U.S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Sediment Magnetic and Geochemical Data from Quaternary Lacustrine Sediment in Two Cores from Tule Lake, Siskiyou County, California

by

Patti J. Best [1], Richard L. Reynolds[1], Joseph G. Rosenbaum[1],
Walter Dean[1], Jeannine Honey[1], John Drexler[2], and David P. Adam[3]

Open-file Report 96-293

1 U.S. Geological Survey, Denver, Colorado
2 University of Colorado, Boulder, Colorado
3 U.S. Geological Survey, Menlo Park, California

1996

INTRODUCTION

As part of the U.S. Geological Survey's Global Change and Climate History Program, sediment magnetic and geochemical results have been obtained from the top 60 meters of lacustrine sediments recovered in two cores from Tule Lake in northern California. The sediment magnetic and geochemical data, presented here in tabular form, represent the last ca. 400,000 years and complement studies of diatoms and pollen in the cores that are the bases for published paleoclimatic interpretations (Adam and others, 1989; Bradbury, 1991). Comparisons of magnetic mineral and geochemical records to the existing climate records also may provide information about the response of lake-watershed system to climate change (e.g., Rosenbaum and others, 1996). Paleoenvironmental interpretations from these magnetic and geochemical data are presented in a Master's thesis by Best (1996). Adam and others (1989) described the site, the drilling methods, and lithology of the lacustrine sediments. In another study of the sediments from Tule Lake, Dean (1996) interpreted geochemical results on 133 samples from the entire 330-m core, representing deposition during the last 3 million years. These results included analyses for 24 major, minor, and trace elements, as well as for organic and carbonate carbon.

METHODS

Samples (Table 1): Samples used for magnetic susceptibility and laboratory induced magnetizations were taken approximately every 5 cm. Samples, approximately 8 cm^3 in volume and representing about 2 cm of depth in the core, were carved from the core and placed into plastic bags. Each such sample was assigned a unique number. Samples were transferred from bags into plastic cubes (3.2 cm^3 in volume) for magnetic mineral measurements. Selected samples were used for geochemical and sedimentologic analysis.

Magnetic Susceptibility (Table 2): Volume susceptibility (MS) was measured using a susceptometer with a sensitivity better than 10^{-5} volume SI. Samples were measured in a 0.1 mT induction at a low frequency of 600 Hz (MS_{lf}) and high frequency of 6000 Hz (MS_{hf}). For each sample, the MS value was determined as the mean of four measurements. Frequency dependent susceptibility was calculated as:

$$FDMS=(MS_{lf}-MS_{hf})/MS_{lf}.$$

Laboratory Induced Magnetization (Table 2): A high-speed spinner magnetometer was used to measure anhysteretic remanent magnetization (ARM) and isothermal remanent magnetization (IRM). ARM was imparted in a decreasing AF from a peak induction of 100 mT and a DC bias of 0.1 mT. IRM magnetizations were generated at room temperature using an impulse magnetizer. Samples were first subjected to IRM in a 1.2T induction ($IRM_{1.2T}$.) and were then magnetized in the opposite direction using an induction of 0.3T ($IRM_{-0.3T}$). Hard isothermal remanent magnetization (HIRM) and the S-parameter were calculated as follows (King and Channel, 1991):

$$HIRM=(IRM_{1.2T}+IRM_{-0.3T})/2$$

$$S=IRM_{-0.3T}/IRM_{1.2T}$$

Elemental Abundance (Tables 3 and 4): Elemental abundance were determined on selected samples using energy dispersive X-ray fluorescence analysis at the University of Colorado's Department of Geological Sciences. Abundance of Cr, Cu, Fe, Mn, Mo, Nb, Ni, Rb, Sr, Ti, V, Y, Zn and Zr were measured.

Total carbon and inorganic (carbonate) carbon were determined using a coulometer on splits of powdered 1-cm samples of sediment (see Engleman and others, 1985) (Table 4). The carbonate in the untreated whole sample was acidified with perchloric acid to liberate CO_2, which was titrated in the coulometer cell to measure carbonate carbon. Total carbon was measured by titrating CO_2 liberated during sample combustion at 1050° C in a stream of oxygen. The technique has a precision of better than ± 0.5% for both carbonate and total carbon. Organic carbon was calculated as the difference between total and carbonate carbon.

REFERENCES

Adam, D.P., Sarna-Wojcicki, A.M., Rieck, H.J., Bradbury, J.P., Dean, W.E., and Forester, R.M., 1989, Tulelake, California: The last 3 million years, Palaeogeography, Palaeoclimatology, Palaeoecology: v. 72, p. 89-103.

Best, P.J., Environmental controls on magnetic mineralogy and geochemistry of late Quaternary lacustrine sediments from Grass Lake and Tule Lake, northern California: M.S. thesis, 139 p., Univ. of Colorado, Boulder.

Bradbury, J.P., 1991, The late Cenozoic diatom stratigraphy and paleolimnology of Tule Lake, Siskyou County, California: Journal of Paleolimnology, v. 6, p. 205-255.

Dean, W.E., 1996, Geochemistry of sediments from Tule Lake, California: U.S. Geological Survey Open-file Report 96-257, 36 p.

Engleman, E.E., Jackson, L.L., Norton, D.R. and Fischer, A. G., 1985, Determination of carbonate carbon in geological materials by coulometric titration: Chemical Geology, v. 53, p. 125-128.

King, J.W., and Channel, J.E.T., 1991, Sedimentary magnetism, environmental magnetism, and magnetostratigraphy: Reviews of Geophysics, Supplement, p. 358-370.

Rosenbaum, J.G., Reynolds, R.L., Adam, D.P., Drexler, John, Sarna-Wojcicki, A.M., and Whitney, G.C., 1996, A middle Pleistocene climate record from Buck Lake, cascade Range, southern Oregon—Evidence from sediment magnetism, trace-element geochemistry, and pollen: Geological Society of America Bulletin (in press).

TABLE 1. Sample Numbers and Depths

Tule Lake Sample no.: A unique sample number used for all measurements.

Core no.: Identifies core. Five cores were recovered from Tule Lake. This document provides data from cores 1 and 2.

Drive no.: Identifies location in the core. Each core was divided into drives numbered sequentially starting with 1 at the top. Some drives have been further divided into slugs indicated by letters, starting with A at the top of the drive.

Drive depth: The depth in meters of the top of the drive from the top of the core. Taken from driller's reports.

Sample depth in drive (m): Midpoint of sample depth interval in meters.

Sample depth in core (m): Sample depth within drive (m) plus adjusted depth from top of core.

Adjusted depth in core (m): The depth in meters of the top of the drive from the top of the core. Depths for core 2 have been lowered by 1.17 meters based on the location of the Trego Hot Springs ash located in each core (see Bradbury, 1991).

Sample density (kg/m3): Density of sample calculated from the mass of the dried box samples used in magnetic mineral studies.

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
1	1	3	0.74	0.135	0.875	0.875	836.9
2	1	3	0.74	0.265	1.005	1.005	944.0
3	1	3	0.74	0.36	1.1	1.1	817.0
4	1	3	0.74	0.43	1.17	1.17	683.8
5	1	3	0.74	0.48	1.22	1.22	820.4
6	1	3	0.74	0.545	1.285	1.285	864.4
7	1	4	1.52	0.045	1.565	1.565	690.7
8	1	4	1.52	0.125	1.645	1.645	608.3
9	1	4	1.52	0.18	1.7	1.7	587.8
10	1	4	1.52	0.24	1.76	1.76	670.5
11	1	4	1.52	0.295	1.815	1.815	555.2
12	1	4	1.52	0.34	1.86	1.86	565.3
13	1	4	1.52	0.395	1.915	1.915	606.8
14	1	4	1.52	0.45	1.97	1.97	557.9
15	1	4	1.52	0.53	2.05	2.05	539.4
16	1	4	1.52	0.58	2.1	2.1	570.8
17	1	4	1.52	0.63	2.15	2.15	691.8
18	1	4	1.52	0.68	2.2	2.2	802.1
19	1	4	1.52	0.725	2.245	2.245	718.1
20	1	5	2.26	0.055	2.315	2.315	677.3
21	1	5	2.26	0.12	2.38	2.38	666.6
22	1	5	2.26	0.18	2.44	2.44	524.3
23	1	5	2.26	0.3	2.56	2.56	445.3
24	1	5	2.26	0.36	2.62	2.62	434.3
25	1	5	2.26	0.415	2.675	2.675	433.7
26	1	5	2.26	0.475	2.735	2.735	420.6
27	1	5	2.26	0.52	2.78	2.78	418.8
28	1	5	2.26	0.615	2.875	2.875	363.7
29	1	5	2.26	0.68	2.94	2.94	365.1
30	1	6	3.05	0.13	3.18	3.18	549.6
31	1	6	3.05	0.185	3.235	3.235	550.4
32	1	6	3.05	0.24	3.29	3.29	543.7
33	1	6	3.05	0.29	3.34	3.34	571.0
34	1	6	3.05	0.345	3.395	3.395	511.0
35	1	6	3.05	0.395	3.445	3.445	537.8
36	1	6	3.05	0.475	3.525	3.525	540.6
37	1	6	3.05	0.525	3.575	3.575	537.4
38	1	6	3.05	0.58	3.63	3.63	504.5
39	1	6	3.05	0.64	3.69	3.69	609.4
40	1	7	3.81	0.065	3.875	3.875	609.9
41	1	7	3.81	0.13	3.94	3.94	772.0
42	1	7	3.81	0.195	4.005	4.005	768.5
43	1	7	3.81	0.25	4.06	4.06	742.5

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
44	1	7	3.81	0.31	4.12	4.12	757.2
45	1	7	3.81	0.38	4.19	4.19	636.2
46	1	7	3.81	0.435	4.245	4.245	479.3
47	1	7	3.81	0.505	4.315	4.315	455.9
48	1	7	3.81	0.56	4.37	4.37	454.3
49	1	7	3.81	0.63	4.44	4.44	472.4
50	1	8	4.57	0.045	4.615	4.615	484.6
51	1	8	4.57	0.095	4.665	4.665	468.4
52	1	8	4.57	0.13	4.7	4.7	430.3
53	1	8	4.57	0.22	4.79	4.79	440.0
54	1	8	4.57	0.27	4.84	4.84	613.8
55	1	8	4.57	0.325	4.895	4.895	613.3
56	1	8	4.57	0.37	4.94	4.94	594.0
57	1	8	4.57	0.425	4.995	4.995	573.4
58	1	8	4.57	0.475	5.045	5.045	594.4
59	1	8	4.57	0.525	5.095	5.095	630.7
60	1	8	4.57	0.575	5.145	5.145	576.1
61	1	8	4.57	0.625	5.195	5.195	579.2
62	1	8	4.57	0.675	5.245	5.245	606.7
63	1	9	5.34	0.05	5.39	5.39	573.2
64	1	9	5.34	0.1125	5.4525	5.4525	552.1
65	1	9	5.34	0.17	5.51	5.51	527.8
66	1	9	5.34	0.22	5.56	5.56	585.9
67	1	9	5.34	0.2775	5.6175	5.6175	650.4
68	1	9	5.34	0.335	5.675	5.675	606.2
69	1	9	5.34	0.3875	5.7275	5.7275	636.4
70	1	9	5.34	0.435	5.775	5.775	990.5
71	1	9	5.34	0.49	5.83	5.83	1064.2
72	1	9	5.34	0.56	5.9	5.9	1235.1
73	1	11	6.86	0.06	6.92	6.92	1031.2
74	1	11	6.86	0.17	7.03	7.03	859.9
75	1	11	6.86	0.245	7.105	7.105	1060.7
76	1	11	6.86	0.34	7.2	7.2	1053.8
77	1	11	6.86	0.4175	7.2775	7.2775	1050.3
1	2	2a	6.096	0.04	6.136	7.306	1041.0
78	1	11	6.86	0.485	7.345	7.345	1041.0
2	2	2a	6.096	0.1	6.196	7.366	1223.1
3	2	2a	6.096	0.14	6.236	7.406	1214.4
79	1	11	6.86	0.555	7.415	7.415	1078.7
4	2	2a	6.096	0.2	6.296	7.466	1255.8
80	1	11	6.86	0.645	7.505	7.505	981.5
5	2	2a	6.096	0.245	6.341	7.511	1176.2
6	2	2a	6.096	0.32	6.416	7.586	1082.0

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
7	2	2a	6.096	0.37	6.466	7.636	874.9
81	1	12	7.62	0.055	7.675	7.675	1115.4
8	2	2a	6.096	0.435	6.531	7.701	1022.7
82	1	12	7.62	0.1125	7.7325	7.7325	1093.4
9	2	2a	6.096	0.495	6.591	7.761	1084.5
83	1	12	7.62	0.17	7.79	7.79	1105.9
10	2	2a	6.096	0.545	6.641	7.811	1135.6
11	2	2a	2.096	4.57	6.666	7.836	1062.0
84	1	12	7.62	0.2375	7.8575	7.8575	996.2
12	2	2a	6.096	0.645	6.741	7.911	1079.9
85	1	12	7.62	0.325	7.945	7.945	992.4
13	2	2a	2.096	4.7	6.796	7.966	1036.7
86	1	12	7.62	0.385	8.005	8.005	924.9
14	2	2a	2.096	4.76	6.856	8.026	1153.0
87	1	12	7.62	0.46	8.08	8.08	1049.1
15	2	2a	2.096	4.845	6.941	8.111	1160.9
88	1	12	7.62	0.535	8.155	8.155	1047.9
16	2	2a	2.096	4.91	7.006	8.176	1065.2
17	2	2a	2.096	4.97	7.066	8.236	1027.9
89	1	12	7.62	0.64	8.26	8.26	1071.4
18	2	2b	2.096	5.075	7.171	8.341	1028.9
90	1	12	7.62	0.74	8.36	8.36	864.7
19	2	2b	2.096	5.14	7.236	8.406	1046.9
91	1	13	8.38	0.07	8.45	8.45	1021.3
20	2	2b	2.096	5.205	7.301	8.471	1147.1
92	1	13	8.38	0.165	8.545	8.545	1077.9
21	2	2b	2.096	5.285	7.381	8.551	1051.3
93	1	13	8.38	0.23	8.61	8.61	1102.2
22	2	2b	2.096	5.36	7.456	8.626	1092.6
94	1	13	8.38	0.29	8.67	8.67	1066.8
23	2	2b	2.096	5.445	7.541	8.711	1106.8
95	1	13	8.38	0.35	8.73	8.73	1007.8
96	1	13	8.38	0.4	8.78	8.78	1130.6
97	1	13	8.38	0.455	8.835	8.835	884.6
98	1	13	8.38	0.5125	8.8925	8.8925	1105.2
99	1	13	8.38	0.6875	9.0675	9.0675	1013.5
100	1	13	8.38	0.7675	9.1475	9.1475	903.0
101	1	16	9.91	0.0675	9.9775	9.9775	930.4
102	1	16	9.91	0.1325	10.0425	10.0425	882.7
103	1	16	9.91	0.2	10.11	10.11	689.3
104	1	16	9.91	0.275	10.185	10.185	825.5
105	1	16	9.91	0.3425	10.2525	10.2525	626.1
106	1	16	9.91	0.42	10.33	10.33	617.2

