DOE/ET/27204--T1-Vol.2-App.Sect.5

ASSESSMENT OF THE GEOTHERMAL RESOURCES

OF KANSAS

Volume II - APPENDICES

Section 5

AS07-79ET27204

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DE83 003216

LOCATION: JOPLIN AMS, KANSAS
25S/13E-24ADD
HOLE NAME: TE BIRD
DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
11.0	36.1	14.350	57.83	0.0	0.0
13.0	42.6	14.420	57.96	35.0	1.9
15.0	49.2	14.510	58.12	45.0	2.5
17.0	55.8	14.620	58.32	55.0	3.0
19.0	62.3	14.750	58.55	65.0	3.6
21.0	68.9	14.840	58.71	45.0	2.5
23.0	75.4	14.920	58.86	40.0	2.2
25.0	82.0	14.990	58.98	35.0	1.9
27.0	88.6	15.040	59.07	25.0	1.4
29.0	95.1	15.080	59.14	20.0	1.1
31.0	101.7	15.120	59.22	20.0	1.1
33.0	108.2	15.160	59.29	20.0	1.1
35.0	114.8	15.240	59.43	40.0	2.2
37.0	121.4	15.330	59.59	45.0	2.5
39.0	127.9	15.420	59.76	45.0	2.5
41.0	134.5	15.510	59.92	45.0	2.5
43.0	141.0	15.610	60.10	50.0	2.7
45.0	147.6	15.690	60.24	40.0	2.2
47.0	154.2	15.780	60.40	45.0	2.5
49.0	160.7	15.880	60.58	50.0	2.7
51.0	167.3	15.960	60.73	40.0	2.2
53.0	173.8	16.070	60.93	55.0	3.0
55.0	180.4	16.160	61.09	45.0	2.5
57.0	187.0	16.260	61.27	50.0	2.7
59.0	193.5	16.350	61.43	45.0	2.5
61.0	200.1	16.410	61.54	30.0	1.6
63.0	206.6	16.480	61.66	35.0	1.9
65.0	213.2	16.540	61.77	30.0	1.6
67.0	219.8	16.610	61.90	35.0	1.9
69.0	226.3	16.670	62.01	30.0	1.6
71.0	232.9	16.750	62.15	40.0	2.2
73.0	239.4	16.820	62.28	35.0	1.9
75.0	246.0	16.900	62.42	40.0	2.2
77.0	252.6	16.970	62.55	35.0	1.9
79.0	259.1	17.040	62.67	35.0	1.9
81.0	265.7	17.130	62.83	45.0	2.5
83.0	272.2	17.200	62.96	35.0	1.9
85.0	278.8	17.300	63.14	50.0	2.7
87.0	285.4	17.390	63.30	45.0	2.5
89.0	291.9	17.460	63.43	35.0	1.9
91.0	298.5	17.550	63.59	45.0	2.5

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LOCATION: JOPLIN AMS, KANSAS
25S/13E-24ADD
HOLE NAME: TE BIRD
DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
93.0	305.0	17.630	63.73	40.0	2.2
95.0	311.6	17.720	63.90	45.0	2.5
97.0	318.2	17.810	64.06	45.0	2.5
99.0	324.7	17.910	64.24	50.0	2.7
101.0	331.3	18.020	64.44	55.0	3.0
103.0	337.8	18.120	64.62	50.0	2.7
105.0	344.4	18.250	64.85	65.0	3.6
107.0	351.0	18.380	65.08	65.0	3.6
109.0	357.5	18.520	65.34	70.0	3.8
111.0	364.1	18.670	65.61	75.0	4.1
113.0	370.6	18.820	65.88	75.0	4.1
115.0	377.2	18.970	66.15	75.0	4.1
117.0	383.8	19.060	66.31	45.0	2.5
119.0	390.3	19.130	66.43	35.0	1.9
121.0	396.9	19.190	66.54	30.0	1.6
123.0	403.4	19.250	66.65	30.0	1.6
125.0	410.0	19.310	66.76	30.0	1.6
127.0	416.6	19.370	66.87	30.0	1.6
129.0	423.1	19.430	66.97	30.0	1.6
131.0	429.7	19.490	67.08	30.0	1.6
133.0	436.2	19.550	67.19	30.0	1.6
135.0	442.8	19.620	67.32	35.0	1.9
137.0	449.4	19.680	67.42	30.0	1.6
139.0	455.9	19.740	67.53	30.0	1.6
141.0	462.5	19.800	67.64	30.0	1.6
143.0	469.0	19.850	67.73	25.0	1.4
145.0	475.6	19.900	67.82	25.0	1.4
147.0	482.2	19.970	67.95	35.0	1.9
149.0	488.7	20.020	68.04	25.0	1.4
151.0	495.3	20.100	68.18	40.0	2.2
153.0	501.8	20.170	68.31	35.0	1.9
155.0	508.4	20.240	68.43	35.0	1.9
157.0	515.0	20.330	68.59	45.0	2.5
159.0	521.5	20.420	68.76	45.0	2.5
161.0	528.1	20.520	68.94	50.0	2.7
163.0	534.6	20.630	69.13	55.0	3.0
165.0	541.2	20.760	69.37	65.0	3.6
167.0	547.8	20.880	69.58	60.0	3.3
169.0	554.3	21.000	69.80	60.0	3.3
171.0	560.9	21.110	70.00	55.0	3.0
173.0	567.4	21.220	70.20	55.0	3.0

LOCATION: JOPLIN AMS, KANSAS
25S/13E-24ADD
HOLE NAME: TE BIRD
DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
175.0	574.0	21.310	70.36	45.0	2.5
177.0	580.6	21.410	70.54	50.0	2.7
179.0	587.1	21.490	70.68	40.0	2.2
181.0	593.7	21.570	70.83	40.0	2.2
183.0	600.2	21.640	70.95	35.0	1.9
185.0	606.8	21.710	71.08	35.0	1.9
187.0	613.4	21.770	71.19	30.0	1.6
189.0	619.9	21.830	71.29	30.0	1.6
191.0	626.5	21.890	71.40	30.0	1.6
193.0	633.0	21.950	71.51	30.0	1.6
195.0	639.6	22.000	71.60	25.0	1.4
197.0	646.2	22.060	71.71	30.0	1.6
199.0	652.7	22.120	71.82	30.0	1.6
201.0	659.3	22.210	71.98	45.0	2.5
203.0	665.8	22.310	72.16	50.0	2.7
205.0	672.4	22.420	72.36	55.0	3.0
207.0	679.0	22.540	72.57	60.0	3.3
209.0	685.5	22.660	72.79	60.0	3.3
211.0	692.1	22.760	72.97	50.0	2.7
213.0	698.6	22.900	73.22	70.0	3.8
215.0	705.2	22.960	73.33	30.0	1.6
217.0	711.8	23.060	73.51	50.0	2.7
219.0	718.3	23.110	73.60	25.0	1.4
221.0	724.9	23.190	73.74	40.0	2.2
223.0	731.4	23.240	73.83	25.0	1.4
225.0	738.0	23.290	73.92	25.0	1.4
227.0	744.6	23.340	74.01	25.0	1.4
229.0	751.1	23.400	74.12	30.0	1.6
231.0	757.7	23.460	74.23	30.0	1.6
233.0	764.2	23.520	74.34	30.0	1.6
235.0	770.8	23.590	74.46	35.0	1.9
237.0	777.4	23.650	74.57	30.0	1.6
239.0	783.9	23.740	74.73	45.0	2.5
241.0	790.5	23.810	74.86	35.0	1.9
243.0	797.0	23.870	74.97	30.0	1.6
245.0	803.6	23.940	75.09	35.0	1.9
247.0	810.2	24.000	75.20	30.0	1.6
249.0	816.7	24.060	75.31	30.0	1.6
251.0	823.3	24.120	75.42	30.0	1.6
253.0	829.8	24.170	75.51	25.0	1.4
255.0	836.4	24.230	75.61	30.0	1.6

LOCATION: JOPLIN AMS, KANSAS
25S/13E-24ADD
HOLE NAME: TE BIRD
DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
257.0	843.0	24.290	75.72	30.0	1.6
259.0	849.5	24.360	75.85	35.0	1.9
261.0	856.1	24.430	75.97	35.0	1.9
263.0	862.6	24.500	76.10	35.0	1.9
265.0	869.2	24.560	76.21	30.0	1.6
267.0	875.8	24.630	76.33	35.0	1.9
269.0	882.3	24.700	76.46	35.0	1.9
271.0	888.9	24.780	76.60	40.0	2.2
273.0	895.4	24.860	76.75	40.0	2.2
275.0	902.0	24.940	76.89	40.0	2.2
277.0	908.6	25.040	77.07	50.0	2.7
279.0	915.1	25.110	77.20	35.0	1.9
281.0	921.7	25.200	77.36	45.0	2.5
283.0	928.2	25.300	77.54	50.0	2.7
285.0	934.8	25.400	77.72	50.0	2.7
287.0	941.4	25.510	77.92	55.0	3.0
289.0	947.9	25.630	78.13	60.0	3.3
291.0	954.5	25.760	78.37	65.0	3.6
293.0	961.0	25.890	78.60	65.0	3.6
295.0	967.6	26.020	78.84	65.0	3.6
297.0	974.2	26.120	79.02	50.0	2.7
299.0	980.7	26.210	79.18	45.0	2.5
301.0	987.3	26.300	79.34	45.0	2.5
303.0	993.8	26.400	79.52	50.0	2.7
305.0	1000.4	26.490	79.68	45.0	2.5
307.0	1007.0	26.590	79.86	50.0	2.7
309.0	1013.5	26.670	80.01	40.0	2.2
311.0	1020.1	26.750	80.15	40.0	2.2
313.0	1026.6	26.820	80.28	35.0	1.9
315.0	1033.2	26.900	80.42	40.0	2.2
317.0	1039.8	26.980	80.56	40.0	2.2
319.0	1046.3	27.040	80.67	30.0	1.6
321.0	1052.9	27.120	80.82	40.0	2.2
323.0	1059.4	27.180	80.92	30.0	1.6
325.0	1066.0	27.260	81.07	40.0	2.2
327.0	1072.6	27.330	81.19	35.0	1.9
329.0	1079.1	27.400	81.32	35.0	1.9
331.0	1085.7	27.460	81.43	30.0	1.6
333.0	1092.2	27.510	81.52	25.0	1.4
335.0	1098.8	27.550	81.59	20.0	1.1
337.0	1105.4	27.600	81.68	25.0	1.4

LOCATION: JOPLIN AMS, KANSAS
25S/13E-24ADD
HOLE NAME: TE BIRD
DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
339.0	1111.9	27.660	81.79	30.0	1.6
341.0	1118.5	27.740	81.93	40.0	2.2
343.0	1125.0	27.830	82.09	45.0	2.5
345.0	1131.6	27.920	82.26	45.0	2.5
347.0	1138.2	28.010	82.42	45.0	2.5
349.0	1144.7	28.120	82.62	55.0	3.0
351.0	1151.3	28.240	82.83	60.0	3.3
353.0	1157.8	28.340	83.01	50.0	2.7
355.0	1164.4	28.430	83.17	45.0	2.5
357.0	1171.0	28.510	83.32	40.0	2.2
359.0	1177.5	28.600	83.48	45.0	2.5
361.0	1184.1	28.680	83.62	40.0	2.2
363.0	1190.6	28.790	83.82	55.0	3.0
365.0	1197.2	28.900	84.02	55.0	3.0
367.0	1203.8	29.040	84.27	70.0	3.8
369.0	1210.3	29.170	84.51	65.0	3.6
371.0	1216.9	29.290	84.72	60.0	3.3
373.0	1223.4	29.400	84.92	55.0	3.0
375.0	1230.0	29.500	85.10	50.0	2.7
377.0	1236.6	29.590	85.26	45.0	2.5
379.0	1243.1	29.680	85.42	45.0	2.5
381.0	1249.7	29.780	85.60	50.0	2.7
383.0	1256.2	29.880	85.78	50.0	2.7
385.0	1262.8	30.010	86.02	65.0	3.6
387.0	1269.4	30.130	86.23	60.0	3.3
389.0	1275.9	30.250	86.45	60.0	3.3
405.0	1328.4	31.140	88.05	55.6	3.1
407.0	1335.0	31.270	88.29	65.0	3.6
409.0	1341.5	31.370	88.47	50.0	2.7
411.0	1348.1	31.550	88.79	90.0	4.9
413.0	1354.6	31.630	88.93	40.0	2.2
415.0	1361.2	31.750	89.15	60.0	3.3
417.0	1367.8	31.880	89.38	65.0	3.6
419.0	1374.3	31.960	89.53	40.0	2.2
421.0	1380.9	32.040	89.67	40.0	2.2
423.0	1387.4	32.130	89.83	45.0	2.5
425.0	1394.0	32.240	90.03	55.0	3.0
427.0	1400.6	32.370	90.27	65.0	3.6
429.0	1407.1	32.510	90.52	70.0	3.8
431.0	1413.7	32.650	90.77	70.0	3.8
433.0	1420.2	32.760	90.97	55.0	3.0

LOCATION: JOPLIN AMS, KANSAS

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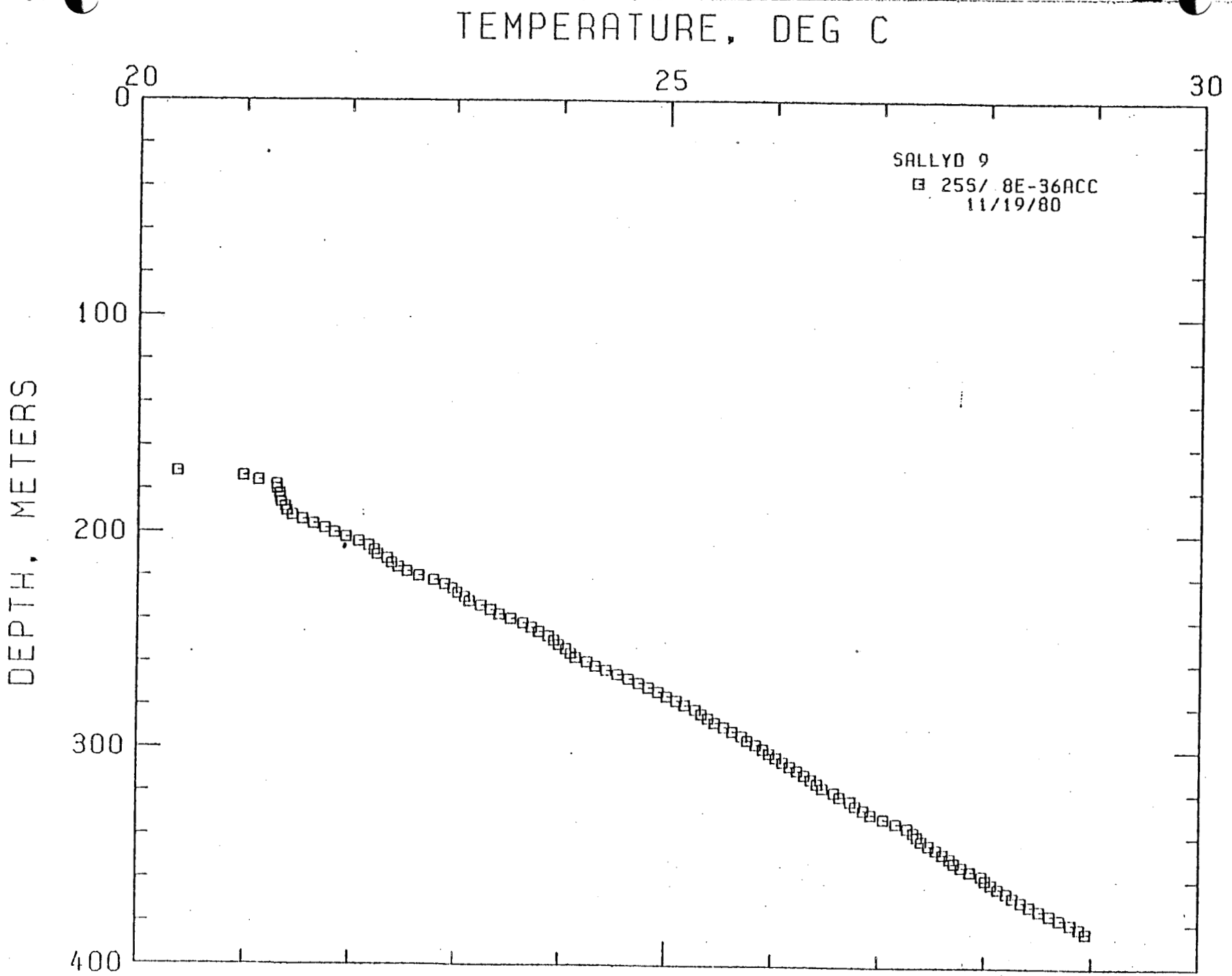
25S/13E-24ADD

HOLE NAME: TE BIRD

DATE MEASURED: 11/18/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
435.0	1426.8	32.830	91.09	35.0	1.9
437.0	1433.4	32.900	91.22	35.0	1.9
439.0	1439.9	32.970	91.35	35.0	1.9
441.0	1446.5	33.030	91.45	30.0	1.6


TEMPERATURE, DEG C
20
25
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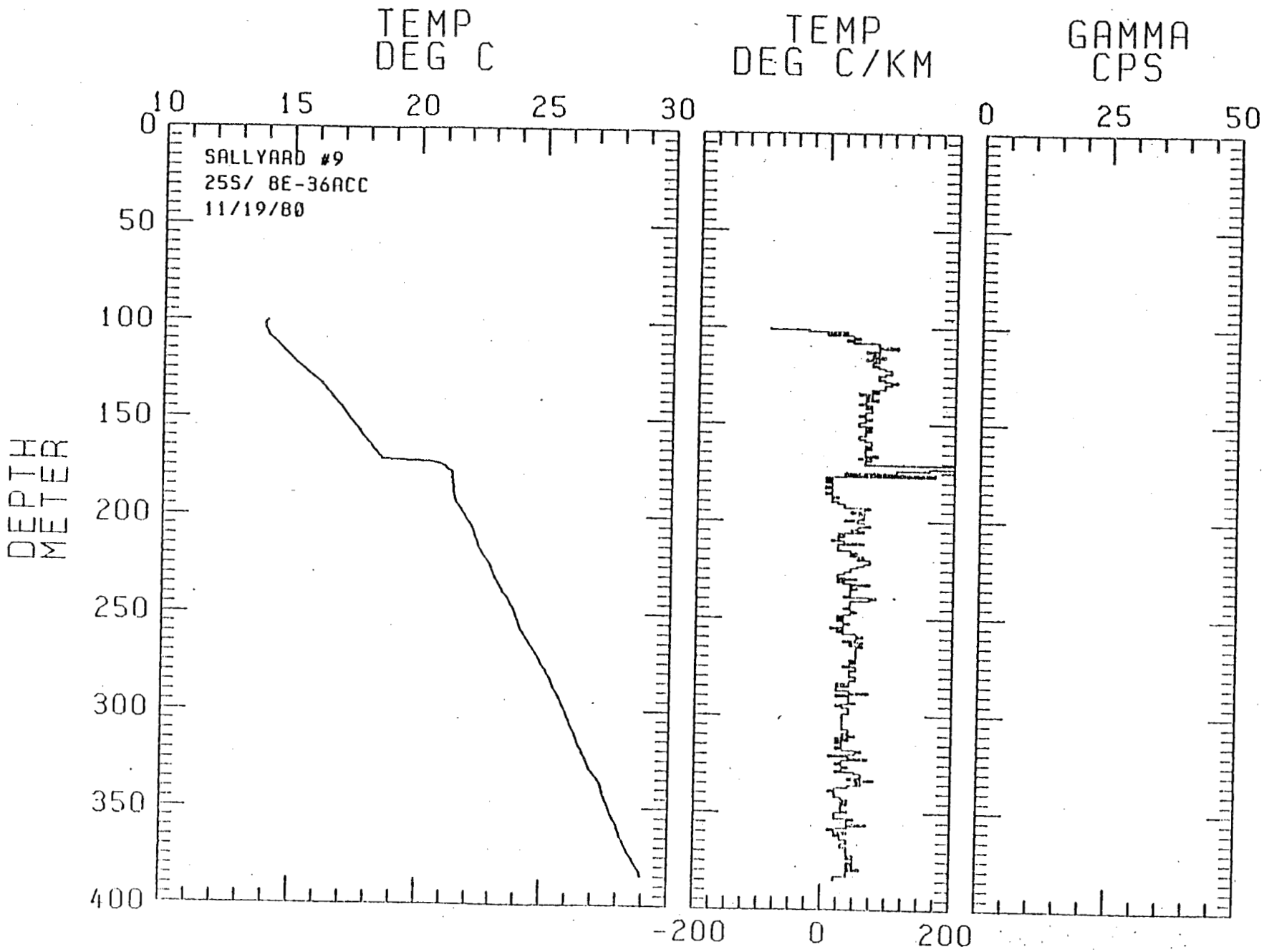
200
300
400
DEPTH, METERS
SALLYD 9
25S/ 8E-36ACC
11/19/80


TEMP
DEG C
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15
20
25
30
SALLYARD #9
25S/ 8E-36ACC
11/19/80
TEMP
DEG C/KM
-200
0
200
GAMMA
CPS
0
25
50
DEPTH
METER
0
50
100
150
200
250
300
350
400

LOCATION: WICHITA AMS, KANSAS
25S/ 8E-36ACC
HOLE NAME: SALLYD 9
DATE MEASURED: 11/19/80

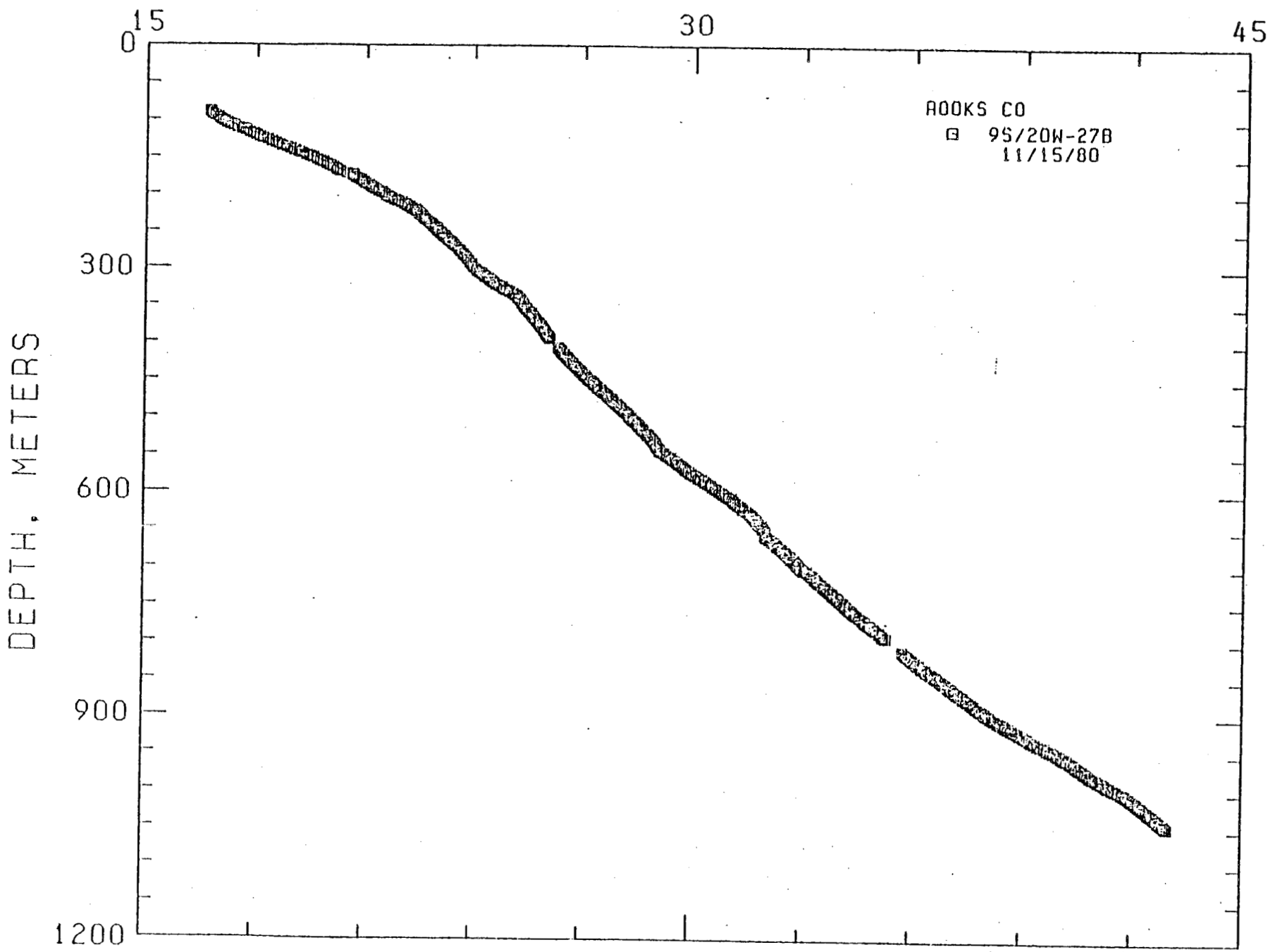
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
172.0	564.2	20.370	68.67	0.0	0.0
174.0	570.7	20.990	69.78	310.0	17.0
176.0	577.3	21.130	70.03	70.0	3.8
178.0	583.8	21.300	70.34	85.0	4.7
180.0	590.4	21.310	70.36	5.0	0.3
182.0	597.0	21.330	70.39	10.0	0.5
184.0	603.5	21.340	70.41	5.0	0.3
186.0	610.1	21.350	70.43	5.0	0.3
188.0	616.6	21.380	70.48	15.0	0.8
190.0	623.2	21.400	70.52	10.0	0.5
192.0	629.8	21.450	70.61	25.0	1.4
194.0	636.3	21.550	70.79	50.0	2.7
196.0	642.9	21.650	70.97	50.0	2.7
198.0	649.4	21.760	71.17	55.0	3.0
200.0	656.0	21.850	71.33	45.0	2.5
202.0	662.6	21.960	71.53	55.0	3.0
204.0	669.1	22.080	71.74	60.0	3.3
206.0	675.7	22.180	71.92	50.0	2.7
208.0	682.2	22.230	72.01	25.0	1.4
210.0	688.8	22.260	72.07	15.0	0.8
212.0	695.4	22.350	72.23	45.0	2.5
214.0	701.9	22.390	72.30	20.0	1.1
216.0	708.5	22.450	72.41	30.0	1.6
218.0	715.0	22.540	72.57	45.0	2.5
220.0	721.6	22.650	72.77	55.0	3.0
222.0	728.2	22.790	73.02	70.0	3.8
224.0	734.7	22.900	73.22	55.0	3.0
226.0	741.3	22.980	73.36	40.0	2.2
228.0	747.8	23.030	73.45	25.0	1.4
230.0	754.4	23.100	73.58	35.0	1.9
232.0	761.0	23.150	73.67	25.0	1.4
234.0	767.5	23.260	73.87	55.0	3.0
236.0	774.1	23.350	74.03	45.0	2.5
238.0	780.6	23.430	74.17	40.0	2.2
240.0	787.2	23.540	74.37	55.0	3.0
242.0	793.8	23.650	74.57	55.0	3.0
244.0	800.3	23.730	74.71	40.0	2.2
246.0	806.9	23.800	74.84	35.0	1.9
248.0	813.4	23.890	75.00	45.0	2.5
250.0	820.0	23.940	75.09	25.0	1.4
252.0	826.6	23.990	75.18	25.0	1.4

LOCATION: WICHITA AMS, KANSAS
25S/ 8E-36ACC
HOLE NAME: SALLYD 9
DATE MEASURED: 11/19/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
254.0	833.1	24.060	75.31	35.0	1.9
256.0	839.7	24.100	75.38	20.0	1.1
258.0	846.2	24.150	75.47	25.0	1.4
260.0	852.8	24.260	75.67	55.0	3.0
262.0	859.4	24.340	75.81	40.0	2.2
264.0	865.9	24.440	75.99	50.0	2.7
266.0	872.5	24.550	76.19	55.0	3.0
268.0	879.0	24.650	76.37	50.0	2.7
270.0	885.6	24.750	76.55	50.0	2.7
272.0	892.2	24.840	76.71	45.0	2.5
274.0	898.7	24.930	76.87	45.0	2.5
276.0	905.3	25.010	77.02	40.0	2.2
278.0	911.8	25.100	77.18	45.0	2.5
280.0	918.4	25.180	77.32	40.0	2.2
282.0	925.0	25.280	77.50	50.0	2.7
284.0	931.5	25.340	77.61	30.0	1.6
286.0	938.1	25.400	77.72	30.0	1.6
288.0	944.6	25.460	77.83	30.0	1.6
290.0	951.2	25.550	77.99	45.0	2.5
292.0	957.8	25.630	78.13	40.0	2.2
294.0	964.3	25.720	78.30	45.0	2.5
296.0	970.9	25.770	78.39	25.0	1.4
298.0	977.4	25.850	78.53	40.0	2.2
300.0	984.0	25.920	78.66	35.0	1.9
302.0	990.6	25.980	78.76	30.0	1.6
304.0	997.1	26.040	78.87	30.0	1.6
306.0	1003.7	26.100	78.98	30.0	1.6
308.0	1010.2	26.170	79.11	35.0	1.9
310.0	1016.8	26.240	79.23	35.0	1.9
312.0	1023.4	26.310	79.36	35.0	1.9
314.0	1029.9	26.370	79.47	30.0	1.6
316.0	1036.5	26.430	79.57	30.0	1.6
318.0	1043.0	26.480	79.66	25.0	1.4
320.0	1049.6	26.590	79.86	55.0	3.0
322.0	1056.2	26.640	79.95	25.0	1.4
324.0	1062.7	26.740	80.13	50.0	2.7
326.0	1069.3	26.790	80.22	25.0	1.4
328.0	1075.8	26.860	80.35	35.0	1.9
330.0	1082.4	26.930	80.47	35.0	1.9
332.0	1089.0	27.050	80.69	60.0	3.3
334.0	1095.5	27.170	80.91	60.0	3.3

