——	9-29-64	S	
29	430855	1004655	A. Brady	150	Dr	60	9-29-64	S	
37-30-									
13cc	431021	1004940	L. Markus	60	Dr 4	20	9-20-64	S	
17cc	431021	1005426	Rosebud Ed. Soc.	342	Dr 4	——	1-06-65	S	
19caa	430945	1005511	Rosebud Ed. Soc.	460	Dr 4	——	1-06-65	S	
20c	430935	1005417	R. Pavelka	320	Dr 4	——	1-06-65	S	
24cc	430929	1004940	L. Markus	105	Dr 6	——	9-29-64	S	
25dd	430936	1004846	L. Markus	165	Dr	20	9-29-64	S	
26b	430909	1005042	S. Pavelka	150	Dr 5	——	1-06-65	S	
27	430856	1005136	S. Pavelka	220	Dr 4	——	1-06-65	S	
30	430856	1005510	St. Francis Mission	330	Dr	——	————	T	Log
32ab	430823	1005350	Rosebud Ed. Soc.	275	Dr 4½	——	1-06-65	S	
32bb	430823	1005400	St. Francis Mission	295	Dr 8	——	11-18-65	P	CA
37-31-									
18cb	431036	1010221	B. Palvik	200+	Dr 4	——	1-22-65	DS	FQW, 55°F
19	430950	1010202	L. Churchill	220	Dr 4	——	1-13-65	S	
26b	430911	1005744	Rosebud Ed. Soc.	344	Dr 4	——	1-06-65	S	
36ca	430759	1005624	W. Drybread	312	Dr 4	——	1-06-65	S	
37-32-									
19b	431008	1010911	Arnold Corp.	160	Dr 5	——	1-06-65	S	
23ca	430948	1010421	L. Churchill	310	Dr 4	——	1-06-65	S	
25c	430849	1010320	L. Churchill	200	Dr 4	——	1-13-65	S	
29bc	430909	1010806	L. Churchill	210	Dr 4	——	1-12-65	S	
31	430810	1010852	F. Keller	80	Dr 3	——	1-14-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
33b	430823	1010648	L. Churchill	180	Dr 4	——	1-12-65	S	FQW, 53°F
33d	430757	1010613	F. Keller	180	Dr 4	——	1-12-65	S	
37-33-									
13	431043	1011005	D. O'Neil	230	Dr 4	——	1-06-65	S	
16d	431030	1011320	D. O'Neil	180	Dr 4	——	1-06-65	S	
25abc	430915	1011001	F. Keller	160	Dr 4	——	1-14-65	S	
25db	430852	1010957	F. Keller	160	Dr 4	——	1-14-65	DS	FQW
36c	430753	1011023	A. Churchill	80	Dr 4	——	1-14-65	S	
38-25-									
2bbc1	431801	1001510	W. Chauncey	70	Dr	20	8-03-65	D	
2bbc2	431801	1001510	W. Chauncey	70	Dr	20	8-03-65	S	
2cda	431728	1001443	H. Furrey	50	Dr	30	8-03-65	S	
2cdc	431722	1001452	H. Furrey	50	Dr	30	8-03-65	S	
2cdd	431722	1001443	H. Furrey	50	Dr	30	8-03-65	S	
5adb	431755	1001751	H. Furrey	60	Dr	30	8-03-65	S	
5adc1	431748	1001751	H. Furrey	20	Dr	16	8-03-65	D	
5adc2	431748	1001751	H. Furrey	7	Dr	4	8-03-65	S	
5cab	431742	1001827	H. Furrey	60	Dr	50	8-03-65	S	
7add	431656	1001853	W. Pierce	120	Dr	——	8-06-65	S	
8ccb1	431636	1001844	E. Chauncey	125	Dr	——	8-03-65	D	60°F
8ccb2	431636	1001844	E. Chauncey	90	Dr	——	8-03-65	S	
8dab	431649	1001751	E. Chauncey	60	Dr	——	8-03-65	S	
9dca	431636	1001648	E. Chauncey	90	Dr	——	8-03-65	S	
12bcc1	431656	1001358	L. Nelson	24	Dr	8	8-03-65	S	
12bcc2	431656	1001358	L. Nelson	24	Dr	8	8-03-65	S	
12bcc3	431656	1001358	L. Nelson	14	Dr	8	8-03-65	D	
12bcc4	431656	1001358	L. Nelson	60	Dr	8	8-03-65	D	
15aab	431623	1001528	S. Whiting	100	Dr	60	8-03-65	S	
15dcc	431537	1001545	S. Whiting	110	Dr	60	8-03-65	S	
17bca	431610	1001825	E. Chauncey	300	Dr	——	8-03-65	S	
17bdc	431603	1001827	E. Chauncey	60	Dr	——	8-03-65	S	
19dba	431505	1001911	W. Pierce	80	Dr	25	8-06-65	S	
20dda	431359	1001742	E. Chauncey	200	Dr	——	8-03-65	S	
21dba	431505	1001648	S. Whiting	110	Dr	60	8-03-65	S	
23cdd	431445	1001443	S. Whiting	165	Dr	60	8-03-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
24dbd	431458	1001313	W. Chauncey, Jr.	240	Dr	40	8-03-65	S	
27dcb	431359	1001545	S. Whiting	50	Dr	8	8-03-65	S	
30dca	431359	1001911	W. Pierce	80	Dr	15	8-06-65	S	
31cdb	431307	1001938	C. McCormick	56	Dr	10	8-05-65	S	
33acd	431326	1001648	C. McCormick	24	Dr	8	8-03-65	S	
38-26-									
1bda	431753	1002041	W. Pierce	80	Dr	20	8-06-65	S	
3baa	431806	1002306	J. Beer	100	Dr	——	8-04-65	S	
7cdb	431634	1002640	S. Whiting	90	Dr	25	7-30-65	S	
9bad	431707	1002419	S. Whiting	80	Dr	——	7-29-65	S	
10acc	431654	1002257	J. Beer	100	Dr	——	8-04-65	S	
11aab	431713	1002126	W. Pierce	160	Dr	50	8-06-65	S	
14ccc	431535	1002221	J. Beer	100	Dr	——	8-04-65	S	
15bbb	431621	1002333	J. Beer	100	Dr	——	8-04-65	S	
18dbb	431554	1002627	S. Whiting	55	Dr	8	7-30-65	S	
20adb	431515	1002504	S. Whiting	90	Dr	30	7-30-65	S	
23bdd	431509	1002153	J. Beer	100	Dr	——	8-04-65	S	
24aab	431528	1002014	W. Pierce	85	Dr	35	8-06-65	DS	
25cda	431356	1002041	W. Abbott	76	Dr	27	8-03-65	DS	
27bba	431436	1002324	J. Beer	100	Dr	——	8-04-65	D	
28dbb	431409	1002410	J. Beer	100	Dr	——	8-04-65	DS	
29daa	431409	1002455	S. Whiting	90	Dr	20	7-30-65	S	
30ddd1	431350	1002606	S. Whiting	85	Dr	20	7-30-65	D	
30ddd2	431350	1002606	J. Tate	90	Dr 4	30	8-04-65	S	45°F
32bbd1	431337	1002549	J. Tate	50	Dr 4	30	8-04-65	D	48°F
32bbd2	431337	1002549	S. Whiting	85	Dr	12	7-30-65	D	
32bbd3	431337	1002549	S. Whiting	85	Dr	12	7-30-65	D	
32bbd4	431337	1002549	S. Whiting	85	Dr	12	7-30-65	D	
32bbd5	431337	1002549	S. Whiting	85	Dr	12	7-30-65	S	
32dcc	431257	1002522	C. Klein	80	Dr	30	7-29-65	S	
33bcc1	431324	1002446	S. Whiting	110	Dr	54	7-30-65	D	
33bcc2	431324	1002446	S. Whiting	130	Dr	54	7-30-65	S	
33bdd	431324	1002419	S. Whiting	70	Dr	8	7-30-65	S	
34bbb	431343	1002333	J. Beer	100	Dr	——	8-04-65	S	
34ddb	431304	1002239	L. Klein	100	Dr	20	7-29-65	SN	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
35cdd	431255	1002150	USGS	14	Dr	--	9-27-64	T	Log
35dbb	431317	1002144	W. Abbott	100	Dr	60	8-03-65	DS	
38-27-									
1bba	431806	1002754	J. Jansen	40	Dr	--	7-29-65	DS	FQW, CA, 48°F
2bba	431806	1002905	O. Einspahr	100	Dr	30	7-29-65	D	
2cbc	431733	1002914	A. Sazama	100	Dr	50	7-29-65	S	
3dad1	431733	1002922	A. Sazama	100	Dr	--	7-29-65	D	
3dad2	431733	1002922	A. Sazama	35	Dr	17	7-29-65	S	
3dad3	431733	1002922	A. Sazama	100	Dr	50	7-29-65	S	
4bab1	431806	1003117	L. Wolfe	100	Dr	60	7-29-65	S	
4bab2	431806	1003117	L. Wolfe	148	Dr	48	7-29-65	D	
4ddd	431720	1003033	V. Holmes	100	Dr	--	7-29-65	S	
5bab1	431806	1003227	L. Russell	100	Dr	30	7-28-65	DS	
5bab2	431806	1003227	L. Russell	100	Dr	24	7-28-65	S	
5bab3	431806	1003227	L. Russell	100	Dr	--	7-28-65	SI	
5cba	431739	1003236	E. Clementz	105	Dr	12	7-28-65	S	
7daaa	431648	1003305	USGS	17	Dr	7.5	10-27-64	T	Log
7daab	431648	1003311	USGS	12	Dr	8	10-27-64	T	Log
8bbc	431707	1003245	E. Clementz	85	Dr	50	7-28-65	DS	
9bcb1	431700	1003135	V. Holmes	125	Dr	--	7-29-65	DS	FQW, 56°F
9bcb2	431700	1003135	V. Holmes	100	Dr	--	7-29-65	S	
9dda	431634	1003033	J. Assman	90	Dr	--	8-10-65	S	
10aba	431713	1002940	A. Sazana	80	Dr	35	7-29-65	S	
10cdc1	431627	1003006	H. Sell	110	Dr	40	7-29-65	S	
10cdc2	431627	1003006	H. Sell	98	Dr	40	7-29-65	D	
10cdc3	431627	1003006	H. Sell	110	Dr	--	7-29-65	S	
11cad	431640	1002847	J. Assman	80	Dr	--	8-10-65	S	
11dba	431647	1002830	J. Assman	90	Dr	--	8-10-65	S	
12aca	431700	1002719	J. Mann	90	Dr	26	7-29-65	D	
12dba	431647	1002719	J. Mann	50	Dr	10	7-29-65		
15bcc	431601	1003024	H. Sell	44	Dr	6	7-29-65	S	
16cba	431554	1003126	M. Hammond	60	Dr	--	7-29-65	S	
16ccb	431541	1003135	M. Hammond	90	Dr	30	7-29-65	DS	
17aad1	431614	1003143	E. Peterboom	90	Dr	--	7-29-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17aad2	431614	1003143	E. Peterboom	90	Dr	——	7-29-65	D	
17aad3	431614	1003143	E. Peterboom	90	Dr	——	7-29-65	N	
19aba1	431528	1003317	E. Jonason	21	Dr	——	7-28-65	S	FQW, 60°F
19aba2	431528	1003317	E. Jonason	80	Dr	——	7-28-65	D	
21bbc1	431522	1003135	C. Gehlsen	100	Dr	——	7-29-65	D	
21bbc2	431522	1003135	C. Gehlsen	100	Dr	——	7-29-65	D	
23acb1	431515	1002838	W. Van Epps	100	Dr	——	7-29-65	S	
23acb2	431515	1002838	W. Van Epps	90	Dr	——	7-29-65	D	
23	431503	1002855	SDHD	55	Dr	——	————	T	Log
24cbbb	431505	1002814	USGS	13	Dr	6.0	10-27-64	T	Log
24cbbc	431455	1002814	USGS	13	Dr	6.0	10-27-64	T	Log
24cc	431445	1002814	SDWRC	35	Dr 1¼	7.9	————	O	Log, WL
25bba	431436	1002745	O. Einsphar	100	Dr	30	7-29-65	S	
26bbb	431436	1002914	L. Wolfe	52	Dr	15	7-29-65	S	
26dbc	431403	1002838	W. Van Epps	100	Dr	——	7-29-65	S	
26dbd	431403	1002830	W. Van Epps	70	Dr	——	7-29-65	S	
27dbd	431403	1002940	J. Assman	130	Dr	——	8-10-65	S	
38-28-									
5aa	431804	1003912	BIA (School No. 2)	136	Dr	——	11-18-65	P	CA, 54°F
5ab	431804	1003936	Mission (Site 3)	135	Dr	——	11-18-65	P	Log, CA
6caa	431738	1004057	Peters Bros. Co.	130	Dr 5	6	7-14-66	S	
7baa	431712	1004057	R. Clausen	17.1	Dr 2	7.1	7-17-65	N	
32bb	431346	1004018	SDWRC	40	Dr 1¼	9.9	————	O	Log, WL
38-29-									
8ca	431642	1004704	W. Barry	130	Dr 5	45	7-13-66	S	
8ccc	431626	1004726	W. Barry	130	Dr 4	30	7-13-66	S	
17cc	431536	1004722	W. Barry	100	Dr 5	20	7-13-66	DS	CA
38-30-									
15bdc	431600	1005149	BIA (Rosebud Agency)	157.5	Dr 4	1.0	7-17-65	N	
17caaa	431558	1005405	USGS	32	Dr	10	11- 5-64	T	Log
17caab	431558	1005411	USGS	22	Dr	9.5	11- 5-64	T	Log
17caba	431558	1005430	USGS	27	Dr	8	11- 6-64	T	Log
17cca	431536	1005415	USGS	25	Dr	10	11- 5-64	T	Log
17ccb	431536	1005435	USGS	32	Dr	9.6	11- 5-64	T	Log
17ccc	431530	1005435	USGS	22	Dr	6	11- 6-64	T	Log

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17dcd	431530	1005343	Tribal	35	Dr	--	7- 7-66	P	CA, 53°F
18dca	431542	1005500	USGS	37	Dr	8.4	11- 3-64	T	Log
18dcd	431542	1005508	USGS	37	Dr	9	11- 5-64	T	Log
18dcc	431530	1005508	SDWRC	39	Dr 1¼	9.1	----	O	Log, WL
27ddc	431348	1005113	BIA (Rosebud Agency)	425	Dr 6	--	8-12-57	P	FQW, 65°F
27ddd	431348	1005104	BIA (Rosebud Agency)	58	Du 10	22.1	8-12-57	P	CA, FQW, 52°F
34aaa	431345	1005104	USGS	32	Dr	11.0	10-30-64	T	Log
34aa	431343	1005110	BIA	225	Dr	--	11-17-65	T	Log, CA, 57°F
34a			BIA	161	Dr	--	1959	T	Log
34aca1	431332	1005105	USGS	22	Dr	3.4	11- 2-64	T	Log
34aca2	431332	1005105	USGS	17	Dr	4.0	11- 2-64	T	Log
34aca3	431332	1005105	USGS	17	Dr	3.8	11- 2-64	T	Log
34aca4	431332	1005105	USGS	17	Dr	3.0	11- 3-64	T	Log
34aca5	431332	1005105	USGS	20	Dr	15.6	11- 3-64	T	Log
34aca6	431332	1005105	USGS	12	Dr	4.6	11- 3-64	T	Log
34acdc	431322	1005112	USGS	50	Dr	8	10-30-64	T	Log
34acdd	431322	1005120	USGS	25	Dr	11.7	11- 3-64	T	Log
34ca1	431320	1005137	BIA	520	Dr	--	3- 9-66	T	Log
34ca2	431320	1005137	BIA	305	Dr	--	3- 9-66	T	Log
34dbaa	431318	1005112	USGS	22	Dr	7	11- 3-64	T	Log
34dbab	431318	1005122	USGS	20	Dr	3.0	11- 3-64	T	Log
34dbac	431312	1005122	USGS	20	Dr	2.0	11- 3-64	T	Log
38-31-									
1cbc	431733	1005647	A. Scott	350	Dr 4	--	7-15-65	D	57°F
1dbd	431733	1005602	A. Scott	200	Dr 4	--	7-15-65	S	
8ccc	431627	1010131	L. Fernen	92.5	Dr 4	51.1	7-15-65	N	
10bbd	431707	1005900	O. LaPointe	150	Dr 4	--	7-15-65	S	
12cac	431640	1005629	A. Scott	180	Dr 4	--	7-15-65	S	
13daaa	431600	1005542	USGS	30	Dr	10.4	11- 4-64	T	Log
13daab	431600	1005547	USGS	17	Dr	Dry	11- 4-64	T	Log
13daac	431558	1005547	USGS	16	Dr	9.0	11- 4-64	T	Log
13daba	431600	1005550	USGS	15	Dr	Dry	11- 4-64	T	Log
13dabb	431600	1005600	USGS	15	Dr	--	11- 4-64	T	Log
13dabc	431558	1005600	USGS	32	Dr	10.5	11- 4-64	T	Log
13dada	431555	1005542	USGS	15	Dr	Dry	11- 4-64	T	Log

