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SERVICES

Exploration
Rock Property Measurements
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Results from Downhole Temperature Profile Readings: SEL 26/2005.

Bangor, Bluestone and Swan.

Prepared for KUTh Energy Ltd

October 2008 - Final Report

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Executive summary

This report provides results obtained from precision temperature logging undertaken in September and October of 2008, of three of KUTh's heat flow holes within tenement SEL 26/2005.

All four holes (Bangor, Bluestone and Swan) are considered to have reached equilibration. The geothermal gradients are displayed in the enclosed figures, and the logged temperatures are listed in the appendix.

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1.0 Introduction

During September and October 2008, three of the completed geothermal exploration holes drilled by KUTh Energy were sampled for temperature.

Temperatures were logged using a thermistor, a type of resistor that relies on the change in resistance to measure temperature change. Each hole was sampled at 1 metre increments. Results are presented in the following report as graphs of geothermal gradients (Figures 1 to 4) and tables of temperature recorded per metre (

Appendix 1).

The results presented for all three holes listed are the results from the second logging runs of these holes, and are considered to be equilibrated. It is therefore expected that the results presented here are an accurate representation of the actual thermal conditions of the holes.

The results provided in this report are based on data collected from the field sampling. Detailed analysis of the thermal properties of the areas sampled will be provided in a separate report for all three holes listed incorporating the data obtained from the conductivity analysis. The temperature profile data aids in the selection and sampling of appropriate lithological intervals for conductivity analysis.

2.0 Results

The results provide recorded temperatures for each metre of the successfully logged holes.

The gradient profiles for each of the logged holes can be seen as average temperature gradients over 2m, 4m and 10m in Figures 1 to 4. The variable nature of the gradient profile can be indicative of unconfined aquifer flows disturbing the thermal profile of the well.

The corresponding preliminary geothermal gradients for selected sections are displayed in Table 1

Table 1. Geothermal gradient (°C/km) values for selected depth profiles

Depth (m)	Bangor	Bluestone	Swan
50 - 150	17.722	25.797	36.385
150 - BoH	24.152	33.133	41.336