LOCATION: WICHITA AMS, KANSAS
25S/ 8E-36ACC
HOLE NAME: SALLYD 9
DATE MEASURED: 11/19/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
336.0	1102.1	27.280	81.10	55.0	3.0
338.0	1108.6	27.340	81.21	30.0	1.6
340.0	1115.2	27.370	81.27	15.0	0.8
342.0	1121.8	27.410	81.34	20.0	1.1
344.0	1128.3	27.480	81.46	35.0	1.9
346.0	1134.9	27.550	81.59	35.0	1.9
348.0	1141.4	27.610	81.70	30.0	1.6
350.0	1148.0	27.680	81.82	35.0	1.9
352.0	1154.6	27.720	81.90	20.0	1.1
354.0	1161.1	27.790	82.02	35.0	1.9
356.0	1167.7	27.870	82.17	40.0	2.2
358.0	1174.2	27.980	82.36	55.0	3.0
360.0	1180.8	28.010	82.42	15.0	0.8
362.0	1187.4	28.070	82.53	30.0	1.6
364.0	1193.9	28.130	82.63	30.0	1.6
366.0	1200.5	28.210	82.78	40.0	2.2
368.0	1207.0	28.270	82.89	30.0	1.6
370.0	1213.6	28.350	83.03	40.0	2.2
372.0	1220.2	28.430	83.17	40.0	2.2
374.0	1226.7	28.520	83.34	45.0	2.5
376.0	1233.3	28.620	83.52	50.0	2.7
378.0	1239.8	28.710	83.68	45.0	2.5
380.0	1246.4	28.810	83.86	50.0	2.7
382.0	1253.0	28.890	84.00	40.0	2.2
384.0	1259.5	28.950	84.11	30.0	1.6


TEMPERATURE, DEG C
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15
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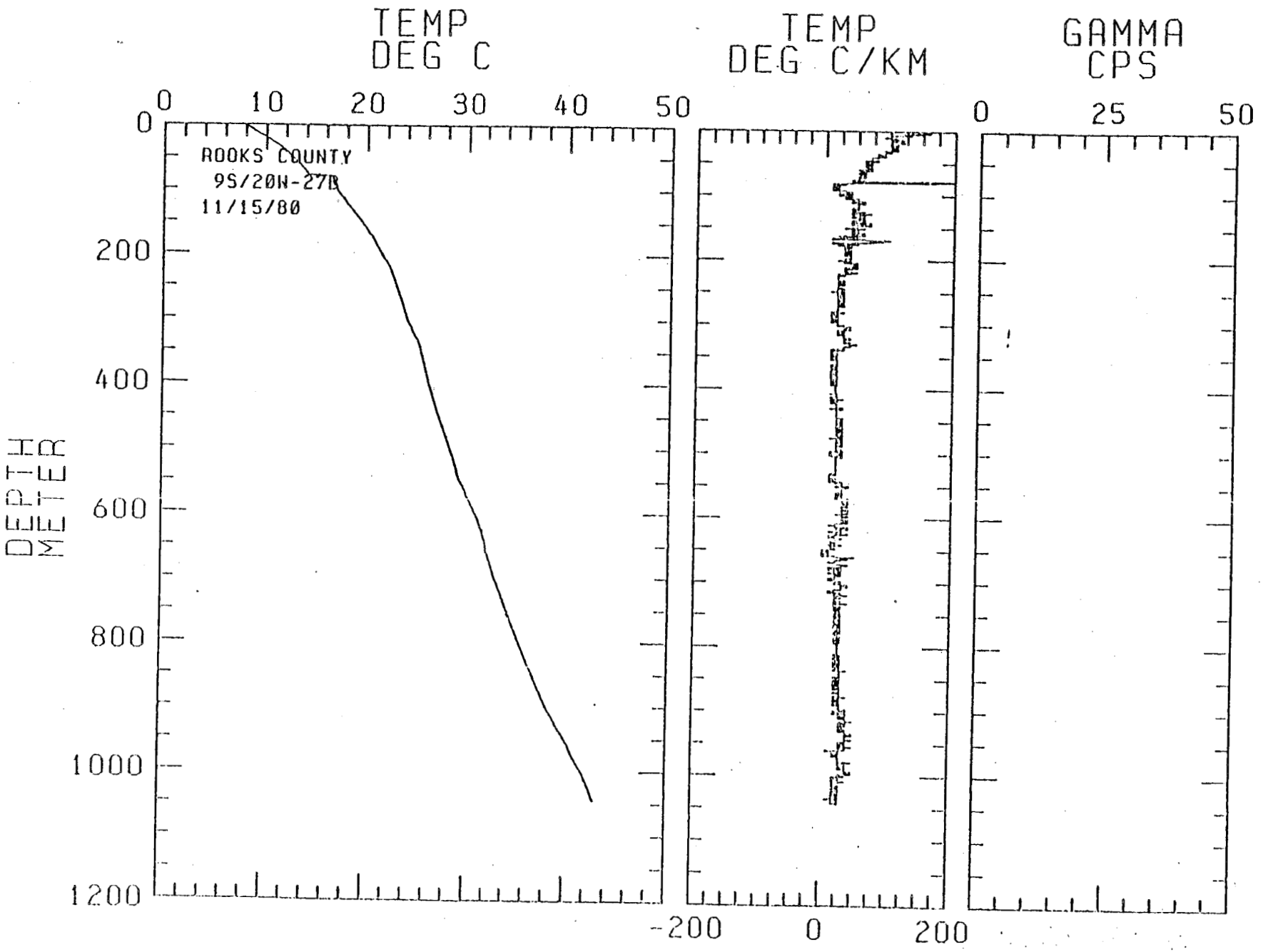
DEPTH, METERS
300
600
900
1200
ROOKS CO
9S/20W-27B
11/15/80


TEMP
DEG C
TEMP
DEG C/KM
GAMMA
CPS
0
10
20
30
40
50
0
25
50
ROOKS COUNTY
9S/20W-27B
11/15/80
DEPTH
METER
0
200
400
600
800
1000
1200
-200
0
200

LOCATION: BELOIT AMS, KANSAS
95/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
89.0	291.9	16.730	62.11	0.0	0.0
91.0	298.5	16.770	62.19	20.0	1.1
93.0	305.0	16.800	62.24	15.0	0.8
95.0	311.6	16.870	62.37	35.0	1.9
97.0	318.2	16.950	62.51	40.0	2.2
99.0	324.7	17.010	62.62	30.0	1.6
101.0	331.3	17.060	62.71	25.0	1.4
103.0	337.8	17.130	62.83	35.0	1.9
105.0	344.4	17.200	62.96	35.0	1.9
107.0	351.0	17.290	63.12	45.0	2.5
109.0	357.5	17.390	63.30	50.0	2.7
111.0	364.1	17.490	63.48	50.0	2.7
113.0	370.6	17.610	63.70	60.0	3.3
115.0	377.2	17.710	63.88	50.0	2.7
117.0	383.8	17.810	64.06	50.0	2.7
119.0	390.3	17.910	64.24	50.0	2.7
121.0	396.9	18.000	64.40	45.0	2.5
123.0	403.4	18.090	64.56	45.0	2.5
125.0	410.0	18.180	64.72	45.0	2.5
127.0	416.6	18.300	64.94	60.0	3.3
129.0	423.1	18.410	65.14	55.0	3.0
131.0	429.7	18.510	65.32	50.0	2.7
133.0	436.2	18.610	65.50	50.0	2.7
135.0	442.8	18.710	65.68	50.0	2.7
137.0	449.4	18.820	65.88	55.0	3.0
139.0	455.9	18.930	66.07	55.0	3.0
141.0	462.5	19.030	66.25	50.0	2.7
143.0	469.0	19.140	66.45	55.0	3.0
145.0	475.6	19.240	66.63	50.0	2.7
147.0	482.2	19.360	66.85	60.0	3.3
149.0	488.7	19.460	67.03	50.0	2.7
151.0	495.3	19.540	67.17	40.0	2.2
153.0	501.8	19.640	67.35	50.0	2.7
155.0	508.4	19.730	67.51	45.0	2.5
157.0	515.0	19.810	67.66	40.0	2.2
159.0	521.5	19.920	67.86	55.0	3.0
161.0	528.1	20.010	68.02	45.0	2.5
163.0	534.6	20.090	68.16	40.0	2.2
165.0	541.2	20.170	68.31	40.0	2.2
167.0	547.8	20.210	68.38	20.0	1.1
169.0	554.3	20.280	68.50	35.0	1.9

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
171.0	560.9	20.470	68.85	95.0	5.2
173.0	567.4	20.620	69.12	75.0	4.1
175.0	574.0	20.650	69.17	15.0	0.8
177.0	580.6	20.720	69.30	35.0	1.9
179.0	587.1	20.800	69.44	40.0	2.2
181.0	593.7	20.870	69.57	35.0	1.9
183.0	600.2	20.930	69.67	30.0	1.6
185.0	606.8	20.990	69.78	30.0	1.6
187.0	613.4	21.060	69.91	35.0	1.9
189.0	619.9	21.130	70.03	35.0	1.9
191.0	626.5	21.190	70.14	30.0	1.6
193.0	633.0	21.260	70.27	35.0	1.9
195.0	639.6	21.340	70.41	40.0	2.2
197.0	646.2	21.420	70.56	40.0	2.2
199.0	652.7	21.490	70.68	35.0	1.9
201.0	659.3	21.540	70.77	25.0	1.4
203.0	665.8	21.610	70.90	35.0	1.9
205.0	672.4	21.690	71.04	40.0	2.2
207.0	679.0	21.770	71.19	40.0	2.2
209.0	685.5	21.860	71.35	45.0	2.5
211.0	692.1	21.960	71.53	50.0	2.7
213.0	698.6	22.040	71.67	40.0	2.2
215.0	705.2	22.110	71.80	35.0	1.9
217.0	711.8	22.180	71.92	35.0	1.9
219.0	718.3	22.250	72.05	35.0	1.9
221.0	724.9	22.340	72.21	45.0	2.5
223.0	731.4	22.390	72.30	25.0	1.4
225.0	738.0	22.440	72.39	25.0	1.4
227.0	744.6	22.480	72.46	20.0	1.1
229.0	751.1	22.520	72.54	20.0	1.1
231.0	757.7	22.560	72.61	20.0	1.1
233.0	764.2	22.610	72.70	25.0	1.4
235.0	770.8	22.660	72.79	25.0	1.4
237.0	777.4	22.710	72.88	25.0	1.4
239.0	783.9	22.770	72.99	30.0	1.6
241.0	790.5	22.810	73.06	20.0	1.1
243.0	797.0	22.850	73.13	20.0	1.1
245.0	803.6	22.900	73.22	25.0	1.4
247.0	810.2	22.940	73.29	20.0	1.1
249.0	816.7	22.970	73.35	15.0	0.8
251.0	823.3	23.020	73.44	25.0	1.4

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
253.0	829.8	23.060	73.51	20.0	1.1
255.0	836.4	23.110	73.60	25.0	1.4
257.0	843.0	23.150	73.67	20.0	1.1
259.0	849.5	23.200	73.76	25.0	1.4
261.0	856.1	23.250	73.85	25.0	1.4
263.0	862.6	23.290	73.92	20.0	1.1
265.0	869.2	23.350	74.03	30.0	1.6
267.0	875.8	23.390	74.10	20.0	1.1
269.0	882.3	23.440	74.19	25.0	1.4
271.0	888.9	23.480	74.26	20.0	1.1
273.0	895.4	23.530	74.35	25.0	1.4
275.0	902.0	23.570	74.43	20.0	1.1
277.0	908.6	23.610	74.50	20.0	1.1
279.0	915.1	23.650	74.57	20.0	1.1
281.0	921.7	23.680	74.62	15.0	0.8
283.0	928.2	23.730	74.71	25.0	1.4
285.0	934.8	23.770	74.79	20.0	1.1
287.0	941.4	23.800	74.84	15.0	0.8
289.0	947.9	23.840	74.91	20.0	1.1
291.0	954.5	23.870	74.97	15.0	0.8
293.0	961.0	23.910	75.04	20.0	1.1
295.0	967.6	23.940	75.09	15.0	0.8
297.0	974.2	23.970	75.15	15.0	0.8
299.0	980.7	24.010	75.22	20.0	1.1
301.0	987.3	24.060	75.31	25.0	1.4
303.0	993.8	24.110	75.40	25.0	1.4
305.0	1000.4	24.180	75.52	35.0	1.9
307.0	1007.0	24.240	75.63	30.0	1.6
309.0	1013.5	24.300	75.74	30.0	1.6
311.0	1020.1	24.350	75.83	25.0	1.4
313.0	1026.6	24.410	75.94	30.0	1.6
315.0	1033.2	24.460	76.03	25.0	1.4
317.0	1039.8	24.510	76.12	25.0	1.4
319.0	1046.3	24.570	76.23	30.0	1.6
321.0	1052.9	24.640	76.35	35.0	1.9
323.0	1059.4	24.720	76.50	40.0	2.2
325.0	1066.0	24.780	76.60	30.0	1.6
327.0	1072.6	24.840	76.71	30.0	1.6
329.0	1079.1	24.910	76.84	35.0	1.9
331.0	1085.7	25.000	77.00	45.0	2.5
333.0	1092.2	25.080	77.14	40.0	2.2

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
335.0	1098.8	25.150	77.27	35.0	1.9
337.0	1105.4	25.200	77.36	25.0	1.4
339.0	1111.9	25.240	77.43	20.0	1.1
341.0	1118.5	25.290	77.52	25.0	1.4
343.0	1125.0	25.310	77.56	10.0	0.5
345.0	1131.6	25.330	77.59	10.0	0.5
347.0	1138.2	25.360	77.65	15.0	0.8
349.0	1144.7	25.380	77.68	10.0	0.5
351.0	1151.3	25.410	77.74	15.0	0.8
353.0	1157.8	25.450	77.81	20.0	1.1
355.0	1164.4	25.480	77.86	15.0	0.8
357.0	1171.0	25.520	77.94	20.0	1.1
359.0	1177.5	25.560	78.01	20.0	1.1
361.0	1184.1	25.600	78.08	20.0	1.1
363.0	1190.6	25.630	78.13	15.0	0.8
365.0	1197.2	25.660	78.19	15.0	0.8
367.0	1203.8	25.700	78.26	20.0	1.1
369.0	1210.3	25.730	78.31	15.0	0.8
371.0	1216.9	25.770	78.39	20.0	1.1
373.0	1223.4	25.800	78.44	15.0	0.8
375.0	1230.0	25.840	78.51	20.0	1.1
377.0	1236.6	25.870	78.57	15.0	0.8
379.0	1243.1	25.900	78.62	15.0	0.8
381.0	1249.7	25.930	78.67	15.0	0.8
383.0	1256.2	25.960	78.73	15.0	0.8
385.0	1262.8	25.990	78.78	15.0	0.8
387.0	1269.4	26.010	78.82	10.0	0.5
389.0	1275.9	26.040	78.87	15.0	0.8
391.0	1282.5	26.080	78.94	20.0	1.1
393.0	1289.0	26.110	79.00	15.0	0.8
405.0	1328.4	26.330	79.39	18.3	1.0
407.0	1335.0	26.360	79.45	15.0	0.8
409.0	1341.5	26.400	79.52	20.0	1.1
411.0	1348.1	26.440	79.59	20.0	1.1
413.0	1354.6	26.470	79.65	15.0	0.8
415.0	1361.2	26.510	79.72	20.0	1.1
417.0	1367.8	26.550	79.79	20.0	1.1
419.0	1374.3	26.590	79.86	20.0	1.1
421.0	1380.9	26.620	79.92	15.0	0.8
423.0	1387.4	26.660	79.99	20.0	1.1
425.0	1394.0	26.700	80.06	20.0	1.1

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
427.0	1400.6	26.740	80.13	20.0	1.1
429.0	1407.1	26.790	80.22	25.0	1.4
431.0	1413.7	26.830	80.29	20.0	1.1
433.0	1420.2	26.870	80.37	20.0	1.1
435.0	1426.8	26.910	80.44	20.0	1.1
437.0	1433.4	26.950	80.51	20.0	1.1
439.0	1439.9	26.990	80.58	20.0	1.1
441.0	1446.5	27.030	80.65	20.0	1.1
443.0	1453.0	27.070	80.73	20.0	1.1
445.0	1459.6	27.120	80.82	25.0	1.4
447.0	1466.2	27.160	80.89	20.0	1.1
449.0	1472.7	27.200	80.96	20.0	1.1
451.0	1479.3	27.250	81.05	25.0	1.4
453.0	1485.8	27.300	81.14	25.0	1.4
455.0	1492.4	27.340	81.21	20.0	1.1
457.0	1499.0	27.390	81.30	25.0	1.4
459.0	1505.5	27.430	81.37	20.0	1.1
461.0	1512.1	27.490	81.48	30.0	1.6
463.0	1518.6	27.530	81.55	20.0	1.1
465.0	1525.2	27.580	81.64	25.0	1.4
467.0	1531.8	27.630	81.73	25.0	1.4
469.0	1538.3	27.680	81.82	25.0	1.4
471.0	1544.9	27.720	81.90	20.0	1.1
473.0	1551.4	27.770	81.99	25.0	1.4
475.0	1558.0	27.820	82.08	25.0	1.4
477.0	1564.6	27.850	82.13	15.0	0.8
479.0	1571.1	27.900	82.22	25.0	1.4
481.0	1577.7	27.950	82.31	25.0	1.4
483.0	1584.2	28.000	82.40	25.0	1.4
485.0	1590.8	28.040	82.47	20.0	1.1
487.0	1597.4	28.080	82.54	20.0	1.1
489.0	1603.9	28.130	82.63	25.0	1.4
491.0	1610.5	28.170	82.71	20.0	1.1
493.0	1617.0	28.210	82.78	20.0	1.1
495.0	1623.6	28.260	82.87	25.0	1.4
497.0	1630.2	28.290	82.92	15.0	0.8
499.0	1636.7	28.340	83.01	25.0	1.4
501.0	1643.3	28.370	83.07	15.0	0.8
503.0	1649.8	28.410	83.14	20.0	1.1
505.0	1656.4	28.460	83.23	25.0	1.4
507.0	1663.0	28.500	83.30	20.0	1.1

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
509.0	1669.5	28.540	83.37	20.0	1.1
511.0	1676.1	28.580	83.44	20.0	1.1
513.0	1682.6	28.620	83.52	20.0	1.1
515.0	1689.2	28.660	83.59	20.0	1.1
517.0	1695.8	28.700	83.66	20.0	1.1
519.0	1702.3	28.740	83.73	20.0	1.1
521.0	1708.9	28.780	83.80	20.0	1.1
523.0	1715.4	28.820	83.88	20.0	1.1
525.0	1722.0	28.860	83.95	20.0	1.1
527.0	1728.6	28.900	84.02	20.0	1.1
529.0	1735.1	28.940	84.09	20.0	1.1
531.0	1741.7	28.970	84.15	15.0	0.8
533.0	1748.2	29.000	84.20	15.0	0.8
535.0	1754.8	29.020	84.24	10.0	0.5
537.0	1761.4	29.040	84.27	10.0	0.5
539.0	1767.9	29.070	84.33	15.0	0.8
541.0	1774.5	29.100	84.38	15.0	0.8
543.0	1781.0	29.130	84.43	15.0	0.8
545.0	1787.6	29.180	84.52	25.0	1.4
547.0	1794.2	29.240	84.63	30.0	1.6
549.0	1800.7	29.300	84.74	30.0	1.6
551.0	1807.3	29.360	84.85	30.0	1.6
553.0	1813.8	29.430	84.97	35.0	1.9
555.0	1820.4	29.490	85.08	30.0	1.6
557.0	1827.0	29.550	85.19	30.0	1.6
559.0	1833.5	29.610	85.30	30.0	1.6
561.0	1840.1	29.660	85.39	25.0	1.4
563.0	1846.6	29.720	85.50	30.0	1.6
565.0	1853.2	29.770	85.59	25.0	1.4
567.0	1859.8	29.820	85.68	25.0	1.4
569.0	1866.3	29.870	85.77	25.0	1.4
571.0	1872.9	29.930	85.87	30.0	1.6
573.0	1879.4	29.990	85.98	30.0	1.6
575.0	1886.0	30.060	86.11	35.0	1.9
577.0	1892.6	30.120	86.22	30.0	1.6
579.0	1899.1	30.190	86.34	35.0	1.9
581.0	1905.7	30.250	86.45	30.0	1.6
583.0	1912.2	30.320	86.58	35.0	1.9
585.0	1918.8	30.380	86.68	30.0	1.6
587.0	1925.4	30.440	86.79	30.0	1.6
589.0	1931.9	30.510	86.92	35.0	1.9

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
591.0	1938.5	30.570	87.03	30.0	1.6
593.0	1945.0	30.640	87.15	35.0	1.9
595.0	1951.6	30.690	87.24	25.0	1.4
597.0	1958.2	30.750	87.35	30.0	1.6
599.0	1964.7	30.820	87.48	35.0	1.9
601.0	1971.3	30.880	87.58	30.0	1.6
603.0	1977.8	30.940	87.69	30.0	1.6
605.0	1984.4	31.010	87.82	35.0	1.9
607.0	1991.0	31.080	87.94	35.0	1.9
609.0	1997.5	31.130	88.03	25.0	1.4
611.0	2004.1	31.160	88.09	15.0	0.8
613.0	2010.6	31.200	88.16	20.0	1.1
615.0	2017.2	31.260	88.27	30.0	1.6
617.0	2023.8	31.330	88.39	35.0	1.9
619.0	2030.3	31.380	88.48	25.0	1.4
621.0	2036.9	31.410	88.54	15.0	0.8
623.0	2043.4	31.470	88.65	30.0	1.6
625.0	2050.0	31.540	88.77	35.0	1.9
627.0	2056.6	31.590	88.86	25.0	1.4
629.0	2063.1	31.620	88.92	15.0	0.8
631.0	2069.7	31.660	88.99	20.0	1.1
633.0	2076.2	31.710	89.08	25.0	1.4
635.0	2082.8	31.750	89.15	20.0	1.1
637.0	2089.4	31.780	89.20	15.0	0.8
639.0	2095.9	31.820	89.28	20.0	1.1
641.0	2102.5	31.850	89.33	15.0	0.8
643.0	2109.0	31.900	89.42	25.0	1.4
645.0	2115.6	31.930	89.47	15.0	0.8
647.0	2122.2	31.960	89.53	15.0	0.8
649.0	2128.7	31.980	89.56	10.0	0.5
651.0	2135.3	32.000	89.60	10.0	0.5
653.0	2141.8	32.010	89.62	5.0	0.3
655.0	2148.4	32.010	89.62	0.0	0.0
657.0	2155.0	32.030	89.65	10.0	0.5
659.0	2161.5	32.050	89.69	10.0	0.5
661.0	2168.1	32.120	89.82	35.0	1.9
663.0	2174.6	32.190	89.94	35.0	1.9
665.0	2181.2	32.260	90.07	35.0	1.9
667.0	2187.8	32.300	90.14	20.0	1.1
669.0	2194.3	32.330	90.19	15.0	0.8
671.0	2200.9	32.370	90.27	20.0	1.1

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
673.0	2207.4	32.430	90.37	30.0	1.6
675.0	2214.0	32.490	90.48	30.0	1.6
677.0	2220.6	32.530	90.55	20.0	1.1
679.0	2227.1	32.570	90.63	20.0	1.1
681.0	2233.7	32.610	90.70	20.0	1.1
683.0	2240.2	32.650	90.77	20.0	1.1
685.0	2246.8	32.690	90.84	20.0	1.1
687.0	2253.4	32.730	90.91	20.0	1.1
689.0	2259.9	32.790	91.02	30.0	1.6
691.0	2266.5	32.830	91.09	20.0	1.1
693.0	2273.0	32.860	91.15	15.0	0.8
695.0	2279.6	32.900	91.22	20.0	1.1
697.0	2286.2	32.930	91.27	15.0	0.8
699.0	2292.7	32.980	91.36	25.0	1.4
701.0	2299.3	33.020	91.44	20.0	1.1
703.0	2305.8	33.070	91.53	25.0	1.4
705.0	2312.4	33.150	91.67	40.0	2.2
707.0	2319.0	33.220	91.80	35.0	1.9
709.0	2325.5	33.280	91.90	30.0	1.6
711.0	2332.1	33.330	91.99	25.0	1.4
713.0	2338.6	33.360	92.05	15.0	0.8
715.0	2345.2	33.390	92.10	15.0	0.8
717.0	2351.8	33.440	92.19	25.0	1.4
719.0	2358.3	33.490	92.28	25.0	1.4
721.0	2364.9	33.550	92.39	30.0	1.6
723.0	2371.4	33.600	92.48	25.0	1.4
725.0	2378.0	33.650	92.57	25.0	1.4
727.0	2384.6	33.690	92.64	20.0	1.1
729.0	2391.1	33.730	92.71	20.0	1.1
731.0	2397.7	33.780	92.80	25.0	1.4
733.0	2404.2	33.840	92.91	30.0	1.6
735.0	2410.8	33.880	92.98	20.0	1.1
737.0	2417.4	33.920	93.06	20.0	1.1
739.0	2423.9	33.970	93.15	25.0	1.4
741.0	2430.5	34.010	93.22	20.0	1.1
743.0	2437.0	34.060	93.31	25.0	1.4
745.0	2443.6	34.110	93.40	25.0	1.4
747.0	2450.2	34.150	93.47	20.0	1.1
749.0	2456.7	34.200	93.56	25.0	1.4
751.0	2463.3	34.240	93.63	20.0	1.1
753.0	2469.8	34.290	93.72	25.0	1.4

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
755.0	2476.4	34.340	93.81	25.0	1.4
757.0	2483.0	34.380	93.88	20.0	1.1
759.0	2489.5	34.430	93.97	25.0	1.4
761.0	2496.1	34.480	94.06	25.0	1.4
763.0	2502.6	34.530	94.15	25.0	1.4
765.0	2509.2	34.590	94.26	30.0	1.6
767.0	2515.8	34.640	94.35	25.0	1.4
769.0	2522.3	34.690	94.44	25.0	1.4
771.0	2528.9	34.740	94.53	25.0	1.4
773.0	2535.4	34.800	94.64	30.0	1.6
775.0	2542.0	34.850	94.73	25.0	1.4
777.0	2548.6	34.900	94.82	25.0	1.4
779.0	2555.1	34.960	94.93	30.0	1.6
781.0	2561.7	35.010	95.02	25.0	1.4
783.0	2568.2	35.060	95.11	25.0	1.4
785.0	2574.8	35.120	95.22	30.0	1.6
787.0	2581.4	35.160	95.29	20.0	1.1
789.0	2587.9	35.210	95.38	25.0	1.4
791.0	2594.5	35.250	95.45	20.0	1.1
793.0	2601.0	35.310	95.56	30.0	1.6
811.0	2660.1	35.770	96.39	25.6	1.4
813.0	2666.6	35.820	96.48	25.0	1.4
815.0	2673.2	35.880	96.58	30.0	1.6
817.0	2679.8	35.920	96.66	20.0	1.1
819.0	2686.3	35.970	96.75	25.0	1.4
821.0	2692.9	36.020	96.84	25.0	1.4
823.0	2699.4	36.070	96.93	25.0	1.4
825.0	2706.0	36.120	97.02	25.0	1.4
827.0	2712.6	36.170	97.11	25.0	1.4
829.0	2719.1	36.220	97.20	25.0	1.4
831.0	2725.7	36.280	97.30	30.0	1.6
833.0	2732.2	36.330	97.39	25.0	1.4
835.0	2738.8	36.390	97.50	30.0	1.6
837.0	2745.4	36.450	97.61	30.0	1.6
839.0	2751.9	36.510	97.72	30.0	1.6
841.0	2758.5	36.570	97.83	30.0	1.6
843.0	2765.0	36.630	97.93	30.0	1.6
845.0	2771.6	36.690	98.04	30.0	1.6
847.0	2778.2	36.740	98.13	25.0	1.4
849.0	2784.7	36.800	98.24	30.0	1.6
851.0	2791.3	36.850	98.33	25.0	1.4