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
13dadb	431555	1005547	USGS	15	Dr	Dry	11- 4-64	T	Log
15bdb	431608	1005851	O. LaPointe	100	Dr 4	——	7-15-65	D	Can pump dry
16aca	431608	1005935	B. Black Bear	140	Dr 4	——	7-15-65	DS	
16acc	431601	1005944	L. LaPointe	60	Dr 4	——	7-15-65	D	
16cca	431541	1010011	E. LaPointe	20	Du 48	6	7-15-65	D	
17caa	431554	1010104	A. Scott	180	Dr	2	7-15-65	S	
20caa	431502	1010104	E. LaPointe	140	Dr 14	6	7-15-65	S	
23aaab	431525	1005900	USGS	25	Dr	12.5	11- 4-64	T	Log
23aaba	431525	1005708	USGS	40	Dr	13.4	11- 4-64	T	Log
23abad	431520	1005710	USGS	25	Dr	Dry	11- 4-64	T	Log
34baa	431334	1005840	USGS	27	Dr	8	11- 6-64	T	Log
38-32-									
11cac1	431643	1010425	C. War Bonnet	123	Dr	——	11-17-65	D	CA, 52°F
11cac2	431643	1010425	C. War Bonnet	225	Dr 4	65	7-18-65	DN	
17ccd	431538	1010801	Tribal	154	Dr 2	150	7-18-65	N	
38-33-									
3dd	431722	1011200	F. Carver	169	Dr 4	——	1-06-65	S	
12a	431703	1010948	L. Churchill	252	Dr 4	——	1-06-65	S	
39-25-									
3bdc	432302	1001603	O. Hanson	30	Dr	8	8-04-65	S	
4dca	432242	1001648	O. Hanson	40	Dr	14	8-04-65	DS	
5ccb	434242	1001844	J. New	40	Dr	20	8-10-65	DS	
6adc	432302	1001902	J. New	45	Dr	——	8-04-65	DS	
6add	432302	1001853	J. New	35	Dr	——	8-04-65	D	
6cab	432556	1001938	J. New	40	Dr	20	8-10-65	S	
6dac	432249	1001902	J. New	35	Dr	——	8-04-65	S	
6dcc	432236	1001920	M. Magpipe	40	Dr	20	8-10-65	DS	
7aab1	432229	1001902	J. New	40	Dr	20	8-10-65	S	
7abb2	432229	1001920	H. Starboy	38	Dr	20	8-10-65	S	
8add	432210	1001742	E. Nicolaisen	50	Dr	16	8-04-65	S	
8cdb	432150	1001827	J. New	40	Dr	——	8-04-65	S	
8cdd	432144	1001818	M. Haase	100	Dr	——	8-11-65	DS	
9cdd	432144	1001706	E. Nicolaisen	50	Dr	16	8-04-65	DS	
16baa1	432137	1001706	E. Nicolaisen	50	Dr	16	8-04-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
16baa2	432137	1001706	E. Nicolaisen	50	Dr	16	8-04-65	D	
16cdd	432051	1001706	W. Colombe	35	Dr	10	8-04-65	D	
16dcc1	432051	1001657	W. Colombe	35	Dr	10	8-04-65	S	
16dcc2	432051	1001657	W. Colombe	35	Dr	10	8-04-65	D	
16dcc3	432051	1001657	W. Colombe	18	Dr	——	8-04-65	S	
19aac1	432038	1001902	H. Snethen	30	Dr	20	8-04-65	D	
19aac2	432038	1001902	H. Snethen	30	Dr	20	8-04-65	S	53°F
22bbd	432028	1001612	W. Colombe	35	Dr	——	8-04-65	SN	
23bdc	432025	1001452	W. Colombe	40	Dr	10	8-04-65	S	
28aca	431939	1001648	J. Ellinghusen	30	Dr	10	8-04-65	D	
28acb1	431939	1001657	J. Ellinghusen	50	Dr	20	8-04-65	S	
28acb2	431939	1001657	J. Ellinghusen	55	Dr	20	8-04-65	S	
33bbb	431900	1001733	E. Kriz	30	Dr	20	8-03-65	DS	65°F
34bad	431854	1001554	M. Moseman	16	Dr	——	8-04-65	DS	
39-26									
4cad	432248	1002419	C. Collins	80	Dr		8-10-65	D	
5caa	432254	1002531	C. Sully	80	Dr	30	8-10-65	S	
6cdb	432241	1002640	C. Sully	75	Dr	40	8-10-65	S	
7ddc	432142	1002613	C. Sully	20	Dr	5	8-10-65	S	
8dbd	432155	1002513	C. Sully	75	Dr	25	8-10-65	S	
8ddb	432149	1002504	C. Sully	30	Dr	15	8-10-65	D	
9cdd1	432142	1002419	C. Sully	30	Dr	15	8-10-65	S	
9cdd2	432142	1002419	C. Sully	20	Dr	15	8-10-65	D	
12cdc	432142	1002050	L. Gran	30	Dr	20	8-10-65	D	CA, 53°F
12cdd	432142	1002041	C. Philips	30	Dr	20	8-10-65	DS	
14aba	432136	1002135	C. Philips	30	Dr	20	8-10-65	S	
26dcc1	431905	1002144	J. Haukaas	40	Dr	10	8-04-65	S	
26dcc2	431905	1002144	J. Haukaas	90	Dr	20	8-04-65	D	
27abd1	431944	1002248	H. Haukaas	45	Dr	14	8-04-65	S	
27abd2	431944	1002248	H. Haukaas	56	Dr	30	8-04-65	D	
31bba	431858	1002647	J. Jansen	100	Dr	——	7-29-65	S	
31dcc	431812	1002627	C. Paulson	100	Dr	——	8-03-65	S	
32abb1	431858	1002522	C. Paulson	100	Dr	——	8-03-65	S	
32abb2	431858	1002522	C. Paulson	100	Dr	——	8-03-65	D	
33baa	431858	1002419	C. Paulson	100	Dr	——	8-03-65	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
39-27-									
1aac	432314	1002710	C. Sully	100	Dr	30	8-10-65	S	
1ccb	432241	1002803	C. Sully	80	Dr	40	8-10-65	S	
3bbd	432314	1003015	C. Sully	65	Dr	30	8-10-65	S	
4cad	432248	1003108	C. Collins	40	Dr	——	8-10-65	S	
5abc	432314	1003210	C. Collins	70	Dr	——	8-10-65	S	
6aaa	432321	1003255	C. Collins	50	Dr	——	8-10-65	S	
6bdd1	432301	1003340	C. Collins	60	Dr	——	8-10-65	D	
6bdd2	432301	1003340	C. Collins	40	Dr	——	8-10-65	S	
10cacd	432146	1003010	BIA Test	2,500	Dr 8	500	8-17-65	NT	Log, AW
10dbd	432155	1002940	C. Sully	75	Dr	30	8-10-65	S	
12bdc	432209	1002745	C. Sully	120	Dr	36	8-10-65	S	
14dda	432056	1002812	M. Barrett	42	Dr	8	8-10-65	D	
15ccc	432050	1003024	J. Assman	100	Dr	——	8-10-65	S	
20acd	432024	1003201	J. Assman	100	Dr	——	8-10-65	S	
20ada	432030	1003143	J. Assman	120	Dr	——	8-10-65	S	
20c	432007	1003232	G. Colombe	150	Dr 5	60	7-14-66	S	
21a	432033	1003046	G. Colombe	220	Dr 5	170	7-14-66	S	
21bda	432030	1003108	J. Assman	120	Dr	——	8-10-65	S	
22cda	432004	1002958	J. Assman	120	Dr	——	8-10-65	S	
22d	432007	1002936	G. Colombe	160	Dr 5	40	7-14-66	S	
23cad	432010	1002847	M. Barrett	130	Dr	40	8-10-65	S	
27ccd	431905	1003015	J. Assman	80	Dr	25	8-10-65	S	
27d	431915	1002936	G. Colombe	130	Dr 5	40	7-14-66	S	
28cc	431908	1003130	G. Colombe	130	Dr 5	40	7-14-66	S	
29aad	431944	1003143	G. Colombe	130	Dr 5	30	7-14-65	S	
29ccc	431905	1003245	A. Petr	120	Dr	——	8-10-65	S	
29cda	431911	1003219	J. Assman	100	Dr	——	8-10-65	S	
31cc1	431816	1003408	G. Colombe	160	Dr 5	60	7-14-66	D	
31cc2	431816	1003408	G. Colombe	——	Du	30	7-14-66	S	
31dca	431819	1003317	A. Petr	120	Dr	——	8-10-65	S	
32bdb	431845	1003227	L. Wolfe	50	Dr	8	7-29-65	S	
32cdc1	431812	1003227	F. Campbell	110	Dr	30	8-11-65	D	
32cdc2	431812	1003227	F. Campbell	90	Dr	30	8-11-65	S	
33acb	431845	1003059	A. Petr	120	Dr	——	8-10-65	S	
33ccc	431812	1003135	A. Petr	120	Dr	——	8-10-65	D	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
33ccd1	431812	1003126	J. Assman	40	Dr	25	8-10-65	S	
33ccd2	431812	1003126	J. Assman	33	Dr	25	8-10-65	D	
33ccd3	431812	1003126	J. Assman	80	Dr	25	8-10-65	DS	52°F
33ccd4	431812	1003126	J. Assman	100	Dr	25	8-10-65	S	
34bcd	431839	1003015	J. Assman	100	Dr	——	8-10-65	S	
35abd	431852	1002830	J. Jansen	140	Dr	70	7-29-65	DS	
35dda	431819	1002812	J. Jansen	130	Dr	60	7-29-65	S	
36bda	431845	1002737	J. Jansen	40	Dr	——	7-29-65	S	
39-28-									
1cdc	431234	1003508	T. Fox	60	Dr	——	7-15-66	S	
2cca	432240	1003629	T. Fox	40	Dr 18	20	7-15-66	S	
3cbc	432247	1003749	T. Fox	60	Dr	30	7-15-66	D	
3ccb	432240	1003749	H. Swanson	140	Dr 5	20	7-15-66	S	
3ccc	432234	1003749	H. Swanson	60	Dr 24	30	7-15-66	D	
3dbc	432247	1003713	T. Fox	30	Dr 18	15	7-15-66	DS	
4d	432244	1003812	T. Fox		Dr 5	——	7-15-66	S	
5ddd	432234	1003910	H. Swanson	100	Dr 4	30	7-15-66	S	
9a	432217	1003812	H. Swanson	——	Dr 18	——	7-15-66	S	
9d1	432151	1003812	L. Jensen	120	Dr 4	30	7-15-66	DS	
9d2	432151	1003812	L. Jensen	68	Dr 12	12	7-15-66	S	
10db	432158	1003709	L. Jensen	72	Dr	——	7-15-66	S	
11caa	432201	1003611	H. Swanson	160	Dr 4	25	7-15-66	S	
15acc	432115	1003713	M. Colombe	160	Dr 5	60	7-14-66	S	
20dbb	432016	1003937	A. Peters	150	Dr 4	20	7-14-66	S	
21	432019	1003830	A. Peters	150	Du 4	20	7-14-66	S	
24cc	431959	1003522	M. Colombe	150	Dr 5	60	7-14-66	S	
24d	432006	1003437	M. Colombe	150	Dr 5	60	7-14-66	S	
25ccd	431903	1003517	M. Colombe	150	Dr 5	60	7-14-66	S	
25cd	431907	1003504	M. Colombe	130	Dr 5	60	7-14-66	D	
26ab	431946	1003557	M. Colombe	150	Dr 5	60	7-14-66	S	
28db	431920	1003821	M. Colombe	140	Dr 5	30	7-14-66	S	
29ab	431946	1003932	A. Peters	150	Dr 4	10	7-14-66	S	
29ccc	431903	1004012	Peters Bros.	150	Dr 4	15	7-14-66	DS	
30b	431940	1004110	A. Peters	150	Dr 4	20	7-14-66	D	
30bb	431946	1004119	A. Peters	150	Dr 4	20	7-14-66	S	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
30cd	431907	1004101	Peters Bros.	150	Dr 4	15	7-14-66	DS	
30ddd	431903	1004021	A. Peters	150	Dr 4	20	7-14-66	D	
32dac	431820	1003930	G. Moser	120	Dr 6	--	8-02-61	D	CA
32dbd	431820	1003945	Mission (Site 2)	390	Dr	--	-----	T	Log
32dca	431810	1003945	W. Meyer	150	Dr 4	--	8-02-61	D	CA
32dcb	431810	1003950	M. Knittel	115	Dr	--	-----	D	Log
32ddb	431810	1004020	C. Hoffine	135	Dr 4	--	8-02-61	P	CA
32ddd	431805	1004020	Mission (Site 1)	110	Dr	--	-----	T	Log, CA (Three test holes at site)
39-29-									
19abb	432042	1004800	Tribal	280	Dr 2	100	7-18-65	S	
20cab	432016	1004798	Tribal	180	Dr	80	7-18-65	S	
23cdb	432003	1004330	E. Bachelor	100	Dr 4		7-17-65	S	
26aaa1	431949	1004245	E. Bachelor	60	Dr 4		7-17-65	D	
26aaa2	431949	1004245	E. Bachelor	125	Dr 4		7-17-65	S	
33da	431827	1004515	V. Boes	140	Dr 4	30	7-14-66	S	
35ca	431827	1004326	V. Boes	140	Dr 4	40	7-14-66	S	
35dad	431824	1004245	L. Bruce	100	Dr 6	35	7-17-65	DS	56°F
36cad	431824	1004209	V. Boes	140	Dr 4	30	7-14-66	S	
36daa1	431831	1004133	V. Boes	190	Dr 4	60	7-14-66	D	
36daa2	431831	1004133	V. Boes	210	Dr 4	60	7-14-66	S	
36dd	431814	1004137	V. Boes	220	Dr 4	50	7-14-66	D	
39-30-									
11ddd	432140	1004945	L. Krogman	2,490	Dr 3	404.0	8-14-66	S	AW
14bdd	432115	1005029	E. Chase	265	Dr 2	--	7-18-65	D	
28bbca	431943	1005310	USGS	13	Dr	Dry	10-29-64	T	Log
28bbcb	431943	1005317	USGS	22	Dr	16.0	10-29-64	T	Log
28bcc	431932	1005317	USGS	7	Dr	Dry	10-28-64	T	Log
28bcd	431932	1005308	USGS	33	Dr	23.0	10-28-64	T	Log
28cbb	431924	1005319	Tribal	31.2	Dr 4	2.5	7-17-65	N	
28cd	431907	1005256	Tribal	34	Dr 3	11.87	10-29-46	N	
29aad	431943	1005350	USGS	17	Dr	Dry	10-29-64	T	Log
39-31-									
9bba	432215	1010010	St. Marks Church	Spring	--	Flow	7-07-66	D	CA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
30acd	431931	1010152	H. Bradford	135	Dr	—	7-18-65	D	
39-32-									
3dac	432249	1010459	J. Heinert	125	Dr	—	7-18-65	DS	
6ac	432306	1010843	F. Carver	150	Dr 4	—	1-06-65	S	CA, 51°F
11cac	432157	1010425	D. Heinert	125	Dr	6	7-18-65	S	
13bbb	432137	1010333	G. Heinert	125	Dr 4	25	7-18-65	DS	FQW, 54°F
14aaa	432137	1010342	D. Heinert	125	Dr	30	7-18-65	S	
15bab	432137	1010534	W. Heinert	200	Dr 2	35	7-18-65	D	
22dad	432012	1010451	D. Huddleston	125	Dr	—	7-18-65	S	

Table 2. -- Logs of wells and test holes

All information available on the subsurface geology of the area prior to 1968 is summarized in this table. Included are logs of test holes drilled by the U. S. Geological Survey (USGS), South Dakota Department of Highways (SDHD), South Dakota Water Resources Commission (SDWRC), U. S. Bureau of Indian Affairs (BIA), U. S. Bureau of Reclamation (USBR), miscellaneous drillers logs, detailed sample descriptions prepared by personnel of the South Dakota Geological Survey (SDGS), and formation tops picked from electric logs.

Because of the diversity of the methods used in collecting and describing the samples, no uniform method of sample description is used in the table.

Altitude of land surface at the well or test hole site, in feet above mean sea level, was determined from topographic maps (T) or by barometer (B).

JACKSON COUNTY

Test hole 3-24-10acad. Land-surface altitude 2,040 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, dark-brown, with thin gravel beds	30	30
Clay, gray	5	35
Clay, gray; gravel, medium	13	48
Shale, light-gray	1	49

Test hole 3-24-10adc. Land-surface altitude 2,035 feet (T). Depth to water about 27 feet (estimated August 11, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown	30	30
Sand, very fine to fine	8	38
No sample	10	48
Shale, dark-gray	1	49

Test hole 3-24-10daad. Land-surface altitude 2,035 feet (T). Depth to water 21.6 feet (measured August 11, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown	6	6
Silt, light-tan, powdery	10	16
Sand, fine	3	19
Sand, medium to coarse; medium gravel	4	23
Sand, coarse; gravel, coarse	2	25
Gravel, coarse; sand, coarse	4	29
Sand, very coarse, silty and clayey	5	34
Shale, dark-gray (bit sample)		

Test hole 3-24-11cbcb. Land-surface altitude 2,015 feet (T). Depth to water about 14 feet (estimated August 11, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	11	11
Sand, medium to coarse; gravel, fine	4	15
Sand, coarse; gravel, medium	4	19

Test hole 3-24-11cbcb -- continued.

Gravel, medium to very coarse; sandy	14	33
Shale, dark-gray (bit sample)		

JONES COUNTY

Test hole 2-26-20bbdb. Land-surface altitude 1,960 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown	25	25
Clay, pink-brown	5	30
Clay, brown to light-gray	9	39
Clay, silty, with fine sand, gray	9	48
Shale, dark-gray (bit sample)		

Test hole 2-26-20bcca. Land-surface altitude 1,945 feet (T). Depth to water about 14 feet (estimated August 18, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown	5	5
Silt, white to tan	5	10
Sand, coarse; gravel, fine to coarse	18	28
Shale, dark-gray (bit sample)		

Test hole 2-26-20ccda. Land-surface altitude 1,940 feet (T). Depth to water about 11 feet (estimated August 18, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	10	10
Sand, coarse; gravel, fine	5	15
Gravel, medium to coarse	10	25
Gravel, fine to medium	4	29
Shale, dark-gray	3	32

Test hole 3-29-34dcdb. Depth to water 10.6 feet (measured May 19, 1964). USBR.

Material	Thickness (feet)	Depth (feet)
Loam	1	1
Fine sandy loam	3	4
Sandy loam	3	7
Very fine sandy loam	1	8
Sandy loam	1	9
Coarse loamy sand	4	13
Coarse gravel and sand	2	15
Sand, clay and gravel	2	17
Shale	6	23

Test hole 3-30-19cddd. Depth to water 9.6 feet (measured May 19, 1964). USBR.

Material	Thickness (feet)	Depth (feet)

Test hole 3-30-19cddd -- continued.

Fine sandy loam	1	1
Very fine sandy loam	1	2
Fine sandy loam	1	3
Loam	1	4
Fine sandy loam	4	8
Sandy loam	2	10
Coarse sand	12	22
Shale	8	30

Test hole 4-29-8bbd. Land-surface altitude 1,788 feet (T). Depth to water 9.9 feet (measured August 9, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	7	7
Sand, fine	4	11
Sand, medium	5	16
Gravel, medium	5	21
Gravel, coarse	3	24
Shale, dark-gray	1	25

Test hole 4-29-8bbc. Land-surface altitude 1,783 feet (T). Depth to water about 11 feet (estimated August 9, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, white	9	9
Sand, fine	2	11
Sand, coarse	12	23
Shale, dark-gray	1	24

Test hole 4-29-8bdc. Land-surface altitude 1,785 feet (T). Depth to water 10.5 feet (measured August 9, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, white	10	10
Sand, fine	5	15
Gravel, medium to coarse	4	19
Shale, dark-gray	1	20

LYMAN COUNTY

Test hole 103-79-21bbb. Land-surface altitude 1,650 feet (T). Depth to water about 14 feet (estimated August 17, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine, silty	10	10
Sand, medium, silty	5	15
Clay, gray to brown, sandy	4	19
Shale, dark-gray	6	25

MELLETTE COUNTY

Well 40-25-5ca. Depth to water 29.5 feet (measured December 16, 1929). Drilled for C. & N. W. Ry. Co. section house at Mosher by E. C. Dreyer Company in 1929.

Material	Thickness (feet)	Depth (feet)
Clay, yellow	56	56

Well 40-25-5da. Depth to water 29.5 feet (measured December 1, 1929). Drilled for C. & N. W. Ry. Co. stockyard at Mosher by E. C. Dreyer Company in 1929.