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
24	2	3a	9.144	0.075	9.219	10.389	1058.2
107	1	16	9.91	0.5075	10.4175	10.4175	823.6
25	2	3a	9.144	0.16	9.304	10.474	1064.3
108	1	16	9.91	0.5975	10.5075	10.5075	937.2
26	2	3a	9.144	0.215	9.359	10.529	816.4
27	2	3a	9.144	0.25	9.394	10.564	768.9
109	1	16	9.91	0.6875	10.5975	10.5975	880.8
28	2	3a	9.144	0.315	9.459	10.629	847.4
110	1	16	9.91	0.7725	10.6825	10.6825	1103.7
29	2	3a	9.144	0.41	9.554	10.724	850.4
30	2	3a	9.144	0.48	9.624	10.794	938.8
31	2	3a	9.144	0.55	9.694	10.864	906.5
32	2	3a	9.144	0.64	9.784	10.954	1235.8
33	2	3a	9.144	0.71	9.854	11.024	964.2
34	2	3a	9.144	0.765	9.909	11.079	939.2
35	2	3a	9.144	0.815	9.959	11.129	909.2
36	2	3a	9.144	0.895	10.039	11.209	826.0
37	2	3a	9.144	0.985	10.129	11.299	896.0
38	2	3a	9.144	1.025	10.169	11.339	941.4
111	1	17	11.43	0.0625	11.4925	11.4925	865.9
112	1	17	11.43	0.13	11.56	11.56	881.2
113	1	17	11.43	0.1875	11.6175	11.6175	984.5
39	2	3b	10.394	0.115	10.509	11.679	987.5
114	1	17	11.43	0.25	11.68	11.68	916.7
40	2	3b	10.394	0.1775	10.5715	11.7415	764.2
115	1	17	11.43	0.3275	11.7575	11.7575	862.2
41	2	3b	10.394	0.24	10.634	11.804	754.5
116	1	17	11.43	0.4	11.83	11.83	832.4
42	2	3b	10.394	0.28	10.674	11.844	780.1
117	1	17	11.43	0.4625	11.8925	11.8925	805.7
43	2	3b	10.394	0.34	10.734	11.904	779.6
44	2	3b	10.394	0.39	10.784	11.954	836.1
118	1	17	11.43	0.5325	11.9625	11.9625	844.1
45	2	3b	10.394	0.4375	10.8315	12.0015	879.5
119	1	17	11.43	0.61	12.04	12.04	901.5
46	2	3b	10.394	0.48	10.874	12.044	609.9
47	2	3b	10.394	0.5325	10.9265	12.0965	906.2
120	1	17	11.43	0.69	12.12	12.12	975.3
48	2	3b	10.394	0.57	10.964	12.134	967.6
49	2	3b	10.394	0.6125	11.0065	12.1765	843.6
50	2	3b	10.394	0.6575	11.0515	12.2215	805.1
121	1	17	11.43	0.825	12.255	12.255	1012.2
51	2	3b	10.394	0.7	11.094	12.264	990.0

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
52	2	3b	10.394	0.745	11.139	12.309	834.9
53	2	3b	10.394	0.785	11.179	12.349	915.0
54	2	3b	10.394	0.8325	11.2265	12.3965	1046.3
55	2	3b	10.394	0.8725	11.2665	12.4365	964.6
56	2	3b	10.394	0.925	11.319	12.489	724.9
57	2	3b	10.394	1.035	11.429	12.599	813.1
58	2	3b	10.394	1.085	11.479	12.649	896.5
59	2	3b	10.394	1.145	11.539	12.709	852.7
60	2	3b	10.394	1.215	11.609	12.779	862.9
61	2	4a	12.092	0.1425	12.2345	13.4045	840.6
62	2	4a	12.092	0.23	12.322	13.492	600.2
63	2	4a	12.092	0.27	12.362	13.532	861.6
64	2	4a	12.092	0.305	12.397	13.567	628.8
65	2	4a	12.092	0.3625	12.4545	13.6245	580.3
66	2	4a	12.092	0.4125	12.5045	13.6745	526.4
67	2	4a	12.092	0.46	12.552	13.722	595.1
68	2	4a	12.092	0.52	12.612	13.782	560.2
69	2	4a	12.092	0.5725	12.6645	13.8345	511.1
70	2	4a	12.092	0.615	12.707	13.877	525.0
71	2	4a	12.092	0.66	12.752	13.922	586.0
72	2	4a	12.092	0.69	12.782	13.952	656.9
73	2	4a	12.092	0.7225	12.8145	13.9845	759.5
74	2	4a	12.092	0.785	12.877	14.047	895.5
75	2	4a	12.092	0.83	12.922	14.092	810.4
76	2	4a	12.092	0.87	12.962	14.132	837.5
77	2	4a	12.092	0.96	13.052	14.222	505.1
78	2	4a	12.092	1.01	13.102	14.272	536.6
79	2	4a	12.092	1.06	13.152	14.322	629.2
80	2	4a	12.092	1.09	13.182	14.352	613.7
81	2	4a	12.092	1.14	13.232	14.402	488.3
82	2	4a	12.092	1.175	13.267	14.437	503.4
83	2	4a	12.092	1.215	13.307	14.477	463.6
84	2	4a	12.092	1.26	13.352	14.522	461.0
85	2	4a	12.092	1.29	13.382	14.552	513.2
86	2	4a	12.092	1.345	13.437	14.607	524.9
87	2	4a	12.092	1.41	13.502	14.672	637.0
88	2	4a	12.092	1.46	13.552	14.722	642.7
89	2	4a	12.092	1.5	13.592	14.762	550.0
90	2	4a	12.092	1.55	13.642	14.812	546.0
91	2	4a	12.092	1.595	13.687	14.857	541.7
92	2	4a	12.092	1.64	13.732	14.902	484.8
93	2	4b	13.762	0.035	13.797	14.967	564.9
94	2	4b	13.762	0.085	13.847	15.017	527.8

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
95	2	4b	13.762	0.13	13.892	15.062	553.4
96	2	4b	13.762	0.18	13.942	15.112	545.7
97	2	4b	13.762	0.22	13.982	15.152	550.6
98	2	4b	13.762	0.27	14.032	15.202	573.8
99	2	4b	13.762	0.33	14.092	15.262	510.1
100	2	4b	13.762	0.39	14.152	15.322	534.7
101	2	4b	13.762	0.43	14.192	15.362	537.5
102	2	4b	13.762	0.5025	14.2645	15.4345	540.8
103	2	4b	13.762	0.55	14.312	15.482	544.1
104	2	4b	13.762	0.6125	14.3745	15.5445	552.1
105	2	4b	13.762	0.6625	14.4245	15.5945	532.3
106	2	4b	13.762	0.7225	14.4845	15.6545	539.2
107	2	4b	13.762	0.785	14.547	15.717	549.5
108	2	4b	13.762	0.8425	14.6045	15.7745	564.8
109	2	4b	13.762	0.905	14.667	15.837	532.7
110	2	4b	13.762	0.9625	14.7245	15.8945	571.6
111	2	4b	13.762	1.0075	14.7695	15.9395	599.9
112	2	4b	13.762	1.1	14.862	16.032	606.3
113	2	4b	13.762	1.15	14.912	16.082	613.1
114	2	5a	15.24	0.05	15.29	16.46	582.3
115	2	5a	15.24	0.1025	15.3425	16.5125	613.8
116	2	5a	15.24	0.1775	15.4175	16.5875	559.3
117	2	5a	15.24	0.22	15.46	16.63	624.4
118	2	5a	15.24	0.26	15.5	16.67	615.0
119	2	5a	15.24	0.305	15.545	16.715	614.6
120	2	5a	15.24	0.35	15.59	16.76	654.9
121	2	5a	15.24	0.395	15.635	16.805	560.2
122	2	5a	15.24	0.4325	15.6725	16.8425	558.9
123	2	5a	15.24	0.49	15.73	16.9	574.0
124	2	5a	15.24	0.53	15.77	16.94	499.4
125	2	5a	15.24	0.58	15.82	16.99	527.3
126	2	5a	15.24	0.655	15.895	17.065	547.1
127	2	5a	15.24	0.73	15.97	17.14	760.2
128	2	5a	15.24	0.8025	16.0425	17.2125	496.4
129	2	5a	15.24	0.845	16.085	17.255	452.6
130	2	5a	15.24	0.9	16.14	17.31	434.9
131	2	5b	16.16	0.04	16.2	17.37	470.9
132	2	5b	16.16	0.0975	16.2575	17.4275	485.8
133	2	5b	16.16	0.155	16.315	17.485	449.0
134	2	5b	16.16	0.2075	16.3675	17.5375	448.7
135	2	5b	16.16	0.26	16.42	17.59	464.1
136	2	5b	16.16	0.2975	16.4575	17.6275	544.5
137	2	5b	16.16	0.3425	16.5025	17.6725	603.4

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
138	2	5b	16.16	0.395	16.555	17.725	581.8
139	2	5b	16.16	0.4375	16.5975	17.7675	601.2
140	2	5b	16.16	0.485	16.645	17.815	571.4
141	2	5b	16.16	0.5525	16.7125	17.8825	651.5
142	2	5b	16.16	0.6075	16.7675	17.9375	683.0
143	2	5b	16.16	0.6675	16.8275	17.9975	975.2
144	2	5b	16.16	0.74	16.9	18.07	1080.6
145	2	5b	16.16	0.78	16.94	18.11	1017.8
146	2	5b	16.16	0.81	16.97	18.14	932.3
147	2	6a	18.29	0.065	18.355	19.525	471.0
148	2	6a	18.29	0.1	18.39	19.56	535.3
149	2	6a	18.29	0.1475	18.4375	19.6075	493.1
150	2	6a	18.29	0.195	18.485	19.655	565.8
151	2	6a	18.29	0.25	18.54	19.71	556.3
152	2	6a	18.29	0.295	18.585	19.755	444.5
153	2	6a	18.29	0.3475	18.6375	19.8075	471.0
154	2	6a	18.29	0.4	18.69	19.86	434.8
155	2	6a	18.29	0.45	18.74	19.91	448.6
156	2	6a	18.29	0.51	18.8	19.97	458.2
157	2	6a	18.29	0.5775	18.8675	20.0375	431.9
158	2	6a	18.29	0.625	18.915	20.085	521.1
159	2	6a	18.29	0.67	18.96	20.13	442.9
160	2	6a	18.29	0.7425	19.0325	20.2025	510.3
161	2	6a	18.29	0.84	19.13	20.3	493.5
162	2	6a	18.29	0.8925	19.1825	20.3525	542.0
163	2	6a	18.29	0.9275	19.2175	20.3875	532.8
164	2	6a	18.29	0.98	19.27	20.44	510.4
165	2	6a	18.29	1.03	19.32	20.49	501.5
166	2	6a	18.29	1.09	19.38	20.55	501.4
167	2	6a	18.29	1.1425	19.4325	20.6025	530.2
168	2	6a	18.29	1.1875	19.4775	20.6475	515.6
169	2	6b	19.49	0.0325	19.5225	20.6925	515.6
170	2	6b	19.49	0.0825	19.5725	20.7425	501.8
171	2	6b	19.49	0.14	19.63	20.8	510.2
172	2	6b	19.49	0.19	19.68	20.85	550.3
173	2	6b	19.49	0.245	19.735	20.905	515.9
174	2	6b	19.49	0.3	19.79	20.96	470.2
175	2	6b	19.49	0.3525	19.8425	21.0125	510.4
176	2	6b	19.49	0.4125	19.9025	21.0725	529.2
177	2	6b	19.49	0.4775	19.9675	21.1375	488.7
178	2	6b	19.49	0.545	20.035	21.205	528.8
179	2	6b	19.49	0.59	20.08	21.25	623.3
180	2	6b	19.49	0.64	20.13	21.3	588.6

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
181	2	6b	19.49	0.68	20.17	21.34	606.6
182	2	6b	19.49	0.72	20.21	21.38	606.1
183	2	6b	19.49	0.78	20.27	21.44	566.9
184	2	6b	19.49	0.8325	20.3225	21.4925	599.4
185	2	6b	19.49	0.8875	20.3775	21.5475	608.5
186	2	6b	19.49	0.93	20.42	21.59	657.9
187	2	6b	19.49	0.98	20.47	21.64	534.7
188	2	6b	19.49	1.0425	20.5325	21.7025	559.3
189	2	6b	19.49	1.09	20.58	21.75	563.6
190	2	6b	19.49	1.14	20.63	21.8	558.1
191	2	6b	19.49	1.18	20.67	21.84	591.4
192	2	7a	21.33	0.0525	21.3825	22.5525	808.0
193	2	7a	21.33	0.13	21.46	22.63	714.9
194	2	7a	21.33	0.1925	21.5225	22.6925	704.1
195	2	7a	21.33	0.2625	21.5925	22.7625	696.1
196	2	7a	21.33	0.32	21.65	22.82	712.0
197	2	7a	21.33	0.375	21.705	22.875	606.4
198	2	7a	21.33	0.4325	21.7625	22.9325	575.2
199	2	7a	21.33	0.495	21.825	22.995	526.2
200	2	7a	21.33	0.54	21.87	23.04	660.8
201	2	7a	21.33	0.6	21.93	23.1	529.7
202	2	7a	21.33	0.6725	22.0025	23.1725	682.4
203	2	7a	21.33	0.725	22.055	23.225	604.5
204	2	7a	21.33	0.7725	22.1025	23.2725	611.7
205	2	7a	21.33	0.83	22.16	23.33	644.5
206	2	7a	21.33	0.8875	22.2175	23.3875	609.7
207	2	7a	21.33	0.9475	22.2775	23.4475	619.7
208	2	7a	21.33	1.005	22.335	23.505	579.5
209	2	7a	21.33	1.0575	22.3875	23.5575	597.5
210	2	7a	21.33	1.12	22.45	23.62	598.0
211	2	7a	21.33	1.175	22.505	23.675	602.6
212	2	7a	21.33	1.23	22.56	23.73	596.6
213	2	7a	21.33	1.2825	22.6125	23.7825	650.7
214	2	7a	21.33	1.33	22.66	23.83	608.4
215	2	7a	21.33	1.435	22.765	23.935	926.5
216	2	8a	24.38	0.065	24.445	25.615	599.3
217	2	8a	24.38	0.115	24.495	25.665	795.5
218	2	8a	24.38	0.17	24.55	25.72	898.3
219	2	8a	24.38	0.26	24.64	25.81	848.8
220	2	8a	24.38	0.305	24.685	25.855	713.6
221	2	8a	24.38	0.3875	24.7675	25.9375	727.4
222	2	8a	24.38	0.4375	24.8175	25.9875	749.3
223	2	8a	24.38	0.49	24.87	26.04	759.3