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

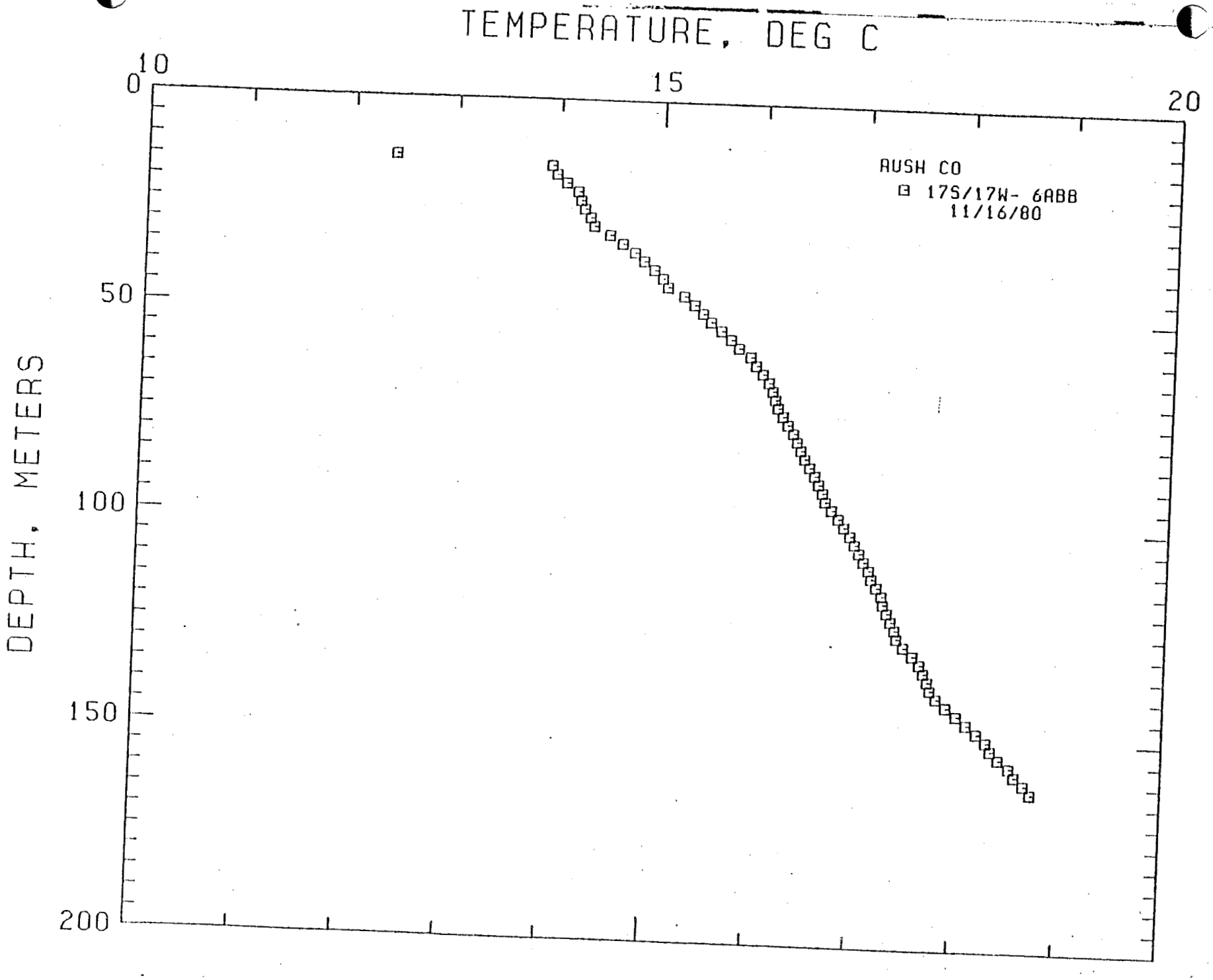
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
853.0	2797.8	36.910	98.44	30.0	1.6
855.0	2804.4	36.960	98.53	25.0	1.4
857.0	2811.0	37.020	98.64	30.0	1.6
859.0	2817.5	37.070	98.73	25.0	1.4
861.0	2824.1	37.120	98.82	25.0	1.4
863.0	2830.6	37.180	98.92	30.0	1.6
865.0	2837.2	37.230	99.01	25.0	1.4
867.0	2843.8	37.290	99.12	30.0	1.6
869.0	2850.3	37.350	99.23	30.0	1.6
871.0	2856.9	37.400	99.32	25.0	1.4
873.0	2863.4	37.460	99.43	30.0	1.6
875.0	2870.0	37.520	99.54	30.0	1.6
877.0	2876.6	37.570	99.63	25.0	1.4
879.0	2883.1	37.640	99.75	35.0	1.9
881.0	2889.7	37.690	99.84	25.0	1.4
883.0	2896.2	37.750	99.95	30.0	1.6
885.0	2902.8	37.800	100.04	25.0	1.4
887.0	2909.4	37.860	100.15	30.0	1.6
889.0	2915.9	37.910	100.24	25.0	1.4
891.0	2922.5	37.960	100.33	25.0	1.4
893.0	2929.0	38.020	100.44	30.0	1.6
895.0	2935.6	38.080	100.54	30.0	1.6
897.0	2942.2	38.150	100.67	35.0	1.9
899.0	2948.7	38.200	100.76	25.0	1.4
901.0	2955.3	38.270	100.89	35.0	1.9
903.0	2961.8	38.320	100.98	25.0	1.4
905.0	2968.4	38.400	101.12	40.0	2.2
907.0	2975.0	38.470	101.25	35.0	1.9
909.0	2981.5	38.540	101.37	35.0	1.9
911.0	2988.1	38.600	101.48	30.0	1.6
913.0	2994.6	38.680	101.62	40.0	2.2
915.0	3001.2	38.760	101.77	40.0	2.2
917.0	3007.8	38.850	101.93	45.0	2.5
919.0	3014.3	38.920	102.06	35.0	1.9
921.0	3020.9	38.990	102.18	35.0	1.9
923.0	3027.4	39.060	102.31	35.0	1.9
925.0	3034.0	39.120	102.42	30.0	1.6
927.0	3040.6	39.180	102.52	30.0	1.6
929.0	3047.1	39.250	102.65	35.0	1.9
931.0	3053.7	39.310	102.76	30.0	1.6
933.0	3060.2	39.390	102.90	40.0	2.2

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
935.0	3066.8	39.480	103.06	45.0	2.5
937.0	3073.4	39.570	103.23	45.0	2.5
939.0	3079.9	39.660	103.39	45.0	2.5
941.0	3086.5	39.740	103.53	40.0	2.2
943.0	3093.0	39.820	103.68	40.0	2.2
945.0	3099.6	39.910	103.84	45.0	2.5
947.0	3106.2	39.990	103.98	40.0	2.2
949.0	3112.7	40.060	104.11	35.0	1.9
951.0	3119.3	40.130	104.23	35.0	1.9
953.0	3125.8	40.200	104.36	35.0	1.9
955.0	3132.4	40.270	104.49	35.0	1.9
957.0	3139.0	40.350	104.63	40.0	2.2
959.0	3145.5	40.410	104.74	30.0	1.6
961.0	3152.1	40.460	104.83	25.0	1.4
963.0	3158.6	40.520	104.94	30.0	1.6
965.0	3165.2	40.580	105.04	30.0	1.6
967.0	3171.8	40.630	105.13	25.0	1.4
969.0	3178.3	40.690	105.24	30.0	1.6
971.0	3184.9	40.740	105.33	25.0	1.4
973.0	3191.4	40.800	105.44	30.0	1.6
975.0	3198.0	40.860	105.55	30.0	1.6
977.0	3204.6	40.920	105.66	30.0	1.6
979.0	3211.1	40.990	105.78	35.0	1.9
981.0	3217.7	41.080	105.94	45.0	2.5
983.0	3224.2	41.150	106.07	35.0	1.9
985.0	3230.8	41.220	106.20	35.0	1.9
987.0	3237.4	41.290	106.32	35.0	1.9
989.0	3243.9	41.370	106.47	40.0	2.2
991.0	3250.5	41.440	106.59	35.0	1.9
993.0	3257.0	41.520	106.74	40.0	2.2
995.0	3263.6	41.610	106.90	45.0	2.5
997.0	3270.2	41.690	107.04	40.0	2.2
999.0	3276.7	41.770	107.19	40.0	2.2
1001.0	3283.3	41.850	107.33	40.0	2.2
1003.0	3289.8	41.900	107.42	25.0	1.4
1005.0	3296.4	41.960	107.53	30.0	1.6
1007.0	3303.0	42.010	107.62	25.0	1.4
1009.0	3309.5	42.070	107.73	30.0	1.6
1011.0	3316.1	42.130	107.83	30.0	1.6
1013.0	3322.6	42.190	107.94	30.0	1.6
1015.0	3329.2	42.240	108.03	25.0	1.4

LOCATION: BELOIT AMS, KANSAS
9S/20W-27B
HOLE NAME: ROOKS CO
DATE MEASURED: 11/15/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
1017.0	3335.8	42.290	108.12	25.0	1.4
1019.0	3342.3	42.340	108.21	25.0	1.4
1021.0	3348.9	42.390	108.30	25.0	1.4
1023.0	3355.4	42.450	108.41	30.0	1.6
1025.0	3362.0	42.500	108.50	25.0	1.4
1027.0	3368.6	42.550	108.59	25.0	1.4
1029.0	3375.1	42.600	108.68	25.0	1.4
1031.0	3381.7	42.650	108.77	25.0	1.4
1033.0	3388.2	42.700	108.86	25.0	1.4
1035.0	3394.8	42.750	108.95	25.0	1.4
1037.0	3401.4	42.790	109.02	20.0	1.1
1039.0	3407.9	42.840	109.11	25.0	1.4
1041.0	3414.5	42.890	109.20	25.0	1.4
1043.0	3421.0	42.940	109.29	25.0	1.4
1045.0	3427.6	43.000	109.40	30.0	1.6


TEMPERATURE, DEG C
10
15
20
0
50
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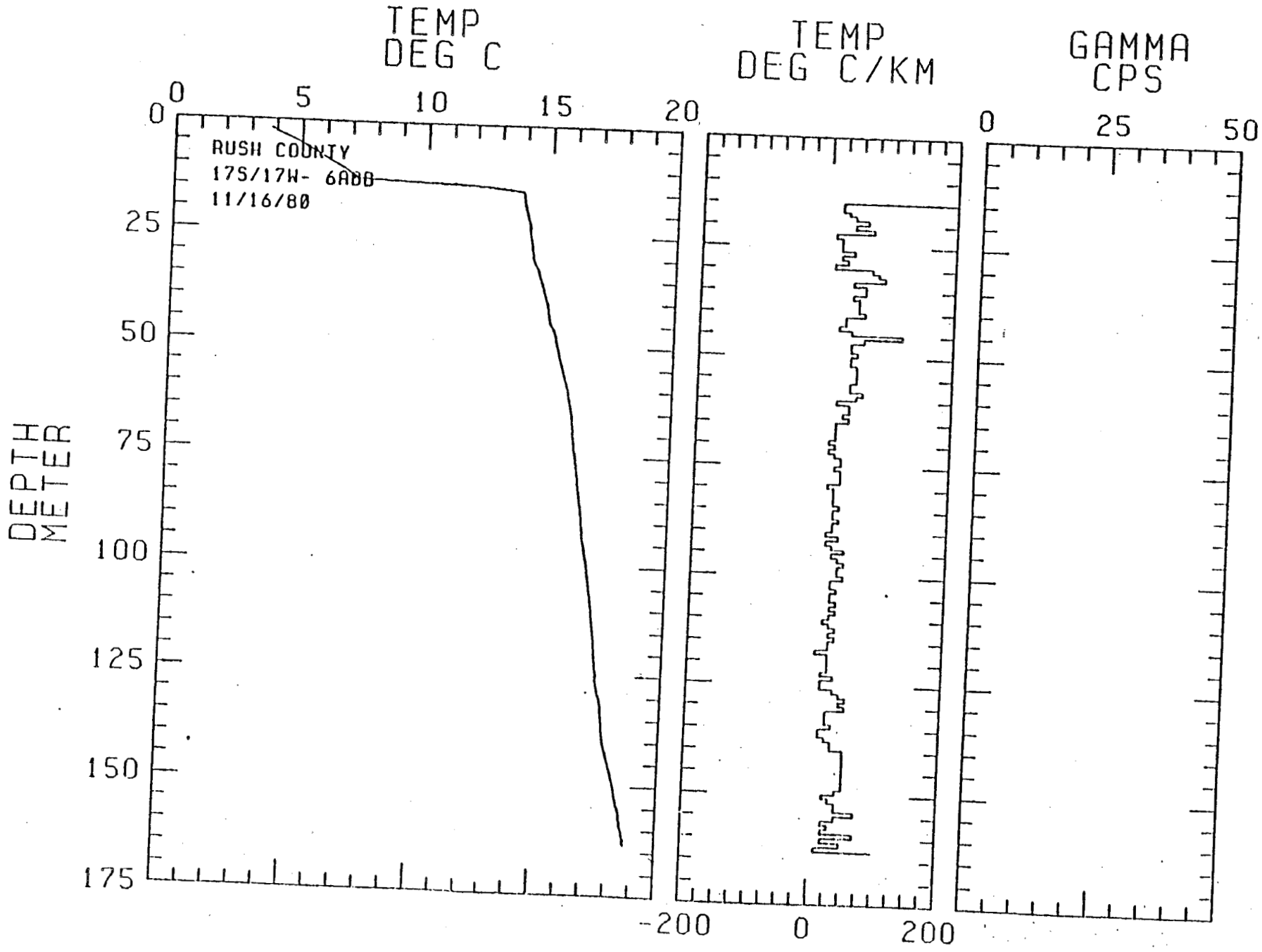
150
200
DEPTH, METERS
RUSH CO
17S/17W- 6ABB
11/16/80

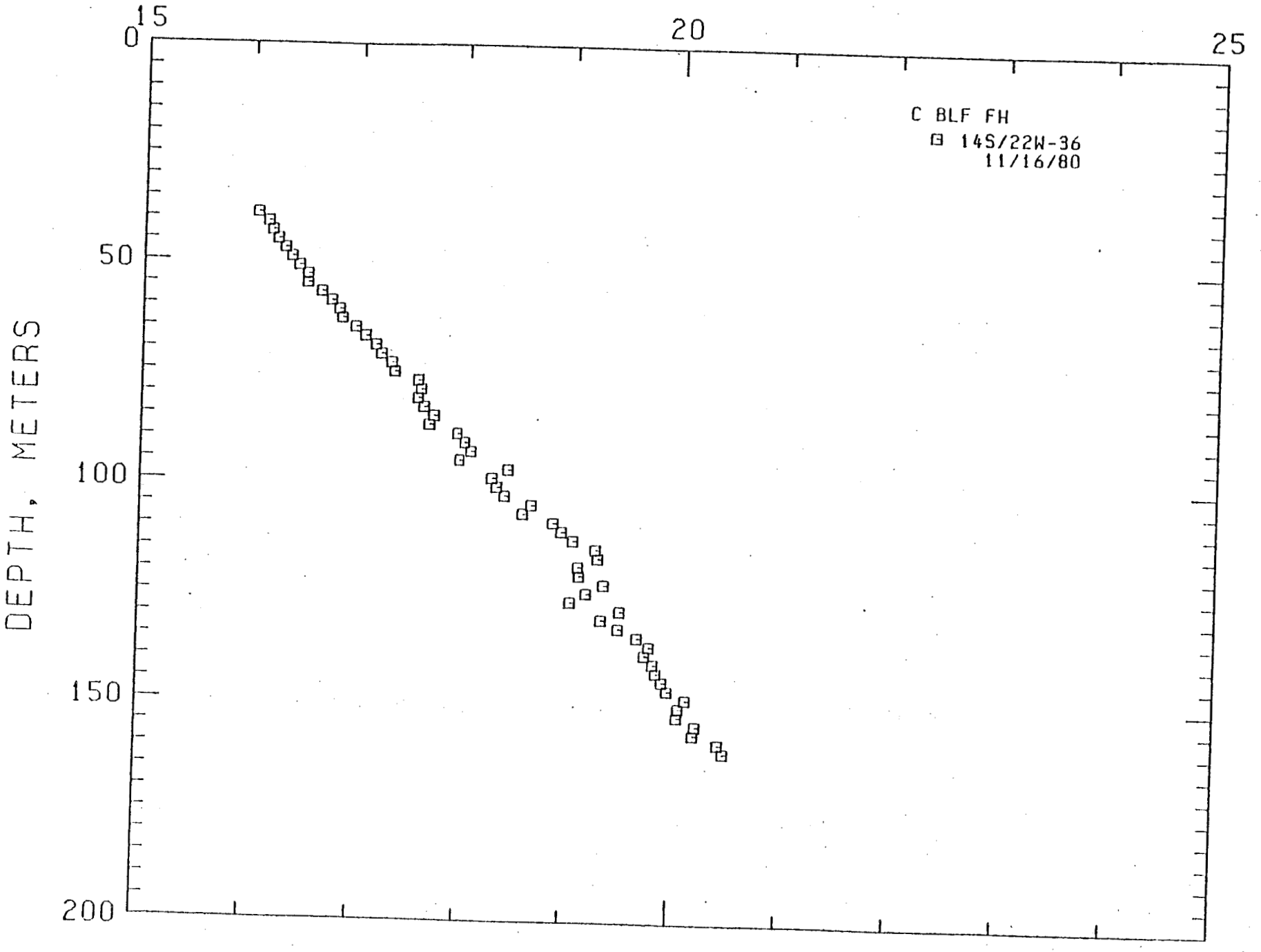

TEMP
DEG C
TEMP
DEG C/KM
GAMMA
CPS
DEPTH
METER
RUSH COUNTY
17S/17W- 6ADB
11/16/80
0
5
10
15
20
0
25
50
0
25
50
75
100
125
150
175
-200
0
200

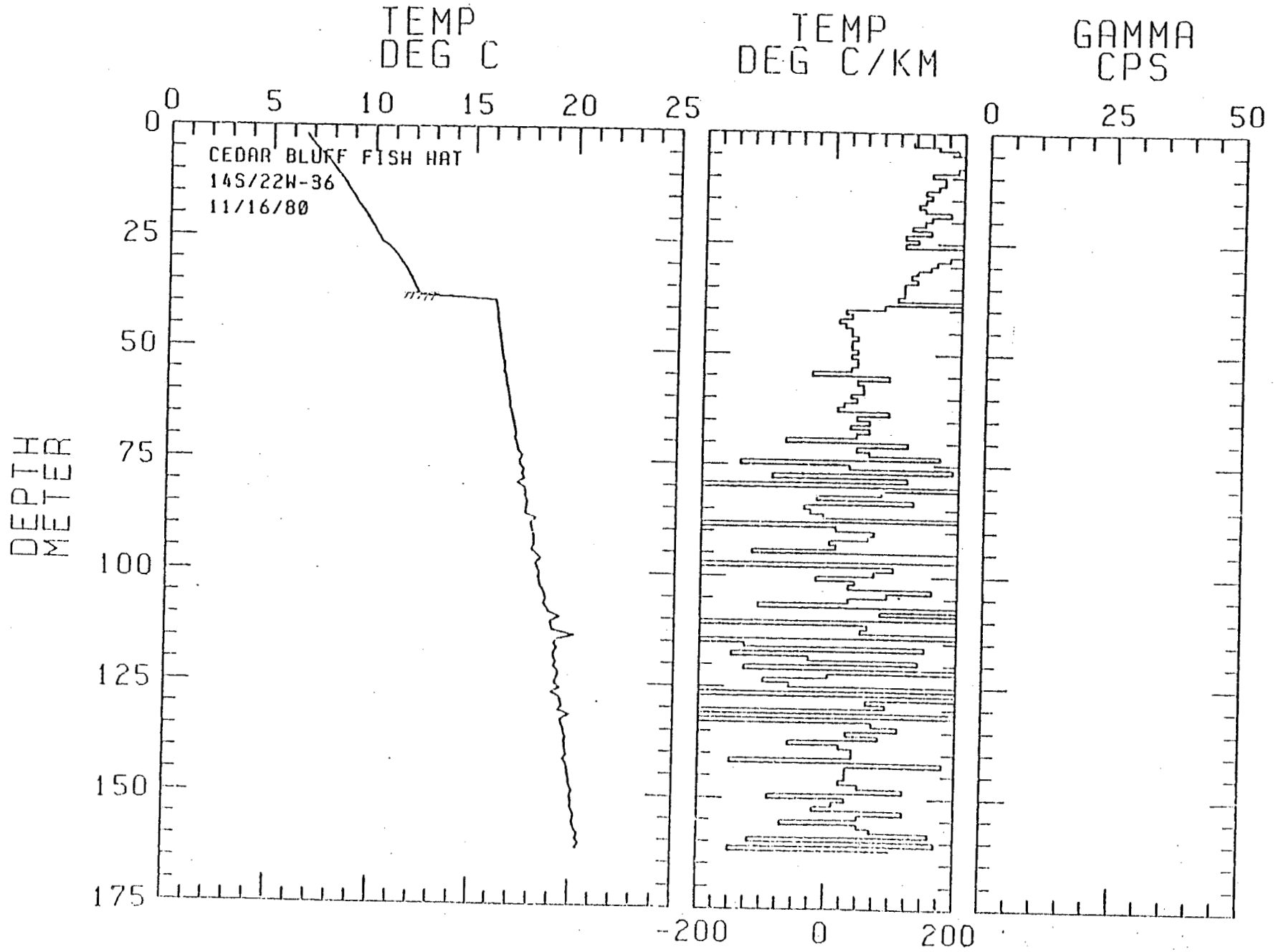
LOCATION: GREAT BEND AMS, KANSAS
17S/17W- 6ABB
HOLE NAME: RUSH CO
DATE MEASURED: 11/16/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
14.0	45.9	12.400	54.32	0.0	0.0
16.0	52.5	13.920	57.06	760.0	41.7
18.0	59.0	13.970	57.15	25.0	1.4
20.0	65.6	14.070	57.33	50.0	2.7
22.0	72.2	14.180	57.52	55.0	3.0
24.0	78.7	14.210	57.58	15.0	0.8
26.0	85.3	14.250	57.65	20.0	1.1
28.0	91.8	14.310	57.76	30.0	1.6
30.0	98.4	14.350	57.83	20.0	1.1
32.0	105.0	14.500	58.10	75.0	4.1
34.0	111.5	14.630	58.33	65.0	3.6
36.0	118.1	14.750	58.55	60.0	3.3
38.0	124.6	14.840	58.71	45.0	2.5
40.0	131.2	14.940	58.89	50.0	2.7
42.0	137.8	15.030	59.05	45.0	2.5
44.0	144.3	15.080	59.14	25.0	1.4
46.0	150.9	15.240	59.43	80.0	4.4
48.0	157.4	15.340	59.61	50.0	2.7
50.0	164.0	15.430	59.77	45.0	2.5
52.0	170.6	15.510	59.92	40.0	2.2
54.0	177.1	15.610	60.10	50.0	2.7
56.0	183.7	15.710	60.28	50.0	2.7
58.0	190.2	15.790	60.42	40.0	2.2
60.0	196.8	15.900	60.62	55.0	3.0
62.0	203.4	15.960	60.73	30.0	1.6
64.0	209.9	16.030	60.85	35.0	1.9
66.0	216.5	16.090	60.96	30.0	1.6
68.0	223.0	16.130	61.03	20.0	1.1
70.0	229.6	16.160	61.09	15.0	0.8
72.0	236.2	16.190	61.14	15.0	0.8
74.0	242.7	16.240	61.23	25.0	1.4
76.0	249.3	16.290	61.32	25.0	1.4
78.0	255.8	16.350	61.43	30.0	1.6
80.0	262.4	16.390	61.50	20.0	1.1
82.0	269.0	16.430	61.57	20.0	1.1
84.0	275.5	16.470	61.65	20.0	1.1
86.0	282.1	16.520	61.74	25.0	1.4
88.0	288.6	16.570	61.83	25.0	1.4
90.0	295.2	16.610	61.90	20.0	1.1
92.0	301.8	16.650	61.97	20.0	1.1
94.0	308.3	16.680	62.02	15.0	0.8

LOCATION: GREAT BEND AMS, KANSAS PAGE 2
17S/17W- 6ABB
HOLE NAME: RUSH CO
DATE MEASURED: 11/16/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
96.0	314.9	16.740	62.13	30.0	1.6
98.0	321.4	16.810	62.26	35.0	1.9
100.0	328.0	16.870	62.37	30.0	1.6
102.0	334.6	16.930	62.47	30.0	1.6
104.0	341.1	16.980	62.56	25.0	1.4
106.0	347.7	17.020	62.64	20.0	1.1
108.0	354.2	17.070	62.73	25.0	1.4
110.0	360.8	17.120	62.82	25.0	1.4
112.0	367.4	17.150	62.87	15.0	0.8
114.0	373.9	17.200	62.96	25.0	1.4
116.0	380.5	17.250	63.05	25.0	1.4
118.0	387.0	17.270	63.09	10.0	0.5
120.0	393.6	17.310	63.16	20.0	1.1
122.0	400.2	17.350	63.23	20.0	1.1
124.0	406.7	17.390	63.30	20.0	1.1
126.0	413.3	17.410	63.34	10.0	0.5
128.0	419.8	17.480	63.46	35.0	1.9
130.0	426.4	17.570	63.63	45.0	2.5
132.0	433.0	17.640	63.75	35.0	1.9
134.0	439.5	17.680	63.82	20.0	1.1
136.0	446.1	17.720	63.90	20.0	1.1
138.0	452.6	17.750	63.95	15.0	0.8
140.0	459.2	17.810	64.06	30.0	1.6
142.0	465.8	17.910	64.24	50.0	2.7
144.0	472.3	18.010	64.42	50.0	2.7
146.0	478.9	18.110	64.60	50.0	2.7
148.0	485.4	18.210	64.78	50.0	2.7
150.0	492.0	18.300	64.94	45.0	2.5
152.0	498.6	18.350	65.03	25.0	1.4
154.0	505.1	18.430	65.17	40.0	2.2
156.0	511.7	18.540	65.37	55.0	3.0
158.0	518.2	18.590	65.46	25.0	1.4
160.0	524.8	18.680	65.62	45.0	2.5
162.0	531.4	18.750	65.75	35.0	1.9


TEMPERATURE, DEG C
15
20
25
0
50
100
150
200
DEPTH, METERS
C BLF FH
14S/22W-36
11/16/80

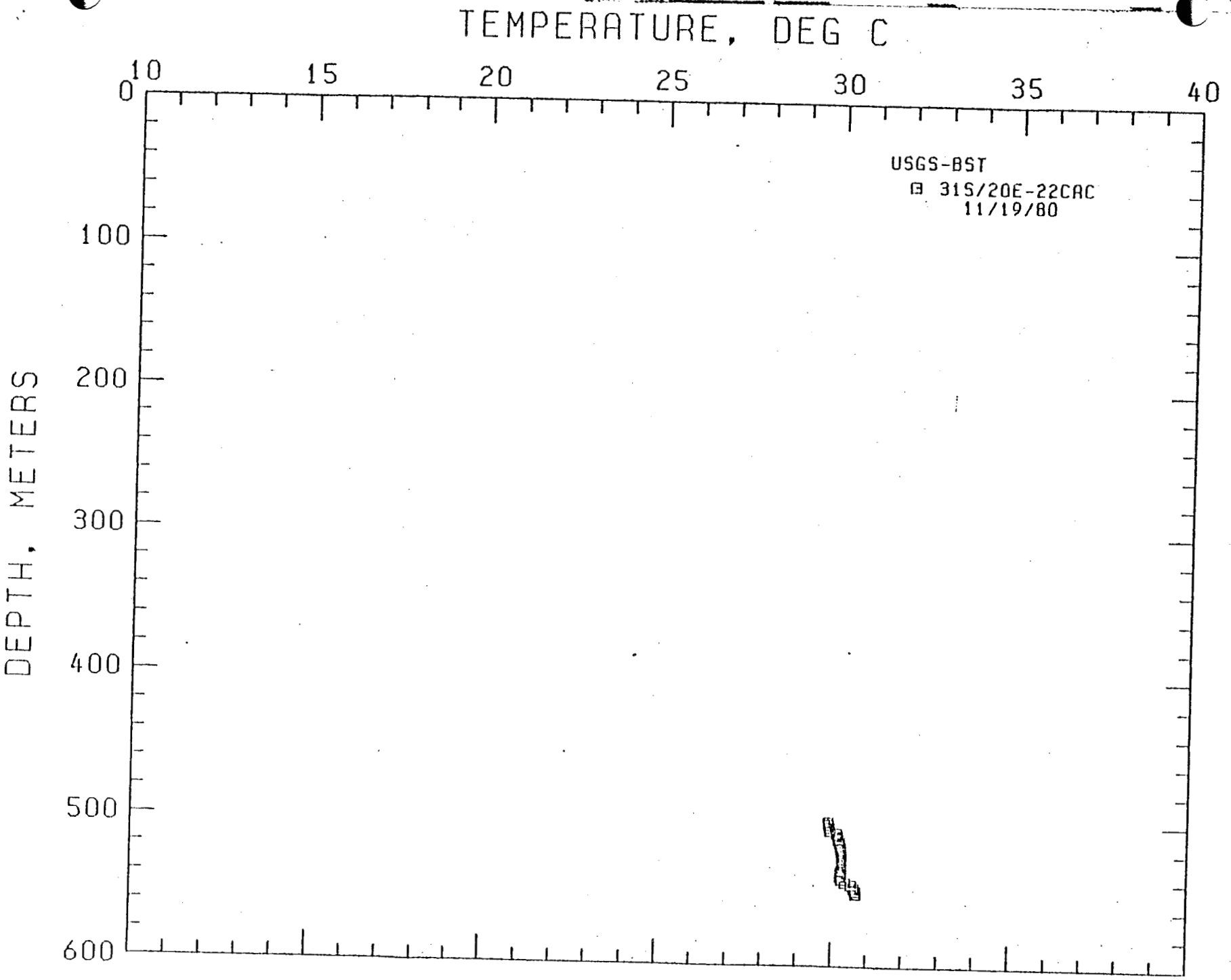

TEMP
DEG C
TEMP
DEG C/KM
GAMMA
CPS
0
5
10
15
20
25
0
25
50
CEDAR BLUFF FISH HAT
14S/22W-36
11/16/80
DEPTH
METER
0
25
50
75
100
125
150
175
-200
0
200