Figure 1 Bangor Geothermal Gradient

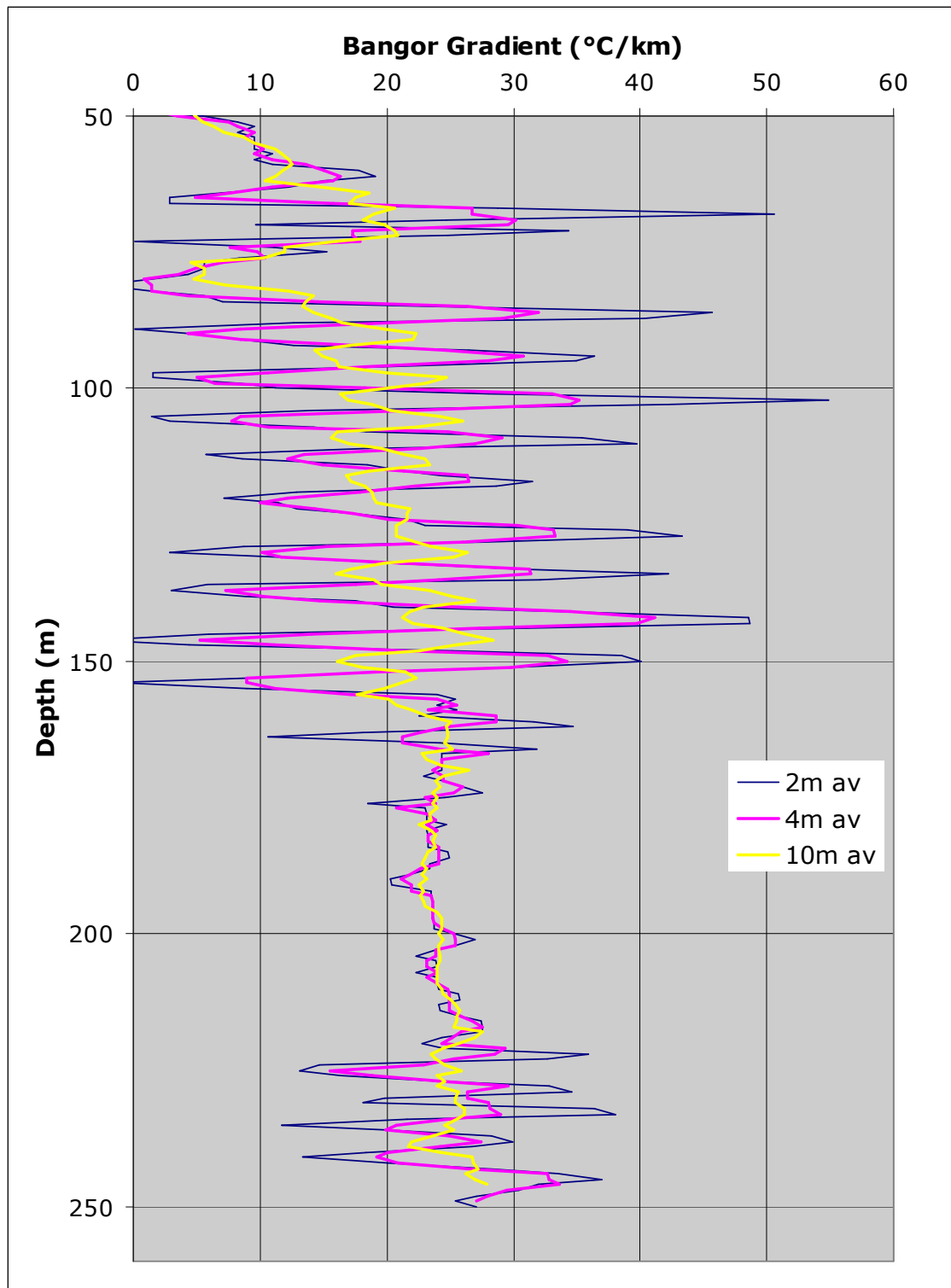


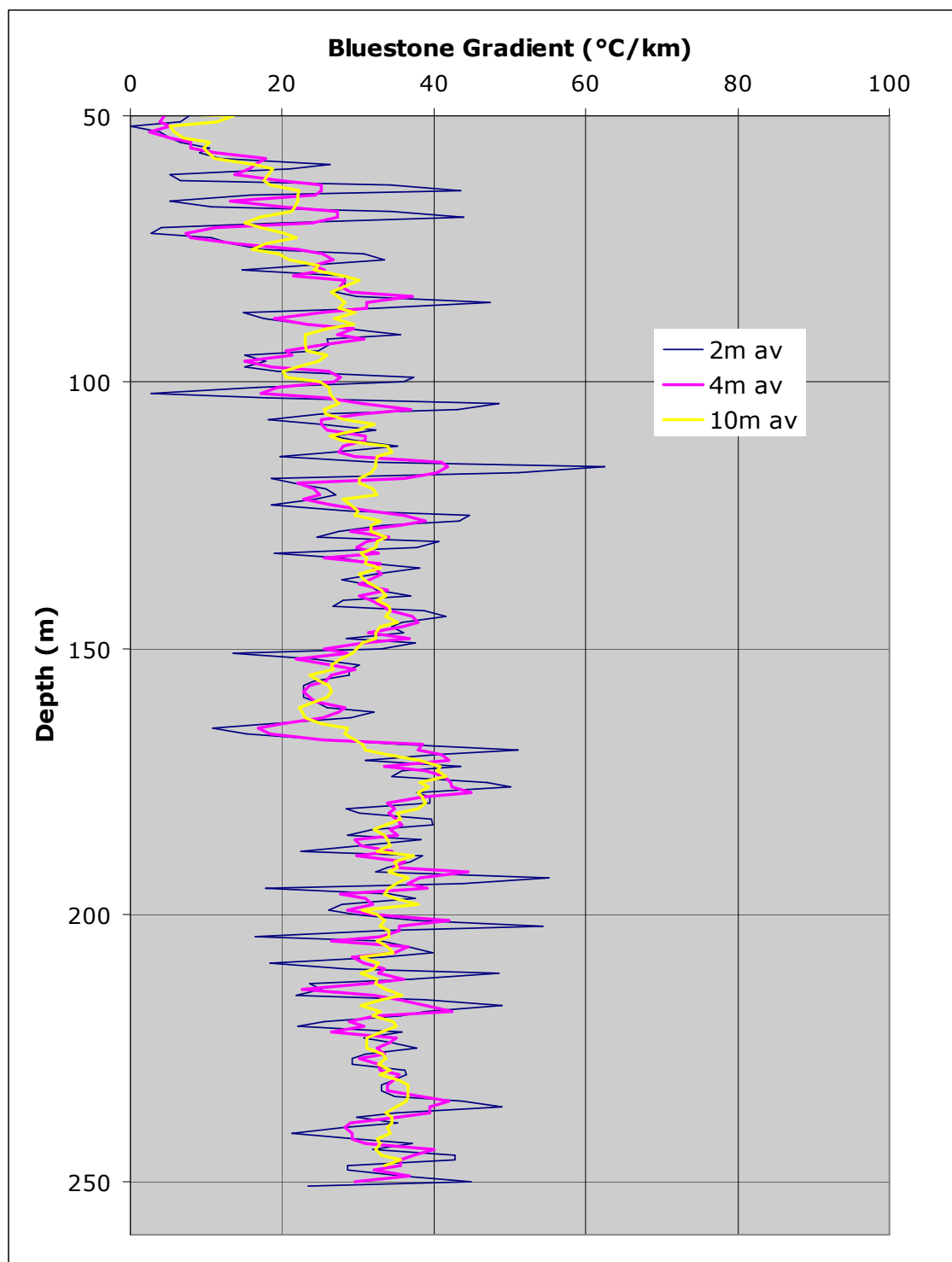