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
224	2	8a	24.38	0.535	24.915	26.085	558.4
225	2	8a	24.38	0.59	24.97	26.14	895.9
226	2	8a	24.38	0.6325	25.0125	26.1825	786.7
227	2	8a	24.38	0.675	25.055	26.225	812.6
228	2	8a	24.38	0.72	25.1	26.27	728.4
229	2	8a	24.38	0.77	25.15	26.32	823.3
230	2	8a	24.38	0.8275	25.2075	26.3775	808.0
231	2	8a	24.38	0.875	25.255	26.425	834.1
232	2	8a	24.38	0.9225	25.3025	26.4725	607.4
233	2	8a	24.38	0.9725	25.3525	26.5225	878.2
234	2	8a	24.38	1.0225	25.4025	26.5725	815.3
235	2	8a	24.38	1.075	25.455	26.625	780.8
236	2	8b	25.5	0.03	25.53	26.7	807.1
237	2	8b	25.5	0.08	25.58	26.75	744.1
238	2	8b	25.5	0.1425	25.6425	26.8125	748.6
239	2	8b	25.5	0.195	25.695	26.865	750.3
240	2	8b	25.5	0.265	25.765	26.935	712.4
241	2	8b	25.5	0.32	25.82	26.99	731.2
242	2	8b	25.5	0.4275	25.9275	27.0975	710.7
243	2	8b	25.5	0.485	25.985	27.155	624.5
244	2	8b	25.5	0.5525	26.0525	27.2225	549.4
245	2	8b	25.5	0.605	26.105	27.275	618.8
246	2	8b	25.5	0.66	26.16	27.33	539.4
247	2	8b	25.5	0.7025	26.2025	27.3725	537.0
248	2	8b	25.5	0.75	26.25	27.42	518.6
249	2	8b	25.5	0.795	26.295	27.465	561.4
250	2	8b	25.5	0.84	26.34	27.51	575.0
251	2	8b	25.5	0.885	26.385	27.555	544.4
252	2	8b	25.5	0.93	26.43	27.6	616.4
253	2	8b	25.5	0.9725	26.4725	27.6425	509.5
254	2	8b	25.5	1.015	26.515	27.685	528.6
255	2	8b	25.5	1.0625	26.5625	27.7325	555.9
256	2	8b	25.5	1.1075	26.6075	27.7775	551.6
257	2	9a	27.43	0.07	27.5	28.67	605.3
258	2	9a	27.43	0.125	27.555	28.725	610.5
259	2	9a	27.43	0.17	27.6	28.77	580.5
260	2	9a	27.43	0.2225	27.6525	28.8225	562.3
261	2	9a	27.43	0.27	27.7	28.87	572.1
262	2	9a	27.43	0.315	27.745	28.915	573.7
263	2	9a	27.43	0.36	27.79	28.96	631.9
264	2	9a	27.43	0.4175	27.8475	29.0175	519.7
265	2	9a	27.43	0.47	27.9	29.07	546.5
266	2	9a	27.43	0.52	27.95	29.12	530.9

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
267	2	9a	27.43	0.565	27.995	29.165	583.5
268	2	9a	27.43	0.615	28.045	29.215	510.9
269	2	9a	27.43	0.665	28.095	29.265	551.0
270	2	9a	27.43	0.715	28.145	29.315	552.3
271	2	9a	27.43	0.76	28.19	29.36	603.7
272	2	9b	28.24	0.0125	28.2525	29.4225	552.2
273	2	9b	28.24	0.06	28.3	29.47	591.6
274	2	9b	28.24	0.115	28.355	29.525	566.3
275	2	9b	28.24	0.16	28.4	29.57	613.2
276	2	9b	28.24	0.205	28.445	29.615	537.7
277	2	9b	28.24	0.245	28.485	29.655	562.1
278	2	9b	28.24	0.2975	28.5375	29.7075	556.1
279	2	9b	28.24	0.335	28.575	29.745	558.4
280	2	9b	28.24	0.385	28.625	29.795	534.1
281	2	9b	28.24	0.43	28.67	29.84	578.8
282	2	9b	28.24	0.475	28.715	29.885	563.0
283	2	9b	28.24	0.53	28.77	29.94	594.8
284	2	9b	28.24	0.575	28.815	29.985	613.7
285	2	9b	28.24	0.62	28.86	30.03	564.7
286	2	9b	28.24	0.665	28.905	30.075	575.2
287	2	9b	28.24	0.7175	28.9575	30.1275	609.6
288	2	9b	28.24	0.78	29.02	30.19	671.4
289	2	10a	30.48	0.07	30.55	31.72	832.1
290	2	10a	30.48	0.13	30.61	31.78	776.7
291	2	10a	30.48	0.175	30.655	31.825	747.0
292	2	10a	30.48	0.2225	30.7025	31.8725	852.9
293	2	10a	30.48	0.27	30.75	31.92	804.1
294	2	10a	30.48	0.3225	30.8025	31.9725	788.2
295	2	10a	30.48	0.3675	30.8475	32.0175	791.5
296	2	10a	30.48	0.4125	30.8925	32.0625	818.7
297	2	10a	30.48	0.455	30.935	32.105	847.8
298	2	10a	30.48	0.5	30.98	32.15	734.4
299	2	10a	30.48	0.545	31.025	32.195	679.8
300	2	10a	30.48	0.59	31.07	32.24	678.9
301	2	10a	30.48	0.6325	31.1125	32.2825	641.3
302	2	10a	30.48	0.6725	31.1525	32.3225	681.2
303	2	10a	30.48	0.715	31.195	32.365	684.4
304	2	10a	30.48	0.755	31.235	32.405	721.2
305	2	10a	30.48	0.795	31.275	32.445	696.5
306	2	10a	30.48	0.835	31.315	32.485	691.5
307	2	10a	30.48	0.87	31.35	32.52	667.2
308	2	10a	30.48	0.915	31.395	32.565	648.0
309	2	10a	30.48	0.955	31.435	32.605	714.0

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
310	2	10a	30.48	0.9975	31.4775	32.6475	649.8
311	2	10a	30.48	1.0425	31.5225	32.6925	712.0
312	2	10a	30.48	1.085	31.565	32.735	691.6
313	2	10a	30.48	1.1275	31.6075	32.7775	712.9
314	2	10b	31.31	0.31	31.62	32.79	698.3
315	2	10b	31.31	0.35	31.66	32.83	714.2
316	2	10b	31.31	0.395	31.705	32.875	719.4
317	2	10b	31.31	0.44	31.75	32.92	712.3
318	2	10b	31.31	0.4875	31.7975	32.9675	679.3
319	2	10b	31.31	0.535	31.845	33.015	705.5
320	2	10b	31.31	0.58	31.89	33.06	666.3
321	2	10b	31.31	0.63	31.94	33.11	615.4
322	2	10b	31.31	0.675	31.985	33.155	549.6
323	2	10b	31.31	0.7225	32.0325	33.2025	528.6
324	2	10b	31.31	0.7675	32.0775	33.2475	539.6
325	2	10b	31.31	0.815	32.125	33.295	490.6
326	2	10b	31.31	0.86	32.17	33.34	500.5
327	2	10b	31.31	0.9	32.21	33.38	508.4
328	2	10b	31.31	0.95	32.26	33.43	607.7
329	2	10b	31.31	0.995	32.305	33.475	720.2
330	2	10b	31.31	1.045	32.355	33.525	661.9
331	2	10b	31.31	1.0875	32.3975	33.5675	767.7
332	2	10b	31.31	1.135	32.445	33.615	647.7
333	2	10b	31.31	1.18	32.49	33.66	625.5
334	2	10b	31.31	1.22	32.53	33.7	619.2
335	2	10b	31.31	1.265	32.575	33.745	542.5
336	2	11a	33.53	0.0375	33.5675	34.7375	513.8
337	2	11a	33.53	0.1075	33.6375	34.8075	559.2
338	2	11a	33.53	0.18	33.71	34.88	513.3
339	2	11a	33.53	0.245	33.775	34.945	531.4
340	2	11a	33.53	0.2925	33.8225	34.9925	595.7
341	2	11a	33.53	0.34	33.87	35.04	566.1
342	2	11a	33.53	0.385	33.915	35.085	548.4
343	2	11a	33.53	0.4425	33.9725	35.1425	523.6
344	2	11a	33.53	0.505	34.035	35.205	574.6
345	2	11a	33.53	0.565	34.095	35.265	536.7
346	2	11a	33.53	0.63	34.16	35.33	539.5
347	2	11a	33.53	0.69	34.22	35.39	605.8
348	2	11a	33.53	0.75	34.28	35.45	603.6
349	2	11a	33.53	0.8075	34.3375	35.5075	603.0
350	2	11a	33.53	0.86	34.39	35.56	568.4
351	2	11a	33.53	0.915	34.445	35.615	610.1
352	2	11a	33.53	0.96	34.49	35.66	624.6

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
353	2	11a	33.53	1.015	34.545	35.715	590.2
354	2	11b	34.58	0.03	34.61	35.78	585.7
355	2	11b	34.58	0.0775	34.6575	35.8275	629.1
356	2	11b	34.58	0.1325	34.7125	35.8825	577.4
357	2	11b	34.58	0.18	34.76	35.93	583.7
358	2	11b	34.58	0.2225	34.8025	35.9725	562.5
359	2	11b	34.58	0.27	34.85	36.02	602.3
360	2	11b	34.58	0.32	34.9	36.07	587.6
361	2	11b	34.58	0.365	34.945	36.115	502.9
362	2	11b	34.58	0.41	34.99	36.16	529.7
363	2	11b	34.58	0.4525	35.0325	36.2025	587.6
364	2	11b	34.58	0.5025	35.0825	36.2525	501.7
365	2	11b	34.58	0.545	35.125	36.295	502.4
366	2	11b	34.58	0.585	35.165	36.335	484.2
367	2	11b	34.58	0.6275	35.2075	36.3775	483.9
368	2	11b	34.58	0.67	35.25	36.42	542.7
369	2	11b	34.58	0.72	35.3	36.47	536.9
370	2	11b	34.58	0.77	35.35	36.52	535.9
371	2	11b	34.58	0.815	35.395	36.565	524.8
372	2	11b	34.58	0.855	35.435	36.605	583.5
373	2	11b	34.58	0.895	35.475	36.645	582.6
374	2	11b	34.58	0.935	35.515	36.685	601.2
375	2	11b	34.58	0.9875	35.5675	36.7375	628.2
376	2	11b	34.58	1.0425	35.6225	36.7925	601.8
377	2	12a	36.57	0.11	36.68	37.85	541.6
378	2	12a	36.57	0.16	36.73	37.9	596.4
379	2	12a	36.57	0.2125	36.7825	37.9525	654.9
380	2	12a	36.57	0.26	36.83	38	794.3
381	2	12a	36.57	0.3075	36.8775	38.0475	605.3
382	2	12a	36.57	0.345	36.915	38.085	651.0
383	2	12a	36.57	0.385	36.955	38.125	599.3
384	2	12a	36.57	0.4325	37.0025	38.1725	625.4
385	2	12a	36.57	0.48	37.05	38.22	617.2
386	2	12a	36.57	0.525	37.095	38.265	791.9
387	2	12a	36.57	0.58	37.15	38.32	724.2
388	2	12a	36.57	0.62	37.19	38.36	774.1
389	2	12a	36.57	0.6675	37.2375	38.4075	912.9
390	2	12a	36.57	0.71	37.28	38.45	514.5
391	2	12a	36.57	0.76	37.33	38.5	535.3
392	2	12a	36.57	0.805	37.375	38.545	636.6
393	2	12a	36.57	0.85	37.42	38.59	551.6
394	2	12a	36.57	0.8925	37.4625	38.6325	635.7
395	2	12a	36.57	0.935	37.505	38.675	610.9

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
396	2	12a	36.57	0.98	37.55	38.72	572.8
397	2	12b	37.57	0.01	37.58	38.75	548.5
398	2	12b	37.57	0.0525	37.6225	38.7925	564.2
399	2	12b	37.57	0.095	37.665	38.835	608.7
400	2	12b	37.57	0.15	37.72	38.89	489.9
401	2	12b	37.57	0.19	37.76	38.93	543.3
402	2	12b	37.57	0.245	37.815	38.985	563.5
403	2	12b	37.57	0.29	37.86	39.03	529.5
404	2	12b	37.57	0.33	37.9	39.07	549.4
405	2	12b	37.57	0.38	37.95	39.12	571.0
406	2	12b	37.57	0.4325	38.0025	39.1725	597.9
407	2	12b	37.57	0.48	38.05	39.22	596.0
408	2	12b	37.57	0.53	38.1	39.27	599.8
409	2	12b	37.57	0.59	38.16	39.33	619.0
410	2	12b	37.57	0.645	38.215	39.385	695.6
411	2	12b	37.57	0.6925	38.2625	39.4325	686.4
412	2	12b	37.57	0.755	38.325	39.495	686.7
413	2	12b	37.57	0.805	38.375	39.545	736.7
414	2	12b	37.57	0.845	38.415	39.585	727.6
415	2	13a	39.62	0.04	39.66	40.83	707.2
416	2	13a	39.62	0.0925	39.7125	40.8825	791.1
417	2	13a	39.62	0.145	39.765	40.935	794.3
418	2	13a	39.62	0.2	39.82	40.99	785.7
419	2	13a	39.62	0.26	39.88	41.05	891.1
420	2	13a	39.62	0.315	39.935	41.105	738.6
421	2	13a	39.62	0.355	39.975	41.145	717.2
422	2	13a	39.62	0.405	40.025	41.195	757.3
423	2	13a	39.62	0.4575	40.0775	41.2475	864.5
424	2	13a	39.62	0.52	40.14	41.31	707.0
425	2	13a	39.62	0.5875	40.2075	41.3775	773.6
426	2	13a	39.62	0.645	40.265	41.435	835.1
427	2	13a	39.62	0.6925	40.3125	41.4825	826.5
428	2	13a	39.62	0.7475	40.3675	41.5375	869.0
429	2	13a	39.62	0.8	40.42	41.59	973.6
430	2	13a	39.62	0.855	40.475	41.645	866.9
431	2	13a	39.62	0.905	40.525	41.695	938.4
432	2	13a	39.62	0.9575	40.5775	41.7475	896.5
433	2	13a	39.62	1	40.62	41.79	822.3
434	2	13a	39.62	1.045	40.665	41.835	758.0
435	2	13a	39.62	1.1	40.72	41.89	809.9
436	2	13a	39.62	1.16	40.78	41.95	773.1
437	2	13a	39.62	1.21	40.83	42	798.9
438	2	13a	39.62	1.285	40.905	42.075	772.7