LOCATION: GREAT BEND AMS, KANSAS
14S/22W-36
HOLE NAME: C BLF FH
DATE MEASURED: 11/16/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
39.0	127.9	16.050	60.89	0.0	0.0
41.0	134.5	16.150	61.07	50.0	2.7
43.0	141.0	16.190	61.14	20.0	1.1
45.0	147.6	16.240	61.23	25.0	1.4
47.0	154.2	16.310	61.36	35.0	1.9
49.0	160.7	16.370	61.47	30.0	1.6
51.0	167.3	16.440	61.59	35.0	1.9
53.0	173.8	16.520	61.74	40.0	2.2
55.0	180.4	16.520	61.74	0.0	0.0
57.0	187.0	16.650	61.97	65.0	3.6
59.0	193.5	16.750	62.15	50.0	2.7
61.0	200.1	16.820	62.28	35.0	1.9
63.0	206.6	16.850	62.33	15.0	0.8
65.0	213.2	16.980	62.56	65.0	3.6
67.0	219.8	17.070	62.73	45.0	2.5
69.0	226.3	17.170	62.91	50.0	2.7
71.0	232.9	17.220	63.00	25.0	1.4
73.0	239.4	17.320	63.18	50.0	2.7
75.0	246.0	17.350	63.23	15.0	0.8
77.0	252.6	17.570	63.63	110.0	6.0
79.0	259.1	17.600	63.68	15.0	0.8
81.0	265.7	17.570	63.63	-15.0	-0.8
83.0	272.2	17.630	63.73	30.0	1.6
85.0	278.8	17.720	63.90	45.0	2.5
87.0	285.4	17.680	63.82	-20.0	-1.1
89.0	291.9	17.950	64.31	135.0	7.4
91.0	298.5	18.030	64.45	40.0	2.2
93.0	305.0	18.090	64.56	30.0	1.6
95.0	311.6	17.980	64.36	-55.0	-3.0
97.0	318.2	18.440	65.19	230.0	12.6
99.0	324.7	18.290	64.92	-75.0	-4.1
101.0	331.3	18.340	65.01	25.0	1.4
103.0	337.8	18.410	65.14	35.0	1.9
105.0	344.4	18.660	65.59	125.0	6.9
107.0	351.0	18.580	65.44	-40.0	-2.2
109.0	357.5	18.870	65.97	145.0	8.0
111.0	364.1	18.950	66.11	40.0	2.2
113.0	370.6	19.060	66.31	55.0	3.0
115.0	377.2	19.270	66.69	105.0	5.8
117.0	383.8	19.290	66.72	10.0	0.5
119.0	390.3	19.110	66.40	-90.0	-4.9

LOCATION: GREAT BEND AMS, KANSAS PAGE 2
14S/22W-36
HOLE NAME: C BLF FH
DATE MEASURED: 11/16/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
121.0	396.9	19.120	66.42	5.0	0.3
123.0	403.4	19.350	66.83	115.0	6.3
125.0	410.0	19.190	66.54	-80.0	-4.4
127.0	416.6	19.040	66.27	-75.0	-4.1
129.0	423.1	19.500	67.10	230.0	12.6
131.0	429.7	19.330	66.79	-85.0	-4.7
133.0	436.2	19.490	67.08	80.0	4.4
135.0	442.8	19.670	67.41	90.0	4.9
137.0	449.4	19.780	67.60	55.0	3.0
139.0	455.9	19.740	67.53	-20.0	-1.1
141.0	462.5	19.820	67.68	40.0	2.2
143.0	469.0	19.850	67.73	15.0	0.8
145.0	475.6	19.910	67.84	30.0	1.6
147.0	482.2	19.960	67.93	25.0	1.4
149.0	488.7	20.130	68.23	85.0	4.7
151.0	495.3	20.070	68.13	-30.0	-1.6
153.0	501.8	20.060	68.11	-5.0	-0.3
155.0	508.4	20.230	68.41	85.0	4.7
157.0	515.0	20.210	68.38	-10.0	-0.5
159.0	521.5	20.440	68.79	115.0	6.3
161.0	528.1	20.490	68.88	25.0	1.4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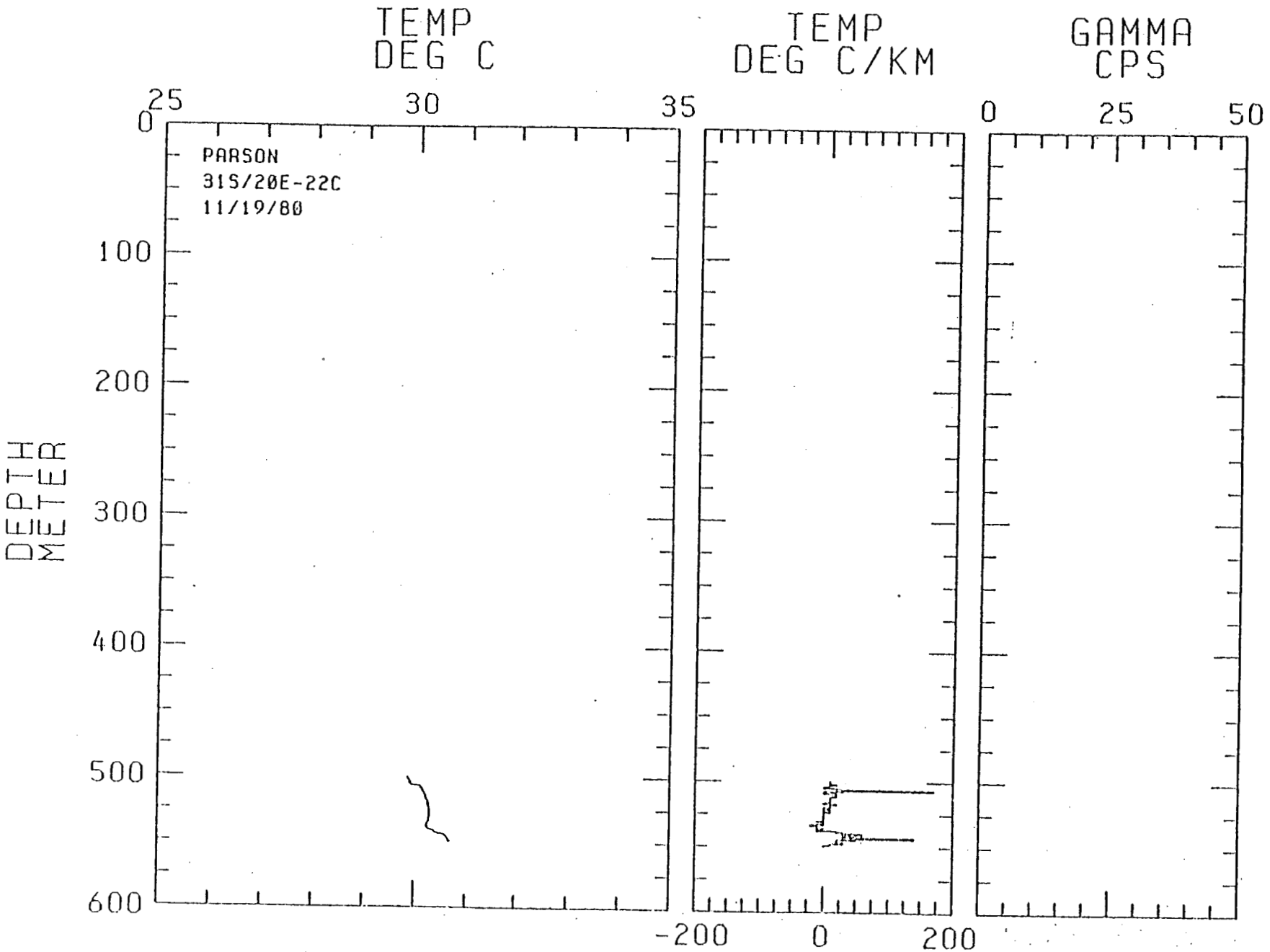
0
10
15
20
25
30
35
40
DEPTH, METERS
100
200
300
400
500
600
USGS-BST
31S/20E-22CAC
11/19/80


TEMP
DEG C
TEMP
DEG C/KM
GAMMA
CPS
25
30
35
0
25
50
PARSON
31S/20E-22C
11/19/80
DEPTH
METER
0
100
200
300
400
500
600
-200
0
200

LOCATION: JOPLIN AMS, KANSAS
31S/20E-22CAC
HOLE NAME: USGS-BST
DATE MEASURED: 11/19/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
500.0	1640.0	29.880	85.78	0.0	0.0
502.0	1646.6	29.900	85.82	10.0	0.5
504.0	1653.1	29.930	85.87	15.0	0.8
506.0	1659.7	29.950	85.91	10.0	0.5
508.0	1666.2	30.150	86.27	100.0	5.5
510.0	1672.8	30.170	86.31	10.0	0.5
512.0	1679.4	30.200	86.36	15.0	0.8
514.0	1685.9	30.220	86.40	10.0	0.5
516.0	1692.5	30.240	86.43	10.0	0.5
518.0	1699.0	30.260	86.47	10.0	0.5
520.0	1705.6	30.280	86.50	10.0	0.5
522.0	1712.2	30.290	86.52	5.0	0.3
524.0	1718.7	30.300	86.54	5.0	0.3
526.0	1725.3	30.300	86.54	0.0	0.0
528.0	1731.8	30.300	86.54	0.0	0.0
530.0	1738.4	30.300	86.54	0.0	0.0
532.0	1745.0	30.290	86.52	-5.0	-0.3
534.0	1751.5	30.270	86.49	-10.0	-0.5
536.0	1758.1	30.250	86.45	-10.0	-0.5
538.0	1764.6	30.240	86.43	-5.0	-0.3
540.0	1771.2	30.290	86.52	25.0	1.4
542.0	1777.8	30.400	86.72	55.0	3.0
544.0	1784.3	30.570	87.03	85.0	4.7
546.0	1790.9	30.640	87.15	35.0	1.9
548.0	1797.4	30.690	87.24	25.0	1.4
550.0	1804.0	30.700	87.26	5.0	0.3

APPENDIX II

Big Springs, Kansas 12S/17E-13bbd

Depth (feet)	Bulk Conductivity $Wm^{-1}K^{-1}$
300 - 310	2.71
400 - 410	2.76
500 - 510	3.49
550 - 560	2.47
570 - 580	2.53
600 - 610	2.69
700 - 710	2.39
750 - 760	2.86
800 - 810	2.33
840 - 850	2.77
890 - 900	2.69
900 - 910	2.81
910 - 920	3.19
920 - 930	3.16
930 - 940	2.68
940 - 950	2.80
960 - 970	3.16
1000 - 1010	3.03
1100 - 1110	2.63
1200 - 1210	2.26
1300 - 1310	2.41
1400 - 1410	2.39
1490 - 1500	2.67
1500 - 1510	3.28
1520 - 1530	3.61
1530 - 1540	3.10
1560 - 1570	3.12
1580 - 1590	2.66
1600 - 1610	4.76
1620 - 1630	3.86
1640 - 1650	3.28
1660 - 1670	2.94
1680 - 1690	2.92
1690 - 1700	2.62
1700 - 1710	3.14
1710 - 1720	3.21
1720 - 1730	3.26
1740 - 1750	3.23
1760 - 1770	3.11
1780 - 1790	3.11
1800 - 1810	3.05
1810 - 1820	3.48
1820 - 1830	3.48
1900 - 1910	2.79
1990 - 2000	2.93
2000 - 2010	3.04
2050 - 2060	2.51
2080 - 2090	2.45

Depth (feet)	Bulk Conductivity $Wm^{-1}K^{-1}$
2100 - 2110	2.48
2150 - 2160	4.82
2200 - 2210	4.11
2250 - 2260	5.02
2300 - 2310	4.66
2350 - 2360	5.46
2400 - 2410	4.06
2450 - 2460	5.07
2500 - 2510	3.93
2550 - 2560	5.67
2600 - 2610	5.03
2650 - 2660	5.48
2700 - 2710	4.36
2750 - 2760	5.09
2800 - 2810	4.66
2850 - 2860	6.10
2900 - 2910	4.69
2950 - 2960	3.94

	Core Conductivity $Wm^{-1}K^{-1}$
2968'8"-2968'9"	3.22
2970'5"-2970'6"	3.21
2974'1.5"-2974'2.5"	3.22
2977'3"-2977'4"	3.22

Smoky Hill, Kansas 13S/2W-32ccc

Depth (feet)	Bulk Conductivity $Wm^{-1}K^{-1}$
950 - 960	3.39
906 - 970	3.64
1700 - 1710	2.70
1750 - 1760	3.22
1860 - 1870	2.80
1940 - 1950	2.82
2010 - 2020	2.62
2100 - 2110	2.96
2150 - 2160	2.98
2260 - 2270	2.74
2350 - 2360	2.98
2440 - 2450	2.62
2560 - 2570	2.68
2650 - 2660	3.04
2700 - 2710	3.86
2760 - 2770	4.21
2860 - 2870	2.65
2950 - 2960	2.54
3020 - 3030	3.84
3070 - 3080	3.26
3130 - 3140	3.28
3150 - 3160	2.82
3210 - 3220	2.77
3250 - 3260	3.12
3345 - 3355	2.97
3400 - 3410	(2.31)
3446 - 3456	3.72
3500 - 3510	4.53
3550 - 3560	4.35
3600 - 3610	3.90
3650 - 3660	4.97

Watson-1, Kansas 18S/23E-18dcd

Depth (feet)	Bulk Conductivity $Wm^{-1}K^{-1}$
350 - 355	4.11
405 - 410	2.72
450 - 455	2.89
505 - 510	2.92
550 - 555	2.41
600 - 605	2.52
650 - 655	2.98
700 - 705	2.63
755 - 760	2.78
770 - 775	3.02
820 - 825	3.23
850 - 855	2.40
895 - 900	2.90
945 - 950	3.21
995 - 1000	4.46
1050 - 1055	3.12
1105 - 1110	3.69
1150 - 1155	3.95
1200 - 1205	2.28
1210 - 1215	2.96
1250 - 1255	3.85
1355 - 1360	4.82
1450 - 1455	4.50
1550 - 1555	4.85
1650 - 1655	4.38
1745 - 1750	5.13
1855 - 1860	5.29

Appendix I

Natural Remanent Magnetizations (NRM)

Osawattamie Core

Specimen	Inclination	Declination	Intensity*
1a.1	87.7	63.6	6.58-2
1a	80.7	46.9	8.41-2
1b.1	77.2	62.0	3.08-2
1b	83.3	184.3	3.61-2
1c.1	75.2	164.3	5.72-2
1c	85.1	251.2	3.79-2
2a.1	84.9	98.0	4.28-2
2a	87.0	244.9	3.45-2
2b.1	89.3	232.5	1.55-2
2b	85.6	86.9	2.96-2
2c.1	87.1	43.1	2.41-2
2c	82.5	35.0	4.80-2
3a.1	69.1	226.5	2.18-2
3a	67.7	0.3	3.38-2
3b.1	67.8	255.3	3.39-2
3b	69.6	217.5	2.50-2
3c.1	60.0	183.6	2.21-2
3c	59.9	218.6	8.30-3

Big Springs Core

Specimen	Inclination	Declination	Intensity*
1A	64.2	219.1	1.10-2
1B	81.2	25.9	1.14-2
1-C-1	59.4	35.8	1.17-2
2A	-77.6	322.3	3.21-3
2B	-84.2	46.3	2.75-3
2-C-1	-77.7	321.3	1.03-3
3A	34.3	240.9	4.73-3
3B	43.6	212.8	4.58-3
3-C-1	39.3	260.7	2.36-3
3-C-2	48.3	262.9	2.66-3
4A	66.6	275.2	8.91-3
4B	62.6	270.2	1.04-2
4-C-1	72.2	234.2	8.48-3

*Intensities: To calculate magnetization, J, divide by specimen volume = 12.87 cm^3

Susceptibilities

Osawattamie Core

Specimens**	Susceptibility (cgs)
1a and 1a.1	3146-6
1b and 1b.1	2400-6
1c and 1c.1	2676-6
2a and 2a.1	2988-6
2b and 2b.1	1907-6
2c and 2c.1	2869-6
3a and 3a.1	2944-6
3b and 3b.1	3576-6
3c and 3c.1	2118-6

**Two paleomagnetic specimens were combined for one susceptibility measurement.

Big Springs Core Samples ***	Susceptibility
1	3936-6 σ=797-6
2	2209-6 σ=1039-6
3	1044-6 σ=95-6
4	3622-6 σ=686-6

***Average susceptibility for 3 measurements from each hand sample.

ACTUAL AND CHEMICAL-GEOTHERMOMETER TEMPERATURES FOR KANSAS WELL WATERS

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
1S38W 2CDC	-101.555	39.9894	16.0	101.0	69.2	197.8	74.5	30.7
1S38W 8DCC	-101.607	39.9750	17.0	84.8	51.8	191.2	69.5	25.2
1S39W34DDA	-101.675	39.9189	17.0	102.8	71.2	259.4	66.5	19.6
1S42W 9ADA	-102.031	39.9851	17.0	95.0	62.8	295.6	79.3	27.2
2S38W27DAD	-101.563	39.8482	19.5	96.1	63.9	363.4	68.7	25.5
2S40W25ADA	-101.750	39.8537	16.5	101.9	70.2	185.2	83.7	30.7
2S40W29DBA	-101.811	39.8501	17.0	114.5	84.0	327.5	70.0	30.0
2S41W28DAD	-101.919	39.8484	18.5	113.7	83.1	320.1	68.0	28.2
3S37W14BBC	-101.448	39.7975	19.0	115.3	84.8	288.5	70.1	27.8
3S37W19BBC	-101.523	39.7830	19.5	116.0	85.6	288.9	69.0	28.5
3S38W21BCB	-101.598	39.7812	19.0	114.5	84.0	286.8	68.6	27.0
3S39W2CDAC	-101.716	39.7758	19.0	113.0	82.3	384.5	59.7	19.0
3S40W28ACA	-101.812	39.7667	15.0	113.7	83.1	196.7	66.9	16.8
3S40W35AAC	-101.772	39.7540	15.0	115.3	84.8	320.5	64.0	22.7
3S41W16AAC	-101.922	39.7976	17.5	113.0	82.3	423.8	56.8	18.3
3S42W16CDD	-102.041	39.7873	18.5	115.3	84.8	344.2	58.1	22.3
4S37W11BCC	-101.449	39.7214	18.5	103.7	72.2	330.8	63.8	22.1
4S37W17AAC	-101.491	39.7106	18.0	108.1	77.0	339.5	61.8	19.2
4S37W25DCA	-101.419	39.6725	16.5	102.8	71.2	291.6	60.0	23.5
4S38W 4BAC	-101.594	39.7396	17.5	103.7	72.2	278.8	64.2	23.7
4S38W21ADC	-101.585	39.6925	16.5	103.7	72.2	263.2	61.7	23.2
4S39W 2DBC	-101.664	39.7323	17.0	103.7	72.2	278.7	69.6	26.5
4S39W15CCA	-101.690	39.7015	17.0	106.4	75.1	270.2	66.1	25.2
4S39W18CAB	-101.744	39.7051	17.0	105.5	74.1	292.5	67.6	26.4
4S39W27CCA	-101.690	39.6725	16.5	116.8	86.5	276.6	60.8	22.8
4S42W26BCC	-102.011	39.6782	23.5	106.4	75.1	318.5	50.0	8.0
4S42W34CAA	-102.022	39.6619	24.5	103.7	72.2	320.1	46.2	7.9
5S37W15DBB	-101.459	39.6182	16.5	115.3	84.8	250.0	59.5	18.9
5S37W18DDD	-101.508	39.6128	17.0	113.0	82.3	259.4	56.4	16.4
5S38W17CBA	-101.616	39.6183	15.0	110.6	79.7	308.9	56.0	17.9
5S38W26CCA	-101.560	39.5957	16.5	113.0	82.3	274.1	59.1	22.8
5S39W11CBC	-101.674	39.6309	17.0	101.9	70.2	267.5	61.4	22.0
5S39W19BBC	-101.749	39.6090	17.0	105.8	78.8	315.0	44.4	10.4
5S39W25CCA	-101.649	39.5856	16.0	102.8	71.2	271.9	50.0	19.7
5S39W3CCBC	-101.749	39.5873	15.0	111.4	80.5	231.6	61.5	20.5
5S40W 4CBD	-101.822	39.6451	15.0	114.5	84.0	250.0	63.9	24.0
5S40W14BCD	-101.784	39.6198	18.0	111.4	80.5	255.2	65.4	26.0
5S40W27BBA	-101.803	39.5962	17.0	108.9	77.9	224.9	58.7	18.3
5S41W12ACC	-101.866	39.6342	17.0	108.1	77.0	260.5	56.4	17.0
5S41W20DAA	-101.939	39.6036	16.5	108.1	77.0	293.9	54.4	15.5
5S41W23ACC	-101.890	39.6052	17.0	108.1	77.0	273.9	56.3	16.8
5S41W33DAA	-101.920	39.5745	16.5	101.9	70.2	293.3	56.2	17.1
5S42W14CBC	-102.011	39.6165	16.0	95.1	67.1	308.1	48.8	12.7
5S42W36BCD	-101.990	39.5765	22.0	110.6	79.7	339.5	49.5	7.4
1S27W26BAD	-100.321	39.9424	14.5	110.6	79.7	589.4	47.9	1.8
1S29W 1BBD	-100.532	40.0004	13.5	98.1	66.1	295.6	66.1	17.2
1S29W 3DCB	-100.557	39.9914	15.5	103.7	72.2	320.1	66.2	20.0
1S29W19BDD	-100.620	39.9533	15.5	97.1	65.0	310.4	72.5	19.8
1S29W30BDD	-100.620	39.9388	13.0	96.1	63.9	355.6	68.1	16.2
1S30W34DDD	-100.667	39.9172	13.5	83.6	50.6	317.5	75.1	21.8
2S23W13ABA	-100.409	39.8861	14.5	96.1	63.9	406.0	73.6	21.8
2S28W33ABB	-100.469	39.8427	14.5	107.3	76.0	412.8	48.4	3.2

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
3S28W32BCA	-100.495	39.7522	16.0	112.2	81.4	423.8	56.8	17.6
3S29W17DCB	-100.600	39.7885	13.5	98.1	66.1	309.1	85.2	29.4
3S29W18DCC	-100.618	39.7866	14.5	100.0	68.2	408.5	78.2	27.0
3S29W31DCC	-100.618	39.7431	14.0	95.0	62.8	364.2	66.9	15.9
3S30W 3BCD	-100.681	39.8229	16.5	116.0	85.6	336.2	67.3	22.8
3S30W26BBB	-100.665	39.7703	14.5	87.3	54.4	383.4	73.9	23.2
4S26W12BCD	-100.196	39.7205	14.0	100.0	68.2	424.4	51.5	8.9
4S27W17DAC	-100.371	39.7031	15.5	111.4	80.5	474.0	45.7	5.2
4S27W30DAC	-100.389	39.6741	14.0	105.8	78.8	349.4	50.8	7.0
4S27W33BBB	-100.366	39.6685	15.0	100.0	68.2	418.2	54.3	9.9
4S28W35DCA	-100.429	39.6579	13.0	101.9	70.2	374.0	51.6	4.2
5S26W26DDA	-100.201	39.5845	15.0	101.0	69.2	553.0	43.9	3.8
5S30W35BCB	-100.666	39.5781	15.5	102.8	71.2	497.4	45.4	4.7
11S28W 5CDD	-100.452	39.1190	17.5	86.0	53.1	333.6	43.2	5.7
11S28W21DCD	-100.426	39.0755	19.0	87.3	54.4	481.3	28.3	-8.8
11S29W 4DAD	-100.535	39.1229	18.5	95.0	62.8	353.6	44.1	6.4
11S30W27ABB	-100.636	39.0746	18.0	88.4	55.7	306.7	46.0	6.7
11S30W31DAB	-100.687	39.0534	17.5	84.8	51.8	355.2	39.2	-.0
11S31W 8CBA	-100.790	39.1110	17.5	83.6	50.5	306.1	46.7	6.3
11S31W12BBB	-100.719	39.1180	17.5	84.8	51.8	329.6	47.5	6.5
12S26W24CBA	-100.165	38.9926	18.0	85.6	56.9	270.2	38.9	-6.1
12S28W12DDD	-100.372	39.0174	19.0	88.4	55.7	473.9	33.9	-1.2
12S29W10BBD	-100.532	39.0289	16.0	91.8	59.3	366.9	45.8	8.4
12S30W 1AAD	-100.592	39.0436	17.5	87.3	54.4	326.9	44.2	4.9
13S27W25ABB	-100.270	38.8994	17.0	90.7	58.1	231.3	50.2	4.5
13S28W 6BBC	-100.480	38.9563	16.0	91.8	59.3	262.4	63.2	13.7
13S29W 4BBB	-100.554	38.9584	18.0	93.9	60.5	286.8	75.2	21.4
13S31W 5CBA	-100.792	38.9532	17.0	90.7	58.1	274.4	40.7	-.7
14S27W19AAB	-100.358	38.8275	17.0	101.0	69.2	392.8	43.5	6.1
15S26W 5CCC	-100.244	38.7707	16.0	84.8	51.8	278.8	54.6	9.6
15S27W21BAD	-100.330	38.7387	17.0	83.6	50.5	321.1	51.5	6.1
15S29W13CCB	-100.503	38.7448	17.5	96.1	63.9	332.1	72.3	22.7
6S24W28BAB	-100.007	39.5083	15.0	107.3	76.0	507.6	38.5	-1.6
6S25W33BCB	-100.125	39.4900	16.0	108.9	77.9	501.3	39.7	1.6
7S22W10BBC	-99.769	39.4628	14.5	100.0	68.2	432.2	25.0	-12.2
7S24W 8CBA	-100.029	39.4575	16.5	101.0	69.2	656.3	32.6	-4.7
8S25W23BBB	-100.088	39.3485	16.0	96.1	63.9	416.6	55.4	15.1
5S24W 6DDD	-100.034	39.2924	16.0	100.0	68.2	524.7	24.2	-7.7
9S24W22BAB	-99.990	39.2616	15.5	107.3	76.0	469.2	23.5	-11.2
11S32W 4ACC	-100.875	39.1271	17.5	80.9	47.7	529.3	30.7	-7.2
11S32W15BBB	-100.866	39.1037	18.0	80.9	47.7	299.3	46.7	7.1
11S33W10CAB	-100.973	39.1111	17.0	84.8	51.8	271.3	50.0	10.7
11S33W12ACA	-100.924	39.1144	17.5	84.8	51.8	314.6	47.0	8.7
11S34W24CDC	-101.040	39.0770	18.5	82.3	49.1	256.2	47.1	7.0
11S35W12ADC	-101.149	39.1126	17.5	70.7	36.8	244.4	46.5	8.6
11S36W 1BBB	-101.273	39.1324	16.0	79.6	46.2	390.1	37.4	2.1
11S36W 6DBB	-101.357	39.1258	17.0	78.2	44.8	451.6	37.0	1.4
12S32W 2ADB	-100.835	39.0428	18.0	80.9	47.7	314.5	42.5	3.7
12S32W15CAA	-100.860	39.0104	17.0	90.7	58.1	281.9	45.8	-.6
12S33W 2DBB	-100.951	39.0390	17.5	86.0	53.1	265.5	46.5	5.0
12S34W 1CBD	-101.051	39.0373	17.0	88.4	55.7	282.1	50.2	9.9
12S35W15DDC	-101.188	38.9174	17.0	84.8	51.8	201.2	51.0	10.5
13S36W18CCA	-101.367	38.9196	15.5	76.8	43.3	174.0	66.0	21.3
13S36W22CCB	-101.351	38.9050	16.0	70.7	36.8	164.4	62.5	17.2
13S37W15BBB	-101.424	38.9302	15.0	79.6	46.2	181.2	76.9	28.9

