



SOUTH DAKOTA GEOLOGICAL SURVEY
 Duncan J. McGregor, State Geologist

Circular 36

SELECTED FORMATION TOPS IN
 WATER WELLS LOGGED BY THE
 SOUTH DAKOTA GEOLOGICAL SURVEY
 TO JANUARY 1, 1968

Compiled by Robert A. Schoon

Science Center
 University of South Dakota
 Vermillion, South Dakota
 1968

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INTRODUCTION

The information contained in this circular was compiled to make data obtained from water wells and test holes drilled in the State readily available. Only wells that have been logged electrically are included. These logs have been run by personnel of the South Dakota Geological Survey, the U. S. Geological Survey, and commercial well-logging companies. Copies of all logs listed are available in the files at the South Dakota Geological Survey in Vermillion.

This circular is a companion to Circular #35 (Selected Formation Tops in Oil and Gas Tests in South Dakota Drilled Before January 1, 1965). The water and the oil industries contribute much information to each other and in view of this the two circulars should be of benefit to both industries.

Formation tops are as described in Circular #35. It is here noted that the Fall River Formation as used in both circulars is equivalent to the "Sundance Sand" of the water well drillers. Likewise, the first thick sand sequence (approximately 300 feet thick in central South Dakota) below the Greenhorn Limestone is the Dakota Formation. The Codell Sandstone top was picked on the basis of E-log characteristics exclusively. Water well drillers are not required to submit well cuttings to this office. As a result, electric log correlations have been carried over great distances without sample confirmation. It is probable that the Codell Sandstone Member is the most unreliable top in the tabulation.

A total of 265 water wells is listed in this compilation. This does not represent the total number of electrical logs run by the various agencies. Many water wells are completed before bedrock is reached. Other wells penetrate bedrock for a short interval and accurate identification cannot be established on the basis of electric log characteristics alone. Some logs are unreliable due to malfunctions in the logging unit. For these reasons many logs in the files of the South Dakota Geological Survey are not included in the tabulation.

Well-site elevations are ground-level elevations unless otherwise noted and have been determined primarily from topographic maps. Figures listed for formation tops are in feet below ground surface.

The locations of wells are abbreviated in the following manner: NE sec. 13, 109 N., 54 W. The legal description of the foregoing location is NE $\frac{1}{4}$, section 13, township 109 north, range 54 west. (See below)

R. 54 W.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

-----T. 109 N.

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Aurora County</u>												
1	Dockendorf Farm	SE SE 20-101N-66W	1570+	951	302	460	550	700				
2	Knigge Farm	SE 24-105N-66W	1614	960	378	490	650	910				
3	White Lake City	SW 11-103N-66W	1644	870	317	448	570	788				855
<u>Beadle County</u>												
1	Barthlow Well	NE SW 35-113N-61W	1260	975	?*	?	510	725				
2	Broadland City	NW NW 24-112N-63W	1307	996	140	A**	506	730				
3	Corcoran Farm	NW 29-112N-62W	1300	840	170	A	472	780				
4	Eichstadt Farm	NE 22-110N-64W	1390	1418	285	A	545	880				
5	Estervig Farm	NE NW 35-113N-61W	1260+	?	?	?	420	?				
6	Glanzer Farm	SE 3-112N-59W	1393	900	282	374	572	840				

* The (?) indicates formation may be present but is not readily determined from log.

** The letter (A) indicates formation is believed to be absent.

No.	Name	Location	Elevation	Total Depth	Nio-brara	Co-dell	Green-horn	Da-kota	Fall River	Minne-lusa	Madi-son	Pre-cambrian
<u>Beadle County--continued</u>												
7	Gruenwold	NE SW 19-109N-65W	1586	1140	350	A	685	975				
8	Kaneb Pipeline	NE NE 36-111N-64W	1315	864	190	282	462	774				
9	Fred Meyer Farm	NW 22-109N-63W	1340	1040	210	310	494	792				
10	Puffer Farm	SE 27-113N-63W	1332	1020+	198	286	460	854				
11	Tschetter Farm	SE 32-113N-62W	1316	910	170	A	466	770				
12	Virgil City	SE 32-110N-63W	1343	1120	228	A	572	822				
13	Waldner Farm	NE 27-113N-59W	1413	1010	330	480	620	890				
14	H. Waters Farm	SE SE 12-113N-60W	1385 ₊	1015	255	360	600	830				975
15	Wipf Farm	NW NW 3-110N-61W	1305	1008	176	314	510	770				
16	Zybell Farm	NE 12-113N-65W	1350	1122	266	422	542	844				
17	USGS Test #1	NW 9-110N-62W	1280 ₊	1254	174	398	492	770				1228