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
439	2	13a	39.62	1.3575	40.9775	42.1475	699.9
440	2	13a	39.62	1.41	41.03	42.2	768.5
441	2	13a	39.62	1.465	41.085	42.255	757.6
442	2	13a	39.62	1.51	41.13	42.3	814.5
443	2	13a	39.62	1.55	41.17	42.34	830.2
444	2	13a	39.62	1.6	41.22	42.39	775.1
445	2	13b	41.25	0.0375	41.2875	42.4575	874.8
446	2	13b	41.25	0.08	41.33	42.5	903.8
447	2	13b	41.25	0.175	41.425	42.595	882.8
448	2	13b	41.25	0.24	41.49	42.66	741.1
449	2	13b	41.25	0.29	41.54	42.71	686.0
450	2	13b	41.25	0.34	41.59	42.76	610.7
451	2	13b	41.25	0.3925	41.6425	42.8125	723.5
452	2	13b	41.25	0.44	41.69	42.86	801.2
453	2	13b	41.25	0.485	41.735	42.905	629.8
454	2	13b	41.25	0.5325	41.7825	42.9525	833.0
455	2	13b	41.25	0.585	41.835	43.005	757.4
456	2	13b	41.25	0.6425	41.8925	43.0625	685.8
457	2	13b	41.25	0.695	41.945	43.115	684.7
458	2	13b	41.25	0.75	42	43.17	692.1
459	2	13b	41.25	0.7975	42.0475	43.2175	707.6
460	2	13b	41.25	0.8625	42.1125	43.2825	780.9
461	2	14a	42.67	0.0775	42.7475	43.9175	587.6
462	2	14a	42.67	0.13	42.8	43.97	586.8
463	2	14a	42.67	0.18	42.85	44.02	552.0
464	2	14a	42.67	0.225	42.895	44.065	540.3
465	2	14a	42.67	0.265	42.935	44.105	553.7
466	2	14a	42.67	0.3075	42.9775	44.1475	549.4
467	2	14a	42.67	0.3525	43.0225	44.1925	531.6
468	2	14a	42.67	0.395	43.065	44.235	588.0
469	2	14a	42.67	0.44	43.11	44.28	758.2
470	2	14a	42.67	0.51	43.18	44.35	571.8
471	2	14a	42.67	0.5625	43.2325	44.4025	578.0
472	2	14a	42.67	0.6225	43.2925	44.4625	616.8
473	2	14a	42.67	0.67	43.34	44.51	598.1
474	2	14a	42.67	0.7125	43.3825	44.5525	599.4
475	2	14a	42.67	0.7625	43.4325	44.6025	567.7
476	2	14a	42.67	0.81	43.48	44.65	582.5
477	2	14a	42.67	0.8525	43.5225	44.6925	578.9
478	2	14a	42.67	0.9	43.57	44.74	559.0
479	2	14a	42.67	0.945	43.615	44.785	556.1
480	2	14a	42.67	0.99	43.66	44.83	591.9
481	2	14a	42.67	1.035	43.705	44.875	608.2

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
482	2	14a	42.67	1.08	43.75	44.92	555.0
483	2	14a	42.67	1.12	43.79	44.96	566.9
484	2	14a	42.67	1.155	43.825	44.995	581.8
485	2	14b	43.87	0.0125	43.8825	45.0525	613.0
486	2	14b	43.87	0.0725	43.9425	45.1125	587.5
487	2	14b	43.87	0.13	44	45.17	580.9
488	2	14b	43.87	0.18	44.05	45.22	572.9
489	2	14b	43.87	0.24	44.11	45.28	633.5
490	2	14b	43.87	0.32	44.19	45.36	616.7
491	2	14b	43.87	0.375	44.245	45.415	604.8
492	2	14b	43.87	0.425	44.295	45.465	573.5
493	2	14b	43.87	0.475	44.345	45.515	607.8
494	2	14b	43.87	0.53	44.4	45.57	634.1
495	2	14b	43.87	0.585	44.455	45.625	653.0
496	2	14b	43.87	0.69	44.56	45.73	707.9
497	2	14b	43.87	0.75	44.62	45.79	660.2
498	2	14b	43.87	0.79	44.66	45.83	693.4
499	2	14b	43.87	0.8375	44.7075	45.8775	665.1
500	2	14b	43.87	0.89	44.76	45.93	590.0
501	2	14b	43.87	0.94	44.81	45.98	671.6
502	2	14b	43.87	0.995	44.865	46.035	687.7
503	2	14b	43.87	1.045	44.915	46.085	582.2
504	2	14b	43.87	1.0975	44.9675	46.1375	599.9
505	2	14b	43.87	1.15	45.02	46.19	618.0
506	2	15a	45.72	0.06	45.78	46.95	543.7
507	2	15a	45.72	0.125	45.845	47.015	583.3
508	2	15a	45.72	0.185	45.905	47.075	562.0
509	2	15a	45.72	0.25	45.97	47.14	484.5
510	2	15a	45.72	0.3	46.02	47.19	552.7
511	2	15a	45.72	0.35	46.07	47.24	610.0
512	2	15a	45.72	0.395	46.115	47.285	556.0
513	2	15a	45.72	0.4375	46.1575	47.3275	561.3
514	2	15a	45.72	0.5	46.22	47.39	566.0
515	2	15a	45.72	0.545	46.265	47.435	670.4
516	2	15a	45.72	0.6	46.32	47.49	629.5
517	2	15a	45.72	0.65	46.37	47.54	661.0
518	2	15a	45.72	0.695	46.415	47.585	631.4
519	2	15a	45.72	0.75	46.47	47.64	658.4
520	2	15a	45.72	0.8	46.52	47.69	664.2
521	2	15a	45.72	0.85	46.57	47.74	697.5
522	2	15a	45.72	0.91	46.63	47.8	743.1
523	2	15a	45.72	0.9625	46.6825	47.8525	867.1
524	2	15a	45.72	1.02	46.74	47.91	722.5

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
525	2	15a	45.72	1.08	46.8	47.97	925.9
526	2	15a	45.72	1.14	46.86	48.03	786.8
527	2	15a	45.72	1.195	46.915	48.085	774.7
528	2	15a	45.72	1.2475	46.9675	48.1375	805.6
529	2	15b	47.05	0.0875	47.1375	48.3075	818.9
530	2	15b	47.05	0.1425	47.1925	48.3625	738.9
531	2	15b	47.05	0.19	47.24	48.41	799.7
532	2	15b	47.05	0.235	47.285	48.455	763.8
533	2	15b	47.05	0.295	47.345	48.515	881.8
534	2	15b	47.05	0.345	47.395	48.565	790.4
535	2	15b	47.05	0.3925	47.4425	48.6125	734.9
536	2	15b	47.05	0.44	47.49	48.66	884.0
537	2	15b	47.05	0.49	47.54	48.71	785.4
538	2	15b	47.05	0.54	47.59	48.76	719.6
539	2	15b	47.05	0.5875	47.6375	48.8075	800.8
540	2	15b	47.05	0.63	47.68	48.85	743.7
541	2	15b	47.05	0.745	47.795	48.965	796.2
542	2	15b	47.05	0.7925	47.8425	49.0125	888.5
543	2	15b	47.05	0.835	47.885	49.055	928.4
544	2	15b	47.05	0.88	47.93	49.1	932.8
545	2	15b	47.05	0.9675	48.0175	49.1875	935.8
546	2	15b	47.05	1.0175	48.0675	49.2375	857.4
547	2	15b	47.05	1.065	48.115	49.285	843.8
548	2	15b	47.05	1.1225	48.1725	49.3425	809.9
549	2	15b	47.05	1.1775	48.2275	49.3975	847.4
550	2	15b	47.05	1.265	48.315	49.485	819.5
551	2	16a	48.77	0.0575	48.8275	49.9975	835.0
552	2	16a	48.77	0.125	48.895	50.065	758.6
553	2	16a	48.77	0.175	48.945	50.115	707.7
554	2	16a	48.77	0.2525	49.0225	50.1925	704.4
555	2	16a	48.77	0.305	49.075	50.245	717.2
556	2	16a	48.77	0.3575	49.1275	50.2975	746.8
557	2	16a	48.77	0.405	49.175	50.345	719.9
558	2	16a	48.77	0.4525	49.2225	50.3925	766.8
559	2	16a	48.77	0.5	49.27	50.44	780.7
560	2	16a	48.77	0.5525	49.3225	50.4925	876.9
561	2	16a	48.77	0.6525	49.4225	50.5925	806.3
562	2	16a	48.77	0.7325	49.5025	50.6725	889.9
563	2	16a	48.77	0.84	49.61	50.78	880.5
564	2	16a	48.77	0.89	49.66	50.83	855.8
565	2	16a	48.77	0.9475	49.7175	50.8875	953.3
566	2	16a	48.77	1.0225	49.7925	50.9625	967.8
567	2	16a	48.77	1.115	49.885	51.055	1000.6

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
568	2	16a	48.77	1.1875	49.9575	51.1275	1076.5
569	2	16a	48.77	1.315	50.085	51.255	987.4
570	2	16a	48.77	1.425	50.195	51.365	1167.7
571	2	17a	51.82	0.0425	51.8625	53.0325	1323.9
572	2	17a	51.82	0.1	51.92	53.09	1355.8
573	2	17a	51.82	0.14	51.96	53.13	1330.9
574	2	17a	51.82	0.19	52.01	53.18	1376.3
575	2	17a	51.82	0.235	52.055	53.225	1384.0
576	2	17a	51.82	0.29	52.11	53.28	1391.9
577	2	17a	51.82	0.34	52.16	53.33	1136.4
578	2	17a	51.82	0.39	52.21	53.38	1091.6
579	2	17a	51.82	0.44	52.26	53.43	1147.7
580	2	17a	51.82	0.495	52.315	53.485	1019.1
581	2	18a	54.86	0.065	54.925	56.095	1296.4
582	2	18a	54.86	0.14	55	56.17	1110.5
583	2	18a	54.86	0.165	55.025	56.195	1187.6
584	2	18a	54.86	0.23	55.09	56.26	1052.1
585	2	18a	54.86	0.2775	55.1375	56.3075	1125.1
586	2	18a	54.86	0.355	55.215	56.385	1051.2
587	2	18a	54.86	0.42	55.28	56.45	1208.4
588	2	18a	54.86	0.505	55.365	56.535	1300.8
589	2	18a	54.86	0.59	55.45	56.62	1307.2
590	2	18a	54.86	0.66	55.52	56.69	1228.7
591	2	18a	54.86	0.73	55.59	56.76	1211.9
592	2	18a	54.86	0.84	55.7	56.87	1167.1
593	2	18a	54.86	0.955	55.815	56.985	727.9
594	2	18a	54.86	1.085	55.945	57.115	554.4
595	2	18a	54.86	1.185	56.045	57.215	535.9
596	2	18a	54.86	1.33	56.19	57.36	569.1
597	2	19a	57.91	0.0625	57.9725	59.1425	826.6
598	2	19a	57.91	0.1175	58.0275	59.1975	895.4
599	2	19a	57.91	0.38	58.29	59.46	866.2
600	2	19a	57.91	0.4925	58.4025	59.5725	857.6
601	2	19a	57.91	0.575	58.485	59.655	591.2
602	2	19a	57.91	0.665	58.575	59.745	547.1
603	2	19a	57.91	0.815	58.725	59.895	584.3
604	2	19a	57.91	0.9725	58.8825	60.0525	510.2
605	2	19a	57.91	1.115	59.025	60.195	600.1
606	2	19b	59.16	0.125	59.285	60.455	787.9
607	2	19b	59.16	0.195	59.355	60.525	758.1
608	2	19b	59.16	0.295	59.455	60.625	541.1
609	2	19b	59.16	0.36	59.52	60.69	746.2
610	2	19b	59.16	0.415	59.575	60.745	613.4

Tule Lake sample no.	core no.	drive no.	drive depth (m)	sample depth in drive (m)	sample depth in core (m)	Adjusted depth in core (m)	Sample density kg/m3
611	2	19b	59.16	0.605	59.765	60.935	565.3
612	2	19b	59.16	0.745	59.905	61.075	595.7
613	2	19b	59.16	0.8825	60.0425	61.2125	733.2
614	2	19b	59.16	0.9725	60.1325	61.3025	558.8
615	2	19b	59.16	1.08	60.24	61.41	622.3
616	2	19b	59.16	1.135	60.295	61.465	661.3
617	2	19b	59.16	1.195	60.355	61.525	684.6

TABLE 2. Sediment Magnetic Data

Sample no.: A unique sample number used for all measurements.

Core no.: Core number from which sample was taken.

Depth: Depth of sample in meters from top of the core.

Adjusted depth: The adjusted depth in meters from the top of the core.

MSLF: Low-frequency magnetic susceptibility in m^3/kg.

FDMS: Frequency-dependent magnetic susceptibility in percent.

IRM (1.2T): Isothermal remanent magnetization from induction in a 1.2 tesla field at room temperature. Expressed in Am^2/kg.

IRM (-.3T): Isothermal remanent magnetization from induction in a -0.3 tesla field at room temperature. Expressed in Am^2/kg.

S: (S Ratio) calculated as IRM (-0.3T)/IRM(1.2T).

HIRM: Hard isothermal remanent magnetization: HIRM is calculated as: [IRM(1.2T) + IRM(-0.3T)]/2 and expressed in Am^2/kg.

ARM: Anhysteretic remanent magnetization in Am^2/kg.