Material	Thickness (feet)	Depth (feet)
Clay, yellow	60	60

Well 40-25-5db. Depth to water 29.5 feet (measured December 20, 1929). Drilled for C. & N. W. Ry. Co. depot at Mosher by E. C. Dreyer Company in 1929.

Material	Thickness (feet)	Depth (feet)
Yellow clay	55	55

Well 40-25-9a. Depth to water 18 feet. Drilled near Little Crow by E. C. Dreyer Company.

Material	Thickness (feet)	Depth (feet)
Black Gumbo	9	9
Common fine yellow sand	8	17
Coarse sand and gravel	4	21
Black and yellow gumbo	6	27
Very hard blue shale	13	40

Well 40-25-12bd. Depth to water 88.0 feet (measured February 25, 1930). Drilled for C. & N. W. Ry. Co. at Mosher by Norbeck Company. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Yellow clay	25	25
Blue shale	458	483
Blue shale with occasional hard streaks	160	643
Blue shale	623	1,266
Very hard blue shale	97	1,363
Hard shale	293	1,656
Open hole; water	25	1,681

Well 40-25-20cdb. Land-surface altitude 2,088 (B). Drilled for B. Mills by Huron Drilling Company. Formation tops picked from electric log. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	855	855
Niobrara Formation	175	1,030
Carlile Shale	303	1,333
Greenhorn Limestone	97	1,430
Graneros Shale	148	1,578
Dakota Formation	114	1,692

Well 40-33-3a. Norris Community well drilled for BIA.

Material	Thickness (feet)	Depth (feet)
Black sandy soil	110	110
Red rock	10	120

Well 41-27-25cb. Drilled for C. & N. W. Ry. Co. at Wood by Norbeck Company. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Clay	130	130
Blue shale	387	517
Soft shale	100	617
Blue shale with frequent streaks of hard shale	1,127	1,744
Sand rock	122	1,866

Well 41-27-25c. Depth to water 22 feet (estimated January 5, 1930). Drilled for C. & N. W. Ry. Co. stockyard at Wood by J. Kinner Company in 1930.

Material	Thickness (feet)	Depth (feet)
Yellow clay	30	30
Blue shale	10	40

Well 41-27-25dca. Depth to water 28 feet (estimated January 15, 1930). Drilled for C. & N. W. Ry. Co. depot at Wood by J. Kinner Company in 1930.

Material	Thickness (feet)	Depth (feet)
Yellow clay	31	31
Blue shale	15	46

Well 41-27-25ddd. Depth to water 28 feet (estimated January 10, 1930). Drilled for C. & N. W. Ry. Co. section house at Wood by J. Kinner Company in 1930.

Material	Thickness (feet)	Depth (feet)
Yellow clay	31	31
Blue shale	13	44

Test hole 41-29-3ccc. Depth to water 15 feet (estimated August 12, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Till	3	3
Sand, fine, tan	6	9
Sand, medium, brown, clean	11	20
Sand, medium, gray, silty	4	24
Shale, dark-gray (bit sample)		

Well 42-25-32cc. Land-surface altitude 2,110 feet (B). Drilled for I. Nelson (new owner, G. Anderson) by Independent Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Well 42-25-32cc -- continued.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	853	853
Niobrara Formation	162	1,015
Carlile Shale	335	1,350
Greenhorn Limestone	105	1,455
Graneros Shale	130	1,585
Dakota Formation	365	1,950
Skull Creek Shale	110	2,060
Inyan Kara Formation	117	2,177
Pre-Inyan Kara - post Minnelusa (undifferentiated)	39	2,216
Minnelusa Formation	324	2,540
Madison Limestone	150	2,690

Well 42-25-34cc. Land-surface altitude 1,821 feet (B). Drilled for I. Nelson (new owner, G. Anderson) by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	573	573
Niobrara Formation	169	742
Carlile Shale	353	1,095
Greenhorn Limestone	118	1,213
Graneros Shale	149	1,362
Dakota Formation	205	1,567

Well 42-26-21cdc. Land-surface altitude 2,202 feet (B). Drilled for G. Bachman by Independent Drilling Company. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Yellow clay	30	30
Pierre Shale	670	700
Niobrara Formation	300	1,000
Carlile Shale	400	1,400
Greenhorn Formation	50	1,450
Graneros Shale	373	1,823
Dakota Formation	127	1,950
Sandy clay	150	2,100
Inyan Kara Formation	275	2,375
Red beds	15	2,390
Shale and lime	20	2,410
Sand	18	2,428
Red beds	132	2,560
Limestone	120	2,680
Shale	20	2,700
Sand	15	2,715
Shale	5	2,720
Sand	10	2,730

Well 42-26-34ab. Land-surface altitude 2,174 feet (B). Drilled for M. Kosken by Independent Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Well 42-26-34ab – continued.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	965	965
Niobrara Formation	147	1,112
Carlile Shale	367	1,479
Greenhorn Limestone	111	1,590
Graneros Shale	180	1,770
Dakota Formation	310	2,080
Skull Creek Shale	112	2,192
Inyan Kara Formation	213	2,405
Pre-Inyan Kara - post Minnelusa (undifferentiated)	43	2,448
Minnelusa Formation	377	2,825
Madison Limestone	95	2,920
Precambrian rocks	14	2,934

Test hole 42-28-1bbbb. Land-surface altitude 1,940 feet (T). Depth to water 15 feet (estimated August 16, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, tan	7	7
Sand, medium; gravel, fine	2	9
Clay, tan	2	11
Shale, dark-gray	14	25

Test hole 42-28-8abb. Land-surface altitude 1,870 feet (T). Depth to water 5 feet (estimated August 10, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	3	3
Sand, medium	14	17
Shale, dark-gray	8	25

Test hole 42-28-18cdbb. Dry hole (August 10, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	3	3
Sand, medium; gravel, coarse	3	6
Shale, dark-gray (bit sample)		

Test hole 42-28-18cdbd. Dry hole (August 10, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, medium	5	5
Sand, coarse; gravel, medium	2	7
Shale, dark-gray (bit sample)		

Test hole 42-28-18cddb. USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine	3	3

Test hole 42-28-18cddb -- continued.

Sand, fine; gravel, medium	11	14
Shale, dark-gray, very soft, sandy	3	17

Test hole 42-28-18cdd. USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil, brown	2	2
Clay, light-brown	1	3
Dirt, brown	3	6
Clay, light-brown	9	15
Sand, very fine	5	20
Sand, fine; gravel, medium, silty	5	25
Gravel, medium	5	30
Clay, gravel, medium	5	35
Shale, dark-gray, gravel, medium	17	52
Shale, dark-gray (bit sample)		

Well 42-28-22b. Land-surface altitude 2,098 feet (B). Drilled for W. Krogman by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	926	926
Niobrara Formation	127	1,053
Carlile Shale	390	1,443
Greenhorn Limestone	107	1,550
Graneros Shale	180	1,730
Dakota Formation	300	2,030
Skull Creek Shale	108	2,138
Inyan Kara Formation	174	2,312
Pre-Inyan Kara - post Minnelusa (undifferentiated)	18	2,330
Minnelusa Formation	30	2,360

Well 42-29-7c. Land-surface altitude 2,087 feet (T). Drilled for C. W. Jensen by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	913	913
Niobrara Formation	162	1,075
Carlile Shale	357	1,432
Greenhorn Limestone	118	1,550
Graneros Shale	186	1,736
Dakota Formation	271	2,007
Skull Creek Shale	136	2,143
Inyan Kara Formation	152	2,295
Pre-Inyan Kara - post Minnelusa (undifferentiated)	63	2,358
Minnelusa Formation	87	2,445

Test hole 42-29-23dbb. Dry hole (August 12, 1966). USGS.

Material	Thickness (feet)	Depth (feet)

Test Hole 42-29-23dbb -- continued.

Silt	2	2
Sand, medium	2	4
Sand, medium; gravel, medium	3	7
Shale, dark-gray	1	8

Test hole 42-29-23cbcc. Depth to water 20 feet (estimated August 12, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, fine	12	12
Sand, coarse	3	15
Sand, coarse; gravel, small, moist	5	20
Shale, dark-gray, sandy, wet	2	22
Shale, dark-gray	4	26

Test hole 42-29-23cbcd. Depth to water 12 feet (estimated August 12, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	½	½
Sand, medium, light-brown to tan	9½	10
Sand, coarse, dark-brown	5	15
Shale, dark-gray	1	16

Test hole 42-29-32ccb. Depth to water 18.6 feet (measured August 12, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, till	15	15
Clay, dark-brown	9	24
Sand, very fine	2	26

Well 42-30-12cb. Land-surface altitude 2,005 feet (T). Drilled for W. Jensen by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	879	879
Niobrara Formation	141	1,020
Carlile Shale	355	1,375
Greenhorn Limestone	115	1,490
Graneros Shale	182	1,672
Dakota Formation	258	1,930

Well 42-30-15b. Land-surface altitude 2,000 feet (T). Drilled for W. Jensen by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	1,015	1,015
Niobrara Formation	148	1,163
Carlile Shale	332	1,495
Greenhorn Limestone	117	1,612

Well 42-30-15b -- continued.

Graneros Shale	184	1,796
Dakota Formation	324	2,120
Skull Creek Shale	96	2,216
Inyan Kara Formation	160	2,376
Pre-Inyan Kara - post Minnelusa (undifferentiated)	19	2,395
Minnelusa Formation	25	2,420

Well 42-31-34aba. Land-surface altitude 2,350 feet (B). Drilled for C. Chamberlain by the Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	1,294	1,294
Niobrara Formation	126	1,420
Carlile Shale	340	1,760
Greenhorn Limestone	120	1,880
Graneros Shale	200	2,080
Dakota Formation	220	2,300

Test hole 43-25-7dbbb. Land-surface altitude 1,845 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil, silt	6	6
Silt, sand, coarse	3	9
Sand, fine, some small gravel	2	11
Sand, medium, tan	4	15
Sand, medium, brown	2	17
Gravel, medium to large	3	20
Shale, dark-gray	2	22

Test hole 43-25-9caac. Depth to water 17.0 feet (measured May 21, 1954). USBR.

Material	Thickness (feet)	Depth (feet)
Loam	1	1
Fine sandy loam	.5	1.5
Very fine sandy loam	1	2.5
Clayey loam	3	5.5
Fine sandy loam	1	6.5
Light clayey loam	2.5	9
Fine sandy loam	3	12
Sandy loam	5	17
Coarse gravel and sandy loam	5	22
Shale	8	30

Observation well 43-25-9caba. SDWRC. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Sand, silty	12	12
Sand, fine	11	23
Clay	7	30

Test hole 43-25-9cada. Land-surface altitude 1,655 feet (T). Depth to water about 7 feet (estimated August 17, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	5	5
Sand, medium	5	10
Sand, very coarse, brown	8	18
Sand, very coarse, gray, silty	6	24
Sand; shale, gray	10	34
Shale, dark-gray (bit sample)		

Test hole 43-25-9cdba. Land-surface altitude 1,660 feet (T). Depth to water about 14 feet (estimated August 17, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	2	2
Clay, brown	7	9
Sand, fine	5	14
Sand, medium to coarse; gravel, medium	8	22
Gravel, fine to medium; sand, coarse	4	26
Shale, dark-gray	1	27

Test hole 43-25-9cdcb. Land-surface altitude 1,660 feet (T). Depth to water about 15 feet (estimated August 17, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	4	4
Clay, brown	10	14
Sand, medium to fine, silty	5	19
Sand, medium to coarse; gravel, medium	6	25
Gravel, medium to large	5	30
Shale, dark-gray	7	37

Test hole 43-25-16bbab. Land-surface 1,665 feet (T). Depth to water about 14 feet (estimated August 17, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	2	2
Sand, coarse to very coarse; gravel, medium	8	10
Sand, medium	4	14
Sand, medium	5	19
Sand, very coarse; gravel, fine	10	29
Gravel, medium, silty	10	39
Sand, medium, silty	6	45
Shale, dark-gray	10	55

Test hole 43-25-16bbda. Land-surface altitude 1,670 feet. (T). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown; sand, coarse; gravel, medium, yellow	10	10
Clay, brown	9	19

Test hole 43-25-16bbda – continued.

Silt, sandy	10	29
Silt, clayey, brown (moist at 30 feet)	2	31
Clay, dark-brown	1	32
Shale, dark-gray (bit sample)		

Test hole 43-25-29abbb. Land-surface altitude 1,970 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, brown	2	2
Sand, medium	2	4
Gravel, medium; sand, coarse	6	10
Sand, coarse; gravel, medium	4	14
Clay, yellow-brown	4	18
Clay, dark-brown	2	20
Shale, dark-gray	2	22

Test hole 43-25-32dddd. Land-surface altitude 2,017 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil, sand, fine	1	1
Silt, white	2	3
Sand, fine to medium, light-tan	7	10
Sand, very fine to fine	4	14
Sand, medium to coarse; gravel, fine to coarse	10	24
Sand, coarse to very coarse; gravel, fine to coarse	26	50
Sand, coarse; some medium gravel, clayey	4	54
Clay, gravel, medium	6	60
Clay, sand, medium, brown	17	77
Sand, fine to medium (moist at 80 feet)	22	99
Shale, dark-gray	3	102

Test hole 43-26-6ccca. Depth to water 12.0 feet (measured May 21, 1964). USBR.

Material	Thickness (feet)	Depth (feet)
Very fine sandy loam	1.5	1.5
Clayey fine sand	3.5	5
Fine sand	5	10
Medium sand	9.5	19.5
Shale and silt	1	20.5
Shale	9.5	30

Well 43-26-33add. Land-surface altitude 1,900 feet (T). Drilled for J. Till by the Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	714	714
Niobrara Formation	130	844
Carlile Shale	379	1,223
Greenhorn Limestone	107	1,330

Well 43-26-33 add -- continued.

Graneros Shale	180	1,510
Dakota Formation	303	1,813
Skull Creek Shale	102	1,915
Inyan Kara Formation	150	2,065
Pre-Inyan Kara - post Minnelusa (undifferentiated)	40	2,105
Minnelusa Formation	67	2,172

Test hole 43-28-1bccc. Land-surface altitude 1,968 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil	3	3
Silt, sandy	6	9
Sand, fine to medium	5	14
Sand, medium; gravel, medium	5	19
Sand, coarse; gravel, coarse	3	22
Clay, light-tan	8	30
Shale, dark-gray (bit sample)		

Test hole 43-28-3dccc. Land-surface altitude 1,970 feet (T). Depth to water about 33 feet (estimated August 15, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	2	2
Sand, very fine, light-brown	13	15
Sand, fine, silty	10	25
Sand, medium; gravel, small	5	30
Sand, medium; gravel, medium, clayey	6	36
Shale, dark-gray	3	39

Test hole 43-28-8cca1. Land-surface altitude 1,785 feet (T). Depth to water 10.5 feet (measured August 9, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, white	7	7
Clay, brown	3	10
Sand, medium, clean	5	15
Sand, medium to coarse, clean	8	23
Shale, dark-gray	1	24

Obervation well 43-28-8cca2. SDWRC. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Topsoil	5	5
Clay, gray	11	16
Sand, fine	8	24
Shale	6	30

Test hole 43-28-8ccd. Land-surface altitude 1,790 feet (T). Depth to water 11.1 feet (measured August 9, 1966). USGS.

Test hole 43-28-8ccd – continued.

Material	Thickness (feet)	Depth (feet)
Silt	7	7
Clay, light-brown	5	12
Sand, very fine to fine	5	17
Sand, coarse; gravel, medium, clean	7	24
Shale, dark-gray	1	25

Test hole 43-28-9add. Land-surface altitude 1,785 feet (T). Depth to water about 4 feet (estimated August 10, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, fine, white	5	5
Sand, fine to medium, dark-gray	15	20
Shale, dark-gray	2	22

Test hole 43-28-9dbd. Land-surface altitude 1,790 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, fine (moist at 18 feet)	20	20
Shale, dark-gray	7	27

Test Hole 43-28-10bcc. Land-surface altitude 1,790 feet (T). Depth to water 6.8 feet (measured August 10, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	.5	.5
Clay, brown	9.5	10
Sand, very fine, silty	12	22
Shale, dark-gray	2	24

Test hole 43-28-11aaaa. Land-surface altitude 1,980 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Clay, light brown, mixed with some fine sand	10	10
Clay, tan	5	15
Clay, tan with pebbles	2	17
Sand, coarse, and gravel	3	20
Sand, fine to very fine light-tan, trace of pebbles	7	27
Sand, medium, trace of gravel	8	35
No samples	12	47

Test hole 43-28-12bccc. Land-surface 2,065 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil	3	3
Silt, sand, very fine	7	10
Sand, medium; gravel, medium to coarse	5	15
Gravel, coarse; sand, medium, clayey	5	20

Test hole 43-28-12bccc -- continued.

Clay, brown to yellow	5	25
Shale, dark-gray	2	27

Test hole 43-28-12cccc. Land-surface altitude 2,075 feet (T). Depth to water about 20 feet (estimated August 16, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil	2	2
Silt	1	3
Clay, light-brown	6	9
Sand, medium, clean	7	16
Sand, medium to coarse; gravel, fine	4	20
Sand, coarse; gravel, medium	3	23
Sand, coarse	4	27
Clay; sand, medium, gray	8	35
Sand, medium, clayey, gray	5	40
Shale, dark-gray	2	42

Test hole 43-28-17bba. Land-surface altitude 1,795 feet (T). Depth to water 11.6 feet (measured August 9, 1966). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, light-brown	10	10
Clay, brown	5	15
Sand, coarse	6	21
Sand, coarse; gravel, fine	2	23
Shale, dark-gray	4	27

Test hole 43-28-18dbc. Land-surface altitude 1,990 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	8	8
Sand, coarse; gravel, fine	3	11
Gravel, coarse	3	14
Clay; gravel, medium	5	19
Clay; sand, coarse	8	27
Clay, dark-brown to gray	3	30
Shale, dark-gray	7	37

Well 43-30-29a. Land-surface altitude 2,375 feet (T). Drilled for W. Jensen by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	1,219	1,219
Niobrara Formation	161	1,380
Carlile Shale	357	1,737
Greenhorn Limestone	118	1,855
Graneros Shale	185	2,040
Dakota Formation	303	2,343
Skull Creek Shale	107	2,450
Inyan Kara Formation	105	2,555

Test hole 44-28-36cbbc. Land-surface altitude 1,950 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Topsoil, dark-brown	3	3
Silt, light-tan; sand, very fine	13	16
Clay, light-brown	3	19
Gravel, medium to coarse, clayey	3	22
Clay, brown	6	28
Shale, dark-gray	6	34

Test hole 44-30-33-dbbd. Depth to water 10.0 feet (measured May 20, 1954). USBR.