No.	Name	Location	Elevation	Total Depth	Nio-brara	Co-dell	Green-horn	Da-kota	Fall River	Mine-lusa	Madi-son	Pre-cambrian
<u>Bon Homme County</u>												
1	Eggers Farm	NW NE 28-96N-61W	1740 ₊	480	105	420						
2	Lehr Farm	SE 13-96N-58W	1300	560	60	180	300	360				
3	Scotland City	SE 12-96N-60W	1510 ₊	362	140	280						
4	Tyndall City	NW 6-94N-59W	1425	292	80	200						
5	Vilhour Farm	NW 5-94N-60W	1413	262	130	232						
<u>Brookings County</u>												
1	Sinai Well	SW 14-109N-52W	1770	714	540	694						
2	Knudtson Farm	SE cor. 13-110N-52W	1690 ₊ 25	780	480	662						
<u>Brown County</u>												
1	Claremont City	SW NW 1-125N-60W	1300 ₊ 5	860	?	A	485	760				
2	Neuman Farm	SW SW 7-123N-60W	1303	970	152	288	536	790				
3	Warren Ditus Farm	SE 28-121N-61W	1292	1009	188	A	530	810				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Brown County--continued</u>												
4	Rodney Barnes Farm	SE 6-125N-60W	1300	988	155	235	505	760				
5	Rodney Barnes Farm	SW 35-126N-60W	1300+10	1030	190	A	485	760				1015
6	SDGS (R-5)	NE NW 14-125N-60W	1303	183	156							
7	John Peldo Farm	NE NE 33-128N-64W	1422	1455	315	A	670	965	A		1412	1455
8	Walter Daley Farm	NW 21-127N-62W	1345	1228	275	A	550	845	1175			
9	Sperry Farm	SE 20-123N-62W	1300	1203	198	310	522	?				1201
<u>Brule County</u>												
1	Eckstrum Farm	SE 3-102N-68W	1685	940	340	438	676	890				
2	Gould Farm	SE 20-105N-67W	1699	945	350	480	650	906				
3	Olson Farm	SW 8-102N-67W	1637	766		380	488					
4	Pearson Farm	NW 1-101N-71W	1500	773	200	322	584	730				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Buffalo County</u>												
1	Gann Valley School	NE 33-107N-68W	1754	1132	506	640	820	1070				
2	Knippling Ranch	NE 36-108N-72W	1633	1150	?	490	686	1034				
3	Stensbol Ranch	SE 15-107N-69W	1776	1205	564	?						
4	Bert Thompson Well	SW 3-108N-72W	1747	1286	435	574	822	1168				
5	Truman Farm	33-108N-72W	1500+50	1075	176	320	588	?				
<u>Butte County</u>												
1	Montana-Dak. Utilities	SW NW 19-12N-2E	3186	3227	1235	A	1770	A	2520			
2	Newell City #2	NW NW NE 32-9N-6E	2810+	2592	?	A	1255	2080	2360			
3	Newell City #3	30-9N-6E	2844	2745	?	A	1300	2110	2400			
4	Newell City #4	9N-5E	2804+	2640	?	A	1220	2030	2300			
5	Davis Farm	SE 15-11N-2E	3000+20	3140	790	A	1260	?	?			