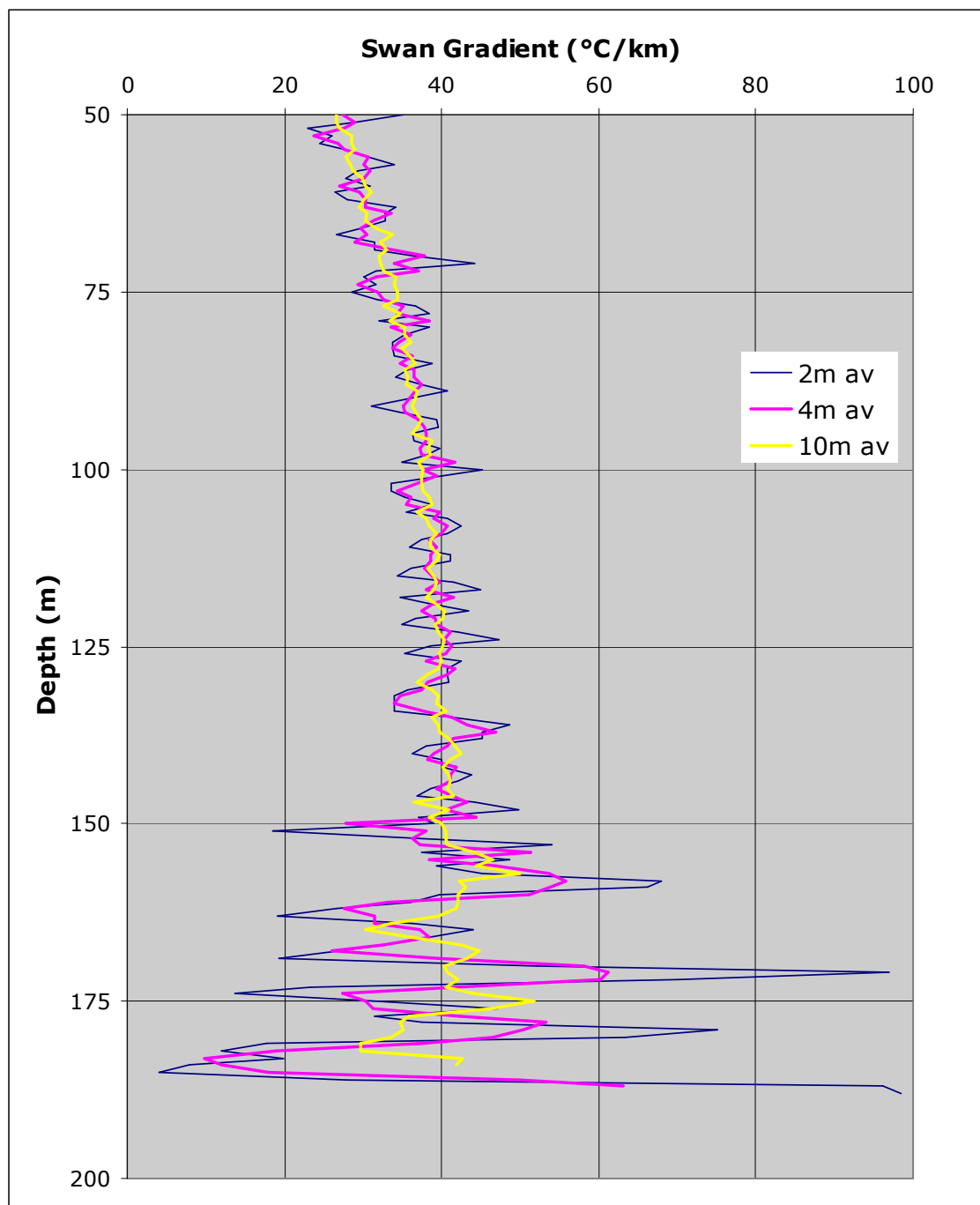
Figure 2 Bluestone Geothermal Gradient