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
1	1	0.875	0.875	1.29E-07	-2.722	8.81E-04	6.93E-04	0.79	9.43E-05	2.10E-05
2	1	1.005	1.005	2.64E-07	2.718	5.15E-03	4.36E-03	0.85	3.97E-04	6.81E-05
3	1	1.1	1.1	1.53E-07	0.166	1.72E-03	1.46E-03	0.85	1.30E-04	3.48E-05
4	1	1.17	1.17	1.24E-07	-1.154	1.47E-03	1.25E-03	0.85	1.08E-04	2.74E-05
5	1	1.22	1.22	2.72E-07	4.24	3.76E-03	3.29E-03	0.88	2.35E-04	7.22E-05
6	1	1.285	1.285	1.74E-07	0.86	2.13E-03	1.76E-03	0.82	1.88E-04	3.73E-05
7	1	1.565	1.565	6.67E-07	4.418	1.15E-02	1.07E-02	0.93	3.96E-04	2.30E-04
8	1	1.645	1.645	1.62E-07	0.617	1.98E-03	1.65E-03	0.83	1.64E-04	4.29E-05
9	1	1.7	1.7	1.97E-07	1.681	2.47E-03	1.99E-03	0.81	2.39E-04	4.19E-05
10	1	1.76	1.76	2.53E-07	3.502	3.33E-03	2.69E-03	0.81	3.24E-04	5.73E-05
11	1	1.815	1.815	1.48E-07	-0.499	1.34E-03	1.06E-03	0.79	1.42E-04	3.09E-05
12	1	1.86	1.86	1.61E-07	1.108	1.55E-03	1.23E-03	0.79	1.62E-04	3.31E-05
13	1	1.915	1.915	1.59E-07	-0.33	1.53E-03	1.22E-03	0.80	1.55E-04	3.16E-05
14	1	1.97	1.97	1.48E-07	-0.381	1.28E-03	1.01E-03	0.79	1.35E-04	2.79E-05
15	1	2.05	2.05	1.54E-07	-0.981	1.42E-03	1.12E-03	0.79	1.51E-04	2.50E-05
16	1	2.1	2.1	2.66E-07	6.028	1.80E-03	1.49E-03	0.83	1.56E-04	3.61E-05
17	1	2.15	2.15	1.47E-06	11.13	4.03E-03	3.59E-03	0.89	2.17E-04	8.31E-05
18	1	2.2	2.2	1.76E-06	7.136	8.04E-03	7.50E-03	0.93	2.72E-04	1.49E-04
19	1	2.245	2.245	8.06E-07	6.09	5.55E-03	5.03E-03	0.91	2.59E-04	1.03E-04
20	1	2.315	2.315	3.89E-07	3.453	4.27E-03	3.61E-03	0.84	3.31E-04	7.85E-05
21	1	2.38	2.38	5.22E-07	4.68	5.03E-03	4.41E-03	0.88	3.14E-04	9.20E-05
22	1	2.44	2.44	5.34E-07	4.308	3.90E-03	3.34E-03	0.86	2.78E-04	8.08E-05
23	1	2.56	2.56	1.77E-07	-4.639	1.92E-03	1.52E-03	0.79	2.03E-04	4.58E-05
24	1	2.62	2.62	1.66E-07	-5.893	1.89E-03	1.47E-03	0.78	2.08E-04	4.34E-05
25	1	2.675	2.675	1.50E-07	-4.205	1.60E-03	1.25E-03	0.78	1.72E-04	4.00E-05
26	1	2.735	2.735	1.50E-07	-4.084	1.67E-03	1.31E-03	0.78	1.82E-04	3.77E-05
27	1	2.78	2.78	1.86E-07	-0.611	2.23E-03	1.74E-03	0.78	2.45E-04	4.77E-05
28	1	2.875	2.875	1.58E-07	-3.788	1.81E-03	1.42E-03	0.79	1.92E-04	4.35E-05
29	1	2.94	2.94	1.20E-07	-7.052	1.40E-03	1.10E-03	0.79	1.49E-04	3.51E-05
30	1	3.18	3.18	3.05E-07	2.349	2.88E-03	2.44E-03	0.85	2.18E-04	6.28E-05
31	1	3.235	3.235	1.89E-07	-1.114	1.89E-03	1.51E-03	0.80	1.89E-04	4.28E-05
32	1	3.29	3.29	2.19E-07	1.791	1.91E-03	1.53E-03	0.80	1.91E-04	4.21E-05
33	1	3.34	3.34	2.01E-07	-0.332	1.66E-03	1.35E-03	0.82	1.52E-04	3.27E-05
34	1	3.395	3.395	1.46E-07	-3.167	1.40E-03	1.10E-03	0.79	1.49E-04	3.20E-05
35	1	3.445	3.445	1.32E-07	-5.386	1.33E-03	1.03E-03	0.78	1.46E-04	3.07E-05
36	1	3.525	3.525	1.15E-07	-6.497	1.05E-03	8.46E-04	0.80	1.04E-04	1.91E-05
37	1	3.575	3.575	1.39E-07	-3.257	1.34E-03	1.05E-03	0.78	1.45E-04	2.76E-05
38	1	3.63	3.63	1.26E-07	-4.385	1.23E-03	9.71E-04	0.79	1.31E-04	2.72E-05
39	1	3.69	3.69	1.59E-07	-1.526	1.68E-03	1.32E-03	0.79	1.80E-04	3.40E-05
40	1	3.875	3.875	2.88E-07	5.296	4.72E-03	3.67E-03	0.78	5.28E-04	8.46E-05
41	1	3.94	3.94	4.74E-07	7.449	9.09E-03	7.05E-03	0.78	1.02E-03	1.58E-04
42	1	4.005	4.005	4.82E-07	7.791	9.16E-03	7.14E-03	0.78	1.01E-03	1.58E-04
43	1	4.06	4.06	8.54E-07	10.89	1.51E-02	1.18E-02	0.78	1.65E-03	2.76E-04
44	1	4.12	4.12	5.68E-07	10.09	8.03E-03	6.93E-03	0.86	5.53E-04	1.65E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
45	1	4.19	4.19	4.36E-07	7.713	7.02E-03	6.19E-03	0.88	4.16E-04	1.48E-04
46	1	4.245	4.245	2.28E-07	6.101	2.63E-03	2.32E-03	0.88	1.57E-04	5.99E-05
47	1	4.315	4.315	8.45E-08	-9.51	8.11E-04	6.81E-04	0.84	6.47E-05	1.46E-05
48	1	4.37	4.37	8.79E-08	-8.323	9.93E-04	8.21E-04	0.83	8.62E-05	1.68E-05
49	1	4.44	4.44	1.61E-07	1.041	2.18E-03	1.78E-03	0.82	1.98E-04	3.55E-05
50	1	4.615	4.615	2.51E-07	2.81	3.47E-03	2.97E-03	0.86	2.51E-04	5.24E-05
51	1	4.665	4.665	2.52E-07	3.807	3.44E-03	2.82E-03	0.82	3.09E-04	5.10E-05
52	1	4.7	4.7	1.76E-07	-1.221	2.37E-03	1.96E-03	0.83	2.05E-04	4.02E-05
53	1	4.79	4.79	2.03E-07	2.536	3.00E-03	2.48E-03	0.83	2.59E-04	4.75E-05
54	1	4.84	4.84	3.15E-07	5.361	5.23E-03	4.23E-03	0.81	4.99E-04	7.22E-05
55	1	4.895	4.895	2.75E-07	4.619	4.06E-03	3.30E-03	0.81	3.81E-04	6.08E-05
56	1	4.94	4.94	2.64E-07	4.066	3.96E-03	3.22E-03	0.81	3.69E-04	5.85E-05
57	1	4.995	4.995	2.07E-07	1.146	2.75E-03	2.23E-03	0.81	2.59E-04	4.61E-05
58	1	5.045	5.045	2.38E-07	3.511	3.52E-03	2.85E-03	0.81	3.34E-04	5.46E-05
59	1	5.095	5.095	2.47E-07	3.14	3.63E-03	2.94E-03	0.81	3.45E-04	5.61E-05
60	1	5.145	5.145	2.10E-07	2.234	2.87E-03	2.32E-03	0.81	2.74E-04	4.55E-05
61	1	5.195	5.195	2.42E-07	3.062	3.45E-03	2.79E-03	0.81	3.29E-04	5.56E-05
62	1	5.245	5.245	2.26E-07	1.68	3.04E-03	2.45E-03	0.81	2.95E-04	4.93E-05
63	1	5.39	5.39	3.18E-07	4.334	4.17E-03	3.39E-03	0.81	3.91E-04	6.98E-05
64	1	5.4525	5.4525	2.92E-07	3.029	3.74E-03	2.99E-03	0.80	3.74E-04	6.12E-05
65	1	5.51	5.51	3.08E-07	3.129	4.19E-03	3.39E-03	0.81	4.03E-04	7.10E-05
66	1	5.56	5.56	2.83E-07	2.893	3.71E-03	2.99E-03	0.81	3.59E-04	6.53E-05
67	1	5.6175	5.6175	3.17E-07	2.593	4.43E-03	3.61E-03	0.81	4.10E-04	7.37E-05
68	1	5.675	5.675	2.65E-07	1.958	3.25E-03	2.62E-03	0.81	3.15E-04	6.05E-05
69	1	5.7275	5.7275	2.67E-07	2.561	3.39E-03	2.76E-03	0.81	3.18E-04	6.22E-05
70	1	5.775	5.775	4.89E-07	5.695	7.26E-03	6.04E-03	0.83	6.13E-04	1.14E-04
71	1	5.83	5.83	4.19E-07	4.551	5.65E-03	4.68E-03	0.83	4.85E-04	9.09E-05
72	1	5.9	5.9	4.13E-07	4.784	5.15E-03	4.14E-03	0.80	5.09E-04	8.44E-05
73	1	6.92	6.92	4.50E-07	3.02	5.98E-03	4.93E-03	0.82	5.24E-04	8.80E-05
74	1	7.03	7.03	5.01E-07	3.097	6.40E-03	5.40E-03	0.84	5.00E-04	9.85E-05
75	1	7.105	7.105	5.29E-07	2.856	6.84E-03	5.73E-03	0.84	5.52E-04	1.04E-04
76	1	7.2	7.2	5.44E-07	2.858	6.80E-03	5.77E-03	0.85	5.14E-04	1.05E-04
77	1	7.2775	7.2775	5.54E-07	2.943	6.71E-03	5.74E-03	0.86	4.83E-04	1.04E-04
1	2	6.136	7.306	3.83E-07	3.836	4.56E-03	3.64E-03	0.80	4.58E-04	7.35E-05
78	1	7.345	7.345	6.43E-07	3.311	7.94E-03	6.81E-03	0.86	5.62E-04	1.25E-04
2	2	6.196	7.366	4.16E-07	3.948	5.19E-03	4.19E-03	0.81	4.98E-04	8.01E-05
3	2	6.236	7.406	4.33E-07	3.827	5.31E-03	4.31E-03	0.81	5.03E-04	8.42E-05
79	1	7.415	7.415	5.71E-07	3.448	8.42E-03	7.07E-03	0.84	6.76E-04	1.47E-04
4	2	6.296	7.466	5.14E-07	3.738	6.52E-03	5.37E-03	0.82	5.73E-04	1.00E-04
80	1	7.505	7.505	6.26E-07	3.024	7.96E-03	6.93E-03	0.87	5.16E-04	1.78E-04
5	2	6.341	7.511	4.78E-07	3.496	6.09E-03	5.04E-03	0.83	5.27E-04	9.21E-05
6	2	6.416	7.586	3.66E-07	3.25	4.46E-03	3.59E-03	0.80	4.38E-04	7.10E-05
7	2	6.466	7.636	4.12E-07	5.837	4.37E-03	3.50E-03	0.80	4.35E-04	7.42E-05
81	1	7.675	7.675	6.28E-07	3.566	8.23E-03	7.16E-03	0.87	5.35E-04	2.28E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
8	2	6.531	7.701	3.99E-07	3.231	5.11E-03	4.19E-03	0.82	4.61E-04	8.01E-05
82	1	7.7325	7.7325	4.84E-07	2.116	6.30E-03	5.44E-03	0.86	4.32E-04	1.54E-04
9	2	6.591	7.761	4.94E-07	3.166	6.43E-03	5.32E-03	0.83	5.53E-04	9.84E-05
83	1	7.79	7.79	6.06E-07	2.819	8.27E-03	7.22E-03	0.87	5.26E-04	2.27E-04
10	2	6.641	7.811	6.12E-07	3.246	7.61E-03	6.52E-03	0.86	5.45E-04	1.40E-04
11	2	6.666	7.836	4.98E-07	3.235	6.42E-03	5.36E-03	0.83	5.32E-04	1.13E-04
84	1	7.8575	7.8575	5.93E-07	3.612	8.40E-03	7.12E-03	0.85	6.39E-04	1.89E-04
12	2	6.741	7.911	8.69E-07	3.943	1.19E-02	1.05E-02	0.88	7.04E-04	3.32E-04
85	1	7.945	7.945	6.12E-07	2.755	8.34E-03	7.29E-03	0.87	5.25E-04	2.24E-04
13	2	6.796	7.966	9.06E-07	3.841	1.57E-02	1.35E-02	0.86	1.12E-03	3.10E-04
86	1	8.005	8.005	5.26E-07	2.767	6.83E-03	5.82E-03	0.85	5.01E-04	1.30E-04
14	2	6.856	8.026	6.32E-07	4.32	8.22E-03	7.15E-03	0.87	5.35E-04	1.99E-04
87	1	8.08	8.08	7.76E-07	3.105	1.02E-02	9.22E-03	0.90	5.11E-04	3.21E-04
15	2	6.941	8.111	7.27E-07	3.159	9.88E-03	8.74E-03	0.88	5.70E-04	3.19E-04
88	1	8.155	8.155	8.39E-07	3.371	1.16E-02	1.04E-02	0.90	5.95E-04	3.27E-04
16	2	7.006	8.176	5.95E-07	3.433	7.87E-03	7.07E-03	0.90	4.03E-04	3.48E-04
17	2	7.066	8.236	2.13E-07	2.484	2.64E-03	2.12E-03	0.80	2.58E-04	8.90E-05
89	1	8.26	8.26	6.86E-07	2.607	8.88E-03	7.98E-03	0.90	4.52E-04	2.35E-04
18	2	7.171	8.341	6.00E-07	2.994	7.90E-03	7.07E-03	0.89	4.15E-04	2.80E-04
90	1	8.36	8.36	8.16E-08	-3.55	4.35E-04	3.78E-04	0.87	2.85E-05	9.47E-06
19	2	7.236	8.406	7.80E-07	3.718	1.01E-02	9.16E-03	0.91	4.80E-04	4.44E-04
91	1	8.45	8.45	5.88E-07	2.715	7.13E-03	6.39E-03	0.90	3.74E-04	1.85E-04
20	2	7.301	8.471	7.62E-07	3.848	9.89E-03	8.84E-03	0.89	5.26E-04	3.82E-04
92	1	8.545	8.545	9.03E-07	3.592	1.16E-02	1.07E-02	0.92	4.50E-04	5.37E-04