No.	Name	Location	Elevation	Total Depth	Niorara	Codell	Greenhorn	Dakota	Fall River	Minnesota	Madison	Pre-cambrian
<u>Charles Mix County</u>												
1	Codell Test #915	NE NE 25-97N-67W	1450	332	122	294						
2	Codell Test #916	SW SW 28-96N-66W	1442	373	170	330						
3	Codell Test #917	SW SW 16-96N-65W	1481	339	157	317						
4	Codell Test #918	NE NE 11-95N-64W	1505	372	206	317						
5	Beryl Green Farm	NW 23-99N-68W	1583	846	308	436	620	714				
6	Ed Holec Farm	SE 23-96N-62W	1675 _± 25	565	430	560						
7	Frank Kocer Farm	NE SE 23-94N-64W	1368	641	334	400						
8	Madricky Farm	NW SW 28-94N-62W	1550 _± 25	763	85	300	650	730				
9	Platte City	SW 13-99N-68W	1611	940	232	405	600	694				
10	Radar Site #2	SW SE 31-96N-64W	1845	691	525	650						
11	Winkler Farm	N 1/2 9-96N-62W	1575 _±	817	376	450	?	?				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Charles Mix County--continued</u>												
12	Wagner Park	SW 33-96N-63W	1425 _±	818	180	275	530	630				
13	Kabena Ranch	SE NW 31-94N-63W	1365 _±	671	surface	130	410	500				
<u>Clark County</u>												
1	Johnson Farm	NE 6-116N-59W	1441	1059	320	A	630	880				
<u>Clay County</u>												
1	Irene City	NW 6-95N-53W	1450	270	94	215						
2	SDGS Test Hole	SW NW 1-93N-53W	1159	170	A	A	130					
<u>Codington County</u>												
1	Coteau Test #2 Henry	SE NE 18-119N-51W	1835	800	660							
2	Watertown Substation	2-116N-52W	1813	1298	826	938	1066	1224				1294
<u>Corson County</u>												
1	Blair Ranch	NW 33-20N-26E	1800 _±	2386	920	1125	1725	?				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Custer County</u>												
1	Buffalo Gap City	29-6S-7E	3305	1400	A	A	155	A	1095			
2	USCE	22-3S-8E	3403	1945	34	A	610	1070	1470			
<u>Davison County</u>												
1	Bower Farm	SE 32-101N-60W	1400	380	80	150	355					
2	Ethan City	14-101N-60W	1345	320	A	A	288	296				
<u>Day County</u>												
1	Amax B-1	SW SW 29-122N-57W	1800 ₊₂₅	1966	620	800	1050	1350				1500
2	Sanderson Farm	SE 19-120N-59W	1461	1174	440	580	706	1020				
3	Torguson Farm	SE 15-124N-59W	1340	1180	A	312	570	880				
4	Webster City #1	NENW 35-122N-56W	1812	1609	665	790	1090	1375				1575
<u>Deuel County</u>												
1	Coteau #3 Astoria	SW 36-113N-48W	1859	1096	648	710	840	960				1060?

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Dewey County</u>												
1	Eagle Butte City #1	NW SW 17-12N-24E	2422	4325	1390	1660	2185	2620	2930	3310	3950	
<u>Douglas County</u>												
1	Corsica City	NW 3-99N-64W	1550 ₊	333	208	324						
2	Ebright Farm	SW SE 1-97N-62W	1520 ₊	345	200	330						
3	Scholten Farm	SE 6-98N-63W	1525 ₊ 25	356	220	332						
4	Van's "66" Service	SE corner 15-99N-63W	1500 ₊ 25	330	210							
<u>Fall River County</u>												
1	Edgemont City	?-9S-3E	3575	2897	A	A	A	?	300	1716	2897	
2	Edgemont City #4	NE SE 2-9S-2E	3575	3040	A	A	A	?	480	1910		
3	Heisel #1 Water	SW SW 26-9S-3E	3510 ₊ 5	840	A	A	A	A	790			
4	Olds & Wrather	11-10S-1E	3728	1921	A	A	500	1130	1330			
5	Pfister, Danks, & Pfister Water	SE SE 20-9S-1E	3750 ₊	2010	?	A	575	A	1410			
6	Provo Ordinance	NE SE SE 3-10S-2E	3665	4000	A	A	220	870	1085	2600	3600	3910