Material	Thickness (feet)	Depth (feet)
Loam	1	1
Very fine sandy loam	3	4
Sandy loam	2	6
Fine silty loam	1	7
Sandy loam	4	11
Coarse sand	10	21
Shale	9	30

Well 44-31-20bbb. Land-surface altitude 2,340 (B). Drilled for G. England by Huron Drilling Company. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Soil and alluvium	40	40
Shale	1,220	1,260
Change of formation	200	1,460
Codell Sandstone	60	1,520
Greenhorn Limestone	155	1,675
Shale	125	1,800
Change of formation	30	1,830
Shale	120	1,950
Shale with many hard sandy streaks	10	1,960
Sandstone	60	2,020
Sandy shale	60	2,080
Sandstone	80	2,160
Sandstone with shaley streaks	20	2,180
Shale	10	2,190
Sand	115	2,305
Shale	10	2,315

Test hole 44-31-28bbdb. Land-surface altitude 1,950 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, white	10	10
Clay, brown	2	12
Silt, white, (moist at 14 feet)	8	20
Silt, gray	4	24
Shale, dark-gray	3	27

Test hole 44-33-10ddca. Land-surface altitude 2,025 feet (T). USGS.

Test hole 44-33-10ddca -- continued.

Material	Thickness (feet)	Depth (feet)
Silt	9	9
Sand, coarse; gravel, fine	6	15
Sand, coarse; gravel, coarse	6	21
Sand, light-gray, silty	8	29
Shale, dark-gray (bit sample)		

Test hole 44-33-14bcbc. Land-surface altitude 2,020 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sand, fine	10	10
Sand, very fine (moist at 12 feet)	5	15
Sand, medium	4	19
Sand, coarse; gravel, fine	15	34
Shale, dark-gray (bit sample)		

Test hole 44-33-15aaab. Land-surface altitude 2,015 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, brown to light-tan	8	8
Sand, medium	2	10
Sand, medium; gravel, medium	2	12
Sand, medium; gravel, medium (moist at 13 feet)	9	21
Gravel, small to medium, silty	8	29
Shale, dark-gray	3	32

Test hole 44-33-15aada. Land-surface altitude 2,015 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt	5	5
Sand, medium; gravel, medium (moist at 13 feet)	13	18
Sand, coarse; gravel, fine	5	23
Gravel, medium, silty, gray	3	26
Shale, dark-gray	1	27

Test hole 44-33-22acab. Land-surface altitude 2,040 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, light-gray	12	12
Silt and clay	3	15
Clay, light-brown with white silt pebbles	2	17
Silt	2	19
Clay, brown; gravel, medium	10	29
Shale, dark-gray	3	32

Test hole 44-33-22acb. Land-surface altitude 2,030 feet (T). Depth to water 11.1 feet (measured August 18, 1966). USGS.

Material	Thickness (feet)	Depth (feet)

Test hole 44-33-22acb -- continued.

Silt and clay, brown	7	7
Sand, fine	6	13
Sand, medium to coarse	2	15
Sand, gravel; shale	4	19
Shale, dark-gray	3	22

Test hole 44-33-22adba. Land-surface altitude 2,353 feet (T). USGS.

Material	Thickness (feet)	Depth (feet)
Silt and clay; sand, very fine, brown	15	15
Clay, brown	4	19
Sand, coarse; gravel, fine, silty	5	24
Gravel, medium	3	27
Clay, brown	2	29
Shale, dark-gray	3	32

Test hole 44-33-27aadc. USGS.

Material	Thickness (feet)	Depth (feet)
Silt	2	2
Sand, medium	3	5
Sand, fine, silty	5	10
Silt and clay, dark-brown	4	14
Shale (bit sample)		

Well 45-32-36b. Land-surface altitude 2,038 feet (T). Drilled for H. P. Iwan by Huron Drilling Company. Formation tops picked from electric logs. Artesian well data given in table 4.

Material	Thickness (feet)	Depth (feet)
Pierre Shale	1,050	1,050
Niobrara Formation	140	1,190
Carlile Shale	370	1,560
Greenhorn Limestone	120	1,680
Graneros Shale	165	1,845
Dakota Formation	320	2,165
Skull Creek Shale	152	2,317
Inyan Kara Formation	63	2,380

TODD COUNTY

Well 35-27-16a. Land-surface altitude 2,700 feet (B). Drilled for E. Benham. Cuttings examined and described by SDGS.

Material	Thickness (feet)	Depth (feet)
Sandstone to siltstone, creamy white, calcareous cement, with much loose, rounded to subrounded quartz sand	14	14
Same with increasing amount of loose sand, some pink grains and many rootlet-like tubular forms	21	35

Well 35-27-16a – continued.

Sand, uncemented, round to sub-round, mostly quartz with small amount of dark minerals, some pink quartz grains	12	47
Limestone, friable, off-white, with occasional quartz grain imbedded. Some loose quartz sand (may be cavings)	17	64
Limestone, hard, off-white, with black speckled inclusions	15	79
Siltstone to very fine sandstone, cream to buff colored with a non-calcareous cement, contains some mica. Few pieces have pinkish cast (becomes slightly finer grained 126-144')	64	143
Sand, round to sub-round, mostly clear quartz with a few pink grains and very few dark grains	45	188
Siltstone, cream to buff, non-calcareous, some black speckled inclusions, and fine sandstone, mostly quartz with a non-calcareous cement	105	293
Sand, mostly frosted and pink quartz grains with some feldspar, angular to sub-angular and some siltstone as above (probably cavings)	42	335
Sand as above with mica and more feldspar in the sand	17	352
Siltstone, cream to buff, non-calcareous, with black speckled inclusions	25	377

Well 35-29-5ba. Land-surface altitude 2,890 feet (B). Drilled for D. Shelburn Farm. Cuttings examined and described by SDGS.

Material	Thickness (feet)	Depth (feet)
Sand, loose, fine to very coarse, mostly clear quartz with minor amounts of pink quartz and dark minerals, rounded to sub-rounded. Some carbonate cemented sandstone formed into rootlet-like tubular forms. Some silica cemented sandstone 25-30'	52	52
Sand and sandstone as above, with olive-green, silicified claystone having a waxy luster. Some of the claystone has sand grains embedded	11.9	63.9
Sandstone, very fine with a gray non-calcareous cement. Some rootlet-like tubular structures in the sandstone	10.1	74
Siltstone, grayish-pink, non-calcareous, with some very fine sandstone embedded in some of the particles. An occasional rootlet-like tubular form (may be cavings) Ogallala Group (probably Ash Hollow Formation). The olive-green claystone from 52' - 63.9' may be a marker bed in the top of the Valentine Formation.	14	88
Sand, loose, round to sub-round, mostly clear quartz with some pink quartz and dark minerals. Also some calcareous cemented, gray, fine to medium		

Well 35-29-5ba -- continued.

sandstone which in part forms small rootlet-like tubular forms, (few pieces of brown, non-calcareous cemented sandstone 55' - 75')	56	94
Siltstone to very fine sandstone, light gray with a non-calcareous cement. Some loose sand (may be cavings)		?

Observation well 35-29-17ddd2. Land-surface altitude 2,840 feet (B). Drilled for SDWRC by Grimshaw-Fox Drilling Company. Cuttings examined and described by SDGS. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Sand, medium, loose, sub-rounded, mostly quartz with some feldspar and dark minerals. Also some loosely cemented sandstone of apparently the same composition and size which contains a few rootlet-like structures filled with secondary carbonate. The cement of the sandstone is in part calcareous	10	10
Same as above only with increased amount to sandstone and less rootlet structures	10	20
Sand as above only with decreasing amount of sandstone until almost all sand 40-90. Few pieces of black organic matter (shale-like) 60-70. Some secondary carbonate (caliche) 70-90	90	110
Sandstone, fine to medium, loosely cemented with a calcareous cement and much loose sand as above	10	120
Silty sand, buff-gray, with an occasional ash shard, loosely cemented in part. Becomes darker colored 180-200. Some loose, medium sand 190-200	80	200

Observation well 35-30-12aaa. Land-surface altitude 2,855 (B). Drilled for SDWRC by Grimshaw-Fox Drilling Company. Cuttings examined and described by SDGS. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Sandstone, fine to medium, calcareous and non-calcareous cemented, few pieces containing rootlet-like structures	10	10
Sand, loose, sub-angular to round, fine to coarse, mostly quartz with some feldspar and dark minerals. Some sandstone, calcareous cemented, fine to medium 50-60. Few pieces buff limestone	50	60
Same as above with increased amount of sandstone. Some of the sandstone formed into rootlet-like structures	30	90
Same as above except sandstone is darker colored and cemented with a non-calcareous cement. Larger amount of loose sand 100-160	20	110

Observation well 35-30-12aaa -- continued.

Sand, loose, fine to coarse but fairly well sorted into medium size, sub-angular to round, mostly quartz with some feldspar and dark minerals	10	120
Sandstone, non-calcareous, very fine, silty, buff, with some loose sand increasing 140-150 and 170-180. Sandstone becomes siltier and few pieces have pinkish cast 190-200	80	200

Test well 36-28-7dd1. Drilled for Fred Lutter. Depth to water 26 feet (reported September 21, 1955).

Material	Thickness (feet)	Depth (feet)
Sand, silty, very fine to medium, trace of coarse sand	14	14
Sand, very fine to medium, trace of coarse sand	60	74
Sand, slightly silty, very fine to medium, slightly cemented, contains a few rootlets	40	114
Marl	10	124
Silt, sandy, to sand, silty, very fine to fine, same medium sand	10	134
Sand, silty, very fine to medium, slightly coarser below 144'	20	154
Sand, silty, very fine to medium	20	174
Sand, silty, very fine to medium, slightly finer below 184'	20	194
Sand, silty, very fine to fine, some medium sand	20	214

Well 36-29-32c. Land-surface altitude 2,895 feet (B). Drilled for the R. Epke farm. Cuttings examined and described by SDGS.

Material	Thickness (feet)	Depth (feet)
Sandstone, fine to medium, brownish-gray, with a calcareous cement. Many secondary calcium deposits formed into rootlet-like tubular structures which in some cases preserves the fibers of the original material. Also much loose sand, round to sub-round, mostly clear quartz with minor amounts of pink quartz and dark minerals	8	55
Same as above with increasing proportion of loose sand	8	63
Siltstone to very fine sandstone containing occasional medium-sized sand grains, light gray, with a non-calcareous cement. Also much loose sand as above and a few pieces of white hard limestone	17	80
Sand, loose, medium to coarse, sub-rounded, mostly clear quartz with minor amounts of pink quartz and dark minerals	5	85
Very fine sandstone to siltstone, gray, with a non-calcareous cement. Also much loose sand as above (may be cavings)	5	100

Test hole 36-32-12aab. Depth to water about 20 feet (estimated October 29, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	10	12
Sand, very fine to fine, silty	10	22
Sand, fine to medium, clean	10	32
Sand fine to medium, silty	16	48
Sand, medium, clean, clay layers, very hard drilling	2	50

Test hole 36-32-12abb. Depth to water about 20 feet (estimated October 29, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	22	24
Sand, very fine to medium, clean, minor clay lenses	48	72

Test hole 36-32-12bbb. Depth to water about 35 feet (estimated October 19, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	28	30
Sand, very fine to medium, silty	12	42

Test hole 36-33-32. Drilled for T. Arnold by Harvey Wilhite Drilling Company in 1958.

Material	Thickness (feet)	Depth (feet)
Sand, fine to medium-grained, rounded chiefly; comprising 90 percent quartz grains with some iron-oxide coating, 6 percent rock fragments of slate, shale and siltstone, plus 3 percent of amorphous quartz, and 1 percent iron-oxides, feldspar, tourmaline and other detrital minerals	10	10
Sand, fine-medium to coarse-grained, rounded chiefly; made up of 85 percent clean quartz grains, 3 percent quartz grains with iron-oxide coating, 4 percent rock fragments of slate, shale and siltstone, 5 percent amorphous quartz and 3 percent iron-oxides, feldspar, biotite, tourmaline, and other detrital minerals	10	20
Sand, fine, medium to coarse-grained, rounded to subrounded; consisting of 85 percent clean quartz grains, 4 percent quartz grains with some iron-oxide coating, 5 percent rock fragments of slate, shale, silty clay, plus 4 percent amorphous quartz and 2 percent iron-oxide, feldspar, aragonite, chlorite, tourmaline and other detrital minerals	10	30
Sand, coarse to very coarse-grained, rounded chiefly; comprising 95 percent quartz grains with some iron-oxide coating, 3 percent rock		

Test hole 36-33-32 -- continued.

fragments of shale, slate and sandstone, plus 2 percent amorphous quartz, and 1 percent feldspar, iron-oxides, and other detrital minerals	10	40
Sand, coarse to very coarse-grained, rounded chiefly consisting of 90 percent quartz grains with some iron-oxide coating, 5 percent rock fragments of slate, and shale, 4 percent amorphous quartz, and 1 percent feldspar, mica, iron-oxides, and other detrital minerals	10	50
Sand, coarse to very coarse-grained with some small pebbles and granules, rounded chiefly; comprising 75 percent quartz grains with some iron-oxide coating, 15 percent kaolinitic clay with rather abundant calcium carbonate, 5 percent rock fragments of granites, slate, shale, plus 4 percent amorphous quartz, and 1 percent feldspar, iron-oxide, tourmaline and other detrital minerals.	10	60
Sand, medium coarse to very coarse-grained, with some granules, rounded to subrounded; made up of 75 percent quartz grains with trace of iron-oxide coating, 10 percent kaolinitic and calcareous clay, 10 percent rock fragments of highly calcareous, micaceous, tuffaceous, fine-grained sandstone, slate, and schist, plus 3 percent amorphous quartz and 2 percent feldspar, mica, iron-oxide, tourmaline, and other detrital minerals	10	70
Sand, medium to coarse-grained, rounded chiefly; consisting of 85 percent quartz grains, 5 percent kaolinitic and calcareous clay, 4 percent rock fragments of highly calcareous, tuffaceous, micaceous, fine-grained sandstone, shale, and slate, plus 4 percent amorphous quartz and 1 percent feldspar, tourmaline, iron-oxides and other detrital minerals	10	80
Sand, fine-medium to coarse-grained, rounded chiefly; comprising 80 percent quartz grains with some iron-oxide coating, 10 percent calcareous and kaolinitic clay, 3 percent rock fragments of high calcareous, tuffaceous, micaceous, and fine grained sandstone, slate, and shale, plus 3 percent amorphous quartz, and 2 percent feldspar, iron-oxides, tourmaline, and other detrital minerals	10	90
Sand, medium to coarse-grained, rounded chiefly; made up of 85 percent quartz grains with some iron-oxide coating, 1 percent calcareous and kaolinitic clay, 5 percent rock fragments of fine-grained, tuffaceous, slightly calcareous and micaceous sandstone, shale and slate, 5 percent amorphous quartz, and 4 percent feldspar, iron-oxides, tourmaline and other detrital minerals	10	100

Test hole 36-33-32 -- continued.

Sand, fine-medium to coarse-grained, rounded chiefly; consisting of 90 percent quartz grains with some iron-oxide coating, 2 percent kaolinitic clay, 3 percent rock fragments of fine grained sandstone, shale, and slate, plus 2 percent amorphous quartz, and 3 percent feldspar, iron-oxides, mica, tourmaline and other detrital minerals	10	110
Sand, fine-grained, somewhat coarse-grained, rounded chiefly; comprising 90 percent quartz grains, 1 percent kaolinitic clay, 4 percent rock fragments of sandstone, slate, and shale, plus 3 percent amorphous quartz, and 2 percent feldspar, tourmaline, mica, and other detrital minerals	10	120
Sand, very fine to medium-grained, somewhat silty, rounded to subrounded; consisting of 85 percent quartz grains, 10 percent kaolinitic and calcareous clay, 2 percent rock fragments of fine-grained, calcareous, and micaceous sandstone, and slate, plus 2 percent amorphous quartz, and 1 percent feldspar, tourmaline, iron-oxides and other detrital minerals	10	130
Sand, medium to coarse-grained, rounded chiefly; made up of 75 percent quartz grains, 1 percent calcareous, and kaolinitic clay, 20 percent rock fragments of fine-grained, calcareous, and slightly micaceous sandstone, slate, and shale, plus 3 percent amorphous quartz, and 1 percent feldspar, mica, tourmaline and other detrital minerals	20	150
Sand, very fine to medium-grained, somewhat coarse-grained, rounded chiefly; consisting of 90 percent quartz grains, 5 percent rock fragments of sandstone, siltstone, shale, and slate, plus 3 percent amorphous quartz, 2 percent feldspar, mica, iron-oxides, tourmaline and other detrital minerals, trace of kaolinitic and calcareous clay	10	160
Sand, silty, very fine to fine grained, somewhat medium to coarse-grained, rounded chiefly; comprising 95 percent quartz grains with some iron-oxide coating, 2 percent rock fragments of slate and shale, 2 percent feldspar, mica, tourmaline, and other detrital minerals, plus 1 percent amorphous quartz and trace of kaolinitic and calcareous clay	10	170

Observation well 37-25-23aaa. SDWRC. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Sand, fine	14	14
Sand, layer, hard, 2' thick, alternating hard and soft clay-sand layers to 35'	21	35

Test hole 37-25-23. Drilled in alluvial deposits along the Keya Paha River by SDHD.

Material	Thickness (feet)	Depth (feet)
Loamy sand	1	1
Sand	7	8
Limestone sand	1	9
Sand, limestone, red rock	3	12
Sand, limestone	2	14
Sand, red rock	5	19
Clayey sand	7	26
Sand, clay and red rock	22	48
Clay		

Well 37-29-15c. Drilled for B. Quigley. Well reported in Newport, T. G., 1959. Ground-water resources of the lower Niobrara River and Ponca Creek basins, Nebraska and South Dakota, U. S. Geol. Survey Water-Supply Paper 1460-G, p. 273-323.

Material	Thickness (feet)	Depth (feet)
Sand	56	56
Sand, very fine to medium-grained traces of coarse sand	28	84
Sand, silty, very fine to medium-grained, some cementation	10	94
Sand, very fine to medium-grained traces of coarse sand	10	104
Sand, silty, very fine to fine, traces of medium-grained sand, some cementation	10	114
Sand, fine to medium-grained, cemented from 118-121'	10	124
Sand, very fine to fine, traces of medium-grained sand	10	134
Sand, very fine to medium-grained interbedded white silt lenses	20	154
Sand, very fine to medium-grained traces of coarse sand	10	164
Sand, very fine to fine, traces of medium-grained sand	10	174
Sand, fine to coarse	10	184
Sand, very fine to fine, traces of medium-grained sand	10	194
Sand, fine to medium-grained, traces of coarse sand	10	204
Sand, very fine to medium-grained traces of coarse sand	10	214
Sand, fine to coarse	10	224
Sand, fine to medium-grained traces of coarse sand	10	234
Sand, very fine to medium-grained	10	244
Sand, very fine to fine, traces of medium-grained sand	10	254
Silt, sandy, very fine to fine sand	10	264

Well 37-30-30. Land-surface altitude 2,888 feet (T). Drilled for St. Francis Mission School.