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
2S32W14DCA	-100.876	39.8756	14.0	83.6	50.5	324.6	82.0	32.8
2S32W2CCBD	-100.941	39.8628	13.0	83.6	50.5	338.8	79.2	29.7
2S36W18CCB	-101.410	39.8753	19.0	108.1	77.0	322.7	74.1	28.0
2S36W36BAA	-101.310	39.8431	18.5	107.3	76.0	312.2	72.2	30.9
3S34W 1BAA	-101.086	39.8282	16.0	91.8	59.3	303.6	85.8	31.7
3S34W26BAC	-101.107	39.7685	14.0	99.1	67.1	262.4	71.7	20.0
3S34W33BCC	-101.149	39.7504	14.5	92.9	60.5	288.2	73.8	23.2
3S35W24CBB	-101.205	39.7776	17.0	101.9	70.2	309.8	68.4	20.5
3S36W 3CCD	-101.352	39.8158	19.0	112.2	81.4	326.7	69.4	23.4
3S36W14CBB	-101.336	39.7923	19.0	110.6	79.7	331.9	69.4	27.6
3S36W17CCC	-101.392	39.7867	18.0	107.3	76.0	332.3	70.8	33.1
3S36W22CCD	-101.353	39.7723	18.0	107.3	76.0	361.3	65.0	24.5
4S31W36DCC	-100.745	39.6560	16.5	97.1	65.0	293.3	61.8	14.4
4S33W13CBB	-100.981	39.7052	15.0	108.9	77.9	367.2	55.0	13.0
4S34W24CAA	-101.086	39.6906	18.0	108.9	77.9	338.6	53.2	13.5
4S34W33CBC	-101.150	39.6598	17.5	113.0	82.3	310.8	61.3	22.3
4S36W 6BBB	-101.411	39.7413	20.5	108.1	77.0	346.8	66.8	25.4
4S36W 9CCD	-101.367	39.7143	16.0	101.9	70.2	339.1	62.2	14.9
4S36W23CBB	-101.337	39.6908	19.5	102.8	71.2	309.5	60.7	18.3
4S36W28DCD	-101.358	39.6709	20.5	107.3	76.0	311.8	56.0	14.7
5S31W19AAD	-100.835	39.6090	16.0	101.0	69.2	357.5	57.2	15.0
5S32W36CDB	-100.866	39.5710	16.0	109.8	78.8	408.5	54.6	8.3
5S33W3CDBD	-101.064	39.5874	16.0	108.9	77.9	295.7	60.2	13.4
5S34W26ACA	-101.101	39.5928	17.5	110.6	79.7	241.4	66.3	24.5
5S34W28ADC	-101.136	39.5909	17.5	113.7	83.1	272.3	64.1	24.5
6S27W 3DCD	-100.317	39.5544	14.5	102.8	71.2	478.5	47.6	2.8
6S27W27BCC	-100.329	39.5035	16.0	108.1	77.0	465.5	49.8	5.3
6S29W10DBC	-100.542	39.5439	17.5	109.8	78.8	434.3	53.6	12.1
6S29W24ABB	-100.505	39.5239	16.5	108.9	77.9	415.0	50.0	11.0
6S30W 2BCA	-100.642	39.5636	17.0	107.3	76.0	338.9	53.7	12.8
6S30W14CCD	-100.642	39.5255	15.0	108.9	77.9	448.0	51.1	11.3
7S26W12BAC	-100.176	39.4628	15.0	107.3	76.0	506.3	40.1	.3
7S26W15CCB	-100.218	39.4395	15.0	105.5	74.1	437.4	45.5	7.2
7S26W19BBC	-100.273	39.4343	16.0	104.6	73.2	394.5	48.4	12.2
7S27W15BAD	-100.322	39.4490	15.0	108.9	77.9	390.9	50.4	11.3
7S28W19BBA	-100.494	39.4368	15.0	107.3	76.0	371.5	49.6	10.8
7S28W23BAD	-100.415	39.4347	16.0	103.7	72.2	371.5	48.0	7.2
7S28W36ABA	-100.392	39.4074	15.0	101.0	69.2	389.8	43.5	3.6
7S29W 3BBB	-100.552	39.4804	15.0	105.5	74.1	337.8	49.9	10.6
7S29W17BBB	-100.589	39.4513	15.0	104.6	73.2	429.3	45.3	6.2
7S29W21ABB	-100.561	39.4368	15.5	108.9	77.9	353.2	49.8	11.0
7S29W27CCC	-100.552	39.4096	15.0	101.9	70.2	339.5	42.6	1.9
7S29W30ABA	-100.596	39.4223	15.0	109.8	78.8	320.7	51.0	10.9
7S30W3CDAB	-100.705	39.4149	17.5	110.6	79.7	375.6	55.5	20.7
7S30W35BBD	-100.642	39.4059	22.0	104.6	73.2	350.0	49.7	10.4
8S26W14DAA	-100.184	39.3557	13.0	91.8	59.3	264.0	44.5	1.6
8S27W22BDB	-100.325	39.3455	16.5	101.0	69.2	263.3	57.1	8.6
8S28W27BBA	-100.441	39.3349	18.0	100.0	68.2	474.7	42.6	1.2
8S29W 1DBC	-100.506	39.3041	16.0	110.6	79.7	325.6	50.9	13.2
8S29W20ABB	-100.580	39.3497	16.0	104.6	73.2	356.4	50.2	11.4
8S29W23BAA	-100.582	39.3352	16.5	101.0	69.2	429.3	40.5	1.0
8S30W11CBC	-100.645	39.3696	17.0	106.4	75.1	318.9	52.7	13.1
8S30W30ABC	-100.710	39.3333	16.0	103.7	72.2	330.9	52.9	12.2
9S28W 4BCC	-100.460	39.3005	17.0	87.3	54.4	351.7	51.2	6.8
9S28W24BAD	-100.397	39.2603	18.0	94.0	61.6	421.0	42.4	2.7

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
7S29W17BAB	-100.585	39.2772	17.0	79.6	46.2	327.8	46.4	8.1
9S29W29BBB	-100.589	39.2482	17.0	86.0	53.1	305.5	50.8	11.6
9S30W 4AAB	-100.668	39.3062	16.5	95.0	62.8	362.0	50.5	8.9
9S30W2CACC	-100.692	39.2573	16.0	82.3	49.1	446.9	40.0	1.9
9S30W35BBB	-100.645	39.2337	18.0	80.9	47.7	291.1	53.4	12.4
10S26W32ACD	-100.245	39.1398	18.0	95.0	62.8	425.1	49.5	1.5
10S27W20CBC	-100.367	39.1658	16.0	95.0	62.8	455.2	57.6	8.9
10S28W 5DCB	-100.464	39.2079	17.5	82.3	49.1	432.7	39.6	.4
10S28W29DAA	-100.462	39.1534	18.0	84.8	51.8	339.9	41.1	1.2
10S30W12BBD	-100.624	39.2029	17.5	86.0	53.1	313.1	49.0	10.2
10S30W17DAD	-100.685	39.1811	17.0	86.0	53.1	300.6	50.4	8.4
6S37W 7BDA	-101.498	39.5531	13.5	99.1	67.1	292.7	57.0	16.7
6S37W16CDD	-101.456	39.5259	16.0	106.4	75.1	246.2	60.9	22.5
6S37W34DCD	-101.433	39.4824	16.5	111.4	80.5	250.8	60.5	19.5
6S38W2CACC	-101.584	39.5186	14.5	105.5	74.1	308.1	53.2	15.9
6S39W 1BBB	-101.630	39.5675	16.5	108.1	77.0	241.6	61.8	23.5
6S39W33BDD	-101.679	39.4894	16.0	110.6	79.7	294.4	48.7	12.6
6S40W1CAAC	-101.765	39.5509	18.0	110.6	79.7	283.5	62.2	26.9
6S40W21ACC	-101.788	39.5182	16.5	112.2	81.4	258.8	60.6	24.3
7S41W 1ABB	-101.843	39.5671	16.5	110.6	79.7	242.6	53.2	13.2
6S41W19DBD	-101.934	39.5148	17.0	106.4	75.1	243.2	50.5	10.5
6S41W27DBD	-101.878	39.5001	16.0	106.4	75.1	231.8	58.0	20.9
6S42W 8CBB	-102.040	39.5458	17.0	108.9	77.9	279.9	47.9	15.8
6S42W22DCC	-101.993	39.5113	16.5	111.4	80.5	267.3	52.0	17.5
6S42W3CADA	-102.043	39.5059	17.0	111.4	80.5	276.6	51.0	15.4
7S37W12CCB	-101.408	39.4553	17.0	108.9	77.9	222.3	56.4	16.6
7S37W17BDA	-101.475	39.4479	20.0	110.6	79.7	229.1	56.5	16.5
7S37W31CCC	-101.492	39.3953	16.0	109.8	78.8	225.3	52.6	15.0
7S38W25BDC	-101.519	39.4206	16.5	116.8	86.5	218.4	54.1	16.0
7S39W 9BBB	-101.686	39.4658	16.0	109.8	78.8	315.0	40.6	3.8
7S39W24BAA	-101.623	39.4369	16.0	112.2	81.4	230.6	53.7	14.5
7S39W3CCCB	-101.724	39.4113	15.0	108.1	77.0	226.0	51.4	14.6
7S40W 6ABB	-101.820	39.4764	16.0	113.0	82.3	248.9	48.7	13.5
7S40W23BDC	-101.756	39.4312	15.5	110.6	79.7	288.5	42.6	8.1
7S40W29BBA	-101.814	39.4220	14.5	107.3	76.0	331.5	35.5	2.7
7S41W 5BBD	-101.925	39.4784	16.0	113.7	83.1	217.4	59.1	23.0
7S41W10BBA	-101.888	39.4657	16.5	110.6	79.7	238.9	50.6	15.3
7S41W28DBD	-101.900	39.4149	15.5	109.8	78.8	251.1	48.3	13.6
7S42W 7DAA	-102.043	39.4587	16.0	107.3	76.0	210.2	57.0	17.5
7S42W27AAB	-101.989	39.4223	16.5	103.7	72.2	243.0	45.3	10.1
8S38W24AAB	-101.506	39.3499	16.0	108.1	77.0	226.3	46.2	9.1
8S38W28ACC	-101.566	39.3299	17.0	100.0	68.2	234.1	45.0	8.1
8S39W 2BDA	-101.647	39.3933	15.0	107.3	76.0	214.1	49.8	10.4
8S39W12AAB	-101.617	39.3643	17.0	109.8	78.8	205.7	49.8	11.5
8S39W17DCD	-101.694	39.3515	17.0	108.9	77.9	208.5	46.4	11.9
8S39W27AAB	-101.654	39.3352	16.0	108.1	77.0	215.9	46.7	11.9
8S40W 5DBD	-101.807	39.3858	17.0	102.8	71.2	196.3	51.5	15.4
8S40W14DCB	-101.752	39.3532	15.0	99.1	67.1	205.7	48.7	14.9
8S40W18DBB	-101.826	39.3568	16.0	104.6	73.2	187.5	54.5	19.1
8S40W35CCB	-101.762	39.3097	17.0	75.3	41.7	215.3	42.6	8.7
8S41W17CBA	-101.926	39.3569	16.0	100.0	68.2	321.1	34.5	.7
8S42W 2DAB	-101.970	39.3860	16.0	100.0	68.2	245.1	43.1	11.8
8S42W19ABB	-102.051	39.3498	17.0	94.0	61.6	252.4	42.4	8.9
8S42W34DCB	-101.994	39.3098	17.0	80.9	47.7	216.7	50.2	18.1
9S39W17BBA	-101.704	39.2771	16.0	75.3	41.7	209.4	42.6	7.8

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LD
9S39W19CCC	-101.725	39.2499	17.0	69.0	35.1	226.9	39.4	8.8
9S40W 8CCB	-101.818	39.2806	16.0	70.7	36.8	194.4	43.8	9.7
9S41W 5DCC	-101.919	39.2934	17.0	73.8	40.1	200.2	46.3	17.1
9S41W11DCB	-101.864	39.2806	15.0	89.6	56.9	269.6	38.1	5.0
9S42W11CCC	-101.985	39.2789	17.0	70.7	36.8	204.7	41.9	11.0
9S42W29BCA	-102.035	39.2445	16.0	67.3	33.3	221.9	37.7	4.3
9S42W35ABB	-101.976	39.2335	16.0	61.8	27.5	203.5	39.7	9.2
10S37W23ABB	-101.418	39.1763	17.0	72.3	38.5	262.4	52.7	16.1
10S39W25CCA	-101.629	39.1501	15.0	91.8	59.3	194.9	66.0	14.6
10S40W 8BAA	-101.811	39.2045	17.0	65.5	31.4	259.1	33.6	3.0
10S40W10ADC	-101.767	39.1990	15.0	67.3	33.3	153.1	43.2	3.0
10S41W15CAD	-101.885	39.1809	14.0	61.8	27.5	420.2	36.3	3.2
10S41W35CAC	-101.870	39.1373	15.0	65.5	31.4	248.9	47.1	11.2
10S42W24BBA	-101.964	39.1754	15.0	59.8	25.4	271.8	34.4	.6
11S27W 8DAA	-100.334	39.1095	15.0	86.0	53.1	413.4	35.6	-.3
7S27W16BAA	-100.340	39.4509	15.0	100.0	68.2	419.5	51.1	10.7
8S34W24BAD	-101.066	39.3484	16.0	105.5	74.1	363.6	49.3	9.2
15S29W18DB	-100.584	38.7479	17.5	80.4	55.7	190.3	77.4	28.5
5S40W31DB	-101.852	39.5734	15.0	113.0	82.3	234.6	61.7	23.4
6S31W 3ADB	-100.761	39.5635	16.0	108.9	77.9	389.6	52.2	13.9
6S31W33CCD	-100.791	39.4821	15.5	102.8	71.2	442.4	45.4	5.0
6S32W29CDB	-100.918	39.4987	16.0	108.1	77.0	315.5	62.1	20.3
6S33W 7BBB	-101.054	39.5530	18.0	110.6	79.7	290.3	62.4	23.3
6S33W32DBB	-101.026	39.4878	15.0	104.6	73.2	293.7	55.2	13.3
6S34W17CBC	-101.146	39.5293	16.0	111.4	80.5	281.5	56.4	17.6
6S34W22CBC	-101.109	39.5149	16.0	112.2	81.4	308.5	60.9	21.0
6S35W 2CDD	-101.195	39.5548	17.0	115.3	84.8	247.3	64.1	21.9
6S35W26ACD	-101.191	39.5040	16.5	113.7	83.1	306.6	54.7	14.6
6S36W11CDD	-101.307	39.5405	17.5	112.2	81.4	254.3	64.2	24.9
6S36W34DDB	-101.319	39.4843	17.0	108.9	77.9	247.1	57.5	18.5
7S31W 1DCA	-100.726	39.4692	15.5	108.9	77.9	344.3	57.5	18.1
7S31W26CCC	-100.757	39.4095	15.5	104.6	73.2	335.8	55.7	17.0
7S32W 8ABB	-100.914	39.4661	14.5	110.6	79.7	303.0	56.8	16.5
7S32W13AAA	-100.833	39.4514	15.5	107.3	76.0	344.1	51.9	15.3
7S32W25ACC	-100.840	39.4170	16.5	105.5	74.1	323.6	52.7	13.2
7S33W 7BDA	-101.047	39.4624	18.0	111.4	80.5	310.2	52.2	14.5
7S33W21DBC	-101.007	39.4280	16.0	109.8	78.8	302.3	53.0	13.7
7S33W35ADD	-100.963	39.4026	15.5	103.7	72.2	334.8	49.1	10.3
7S34W27DBB	-101.101	39.4153	15.0	107.3	76.0	313.1	47.4	8.0
7S35W10CCC	-101.221	39.4533	16.0	110.6	79.7	267.2	59.6	23.0
7S35W27BDC	-101.217	39.4170	15.0	108.1	77.0	310.4	54.3	16.8
7S36W14BCB	-101.315	39.4480	17.0	110.6	79.7	265.9	50.2	12.6
7S36W17CCC	-101.371	39.4390	16.0	110.6	79.7	296.1	45.5	5.2
8S31W 1DCA	-100.726	39.3822	15.5	101.0	69.2	359.6	50.2	10.0
8S31W 4ACB	-100.784	39.3897	15.5	100.0	68.2	419.5	49.1	8.8
8S31W27BAB	-100.771	39.3353	16.0	102.8	71.2	307.1	55.0	13.9
8S32W12DBC	-100.840	39.3699	16.0	97.1	65.0	305.0	50.6	11.5
8S32W16BBA	-100.903	39.3645	15.5	89.6	56.9	320.7	49.0	10.1
8S32W27CBC	-100.887	39.3264	16.0	95.0	62.8	264.8	58.6	19.2
8S33W 2CDA	-100.973	39.3827	16.0	101.9	70.2	301.3	51.2	14.6
8S33W14CAA	-100.973	39.3573	15.0	90.7	58.1	329.5	53.6	12.5
8S33W18CCA	-101.052	39.3538	15.0	100.0	68.2	316.0	53.6	11.6
8S33W34BBC	-100.999	39.3193	15.0	84.8	51.8	256.9	54.9	16.4
8S34W 6CBC	-101.166	39.3843	15.5	105.5	74.1	302.4	49.8	10.3
8S34W23CBD	-101.089	39.3411	17.0	101.9	70.2	350.2	49.6	8.1

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
8S35W36DAA	-101.168	39.3137	16.0	97.1	65.0	258.1	57.4	16.8
8S36W 4DCC	-101.338	39.3810	16.5	105.5	74.1	270.7	47.1	9.3
8S36W20BBB	-101.362	39.3430	16.0	105.5	74.1	252.5	48.6	12.2
9S31W10BBB	-100.775	39.2918	15.0	83.6	50.5	381.8	46.1	8.0
9S31W19BCA	-100.829	39.2593	16.0	69.0	35.1	339.9	47.7	9.3
9S31W30BBB	-100.738	39.2337	16.0	73.8	40.1	302.3	55.3	15.1
9S32W 9BDA	-100.899	39.2884	15.0	70.7	36.8	341.1	50.9	11.4
9S32W27BCD	-100.885	39.2430	16.0	61.8	27.5	343.7	46.6	11.8
9S33W 6AAA	-101.038	39.3067	15.0	80.9	47.7	276.6	51.3	14.6
9S33W 9CCC	-101.017	39.2795	15.0	72.3	38.5	273.8	50.8	10.3
9S33W15ACC	-100.990	39.2722	15.0	79.2	44.9	260.4	49.6	10.7
9S33W30CAA	-101.048	39.2416	15.0	70.7	36.8	276.6	50.8	15.2
9S33W35AAD	-100.964	39.2322	15.0	59.8	25.4	343.5	43.1	5.8
9S34W 2BDA	-101.085	39.3030	15.0	73.8	40.1	350.2	49.6	10.6
9S34W17BDA	-101.145	39.2775	15.5	80.9	47.7	313.1	47.4	6.3
9S35W32DAA	-101.243	39.2266	16.0	72.3	38.5	265.9	52.9	10.8
10S31W 6DCA	-100.820	39.2086	17.0	67.3	33.3	298.7	53.8	13.9
10S31W13BAD	-100.731	39.1884	17.0	82.3	49.1	300.4	49.6	10.6
10S31W29AAB	-100.799	39.1614	17.5	76.8	43.3	279.3	53.1	12.1
10S32W 6CAB	-100.939	39.2122	15.0	63.7	29.5	268.9	53.3	16.1
10S32W11BAA	-100.862	39.2050	15.0	76.8	43.3	291.2	53.4	16.2
10S32W29DCB	-100.916	39.1505	18.0	73.8	40.1	343.1	41.1	1.2
10S32W30CABB	-100.935	39.1614	18.5	80.9	47.7	324.6	43.9	3.3
10S33W10DAA	-100.983	39.1979	15.0	59.8	25.4	255.0	52.9	12.0
10S33W17AAA	-101.020	39.1908	16.0	63.7	29.5	337.8	39.3	.3
10S33W19CBD	-101.053	39.1674	17.0	73.8	40.1	432.7	34.6	-5.9
10S34W 1ABA	-101.062	39.2199	15.0	69.0	35.1	255.5	49.4	9.5
10S34W12BCD	-101.071	39.1999	15.0	69.0	35.1	343.3	41.8	6.2
10S35W 9AAB	-101.227	39.2049	15.0	78.2	44.8	309.6	41.3	4.3
10S36W 7ACC	-101.381	39.2000	15.0	75.3	41.7	350.4	45.2	7.3
11S38W 5BBC	-101.569	39.1302	15.0	73.8	40.1	197.9	64.7	15.7
11S39W26CCD	-101.623	39.0615	15.0	76.8	43.3	228.7	64.9	19.3
11S41W35BBD	-101.846	39.0575	16.0	99.1	67.1	199.8	57.9	14.6
11S42W 5CBB	-102.014	39.1246	14.0	57.7	23.2	299.8	39.9	5.0
11S42W 8DCC	-102.001	39.1046	15.0	65.5	31.4	273.0	43.4	9.7
11S42W10AAD	-101.960	39.1155	15.0	61.8	27.5	280.4	42.5	9.0
13S39W20CCC	-101.685	38.9023	16.0	73.8	40.1	217.5	64.2	24.0
13S40W10ABB	-101.749	38.9436	18.0	65.5	31.4	228.2	57.0	14.8
13S41W12DDD	-101.817	38.9307	15.0	65.5	31.4	283.1	52.0	10.3
14S39W36BCB	-101.613	38.7961	15.0	73.8	40.1	225.5	41.9	8.4
14S40W23ACC	-101.733	38.8225	18.5	63.7	29.5	242.0	37.8	5.3
14S41W23BBB	-101.853	38.8270	17.0	61.8	27.5	233.9	39.4	6.6
14S42W 2AAB	-101.949	38.8699	17.0	69.0	35.1	281.7	34.4	3.9
16S39W 2BDC	-101.601	38.6930	15.0	79.6	46.2	256.2	52.6	9.1
16S39W18BBC	-101.680	38.6670	16.0	82.3	49.1	250.0	48.2	8.1
16S39W22DCB	-101.614	38.6438	16.0	91.8	59.3	234.4	46.4	3.3
16S39W25CBB	-101.586	38.6332	16.0	85.6	56.9	249.0	47.4	8.7
16S40W 6BAA	-101.785	38.6969	16.5	67.3	33.3	256.9	51.9	5.8
16S40W15ACC	-101.726	38.6630	16.0	89.4	55.7	240.3	49.9	11.9
16S40W35BBA	-101.714	38.6250	15.0	96.1	63.9	241.6	46.3	9.1
16S41W 5CCC	-101.884	38.6831	19.0	75.3	41.7	298.5	37.7	1.0
16S41W20BAD	-101.877	38.6506	16.0	89.6	56.9	237.4	41.0	4.0
16S42W22BCB	-101.956	38.6480	17.0	80.9	47.7	235.8	42.2	6.0
17S39W 6CCD	-101.677	38.5980	16.0	94.0	61.6	255.5	48.6	9.6
17S39W19DBB	-101.669	38.5599	16.0	85.8	53.1	276.6	42.2	5.9

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
17S39W22ABB	-101.614	38.5675	16.0	95.0	62.8	245.5	45.7	6.2
17S40W 4DCB	-101.744	38.5994	17.0	97.1	65.0	225.8	48.8	9.2
17S40W15CCB	-101.735	38.5704	15.0	91.8	59.3	222.7	41.4	5.8
17S40W31BBA	-101.788	38.5375	16.0	79.6	46.2	300.1	39.4	1.5
17S42W27CBB	-101.956	38.5434	14.5	90.7	58.1	256.5	52.9	10.6
18S39W 7BBD	-101.676	38.5072	16.0	79.6	46.2	299.8	32.6	5.6
18S39W23CCB	-101.604	38.4695	16.0	79.6	46.2	482.1	34.3	2.7
18S40W 4CBD	-101.751	38.5142	15.0	75.3	41.7	318.9	27.6	-16.0
16S29W26CCD	-100.501	38.6269	16.0	103.7	72.2	330.2	44.0	4.0
16S30W24DCC	-100.584	38.6421	16.0	100.0	68.2	308.6	46.0	5.8
16S30W29CDD	-100.660	38.6304	16.0	102.8	71.2	299.5	49.4	-2.4
17S27W2CCCC	-100.337	38.5534	16.0	104.6	73.2	318.1	43.3	1.1
17S27W26CCC	-100.281	38.5386	17.0	105.5	74.1	330.2	43.0	3.2
17S28W 7BBB	-100.467	38.5959	16.0	107.3	76.0	306.1	48.0	8.4
17S29W36BAA	-100.477	38.5377	15.0	102.8	71.2	296.5	53.5	6.0
18S28W18ACC	-100.456	38.4885	15.5	116.8	86.5	362.2	53.8	4.9
18S29W 4DAD	-100.523	38.5142	18.5	107.3	76.0	335.0	53.2	5.6
18S30W 2AAA	-100.596	38.5241	15.5	108.1	77.0	278.5	56.5	8.2
16S31W31BCB	-100.799	38.6252	16.5	106.4	75.1	299.5	43.9	.9
16S33W 7CCC	-101.016	38.6729	16.5	86.0	53.1	265.9	47.1	8.3
16S33W19CBB	-101.015	38.6492	16.0	75.3	41.7	247.2	48.7	-2.4
16S33W21BCC	-100.979	38.6512	16.0	84.8	51.8	259.8	48.6	-1.4
16S33W25BCC	-100.923	38.6370	15.5	84.8	51.8	250.0	48.4	-1.4
16S34W2CDBC	-101.100	38.6465	15.5	72.3	38.5	254.0	48.4	-3.6
16S34W22BDC	-101.067	38.6505	16.0	73.8	40.1	249.0	47.8	-5.2
16S34W29CBB	-101.109	38.6336	15.5	72.3	38.5	251.9	47.9	2.8
16S34W34CBB	-101.071	38.6195	15.5	82.3	49.1	243.9	50.4	4.5
17S31W31BBB	-100.797	38.5410	16.0	109.8	78.8	300.6	51.1	5.6
17S32W 5ABB	-100.878	38.6136	16.5	107.3	76.0	256.9	48.2	3.3
17S32W16BBB	-100.869	38.5844	16.0	105.5	74.1	279.3	48.5	3.1
17S32W31BCB	-100.904	38.5368	16.0	108.9	77.9	276.6	50.5	1.1
17S32W34CAA	-100.844	38.5334	16.0	108.1	77.0	276.6	51.2	3.5
17S33W 7BBB	-101.015	38.5981	15.0	96.1	63.9	246.8	51.8	.8
17S33W14CB	-100.932	38.5804	17.0	107.3	76.0	254.0	61.2	9.9
17S33W16ABC	-100.969	38.5820	16.5	104.6	73.2	256.4	54.2	5.6
17S34W 6BCB	-101.127	38.6080	17.0	73.8	40.1	247.2	48.7	7.9
17S34W16ACB	-101.080	38.5793	16.0	100.0	68.2	251.5	52.3	7.8
17S34W28CCB	-101.089	38.5429	17.0	103.7	72.2	276.6	54.6	13.9
18S32W14BBB	-100.833	38.4969	16.0	110.6	79.7	276.6	51.7	4.7
18S32W20CBB	-100.886	38.4748	16.0	110.6	79.7	264.5	56.9	8.6
18S33W 3CCB	-100.960	38.5146	17.0	110.6	79.7	266.2	51.5	.6
18S33W 5CCC	-100.997	38.5126	17.0	103.7	72.2	294.6	50.2	-2.6
18S33W20CCD	-100.994	38.4688	16.0	103.7	72.2	307.3	47.0	1.7
18S34W 1CBB	-101.034	38.5178	17.0	108.9	77.9	278.9	53.0	8.7
18S34W25BBD	-101.031	38.4650	16.0	106.4	75.1	276.6	51.9	4.9
18S34W36DDC	-101.112	38.4536	16.5	103.7	72.2	281.7	49.9	-.9
18S34W34BBC	-101.070	38.4502	18.0	95.0	62.8	305.6	54.6	4.4
19S31W2CBAD	-100.770	38.3928	15.0	78.2	44.8	327.8	47.0	-1.4
19S33W15DBD	-100.948	38.3998	16.0	91.8	59.3	203.3	52.8	3.8
19S33W24ABB	-100.913	38.3944	17.5	88.4	55.7	190.5	63.1	11.5
19S33W25DCD	-100.910	38.3671	15.5	84.8	51.8	258.8	57.2	6.2
19S33W34DCC	-100.950	38.3523	16.5	73.8	40.1	322.8	52.8	4.6
19S33W29CBB	-100.996	38.3722	16.5	92.9	60.5	290.7	53.8	3.5
20S31W14CBC	-100.721	38.3121	14.0	72.3	38.5	274.3	65.5	12.2
20S32W 7CBA	-100.901	38.3288	18.0	90.7	58.1	253.1	66.5	11.8

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
20S32W16DAD	-100.851	38.3123	19.0	79.5	46.2	332.1	48.5	-.2
20S32W21BBC	-100.867	38.3050	16.0	95.0	62.8	202.1	67.2	13.4
20S33W 2DBB	-100.931	38.3433	15.0	76.8	43.3	276.6	53.4	4.6
20S33W10DBC	-100.950	38.3268	16.0	80.9	47.7	287.1	51.6	5.1
20S33W17BAB	-100.991	38.3212	16.5	83.6	50.5	328.5	53.5	4.8
20S33W21ABD	-100.966	38.3049	17.0	89.6	56.9	342.4	52.8	4.7
20S33W35DBA	-100.928	38.2703	16.0	86.0	53.1	305.5	49.4	4.9
20S34W 2DBC	-101.042	38.3411	16.0	78.2	44.8	413.6	48.4	.6
14S40W23ACD	-101.726	38.8225	16.0	53.2	18.6	269.2	43.8	-1.7
14S40W29ABA	-101.787	38.8130	16.0	55.5	21.0	266.0	42.4	.7
14S41W22DBB	-101.872	38.8269	16.0	61.8	27.5	255.0	42.9	-.3
14S42W14DBD	-101.952	38.8317	17.0	59.8	25.4	252.4	43.4	1.5
14S42W22BDD	-101.975	38.8206	16.0	59.8	25.4	251.1	46.7	5.0
14S42W22DBA	-101.970	38.8188	16.0	55.5	21.0	241.0	45.2	3.9
14S42W30BCA	-102.034	38.8075	17.0	67.3	33.3	268.0	47.2	3.6
15S38W 7BBB	-101.594	38.7710	16.0	73.8	40.1	251.0	48.3	-7.6
15S38W14CCD	-101.518	38.7439	16.0	78.2	44.8	237.0	45.7	-9.2
15S38W30CCB	-101.596	38.7168	16.0	70.7	36.8	271.1	52.1	7.4
15S38W36CBB	-101.503	38.7059	16.0	76.8	43.3	263.6	46.0	-7.5
15S39W 2BCD	-101.629	38.7797	16.0	70.7	36.8	242.0	48.9	-.5
15S39W 6CBA	-101.794	38.7774	17.0	65.5	31.4	257.7	49.6	1.0
15S39W 8ACC	-101.678	38.7650	17.0	72.3	38.5	245.0	50.1	.0
15S39W26BBB	-101.633	38.7273	18.0	72.3	38.5	251.0	49.7	-.3
15S40W 7BBB	-101.818	38.7693	16.0	63.7	29.5	264.6	50.7	2.9
15S40W13BAA	-101.718	38.7556	16.0	65.5	31.4	270.4	48.3	-.1
15S40W30DBB	-101.809	38.7186	17.0	70.7	36.8	250.8	61.1	9.9
15S41W 5ACB	-101.900	38.7794	16.5	65.5	31.4	276.6	48.4	3.5
15S41W10BAB	-101.868	38.7688	16.5	65.5	31.4	267.7	50.2	4.6
15S41W27CBC	-101.874	38.7161	17.0	70.7	36.8	243.0	61.0	12.4
15S42W 2BBB	-101.964	38.7825	17.0	63.7	29.5	254.8	51.7	5.9
15S42W32BDA	-102.013	38.7056	17.0	67.3	33.3	276.6	53.8	7.2
16S35W20CCC	-101.218	38.6423	15.5	70.7	36.8	260.4	47.6	-4.1
16S35W27BBC	-101.182	38.6387	15.5	70.7	36.8	259.1	47.6	-5.3
16S35W31DBA	-101.225	38.6186	18.0	73.8	40.1	281.9	46.0	-7.7
16S36W21CCC	-101.310	38.6425	16.5	70.7	36.8	246.5	51.3	5.5
16S36W25BBB	-101.255	38.6405	16.0	70.7	36.8	255.5	47.5	2.7
16S36W34CCC	-101.292	38.6134	17.0	69.0	35.1	249.1	52.3	7.0
16S36W35CCC	-101.273	38.6133	16.0	72.3	38.5	256.2	52.1	5.8
16S36W36CBC	-101.255	38.6169	18.0	70.7	36.8	256.2	51.2	5.1
16S37W 4DCC	-101.412	38.6851	17.0	75.3	41.7	227.9	49.7	3.9
16S37W15CCC	-101.402	38.6570	16.0	72.3	38.5	260.9	50.5	4.9
16S37W17BBB	-101.439	38.6697	16.0	72.3	38.5	257.5	51.4	5.8
16S37W27ABC	-101.393	38.6389	16.0	70.7	36.8	244.9	54.1	8.5
16S37W29BBB	-101.439	38.6406	16.0	69.0	35.1	261.9	54.4	7.4
16S37W30CAB	-101.448	38.6369	16.5	72.3	38.5	242.6	56.5	9.1
16S38W 5BBB	-101.549	38.6987	16.0	70.7	36.8	273.7	50.8	5.2
16S38W10CABB	-101.503	38.6842	16.0	70.7	36.8	265.1	51.1	5.5
16S38W16ACC	-101.522	38.6642	16.0	70.7	36.8	255.8	54.1	7.3
16S38W26BBB	-101.494	38.6405	16.0	76.8	43.3	292.7	52.9	7.1
16S38W29ACB	-101.535	38.6369	16.0	83.6	56.9	261.4	51.4	5.8
17S35W 2BBB	-101.164	38.6115	17.0	72.3	38.5	240.0	48.8	4.5
17S35W15CBC	-101.177	38.5697	17.0	100.0	68.2	269.4	52.1	9.8
17S35W14ACB	-101.227	38.5787	17.0	95.0	62.8	266.9	58.6	11.8
17S35W27CCC	-101.181	38.5407	17.0	101.0	69.2	264.8	55.7	13.8
17S36W 5CCD	-101.326	38.5989	17.0	73.8	40.1	256.2	51.6	5.0