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Faulk County</u>												
1	Faulkton City	15-110N-69W	1550+	1283	400	545?	785	1095				
2	Chelquist Farm	NE SE 34-117N-69W	1680+	1265	530	610	895	1175				
3	Lange Farm	SE 1-119N-69W	1535	1162	375	580	755	1065				
4	Meyers Farm	NW 11-117N-68W	1460+5	1170	290	475	635	925				
5	Wilkins Farm	NE 13-120N-67W	1400+	1152	275	325	580	896				
6	Noonan & McDonald	SE SE 31-117N-71W	1800	1960	670	865	1025	1400	1775	1950?		
7	Fredrickson Farm	NE NW 1-118N-66W	1340	1040	165	360	535	885				
<u>Grant County</u>												
1	Dockter Farm	NE 8-120N-49W	1190	526	170	250	355	435				
<u>Gregory County</u>												
1	Weller Farm	SE 29-95N-68W	1926	1250	680	830	1046	1146				

No.	Name	Location	Elevation	Total Depth	Nio-brara	Co-dell	Green-horn	Da-kota	Fall River	Minne-lusa	Madi-son	Pre-cam-brian
<u>Haakon County</u>												
1	Bucholtz Ranch	SE 28-7N-22E	2200+20	2405	1260	1360	1855	2176				
2	Ferguson Ranch	NE 11-5N-21E	2120	2600	940	1175	1635	1915	2360			
3	Foley Ranch	SW NW 28-5N-18E	2350	2937	1420	1575	2040	2360	2775			
4	Jettters Brothers Ranch	N 1/2 24-7N-21E	2200	2763	1100	1430	1875	2180	2605			
5	Midland City	6-1N-25E	1945	2348	?	?	1455	1730	2170			
6	Pfeifer Well	NW 24-1N-20E	2155	2560	990	1275	1735	2005	2470			
7	Philip City	E 1/2 1-1N-20E	2245	3730	1055	?	1820	2110	2580	2960		
<u>Hand County</u>												
1	Brueggeman Farm	Center NE 30-115N-68W	1552	1223	415	535	765	1035				
2	Harvey Farm	SE NW 4-109N-70W	1875+25	1935	675	A	1010	1380				1935
3	Kost Ranch	SE 23-113N-70W	1634+	1340	490	A	820	1160				
4	Lichty Farm	SW 9-111N-66W	1505	1170	374	476	663	920				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Hand County--continued</u>												
5	Mehling Ranch	SE NE 27-111N-66W	1495	1291	360	A	638	956				1288
6	Miller City	NE 11-112N-68W	1585 ⁺¹⁰	1150	425	500	730	1090				
7	Moncur Farm	SE 15-114N-68W	1510	1350	360	525	710	970				
8	Olson Farm	SE 33-112N-68W	1683	1290	574	705	852	1120				
9	Ree Heights City	NW 13-112N-70W	1750	1400	595	710	930	1190				
10	Ross Palmer Farm	NE NE 35-110N-66W	1664	1260	510	620	770	1070				
11	SDGS-Stebbins School	NE NE SE 27-109N-68W	1901	1500	725	860	1025	1340				
12	Shaffer Farm	SW 11-114N-69W	1582	1550	505	A	770	1045	1515			
13	Sheldon Reese Co.	SE NE 29-110N-68W	1970	1532	752	915	1070	1378				
14	Snodgrass Farm	SE 32-113N-66W	1444	1260	340	440	636	968				
15	Step toe Sisters Ranch	E 1/2 19-114N-69W	1613	1373	520	616	830	1095				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Hand County--continued</u>												
16	Van Asperin	SW SW 21-111N-66W	1675	1404	500	654	784	1096	1394			
17	Waring Farm	NE 13-109N-69W	1860 ₊	1573	735	890	1075	1410				
18	Waring Farm	SE NW 31-110N-69W	1850 ₊	1810	710	795	1015	1380	1680?			
<u>Hughes County</u>												
1	Irving Farm	SE 16-108N-74W	1650 ₊	1210	315	A	670	1065				
2	Mehrer Farm	15-111N-74W	1940	1620	724	A	1160	1470				
<u>Hutchinson County</u>												
1	Massey Farm	NE SE 1-97N-56W	1622	548	220	A	A					548
<u>Hyde County</u>												
1	Cowan Ranch	SW 2-110N-72W	2175	2420	945	A	1330	1700	2100	2420		
2	Meek Ranch	SW 10-111N-73W	1950	1850	740	A	1164	1504				
3	H. Parlin Ranch	SW SW 2-112N-71W	1760	1905	620	A	945	1300	1700			