Material	Thickness (feet)	Depth (feet)
Topsoil, sand and clay	39	39
Hard rock, thin layers	1	40
Alternating bed of white and green rock (probably thin bedded clays and shales) and dirty sand	65	105
Yellow and gray quicksand interbedded w/ thin layers of magnesia rock	95	200
Quicksand; water level	5	205
Fair water sand	10	215
Fine sand and thin rock layers (probably sandstone)	65	280
Medium coarse sand	11	291
Medium to fine sand, water-bearing	14	305
Sand rock, set 15' perforated casing	1	306
Sand rock	24	330

Test Hole 38-26-35cdd. USGS.

Material	Thickness (feet)	Depth (feet)
Silt	2	2
Sand, very fine to fine, clean	8	10
Sand, medium to coarse (moist at 11 feet)	2	12
Clay, light gray; very hard drilling 13'-14'	2	14

Test hole 38-27-7daaa. Depth to water 7.5 feet (measured October 27, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine to fine, silty	3	3
Sand, very fine to fine, clean	4	7
Sand, medium to coarse; gravel, coarse	7	14
Sand, very fine to fine, pink to tan	3	17

Test hole 38-27-7daab. Depth to water about 8 feet (estimated October 27, 1954). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine, silty	5	5
Clay, smooth, pink	2	7
Sand, very fine, pink to tan layers of smooth clay	5	12

Test hole 38-27-23. Drilled in alluvial deposits along the Keya Paha River by SDHD.

Material	Thickness (feet)	Depth (feet)
Topsoil, sandy	1	1
Sand	6	7
Clayey sand	8	15
Clayey sand and red rock	20	35
Sand clay and red rock	20	55

Test Hole 38-27-24cbbb. Depth to water 6.0 feet (measured October 27, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine to fine, silty	3	3
Sand, fine to medium, clean	4	7
Sand, medium to coarse	5	12
Clay, silty, white to light-gray; very hard drilling	1	13

Test hole 38-27-24cbbc. Depth to water 6.0 feet (measured October 27, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine to fine, silty	3	3
Sand, very fine to fine, clean	4	7
Sand, medium to coarse	5	12
Clay, silty, white to light gray, very hard drilling	1	13

Observation well 38-27-24cc. SDWRC. Water levels given in table 3.

Material	Thickness (feet)	Depth (feet)
Sand, fine	16	16
Clay; sand layers	19	35

Well 38-28-5ab. Drilled for BIA School at Mission by the United Exploration Corporation.

Material	Thickness (feet)	Depth (feet)
Topsoil	1	1
Fine tan sand	6	7
Green sand and sandstone with traces of soft green clay	10	17
Red clay	43	60
Red clay but lighter in color	15	75
Red clay	40	115
Sandstone, limestone and light clay	5	120
Light tan clay	15	135
We cased and cemented the top 20' one day and drilled the balance the following day. This was very easy drilling. We pumped this well for several hours - it had a capacity of about 30 gpm.		

Observation well 38-28-32bb. SDWRC. Water levels listed in table 3.

Material	Thickness (feet)	Depth (feet)
Topsoil	2	2
Sand, fine; clay	10	12
Sand, fine (sample)	16	28
Sand, firm and clay layers	12	40

Test hole 38-30-17caaa. Depth to water about 10 feet (estimated November 5, 1964). USGS.

Test hole 38-30-17caaa – continued.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, pebbles, clean	7	8
Sand, fine to coarse	18	26
Sand, very fine to medium, clayey, gravelly, pinkish-tan	6	32

Test hole 38-30-17caab. Depth to water 9.5 feet (measured November 5, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	11	12
Sand, fine to coarse	6	18
Sand, very fine to medium, clayey, gravelly, greenish-tan	4	22

Test hole 38-30-17caba. Depth to water about 8 feet (estimated November 6, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	6	7
Sand, fine to coarse, clean	17	24
Sand, very fine to medium, clayey, gravelly, pinkish-tan	3	27

Test hole 38-30-17cca. Depth to water about 10 feet (estimated November 5, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	6	7
Sand, fine to coarse, clean	15	22
Clay, very fine to medium, sand, gravelly, gray	3	25

Test hole 38-30-17ccb. Depth to water 9.6 feet (measured November 5, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	8	10
Sand, fine to coarse, clean	20	30
Sand, very fine to medium, clayey, gravelly, greenish-gray	2	32

Test hole 38-30-17ccc. Depth to water about 6 feet (estimated November 5, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine	6	7
Sand, fine to coarse	11	18
Sand, very fine to medium, clayey, gravelly, pinkish-tan	4	22

Test hole 38-30-18dca. Depth to water 8.4 feet (measured November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine	19	20
Sand, fine to medium	15	35
Sand, very fine, silty, hard drilling, not bedrock	2	37

Test hole 38-30-18dcb. Depth to water about 9 feet (estimated November 5, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, silty	5	7
Sand, very fine to fine	5	12
Sand, fine to medium	23	35
Sand, very fine to medium, clayey, gravelly, greenish-gray	2	37

Observation well 38-30-18dcc. Land-surface altitude 2,411 (B). SDWRC. Water levels given in table 3.

Material	Thickness (feet)	Depth (feet)
Topsoil, fine sand	30	30
Sand, fine, hard packed	3	33
Sand and clay mixed	6	39

Test hole 38-30-34aaa. Depth to water 11.0 (measured October 30, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	7	7
Sand, very fine, silt	17	24
Sand, fine, clayey, hard drilling	8	32

Well 38-30-34aa. Drilled for BIA at Rosebud Agency by Frederickson's Inc. in 1959.

Material	Thickness (feet)	Depth (feet)
Topsoil, black	2	2
Sand, fine, gray	2	4
Sandy, tan	17	21
Shale, gritty, red	51	72
Shale, soft, red	13	85
Shale, gritty, brown	22	107
Soft, gritty, brown	5	112
Shale, brown	5	117
Shale, hard, white and brown	6	123
Shale, soft, brown	4	127
Shale, hard, brown	11	138
Shale, soft, brown and white	7	145
Shale, hard, brown	1	146
Shale, soft, brown	2	148
Shale, hard, brown and white	2	150

Well 38-30-34aa -- continued.

Shale, soft, brown	33	183
Shale, hard, light brown	42	225

Test hole 38-30-34a. Drilled for BIA at Rosebud Agency by Fredrickson's Inc. in 1959.

Material	Thickness (feet)	Depth (feet)
Clay, sandy, tan	2	2
Sand, fine, tan	5	7
Shale, sandy, red	83	90
Shale, gritty, red	71	161

Test hole 38-30-34aca1. Depth to water 3.4 feet (measured November 2, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine	4	5
Sand, fine to medium	15	20
Sand, very fine to fine, clayey, gravelly, pinkish-tan	2	22

Test hole 38-30-34aca2. Depth to water 4.0 feet (measured November 2, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, silty	4	5
Sand, fine to medium	10	15
Sand, very fine to fine, clayey, gravelly, tan to pink	2	17

Test hole 38-30-34aca3. Depth to water 3.8 feet (measured November 2, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	3	3
Sand, very fine to fine	4	7
Sand, medium to coarse, fine gravel	8	15
Sand, very fine to fine, clayey, gravelly, pinkish-tan	2	17

Test hole 38-30-34aca4. Depth to water 3.0 feet (measured November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine	6	8
Sand, fine to medium	7	15
Sand, very fine to fine, clayey, gravelly, pinkish-tan	2	17

Test hole 38-30-34aca5. Depth to water 15.6 feet (measured November 3, 1964). USGS.

Test hole 38-30-34aca5 -- continued.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	7	7
Sand, fine to medium	11	18
Sand, fine to medium, clayey, gravelly, pinkish-tan	2	20

Test hole 38-30-34aca6. Depth to water 4.6 feet (measured November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine	3	5
Sand, fine to coarse	5	10
Sand, very fine to fine, clayey, gravelly, pinkish-tan	2	12

Test hole 38-30-34acdc. Depth to water about 8 feet (estimated October 30, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, fine to medium, clean	26	28
Sand, very fine to fine, clayey, gravelly; layers of indurated sand and clay. Very hard drilling	22	50

Test hole 38-30-34acdd. Depth to water 11.7 feet (measured November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine	8	10
Sand, fine to medium	11	21
Sand, very fine to coarse, clayey, gravelly, pinkish-tan	4	25

Well 38-30-34ca1. Drilled for Rosebud Indian Reservation Golf Course by the Thiem Drilling Company in 1966.

Material	Thickness (feet)	Depth (feet)
Black dirt	3	7
Gray sand	7	10
Sand, very fine	10	20
Salmon colored shale	90	110
Sand	10	120
Salmon colored shale with hard rock layers	120	240
Tight sticky shale, salmon colored	40	280
Rough cutting rock and lime	40	320
Salmon colored shale	37	357
Salmon with lime layers	7	364
Salmon colored shale	16	380
Salmon colored shale with bentonite (greenish layers	140	520

Test hole 38-30-34ca2. Dry hole. Drilled for Rosebud Indian Reservation Golf Course by the Thiem Drilling Company in 1966.

Material	Thickness (feet)	Depth (feet)
Salmon colored shale	305	305

Test hole 38-30-34dbaa. Depth to water about 7 feet (estimated November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, fine to medium	14	15
Sand, medium to coarse, gravelly	3	18
Sand, very fine to fine, clayey, gravelly, pinkish-tan	4	22

Test hole 38-30-34dbab. Depth to water about 3.0 feet (estimated November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, fine to coarse	15	17
Sand, fine, clayey	1	18
Sand, very fine to coarse, clayey, gravelly, pinkish-tan	2	20

Test hole 38-30-34dbac. Depth to water 2.0 feet (measured November 3, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, medium to coarse	16	18
Sand, very fine to medium, clayey, gravelly, pinkish-tan	2	20

Test hole 38-31-13daaa. Depth to water 10.4 feet (measured November 4, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	11	12
Sand, fine to medium	16	28
Sand, very fine to medium, clayey, gravelly, greenish-gray	2	30

Test hole 38-31-13daab. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	5	7
Sand, fine to medium, clayey	8	15
Sand, very fine to fine, clayey, gravelly, pinkish-tan	2	17

Test hole 38-31-13daac. Depth to water 9.0 feet (measured November 4, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sand	1	1
Sand, very fine to fine	6	7
Sand, fine to coarse	7	14
Sand, very fine to medium, clayey, gravelly, pinkish-tan, greenish-streaks	2	16

Test hole 38-31-13daba. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	11	12
Sand, fine to medium, clayey, gravelly, pinkish-tan	3	15

Test hole 38-31-13dabb. UGGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean (moist at 11 feet)	11	12
Sand, fine to medium clayey, gravelly, pinkish-tan	3	15

Test hole 38-31-13dabc. Depth to water 10.5 feet (measured November 4, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	6	7
Sand, fine to medium	23	30
Sand, very fine to medium, clayey, gravelly, greenish-gray	2	32

Test hole 38-31-13dada. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, fine to medium, clean	9	10
Sand, fine to medium clayey, gravelly, pinkish-tan	5	15

Test hole 38-31-13dadb. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	9	10
Sand, fine to medium, clayey, gravelly, pinkish-tan	5	15

Test hole 38-31-23aaab. Depth to water 12.5 feet (measured November 4, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	9	10
Sand, fine to medium	12	22
Sand, fine to medium, clayey, gravelly, pinkish-tan	3	25

Test hole 38-31-23aaba. Depth to water 13.4 feet (measured November 4, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine	5	7
Sand, fine to medium, pebbles	10	17
Sand, fine to medium	21	38
Sand, fine to medium, clayey, gravelly, pinkish-tan	2	40

Test hole 38-31-23abad. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, very fine to fine, clean	6	7
Sand, fine to medium, clean	13	20
Sand, fine to medium, clayey, gravelly, greenish-gray	5	25

Test hole 38-31-34baa. Depth to water about 8 feet (estimated November 6, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	1	1
Sand, fine to coarse	24	25
Sand, very fine to medium, clayey, gravelly, pinkish-tan	2	27

Well 39-27-10cacd. Land-surface altitude 2,626 feet (B). U. S. Bureau of Indian Affairs test well drilled in 1895-97. Log is as given in So. Dak. Geol. Survey Rept. Inv. 61, p. 30-32.

Depth	Material
0- 4	Cenozoic sand, fine bentonite light brown.
60	Silt, yellow green.
70- 100	Silt with bentonite matriz and volcanic glass shards, cream colored.
115- 120	Clay, blue gray, bentonitic.
120- 123	Clay, silty, cream.
135	Clay, bentonitic, with coarse sand, cuttings below to 370' have glass shards.
180	Silt, bentonitic, cream.
260	Largely light cream bentonite.
290	Sand, drab.
320	Ash, mostly bentonite, light gray drab.
340	Same, with angular sand.

Well 39-27-10cacd -- continued.

350	Bentonite, faint lavender.
360	Bentonite and sand, cream.
370	Bentonite and sand, light drab or ashy gray.
370	Pierre, (top) clay, blue gray, bentonitic.
390	Clay, gray, bentonitic.
400	Clay, gray, bentonitic with altered GLOBIGERINA.
430	Clay, ashy, with biotite.
440	Clay with GLOBIGERINA and fish remains.
480	Clay spotted with flattened chalk pellets.
500- 520	Bentonite, white.
520	Large amount marcasite, hauerite.
540	OSTRACODS and CRISTELLARIA.
550	Chalk, medium gray.
590	Clay, gray.
611- 620	Angular fine sand, bentonite, light gray, very small buckshot concretions insoluble in hydrochloric acid.
620	INOCERAMUS prisms.
640	GLOBIGERINA, some light gray bentonite.
690	Bentonite, cream.
760	Siltstone, brown.
850	Bentonite, blue gray, flaky.
860- 880	Bentonite, light gray, large flakes biotite.
890	Clay, bentonitic, darker gray.
950- 970	Some fine brown sandstone.
980	AMMODISCUS.
1000	Clay, bentonitic, darker gray.
1150	GLOMOSPIRA, gray biotitic bentonite.
1275	Hauerite and concretions.
1320	Sharon Springs Member, dark blue gray, bituminous shale.
1350	Bentonite, light gray.
1390-1410	Niobrara marl, with chalk pellets.
1430	Larger percent chalk.
1490	Marl, with GLOBIGERINA and chalcopyrite.
1500	INOCERAMUS, GLOBIGERINA, OSTREA, TEXTULARIA.
1510	Less chalky, TEXTULARIA, GLOBIGERINA.
1530	Still less chalky.
1600	Carlile shale, dark gray, somewhat chalky, chalcopyrite.
1630	Still somewhat chalky.
1650	Some pure bentonite.
1650-1670	Marcasitized stems.
1670	Some gray siltstone.
1780-1810	Shale.
1830-1850	Greenhorn limestone, gray, composed on INOCERAMUS prisms and fish remains, some fossils pyritized and marcasitized, shale interbeds.
1870	Many INOCERAMUS prisms and GLOBIGERINA in light gray limestone.
1890	Limestone, fine texture, dull, chalky, light-gray.
1900	Some dull coal with limestone, chalcopyrite.
1905	Many GLOBIGERINA.
1920	Limestone with a small amount of glauconite.
1960	Graneros (?)
1990	Siltstone, gray.
2000	Dakota, sandstone, light gray.

Well 39-27-10cacd -- continued.

2020	Concretions, red brown.
2050	Angular sandstone, fused by bit.
2050-2060	Probably fused concretion.
2060-2085	Fuson mudstone, hard, gray, another sample from 2060 and 2070 has sand, coarse, angular, partly recrystallized, some etched grains, also fine sand and manganese bearing pellets, dark purplish brown.
2080	Brown sandstone concretion.
2085	Interbedded fine light gray sandstone and dark gray micaceous siltstone.
2100-2113	Ironstone concretion, shale, dark blue gray.
2140-2155	Sandstone, medium to fine, light gray, angular, micaceous and cherty, hard gray mudstone.
2160	Hard gray bentonite and dark gray shale, full of fish and plant remains.
2215-2225	Siltstone, light gray, micaceous.
2225-2235	Sandstone, carbonaceous, fine, angular.
2220	Cavings with tyrite cemented sandstone, many manganese bearing pellets.
2240	Lakota sand, brown gray, fine, angular.
2250	Sand, brown gray, coarse, angular.
2260	Sand, brown gray, medium, angular.
2270	Sand, brown gray, fine, angular.
2280	Sand, brown gray, medium, angular.
2290	Sand, fine, many manganese bearing pellets (caving?).
2295	Sand, coarse
2350	Clay, drab, bentonitic.
2380-2390	Cavings, but perhaps sand with some dark gray shale.
2400-2410	Sand, medium recrystallized, many manganese bearing pellets (cavings?).
2420	Sand, light gray, medium, angular, recrystallized.
2430-2440	Sand, cream fine to medium some etched grains, recrystallized.
2450	Sand, cream, mostly fine, some medium.
2460-2480	Sand cream buff, fine to medium.
2502	Bottom sample, mostly cream buff sand with biotite.

Test hole 39-28-32dbd. Drilled for BIA.

Material	Thickness (feet)	Depth (feet)
Layers of clay and black earth - probably fill or wash in	10	10
Fine sand	8	18
Red clay	52	70
Red clay with layers of light colored clay	71	141
Dun colored, very compressed clay - formed boots and clay rings	39	180
Traces of sandstone, gray shale, red clay, and buff clay.	15	195
Shale, gray and blue-green	60	255
Blue and gray clay and shale	50	305
Very hard layer of shale	2	307
Red, green, yellow, blue and gray clay	13	320

Test hole 39-28-32dbd -- continued.

Gray and blue clay	37	357
Dark gray shale	33	390

Well 39-28-32dcb. Land-surface altitude 2,480 feet (B). Drilled for M. Knittel in 1941.

Material	Thickness (feet)	Depth (feet)
Topsoil, clay, magnesia rock and sand	22	22
Red rock, small water-bearing vein at 40' level	84	106
Gravel, water-bearing, temperature 50°F., yield 5 gpm	9	115

Test hole 39-28-32ddd. The following three test holes were drilled for BIA school at Mission.

OBSERVATION HOLE – SITE NO. 1

Material	Thickness (feet)	Depth (feet)
Top formation, loam and yellow clay	8	7
Red clay, very dark red	22	30
Red clay, not so red as above with a layer of near tan at about 65'	72	102
Tan clay	3	105

TEST HOLE NO. 1, SITE NO. 1

Sand, fine	6	6
Clay, blue-gray	1	7
Clay, yellow	17	24
Clay, red	6	30
Clay, red, with layer of paler color from 60-70'	60	90
Clay, red with thin layers of sandstone and limestone	10	100
Layers of tan clay, green clay, and sandstone	8	108

TEST HOLE NO. 2, SITE NO. 1

Sand, fine	6	6
Clay, red	51	57
Clay, red, lighter color	28	85
Clay, red, darker color	17	102
Clay, light tan, clay, green, and sandstone	8	110

Test hole 39-30-28bbca. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	10	12
Clay, pink to light-tan	1	13

Test hole 39-30-28bbcb. Depth to water 16.0 feet (measured October 29, 1964). USGS.