21	2	7.381	8.551	8.14E-07	3.875	1.07E-02	9.57E-03	0.90	5.48E-04	4.04E-04
93	1	8.61	8.61	9.62E-07	3.853	1.30E-02	1.19E-02	0.92	5.47E-04	5.56E-04
22	2	7.456	8.626	6.66E-07	3.887	8.66E-03	7.62E-03	0.88	5.23E-04	2.46E-04
94	1	8.67	8.67	8.45E-07	3.452	1.13E-02	1.03E-02	0.91	5.18E-04	4.45E-04
23	2	7.541	8.711	5.38E-07	3.493	7.40E-03	6.19E-03	0.84	6.06E-04	1.31E-04
95	1	8.73	8.73	7.15E-07	3.486	9.76E-03	8.65E-03	0.89	5.58E-04	3.32E-04
96	1	8.78	8.78	8.71E-07	3.319	1.16E-02	1.05E-02	0.91	5.47E-04	4.35E-04
97	1	8.835	8.835	8.41E-07	3.748	1.14E-02	1.04E-02	0.92	4.73E-04	5.45E-04
98	1	8.8925	8.8925	6.70E-07	3.534	9.20E-03	7.91E-03	0.86	6.43E-04	1.81E-04
99	1	9.0675	9.0675	4.41E-07	3.281	6.10E-03	5.06E-03	0.83	5.23E-04	9.64E-05
100	1	9.1475	9.1475	4.13E-07	2.639	5.47E-03	4.53E-03	0.83	4.69E-04	9.53E-05
101	1	9.9775	9.9775	4.72E-07	3.566	6.69E-03	5.62E-03	0.84	5.37E-04	1.03E-04
102	1	10.043	10.0425	4.28E-07	3.554	6.06E-03	5.11E-03	0.84	4.72E-04	9.49E-05
103	1	10.11	10.11	2.26E-07	3.599	2.52E-03	1.95E-03	0.77	2.86E-04	4.63E-05
104	1	10.185	10.185	3.04E-07	4.194	4.15E-03	3.26E-03	0.79	4.42E-04	6.69E-05
105	1	10.253	10.2525	2.43E-07	2.199	2.81E-03	2.19E-03	0.78	3.08E-04	4.99E-05
106	1	10.33	10.33	2.40E-07	2.128	2.82E-03	2.18E-03	0.78	3.16E-04	5.20E-05
24	2	9.219	10.389	4.22E-07	2.447	5.72E-03	4.76E-03	0.83	4.79E-04	8.91E-05
107	1	10.418	10.4175	3.40E-07	3.507	4.53E-03	3.66E-03	0.81	4.36E-04	6.96E-05
25	2	9.304	10.474	4.83E-07	3.211	7.01E-03	5.86E-03	0.84	5.77E-04	1.06E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
108	1	10.508	10.5075	5.60E-07	4.212	8.08E-03	6.89E-03	0.85	5.94E-04	1.11E-04
26	2	9.359	10.529	3.06E-07	1.962	4.14E-03	3.30E-03	0.80	4.25E-04	6.47E-05
27	2	9.394	10.564	2.11E-07	1.206	2.29E-03	1.74E-03	0.76	2.78E-04	4.37E-05
109	1	10.598	10.5975	5.36E-07	4.253	7.77E-03	6.57E-03	0.84	6.03E-04	1.25E-04
28	2	9.459	10.629	2.95E-07	2.054	3.94E-03	3.09E-03	0.78	4.27E-04	6.17E-05
110	1	10.683	10.6825	1.05E-06	4.369	1.65E-02	1.50E-02	0.91	7.47E-04	2.74E-04
29	2	9.554	10.724	2.90E-07	2.054	3.90E-03	3.10E-03	0.80	3.99E-04	6.17E-05
30	2	9.624	10.794	3.94E-07	3.033	5.51E-03	4.58E-03	0.83	4.65E-04	8.19E-05
31	2	9.694	10.864	5.63E-07	3.43	8.33E-03	7.12E-03	0.85	6.05E-04	1.13E-04
32	2	9.784	10.954	1.01E-06	4.436	1.61E-02	1.46E-02	0.90	7.72E-04	2.42E-04
33	2	9.854	11.024	5.05E-07	2.808	6.67E-03	5.64E-03	0.85	5.17E-04	1.34E-04
34	2	9.909	11.079	5.26E-07	3.014	7.30E-03	6.18E-03	0.85	5.58E-04	1.32E-04
35	2	9.959	11.129	5.14E-07	3.301	6.79E-03	5.73E-03	0.84	5.29E-04	1.27E-04
36	2	10.039	11.209	4.98E-07	3.548	6.59E-03	5.56E-03	0.84	5.14E-04	1.19E-04
37	2	10.129	11.299	5.49E-07	3.594	7.41E-03	6.29E-03	0.85	5.58E-04	1.34E-04
38	2	10.169	11.339	5.63E-07	4.023	7.65E-03	6.44E-03	0.84	6.05E-04	1.44E-04
111	1	11.493	11.4925	4.27E-07	3.739	5.53E-03	4.54E-03	0.82	4.95E-04	9.50E-05
112	1	11.56	11.56	4.71E-07	4.037	6.37E-03	5.26E-03	0.83	5.53E-04	1.07E-04
113	1	11.618	11.6175	6.12E-07	4.629	8.69E-03	7.23E-03	0.83	7.27E-04	1.38E-04
39	2	10.509	11.679	5.67E-07	3.607	7.25E-03	6.09E-03	0.84	5.81E-04	1.24E-04
114	1	11.68	11.68	5.39E-07	4.319	7.66E-03	6.22E-03	0.81	7.22E-04	1.10E-04
40	2	10.572	11.7415	2.20E-07	2.712	2.51E-03	1.85E-03	0.74	3.29E-04	4.64E-05
115	1	11.758	11.7575	4.29E-07	3.509	5.58E-03	4.54E-03	0.81	5.24E-04	9.23E-05
41	2	10.634	11.804	2.27E-07	2.881	2.44E-03	1.82E-03	0.75	3.08E-04	4.42E-05
116	1	11.83	11.83	2.56E-07	2.782	3.20E-03	2.47E-03	0.77	3.66E-04	5.60E-05
42	2	10.674	11.844	2.39E-07	2.383	2.67E-03	2.07E-03	0.77	3.01E-04	4.87E-05
117	1	11.893	11.8925	3.07E-07	3.069	4.02E-03	3.15E-03	0.79	4.30E-04	6.53E-05
43	2	10.734	11.904	2.99E-07	3.956	4.15E-03	3.18E-03	0.77	4.85E-04	6.24E-05
44	2	10.784	11.954	2.96E-07	2.989	3.75E-03	2.95E-03	0.79	4.03E-04	6.09E-05
118	1	11.963	11.9625	3.00E-07	2.766	3.84E-03	3.02E-03	0.79	4.12E-04	6.42E-05
45	2	10.832	12.0015	3.86E-07	3.802	5.29E-03	4.23E-03	0.80	5.31E-04	7.94E-05
119	1	12.04	12.04	4.07E-07	3.378	5.65E-03	4.66E-03	0.82	4.95E-04	8.45E-05
46	2	10.874	12.044	3.44E-07	1.68	4.34E-03	3.43E-03	0.79	4.55E-04	7.58E-05
47	2	10.927	12.0965	5.02E-07	3.204	7.19E-03	5.98E-03	0.83	6.06E-04	1.04E-04
120	1	12.12	12.12	6.15E-07	4.255	8.77E-03	7.46E-03	0.85	6.57E-04	1.30E-04
48	2	10.964	12.134	5.56E-07	3.287	7.82E-03	6.66E-03	0.85	5.79E-04	1.16E-04
49	2	11.007	12.1765	6.32E-07	3.607	9.09E-03	7.69E-03	0.85	6.99E-04	1.39E-04
50	2	11.052	12.2215	6.02E-07	4.129	8.37E-03	6.97E-03	0.83	7.03E-04	1.31E-04
121	1	12.255	12.255	5.86E-07	4.853	8.08E-03	6.64E-03	0.82	7.17E-04	1.16E-04
51	2	11.094	12.264	6.71E-07	4.433	1.01E-02	8.31E-03	0.82	8.85E-04	1.43E-04
52	2	11.139	12.309	4.80E-07	3.716	6.33E-03	5.26E-03	0.83	5.33E-04	9.96E-05
53	2	11.179	12.349	7.32E-07	4.377	1.03E-02	8.75E-03	0.85	7.76E-04	1.65E-04
54	2	11.227	12.3965	7.23E-07	4.847	1.05E-02	8.76E-03	0.83	8.89E-04	1.68E-04
55	2	11.267	12.4365	6.88E-07	4.871	1.08E-02	8.83E-03	0.82	9.81E-04	1.59E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
56	2	11.319	12.489	5.01E-07	5.239	7.19E-03	5.75E-03	0.80	7.20E-04	9.95E-05
57	2	11.429	12.599	7.42E-07	6.114	1.22E-02	9.79E-03	0.80	1.23E-03	1.65E-04
58	2	11.479	12.649	1.12E-06	6.748	2.18E-02	1.73E-02	0.79	2.26E-03	2.68E-04
59	2	11.539	12.709	8.22E-07	5.85	1.57E-02	1.24E-02	0.79	1.63E-03	2.00E-04
60	2	11.609	12.779	5.91E-07	5.548	8.24E-03	6.70E-03	0.81	7.67E-04	1.18E-04
61	2	12.235	13.4045	5.07E-07	6.122	7.75E-03	6.20E-03	0.80	7.76E-04	9.77E-05
62	2	12.322	13.492	2.68E-07	5.131	3.52E-03	2.68E-03	0.76	4.20E-04	5.84E-05
63	2	12.362	13.532	6.82E-07	8.068	1.03E-02	8.00E-03	0.78	1.14E-03	1.18E-04
64	2	12.397	13.567	4.43E-07	8.496	4.43E-03	3.42E-03	0.77	5.07E-04	6.84E-05
65	2	12.455	13.6245	1.95E-07	3.541	2.33E-03	1.81E-03	0.78	2.61E-04	4.61E-05
66	2	12.505	13.6745	1.80E-07	2.734	2.04E-03	1.53E-03	0.75	2.59E-04	4.10E-05
67	2	12.552	13.722	1.76E-07	2.097	2.20E-03	1.65E-03	0.75	2.74E-04	4.55E-05
68	2	12.612	13.782	1.89E-07	2.097	2.39E-03	1.82E-03	0.76	2.85E-04	5.02E-05
69	2	12.665	13.8345	1.87E-07	1.547	2.63E-03	2.02E-03	0.77	3.05E-04	5.13E-05
70	2	12.707	13.877	2.02E-07	2.909	3.02E-03	2.36E-03	0.78	3.32E-04	6.14E-05
71	2	12.752	13.922	2.24E-07	3.129	3.81E-03	3.02E-03	0.79	3.92E-04	7.32E-05
72	2	12.782	13.952	2.74E-07	2.992	5.02E-03	4.06E-03	0.81	4.80E-04	9.10E-05
73	2	12.815	13.9845	3.77E-07	6.636	5.95E-03	4.93E-03	0.83	5.09E-04	1.05E-04
74	2	12.877	14.047	4.72E-07	11.86	4.61E-03	3.91E-03	0.85	3.51E-04	8.48E-05
75	2	12.922	14.092	3.23E-07	9.388	3.40E-03	2.90E-03	0.85	2.52E-04	6.39E-05
76	2	12.962	14.132	2.45E-07	4.939	2.80E-03	2.35E-03	0.84	2.21E-04	4.63E-05
77	2	13.052	14.222	1.53E-07	-1.46	1.71E-03	1.29E-03	0.75	2.13E-04	3.66E-05
78	2	13.102	14.272	1.89E-07	0.91	2.13E-03	1.65E-03	0.78	2.38E-04	4.59E-05
79	2	13.152	14.322	2.51E-07	1.91	3.12E-03	2.61E-03	0.84	2.54E-04	6.98E-05
80	2	13.182	14.352	2.69E-07	1.414	3.65E-03	3.16E-03	0.86	2.49E-04	8.29E-05
81	2	13.232	14.402	1.86E-07	0.143	2.13E-03	1.63E-03	0.76	2.54E-04	4.45E-05
82	2	13.267	14.437	1.73E-07	-1.411	1.96E-03	1.48E-03	0.76	2.40E-04	4.03E-05
83	2	13.307	14.477	1.76E-07	-0.706	2.04E-03	1.57E-03	0.77	2.37E-04	4.12E-05
84	2	13.352	14.522	1.47E-07	-3.36	1.45E-03	1.08E-03	0.75	1.83E-04	3.32E-05
85	2	13.382	14.552	1.69E-07	-1.661	1.78E-03	1.35E-03	0.76	2.12E-04	3.62E-05
86	2	13.437	14.607	1.70E-07	-0.883	1.79E-03	1.36E-03	0.76	2.18E-04	3.68E-05
87	2	13.502	14.672	1.71E-07	-0.659	1.72E-03	1.29E-03	0.75	2.10E-04	3.40E-05
88	2	13.552	14.722	1.61E-07	-0.43	1.73E-03	1.30E-03	0.75	2.14E-04	3.37E-05
89	2	13.592	14.762	1.58E-07	-0.361	1.80E-03	1.34E-03	0.74	2.32E-04	3.52E-05
90	2	13.642	14.812	1.71E-07	1.066	2.08E-03	1.56E-03	0.75	2.63E-04	3.83E-05
91	2	13.687	14.857	1.68E-07	0.721	2.15E-03	1.59E-03	0.74	2.78E-04	3.90E-05
92	2	13.732	14.902	1.78E-07	-1.353	2.45E-03	1.83E-03	0.75	3.11E-04	4.22E-05
93	2	13.797	14.967	1.77E-07	2.274	2.30E-03	1.72E-03	0.75	2.89E-04	4.02E-05
94	2	13.847	15.017	1.66E-07	1.309	2.22E-03	1.67E-03	0.75	2.77E-04	3.67E-05
95	2	13.892	15.062	1.82E-07	1.722	2.46E-03	1.85E-03	0.75	3.09E-04	4.24E-05
96	2	13.942	15.112	1.89E-07	1.866	2.80E-03	2.09E-03	0.75	3.57E-04	4.52E-05
97	2	13.982	15.152	1.97E-07	1.546	2.91E-03	2.18E-03	0.75	3.67E-04	4.77E-05
98	2	14.032	15.202	1.95E-07	1.862	2.74E-03	2.07E-03	0.75	3.38E-04	4.62E-05
99	2	14.092	15.262	2.08E-07	3.302	2.92E-03	2.20E-03	0.75	3.62E-04	5.13E-05