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Jackson County</u>												
1	Addison Ranch	SW NW 25-1S-24E	2075	2400	1135	1315	1620	1895	2365			
2	Belvidere City	NE 32-2S-24E	2303+10	2640	1325	1515	1845	2125	2610			
3	Kadoka City #1	32-2S-22E	2455	2956	1550	1740	2065	2350	2850			
4	Kadoka City #2	28-2S-22E	2455+	2728	1395	1750	2080	2365				
5	Williams Ranch	NW SE 10-3S-18E	2525+10	2825	1400	1600	1965	2275	2770			
6	Hollis Young Ranch	SW NW 19-1S-22E	2230	2705	1390	1580	1850	2125	2610			
7	Young Ranch	NE NW 28-2S-19E	2470	2780	1350	1675	1940	2220	2715			
<u>Jerauld County</u>												
1	Alpena City	SW NE 11-108N-63W	1310+5	986?	150	265	435					
2	Neumeyer Farm	SE 3-108N-64W	1420	921	276	A	616	820				
3	Wessington Springs Test #1	SE 9-107N-65W	1910	1700	770	885	1040	1295				

No.	Name	Location	Elevation	Total Depth	Niorara	Co-dell	Greenhorn	Da-kota	Fall River	Minnelusa	Madi-son	Pre-cambrian
<u>Jones County</u>												
1	Booth Ranch	NE NE 13-3S-31E	1890 _±	2042	600	885	1120	1425	1855	2035		
2	Lynn Lyman	NW 21-1N-27E	2060	2360	960	1235	1525	1840	2310			
3	Lynn Lyman Ranch	SE SE 30-1N-27E	2120	2460	1060	1330	1615	1940	2390			
4	Bob Shay Ranch	SW 14-2N-30E	1935	1951	740	916	1246	1580	1865			
<u>Kingsbury County</u>												
1	Atchison Farm	SW SW 16-111N-58W	1480	1118	310	500	635	900				1105
2	Cadwell Farm	SW 27-111N-58W	1480	980	330	415	629	812				
3	Erwin City	21-112N-55W	1874	1346	760	950	1095	1297				
4	Lake Preston City	Center NE 1-110N-55W	1718	1134	550	700	915	1100				
5	Oldham City	NE SW 22-109N-54W	1725 _± 20	1223	515	655	875	1015				
6	Tonsager Farm	SE SE 15-109N-54W	1745	1040	518	655	870	992				1040