Material	Thickness (feet)	Depth (feet)

Test hole 39-30-28bbcb – continued.

Silt, sandy	2	2
Sand, very fine to fine, pebbles	16	18
Clay, moist, light gray	4	22

Test Hole 39-30-28bcc. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine to fine, silty	5	5
Clay, pink to light gray	2	7
Abandoned, unable to penetrate		

Test hole 39-30-28bcd. Depth to water 23.0 feet (measured October 28, 1964). USGS.

Material	Thickness (feet)	Depth (feet)
Sand, very fine to fine, silty	2	2
Sand, fine, clayey	5	7
Clay, sandy, pink, to light gray	23	30
Clay, silty, moist, light gray to green	2	32
Abandoned, unable to penetrate	1	33

Test hole 39-30-29aad. Dry hole. USGS.

Material	Thickness (feet)	Depth (feet)
Silt, sandy	2	2
Sand, very fine to fine, clean	13	15
Clay, smooth, light brown to buff	2	17

Table 3. -- Water levels in observation wells

The South Dakota Water Resources Commission, as part of their program to establish observation wells in areas where shallow aquifers have a potential for further development, has installed 8 observation wells in the project area. Water-level measurements are made in these wells three times each year. The dates of measurements and the depths to water, in feet below land-surface datum, are given for each well. The highest and lowest water levels measured in each well are indicated by underlined dates and measurements followed by **H** and **L** respectively.

In addition to the 8 shallow observation wells, the U. S. Geological Survey, as part of a cooperative program with the South Dakota Water Resources Commission, makes water-level measurements annually on 3 artesian wells in the project area.

MELLETTE COUNTY

41-26-30ddc - Artesian observation well; all water-level measurements and other available information on this well are summarized in table 4.

43-25-9acba - South Dakota Water Resources Commission observation well W-4. Diameter 1½ inches, depth 21 feet (hole was drilled to 30 feet). Well completed in alluvial deposits along the White River.

Date	Water level	Date	Water level	Date	Water level
9-13-57	16.2	7-29-59	16.5	3-13-61	16.1
7- 2-58	16.2	11-23-59	17.7 L	7- 1-61	16.4
12-16-58	16.5	4- 4-60	15.6	10- 5-61	16.6
1- 6-59	17.31	7-11-60	15.9	3- -62	16.0
3-18-59	16.1	11-21-60	16.5	7- -62	13.5 H
11- -62	15.9	7- -64	15.8	4-11-66	15.8
3- 63	15.4	11- -64	16.6	7- -66	15.9
7- -63	15.2	3- 65	15.9		
11- -63	16.3	7- -65	15.7		
3- 64	16.1	11-19-65	16.9		

43-28-8cca2 - South Dakota Water Resources Commission observation well W-3. Diameter 1½ inches, depth 24 feet (hole was drilled to 30 feet). Well completed in alluvial deposits along White River.

Date	Water level	Date	Water level	Date	Water level
9-13-57	14.0	3-13-61	13.7	11- -64	12.7
7- 2-58	13.5	7- 1-61	13.7	3- -65	12.7
12-16-58	14.2	10- 5-61	13.8	7- -65	12.8
1- 6-59	16.57 L	3 -62	13.9	11- 9-65	13.1
3-18-59	14.1	7- -62	13.3	4-11-66	13.9
7-29-59	14.5	11- -62	12.1	7- -66	12.8
11-23-59	16.4	3- -63	11.9		
4-14-60	16.2	7- -63	11.6 H		

43-28-8cca2 -- continued.

7-11-60	13.3	3- -64	12.0
11-21-60	13-7	7- -64	12.4

43-30-5cac - Artesian observation well; all water-level measurements and other available information on this well are summarized in table 4.

TODD COUNTY

35-29-17ddd2 - South Dakota Water Resources Commission observation well NC-5. Diameter 1½ inches, depth 126 feet (hole was drilled to 200 feet). Well completed in Tertiary deposits, probably Ogallala Formation.

Date	Water level	Date	Water level	Date	Water level
11-23-59	87.1 L	3- -63	84.0	7- -66	84.0
5-26-60	85.5	7- -63	84.0		
7-12-60	85.5	3- -64	84.0		
11-22-60	84.6	7- -64	84.4		
3-14-61	84.6	11- -64	84.6		
8-16-61	84.2	3- -65	84.1		
10-24-61	84.3	7- -65	84.0		
3- -62	84.3	8-17-65	83.73 H		
7- -62	84.2	11- 8-65	83.9		
11- -62	84.2	4-11-66	84.0		

35-30-12aaa - South Dakota Water Resources Commission observation well NC-4. Diameter 1½ inches, depth 82 feet (hole was drilled to 200 feet). Well completed in Tertiary deposits, probably Ogallala Formation.

Date	Water level	Date	Water level	Date	Water level
11-23-59	68.0 L	3- -63	64.8 H	7- -66	65.6
5-26-60	66.5	7- -63	65.0		
7-12-60	66.3	3- -64	65.2		
11-22-60	65.6	7- -64	65.8		
3-14-61	65.7	11- -64	65.4		
8-16-61	65.6	3- -65	65.4		
10-24-61	65.5	7- -65	65.7		
3- -62	66.0	8-17-65	64.95		
7- -62	65.4	11- 8-65	65.6		
11- -62	65.1	4-11-66	65.6		

37-25-23aaa - South Dakota Water Resources Commission observation well K-3. Diameter 1½ inches, depth 27 feet (hole was drilled to 35 feet). Well completed in alluvial deposits along Keya Paha River.

Date	Water level	Date	Water level	Date	Water level
9-13-57	10.7	3-13-61	10.5	11- -64	10.6
7- 2-58	10.5	7-27-61	11.2	3- -65	10.4
12-16-58	10.9	10-24-61	11.1	7- -65	10.7
1- 7-59	12.88	3- -62	9.6	11- 9-65	10.6
3-18-59	10.5	7- -62	7.7 H	4- 8-66	10.4
7-30-59	11.2	11- -62	9.4	7- -66	10.4
11-23-59	13.3 L	3- -63	8.8	11- -66	11.2
5-25-60	8.9	7- -63	10.4		
7-12-60	9.8	3- -64	11.7		
11-21-60	11.0	7- -64	10.6		

38-27-24cc - South Dakota Water Resources Commission observation well K-2. Diameter 1½ inches, depth 18 feet (hole was drilled to 35 feet). Well completed in alluvial deposits along Antelope Creek.

Date	Water level	Date	Water level	Date	Water level
9-13-57	8.9	3-13-61	7.8	11- 64	8.6
7- 2-58	8.2	7-27-61	9.0	3- -65	7.8
12-16-58	8.6	10- 5-61	8.3	7- -65	8.6
1- 7-59	10.25 L	3- -62	6.4	8-17-65	9.14
3-18-59	7.4	7- -62	4.8 H	11- 9-65	8.3
7-30-59	9.0	11- -62	8.2	4-11-66	6.8
11-23-59	10.2	3- -63	7.4	7- -66	7.1
5-25-60	6.0	7- -63	7.8	11- -66	8.6
7-12-60	7.9	3- -64	8.0		
11-21-60	9.1	7- -64	8.5		

38-28-32bb - South Dakota Water Resources Commission observation well K-1. Diameter 1½ inches, depth 23 feet (hole was drilled to 40 feet). Well completed in alluvial deposits along Antelope Creek.

Date	Water level	Date	Water level	Date	Water level
9-13-57	10.6	3-13-61	9.8	11- -64	9.8
7- 2-58	10.3	7- 1-61	10.4	3- -65	9.6
12-16-58	10.0	10- 5-61	10.8	7- -65	10.0
1- 7-59	11.98	3- -62	9.5	11- 9-65	9.8
3-18-59	10.0	7- -62	8.1 H	4-11-66	9.6

38-28-32bb -- continued.

7-30-59	11.0	11- -62	9.8	7- -66	10.1
11-23-59	12.0 L	3- -63	9.0	11- -66	9.0
5-25-60	8.3	7- -63	10.2		
7-12-60	9.7	3- -64	9.6		
11-21-60	10.0	7- -64	10.0		

38-30-18dcc - South Dakota Water Resources Commission observation well W-2. Diameter 1½ inches, depth 39 feet (hole was drilled to 39 feet). Well completed in alluvial deposits along the Little White River.

Date	Water level	Date	Water level	Date	Water level
9-13-57	9.7	3-13-61	8.5	11- -64	9.5
7- 2-58	9.0	7- 1-61	9.2	3- -65	8.3
12-16-58	9.1	10- 5-61	10.0	7- -65	7.5
1- 7-59	11.19	3- -62	7.6	11- 9-65	8.4
3-18-59	8.2	7- -62	7.2 H	4-11-66	7.8
7-29-59	10.1	11- -62	9.1	7- 6-66	
11-23-59	12.0 L	3- -63	8.5	7- -66	7.5
4-14-60	10.3	7- -63	8.7		
7-11-60	8.9	3- -64	8.9		
11-21-60	9.2	7- -64	8.7		

Table 4. – Artesian-well data

Data on the 41 artesian wells in the project area are summarized in the following table. The general physical properties of the artesian aquifers are discussed in the interpretive report, U. S. Geological Survey Hydrologic Atlas HA-355.

MELLETTE COUNTY

40-25-12bd

Owner–	Chicago and North Western Railway Co. (Mosher).
Date drilled–	Aug. 8 - Oct. 18, 1929.
Driller–	Norbeck Drilling Co., Redfield, South Dakota.
Depth–	1,681 feet (driller).
Casing–	0 - 330 feet, 8-inch black iron pipe. 329 - 1,066 feet, 6-inch black iron pipe. 1,055 - 1,458 feet, 4-inch black iron pipe. 1,445 - 1,656 feet, 3-inch black iron pipe.
Completion–	bottom 25 feet of well uncased (from 1,656 to 1,681 feet).
Aquifer–	Dakota Sandstone.
Elevation–	land surface 2,040 feet (altimeter).
Depth to water–	88 feet, Feb. 25, 1930.
Remarks–	log (drillers), chemical analysis, well has been abandoned and the casing is obstructed so that the water level cannot be measured.

40-25-20cdb

Owner–	B. Mills.
Date drilled–	Nov. 1 - Nov. 10, 1965.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,693 feet (driller). 1,692 feet (e-log).
Casing–	0 - 480 feet, 5-inch black iron pipe. 451 - 1,693 feet, 2½-inch black iron pipe. The 2½-inch pipe is connected to the 5-inch pipe with a 3-inch lead seal.
Completion–	bottom 220 feet of 2½-inch pipe perforated (from 1,483 to 1,683 feet).
Aquifer–	Dakota Sandstone
Elevation–	land surface 2,088 feet (altimeter).
Depth to water–	120 feet (owner). 220 feet (driller).
Remarks–	water temperature 75°F, log (electric), chemical analysis, pumps 25 - 30 gpm.

40-29-8a

Owner–	L. Krogman.
Date drilled–	Mar. 13 - May 8, 1961.
Driller–	Huron Drilling Inc., Huron, South Dakota
Depth–	1,980 feet (driller).
Casing–	0 - 1,135 feet, 5-inch black iron pipe. 1,090 - 1,980 feet, 2-inch extra heavy black iron pipe.
Completion–	bottom 168 feet of 2-inch pipe perforated (from 1,812 to 1,980 feet).
Aquifer–	Dakota Sandstone.
Elevation–	land surface 2,263 feet (altimeter).
Depth to water–	220 feet (driller).
Remarks–	Well pumps about 15 gpm.

40-30-3ac

Owner–	L. Krogman.
Date drilled–	Jan. 29 - Feb. 12, 1960.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,205 feet (driller).
Casing–	0 - 479 feet, 5-inch black iron pipe. 479 - 563 feet, 4-inch black iron pipe. 563 - 2,205 feet, 2-inch black iron pipe.
Completion–	bottom 147 feet of 2-inch pipe perforated (from 2,058 to 2,205 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,430 feet (altimeter).
Depth to water–	398.10 feet, August 14, 1966.
Remarks–	well pumps 10 - 15 gpm.

41-25-31cab

Owner–	A. Pearsall.
Date drilled–	June 16 - June 26, 1962.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,775 feet (driller).
Casing–	0 - 350 feet, 5-inch black iron pipe. 350 - 1,775 feet, 2-inch black iron pipe. The 2-inch pipe is connected to the 5-inch pipe with a pipe bushing.
Completion–	bottom 142 feet of 2-inch pipe perforated (from 1,663 to 1,775 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,107 feet (altimeter).
Depth to water–	140 feet (driller).
Remarks–	chemical analysis, well pumps about 15 gpm.

41-25-35ccd

Owner–	H. Richter.
Date drilled–	Nov. 15 - Nov. 22, 1965.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,700 feet (driller).
Casing–	0 - 460 feet, 5-inch black iron pipe. 460 - 1,700 feet, 2½-inch black iron pipe.
Completion–	bottom 210 feet of 2½-inch pipe perforated (from 1,490 to 1,700 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,092 feet (altimeter).
Depth to water–	180 feet (owner).
Remarks–	water temperature 87°F, chemical analysis, well pumps about 15 gpm.

41-26-8aa

Owner–	W. Dimond.
Date drilled–	June 5 - June 19, 1965.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,875 feet (driller).
Casing–	0 - 498 feet, 5-inch black iron pipe. 441 - 2,875 feet, 2½-inch black iron pipe. The 2½-inch pipe is connected to the 5-inch pipe with a 3-inch lead seal.
Completion–	bottom 168 feet of 2½-inch pipe perforated (from 2,707 to 2,875 feet).
Aquifer–	Minnelusa Formation.

41-26-8aa -- continued.

Elevation–	land surface 2,227 feet (altimeter).
Depth to water–	1.10 feet, August 16, 1966. Flows occasionally in response to barometric fluctuations.
Remarks–	chemical analysis, pumps about 40 gpm, occasionally well flows about 1 gpm.

41-26-27

Owner–	D. Lookabill.
Date drilled–	1965.
Driller–	Independent Drilling Co., Aberdeen, South Dakota.
Depth–	1,960 (driller).
Casing–	0 - 459 feet, 5-inch black iron pipe. 442 - 1,960 feet, 2½-inch extra heavy copper pipe.
Completion–	bottom 147 feet of 2½-inch pipe perforated (from 1,813 to 1,960 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,108 feet (altimeter).
Depth to water–	173.70 feet, August 16, 1966.
Remarks–	chemical analysis, pumps about 10 gpm, driller reported Greenhorn Formation at 1,415 feet.

41-26-30ddc

Owner–	S. Galbraith.
Date drilled–	1960.
Driller–	M. Sather, Presho, South Dakota
Depth–	1,804 feet (driller).
Casing–	0 - 400 feet, 4-inch black iron pipe. 397 - 1,804 feet, 2-inch black iron pipe.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 2,115 feet (altimeter).
Depth to water–	156.57, July 25, 1963. 157.30, May 15, 1964. 157.82, July 19, 1965. 165.40, July 7, 1966. 169.30, May 25, 1967.
Remarks–	water temperature 93°F, chemical analysis, well pumps about 10 gpm, used as artesian observation well and measured once each year.

41-27-25cb

Owner–	Chicago and North Western Railway Co. (Wood).
Date drilled–	Nov. 8, 1929 - Feb. 15, 1930.
Driller–	Norbeck Drilling Co., Redfield, South Dakota.
Depth–	1,866 feet (driller).
Casing–	0 - 769 feet, 8-inch black iron pipe. 768 - 1,179 feet, 6-inch black iron pipe. 1,178 - 1,578 feet, 4½-inch black iron pipe. 1,575 - 1,748 feet, 3-inch black iron pipe. 1,745 - 1,787 feet, 2½-inch black iron pipe.
Completion–	bottom 79 feet of well, open hole (from 1,787 to 1,866 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,147 feet (altimeter).
Depth to water–	160.50 feet, Feb. 27, 1930.

41-27-25cb -- continued.

	184.44 feet, Feb. 28, 1957. 183.44 feet, May 27, 1957.
Remarks–	log (drillers), chemical analysis, well is abandoned and casing is obstructed so that it is impossible to measure water levels.

41-27-25da

Owner–	Wood School.
Date drilled–	1961.
Driller–	unknown.
Depth–	1,779 feet (approximate).
Casing–	0 - 300 feet, 4-inch iron pipe. 300 - 1,800 feet, 2-inch iron pipe.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 2,146 feet (altimeter).
Depth to water–	unknown.
Remarks–	Chemical analysis, well pumps about 30 gpm.

41-29-27abb

Owner–	Amber Bros.
Date drilled–	July, 1961.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,885 feet (driller).
Casing–	0 - 310 feet, 5-inch black iron pipe. 301 - 1,885 feet, 2-inch extra heavy black iron pipe. The 2-inch pipe is connected to the 5-inch pipe with a lead seal.
Completion–	bottom 152 feet of 2-inch pipe perforated (from 1,733 to 1,885 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,220 feet (altimeter).
Depth to water–	180 feet when drilled.
Remarks–	pumps about 15 gpm.

42-25-1ca

Owner–	P. McDill.
Date drilled–	1951.
Driller–	M. Sather, Presho, South Dakota.
Depth–	1,342 feet (driller).
Casing–	0 - 150 feet, 3½-inch black iron pipe. 150 - 1,342 feet, 2-inch black iron pipe.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 1,695 feet (topographic map).
Water level–	78.59 feet above land surface, September 16, 1956.
Remarks–	water temperature 112°F, well flowed 98 gpm 9-16-56, 70 gpm 8-31-61, and 75 gpm 8-17-66.

42-25-32cc

Owner–	G. Anderson (formerly owned by I. Nelson).
Date drilled–	1964.
Driller–	Independent Drilling Co., Aberdeen, South Dakota.
Depth–	2,690 feet (driller). 2,690 feet (e-log).
Casing–	2½-inch galvanized at surface.
Completion–	Perforated.

42-25-32cc -- continued.

Aquifer–	Madison Limestone.
Elevation–	land surface 2,110 feet (altimeter).
Water level–	78.59 feet above land surface, August 17, 1966.
Remarks–	water temperature 140°F, log (electric), chemical analysis, flowed 25 gpm through a 3/4-inch facet (8-17-66).

42-25-34cc

Owner–	G. Anderson (well drilled for former owner - I. Nelson).
Date drilled–	May 16 - May 24, 1961.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,567 feet (driller). 1,565 feet (e-log).
Casing–	0 - 21 feet, 3-inch galvanized iron pipe. 21 - 117 feet, 3-inch black iron pipe. 117 - 1,567 feet, 2-inch extra heavy iron pipe.
Completion–	bottom 147 feet of 2-inch pipe is perforated (from 1,420 to 1,567 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 1,821 (altimeter).
Water level–	flows.
Remarks–	water temperature 90°F, log (electric), chemical analysis, well flowed 4 gpm and pumped 25 gpm when drilled - well flowed less than 1 gpm in August 1966.