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
17S36W10CBB	-101.292	38.5897	17.0	82.3	49.1	242.0	52.8	5.8
17S37W 3AAB	-101.389	38.6116	17.0	82.3	49.1	255.5	50.7	4.2
17S37W 8BAA	-101.432	38.5970	16.5	88.4	55.7	245.7	52.1	5.0
17S37W13CDD	-101.359	38.5699	16.5	89.6	56.9	289.6	47.0	.3
17S37W22CCC	-101.402	38.5553	17.0	100.0	68.2	251.7	52.4	7.4
17S37W28CCC	-101.420	38.5407	16.0	101.9	70.2	248.4	51.4	7.0
17S38W1CAAB	-101.498	38.5969	16.0	91.8	59.3	239.5	46.6	2.4
17S38W21BBB	-101.531	38.5678	16.5	105.5	74.1	240.6	50.8	5.0
17S38W24ACC	-101.466	38.5624	16.5	94.0	61.6	263.6	51.0	7.7
17S38W27ACD	-101.501	38.5478	16.0	96.1	63.9	246.5	50.0	12.0
17S38W28CCC	-101.530	38.5405	16.0	97.1	65.0	276.6	47.0	9.6
18S35W 2ACB	-101.154	38.5207	17.0	107.3	76.0	267.5	52.6	9.8
18S35W 8BBC	-101.217	38.5079	17.0	102.8	71.2	276.6	50.3	8.1
18S35W17DAA	-101.201	38.4880	17.0	99.1	67.1	297.0	46.0	7.4
18S35W34ABB	-101.171	38.4516	16.0	101.0	69.2	266.6	49.0	5.5
18S36W 2DCB	-101.263	38.5134	17.0	101.9	70.2	273.8	51.7	10.6
18S36W 9BBB	-101.310	38.5099	17.0	100.0	68.2	271.5	49.7	5.9
18S36W15DAD	-101.275	38.4862	16.0	96.1	63.9	273.5	45.4	8.6
18S36W29ABB	-101.319	38.4663	17.0	94.0	61.6	280.4	42.1	1.3
18S37W 3CCC	-101.402	38.5116	17.0	96.1	63.9	261.9	49.0	5.2
18S37W19AAD	-101.441	38.4788	16.0	88.4	55.7	342.4	35.4	-1.5
18S37W21BBB	-101.420	38.4807	16.0	89.6	56.9	335.2	35.0	3.2
19S35W 1AAA	-101.128	38.4372	17.0	97.1	65.0	316.7	46.6	4.3
19S36W15BAA	-101.283	38.4081	16.0	98.1	66.1	286.8	54.2	10.1
19S37W22AAB	-101.387	38.3936	15.0	101.9	70.2	300.6	55.6	11.0
19S38W14AAB	-101.479	38.4079	16.0	96.1	63.9	250.8	63.2	21.7
19S38W18DCC	-101.557	38.3951	16.0	96.1	63.9	265.9	56.7	17.1
19S38W26CCB	-101.493	38.3679	15.0	101.0	69.2	266.6	54.1	8.5
19S38W35BAB	-101.488	38.3642	15.0	98.1	66.1	282.5	50.0	6.0
20S38W17CBD	-101.546	38.3115	16.0	76.8	43.3	251.7	56.5	16.9
21S31W26CCC	-100.700	38.1920	16.0	113.7	83.1	272.2	62.4	18.8
21S32W 8ABD	-100.853	38.2468	16.0	115.3	84.8	161.3	57.9	12.8
21S32W2CCBD	-100.861	38.2107	15.0	118.2	88.1	172.4	56.4	13.0
21S33W 2ACB	-100.910	38.2594	15.5	95.0	62.8	170.7	44.0	6.0
21S33W 7DDA	-100.977	38.2376	17.0	101.9	70.2	223.1	67.2	19.8
21S33W25CAA	-100.893	38.1981	16.0	104.6	73.2	113.3	52.1	9.0
21S33W31CBB	-100.992	38.1834	15.0	87.3	54.4	187.5	50.2	6.9
22S31W 9DCC	-100.727	38.1488	16.0	106.4	75.1	232.4	54.3	9.3
22S31W12CDC	-100.677	38.1485	16.0	112.2	81.4	266.6	53.5	11.8
22S31W35ABB	-100.690	38.1034	16.0	106.4	75.1	199.5	54.9	11.8
22S32W21CCD	-100.843	38.1204	16.0	87.3	54.4	198.5	51.8	5.8
22S32W25BBB	-100.791	38.1184	16.0	95.0	62.8	196.0	52.8	10.7
22S33W 3DBC	-100.928	38.1674	17.0	83.6	50.5	190.3	52.8	13.2
22S33W17DCD	-100.962	38.1348	15.0	70.7	36.8	220.2	42.0	-.2
22S33W22BAA	-100.930	38.1331	16.0	70.7	36.8	220.7	44.2	3.6
22S33W32CBC	-100.973	38.0951	16.0	70.7	36.8	240.6	39.5	.2
22S33W36AAA	-100.883	38.1044	17.0	73.8	40.1	114.5	64.1	16.5
22S34W 8BCB	-101.084	38.1578	19.0	79.7	36.8	256.9	48.7	8.0
22S34W1CADD	-101.031	38.1562	16.0	72.3	38.5	245.9	43.0	2.3
22S34W22CCC	-101.047	38.1200	16.0	63.7	29.5	232.0	38.5	.5
22S34W32BCB	-101.084	38.0999	16.0	63.7	29.5	270.4	40.8	3.6
23S29W34CDD	-100.493	38.0033	16.0	101.9	70.2	288.7	45.1	6.3
23S31W 3DCD	-100.706	38.0763	16.0	101.9	70.2	233.5	48.3	7.6
23S31W 9DBB	-100.727	38.0674	17.0	67.3	33.3	245.0	40.1	1.1
23S31W35CCC	-100.699	38.0039	16.0	95.0	62.8	265.5	45.8	8.1

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
23S32W 4DCD	-100.829	38.0771	16.0	88.4	55.7	197.8	46.8	5.8
23S32W11ADC	-100.795	38.0697	16.0	87.3	54.4	204.0	44.0	3.3
23S32W18BCD	-100.879	38.0556	17.0	73.8	40.1	206.6	44.8	6.9
23S32W22DAB	-100.813	38.0391	16.0	76.8	43.3	231.8	44.8	4.9
23S32W31CA	-100.875	38.0096	17.0	69.0	35.1	139.6	47.0	3.2
23S33W1CDCC	-100.927	38.0528	16.0	70.7	36.8	212.9	45.7	3.8
23S33W17BBB	-100.973	38.0609	16.0	70.7	36.8	222.8	40.8	3.5
23S33W26ABB	-100.908	38.0321	17.0	73.8	40.1	172.5	49.6	7.7
23S33W28CDC	-100.950	38.0194	18.0	72.3	38.5	107.1	58.1	16.7
23S33W32ABB	-100.964	38.0176	19.0	73.8	40.1	128.1	53.6	13.0
23S33W35ACC	-100.908	38.0123	18.0	78.2	44.8	98.9	61.0	8.9
23S34W 3BCB	-101.047	38.0857	16.0	70.7	36.8	251.9	40.1	.8
23S34W14BDC	-101.024	38.0552	17.0	73.8	40.1	179.1	44.8	6.2
23S34W17CCC	-101.084	38.0475	17.0	67.3	33.3	241.6	36.4	-3.6
23S34W21DDC	-101.051	38.0333	17.0	75.6	46.2	189.0	41.9	5.2
23S34W28CDA	-101.058	38.0206	18.0	78.2	44.8	152.8	53.2	10.7
24S31W11DBD	-100.688	37.9785	16.5	94.0	61.6	210.4	49.4	7.0
24S31W17DDD	-100.738	37.9609	17.0	84.8	51.8	196.7	45.5	2.6
24S32W 5BCB	-100.862	37.9996	16.0	70.7	36.8	145.5	56.7	8.7
24S32W25CBB	-100.790	37.9379	20.0	67.3	33.3	107.6	60.5	6.9
24S32W29AC	-100.852	37.9409	18.0	61.8	27.5	313.1	18.7	-15.3
24S33W14BBB	-100.917	37.9744	16.0	61.8	27.5	140.6	40.6	3.4
24S33W21CAB	-100.949	37.9527	18.0	61.8	27.5	228.8	28.4	-7.1
24S33W22DCA	-100.924	37.9491	18.0	61.8	27.5	198.4	29.4	-7.3
24S33W28DAA	-100.938	37.9383	18.0	57.7	23.2	216.3	27.8	-8.7
25S33W35CCA	-100.914	37.8337	16.5	63.7	29.5	260.9	23.3	-12.5
25S34W 6BAD	-101.095	37.9135	17.0	57.7	23.2	215.0	26.6	-9.2
25S34W11DCD	-101.012	37.8892	17.0	57.7	23.2	219.1	25.2	-9.7
25S34W34DBD	-101.034	37.8348	18.0	57.7	23.2	306.1	19.6	-12.9
26S31W 6BBC	-100.760	37.8276	19.0	55.8	25.4	248.4	24.9	-11.3
26S31W31CDC	-100.756	37.7429	17.5	61.8	27.5	210.7	26.6	-8.9
26S31W36CAC	-100.663	37.7455	17.5	63.7	29.5	226.9	27.9	-7.8
26S32W22ABB	-100.805	37.7855	20.0	57.7	23.2	219.5	26.4	-10.6
26S32W35CDA	-100.790	37.7449	17.0	61.8	27.5	199.6	24.7	-12.0
26S33W 3DBB	-100.914	37.8227	16.5	57.7	23.2	217.6	23.3	-11.6
26S33W12BDC	-100.882	37.8098	17.5	61.8	27.5	267.5	25.2	-11.1
26S33W26ABB	-100.896	37.7711	17.0	53.2	18.6	283.5	19.1	-11.2
27S35W17ADD	-101.161	37.7057	20.0	61.8	27.5	270.7	18.7	-11.5
27S35W34BBA	-101.139	37.6670	19.0	59.8	25.4	256.9	18.0	-16.0
27S36W15DDD	-101.234	37.6985	19.0	59.8	25.4	199.2	32.0	-5.0
27S36W18DCB	-101.295	37.7001	19.0	78.2	44.8	150.4	45.0	7.1
27S37W 4ABB	-101.369	37.7402	18.0	69.0	35.1	177.6	53.3	7.5
27S37W11ABA	-101.330	37.7256	19.0	72.3	38.5	166.9	50.2	10.3
27S37W22BBB	-101.369	37.6962	18.0	78.2	44.8	209.1	37.5	-1.6
27S37W26BCB	-101.341	37.6779	19.0	70.7	36.8	134.5	46.1	5.0
27S37W29CBB	-101.396	37.6741	18.0	70.7	36.8	169.0	39.9	1.8
27S38W22CBB	-101.470	37.6985	17.0	70.7	36.8	194.6	39.0	-.2
27S38W25BBB	-101.433	37.6813	19.0	70.7	36.8	169.5	35.4	-3.3
27S38W32BBC	-101.506	37.6646	18.5	69.0	35.1	182.8	39.1	1.8
24S27W 8CCC	-100.317	37.9740	16.0	101.0	69.2	294.6	44.8	6.2
24S28W10ADD	-100.374	37.9814	16.0	99.1	67.1	305.5	44.6	6.0
24S28W28BBA	-100.406	37.9436	16.0	97.1	65.0	276.6	46.5	7.0
24S28W31DD	-100.431	37.9175	16.5	94.0	61.6	288.2	42.6	4.5
24S29W16DCA	-100.507	37.9618	17.0	92.9	60.5	334.2	41.6	5.1
24S29W18CCB	-100.554	37.9618	16.0	95.0	62.8	290.6	44.9	6.4

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
24S29W24ACD	-100.448	37.9527	16.0	95.0	62.8	304.7	42.2	4.2
24S30W 1BCB	-100.572	37.9979	16.0	106.4	75.1	273.9	46.0	8.3
24S30W 8DCD	-100.634	37.9746	16.0	97.1	65.0	236.8	48.6	9.1
24S30W15CCC	-100.609	37.9601	16.0	91.8	59.3	233.7	46.2	8.6
24S30W31ABD	-100.654	37.9294	16.0	82.3	49.1	235.8	39.7	.9
25S27W19CCC	-100.336	37.8588	17.5	88.4	55.7	358.1	37.3	-3.3
25S27W33ABB	-100.290	37.8423	17.0	88.4	55.7	354.8	37.4	.3
25S27W35CDC	-100.258	37.8295	18.0	87.3	54.4	369.5	36.2	-2.1
25S28W16BBB	-100.409	37.8859	16.5	90.7	58.1	316.3	39.9	2.3
25S28W31BBC	-100.446	37.8409	16.0	72.3	38.5	265.1	34.6	-1.5
25S29W 7BCB	-100.554	37.8958	16.0	79.6	46.2	235.8	38.1	.8
25S29W14ABB	-100.473	37.8860	16.5	78.2	44.8	250.0	41.0	.2
25S29W32BBC	-100.518	37.8408	16.0	61.8	27.5	230.5	29.9	-7.9
25S30W2CBCB	-100.645	37.8678	15.0	50.8	16.1	102.8	47.1	2.0
26S27W13BDC	-100.233	37.7963	16.0	63.7	29.5	242.0	31.1	-3.2
26S27W18ADC	-100.310	37.7930	15.5	63.7	29.5	239.7	28.9	-5.4
26S27W27CDD	-100.262	37.7559	16.0	65.5	31.4	242.4	35.9	-2.5
26S28W19ABD	-100.421	37.7823	17.0	63.7	29.5	242.0	30.8	-5.6
26S30W 1CDA	-100.553	37.8171	17.0	59.8	25.4	216.3	27.2	-6.0
26S30W17AD	-100.617	37.7941	16.0	57.7	23.2	251.5	28.1	-7.8
26S30W24DDD	-100.544	37.7712	16.0	63.7	29.5	246.0	29.0	-6.5
26S30W28ADD	-100.598	37.7638	16.0	57.7	23.2	231.4	26.2	-8.2
27S27W 6BBB	-100.323	37.7397	17.0	67.3	33.3	276.6	31.2	-6.9
27S27W 7ADC	-100.310	37.7193	16.5	65.5	31.4	272.6	30.0	-9.2
27S27W19BBD	-100.321	37.6936	16.5	63.7	29.5	276.6	32.3	-4.9
27S28W30CCA	-100.430	37.6701	17.0	63.7	29.5	248.6	30.7	-8.0
27S29W 9DA	-100.491	37.7170	17.0	59.8	25.4	251.3	32.8	-5.7
27S29W18DBB	-100.533	37.7032	16.0	61.8	27.5	242.0	29.9	-7.6
27S29W23ADC	-100.455	37.6904	16.5	59.8	25.4	276.6	31.4	-6.4
27S29W33CCC	-100.506	37.6536	17.0	63.7	29.5	272.1	27.2	-10.1
27S30W 8BB	-100.631	37.7242	16.0	63.7	29.5	193.1	29.0	-10.8
27S30W25CCB	-100.560	37.6701	16.0	57.7	23.2	235.8	23.8	-9.9
27S30W34CCC	-100.596	37.6536	16.5	59.8	25.4	226.9	22.5	-11.4
28S30W 6BBA	-100.648	37.6517	17.0	55.5	21.0	235.8	23.4	-9.3
23S42W19CBB	-101.981	38.0374	15.5	80.9	47.7	81.8	75.7	21.4
23S42W27DDB	-101.912	38.0194	16.0	55.5	21.0	70.2	67.7	19.3
23S42W34CBB	-101.926	38.0085	15.0	45.6	10.7	65.2	57.9	12.7
23S43W25CBD	-101.997	38.0210	14.5	50.8	16.1	44.6	64.3	14.7
24S39W19CBC	-101.650	37.9482	14.5	50.8	16.1	60.5	54.6	7.1
24S39W30BBD	-101.648	37.9410	14.5	48.3	13.5	66.6	58.7	12.4
24S39W30CAD	-101.643	37.9338	15.0	57.7	23.2	56.3	66.1	14.4
24S40W17BBB	-101.742	37.9720	15.0	59.8	25.4	61.6	51.4	1.7
25S43W26DDD	-102.002	37.8438	19.0	48.3	13.5	264.9	32.3	-8.4
26S41W20BBD	-101.831	37.7815	16.0	65.5	31.4	188.8	43.2	-1.2
26S41W36CC	-101.759	37.7419	17.0	76.3	43.3	208.4	43.1	1.5
26S42W10BB	-101.904	37.8119	18.0	35.6	4.6	239.7	34.1	-5.4
26S42W17CB	-101.941	37.7899	17.0	50.8	16.1	266.0	32.1	-4.0
26S42W22CCB	-101.901	37.7725	17.0	50.8	16.1	262.4	32.4	-4.8
26S43W 8ADB	-102.038	37.8091	19.0	45.6	10.7	301.3	33.0	-4.1
26S43W25DCC	-101.969	37.7560	18.0	50.8	16.1	241.0	34.1	-1.5
27S31W 7BDA	-100.753	37.7226	16.5	53.9	25.4	243.4	22.5	-12.3
27S31W24CCC	-100.664	37.6830	15.5	59.8	25.4	251.7	21.8	-12.6
27S32W 6CBB	-100.869	37.7343	19.5	57.7	23.2	211.5	21.9	-10.8
27S32W19CCD	-100.866	37.6845	17.5	57.7	23.2	248.0	19.4	-12.1
27S33W27CAD	-100.916	37.6735	19.0	59.8	25.4	226.9	20.3	-11.2

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
27S33W25DAA	-100.944	37.6753	18.0	59.8	25.4	242.0	20.5	-10.9
27S33W33DCD	-100.930	37.6551	19.0	57.7	23.2	192.4	22.3	-10.6
27S34W16DCD	-101.035	37.6986	19.0	63.7	29.5	211.7	21.4	-14.4
27S34W23DCA	-100.998	37.6861	17.5	63.7	29.5	227.9	19.8	-15.0
27S34W28DA	-101.036	37.6737	20.0	59.8	25.4	226.9	25.6	-7.0
22S35W23CDD	-101.131	38.1198	17.0	67.3	33.3	369.5	35.0	-1.2
22S37W18CCD	-101.428	38.1339	17.5	63.7	29.5	210.2	46.6	6.7
23S35W 5ACC	-101.184	38.0838	17.0	61.8	27.5	227.5	39.4	-2.2
23S35W12CCC	-101.120	38.0619	17.0	67.3	33.3	245.5	39.0	1.2
23S35W25BBB	-101.120	38.0311	17.0	73.8	40.1	179.1	48.7	4.6
23S36W 9CBB	-101.284	38.0819	16.0	59.8	25.4	235.8	37.7	-1.0
23S36W32BBB	-101.302	38.0168	17.5	63.7	29.5	237.3	51.0	10.4
23S37W19BCC	-101.430	38.0398	17.0	63.7	29.5	198.2	56.9	15.8
23S37W28CCB	-101.394	38.0200	19.0	59.8	25.4	252.8	47.7	8.1
24S35W13CCD	-101.118	37.9605	15.0	63.7	29.5	77.4	56.6	7.2
24S35W22CCC	-101.156	37.9463	15.0	59.8	25.4	77.4	57.5	6.7
24S36W15BCB	-101.266	37.9698	17.0	63.7	29.5	270.7	45.2	6.0
24S36W23CBB	-101.247	37.9518	16.0	65.5	31.4	131.4	51.9	6.1
24S37W 4CDD	-101.387	37.9893	18.0	53.2	18.6	276.6	37.3	.1
25S35W22CAA	-101.149	37.8648	18.0	50.8	16.1	227.9	24.0	-10.3
25S36W11CBC	-101.247	37.8922	16.0	48.3	13.5	63.7	47.1	2.1
25S36W18ACC	-101.311	37.8810	15.0	48.3	13.5	66.8	50.4	6.3
25S36W19BBB	-101.320	37.8719	18.0	48.3	13.5	81.3	44.1	1.4
25S36W28BBD	-101.281	37.8558	18.0	48.3	13.5	222.3	21.8	-10.5
26S35W 6BBD	-101.192	37.8272	18.0	57.7	23.2	368.0	12.3	-17.0
26S35W31DCA	-101.184	37.7445	19.0	65.5	31.4	293.3	15.4	-15.9
26S37W21DCD	-101.362	37.7714	17.0	65.5	31.4	209.9	38.1	-4.6
26S37W24DBC	-101.332	37.7605	18.0	63.7	29.5	265.5	25.8	-10.6
18S32W20CBB	-100.886	38.4748	15.5	109.8	78.8	252.8	51.8	16.1
18S33W35AAA	-100.925	38.4527	14.0	108.9	77.9	229.1	47.2	7.1
19S33W12DDC	-100.908	38.4109	15.0	99.1	67.1	129.3	67.6	17.8
19S33W15DBD	-100.948	38.3998	14.5	103.7	72.2	158.0	46.9	7.4
19S33W25DCD	-100.910	38.3671	15.0	89.6	56.9	244.8	51.2	10.4
19S33W29CBB	-100.996	38.3722	16.0	96.1	63.9	266.9	49.6	8.9
19S33W34DCC	-100.950	38.3523	14.5	79.6	46.2	313.1	47.0	9.9
20S33W 2DBB	-100.931	38.3433	14.0	80.9	47.7	266.9	48.9	6.1
20S33W21ABD	-100.966	38.3049	15.0	90.7	58.1	313.1	48.1	9.6
20S33W26CBB	-100.940	38.2849	17.0	88.4	55.7	308.6	47.9	12.0
20S33W35DBA	-100.929	38.2703	15.0	89.6	56.9	286.9	43.9	9.2
20S33W36CCD	-100.919	38.2649	16.0	91.8	59.3	227.4	46.1	9.3
27S39W23ACC	-101.552	37.6900	17.5	79.6	46.2	232.2	35.9	-5.6
27S39W27BBA	-101.577	37.6807	20.0	75.3	41.7	207.0	35.2	-.2
27S40W15DBC	-101.679	37.7006	19.0	61.8	27.5	199.7	36.4	-.3
27S40W25CBC	-101.652	37.6713	17.0	59.8	25.4	221.8	30.2	-3.9
27S40W28CCD	-101.700	37.6677	18.0	55.5	21.0	248.8	33.8	-1.7
27S41W19BAD	-101.844	37.6937	18.0	55.5	21.0	226.2	35.0	-1.7
27S41W35CCC	-101.779	37.6532	18.0	59.8	25.4	218.6	35.8	-1.1
27S42W11DBB	-101.878	37.7175	17.0	48.3	13.5	229.4	35.7	-2.4
27S42W17DCC	-101.933	37.6973	18.0	48.3	13.5	226.2	35.3	1.8
27S42W31CCC	-101.960	37.6533	17.0	45.6	10.7	230.0	33.1	-.7
27S43W12BCC	-101.978	37.7194	18.0	45.6	10.7	237.5	35.1	1.9
15S38W14AAB	-101.479	38.4079	15.0	101.0	69.2	222.4	57.5	20.2
15S38W18DCC	-101.557	38.3951	16.0	101.9	70.2	235.8	50.6	14.9
15S38W26CCB	-101.493	38.3679	14.5	102.8	71.2	240.0	48.8	13.2
15S39W31CBC	-101.566	38.3951	15.0	95.1	63.9	288.7	51.0	16.9

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
19S38W35BAB	-101.488	38.3642	15.0	102.8	71.2	243.8	43.8	9.6
26S31W22CAD	-100.679	37.7751	18.0	65.5	31.4	224.5	31.3	-4.6
26S31W31CDC	-100.756	37.7429	16.5	70.7	36.8	220.7	28.2	-7.8
26S31W36CAC	-100.663	37.7455	17.0	61.8	27.5	235.8	29.0	-5.9
26S32W22ABB	-100.805	37.7855	17.0	67.3	33.3	241.0	30.2	-7.5
26S32W35CDA	-100.790	37.7449	16.0	67.3	33.3	260.9	28.4	-8.5
26S33W26ABB	-100.896	37.7711	17.5	67.3	33.3	295.3	23.7	-9.6
26S34W24BDB	-100.991	37.7819	17.5	69.0	35.1	352.9	20.1	-12.2
27S35W17ACD	-101.161	37.7057	18.0	53.2	18.6	301.8	17.9	-14.5
27S36W15DDD	-101.234	37.6985	21.0	48.3	13.5	202.9	32.2	-4.9
27S36W18DCB	-101.295	37.7001	19.0	67.3	33.3	158.5	46.5	3.6
27S36W26DCC	-101.218	37.6691	18.0	57.7	23.2	161.7	44.2	3.4
27S37W 4ABB	-101.369	37.7402	17.5	76.8	43.3	167.0	58.2	10.7
27S37W11APA	-101.330	37.7256	19.0	82.3	49.1	185.4	55.5	16.0
27S37W22BBB	-101.360	37.6962	17.5	83.6	50.5	220.7	41.3	.3
27S37W29CBB	-101.396	37.6741	17.5	78.2	44.8	175.2	41.0	1.7
27S38W12ADC	-101.419	37.7198	17.0	90.7	58.1	184.9	55.4	10.1
27S38W22CCA	-101.467	37.6849	16.5	76.8	43.3	203.3	41.6	1.8
27S38W25BBB	-101.433	37.6813	18.0	75.3	41.7	175.2	39.6	.1
27S38W29CCB	-101.506	37.6701	17.5	82.3	49.1	208.9	38.0	-.1
28S35W15CBB	-101.141	37.6156	20.0	59.8	25.4	230.0	30.6	-7.8
28S35W36ABC	-101.096	37.5768	19.0	63.7	29.5	233.7	30.8	-3.4
28S36W 2CDD	-101.224	37.6397	19.0	70.7	36.8	179.8	43.3	-.3
28S37W1CBCD	-101.357	37.6321	19.0	83.6	50.5	153.4	47.6	4.3
28S37W3CBDD	-101.413	37.5916	18.0	76.8	43.3	183.6	46.9	6.8
28S38W 8BBB	-101.506	37.6372	18.0	82.3	49.1	168.3	43.0	2.7
28S38W12BCB	-101.433	37.6337	19.0	82.3	49.1	139.0	46.0	3.3
28S38W31DBB	-101.515	37.5714	17.5	63.7	29.5	205.8	39.7	4.7
29S35W 1CCC	-101.105	37.5511	19.0	65.5	31.4	193.9	34.8	-.9
29S35W 6BAA	-101.188	37.5644	19.0	95.0	62.8	180.1	49.2	10.4
29S37W 9CBA	-101.394	37.5422	18.0	69.0	35.1	213.6	42.0	4.6
29S37W29BBD	-101.394	37.5037	19.0	75.3	41.7	209.4	46.3	7.6
29S38W3CCDC	-101.501	37.5074	18.0	67.3	33.3	213.7	39.5	4.0
29S38W22BBB	-101.470	37.5202	18.0	63.7	29.5	211.5	41.5	4.3
30S35W 2DBC	-101.114	37.4666	19.0	76.8	43.3	218.5	48.7	5.3
30S35W19BCD	-101.192	37.4265	17.0	70.7	36.8	191.4	49.5	10.8
30S39W 3DCC	-101.460	37.4634	19.0	53.2	18.6	196.3	39.8	2.7
30S39W13CCC	-101.433	37.4341	19.0	61.8	27.5	175.7	44.7	6.1
30S38W15DBC	-101.460	37.4378	19.0	57.7	23.2	182.1	41.7	4.1
30S38W3CACA	-101.513	37.4141	18.0	57.7	23.2	200.6	40.2	4.2
28S35W26ADA	-101.108	37.5897	19.0	59.8	25.4	225.1	31.2	-6.2
28S37W 2BBB	-101.341	37.6523	19.0	79.6	46.2	176.9	40.6	-.9
28S38W2CDCB	-101.497	37.5970	20.0	50.8	16.1	158.0	51.1	12.6
29S38W 3BAA	-101.463	37.5641	18.0	69.0	35.1	200.3	40.9	5.2
30S37W 6DCC	-101.406	37.4633	18.0	70.7	36.8	197.5	44.5	4.9
30S38W 2CBB	-101.451	37.4689	25.0	61.8	27.5	200.9	43.9	5.5
26S27W27CDD	-100.262	37.7559	15.0	69.0	35.1	258.4	38.9	-.2
26S28W19ABD	-100.421	37.7923	16.0	67.3	33.3	254.0	32.6	-3.2
26S30W24DDD	-100.544	37.7712	16.0	63.7	29.5	266.0	33.3	-6.5
26S30W28DAA	-100.598	37.7619	17.0	61.8	27.5	256.9	31.2	-7.5
27S27W 6BBB	-100.323	37.7397	17.0	73.8	40.1	292.4	33.4	-2.9
27S27W10CDB	-100.265	37.7135	16.0	79.7	36.8	294.2	31.6	-4.3
27S28W24BBD	-100.339	37.6937	17.0	70.7	36.8	284.2	35.2	-2.8
27S29W23ACC	-100.455	37.6904	16.0	61.8	27.5	293.3	33.7	-5.7
27S29W33CCC	-100.506	37.6536	17.0	65.5	31.4	289.9	28.2	-10.4