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Lake County</u>												
1	Ramona City	SE NW 32-108N-53W	1811	847	600	732						
2	Casper Farm	NW 34-108N-52W	1735+	765	565	710						
3	Bloom Farm	SE cor. 23-108N-54W	1760+	801	605	755						
<u>Lawrence County</u>												
1	Papousek Farm #1	SW SW 20-7N-1E	3530+	800	A	A	A	A	A	670		
2	Papousek Farm #2	SW NW 19-7N-1E	3440	800	A	A	A	A	A	625		
3	Redwater Observa- tion Well	NE NW 10-7N-2E	3205+5	1306	A	A	A	A	A	1250		
4	Sankey Ranch	NW SE 15-7N-2E	3370+	1260	A	A	A	A	A	1100		
5	Spearfish City Well	10-6N-2E	3700+	550	A	A	A	A	A	80		
6	Whitewood City	21-6N-4E	3850+50	630	A	A	A	A	A	310		
<u>Lincoln County</u>												
1	Canton City #1	23-98N-49W	1260+5	475	A	A	225	295				
2	Canton City #2	NE 23-98N-49W	1250+5	490	A	A	A	270				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Lincoln County--continued</u>												
3	Johnson Farm	NE 17-96N-50W	1450	768	?	?	420	518				
4	Kittelson Farm	NE NW 35-97N-50W	1470	570	220	A	450	520				
5	Newton Hills State Park	NE SW 13-97N-49W	1500 _±	430	230	A	370	430				
6	Voges Farm	NW NE 9-98N-50W	1360 _± 5	707	?	?	404	430				692
7	Lowell Larson Farm	SE NW 26-99N-49W	1364 _± 5	355	A	A	280					
<u>Lyman County</u>												
1	Eldridge Ranch	NE 21-108N-79W	2010 _± 50	1840	880	1090	1350	1708				
2	Oller Ranch	NE SW 19-105N-79W	2048	2330	890	1190	1400	1710	2115	2330		
3	Parkening Ranch	SE NE 8-105N-73W	1802 _±	1226	475	675	860	1155				
4	Don Williams	NE 19-105N-78W	2060	2048	675	930	1240	1500	1875	2045		
5	Williams Ranch	SE 4-108N-78W	1850 _±	1750	690	840	1090	1445				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Lyman County--continued</u>												
6	Kramer Ranch	SE 5-103N-79W	1790	1637	500	780	1015	1325				
7	Presho City	SE NW 10-105N-77W	1820±	1308	594	758	994	1278				
<u>McPherson County</u>												
1	Eureka City	SE 35-127N-73W	1883	2070	800	1020	1350	1655	2010			
<u>Marshall County</u>												
1	Amax L-1	NW SE 12-125N-59W	1309	1032	232	336	494	805				912
2	Curr Farm	SE 19-126N-59W	1305	932	150	255	475	705				927
3	Coteau Test #1 Eden	SE 22-125N-56W	1823	1096	770	892	1078					
4	Rainbow Dance Hall	SE SE 35-127N-58W	1325	1040	210	310	500	770	1025			
5	Doctor Farm	NW NW 20-126N-59W	1302	927	125	240	470	735				925
6	Langford City	SW SW 29-125N-58W	1360±	1113	170	310	570	908				1113

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Meade County</u>												
1	Konechne Farm	SW SW 10-2N-7E	3390+	790	A	A	A	A	A		680	
2	McMahon Ranch	Center SW 7-2N-8E	3240+	1630	A	A	250	1060	1485			
3	Western Cattle Co.	NE SE 27-6N-14E	2160	3330	1135	1620	1950	2285	2690			
4	Corps of Engineers	19-5N-7E	2963	1802	surface		513	1310	1580			
<u>Mellette County</u>												
1	H. Iwan Farm	NE NW 36-45N-32W	2050+	2392	1050	1230	1560	1845	2350?			
2	Jensen Ranch	NW SW 12-42N-30W	2010+	1930	880	1080	1375	1670				
3	Jensen Ranch	NW 15-42N-30W	2140+25	2420	1000	1225	1500	1795	2220			
4	Jensen Ranch	NE 29-43N-30W	2310	2550	1220	1450	1745	2040	2450			
5	Krogman Ranch	NE 22-42N-28W	2200+	2380	925	1190	1445	1740	2135			
6	Clifford Jenson	SW 7-42N-29W	2090+	2445	915	1190	1435	1735	2135	2425		

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Mellette County--continued</u>												
7	Mills Ranch	SE SW 20-40N-25W	2080±	1692	860	1100	1325	1540				
8	Nelson Ranch	SW 32-42N-25W	2050	2690	860	1050	1350	1585	2220	2535		
9	Ivan Nelson Ranch	SW 34-43N-25W	1830±	1565	575	805	1095	1355				
10	Till Ranch	NE 33-43N-26W	1920	2172	720	925	1220	1510	1910			
11	Tuf Inc.	NE NE 34-42N-31W	2375±	2305	1300	1505	1760	2070				
12	Kosken Ranch	NW SE 27-42N-26W	2150±	2920	965	1235	1480	1765	2190	2450	2825?	
<u>Miner County</u>												
1	Chave Farm	NW 19-105N-58W	1308	354	A	A	236	270				354
2	Felthouse Farm	NE SE 34-107N-56W	1550±	425	250	375						
3	Howard City	NW 2-106N-56W	1550	689	250	600?						685?
4	Longville Bros. Farm	NE 10-108N-55W	1710±	760	520							