42-26-21cdc

Owner–	G. Bachman.
Date drilled–	1952.
Driller–	Independent Drilling Co. (J. Selnes), Faulkton, South Dakota.
Depth–	2,730 feet (driller).
Casing–	0 - 500 feet, 5-inch black iron pipe. 500 - 2,730 feet, 2-inch black iron pipe.
Completion–	bottom 50 feet of 2-inch pipe perforated (from 2,680 to 2,730 feet).
Aquifer–	Minnelusa Formation and Madison Limestone.
Elevation–	land surface 2,202 feet (altimeter).
Water level–	41.58 feet above land surface, August 16, 1966.
Remarks–	water temperature 110°F, log (drillers), chemical analysis, well reported to have flowed 100 gpm when drilled, flowed 25 gpm 8-16-66.

42-26-27bda

Owner–	D. Brown.
Date Drilled–	August 19 - September 1, 1964.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,000 feet (driller).
Casing–	0 - 386 feet, 5-inch black iron pipe. 362 - 2,000 feet, 2½-inch black iron pipe. The 2½-inch pipe is connected to the 5-inch pipe with a 2½-inch lead seal.
Completion–	bottom 210 feet of 2½-inch pipe is perforated (from 1,790 to 2,000 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,153 feet (altimeter).
Depth to water–	250 feet (driller). 70 feet (owner).
Remarks–	chemical analysis, well pumps about 20 gpm.

42-26-34ab
Owner– M. Kosken.
Date drilled– August 1- August 14, 1965.
Driller– Independent Drilling Co. (C. Selnes), Faulkton, South Dakota.
Depth– 2,934 feet (driller).
2,920 feet (e-log, well was drilled deeper after e-log was run).
Casing– 0 - 200 feet, 5-inch black iron pipe.
0 - 2,934 feet, 2-inch extra heavy copper pipe.
Completion– bottom 275 feet of 2-inch pipe perforated (from 2,659 to 2,934 feet).
Aquifer– Minnelusa Formation and Madison Limestone.
Elevation– land surface 2,174 feet (altimeter).
Water level– 73.92 feet above land surface, August 6, 1966.
Remarks– water temperature 142°F, log (electric, chemical analysis, well flowed 23 gpm 8-6-66.

42-27-1aaa
Owner– H. Sherwood.
Date drilled– 1961.
Driller– M. Sather, Presho, South Dakota.
Depth– 1,600 feet (driller).
Casing– unknown.
Completion– unknown
Aquifer– Dakota Formation.
Elevation– land surface 1,855 (altimeter).
Water level– flows.
Remarks– water temperature more than 110°F, chemical analysis, well flowed about 25 gpm 9-13-66.

42-27-2ccdc
Owner– B. Ryno.
Date drilled– 1962.
Driller– M. Sather, Presho, South Dakota.
Depth– 1,998 feet (driller).
Casing– 0 - 280 feet, 4-inch black iron pipe.
280 - 1,990 feet, 2-inch black iron pipe.
Completion– 2-inch pipe is perforated.
Aquifer– Dakota Formation.
Elevation– land surface 2,125 feet (altimeter).
Depth to water– 180 feet (owner).
Remarks– water temperature more than 110°F, chemical analysis

42-27-23aca
Owner– R. Ryno.
Date drilled– 1962.
Driller– M. Sather, Presho, South Dakota
Depth– 1,993 feet (driller).
Casing– 4-inch black iron pipe at surface
Completion– unknown
Aquifer– Dakota Formation
Elevation– land surface 2,173 feet (altimeter).
Depth to water– 225 feet (owner).
Remarks– water temperature more than 110°F, chemical analysis.

42-28-22b
Owner– W. Krogman.
Date drilled– April 26 - May 11, 1963.

42-28-22b -- continued.

Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,360 feet (driller). 2,380 feet (e-log, possible slippage occurred during logging).
Casing–	0 - 357 feet, 5-inch black iron pipe. 0 -2,360 feet, 2½-inch seamless black iron pipe.
Completion–	bottom 494 feet of 2½-inch pipe is perforated (from 1,866 to 2,360 feet).
Aquifer–	Dakota Formation, Inyan Kara Formation, pre-Cretaceous sandstones.
Elevation–	land surface 2,098 feet (altimeter).
Water Level–	55.44 feet above land surface, August 4, 1966.
Remarks–	water temperature 140°F, log (electric), chemical analysis, well flowed 37.5 gpm 8-4-66.

42-28-30bbb

Owner–	L. Iwan.
Date drilled–	July 1 - July 20, 1966.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,400 feet (driller).
Casing–	0 - 195 feet, 5-inch black iron pipe. 195 - 2,400 feet, 2½-inch black iron pipe.
Completion–	bottom 252 feet of 2½-inch pipe perforated (from 2,148 to 2,400 feet).
Aquifer–	Inyan Kara Formation.
Elevation–	land surface 2,146 feet (altimeter).
Water level–	16.71 feet above land surface when drilled. 17.56 feet above land surface, August 4, 1966.
Remarks–	water temperature 137°F, chemical analysis, well flowed 28 gpm when drilled, and 27 gpm 8-4-66.

42-29-7c

Owner–	C. Jensen.
Date drilled–	October, 1964.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,460 feet (driller). 2,445 feet (e-log, well was drilled deeper after e-log was run).
Casing–	0 - 252 feet, 5-inch black iron pipe. 231 - 2,460 feet, 2½-inch black iron pipe.
Completion–	bottom 321 feet of 2½-inch pipe perforated (from 2,039 to 2,460 feet).
Aquifer–	Inyan Kara Formation and pre-Cretaceous sandstones.
Elevation–	land surface 2,087 feet (altimeter).
Depth to water–	6.00 feet, August 16, 1966.
Remarks–	log (electric and drillers), chemical analysis, pumps about 25 gpm.

42-30-12cb

Owner–	W. Jensen.
Date drilled–	April 30- March 7, 1961.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,110 feet (driller). 1,930 feet (e-log, well was drilled deeper after e-log was run).
Casing–	0 - 110 feet, 5-inch black iron pipe. 0 - 2,110 feet, 2-inch black iron pipe. 0 - 2,110 feet, 1½-inch copper.
Completion–	bottom 375 feet of 2-inch and 1½-inch pipes are perforated (from 1,735 to 2,110 feet).

42-30-12cb -- continued.

Aquifer– Dakota Formation.
Elevation– land surface 2,005 feet (topographic).
Water level– 46.20 feet above land surface when well was first drilled.
39.27 feet above land surface, July 7, 1966.
Remarks– water temperature 115°F, log (electric), chemical analysis, well flowed 16.6 gpm 7-7-66.

42-30-13dbb
Owner– W. Jensen.
Date drilled– January 8 - January 18, 1960.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,125 feet (driller).
Casing– 0 - 558 feet, 5-inch black iron pipe.
558 - 2,125 feet, 2-inch black iron pipe.
Completion– bottom 126 feet of 2-inch pipe perforated (from 1,999 to 2,125 feet).
Aquifer– Dakota Formation.
Elevation– land surface 2,216 feet (altimeter).
Depth to water– 180 feet when drilled.
Remarks– chemical analysis, pumps about 15 gpm.

42-30-15b
Owner– W. Jensen.
Date drilled– July 22 - August 3, 1964.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,430 feet (driller).
2,420 feet (e-log, well was drilled deeper after e-log was run).
Casing– 0 - 359 feet, 5-inch black iron pipe.
320 - 2,430 feet 2-inch black iron pipe.
320 - 2,430 feet, 1½-inch copper pipe. The 2-inch pipe is connected to the 5-inch pipe with a lead seal.
Completion– bottom 210 feet of 2-inch and 1½-inch pipes are perforated (from 2,220 to 2,430 feet).
Aquifer– Inyan Kara Formation and pre-Cretaceous sandstones.
Elevation– land surface 2,140 (estimated with hand level).
Depth to water– 14 feet (reported by driller).
Remarks– water temperature 87°F, log (electric and drillers) chemical analysis, pumps about 15 gpm.

42-31-34aba
Owner– C. Chamberlain (T.U.F. Inc.).
Date drilled– October 19 - October 27, 1965.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,300 feet (driller).
2,306 feet (e-log).
Casing– 0 - 595 feet, 5-inch standard steel pipe.
574 - 2,300 feet, 2½-inch black iron pipe.
The 2½-inch pipe is connected to the 5-inch pipe with a lead seal.
Completion– bottom 231 feet of 2½-inch pipe is perforated (from 2,069 to 2,300 feet).
Aquifer– Dakota Formation.
Elevation– land surface 2,350 (altimeter).
Depth to water– 275 feet (driller).

42-31-34aba -- continued.

Remarks– log (electric, chemical analysis, pumps 25 - 30 gpm.

43-25-24

Owner– P. McDill.
Date drilled– 1953.
Driller– unknown.
Depth– unknown.
Casing– unknown.
Completion– unknown.
Aquifer– Dakota Formation.
Elevation– unknown.
Water level– unknown.
Remarks– chemical analysis, flowed about 15 gpm when drilled.

43-26-16ca

Owner– R. Edwards.
Date drilled– 1951.
Driller– M. Sather, Presho, South Dakota.
Depth– 1,515 feet (driller).
Casing– 0 - 150 feet, 3½-inch black pipe.
150 - 1,515 feet, 2-inch black pipe.
Completion– unknown.
Aquifer– Dakota Formation.
Elevation– land surface 1,740 (topographic map).
Water level– 127.05 feet above land surface, September 13, 1956.
101.64 feet above land surface, August 17, 1966.
Remarks– water temperature 104°F, well flowed 67 gpm 8-17-66.

43-26-33add

Owner– J. Till.
Date drilled– September 14 - September 24, 1964.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,172 feet (driller).
2,172 feet (e-log).
Casing– 0 - 163 feet, 5-inch black iron pipe.
0 - 2,172 feet, 2½-inch R & D black iron pipe.
The 2½-inch pipe is connected to the 5-inch pipe with a 3-inch lead seal.
Completion– bottom 273 feet of 2½-inch pipe perforated (from 1,899 to 2,172 feet).
Aquifer– Inyan Kara Formation and pre-Cretaceous sandstones.
Elevation– land surface 1,900 feet (altimeter).
Water level– 286.44 feet above land surface when drilled (reported by driller).
256.41 feet above land surface 8-17-66.
Remarks– water temperature 128°F, log (electric), chemical analysis, well reported to have flowed 150 gpm when drilled and flowed 160 gpm 8-17-66.

43-27-3ca

Owner– R. Edwards.
Date drilled– December, 1952.
Driller– Art Larson, Redfield, South Dakota.
Depth– 1,585 feet (driller).
Casing– 5-inch pipe at surface

43-27-3ca -- continued.

	2-inch pipe below.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 1,745 feet (topographic map).
Water level–	4.00 feet above land surface, 8-31-61.
Remarks–	water temperature 129°F, chemical analysis, well flowed 63 gpm, August 31, 1961.

43-27-11ad

Owner–	R. Edwards.
Date drilled–	1952 or 1953.
Driller–	Norbeck Co., Redfield, South Dakota.
Depth–	1,700 feet (owner).
Casing–	2-inch pipe at surface.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 1,710 feet (topographic map).
Water level–	flows.
Remarks–	water temperature 122°F, well flowed 40 gpm, September 14, 1956.

43-27-14dbb

Owner–	R. Edwards.
Date drilled–	August 1 - August 8, 1960.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	1,605 feet (driller).
Casing–	0 - 213 feet, 3-inch black iron pipe. 213 - 1,605 feet, 2-inch extra heavy black iron pipe.
Completion–	bottom 145 feet of 2-inch pipe perforated (from 1,460 to 1,605 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 1,830 feet (topographic map).
Water level–	14.32 above land surface, July 25, 1963. 11.09 above land surface, May 13, 1964. 9.24 above land surface, May 26, 1965. 9.82 above land surface, July 7, 1966. 9.24 above land surface, May 25, 1967.
Remarks–	water temperature 112°F, chemical analysis, flowed 35 gpm when drilled, 14 gpm, 7-25-63, and 12 gpm, 5-13-64 to 5-25-67, used as artesian observation well and measured once each year.

43-28-36ac

Owner–	M. Williams.
Date drilled–	December 1 - December 12, 1960.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth	1,992 feet (driller).
Casing–	0 - 21 feet, 5-inch galvanized iron pipe. 21 - 364 feet, 5-inch black iron pipe. 364 - 1,992 feet, 2-inch extra heavy black iron pipe.
Completion–	bottom 155 feet of 2-inch pipe perforated (from 1,837 to 1,992 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,112 feet (topographic map).
Depth to water–	170 feet when drilled.

43-28-36ac – continued.

Remarks– water temperature 112°F, chemical analysis, pumps about 20 gpm.

43-30-5cac

Owner– H. Peterson.
Date– June 2 - June 12, 1961.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,015 feet (driller).
Casing– 0 - 185 feet, 5-inch black iron pipe.
185 - 2,015 feet, 2-inch extra heavy black iron pipe.
Completion– bottom 200 feet of 2-inch pipe perforated (from 1,815 to 2,015 feet).
Aquifer– Dakota Formation.
Elevation– land surface 2,015 feet (topographic map).
Depth to water– 90 feet when drilled.
94.92 feet, July 30, 1963.
98.32 feet, May 13, 1964.
100.72 feet, May 25, 1965.
104.73 feet, July 7, 1966.
105.20 feet, May 25, 1967.
Remarks– water temperature 74°F, chemical analysis, pumps about 10 gpm, used as artesian observation well and measured once each year.

43-30-29a

Owner– W. Jensen.
Date drilled– August 26 - September 10, 1964.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,555 feet (driller).
2,555 feet (e-log).
Casing– 0 - 418 feet, 5-inch black iron pipe.
389 - 2,555 feet, 2½-inch R & D black iron pipe.
The 2½-inch pipe is connected to the 5-inch pipe with a 2½-inch lead seal.
Completion– bottom 105 feet of 2½-inch pipe perforated from 2,450 to 2,555 feet).
Aquifer– Inyan Kara Formation.
Elevation– 2,375 feet (topographic map).
Depth to water– 153 feet when drilled (reported by driller).
Remarks– water temperature 89°F, log electric, chemical analysis, pumps 20 gpm.

44-31-20bbb

Owner– G. England
Date drilled– December 31, 1965 - January 5, 1966.
Driller– Huron Drilling Inc., Huron, South Dakota.
Depth– 2,315 feet (driller).
Casing– 0 - 604 feet, 5-inch black iron pipe.
570 - 2,315 feet, 2½-inch black iron pipe.
The 2½-inch pipe is connected to the 5-inch pipe with a 2½-inch lead seal.
Completion– bottom 252 feet of 2½-inch pipe is perforated (from 2,063 to 2,315 feet).
Aquifer– Dakota Formation.
Elevation– land surface 2,340 feet (topographic map).

44-31-20bbb -- continued.

Depth to water–	311 feet when drilled (reported by driller). 314.0 feet, August 4, 1966.
Remarks–	log (drillers), water temperature 95°F, chemical analysis, well pumps about 25 gpm.

45-32-36b

Owner–	H. Iwan.
Date drilled–	January 6 - January 17, 1966.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,387 feet (driller). 2,332 feet (e-log, well was drilled deeper after e-log was run).
Casing–	0 - 175 feet, 5-inch black iron pipe. 140 - 2,387 feet, 2½-inch black iron pipe. The 2½-inch pipe is connected with a lead seal.
Completion–	bottom 210 feet of 2½-inch pipe is perforated (from 2,177 to 2,387 feet).
Aquifer–	Inyan Kara Formation.
Elevation–	land surface 2,138 feet (altimeter).
Water level–	138.6 feet above land surface, August 4, 1966.
Remarks–	water temperature 136°F, log (electric and drillers), chemical analysis, well flowed about 50 gpm, 8-4-66.

TODD COUNTY

39-27-10cacd

Owner–	Drilled for U. S. Bureau of Indian Affairs.
Date drilled–	1895 - 1897.
Driller–	unknown.
Depth–	2,500 feet (driller).
Casing–	0 - 2,145 feet, 8-inch iron pipe. 2,145 - total depth, 6-inch iron pipe.
Completion–	unknown.
Aquifer–	Dakota Formation.
Elevation–	land surface 2,626 feet (reported).
Depth to water–	500 feet, approximately.
Remarks–	Log. This was a test well, the records are very sketchy, the best is given by N. H. Darton in U. S. Geological Survey Water-Supply Paper 227 (p. 132) and South Dakota Geol. Survey Rept. Inv. 61, (p. 30-32).

39-30-11dd

Owner–	L. Krogman.
Date drilled–	May 26 - June 11, 1963.
Driller–	Huron Drilling Inc., Huron, South Dakota.
Depth–	2,490 feet (driller).
Casing–	0 - 600 feet, 5-inch No. 10 R & D black iron pipe. 534 - 2,490 feet, 2½-inch black iron pipe. The 2½-inch pipe is connnected to the 5-inch pipe with a lead seal.
Completion–	bottom 180 feet of 2½-inch pipe perforated (from 2,310 to 2,490 feet).
Aquifer–	Dakota Formation.
Elevation–	land surface 2,425 feet (estimated from 1:250,000 topographic map).
Depth to water–	404 feet, August 14, 1966.
Remarks–	well pumps 12 - 15 gpm.

Table 5. – Chemical analyses of ground water.

The chemical composition of natural waters is affected by the soluble products of rock weathering and decomposition. Chemical analyses of representative water samples help determine the general suitability of water for specific uses. The analyses listed on the following pages are representative of water from the sources shown in the vicinity of the data-collection point. Because of the wide variation in ground-water quality, the extent to which data in the analyses may be interpolated for other sites is uncertain. Before water is used for domestic, irrigation, industrial, or municipal use; however, a sample should be analyzed to determine its suitability. Periodic analyses should also be made after initial sampling because the quality of ground water can change.

In addition to the analyses shown in this table, the results of field tests are available. The chemical or physical properties of ground water indicated by the field tests are given in table 6.