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
100	2	14.152	15.322	2.17E-07	3.035	3.14E-03	2.37E-03	0.76	3.85E-04	5.30E-05
101	2	14.192	15.362	2.38E-07	2.71	3.50E-03	2.66E-03	0.76	4.18E-04	5.71E-05
102	2	14.265	15.4345	2.26E-07	2.092	3.28E-03	2.48E-03	0.76	3.99E-04	5.32E-05
103	2	14.312	15.482	2.21E-07	1.235	3.15E-03	2.38E-03	0.75	3.87E-04	5.23E-05
104	2	14.375	15.5445	2.47E-07	2.125	3.50E-03	2.66E-03	0.76	4.21E-04	5.72E-05
105	2	14.425	15.5945	2.49E-07	2.024	3.65E-03	2.78E-03	0.76	4.36E-04	5.97E-05
106	2	14.485	15.6545	2.58E-07	2.385	3.80E-03	2.90E-03	0.76	4.48E-04	6.12E-05
107	2	14.547	15.717	2.72E-07	2.655	4.08E-03	3.13E-03	0.77	4.76E-04	6.57E-05
108	2	14.605	15.7745	2.92E-07	1.879	4.45E-03	3.43E-03	0.77	5.11E-04	7.06E-05
109	2	14.667	15.837	2.89E-07	2.437	4.34E-03	3.37E-03	0.78	4.88E-04	7.14E-05
110	2	14.725	15.8945	3.07E-07	2.783	4.71E-03	3.67E-03	0.78	5.19E-04	7.60E-05
111	2	14.77	15.9395	3.29E-07	2.956	4.97E-03	3.85E-03	0.77	5.59E-04	7.87E-05
112	2	14.862	16.032	2.88E-07	2.732	4.11E-03	3.13E-03	0.76	4.90E-04	6.89E-05
113	2	14.912	16.082	3.03E-07	2.727	4.41E-03	3.36E-03	0.76	5.28E-04	7.20E-05
114	2	15.29	16.46	2.94E-07	3.746	4.29E-03	3.28E-03	0.77	5.03E-04	6.72E-05
115	2	15.343	16.5125	2.89E-07	2.568	4.36E-03	3.32E-03	0.76	5.24E-04	6.78E-05
116	2	15.418	16.5875	2.88E-07	2.771	4.32E-03	3.28E-03	0.76	5.23E-04	6.79E-05
117	2	15.46	16.63	2.73E-07	2.595	3.95E-03	2.99E-03	0.76	4.81E-04	6.31E-05
118	2	15.5	16.67	2.78E-07	2.719	4.06E-03	3.06E-03	0.75	5.00E-04	6.30E-05
119	2	15.545	16.715	3.50E-07	4.187	6.37E-03	4.81E-03	0.76	7.80E-04	8.08E-05
120	2	15.59	16.76	3.50E-07	3.817	7.08E-03	5.36E-03	0.76	8.58E-04	8.79E-05
121	2	15.635	16.805	1.87E-07	0.011	2.46E-03	1.84E-03	0.74	3.14E-04	4.11E-05
122	2	15.673	16.8425	1.84E-07	0.804	2.43E-03	1.81E-03	0.74	3.10E-04	4.07E-05
123	2	15.73	16.9	1.92E-07	2.225	2.75E-03	2.03E-03	0.74	3.57E-04	4.47E-05
124	2	15.77	16.94	1.96E-07	-1.067	3.12E-03	2.29E-03	0.73	4.13E-04	4.67E-05
125	2	15.82	16.99	1.82E-07	0.323	2.91E-03	2.13E-03	0.73	3.92E-04	4.33E-05
126	2	15.895	17.065	2.90E-07	2.656	8.03E-03	5.99E-03	0.75	1.02E-03	7.99E-05
127	2	15.97	17.14	1.51E-07	1.096	2.47E-03	1.82E-03	0.74	3.22E-04	3.44E-05
128	2	16.043	17.2125	1.76E-07	-0.892	2.31E-03	1.72E-03	0.75	2.93E-04	3.79E-05
129	2	16.085	17.255	1.45E-07	-3.406	1.72E-03	1.29E-03	0.75	2.18E-04	3.29E-05
130	2	16.14	17.31	1.34E-07	-4.013	1.57E-03	1.17E-03	0.74	2.03E-04	2.88E-05
131	2	16.2	17.37	1.48E-07	-0.192	1.72E-03	1.28E-03	0.74	2.23E-04	3.21E-05
132	2	16.258	17.4275	1.50E-07	-0.183	1.63E-03	1.20E-03	0.74	2.12E-04	2.96E-05
133	2	16.315	17.485	1.49E-07	-0.564	1.58E-03	1.17E-03	0.74	2.03E-04	3.17E-05
134	2	16.368	17.5375	1.43E-07	-1.22	1.39E-03	1.04E-03	0.75	1.77E-04	2.97E-05
135	2	16.42	17.59	1.43E-07	-0.035	1.42E-03	1.06E-03	0.74	1.84E-04	3.17E-05
136	2	16.458	17.6275	1.90E-07	1.49	2.44E-03	1.82E-03	0.75	3.10E-04	4.26E-05
137	2	16.503	17.6725	2.14E-07	3.435	2.87E-03	2.16E-03	0.75	3.56E-04	4.97E-05
138	2	16.555	17.725	1.83E-07	2.126	1.88E-03	1.89E-03	1.01	-7.07E-06	4.22E-05
139	2	16.598	17.7675	2.16E-07	2.245	3.27E-03	2.46E-03	0.75	4.05E-04	5.27E-05
140	2	16.645	17.815	2.09E-07	2.616	3.32E-03	2.46E-03	0.74	4.32E-04	5.44E-05
141	2	16.713	17.8825	3.04E-07	3.86	5.60E-03	4.16E-03	0.74	7.18E-04	8.19E-05
142	2	16.768	17.9375	3.39E-07	4.858	5.71E-03	4.32E-03	0.76	6.94E-04	8.37E-05
143	2	16.828	17.9975	7.79E-07	5.483	1.66E-02	1.32E-02	0.80	1.68E-03	2.00E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
144	2	16.9	18.07	4.56E-07	4.511	1.29E-02	9.98E-03	0.77	1.48E-03	1.39E-04
145	2	16.94	18.11	3.21E-07	4.647	6.37E-03	4.97E-03	0.78	7.01E-04	8.11E-05
146	2	16.97	18.14	2.09E-07	2.667	2.44E-03	1.98E-03	0.81	2.30E-04	4.03E-05
147	2	18.355	19.525	1.34E-07	0.378	1.83E-03	1.44E-03	0.79	1.92E-04	3.63E-05
148	2	18.39	19.56	1.53E-07	2.677	2.18E-03	1.71E-03	0.79	2.32E-04	4.60E-05
149	2	18.438	19.6075	1.60E-07	3.232	2.41E-03	1.90E-03	0.79	2.56E-04	5.02E-05
150	2	18.485	19.655	1.58E-07	5.217	2.35E-03	1.87E-03	0.80	2.39E-04	5.14E-05
151	2	18.54	19.71	1.39E-07	0.877	2.04E-03	1.63E-03	0.80	2.02E-04	4.73E-05
152	2	18.585	19.755	1.79E-07	-0.475	3.16E-03	2.46E-03	0.78	3.49E-04	5.67E-05
153	2	18.638	19.8075	1.51E-07	-1.623	1.81E-03	1.39E-03	0.77	2.06E-04	3.84E-05
154	2	18.69	19.86	1.72E-07	-0.744	2.12E-03	1.69E-03	0.80	2.16E-04	6.83E-05
155	2	18.74	19.91	1.55E-07	-0.476	1.83E-03	1.39E-03	0.76	2.17E-04	3.72E-05
156	2	18.8	19.97	1.74E-07	0.385	2.20E-03	1.70E-03	0.77	2.49E-04	4.44E-05
157	2	18.868	20.0375	1.57E-07	-0.786	2.02E-03	1.56E-03	0.77	2.28E-04	4.31E-05
158	2	18.915	20.085	1.73E-07	2.339	2.17E-03	1.66E-03	0.77	2.53E-04	4.44E-05
159	2	18.96	20.13	1.62E-07	1.719	2.01E-03	1.54E-03	0.77	2.32E-04	4.30E-05
160	2	19.033	20.2025	1.44E-07	-1.214	1.74E-03	1.33E-03	0.77	2.03E-04	3.83E-05
161	2	19.13	20.3	1.63E-07	0.888	2.15E-03	1.68E-03	0.78	2.37E-04	4.36E-05
162	2	19.183	20.3525	1.51E-07	1.775	1.83E-03	1.44E-03	0.79	1.95E-04	4.03E-05
163	2	19.218	20.3875	1.53E-07	1.174	1.88E-03	1.51E-03	0.80	1.88E-04	4.16E-05
164	2	19.27	20.44	1.42E-07	0.06	1.80E-03	1.43E-03	0.80	1.83E-04	3.67E-05
165	2	19.32	20.49	1.40E-07	0.348	1.67E-03	1.35E-03	0.81	1.63E-04	3.74E-05
166	2	19.38	20.55	1.32E-07	1.228	1.56E-03	1.26E-03	0.81	1.52E-04	3.59E-05
167	2	19.433	20.6025	1.36E-07	1.621	1.59E-03	1.28E-03	0.81	1.52E-04	3.53E-05
168	2	19.478	20.6475	1.27E-07	-1.758	1.46E-03	1.18E-03	0.81	1.42E-04	3.37E-05
169	2	19.523	20.6925	1.26E-07	-1.612	1.45E-03	1.16E-03	0.80	1.43E-04	3.31E-05
170	2	19.573	20.7425	1.32E-07	1.07	1.62E-03	1.30E-03	0.80	1.58E-04	3.58E-05
171	2	19.63	20.8	1.25E-07	-0.402	1.46E-03	1.17E-03	0.80	1.44E-04	3.30E-05
172	2	19.68	20.85	1.39E-07	0.588	1.78E-03	1.43E-03	0.80	1.77E-04	3.85E-05
173	2	19.735	20.905	1.20E-07	-1.551	1.57E-03	1.25E-03	0.79	1.62E-04	3.39E-05
174	2	19.79	20.96	1.18E-07	-2.252	1.57E-03	1.24E-03	0.79	1.67E-04	3.43E-05
175	2	19.843	21.0125	1.31E-07	-1.32	1.83E-03	1.45E-03	0.79	1.92E-04	3.80E-05
176	2	19.903	21.0725	1.33E-07	1.396	2.14E-03	1.68E-03	0.79	2.29E-04	4.33E-05
177	2	19.968	21.1375	1.68E-07	2.476	3.10E-03	2.48E-03	0.80	3.09E-04	5.94E-05
178	2	20.035	21.205	2.04E-07	3.484	4.35E-03	3.48E-03	0.80	4.35E-04	7.76E-05
179	2	20.08	21.25	2.17E-07	4.513	4.68E-03	3.74E-03	0.80	4.74E-04	7.77E-05
180	2	20.13	21.3	1.96E-07	2.957	3.82E-03	2.78E-03	0.73	5.20E-04	4.93E-05
181	2	20.17	21.34	2.09E-07	4.159	4.13E-03	3.00E-03	0.73	5.65E-04	5.22E-05
182	2	20.21	21.38	1.95E-07	4.633	3.63E-03	2.67E-03	0.73	4.83E-04	4.85E-05
183	2	20.27	21.44	1.62E-07	2.327	2.62E-03	1.91E-03	0.73	3.53E-04	4.00E-05
184	2	20.323	21.4925	2.02E-07	4.032	3.77E-03	2.73E-03	0.72	5.22E-04	4.82E-05
185	2	20.378	21.5475	2.53E-07	4.407	5.56E-03	3.84E-03	0.69	8.58E-04	5.81E-05
186	2	20.42	21.59	5.41E-07	8.333	1.68E-02	1.07E-02	0.64	3.03E-03	1.17E-04
187	2	20.47	21.64	1.16E-07	-1.532	1.23E-03	1.03E-03	0.84	9.92E-05	2.99E-05