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Pennington County</u>												
1	Arrowhead Country Club	15-1N-7E	?	923						550		
2	Box Elder City	NE SE 23-2N-8E	3072	2222	?	?	?	1620	1885			
3	Gabriel Ranch	NE SE 1-4N-16E	2260+10	2715	1435	1660	1885	2310	2675			
4	Earl Gabriel Ranch	SW NW 25-5N-16E	2150	2666	1000	1410	1845	2210	2635			
5	Heuthers Ranch	SE 31-2S-16E	2590	2717	1045	1390	1830	2125	2660			
6	New Underwood City	SE 31-2N-11E	2698	2680				2310	2580			
7	Pinnacle Peaks Entrance	SW 8-2S-16E	3077	3267	1725	2030	2540	2800				
8	Quinn City	NW SE 6-1S-17E	2620	2990	1335	1700	2135	2485	2910			
9	Rapid City Airport #1	18-2N-9E	3195	4621			1180	1860	2140	3575	4475	
10	Rapid City Airport #2	SW NW 13-2N-8E	3210	3848			1150	1835	2100	3420		
11	Rapid Valley (City #3)	NE SE 10-1N-8E	3145	1914				1340	1615			

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Pennington County--continued</u>												
12	Rapid City #4	Spot location not available	3172	2433	390	700	1190	1860	2150			
13	Rapid Valley	NE NW 9-1N-8E	3127	?	A	A	300	870		1335		?
14	USA-Corps Eng.	SW NE 13-2N-12E	3072	3610	1600	1910	2440	2940	3230			
15	Wall City #1	NE NE 6-1S-16E	2825	3358	1500	1810	2300	2715	3090			
16	Wall City #2	SW NW 5-1S-16E	2845	3210	1545	1830	2315	2670	3105			
17	H. Pool Well	SE SE 27-1N-7E	3810+10	1300	A	A	A	A	?	1165		
<u>Potter County</u>												
1	Gettysburg City	25-118N-76W	2075+	1951	960	1055	1412	1774				
2	Gettysburg City	NW 25-118N-76W	2090	2310	980	1055	1430	1796	2150			
<u>Roberts County</u>												
1	Sather Farm	NE corner 18-127N-50W	1150+	753	210	265	365	585				730

No.	Name	Location	Elevation	Total Depth	Nio-brara	Co-dell	Green-horn	Da-kota	Fall River	Minne-lusa	Madi-son	Pre-cambrian
<u>Sanborn County</u>												
1	Austerman Farm	SW 22-108N-59W	1349	660	?	?	426	?				
2	Grassell Farm	NE 21-108N-59W	1340	730	135	224	425	586				675
3	Loring Farm	SW SE 27-108N-61W	1309	680	?	245	438	?				
4	State Game & Fish	SW SW 30-106N-62W	1319	945	190	244	420	666				
5	Letcher City	SW SE 15-105N-61W	1320±	760	115	195	325	555				750
<u>Spink County</u>												
1	Conde City	31-120N-60W	1310±	1050	210	A	530	890				
2	Hoffer Farm	NW NW 14-116N-60W	1394	1012	280	360	604	910				
3	Tschetter	NE 25-116N-61W	1420	1058	285	A	504	895				
4	Levsen Farm	SE 31-116N-60W	1350	996	272	A	563	870				
5	Mereness Farm	NW NE 8-120N-60W	1320	1120	240	300	560	924				
6	Morey Farm	NW SW 5-120N-60W	1320	1190	?	?	556					

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Spink County--continued</u>												
7	Northville City	NE 6-119N-64W	1280	1100	148	256	490	858				
8	Ottenbacher Farm	NW 13-117N-61W	1319	1060	218	A	526	866				
9	Schmidt Farm	NE 26-115N-64W	1325	1024	210	A	466	798				
10	Thomas Farm	NE 33-119N-61W	1300 \pm	1020	192	A	506	864				
11	Tulare City	SE SE 27-115N-64W	1300	927	185	A	490	835				
12	Wurz Farm	NW 34-116N-61W	1300	950	200	A	500	830				
<u>Stanley County</u>												
1	Hannum Ranch	N 1/2 28-4N-30E	1550 \pm 50	1444	410	630	925	1250				
2	Nemec Ranch	SW NW 32-3N-25E	2210 \pm	2603	1120	1460	1730	2005	2530			
3	Earl Sunshine	NW 19-7N-26E	2170 \pm	2440	970	1270	1575	1905	2380			