Figure 3 Swan Geothermal Gradient



Appendix 1:

Tables of recorded down hole temperature

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Bangor - Depth vs. Temperature results

Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)
1	8.8978	43	9.4454	85	9.8639	127	10.7272
2	8.7910	44	9.4454	86	9.8999	128	10.7591
3	8.7936	45	9.4509	87	9.9554	129	10.7823
4	8.8693	46	9.4537	88	9.9805	130	10.7765
5	9.0531	47	9.4565	89	9.9806	131	10.7881
6	9.1856	48	9.4592	90	9.9807	132	10.7998
7	9.3083	49	9.4512	91	9.9891	133	10.8288
8	9.4050	50	9.4567	92	9.9975	134	10.8609
9	9.4724	51	9.4622	93	10.0143	135	10.9134
10	9.5266	52	9.4731	94	10.0506	136	10.9251
11	9.5592	53	9.4813	95	10.0870	137	10.9251
12	9.5701	54	9.4895	96	10.1206	138	10.9310
13	9.5702	55	9.5004	97	10.1263	139	10.9427
14	9.5675	56	9.5086	98	10.1236	140	10.9661
15	9.5568	57	9.5195	99	10.1293	141	10.9837
16	9.5406	58	9.5305	100	10.1406	142	11.0336
17	9.5271	59	9.5387	101	10.1519	143	11.0807
18	9.5082	60	9.5524	102	10.1968	144	11.1309
19	9.4867	61	9.5742	103	10.2615	145	11.1428
20	9.4787	62	9.5906	104	10.2813	146	11.1428
21	9.4679	63	9.6043	105	10.2897	147	11.1369
22	9.4626	64	9.6152	106	10.2841	148	11.1517
23	9.4546	65	9.6181	107	10.2954	149	11.1873
24	9.4466	66	9.6209	108	10.3124	150	11.2288
25	9.4386	67	9.6237	109	10.3322	151	11.2675
26	9.4387	68	9.6783	110	10.3832	152	11.2884
27	9.4360	69	9.7249	111	10.4116	153	11.3064
28	9.4388	70	9.7277	112	10.4202	154	11.3064
29	9.4362	71	9.7443	113	10.4231	155	11.3035
30	9.4363	72	9.7965	114	10.4373	156	11.3244
31	9.4337	73	9.7939	115	10.4601	157	11.3514
32	9.4337	74	9.7967	116	10.4801	158	11.3754
33	9.4338	75	9.8161	117	10.5086	159	11.3994
34	9.4339	76	9.8272	118	10.5430	160	11.4264
35	9.4313	77	9.8328	119	10.5659	161	11.4445
36	9.4340	78	9.8384	120	10.5688	162	11.4897
37	9.4341	79	9.8440	121	10.5803	163	11.5138
38	9.4369	80	9.8469	122	10.5918	164	11.5260
39	9.4370	81	9.8470	123	10.6061	165	11.5351
40	9.4397	82	9.8416	124	10.6263	166	11.5744
41	9.4398	83	9.8500	125	10.6493	167	11.5987
42	9.4426	84	9.8528	126	10.6724	168	11.6230

Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)
169	11.6474	209	12.5937	249	13.6140		
170	11.6717	210	12.6161	250	13.6445		
171	11.6961	211	12.6418	251	13.6682		
172	11.7175	212	12.6675				
173	11.7450	213	12.6932				
174	11.7696	214	12.7158				
175	11.8002	215	12.7416				
176	11.8187	216	12.7674				
177	11.8371	217	12.7966				
178	11.8648	218	12.8225				
179	11.8833	219	12.8517				
180	11.9111	220	12.8712				
181	11.9327	221	12.8972				
182	11.9575	222	12.9200				
183	11.9792	223	12.9689				
184	12.0040	224	12.9853				
185	12.0257	225	12.9984				
186	12.0537	226	13.0115				
187	12.0755	227	13.0312				
188	12.1005	228	13.0607				
189	12.1223	229	13.0969				
190	12.1442	230	13.1298				
191	12.1630	231	13.1364				
192	12.1849	232	13.1661				
193	12.2100	233	13.2091				
194	12.2320	234	13.2422				
195	12.2572	235	13.2522				
196	12.2792	236	13.2654				
197	12.3045	237	13.2920				
198	12.3266	238	13.3220				
199	12.3518	239	13.3520				
200	12.3740	240	13.3753				
201	12.4025	241	13.3887				
202	12.4279	242	13.4021				
203	12.4533	243	13.4289				
204	12.4756	244	13.4591				
205	12.4979	245	13.4960				
206	12.5234	246	13.5330				
207	12.5457	247	13.5599				
208	12.5681	248	13.5937				

Bluestone - Depth vs. Temperature results.

Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)
1	9.3938	43	9.0346	85	9.5547	127	10.7325
2	8.9818	44	9.0345	86	9.6008	128	10.7614
3	8.8351	45	8.8014	87	9.6199	129	10.7874
4	8.8012	46	8.8300	88	9.6307	130	10.8106
5	8.8872	47	8.9056	89	9.6552	131	10.8688
6	8.9763	48	8.9056	90	9.6770	132	10.8862
7	8.9710	49	8.9108	91	9.7125	133	10.9066
8	9.0604	50	8.9107	92	9.7481	134	10.9417
9	9.1928	51	8.9264	93	9.7645	135	10.9709
10	9.2700	52	8.9238	94	9.8002	136	11.0178
11	9.2993	53	8.9264	95	9.8139	137	11.0354
12	9.3180	54	8.9316	96	9.8304	138	11.0737
13	9.3260	55	8.9368	97	9.8497	139	11.0972
14	9.3179	56	8.9446	98	9.8607	140	11.1385
15	9.2857	57	8.9577	99	9.8883	141	11.1710
16	9.2590	58	8.9630	100	9.9353	142	11.1947
17	9.2322	59	8.9813	101	9.9602	143	11.2244
18	9.2162	60	9.0155	102	9.9685	144	11.2719
19	9.2002	61	9.0234	103	9.9657	145	11.3077
20	9.2001	62	9.0260	104	10.0045	146	11.3435
21	9.1841	63	9.0365	105	10.0629	147	11.3764
22	9.1654	64	9.0946	106	10.0908	148	11.4153
23	9.1495	65	9.1237	107	10.1131	149	11.4333
24	9.1308	66	9.1263	108	10.1271	150	11.4904
25	9.1175	67	9.1342	109	10.1635	151	11.4995
26	9.1069	68	9.1474	110	10.1915	152	11.5176
27	9.0963	69	9.2032	111	10.2168	153	11.5477
28	9.0856	70	9.2351	112	10.2505	154	11.5780
29	9.0803	71	9.2431	113	10.2871	155	11.6052
30	9.0670	72	9.2431	114	10.3041	156	11.6356
31	9.0643	73	9.2484	115	10.3267	157	11.6538
32	9.0642	74	9.2644	116	10.3691	158	11.6811
33	9.0615	75	9.2750	117	10.4515	159	11.6994
34	9.0536	76	9.2991	118	10.4714	160	11.7268
35	9.0482	77	9.3365	119	10.4885	161	11.7482
36	9.0376	78	9.3660	120	10.5142	162	11.7788
37	9.0323	79	9.3821	121	10.5399	163	11.8125
38	9.0322	80	9.3955	122	10.5685	164	11.8370
39	9.0348	81	9.4385	123	10.5885	165	11.8493
40	9.0348	82	9.4520	124	10.6057	166	11.8585
41	9.0373	83	9.4952	125	10.6460	167	11.8800
42	9.0373	84	9.5060	126	10.6949	168	11.9108

Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)
169	11.9509	209	13.3786	249	14.7160		
170	12.0127	210	13.3953	250	14.7590		
171	12.0313	211	13.4354	251	14.8058		
172	12.0748	212	13.4924	252	14.8057		
173	12.1184	213	13.5091	253	14.9032		
174	12.1464	214	13.5394				
175	12.1871	215	13.5596				
176	12.2403	216	13.5832				
177	12.2874	217	13.6372				
178	12.3158	218	13.6812				
179	12.3662	219	13.7152				
180	12.3947	220	13.7525				
181	12.4231	221	13.7661				
182	12.4548	222	13.7968				
183	12.5025	223	13.8378				
184	12.5344	224	13.8583				
185	12.5662	225	13.9063				
186	12.5918	226	13.9337				
187	12.6430	227	13.9681				
188	12.6526	228	13.9922				
189	12.6879	229	14.0267				
190	12.7298	230	14.0648				
191	12.7620	231	14.0994				
192	12.7975	232	14.1341				
193	12.8266	233	14.1654				
194	12.9078	234	14.2002				
195	12.9142	235	14.2351				
196	12.9435	236	14.2875				
197	12.9827	237	14.3331				
198	13.0186	238	14.3577				
199	13.0382	239	14.3928				
200	13.0710	240	14.4281				
201	13.0973	241	14.4492				
202	13.1466	242	14.4704				
203	13.2060	243	14.5094				
204	13.2126	244	14.5448				
205	13.2391	245	14.5733				
206	13.2788	246	14.6302				
207	13.3120	247	14.6588				
208	13.3586	248	14.6874				

Swan - Depth vs. Temperature results.

Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)	Depth	Temp (Deg C)
1	13.3926	43	11.5514	85	12.8310	127	14.4341
2	11.3490	44	11.5666	86	12.8699	128	14.4801
3	11.1763	45	11.5878	87	12.9024	129	14.5155
4	11.4029	46	11.6181	88	12.9382	130	14.5617
5	11.7023	47	11.6455	89	12.9773	131	14.5973
6	11.9509	48	11.6668	90	13.0198	132	14.6330
7	12.0811	49	11.6881	91	13.0493	133	14.6651
8	12.1591	50	11.7187	92	13.0821	134	14.7009
9	12.1466	51	11.7583	93	13.1182	135	14.7332
10	12.1092	52	11.7767	94	13.1610	136	14.7835
11	11.4421	53	11.8042	95	13.1973	137	14.8304
12	11.3492	54	11.8288	96	13.2337	138	14.8737
13	11.3134	55	11.8533	97	13.2701	139	14.9208
14	11.3074	56	11.8841	98	13.3133	140	14.9498
15	11.2985	57	11.9149	99	13.3466	141	14.9934
16	11.2955	58	11.9519	100	13.3832	142	15.0298
17	11.2866	59	11.9735	101	13.4367	143	15.0736
18	11.2867	60	12.0076	102	13.4635	144	15.1176
19	11.2837	61	12.0355	103	13.5038	145	15.1579
20	11.2837	62	12.0603	104	13.5307	146	15.1946
21	11.2837	63	12.0914	105	13.5745	147	15.2315
22	11.2838	64	12.1288	106	13.6083	148	15.2831
23	11.2868	65	12.1569	107	13.6455	149	15.3312
24	11.2898	66	12.1944	108	13.6896	150	15.3572
25	11.2898	67	12.2163	109	13.7304	151	15.4091
26	11.2898	68	12.2476	110	13.7713	152	15.3943
27	11.2928	69	12.2791	111	13.8054	153	15.4836
28	11.2988	70	12.3105	112	13.8430	154	15.5023
29	11.3078	71	12.3515	113	13.8875	155	15.5584
30	11.3257	72	12.3989	114	13.9253	156	15.5996
31	11.3377	73	12.4147	115	13.9597	157	15.6372
32	11.3557	74	12.4591	116	13.9942	158	15.6899
33	11.3677	75	12.4782	117	14.0426	159	15.7731
34	11.3767	76	12.5163	118	14.0841	160	15.8224
35	11.3917	77	12.5418	119	14.1119	161	15.8528
36	11.4097	78	12.5897	120	14.1606	162	15.8947
37	11.4247	79	12.6185	121	14.1989	163	15.9062
38	11.4428	80	12.6538	122	14.2338	164	15.9329
39	11.4669	81	12.6955	123	14.2688	165	15.9788
40	11.4789	82	12.7245	124	14.3179	166	16.0210
41	11.5031	83	12.7631	125	14.3636	167	16.0555
42	11.5303	84	12.7922	126	14.3953	168	16.0863

[illegible]