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
27S29W36ABB	-100.442	37.6665	17.0	63.7	29.5	280.9	31.4	-7.5
27S30W 8BBB	-100.632	37.7252	16.0	67.3	33.3	208.0	31.1	-7.1
27S30W 8CBB	-100.632	37.7178	16.0	75.3	41.7	223.5	27.5	-8.1
27S30W22BDC	-100.591	37.6903	16.0	70.7	36.8	276.6	32.3	-4.6
27S30W25CCB	-100.560	37.6701	16.0	63.7	29.5	256.9	27.5	-10.3
27S30W34CCC	-100.596	37.6536	16.0	65.5	31.4	252.8	27.2	-10.8
28S27W 4ABB	-100.278	37.6509	17.0	73.8	40.1	268.0	30.3	-4.9
28S28W20ACD	-100.399	37.6019	17.0	75.3	41.7	317.5	34.5	-2.4
28S29W16ACC	-100.497	37.6168	16.0	72.3	38.5	260.1	29.0	-7.9
28S30W 6BBA	-100.648	37.6517	16.5	65.5	31.4	254.6	26.1	-8.0
28S30W10DDD	-100.580	37.6242	16.0	69.0	35.1	258.1	25.7	-8.1
28S30W17BBA	-100.630	37.6223	17.0	67.3	33.3	248.4	24.6	-8.7
28S30W24BAB	-100.556	37.6077	17.0	69.0	35.1	267.5	27.8	-7.7
28S30W31CCB	-100.650	37.5672	17.0	69.0	35.1	303.5	22.2	-10.6
29S27W30BCC	-100.323	37.4983	16.5	84.8	51.8	317.5	32.5	-4.8
29S27W36ABA	-100.222	37.4880	16.0	83.6	50.5	408.5	28.9	-7.9
29S28W18CCC	-100.433	37.5212	16.0	70.7	36.8	311.1	32.0	-5.4
29S28W19DDD	-100.417	37.5064	16.0	73.8	40.1	298.5	30.7	-4.7
29S28W28CDC	-100.392	37.4915	16.0	73.8	40.1	304.3	31.4	-4.9
29S29W10BBB	-100.488	37.5488	15.0	69.0	35.1	276.6	28.4	-7.3
29S29W27BCD	-100.488	37.5910	16.5	72.3	38.5	291.6	28.7	-7.4
29S30W22BBC	-100.596	37.5176	17.5	70.7	36.8	251.7	26.5	-5.1
29S30W35ACD	-100.567	37.4845	18.0	69.0	35.1	276.6	26.1	-7.8
26S41W2CBBD	-101.831	37.7815	16.0	76.8	43.3	186.4	47.4	2.9
26S42W22CDB	-101.901	37.7725	17.5	55.5	21.0	269.9	34.9	-3.0
26S43W25DCC	-101.969	37.7560	18.0	53.2	18.6	254.4	36.0	-1.2
27S31W21BBC	-100.723	37.6947	24.0	55.8	25.4	244.4	25.8	-11.0
27S31W24CDC	-100.664	37.6830	17.0	67.3	33.3	267.5	25.4	-9.8
27S31W31CBC	-100.760	37.6583	17.0	67.3	33.3	316.3	21.5	-10.0
27S32W 6CBB	-100.869	37.7343	18.5	65.5	31.4	233.2	25.3	-8.2
27S32W13ABB	-100.769	37.7117	17.0	65.5	31.4	247.5	27.8	-9.8
27S32W19CCD	-100.866	37.6845	17.5	69.0	35.1	271.1	22.0	-11.2
27S33W27CAD	-100.916	37.6735	22.0	67.3	33.3	285.5	32.7	3.0
27S33W29DAA	-100.944	37.6753	18.0	65.5	31.4	259.8	22.5	-10.4
27S33W33DCD	-100.930	37.6551	19.0	65.5	31.4	201.7	24.0	-9.3
27S34W16DDD	-101.035	37.6986	18.0	67.3	33.3	242.6	24.3	-10.9
27S34W28DAA	-101.035	37.6747	18.5	63.7	29.5	235.8	25.7	-6.9
28S31W32ABB	-100.732	37.5789	17.5	67.3	33.3	276.6	23.5	-9.6
28S31W35CCB	-100.687	37.5675	17.5	69.0	35.1	299.5	23.9	-9.4
28S32W 9CCC	-100.832	37.6254	17.5	69.0	35.1	266.2	22.6	-11.1
28S32W18BBB	-100.869	37.6237	17.5	69.0	35.1	242.0	24.8	-9.7
28S32W35BBA	-100.794	37.5792	19.0	70.7	36.8	199.2	27.6	-4.2
28S33W21BCC	-100.941	37.6035	19.0	63.7	29.5	238.1	30.1	-3.6
28S33W24DBC	-100.878	37.5998	22.5	86.0	53.1	181.8	42.9	6.2
28S34W15DAB	-101.019	37.6160	19.0	67.3	33.3	204.7	33.4	-1.9
28S34W32ACD	-101.053	37.5734	18.5	63.7	29.5	231.4	31.2	-3.0
29S31W14BBB	-100.687	37.5344	17.5	75.3	41.7	266.2	25.1	-9.6
29S31W34BCA	-100.703	37.4867	17.5	69.0	35.1	229.4	29.1	-5.4
29S32W 4BCC	-100.832	37.5591	19.0	57.7	23.2	183.9	32.4	-2.1
29S32W16DAA	-100.816	37.5277	19.0	72.3	38.5	175.2	35.1	-.8
29S33W 1AAB	-100.873	37.5548	18.5	70.7	36.8	219.3	29.9	-4.8
29S33W 5ACA	-100.948	37.5612	19.0	55.8	25.4	220.7	34.8	-.1
29S33W28BCB	-100.941	37.5022	18.0	61.8	27.5	239.7	35.0	-.2
29S34W 2ABB	-101.005	37.5646	18.5	63.7	29.5	220.7	32.7	-.8
29S35W11BBC	-100.905	37.5482	19.0	63.7	29.5	209.4	33.0	-4.1

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
29S34W 9CBB	-101.051	37.5421	19.0	61.8	27.5	201.0	34.5	-.6
29S34W11ADD	-100.998	37.5445	19.0	65.5	31.4	198.4	34.6	.6
29S34W24BCC	-100.996	37.5150	19.0	65.5	31.4	172.8	38.3	3.5
29S34W3ECBC	-100.996	37.4819	19.0	63.7	29.5	190.8	36.2	.4
30S31W 6BBB	-100.760	37.4760	18.0	65.5	31.4	226.1	32.6	-2.5
30S31W15ABB	-100.696	37.4462	17.5	65.5	31.4	254.0	34.2	-.6
30S31W24BBB	-100.669	37.4314	17.5	63.7	29.5	256.9	33.7	-1.9
30S31W33BBB	-100.723	37.4022	18.0	65.5	31.4	232.4	38.7	1.9
30S32W11BBB	-100.796	37.4614	18.0	65.5	31.4	230.5	34.7	-1.0
30S32W17BCC	-100.850	37.4413	18.0	59.8	25.4	221.9	36.6	.2
30S32W31BAB	-100.864	37.4026	18.0	65.5	31.4	196.6	37.9	.6
30S33W 2AAB	-100.891	37.4764	19.0	63.7	29.5	205.9	35.0	.1
30S33W 6DBB	-100.966	37.4673	19.0	67.3	33.3	190.3	37.7	3.2
30S33W30CBD	-100.975	37.4084	21.5	69.0	35.1	187.5	44.4	6.7
30S34W 5BBB	-101.069	37.4759	19.5	67.3	33.3	185.4	43.1	6.2
30S34W16BBB	-101.051	37.4466	19.5	70.7	36.8	180.9	43.8	6.6
26S35W31DCA	-101.184	37.7445	18.0	65.5	31.4	298.9	19.0	-14.2
26S35W16DDB	-101.254	37.7884	17.0	55.5	21.0	324.0	16.5	-14.6
26S37W22CCA	-101.357	37.7732	17.0	65.5	31.4	260.1	33.3	-5.1
26S37W26DBC	-101.332	37.7605	18.0	67.3	33.3	282.1	28.0	-6.7
30S26W 4CBB	-100.179	37.4658	15.0	75.3	41.7	299.8	31.1	-4.8
30S26W 7BBB	-100.216	37.4584	15.0	70.7	36.8	273.3	32.4	-6.3
30S26W17BBC	-100.197	37.4418	15.0	67.3	33.3	276.6	31.9	-5.1
30S26W31CBC	-100.216	37.3902	18.0	82.3	49.1	240.6	52.3	10.3
30S27W 4DBD	-100.276	37.4646	15.0	67.3	33.3	280.3	31.8	-4.0
30S27W23ABB	-100.243	37.4292	16.0	67.3	33.3	268.5	32.4	-4.1
30S28W 2BAA	-100.353	37.4746	16.0	70.7	36.8	308.8	33.6	-2.4
30S28W17ABB	-100.406	37.4456	15.5	57.7	23.2	318.1	30.8	-3.2
30S29W 3DCC	-100.479	37.4624	16.5	67.3	33.3	305.0	27.9	-5.2
30S29W23CAD	-100.463	37.4220	16.0	57.7	23.2	281.7	30.1	-5.5
30S29W28BBB	-100.506	37.4165	17.0	61.8	27.5	259.1	33.2	-2.2
30S30W12CBB	-100.560	37.4533	18.0	57.7	23.2	250.0	30.5	-3.2
30S30W28ABB	-100.606	37.4166	18.0	65.5	31.4	237.8	32.9	-2.4
31S28W10BCB	-100.362	37.3684	16.5	59.8	25.4	310.4	26.5	-7.9
31S29W25AAA	-100.418	37.3291	16.0	59.8	25.4	281.4	32.6	-3.8
31S29W30AAA	-100.508	37.3292	16.0	73.8	40.1	276.6	37.4	-.2
31S30W16BBC	-100.597	37.3564	18.0	69.0	35.1	255.0	38.0	2.5
32S30W 9CCC	-100.597	37.2731	18.0	61.8	27.5	235.8	41.2	3.8
32S30W28BBC	-100.596	37.2405	16.0	73.8	40.1	225.7	42.4	4.7
32S30W35CAA	-100.553	37.2206	17.0	79.6	46.2	222.7	42.1	4.4
32S29W36AAD	-100.419	37.1410	16.0	75.3	41.7	42.0	59.3	15.6
31S39W18CCC	-101.609	37.3462	18.0	73.8	40.1	198.2	48.4	6.4
31S40W29ABB	-101.690	37.3299	18.0	72.3	38.5	203.2	41.9	4.0
31S42W29AAB	-101.903	37.3294	21.0	55.5	21.0	124.5	30.3	-6.9
31S43W17CDC	-102.022	37.3458	18.0	59.8	25.4	196.3	34.7	-.7
32S40W21ADB	-101.667	37.2536	19.0	83.6	50.5	172.4	48.6	5.8
32S42W14CCC	-101.862	37.2584	18.0	76.8	43.3	172.9	47.9	10.4
32S42W21BCC	-101.898	37.2511	18.0	76.8	43.3	174.1	50.8	11.3
32S42W26CDD	-101.855	37.2292	19.0	76.8	43.3	183.7	50.9	9.4
32S43W17DCC	-102.017	37.2582	19.0	82.3	49.1	213.7	46.1	7.6
33S39W16ABB	-101.562	37.1850	19.0	83.6	50.5	168.7	48.7	7.0
33S40W27CCC	-101.661	37.1428	19.0	79.6	46.2	121.8	45.5	2.9
33S41W 3AAD	-101.755	37.2115	19.0	83.6	50.5	177.2	51.7	9.2
35S40W 3BBB	-101.661	37.0393	20.0	79.6	46.2	137.9	28.2	-6.9
35S43W13BDB	-101.947	37.0053	19.0	72.3	38.5	175.4	48.3	5.2

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
21S31W 8BCC	-100.722	37.3577	17.5	69.0	35.1	192.6	41.6	5.4
31S31W13BCB	-100.652	37.3547	17.0	65.5	31.4	228.9	38.4	2.9
31S32W 3CAD	-100.779	37.3787	18.0	65.5	31.4	211.5	38.3	.5
31S32W21CBA	-100.810	37.3372	18.0	67.3	33.3	189.7	44.2	5.5
31S32W34CBB	-100.794	37.3082	18.0	65.5	31.4	189.7	44.6	8.2
31S33W 6CBD	-100.956	37.3791	18.0	70.7	36.8	202.7	43.4	6.2
31S33W20CBB	-100.931	37.3373	18.0	72.3	38.5	196.7	43.9	10.9
31S34W18BDB	-101.067	37.3585	19.0	70.7	36.8	191.2	55.1	12.9
32S31W 8BBB	-100.722	37.2863	16.0	65.5	31.4	215.9	40.4	4.1
32S31W26CAA	-100.662	37.2353	16.0	61.8	27.5	226.3	42.1	5.5
32S31W31ACC	-100.731	37.2231	19.0	67.3	33.3	187.5	45.8	9.1
32S32W14BBB	-100.776	37.2720	18.0	65.5	31.4	201.7	45.1	5.0
32S32W19BAB	-100.844	37.2577	18.0	65.5	31.4	227.3	49.8	8.5
32S33W12BCC	-100.867	37.2812	18.0	65.5	31.4	245.3	51.1	12.0
32S33W17DCC	-101.581	37.2533	20.0	76.8	43.3	204.3	41.3	3.1
32S34W32DBB	-101.048	37.2290	18.5	78.2	44.8	194.7	46.1	6.4
33S33W12AAD	-100.850	37.1981	18.0	69.0	35.1	215.9	36.9	.7
34S32W35ADA	-100.759	37.0514	18.0	75.3	41.7	88.0	51.2	13.0
34S34W16DAA	-101.013	37.0903	18.0	75.6	46.2	228.4	28.2	-6.3
35S33W15DCA	-100.917	37.0076	18.0	79.6	46.2	220.7	36.3	2.6
35S34W1CBBB	-101.011	37.0250	16.0	79.6	46.2	150.5	35.7	-.6
27S39W23ACC	-101.552	37.6900	16.5	78.2	44.8	244.8	38.5	-4.7
27S39W27BBA	-101.577	37.6807	19.5	83.6	50.5	240.0	38.0	1.3
27S39W34CDD	-101.563	37.6534	18.0	85.6	56.9	192.6	39.5	2.7
27S41W19BAD	-101.844	37.6937	17.5	59.8	25.4	243.8	37.2	1.1
27S41W31CCB	-101.851	37.6552	18.0	67.3	33.3	251.1	37.3	2.5
27S42W31CCC	-101.960	37.6533	17.0	50.8	16.1	226.9	34.6	-.5
27S29W 9DA	-100.491	37.7170	16.0	65.5	31.4	266.9	36.1	-5.8
26S41W36CC	-101.759	37.7419	17.0	75.6	46.2	198.8	45.2	2.6
29S31W 9CB	-100.722	37.5411	17.0	72.3	38.5	251.7	25.3	-10.3
29S32W19CC	-100.867	37.5085	18.5	70.7	36.8	201.9	35.7	.6
28S29W 5CC	-100.504	37.2885	16.0	72.3	38.5	269.2	36.5	-.9
33S28W29BC	-100.395	37.1507	16.0	79.6	46.2	104.3	46.9	6.5
33S30W35CB	-100.558	37.1328	16.0	70.7	36.8	231.5	42.9	4.9
31S40W 1DA	-101.613	37.3798	18.0	75.3	41.7	202.0	45.9	8.5
31S43W 3CB	-101.989	37.3794	17.0	65.5	31.4	170.5	48.3	9.1
32S39W 9DC	-101.557	37.2749	22.0	86.0	53.1	163.8	59.4	12.7
32S34W1CDA	-100.997	37.2782	18.0	67.3	33.3	226.9	47.6	10.6
27S43W12BCC	-101.978	37.7194	18.5	53.2	18.6	250.0	35.5	-1.1
27S43W29DAB	-102.038	37.6736	17.0	53.2	18.6	255.0	33.8	-1.2
28S39W 5BBB	-101.616	37.6513	19.0	50.8	16.1	138.4	52.3	12.1
28S39W31BCC	-101.634	37.5725	18.0	63.7	29.5	228.6	37.4	3.7
28S39W33ACC	-101.588	37.5728	17.0	63.7	29.5	216.9	39.3	4.1
28S39W36ABB	-101.533	37.5796	17.5	63.7	29.5	224.3	39.5	3.2
28S40W 4CCC	-101.706	37.6385	17.0	57.7	23.2	245.7	36.0	-.7
28S40W23ACC	-101.661	37.5018	18.0	63.7	29.5	235.8	37.7	.7
28S40W32CCB	-101.724	37.5872	18.0	61.8	27.5	216.7	37.6	2.7
28S41W31BDD	-101.845	37.5728	18.5	50.8	16.1	351.4	36.2	-.3
28S42W 8CCC	-101.942	37.6240	19.5	45.6	10.7	218.4	34.8	-2.8
28S42W32BBB	-101.942	37.5782	18.0	48.3	13.5	183.3	49.0	2.1
29S39W17BCB	-101.616	37.5306	18.0	57.7	23.2	234.0	37.3	5.0
29S39W21DBD	-101.566	37.5107	19.0	59.8	25.4	212.1	37.9	4.0
29S39W24DDA	-101.526	37.5092	18.0	57.7	23.2	221.8	37.6	1.3
29S41W13ACC	-101.752	37.5289	17.5	67.3	33.3	218.8	39.7	3.5
29S41W31CBD	-101.849	37.4812	18.0	63.7	29.5	252.4	35.4	.1

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
25S42W 8CDC	-101.938	37.5360	18.0	57.7	23.2	201.7	44.5	.7
26S42W24CCC	-101.870	37.5068	17.0	59.8	25.4	207.0	43.8	1.7
30S39W 2ABB	-101.552	37.4762	18.0	61.8	27.5	211.3	39.2	4.2
30S39W18BBB	-101.635	37.4464	17.0	67.3	33.3	197.1	40.9	5.9
30S39W32DA	-101.601	37.3945	17.5	70.7	36.8	203.9	48.3	9.2
30S39W36BCD	-101.536	37.3976	18.0	65.5	31.4	185.2	50.7	11.9
30S40W24CCC	-101.648	37.4190	17.5	69.0	35.1	190.1	49.0	9.4
30S40W33CCB	-101.707	37.3917	18.5	61.8	27.5	210.8	51.5	12.7
30S42W12ACC	-101.861	37.4555	19.0	65.5	31.4	192.4	48.4	8.5
30S42W16BDB	-101.920	37.4426	17.0	69.0	35.1	222.9	39.7	2.1
30S43W34BBB	-102.017	37.4023	17.0	67.3	33.3	154.9	47.0	6.1
31S35W15BAA	-101.114	37.3587	19.0	72.3	38.5	198.2	50.2	8.3
31S35W26DCC	-101.094	37.3169	18.5	70.7	36.8	226.4	49.8	11.0
31S36W 2CDD	-101.204	37.3754	19.0	67.3	33.3	200.6	52.1	11.2
31S36W18BAA	-101.276	37.3592	19.0	70.7	36.8	192.8	47.1	9.0
31S36W27BCB	-101.228	37.3264	19.0	70.7	36.8	192.8	47.1	7.7
31S37W 9BCC	-101.355	37.3683	18.0	65.5	31.4	187.5	52.6	12.9
31S37W22BCC	-101.337	37.3392	18.0	78.2	44.8	175.6	55.5	12.4
31S38W17CCA	-101.475	37.3486	19.0	72.3	38.5	191.1	50.8	10.8
31S39W23BBB	-101.536	37.3448	18.0	78.2	44.8	193.2	50.4	11.6
32S35W 2CBB	-101.103	37.2933	18.0	72.3	38.5	237.0	48.3	9.9
32S35W 8DDD	-101.140	37.2735	22.0	72.3	38.5	197.5	48.7	8.4
33S36W11DDC	-101.196	37.1865	19.0	86.0	53.1	206.5	41.0	3.0
33S37W17CCC	-101.372	37.1719	19.0	73.8	40.1	173.6	34.0	-2.4
33S38W 6AAB	-101.486	37.2143	19.0	80.9	47.7	165.0	44.8	5.5
33S38W16ACC	-101.436	37.1940	19.0	86.0	53.1	178.9	45.9	5.6
33S38W20CCB	-101.468	37.1597	19.0	75.3	41.7	191.3	29.1	-4.4
33S38W25DDC	-101.395	37.1428	19.0	75.3	41.7	213.8	27.7	-6.7
34S35W 7BCC	-101.173	37.1065	20.0	73.6	46.2	267.5	21.2	-10.7
34S35W18BCA	-101.171	37.0937	20.0	80.9	47.7	253.3	21.2	-13.9
34S38W 2CDB	-101.422	37.1157	20.0	75.3	41.7	196.8	31.8	-4.2
34S39W15CAD	-101.546	37.0890	20.0	75.3	41.7	322.6	20.3	-15.4
35S35W 1AAA	-101.175	37.0393	21.0	83.6	50.5	276.6	30.7	-2.3
35S39W10CAD	-101.545	37.0165	21.0	75.8	43.3	205.5	20.5	-13.0
35S43W32BCC	-102.026	37.1342	20.0	72.3	38.5	105.4	50.2	11.7
20S11W 3ABB	-98.526	38.3469	13.0	69.0	35.1	103.3	41.3	-1.7
20S11W19A	-98.577	38.3005	15.0	70.7	36.8	68.3	49.8	6.6
20S11W26DDB	-98.503	38.2779	15.0	76.8	43.3	41.3	58.1	14.0
20S12W 1C	-98.605	38.3368	14.0	70.7	36.8	109.8	41.7	-1.2
20S12W 3B	-98.642	38.3442	14.0	73.8	40.1	119.6	33.6	-5.7
20S12W 6AAC	-98.687	38.3453	15.0	73.8	40.1	99.1	41.1	.9
20S12W30BDB	-98.696	38.2856	15.0	69.0	35.1	197.1	32.4	-7.0
20S13W19CCB	-98.810	38.2931	15.0	75.3	41.7	104.7	36.8	-4.5
20S13W31BDD	-98.803	38.2496	15.0	70.7	36.8	157.1	33.5	-5.7
20S14W1CAAA	-98.849	38.3330	15.0	62.7	29.5	139.9	36.3	-2.2
20S14W23DDD	-98.833	38.2931	15.0	69.0	35.1	126.3	38.3	-1.9
20S14W27CAC	-98.860	38.2804	15.0	70.7	36.8	122.1	33.9	-4.8
20S14W30BBC	-98.920	38.2877	15.0	62.7	29.5	95.8	36.8	-3.0
20S14W32BCA	-98.899	38.2714	15.5	72.3	38.5	172.6	27.3	-7.8
24S17W25AAD	-99.133	37.9394	15.0	75.3	41.7	238.1	26.0	-8.9
24S18W17ABD	-99.320	37.9691	15.0	76.8	43.3	239.7	11.9	-18.6
24S18W36DCC	-99.244	37.9144	14.0	72.3	38.5	183.9	26.2	-10.5
25S16W 4DBC	-99.085	37.9031	18.0	70.7	36.8	187.5	34.9	-4.9
25S16W33DDD	-99.081	37.8288	16.0	73.8	40.1	238.3	21.8	-12.5
25S17W17DCB	-99.208	37.8725	15.0	67.3	33.3	246.5	23.5	-8.5

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
25S18W 9C	-99.309	37.8883	18.0	70.7	36.8	220.7	18.0	-13.9
25S18W33CDC	-99.308	37.8276	16.0	73.8	40.1	187.5	24.2	-10.4
25S20W35BCC	-99.495	37.8355	15.0	63.7	29.5	110.1	36.8	-4.4
26S16W25DDB	-99.389	37.7551	18.0	82.3	49.1	298.9	19.6	-15.2
26S19W12ABC	-99.348	37.8093	14.0	73.8	40.1	242.0	18.7	-12.3
26S20W 4DCA	-99.509	37.8152	15.0	67.3	33.3	106.5	34.3	-6.4
24S18W23BBC	-99.276	37.9544	15.0	70.7	36.8	211.7	23.7	-13.4
25S22W17CBB	-99.768	37.8774	21.0	87.3	54.4	176.2	63.8	15.5
25S23W14ADD	-99.807	37.8794	21.0	98.1	66.1	295.3	53.8	8.1
25S26W25CDD	-100.128	37.8434	15.0	108.1	77.0	374.0	37.7	-1.2
25S26W3CABB	-100.217	37.8563	15.0	102.8	71.2	343.1	42.1	1.2
26S24W32DDA	-99.959	37.7425	15.0	78.2	44.8	112.6	46.9	-.4
26S24W33CDA	-99.950	37.7424	16.0	113.7	83.1	143.3	45.6	-5.0
26S25W34BBB	-100.049	37.7535	15.0	69.0	35.1	97.1	48.9	3.5
26S26W12CDB	-100.118	37.8014	15.0	101.0	69.2	342.4	37.4	.1
26S26W32ADD	-100.181	37.7481	16.0	73.8	40.1	276.6	35.5	-3.8
26S26W36DCC	-100.114	37.7405	16.0	73.8	40.1	263.6	36.0	-2.6
27S23W35CCC	-99.791	37.6503	18.5	78.2	44.8	266.0	32.8	-5.3
27S24W 4BBC	-99.957	37.7369	16.0	79.6	46.2	196.3	36.4	-2.7
27S24W26DAA	-99.904	37.6720	16.5	76.8	43.3	291.6	26.7	-9.3
27S26W21DAA	-100.162	37.6871	16.0	76.8	43.3	284.6	28.8	-7.6
28S21W10DDD	-99.594	37.6203	18.0	76.8	43.3	243.6	27.2	-10.9
28S22W32BAB	-99.750	37.5739	17.0	86.0	53.1	352.6	22.8	-12.9
28S24W 9CBC	-99.957	37.6261	17.5	75.3	41.7	251.5	30.1	-8.3
28S25W 6ABB	-100.095	37.6501	16.0	73.8	40.1	255.0	29.1	-7.1
28S25W19BBB	-100.105	37.6058	17.0	82.3	49.1	342.4	34.5	-3.3
28S26W 6ABB	-100.206	37.6503	16.0	78.2	44.8	331.2	35.8	-2.1
29S21W 5BBB	-99.645	37.5592	17.0	84.8	51.8	318.1	27.4	-9.2
29S22W17DAD	-99.738	37.5200	18.0	86.0	53.1	308.8	33.9	-4.5
29S23W16CAA	-99.839	37.5230	18.0	84.8	51.8	257.8	35.9	-2.8
29S24W18BAA	-99.987	37.5323	17.5	79.6	46.2	268.0	33.2	-3.5
29S25W 3ADA	-100.033	37.5581	16.0	88.4	55.7	393.6	27.8	-7.6
29S26W 1CDD	-100.116	37.5487	17.0	95.0	62.8	409.8	23.8	-10.5
29S26W30BBB	-100.123	37.4878	17.0	82.3	49.1	235.8	33.7	-3.7
27S 7W 3ADC	-98.067	37.7307	15.0	70.7	36.8	87.0	3.6	-30.5
27S 9W 6DDB	-98.340	37.7252	17.5	78.2	44.8	118.5	16.9	-17.4
27S10W31BCD	-98.463	37.6570	17.0	76.8	43.3	144.0	10.5	-23.8
28S 9W 1BCC	-98.263	37.6427	17.5	80.9	47.7	151.5	11.3	-23.5
27S18W28C	-99.298	37.6679	17.0	80.9	47.7	303.5	21.6	-14.3
27S19W17BBA	-99.426	37.7079	17.0	73.8	40.1	307.3	25.4	-8.5
27S26W26ABD	-99.471	37.6763	17.0	75.3	41.7	239.1	14.0	-19.6
28S16W 2CCA	-99.046	37.6373	16.0	76.8	43.3	316.3	26.8	-10.2
28S17W 2C	-99.153	37.6382	16.0	83.6	50.5	282.5	22.0	-15.0
28S17W15DDB	-99.161	37.6079	17.0	76.8	43.3	276.6	23.4	-12.0
28S18W19CCB	-99.338	37.5930	16.0	78.2	44.8	259.1	22.5	-15.0
28S19W 5AAC	-99.415	37.6467	16.0	73.8	40.1	266.2	22.6	-11.9
28S19W31BBB	-99.446	37.5745	16.0	79.6	46.2	259.1	25.7	-12.3
28S20W19BBD	-99.553	37.6018	18.0	78.2	44.8	272.1	27.2	-9.2
21S15W17CCC	-99.003	38.2186	15.0	63.7	29.5	91.1	43.7	1.3
21S15W17CBC	-98.998	38.2186	14.0	65.5	31.4	89.0	40.9	.6
22S15W25ABD	-99.028	38.2005	15.0	63.7	29.5	135.8	35.9	-2.1
22S15W10AAC	-98.953	38.1571	16.5	88.4	55.7	90.6	48.7	6.3
22S15W36CCA	-98.928	38.0900	16.0	75.3	41.7	222.9	32.2	-6.5
23S15W 6BBD	-99.019	38.0844	17.0	67.3	33.3	190.7	32.9	-5.8
23S15W10CCA	-98.964	38.0609	15.0	73.8	40.1	231.4	25.4	-9.5