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Sully County</u>												
1	Busch Ranch	SW SE 30-115N-80W	1800 _± 25	2315	770	1000	1295	1615	?			
2	Onida City	11-114N-77W	1868		685	840?	1115	1535	1960			
3	Zebroski Ranch	14-115N-80W	1950 _±	2525	825	1090	1380	1715	2180	2350		
4	Todd Ranch	NE SW 7-115N-76W	1863	1820	650	?	1135	1535				
<u>Tripp County</u>												
1	Puttman Ranch	SW NW 10-95N-74W	2300 _± 50	1947	1050	1190	1425	1510	1850			
2	Smith Ranch	Center E 1/2 6-102N-78W	1680 _± 10	1200	410	675	900	1075				
3	Orville Smith Ranch	NW corner 28-100N-78W	2000 _± 25	1650	695	880	1170	1410	1845			
4	W. Nelson Ranch	SW NW 35-101N-76W	1975 _±	1512	710	870	1120	1350				
<u>Turner County</u>												
1	Herrig Farm	SW 14-97N-55W	1650 _±	765+	363	500	765?	A				765?
2	Kaufman Farm	Center 7-97N-54W	1520	670	262	320	560	640				

No.	Name	Location	Elevation	Total Depth	Nio-brara	Co-dell	Green-horn	Da-kota	Fall River	Minne-lusa	Madi-son	Pre-cambrian
<u>Turner County--continued</u>												
3	Helga Lee	NW 22-98N-54W	1340 ₊	608	?	?	420	480				
4	Schrag Farm	SE NW 36-99N-55W	1525 ₊	535	?	?	445	505				
5	Sturzenbucher Farm	SE 28-99N-54W	1450 ₊ 10	410	125	170	320	370				
6	Viborg City	SW 35-97N-53W	1305 ₊ 5	700	?	?	390	420				700
7	Weir Farm	NW 8-97N-55W	1720	595	355	420	595?					595?
8	A. Schrag Farm	NE 30-99N-54W	1485 ₊	359	192	242	342					
<u>Union County</u>												
1	SDGS	NW 6-93N-50W	1284	198	A	?	180					
2	SDGS #1 Huebner	SW NW 25-93N-50W	1269 ₊ 20	796	A	A	120	195				791
3	North Sioux City Well	SW SW 14-89N-48W	1100 ₊	189	A	A	A	154				

No.	Name	Location	Eleva- tion	Total Depth	Nio- brara	Co- dell	Green- horn	Da- kota	Fall River	Minne- lusa	Madi- son	Pre- cam- brian
<u>Yankton County</u>												
1	English Ski Jump	SW 13-93N-57W	1400+	720	126	250	510	590				
2	Gavins Point	22-93N-56W	1293	542	?	?	378	454				
3	Johnson Farm	SW SE 10-95N-54W	1537	770	220	294	530	600				768
4	SDGS #1 Holzbauer	NE SW 12-93N-55W	1170	763	A	A	195	265				755
5	Utica City	8-94N-56W	1362	760	?	?	450	540				
6	Yankton City	14-93N-56W	1246	676	A	A	314	408				
7	Oscar Rempfer	NW NW 21-96N-56W	1310+	576	125	215	385	430				

About the South Dakota Geological Survey

The South Dakota Geological Survey is a research and public service agency for the State of South Dakota. Since 1893 the State Geologist has been authorized to "make an actual geological survey of the lands, the earth, and the area beneath the surface of the lands....." of the State. The purpose of the State Geological Survey is to conduct field and laboratory studies of South Dakota's geology and mineral deposits, which are the metals and non-metals, the mineral fuels including oil and gas, and ground water. The results of these studies are published in reports such as this.

The work of the State Geological Survey is continuous--its research and services are adjusted to the changing economy in order to serve South Dakota most effectively.

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