TABLE 5.--CHEMICAL ANALYSES OF GROUND WATER [a/]

[Chemical constituents are given in milligrams per liter]

Well location number	Geologic source [b]	Well depth (feet)	Date of collection	Specific conductance (micromhos/cm at 25°C)	pH	Temperature (F°)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Iron (Fe)	Manganese (Mn)	Residue at 180°C	Calculated dissolved solids	Calcium & Magnesium hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Sodium-adsorption-ratio (SAR)	Selenium (Se)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
												JONES COUNTY														
4-29-8bdb	Qf	---	7-06-66	1,150	7.9	52	25	71	7.3	183	7.4	469	0	223	8.0	0.4	0.3	0.31	0.42	1.2	771	---	207	0	5.6	.00
												MELLETTE COUNTY														
40-25-5adc	Qt	35	11-20-65	530	7.6	52	21	75	10	23	7.4	278	0	50	4.5	.2	3.2	.13	.08	.10	336	---	230	2	.7	.01
40-25-12bd [c]	Kd	1,681	2-25-30	---	---	---	20	71	9.8	516	---	451	---	768	120	---	---	---	---	---	---	1,730 [d]	218	---	---	---
40-25-20cdb	Kd	1,692	11-20-65	2,530	7.7	75	12	33	7.9	556	13	672	0	545	138	2.5	0.0	3.6	.02	.13	1,790	1,640	115	0	23	.01
40-27-5abc	Tw	43	7-07-66	994	7.8	60	39	122	12	86	1.4	456	0	149	17	.4	1.0	.11	.03	.00	672	---	353	0	2.0	.03
40-28-7bbd	Qc	45	11-20-65	3,190	7.6	55	30	367	40	381	24	600	0	1,120	103	.5	183	.68	.52	.12	2,620	2,540	1,080	588	5.0	.50
40-31-5cbb2	Tw	105	11-19-65	431	7.6	55	53	22	4.1	67	9.0	217	0	17	13	.3	8.2	.18	.05	.10	308	---	72	0	3.4	.01
40-33-3ad	Ta	150	11-19-65	587	7.9	65	65	17	.1	119	9.4	355	0	19	5.7	.0	1.1	.11	.01	.11	425	---	43	0	7.9	.01
41-25-31cab [e]	Kd	1,775	10-25-66	2,440	7.5	---	---	20	2.4	564	12	---	---	5	5.0	---	0.0	---	1.1	---	---	1,320 [d]	60	---	32	---
41-25-35ccd [e]	Kd	1,700	10-25-66	2,540	7.3	87	---	24	17	555	16	---	---	450	2.5	---	---	---	.36	---	---	1,580 [d]	130	---	9.3	---
41-26-8aa [e]	PPm	2,875	10-25-66	1,850	7.1	---	---	336	34	45	4.9	---	---	700	78	---	---	---	2.0	---	---	1,640 [d]	980	---	.6	---
41-26-27 [e]	Kd	1,960	10-24-66	2,600	7.1	---	---	232	48	370	24	---	---	860	2.5	---	---	---	2.5	---	---	1,950 [d]	780	---	5.8	---
41-26-30ddc	Kd	1,804	7-25-63	2,780	7.4	93	26	41	13	579	17	494	0	890	85	4.1	0.0	2.5	8.7	.19	1,910	1,910	154	0	20	---
41-27-12daa	Qc	50	7-06-66	3,440	7.5	56	29	527	132	273	13	444	0	1,930	13	.4	18	.94	.03	.00	3,410	3,150	1,860	1,500	2.8	.05
41-27-25cb [c]	Kd	1,866	3- -30	---	---	---	25	9.8	5.0	686	---	---	---	172	362	---	---	---	---	---	---	1,810 [d]	45	---	---	---
41-27-25da	Kd	1,779	11-20-65	3,480	7.8	---	26	17	1.3	781	15	1,060	0	.2	656	3.0	0.0	7.1	1.7	.14	2,070	2,030	48	0	49	.01
41-33-2dab	Ta	39	11-19-65	415	7.4	53	37	55	4.6	26	8.2	252	0	6.2	1.6	.2	8.8	.04	.05	.08	268	---	156	0	.9	.00
42-25-32cc	Mm	2,690	5-16-66	1,510	7.3	132	40	246	47	35	13	152	0	672	42	1.7	0.0	.17	.45	.05	1,270	1,170	806	681	.5	---
42-25-34cc	Kd	1,567	11-20-65	2,440	7.6	90	22	13	2.6	548	12	588	0	120	440	4.0	0.0	3.7	.47	.11	1,450	1,450	43	0	.36	.00
42-26-21cdc [e]	PPm & Mm	2,730	10-25-66	1,600	6.9	>110	---	252	70	48	17	---	---	620	53	---	0.0	---	.84	---	---	1,270 [d]	920	---	.68	---
42-26-27bda [e]	Kd	2,000	10-26-66	2,700	8.0	---	---	12	9.6	585	16	---	---	570	116	---	---	---	.01	---	---	1,740 [d]	484	---	30	---
42-26-34ab [e]	PPm & Mm	2,934	10-25-66	1,330	7.9	142	---	268	24	39	10	---	---	630	2.5	---	0.0	---	.35	---	---	1,180 [d]	770	---	.54	---
42-27-1aaa [e]	Kd	1,600	10-27-66	2,820	8.4	>110	---	4	2.4	686	10	---	---	600	110	---	---	---	0.00	---	---	1,820 [d]	20	---	66	---
42-27-2ccdc [e]	Kd	1,998	10-27-66	2,765	8.3	>110	---	8	2.4	670	10	---	---	450	110	---	---	---	.56	---	---	1,900 [d]	30	---	53	---
42-27-23bdd [e]	Kd	1,993	10-27-66	2,735	8.3	>110	---	28	4.8	650	12	---	---	540	114	---	---	---	.05	---	---	1,890 [d]	90	---	30	---
42-28-22b	Kd & Ki	2,360	11-19-65	2,480	7.2	140	32	344	93	131	20	132	0	1,090	184	2.8	0.4	.21	1.2	.27	2,140	1,960	1,240	1,130	1.6	.00
42-28-30bbb [e]	Ki	2,400	10-27-66	3,880	7.1	137	---	128	41	732	21	---	---	1,150	147	---	0	---	.38	---	---	2,430 [d]	490	---	14	---
42-29-7c [e]	Ki	2,460	10-27-66	3,875	8.1	---	---	40	9.6	880	19	---	---	1,010	196	---	---	---	4.4	---	---	2,760 [d]	140	---	33	---
42-29-34ac	Qf	18	11-20-65	337	7.4	59	42	40	4.4	24	9.2	201	0	9.2	5.0	.5	.0	.03	.49	.49	232	---	118	0	1.0	.00
42-30-12cb	Kd	2,110	11-19-65	4,080	8.0	115	30	21	2.1	965	11	870	0	1,170	144	4.6	.1	2.6	.07	.14	2,900	2,780	61	0	54	.01
42-30-13dbb [c]	Kd	2,125	10-28-66	2,725	8.2	---	---	8	2.4	644	7.0	---	---	780	38	---	---	---	.04	---	---	1,870 [d]	30	---	51	---
42-30-15b	Ki	2,430	11-19-65	5,590	7.9	87	28	51	7.1	1,290	17	740	0	1,840	255	3.9	.1	1.9	5.7	.14	4,070	3,860	156	0	45	.00
42-31-34aba	Kd	2,300	5-16-66	2,300	7.7	---	20	129	19	385	20	264	0	985	39	1.9	.0	.51	1.1	.06	1,810	1,730	400	184	8.4	---
43-25-9cba	Qf	12	7-06-66	1,880	7.8	49	24	175	22	209	9.8	350	0	288	137	.5	271	.26	.01	.38	1,320	1,310	525	238	4.0	.01
43-25-24 [f]	Kd	---	4-03-53	2,810	8.0	---	---	11	4.1	620	14	714	42	464	224	---	---	---	---	---	---	1,810 [d]	---	---	---	---
43-26-14daa	Qo	40	7-07-66	2,550	7.7	51	28	227	68	256	13	320	0	600	130	.2	438	.72	.02	.00	2,000	1,920	846	584	3.8	.04

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
43-26-33add	Ki	2,172	11-20-65	2,610	7.1	128	24	370	94	119	21	139	0	1,060	229	1.0	.5	.18	5.9	.19	2,220	1,990	1,310	1,200	1.4	.00
43-27-3ca[e]	Kd	1,585	10-28-66	2,900	8.3	129	---	4	9.6	726	10	---	---	600	126	---	---	---	0.0	---	---	998[d]	50	---	45	---
43-27-14dbb	Kd	1,605	7-25-63	3,040	8.1	112	22	9.6	1.9	706	11	976	0	3.5	329	4.4	.0	4.6	.14	.00	1,890	1,880	32	0	54	---
43-28-2bdd	Qo	19	7-06-66	1,860	7.7	54	27	178	42	196	18	296	0	720	38	.3	17	.62	.05	.00	1,430	1,380	618	375	3.4	.02
43-28-18cbc	Qo	70	7-07-66	4,340	8.0	62	11	214	48	756	13	457	0	1,740	174	.3	3.8	.26	.02	.20	3,380	3,190	733	358	12	.00
43-28-36ac[e]	Kd	1,992	10-27-66	2,670	8.2	112	---	8	2.4	690	8	---	---	550	104	.0	---	---	---	---	---	1,770[d]	30	---	55	---
43-30-5cac	Kd	2,015	7-30-63	2,820	8.0	74	26	5.9	1.1	650	7.4	656	0	800	84	3.4	.0	1.3	4.5	.06	1,910	1,910	19	0	65	---
43-30-29a	Ki	2,555	11-19-65	4,320	7.9	89	30	18	3.2	1,050	9.8	875	0	1,270	179	4.4	.1	2.2	1.3	.14	3,060	3,000	58	0	60	.00
44-31-6cab	Qo	60	7-07-66	3,570	7.6	54	13	504	100	306	24	332	0	1,940	68	.3	.3	.88	.18	.47	3,330	3,120	1,670	1,400	3.2	.00
44-31-20bbb[e]	Kd	2,315	10-26-66	2,680	7.1	95	---	8	2.4	646	7.2	---	---	620	76	---	---	---	.04	---	---	1,800[d]	30	---	52	---
45-32-36b[e]	Ki	2,387	10-26-66	6,300	7.4	136	---	12	17	1,488	13	---	---	1,950	352	---	---	---	1.2	---	---	4,333[d]	100	---	65	---
												TODD COUNTY														
35-28-10ccc	To	125	11-18-65	392	7.7	60	60	63	6.3	6.0	9.0	224	0	10	3.1	0.5	0.8	0.02	0.06	0.10	286	---	183	0	0.2	0.01
35-32-3ac	Qw	110	11-17-65	346	7.8	57	73	41	4.5	23	9.6	194	0	20	.8	.6	.4	.04	.02	.12	269	---	121	0	.9	.00
36-28-7dd1[f]	To	214	4-02-53	400	7.5	---	---	63	5.1	4.8	9.0	186	6.0	39	7.1	---	---	---	---	---	---	272[d]	---	---	---	---
36-28-7dd2[f]	To	72	2-10-53	800	7.2	---	---	67	42	12	5.5	241	6.0	33	44	---	---	---	---	---	---	448[d]	---	---	---	---
36-29-15bbb[g]	To	160	10-26-65	500	---	---	---	72	9.0	22	7.8	260	---	35	---	---	0.0	---	---	---	---	---	220	---	---	---
36-30-24ccd	To	80	11-18-65	416	7.4	53	60	61	9.2	7.3	8.2	214	0	9.2	8.7	.2	13	.04	.03	.09	298	---	190	15	.2	.01
36-32-1cd	Qf & Ta	60	11-17-65	437	7.7	58	68	30	3.9	59	11	248	0	28	1.7	.5	.1	.09	.01	.14	324	---	91	0	2.7	.01
36-33-10ab	Qw & To	65	11-17-65	227	7.8	49	59	24	2.9	16	6.8	126	0	6.2	1.2	.2	4.9	.02	.02	.10	182	---	72	0	.8	.01
37-26-9bbb1	Ta	70	11-18-65	407	7.1	53	63	60	4.5	14	14	241	0	9.0	3.4	.4	1.5	.03	.01	.08	288	---	168	0	.5	.00
37-30-32bb	To & Ta	295	11-18-65	369	7.6	52	60	50	7.3	10	8.4	207	0	12	2.3	.3	5.7	.04	.00	.12	261	---	155	0	.4	.01
38-27-1bba	To & Ta	40	11-18-65	371	7.8	48	63	49	8.6	11	12	212	0	6.0	3.9	.3	7.5	.12	.11	.12	264	---	158	0	.4	.01
38-28-5aa	Ta	136	11-18-65	419	8.0	54	60	18	1.5	71	11	235	0	20	4.6	.4	2.5	.12	.08	.13	303	---	51	0	4.3	.00
38-28-5ab[g]	Ta	135	1- -63	---	7.6	---	31	36	3.8	70	15	278	0	58	7.0	---	---	---	.20	---	370	---	103	0	---	---
38-29-17cc[f]	Ta	100	2- -65	400	---	---	---	48	4.8	5.1	7.8	190	---	0	5.0	---	0.0	---	---	---	---	---	140	---	---	---
38-30-17dcd	Qf	35	7-07-66	498	8.1	53	66	67	7.8	30	9.2	323	0	8.2	1.8	.4	.2	.06	.02	.05	350	---	199	0	.9	.01
38-30-27ddd	Ta	58	11-17-65	440	7.8	52	67	63	6.3	23	9.0	287	0	3.5	2.0	.2	0.0	.05	.17	.81	311	---	183	0	.7	.01
38-30-34aa	Ta	225	11-17-65	609	8.1	57	70	26	2.7	111	11	305	0	73	4.2	.5	.6	.21	.02	.23	499	---	76	0	5.5	.02
38-32-11cac1	Ta	123	11-17-65	390	7.5	52	64	61	6.1	12	4.2	223	0	10	7.1	.4	1.4	.03	.02	.12	298	---	177	0	.4	.01
39-26-12cdc	Qf & Qc	30	11-18-65	1,710	7.8	53	45	208	35	156	24	471	0	575	15	.5	1.2	.16	.02	.11	1,350	1,290	663	277	2.6	.06
39-28-32dac[h]	Ta	120	8-02-61	61	7.7	---	---	66	15	---	---	279	---	---	22	---	---	---	0.01	---	---	420[d]	196	---	---	---
39-28-32dca[h]	Ta	150	8-02-61	68	7.7	---	---	59	19	---	---	277	---	---	18	---	---	---	.05	0.01	---	482[d]	176	---	---	---
39-28-32ddb[h]	Ta	135	8-02-61	65	7.8	---	---	52	5.8	---	---	250	---	---	44	0.28	---	---	.01	---	---	444[d]	154	---	---	---
39-28-32ddd[g]	Ta	110	1- -63	---	7.7	---	28	36	3.8	63	15	251	0	36	11	---	---	---	.28	---	362	---	103	0	---	---
39-31-9bba	Ta	Spring	7-07-66	384	8.1	---	65	18	1.2	65	9.4	232	0	8.0	3.0	.4	1.6	.10	.02	.00	285	---	50	0	4.0	0.00
39-32-6ac	Ta	150	11-17-65	413	7.4	51	69	55	4.6	25	7.0	241	0	15	3.0	.3	.9	.03	.01	.12	311	---	156	0	.9	.01

[a] Analyses, except as noted in the location column, are by the U. S. Geological Survey's Quality of Water Laboratory, Lincoln, Nebraska.

[b] The following abbreviations are used to indicate geologic source of water: Qf - flood plain alluvium, Qt - terrace alluvium, Qc - colluvial and alluvial deposits of broken Pierre Shale, Qw - wind-blown sand deposits, Qo - old terrace deposits, To - Ogallala Formation, Ta - Arikaree Formation, Tw - White River Group, Kd - Dakota Formation, Ki - Inyan Kara Formation, PPm - Minnelusa Formation, Mm - Madison Limestone.

[c] Analyses from Tullis, Gries, and Cope, 1954.

[d] Method of determining total dissolved solids unknown.

[e] Analysis by Water Resource Research Institute, South Dakota State University, Brookings, South Dakota.

[f] Analysis by Soils Laboratory, South Dakota Agricultural Experiment Station, Brookings, South Dakota.

[g] Analysis by Engineering and Mining Experiment Station, South Dakota School of Mines and Technology, Rapid City, South Dakota.

[h] Analysis by South Dakota Department of Health, Pierre, South Dakota.

Table 6. – Field tests - chemical quality of ground water

To help determine variations in the chemical quality of water within an aquifer and between aquifers, field tests were made to determine selected chemical and physical properties of ground water. The results of these field tests are not as accurate as laboratory analyses, but they aided in the selection of locations where water samples for complete laboratory analyses were collected (results are given in table 5). Also, the results of these field tests are useful in that they give a general indication of water quality.

Well Location number	Chloride (Cl) (m/l)	Calcium and magnesium hardness as $CaCO_3$ (m/l)	Specific conductance (micromhos/cm at 25°C)	pH
(1)	(2)	(3)	(4)	(5)
		MELLETTE COUNTY		
40-27-14cdd1	50	291	820	7.6
40-28- 4ddc1	38	257	760	7.7
40-32-10dca	38	51	310	8.1
41-25-11aac	–	1,640	–	–
41-27-10aa1	–	428	–	–
41-27-10aa2	–	2,050	–	–
-20cdb2	–	342	–	–
41-29-27abb2	113	103	2,400	7.6
41-33- 2dab	25	154	460	7.8
42-27-15ba	–	2,220	–	–
42-31-11ccb2	–	1,350	–	–
-33bb	63	51	1,450	10.2
42-32- 9c	–	59	–	–
43-26-14daa	–	–	2,800	–
43-27-11ad	–	–	3,000	–
43-27-20dd	–	1,880	–	–
43-28- 2bdd	–	–	1,650	–
		TODD COUNTY		
(1)	(2)	(3)	(4)	(5)
35-31- 5ab2	25	86	90	7.3
-12dd	25	103	117	7.8
35-32- 7bd	25	86	140	7.6
36-28- 5ddb	25	154	280	7.5
- 7dd2	12	240	398	7.6
36-28- 8ada	25	223	428	7.9
- 8caa	38	257	469	7.7
- 9cba	25	205	408	7.7
-17bb	12	188	296	7.6
-17b	38	188	377	7.9

Todd County -- continued.

(1)	(2)	(3)	(4)	(5)
36-28-18acc	25	137	310	7.9
-18cd	88	411	816	7.9
-29ac1	25	120	568	7.9
-29db	175	445	1,300	7.8
-30b	25	171	296	7.9
36-28-30dd1	25	188	316	7.9
-30dd2	50	257	418	7.9
-31a	38	205	398	7.9
36-29-13dcc	25	188	367	7.9
-35da	25	188	388	7.9
36-30-13acc	25	154	260	7.9
-24cdd	38	188	340	7.9
36-31-15a2	25	86	114	7.4
-22cc	25	86	150	8.0
36-32- 9cda	25	51	100	7.3
37-28-18acc	25	188	320	7.9
-19ac	62	291	459	7.9
-29bcd	25	188	296	7.9
-30add	25	171	367	7.9
-30caa	113	428	770	7.9
37-29-21baa	38	205	410	7.8
-28acc	38	188	340	7.8
37-31-18cb	25	86	200	7.9
37-32-33b	25	120	118	7.5
37-33-25db	25	103	200	7.5
38-27- 1bba	25	171	320	7.9
- 9bcb1	25	154	270	7.8
-19aba1	25	233	330	7.9
38-30-27ddc	--	--	1,516	--
-27ddd	--	--	453	--
38-31- 1cbc	25	68	345	7.8
39-32-13bbb	38	51	390	7.9

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