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
22S16W17ADC	-99.099	38.0519	15.0	67.3	33.3	160.9	36.8	-2.4
26S12W 2AAB	-98.596	37.8246	16.0	73.8	40.1	84.9	32.8	-5.6
26S12W17CCA	-98.662	37.7845	17.5	70.7	36.8	94.1	37.1	-3.0
26S13W 9CAC	-98.752	37.8011	16.5	73.8	40.1	209.7	24.9	-12.6
26S13W19BBD	-98.791	37.7790	17.0	69.0	35.1	208.8	26.1	-9.3
26S14W 1	-98.803	37.8185	15.0	72.3	38.5	224.0	24.9	-8.9
26S14W 5BBD	-98.882	37.8232	17.0	67.3	33.3	244.4	26.7	-7.7
26S14W15AAC	-98.834	37.7938	19.0	67.3	33.3	207.1	26.0	-9.2
26S14W31ACA	-98.891	37.7479	17.5	76.8	43.3	351.7	26.0	-9.9
26S15W 3BCA	-98.955	37.8214	17.0	67.3	33.3	255.5	23.0	-11.4
26S15W13CCA	-98.918	37.7846	17.5	73.8	40.1	338.6	17.0	-13.8
27S11W18BBD	-98.562	37.6978	20.0	79.6	46.2	119.4	21.1	-15.0
27S13W 6AAC	-98.779	37.7349	16.5	69.0	35.1	214.7	33.8	-4.0
27S13W18DDB	-98.779	37.6964	20.0	73.8	40.1	115.8	33.1	-4.2
27S15W 8BBD	-98.992	37.7202	19.0	76.8	43.3	295.3	24.4	-10.5
27S15W29CCA	-98.992	37.6668	17.0	83.9	47.7	310.0	25.9	-9.8
27S15W33ADC	-98.906	37.6578	17.0	78.2	44.8	250.9	29.6	-9.3
28S11W 8DAB	-98.542	37.6262	18.0	76.8	43.3	68.2	36.5	-3.3
28S13W12BDA	-98.694	37.6304	18.5	75.3	41.7	183.3	18.5	-18.9
28S14W 3DD	-98.851	37.6220	17.0	79.6	46.2	132.9	35.2	-1.1
28S15W10CCA	-98.955	37.6227	17.5	75.3	41.7	299.5	29.7	-9.0
22S 6W17CCA	-98.012	38.1329	14.0	63.7	29.5	114.2	53.9	8.8
22S 7W 2C	-98.066	38.1627	14.0	67.3	33.3	74.2	30.4	-12.2
22S 7W17DCD	-98.114	38.1326	15.0	72.3	38.5	31.3	42.2	-1.5
23S 7W 1ABA	-98.039	38.0857	15.0	59.8	25.4	31.4	45.9	3.1
23S 9W21DDB	-98.311	38.0311	15.5	76.8	43.3	67.7	43.4	2.0
24S 4W31ACD	-97.799	37.9214	14.5	73.8	40.1	128.3	22.9	-17.1
24S 5W16AA	-97.869	37.9692	15.0	69.0	35.1	175.6	22.7	-16.3
24S 5W20BBD	-97.900	37.9537	14.5	73.8	40.1	112.9	18.0	-21.1
24S 6W 6DBB	-98.023	37.9913	14.5	73.8	40.1	133.7	23.7	-17.5
24S 6W12B	-97.936	37.9817	14.5	72.3	38.5	110.9	31.2	-4.9
24S 7W13CCA	-98.048	37.9586	14.5	73.8	40.1	86.3	25.8	-14.6
24S 7W28AB	-98.095	37.9395	14.5	70.7	36.8	118.5	40.5	-3.9
24S 7W31CBA	-98.139	37.9186	15.5	72.3	38.5	98.8	34.2	-7.2
24S 8W34DAC	-98.182	37.9169	14.5	76.8	43.3	174.2	48.6	2.8
24S 9W19DCB	-98.348	37.9439	15.0	75.3	41.7	75.6	36.0	-3.1
24S 9W34A	-98.294	37.9232	15.0	79.6	46.2	128.5	28.2	-10.8
24S10W15CAB	-98.412	37.9619	15.0	76.8	43.3	172.6	30.8	-10.3
24S10W19D	-98.459	37.9447	15.0	78.2	44.8	80.8	38.6	-2.3
25S 4W14BAC	-97.733	37.8814	14.5	76.8	43.3	125.0	21.6	-17.3
25S 8W 8CBB	-98.233	37.8897	16.0	76.8	43.3	72.1	33.3	-5.5
25S 9W 8BBD	-98.341	37.8950	15.5	75.3	41.7	83.6	32.6	-5.5
25S 9W20CCA	-98.341	37.8569	15.5	75.3	41.7	85.6	42.6	-.5
25S10W17B	-98.450	37.8793	15.0	76.8	43.3	103.1	21.7	-16.6
26S 6W13BAB	-97.930	37.7956	15.0	72.3	38.5	117.8	17.2	-18.6
26S 6W34BBC	-97.971	37.7495	15.0	84.8	51.8	133.3	14.2	-22.4
26S 7W 1AAA	-98.029	37.8243	15.0	82.3	49.1	166.2	14.6	-20.1
26S 7W13DDB	-98.031	37.7839	15.0	82.3	49.1	130.3	12.8	-26.6
26S 7W21DDC	-98.086	37.7674	15.0	76.8	43.3	179.7	9.3	-20.9
26S 8W3CDCB	-98.235	37.7547	15.0	76.8	43.3	116.2	17.6	-18.7
26S 9W10DDB	-98.286	37.7987	15.0	73.8	40.1	76.4	35.5	-4.4
26S 9W31DCB	-98.345	37.7399	15.0	79.6	46.2	106.2	15.5	-18.8
26S10W32ACA	-98.435	37.7470	15.0	72.3	38.5	152.8	2.5	-27.3
20S10W36ACD	-98.376	38.2682	14.0	69.0	35.1	58.4	46.1	.6
21S 7W18B	-98.138	38.2277	14.0	72.3	38.5	121.8	33.7	-4.3

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
21S 7W29D	-98.111	38.1915	14.0	61.8	27.5	113.8	32.7	-8.7
21S 9W 7A	-98.349	38.2420	14.0	65.5	31.4	125.7	39.5	-2.9
21S 9W28DDB	-98.311	38.1906	15.0	78.2	44.8	96.1	27.9	-11.2
21S 9W31AAC	-98.348	38.1849	15.0	75.8	43.3	61.6	35.4	-3.9
21S12W 8BAC	-98.669	38.2439	15.5	63.7	29.5	141.6	38.5	-1.8
21S12W15BAC	-98.632	38.2292	15.5	75.3	41.7	130.3	43.6	4.8
21S13W 6BBD	-98.798	38.2587	15.5	70.7	36.8	218.6	32.7	-8.0
21S14W 6A	-98.899	38.2578	15.0	70.7	36.8	152.1	31.1	-7.1
21S14W 7DDB	-98.898	38.2351	15.5	76.8	43.3	146.4	24.8	-10.9
21S14W25DDB	-98.805	38.1915	16.0	70.7	36.8	160.9	37.9	-2.7
21S14W32BAC	-98.889	38.1861	15.5	75.3	41.7	209.2	35.5	-4.1
22S11W 9BDB	-98.545	38.1581	13.5	73.6	46.2	180.2	18.1	-10.9
22S11W27A	-98.514	38.1118	14.5	80.9	47.7	85.9	30.6	-2.8
22S13W12CAC	-98.705	38.1497	15.5	67.3	33.3	211.6	37.7	-3.5
22S13W18DBC	-98.792	38.1353	16.0	70.7	36.8	260.3	34.0	-2.9
22S13W21DCB	-98.751	38.1189	16.0	57.7	23.2	258.7	32.5	-5.8
22S13W30CCA	-98.799	37.8431	15.0	75.3	41.7	263.6	22.7	-14.7
22S14W 7AAC	-98.898	38.1571	15.5	76.8	43.3	207.4	35.9	-5.1
22S14W14CCA	-98.835	38.1335	16.0	75.3	41.7	235.8	33.1	-5.5
22S14W29BBA	-98.891	38.1154	15.5	75.3	41.7	215.3	32.5	-5.2
23S11W 4CDA	-98.529	38.0746	14.5	75.3	41.7	123.3	24.8	-15.1
23S12W22BCC	-98.636	38.0369	15.0	70.7	36.8	131.0	29.0	-9.8
23S12W25CDC	-98.595	38.0150	14.5	73.8	40.1	97.3	36.4	-4.5
24S12W34ABC	-98.627	37.9245	15.5	72.3	38.5	187.5	47.4	5.4
24S13W 6ACB	-98.792	37.9955	16.0	76.8	43.3	145.9	32.0	-6.6
24S13W15BBD	-98.744	37.9683	17.0	76.8	43.3	66.1	29.9	-7.4
24S13W19BBD	-98.799	37.9538	17.0	75.3	41.7	178.3	26.7	-12.0
24S13W26AAD	-98.711	37.9393	16.5	72.3	38.5	80.6	39.5	.6
24S13W31CCB	-98.801	37.9157	15.0	78.2	44.8	126.9	23.8	-14.1
24S14W 5DBD	-98.882	37.9902	16.0	72.3	38.5	217.6	35.6	-1.5
24S15W32DBC	-98.994	37.9176	15.5	70.7	36.8	230.9	33.0	-5.0
25S12W 3C	-98.632	37.9018	15.0	73.8	40.1	51.2	45.8	5.2
25S12W24DDB	-98.585	37.8572	15.0	72.3	38.5	123.3	23.7	-13.4
25S13W 3DAD	-98.730	37.9030	15.5	79.6	46.2	103.9	34.7	-3.0
25S13W16BAC	-98.760	37.8812	17.5	80.9	47.7	100.5	42.2	2.9
25S13W34AAC	-98.732	37.8377	15.5	78.2	44.8	198.4	27.6	-11.1
25S14W17CDB	-98.889	37.8722	16.0	75.3	41.7	167.5	29.8	-6.5
25S14W27CAC	-98.852	37.8450	16.0	73.8	40.1	152.3	36.8	-.7
25S15W30ABC	-99.013	37.8524	15.0	73.8	40.1	184.6	31.0	-6.3
24S14W22BBB	-98.856	37.9557	15.5	70.7	36.8	211.5	34.9	-4.9
22S 2W32BCD	-97.570	38.0755	15.0	80.9	47.7	102.7	10.8	-27.5
22S 3W 2C	-97.624	38.1635	14.5	82.3	49.1	119.0	11.1	-26.8
22S 3W 5BBB	-97.683	38.1733	16.0	80.9	47.7	190.9	23.1	-18.8
22S 3W 6ABA	-97.690	38.1733	16.0	78.2	44.8	177.5	21.9	-19.4
22S 3W 8CB	-97.681	38.1506	15.5	84.8	51.8	220.7	27.1	-15.3
22S 3W 9C	-97.661	38.1489	16.0	79.6	46.2	164.0	17.6	-20.4
22S 3W11ADC	-97.613	38.1535	15.0	78.2	44.8	123.3	9.6	-25.2
22S 3W17CB	-97.681	38.1361	15.5	84.8	51.8	118.1	49.4	-1.0
23S 1W18CAC	-97.475	38.0479	16.0	72.3	38.5	120.0	3.9	-29.3
23S 1W21BCC	-97.443	38.0370	16.5	83.6	50.5	59.7	9.6	-25.9
23S 1W34CBB	-97.425	38.0051	14.9	70.7	36.8	67.1	8.9	-28.1
23S 2W 4DBB	-97.544	38.0790	15.1	82.3	49.1	109.2	9.5	-26.1
23S 2W 5CBD	-97.569	38.0773	15.0	73.8	40.1	125.7	22.9	-9.9
23S 2W 9BAA	-97.547	38.0718	16.0	84.8	51.8	106.2	10.3	-23.8
23S 2W19ABC	-97.526	38.0553	16.0	79.6	46.2	106.2	5.1	-27.4

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
23S 2W25CBD	-97.496	38.0189	15.0	75.3	41.7	136.0	5.3	-26.7
23S 2W29BAC	-97.567	38.0265	15.4	73.8	40.1	149.1	30.3	-7.7
23S 3W16DDB	-97.650	38.0464	16.1	70.7	36.8	115.8	29.7	-11.2
23S 3W21ADC	-97.650	38.0374	16.0	70.7	36.8	148.1	45.7	3.0
23S 3W22DBD	-97.634	38.0338	16.3	76.8	43.3	155.2	31.2	-9.7
23S 3W36ABC	-97.599	38.0121	15.2	72.3	38.5	187.5	33.6	-8.8
24S 1W 8DAC	-97.448	37.9752	17.5	94.0	61.6	168.7	3.8	-32.1
24S 1W15BCC	-97.425	37.9643	15.1	82.3	49.1	87.3	7.5	-27.6
24S 1W18CCA	-97.478	37.9588	15.3	69.0	35.1	114.7	30.7	-9.8
24S 1W29BBC	-97.462	37.9388	15.4	69.0	35.1	98.1	38.0	-5.2
24S 2W 5DDA	-97.556	37.9883	15.9	73.8	40.1	115.8	31.5	-8.4
24S 2W 6DBD	-97.579	37.9902	15.0	69.0	35.1	167.5	31.9	-4.6
24S 2W12CCC	-97.498	37.9716	15.7	69.0	35.1	112.2	30.8	-11.3
24S 2W17CAA	-97.565	37.9629	14.8	63.7	29.5	115.1	38.4	-5.8
24S 2W23BBC	-97.517	37.9536	15.1	65.5	31.4	173.9	32.4	-10.9
24S 2W23BDC	-97.512	37.9499	14.8	63.7	29.5	196.6	36.5	-7.0
24S 2W27C	-97.532	37.9310	15.0	72.3	38.5	117.4	32.4	-10.1
24S 2W29DDB	-97.558	37.9302	15.6	67.3	33.3	114.6	35.5	-4.1
24S 3W 5ACC	-97.673	37.9938	14.5	55.5	21.0	127.5	40.1	1.0
24S 3W 8DBB	-97.673	37.9775	14.0	59.8	25.4	107.1	38.7	-3.4
24S 3W15DCD	-97.634	37.9576	14.0	59.8	25.4	128.0	43.1	-3.5
24S 3W20BBD	-97.680	37.9539	14.0	57.7	23.2	111.6	39.3	-3.5
24S 3W22CBB	-97.646	37.9485	14.2	59.8	25.4	105.1	44.5	.3
24S 3W24C	-97.605	37.9458	14.8	45.6	10.7	123.3	30.2	-5.8
24S 3W26B	-97.624	37.9386	14.8	55.5	21.0	110.8	34.0	-3.8
24S 3W32B	-97.679	37.9240	16.0	63.7	29.5	85.4	44.7	1.1
24S 3W36AAA	-97.592	37.9268	14.5	57.7	23.2	103.0	31.3	-8.8
18S 3W31BBD	-97.701	38.4474	16.0	90.7	58.1	202.4	17.4	-22.0
18S 3W33CCC	-97.666	38.4366	15.1	90.7	58.1	132.2	26.0	-14.1
18S 4W29DAD	-97.778	38.4548	15.8	73.8	40.1	204.7	12.8	-23.9
19S 1W32DCA	-97.451	38.3514	14.5	79.6	46.2	124.8	21.1	-19.7
19S 3W17BAC	-97.680	38.4038	15.4	90.7	58.1	203.1	15.2	-21.5
19S 3W31BAB	-97.698	38.3620	15.0	83.6	50.5	187.5	7.1	-26.7
19S 4W11CCA	-97.737	38.4093	15.8	70.7	36.8	159.6	15.2	-23.2
19S 4W19AA	-97.725	38.4047	15.6	79.6	46.2	214.1	16.4	-20.4
19S 4W26BCC	-97.740	38.3711	15.6	67.3	33.3	151.3	20.6	-19.2
20S 1W22BBB	-97.426	38.3043	14.4	78.2	44.8	100.9	9.5	-27.4
20S 3W19B	-97.700	38.3012	15.4	80.9	47.7	225.8	17.7	-19.3
20S 4W10DA	-97.743	38.3248	15.0	67.3	33.3	162.7	23.4	-18.5
20S 4W12AAC	-97.708	38.3311	15.0	80.9	47.7	199.6	18.5	-19.2
20S 4W23AAB	-97.726	38.3039	15.0	76.8	43.3	202.4	20.1	-18.4
21S 3W 2BAC	-97.623	38.2587	15.0	89.6	55.9	155.6	9.8	-26.9
21S 3W 7BCA	-97.699	38.2421	15.3	78.2	44.8	202.4	24.3	-15.0
21S 3W 9B	-97.661	38.2432	15.0	78.2	44.8	113.5	35.9	-6.0
21S 3W20BA	-97.677	38.2159	15.0	75.3	41.7	170.2	17.0	-19.4
21S 3W29BAD	-97.676	38.2005	16.0	73.6	46.2	198.8	25.0	-14.5
21S 3W29CBC	-97.683	38.1932	15.0	73.8	40.1	178.3	22.6	-17.5
21S 3W32DBD	-97.671	38.1788	15.5	72.3	38.5	194.4	30.7	-12.5
21S 3W33BBC	-97.664	38.1860	15.5	73.8	40.1	170.5	23.9	-16.4
21S 3W35ACC	-97.618	38.1826	15.0	76.8	43.3	112.6	12.2	-23.8
21S 4W13D	-97.707	38.2213	16.0	76.8	43.3	177.5	22.3	-16.7
21S 4W26DD	-97.723	38.1905	16.0	82.3	49.1	203.5	21.0	-16.8
22S 4W 1BA	-97.714	38.1723	15.5	82.3	49.1	199.2	21.3	-19.6
22S 4W24BAA	-97.713	38.1297	15.0	83.6	50.5	114.6	31.4	-12.0
24S 4W 7DCB	-97.801	37.9739	14.0	59.8	25.4	96.1	51.5	5.2

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
24S 4W14DA	-97.723	37.9620	14.5	61.8	27.5	102.8	29.9	-11.6
24S 4W31ACD	-97.799	37.9214	15.0	75.3	41.7	119.9	21.9	-16.8
24S 5W11A	-97.834	37.9820	15.0	53.2	18.6	78.1	58.9	15.2
24S 5W16AA	-97.869	37.9692	15.2	72.3	38.5	150.4	21.2	-16.4
24S 5W23CBD	-97.955	37.9462	13.9	72.3	38.5	115.0	4.8	-28.5
25S 4W 3BCB	-97.756	37.9086	15.0	73.8	40.1	107.0	19.7	-18.2
25S 4W13DAA	-97.704	37.8759	15.0	75.3	41.7	131.9	19.9	-19.5
25S 4W14DAC	-97.733	37.8814	15.0	67.3	33.3	116.4	21.0	-17.6
25S 1W 6DBB	-97.471	37.9043	15.0	57.7	23.2	109.5	25.7	-12.9
25S 1W21B	-97.440	37.8652	14.5	61.8	27.5	117.6	25.0	-12.7
25S 1W27ABC	-97.416	37.8515	14.5	61.8	27.5	135.5	24.5	-12.9
25S 1W31B	-97.477	37.8361	16.0	70.7	36.8	116.0	46.0	1.8
25S 1W32BCB	-97.462	37.8352	14.5	57.7	23.2	96.9	47.3	.7
25S 1W32CDA	-97.455	37.8279	15.7	65.5	31.4	109.5	41.2	-1.2
25S 2W 3DD	-97.520	37.9000	15.0	50.8	16.1	171.9	31.4	-8.9
25S 2W 7DC	-97.580	37.8859	14.7	63.7	29.5	132.2	49.2	3.1
25S 2W10AAB	-97.521	37.8973	14.5	55.5	21.0	152.3	30.6	-9.4
25S 2W12DBD	-97.487	37.8880	15.0	63.7	29.5	142.3	29.3	-9.2
25S 2W15ABB	-97.526	37.8828	14.7	59.8	25.4	116.0	35.4	-6.1
25S 2W15C	-97.532	37.8729	14.8	59.8	25.4	118.1	25.3	-14.0
25S 2W22BDA	-97.528	37.8647	14.5	61.8	27.5	106.2	43.8	-1.8
25S 2W22DAA	-97.519	37.8610	15.0	59.8	25.4	178.2	64.1	13.1
25S 2W30DBB	-97.581	37.8469	14.9	63.7	29.5	59.3	67.2	21.0
25S 2W36ABD	-97.489	37.8389	15.6	63.7	29.5	84.5	58.2	11.3
25S 3W 2CCB	-97.627	37.9014	14.0	63.7	29.5	111.7	31.6	-10.1
25S 3W 3D	-97.633	37.9023	15.1	67.3	33.3	94.5	48.3	6.2
25S 3W 5BBB	-97.683	37.9122	14.8	61.8	27.5	82.9	46.4	4.0
25S 3W 6A	-97.689	37.9094	15.0	55.5	21.0	93.4	49.1	10.7
25S 3W11CBD	-97.625	37.8887	14.7	63.7	29.5	85.2	45.3	.7
25S 3W15ADC	-97.632	37.8778	15.0	61.8	27.5	59.7	64.4	19.7
25S 3W16DA	-97.649	37.8750	16.0	61.8	27.5	91.3	60.0	13.3
25S 3W26CBD	-97.625	37.8451	15.0	65.0	35.1	71.1	45.3	1.4
25S 3W30ABB	-97.692	37.8541	15.3	73.8	40.1	119.0	13.8	-24.2
25S 3W33CB	-97.663	37.8315	15.0	76.8	43.3	120.8	13.3	-26.2
26S 1W 2DC	-97.396	37.8125	15.0	59.8	25.4	123.3	31.3	-10.7
26S 1W11D	-97.393	37.7999	15.0	59.8	25.4	122.1	38.4	-2.1
26S 1W32BCA	-97.454	37.7483	16.0	70.7	36.8	77.9	45.2	.7
26S 2W 8AD	-97.555	37.8058	15.0	72.3	38.5	102.7	28.5	-14.2
26S 2W14ABC	-97.506	37.7937	14.5	65.5	31.4	86.7	45.5	.4
26S 2W27ABA	-97.522	37.7666	15.0	75.3	41.7	131.0	23.8	-17.1
21S25W16CA	-100.074	38.2233	14.2	102.8	71.2	353.5	57.7	11.1
21S24W 7CB	-100.005	38.2382	14.5	99.1	67.1	226.4	56.4	5.9
20S24W36CBB	-99.930	38.2679	15.0	92.9	60.5	293.3	57.5	6.7
20S23W27DCD	-99.845	38.2769	14.5	97.1	65.0	325.7	47.7	-.8
20S22W15CC	-99.801	38.2922	14.1	91.8	57.3	353.5	45.9	.1
20S22W33DAA	-99.749	38.2678	15.0	98.1	66.1	348.8	42.5	-6.3
21S22W 2AB	-99.703	38.2596	14.5	99.1	67.1	284.0	59.5	8.0
21S21W18AAB	-99.664	38.2316	14.2	87.3	54.4	206.9	59.3	9.2
21S21W26CB	-99.604	38.1946	15.0	84.8	51.8	300.8	51.6	1.1
23S24W11ABB	-99.924	38.0729	14.0	99.1	67.1	356.3	40.5	-4.5
23S23W 4BBD	-99.848	38.0782	16.0	42.7	7.7	137.6	85.5	28.0
23S22W 5CAB	-99.764	38.0798	15.8	96.1	63.9	235.8	53.9	-1.4
22S22W13BBC	-99.695	38.1430	14.2	92.9	60.5	199.2	48.7	.8
22S22W 4AAA	-99.734	38.1738	15.0	103.7	72.2	290.9	33.9	-7.5
22S21W 9BAA	-99.634	38.1593	14.2	84.8	51.8	218.0	62.5	9.8

WELL LOCATION			ACTUAL TEMP	GEOTHERMOMETER TEMPERATURES - DEGREES C				
TOWNSHIP-RANGE	LONGITUDE	LATITUDE	DEGREES C	QUARTZ	CHALCEDONY	NA-K	NA-K-CA	NA-K-CA LO
21S20W29B	-99.547	38.2000	14.5	90.7	58.1	279.7	50.8	1.8
21S20W13DB	-99.467	38.2236	15.0	90.7	58.1	276.6	19.7	-18.7
21S21W36DBA	-99.575	38.1810	14.5	84.8	51.8	247.1	35.9	-8.1
21S19W26ADA	-99.370	38.1995	15.0	50.9	16.1	177.2	54.4	7.0
21S18W33BCB	-99.313	38.1848	14.0	87.3	54.4	251.7	33.7	-9.5
22S18W 9BBD	-99.311	38.1576	14.3	76.8	43.3	126.9	61.9	11.6
22S18W11ABC	-99.267	38.1573	14.3	78.2	44.8	148.0	56.4	6.4
22S17W17BAC	-99.217	38.1426	15.0	63.7	29.5	120.9	46.7	3.8
21S17W31BAD	-99.233	38.1861	14.2	75.3	41.7	179.1	34.1	-8.7
22S17W 4BBD	-99.203	38.1734	15.0	89.6	56.9	147.9	62.5	10.9
22S16W 6B	-99.127	38.1707	13.8	65.5	31.4	92.7	44.8	-3.3
19S13W26DD	-98.722	38.3644	14.2	59.8	25.4	126.6	49.3	3.6
18S14W35AC	-98.832	38.4443	15.2	87.3	54.4	201.4	38.5	-6.9
18S14W 6BB	-98.919	38.4336	14.2	76.8	43.3	122.2	42.5	-7.6
18S15W28DB	-98.993	38.4626	14.2	86.0	53.1	202.4	34.5	-12.0
18S16W14DD	-99.053	38.4808	14.3	84.8	51.8	220.7	40.8	-7.4
18S17W13CD	-99.154	38.4811	14.0	79.6	46.2	171.7	46.5	-2.6
18S18W27CC	-99.305	38.4522	14.2	80.9	47.7	183.3	59.9	6.5
18S18W25CB	-99.268	38.4556	14.0	83.6	50.5	211.0	44.3	-5.7
18S17W25AA	-99.218	38.4629	14.2	76.8	43.3	199.8	36.9	-10.1
18S18W30DDC	-99.348	38.4514	14.2	80.9	47.7	194.4	39.2	-8.8
18S19W27AAA	-99.401	38.4639	14.0	84.8	51.8	249.3	36.7	-9.6
18S19W18CCC	-99.472	38.4799	14.2	98.1	66.1	246.1	42.8	-6.1
18S20W17DCC	-99.556	38.4796	14.0	95.0	62.8	233.6	38.8	-4.9
18S22W36AB	-99.701	38.4480	14.3	102.8	71.2	256.6	51.8	3.3
18S23W30DD	-99.898	38.4515	15.0	92.9	60.5	349.6	63.4	13.9
18S24W25BBA	-99.930	38.4633	14.0	100.0	68.2	265.7	45.1	-1.5
18S24W22CC	-99.967	38.4661	14.0	89.6	56.9	220.1	65.7	13.2
18S17W15DBB	-99.187	38.4856	14.5	79.6	46.2	234.6	56.0	3.8
18S17W13CBC	-99.159	38.4838	14.3	78.2	44.8	199.2	47.0	-1.5
18S16W 7DC	-99.126	38.4956	14.0	98.1	66.1	205.0	49.1	-1.2
18S16W22BBB	-99.086	38.4782	14.0	76.8	43.3	217.5	46.8	.1
18S15W30DC	-99.021	38.4517	14.0	89.6	56.9	227.8	30.1	-14.8
18S15W23CC	-98.956	38.4662	15.0	98.1	66.1	269.2	28.4	-13.5
18S14W32B	-98.899	38.4462	14.0	91.8	59.3	226.3	35.7	-7.5
19S14W20AAB	-98.888	38.3910	15.0	73.8	40.1	93.4	38.8	-5.9
20S14W 8BBD	-98.900	38.3312	14.3	75.3	41.7	135.4	45.7	-2.9
20S15W13ADD	-98.922	38.3131	14.0	78.2	44.8	152.7	46.7	-.6
19S13W 9C	-98.770	38.4098	14.0	76.8	43.3	160.9	45.4	-2.1