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
188	2	20.533	21.7025	1.25E-07	-0.247	1.34E-03	1.13E-03	0.84	1.06E-04	3.18E-05
189	2	20.58	21.75	1.11E-07	-1.29	1.09E-03	9.05E-04	0.83	9.19E-05	2.63E-05
190	2	20.63	21.8	9.87E-08	-3.293	8.90E-04	7.39E-04	0.83	7.56E-05	2.33E-05
191	2	20.67	21.84	1.27E-07	-1.399	1.38E-03	1.22E-03	0.88	8.07E-05	2.68E-05
192	2	21.383	22.5525	2.59E-07	2.282	3.35E-03	2.80E-03	0.84	2.75E-04	5.46E-05
193	2	21.46	22.63	2.37E-07	3.801	3.01E-03	2.59E-03	0.86	2.13E-04	4.86E-05
194	2	21.523	22.6925	1.12E-07	1.013	1.24E-03	1.06E-03	0.86	8.58E-05	2.61E-05
195	2	21.593	22.7625	8.37E-08	0.492	8.69E-04	7.34E-04	0.84	6.74E-05	1.87E-05
196	2	21.65	22.82	1.05E-07	1.693	1.18E-03	9.87E-04	0.84	9.61E-05	2.38E-05
197	2	21.705	22.875	1.30E-07	3.805	1.71E-03	1.43E-03	0.84	1.39E-04	3.28E-05
198	2	21.763	22.9325	1.17E-07	2.801	1.44E-03	1.21E-03	0.84	1.13E-04	2.96E-05
199	2	21.825	22.995	1.20E-07	1.817	1.30E-03	1.10E-03	0.84	1.02E-04	2.91E-05
200	2	21.87	23.04	1.33E-07	2.196	1.43E-03	1.23E-03	0.85	1.04E-04	2.96E-05
201	2	21.93	23.1	1.18E-07	0.753	1.48E-03	1.24E-03	0.84	1.19E-04	3.28E-05
202	2	22.003	23.1725	1.15E-07	0.165	1.20E-03	9.89E-04	0.83	1.04E-04	2.64E-05
203	2	22.055	23.225	1.02E-07	-1.016	8.96E-04	7.57E-04	0.84	6.98E-05	2.02E-05
204	2	22.103	23.2725	1.09E-07	-2.547	8.92E-04	7.54E-04	0.85	6.88E-05	2.08E-05
205	2	22.16	23.33	1.21E-07	0.312	1.12E-03	9.39E-04	0.84	9.15E-05	2.30E-05
206	2	22.218	23.3875	1.03E-07	-2.413	8.32E-04	7.01E-04	0.84	6.55E-05	2.00E-05
207	2	22.278	23.4475	1.33E-07	-0.024	1.49E-03	1.33E-03	0.89	8.19E-05	2.83E-05
208	2	22.335	23.505	1.12E-07	-2.163	9.69E-04	8.05E-04	0.83	8.17E-05	2.17E-05
209	2	22.388	23.5575	1.27E-07	-1.848	1.11E-03	9.28E-04	0.83	9.29E-05	2.32E-05
210	2	22.45	23.62	1.22E-07	-0.623	1.04E-03	8.46E-04	0.82	9.52E-05	2.22E-05
211	2	22.505	23.675	1.35E-07	1.315	1.10E-03	8.95E-04	0.82	1.01E-04	2.47E-05
212	2	22.56	23.73	1.38E-07	-0.831	1.12E-03	9.03E-04	0.81	1.06E-04	2.52E-05
213	2	22.613	23.7825	1.29E-07	0.974	1.01E-03	8.14E-04	0.81	9.63E-05	2.26E-05
214	2	22.66	23.83	1.40E-07	0.06	1.08E-03	8.71E-04	0.81	1.05E-04	2.36E-05
215	2	22.765	23.935	1.42E-07	0.649	9.31E-04	7.61E-04	0.82	8.51E-05	2.04E-05
216	2	24.445	25.615	7.54E-07	4.265	1.14E-02	1.02E-02	0.89	6.07E-04	3.44E-04
217	2	24.495	25.665	2.06E-06	5.222	3.09E-02	2.84E-02	0.92	1.25E-03	1.08E-03
218	2	24.55	25.72	1.59E-06	5.119	2.60E-02	2.35E-02	0.90	1.25E-03	8.17E-04
219	2	24.64	25.81	1.80E-06	12.87	1.59E-02	1.45E-02	0.91	7.17E-04	5.19E-04
220	2	24.685	25.855	1.13E-06	4.474	1.73E-02	1.55E-02	0.89	9.29E-04	4.45E-04
221	2	24.768	25.9375	1.12E-06	3.89	1.73E-02	1.52E-02	0.88	1.03E-03	4.57E-04
222	2	24.818	25.9875	1.42E-06	4.379	2.26E-02	2.02E-02	0.90	1.18E-03	7.61E-04
223	2	24.87	26.04	1.62E-06	4.134	2.72E-02	2.47E-02	0.91	1.28E-03	8.91E-04
224	2	24.915	26.085	2.41E-06	4.712	4.22E-02	3.72E-02	0.88	2.50E-03	1.28E-03
225	2	24.97	26.14	1.83E-06	4.773	3.10E-02	2.76E-02	0.89	1.69E-03	8.97E-04
226	2	25.013	26.1825	1.55E-06	4.102	2.50E-02	2.26E-02	0.90	1.19E-03	7.60E-04
227	2	25.055	26.225	1.31E-06	3.843	2.03E-02	1.84E-02	0.91	9.26E-04	6.03E-04
228	2	25.1	26.27	1.21E-06	3.875	1.82E-02	1.65E-02	0.90	8.81E-04	5.57E-04
229	2	25.15	26.32	1.14E-06	4.045	1.75E-02	1.57E-02	0.90	8.65E-04	4.81E-04
230	2	25.208	26.3775	1.03E-06	3.459	1.65E-02	1.50E-02	0.91	7.21E-04	5.32E-04
231	2	25.255	26.425	1.09E-06	4.696	1.71E-02	1.58E-02	0.92	6.87E-04	5.81E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
232	2	25.303	26.4725	1.76E-06	4.072	2.64E-02	2.41E-02	0.91	1.17E-03	8.49E-04
233	2	25.353	26.5225	1.03E-06	4	1.50E-02	1.35E-02	0.90	7.30E-04	4.78E-04
234	2	25.403	26.5725	1.13E-06	4.326	1.65E-02	1.48E-02	0.90	8.38E-04	5.23E-04
235	2	25.455	26.625	1.12E-06	4.514	1.59E-02	1.43E-02	0.90	7.78E-04	5.79E-04
236	2	25.53	26.7	8.54E-07	4.176	1.26E-02	1.10E-02	0.87	7.98E-04	3.52E-04
237	2	25.58	26.75	7.95E-07	3.841	1.12E-02	9.77E-03	0.87	7.26E-04	3.02E-04
238	2	25.643	26.8125	8.50E-07	3.708	1.21E-02	1.05E-02	0.87	7.86E-04	3.20E-04
239	2	25.695	26.865	9.13E-07	3.55	1.30E-02	1.14E-02	0.88	7.98E-04	3.55E-04
240	2	25.765	26.935	9.77E-07	3.516	1.41E-02	1.25E-02	0.88	8.45E-04	3.70E-04
241	2	25.82	26.99	9.21E-07	3.371	1.31E-02	0.00E+00		6.56E-03	3.35E-04
242	2	25.928	27.0975	8.12E-07	3.693	1.16E-02	1.00E-02	0.87	7.75E-04	3.03E-04
243	2	25.985	27.155	7.45E-07	3.961	1.09E-02	9.33E-03	0.86	7.62E-04	2.80E-04
244	2	26.053	27.2225	6.35E-07	3.24	9.16E-03	7.88E-03	0.86	6.39E-04	2.12E-04
245	2	26.105	27.275	7.84E-07	3.261	1.13E-02	1.00E-02	0.88	6.56E-04	3.81E-04
246	2	26.16	27.33	6.92E-07	3.276	9.86E-03	8.69E-03	0.88	5.83E-04	3.09E-04
247	2	26.203	27.3725	6.31E-07	2.599	9.04E-03	7.88E-03	0.87	5.80E-04	2.56E-04
248	2	26.25	27.42	6.36E-07	2.29	9.27E-03	8.04E-03	0.87	6.16E-04	2.54E-04
249	2	26.295	27.465	6.30E-07	3.129	9.22E-03	7.95E-03	0.86	6.34E-04	2.00E-04
250	2	26.34	27.51	6.12E-07	2.269	9.00E-03	7.76E-03	0.86	6.17E-04	1.94E-04
251	2	26.385	27.555	6.21E-07	2.961	9.20E-03	7.86E-03	0.85	6.70E-04	1.99E-04
252	2	26.43	27.6	6.21E-07	3.345	9.13E-03	7.80E-03	0.85	6.67E-04	2.11E-04
253	2	26.473	27.6425	5.15E-07	2.655	7.52E-03	6.30E-03	0.84	6.11E-04	1.69E-04
254	2	26.515	27.685	4.49E-07	2.784	6.56E-03	5.32E-03	0.81	6.20E-04	1.21E-04
255	2	26.563	27.7325	4.43E-07	2.646	6.60E-03	5.29E-03	0.80	6.59E-04	1.21E-04
256	2	26.608	27.7775	5.03E-07	2.869	7.52E-03	6.11E-03	0.81	7.05E-04	1.44E-04
257	2	27.5	28.67	5.24E-07	2.532	7.60E-03	6.58E-03	0.87	5.10E-04	1.94E-04
258	2	27.555	28.725	5.13E-07	2.778	7.47E-03	6.45E-03	0.86	5.07E-04	2.06E-04
259	2	27.6	28.77	5.27E-07	3.048	7.73E-03	6.72E-03	0.87	5.04E-04	2.09E-04
260	2	27.653	28.8225	5.12E-07	-6.725	7.45E-03	6.41E-03	0.86	5.20E-04	2.02E-04
261	2	27.7	28.87	5.02E-07	2.788	7.23E-03	6.23E-03	0.86	4.97E-04	2.03E-04
262	2	27.745	28.915	4.87E-07	2.481	6.98E-03	6.03E-03	0.86	4.75E-04	1.96E-04
263	2	27.79	28.96	5.16E-07	4.124	7.22E-03	6.25E-03	0.87	4.86E-04	2.09E-04
264	2	27.848	29.0175	5.54E-07	1.815	7.71E-03	6.70E-03	0.87	5.03E-04	2.03E-04
265	2	27.9	29.07	5.92E-07	2.499	8.27E-03	7.24E-03	0.88	5.12E-04	2.39E-04
266	2	27.95	29.12	6.25E-07	2.953	8.59E-03	7.54E-03	0.88	5.25E-04	2.46E-04
267	2	27.995	29.165	5.90E-07	4.133	8.46E-03	7.40E-03	0.87	5.30E-04	2.48E-04
268	2	28.045	29.215	5.85E-07	2.867	8.72E-03	7.61E-03	0.87	5.54E-04	2.40E-04
269	2	28.095	29.265	6.49E-07	2.717	9.71E-03	8.60E-03	0.89	5.58E-04	2.77E-04
270	2	28.145	29.315	6.35E-07	3.05	9.49E-03	8.40E-03	0.88	5.47E-04	2.58E-04
271	2	28.19	29.36	6.99E-07	2.764	1.05E-02	9.30E-03	0.88	6.06E-04	2.80E-04
272	2	28.253	29.4225	7.48E-07	2.673	1.13E-02	1.00E-02	0.88	6.63E-04	3.03E-04
273	2	28.3	29.47	7.39E-07	2.774	1.12E-02	9.90E-03	0.89	6.32E-04	3.32E-04
274	2	28.355	29.525	7.32E-07	3.09	1.10E-02	9.76E-03	0.89	6.20E-04	3.27E-04
275	2	28.4	29.57	7.43E-07	2.92	1.12E-02	9.87E-03	0.88	6.50E-04	3.21E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
276	2	28.445	29.615	7.70E-07	2.732	1.14E-02	1.02E-02	0.89	6.32E-04	3.31E-04
277	2	28.485	29.655	8.31E-07	3.095	1.26E-02	1.12E-02	0.89	6.78E-04	3.75E-04
278	2	28.538	29.7075	8.62E-07	2.981	1.31E-02	1.17E-02	0.89	7.04E-04	3.82E-04
279	2	28.575	29.745	8.72E-07	2.741	1.32E-02	1.18E-02	0.89	7.15E-04	4.07E-04
280	2	28.625	29.795	8.40E-07	3.003	1.26E-02	1.13E-02	0.90	6.33E-04	4.11E-04
281	2	28.67	29.84	8.77E-07	2.948	1.32E-02	1.18E-02	0.89	7.02E-04	4.20E-04
282	2	28.715	29.885	8.74E-07	3.583	1.30E-02	1.17E-02	0.90	6.64E-04	4.11E-04
283	2	28.77	29.94	8.58E-07	3.269	1.28E-02	1.14E-02	0.89	6.86E-04	3.83E-04
284	2	28.815	29.985	8.68E-07	2.874	1.29E-02	1.16E-02	0.90	6.78E-04	3.85E-04
285	2	28.86	30.03	8.32E-07	3.126	1.25E-02	1.11E-02	0.89	6.98E-04	3.39E-04
286	2	28.905	30.075	8.74E-07	2.687	1.35E-02	1.22E-02	0.90	6.68E-04	3.50E-04
287	2	28.958	30.1275	8.58E-07	1.976	1.29E-02	1.16E-02	0.90	6.65E-04	3.29E-04
288	2	29.02	30.19	9.34E-07	2.882	1.37E-02	1.23E-02	0.90	6.71E-04	4.04E-04
289	2	30.55	31.72	1.50E-06	4.093	2.33E-02	2.16E-02	0.93	8.32E-04	9.61E-04
290	2	30.61	31.78	1.53E-06	4.071	2.39E-02	2.22E-02	0.93	8.42E-04	1.00E-03
291	2	30.655	31.825	1.57E-06	4.491	2.44E-02	2.26E-02	0.93	9.06E-04	9.70E-04
292	2	30.703	31.8725	1.73E-06	4.043	2.75E-02	2.54E-02	0.92	1.03E-03	1.12E-03
293	2	30.75	31.92	1.89E-06	4.874	3.04E-02	2.81E-02	0.93	1.14E-03	1.24E-03
294	2	30.803	31.9725	2.03E-06	4.708	3.05E-02	2.87E-02	0.94	9.28E-04	1.29E-03
295	2	30.848	32.0175	1.99E-06	4.811	2.93E-02	2.76E-02	0.94	8.51E-04	1.33E-03
296	2	30.893	32.0625	1.75E-06	4.504	2.49E-02	2.33E-02	0.94	7.79E-04	1.05E-03
297	2	30.935	32.105	1.95E-06	4.74	2.37E-02	2.23E-02	0.94	7.01E-04	9.89E-04
298	2	30.98	32.15	1.85E-06	4.563	2.68E-02	2.51E-02	0.94	8.19E-04	1.21E-03
299	2	31.025	32.195	1.69E-06	4.311	2.63E-02	2.46E-02	0.94	8.25E-04	1.16E-03
300	2	31.07	32.24	1.68E-06	4.139	2.60E-02	2.43E-02	0.94	8.13E-04	1.16E-03
301	2	31.113	32.2825	1.76E-06	4.437	2.72E-02	2.55E-02	0.94	8.38E-04	1.25E-03
302	2	31.153	32.3225	1.79E-06	4.508	2.84E-02	2.67E-02	0.94	8.26E-04	1.28E-03
303	2	31.195	32.365	1.99E-06	4.781	3.12E-02	2.94E-02	0.94	8.92E-04	1.45E-03
304	2	31.235	32.405	2.02E-06	4.932	3.16E-02	2.97E-02	0.94	9.07E-04	1.42E-03
305	2	31.275	32.445	2.00E-06	5.244	3.17E-02	2.98E-02	0.94	9.22E-04	1.44E-03
306	2	31.315	32.485	1.90E-06	4.785	3.00E-02	2.83E-02	0.94	8.54E-04	1.37E-03
307	2	31.35	32.52	1.84E-06	4.992	2.88E-02	2.71E-02	0.94	8.42E-04	1.38E-03
308	2	31.395	32.565	1.69E-06	5.12	2.65E-02	2.50E-02	0.94	7.65E-04	1.33E-03
309	2	31.435	32.605	1.65E-06	4.981	2.58E-02	2.42E-02	0.94	7.86E-04	1.33E-03
310	2	31.478	32.6475	1.70E-06	4.899	2.72E-02	2.55E-02	0.93	8.91E-04	1.26E-03
311	2	31.523	32.6925	1.76E-06	4.811	2.86E-02	2.68E-02	0.94	9.05E-04	1.38E-03
312	2	31.565	32.735	1.83E-06	4.798	2.90E-02	2.71E-02	0.94	9.11E-04	1.31E-03
313	2	31.608	32.7775	1.90E-06	4.987	3.02E-02	2.83E-02	0.94	9.55E-04	1.23E-03
314	2	31.62	32.79	1.96E-06	4.963	3.11E-02	2.92E-02	0.94	9.73E-04	1.35E-03
315	2	31.66	32.83	2.03E-06	5.345	3.25E-02	3.05E-02	0.94	1.01E-03	1.41E-03
316	2	31.705	32.875	2.04E-06	5.572	3.22E-02	3.04E-02	0.94	9.04E-04	1.46E-03
317	2	31.75	32.92	1.96E-06	5.188	3.04E-02	2.88E-02	0.95	8.35E-04	1.47E-03
318	2	31.798	32.9675	1.92E-06	5.135	3.03E-02	2.86E-02	0.94	8.39E-04	1.35E-03
319	2	31.845	33.015	1.91E-06	5.035	3.02E-02	2.85E-02	0.94	8.90E-04	1.38E-03

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
320	2	31.89	33.06	1.72E-06	5.293	2.67E-02	2.51E-02	0.94	8.05E-04	1.36E-03
321	2	31.94	33.11	1.39E-06	4.355	2.25E-02	2.12E-02	0.94	6.59E-04	1.29E-03
322	2	31.985	33.155	1.30E-06	4.19	2.18E-02	2.05E-02	0.94	6.78E-04	1.22E-03
323	2	32.033	33.2025	1.30E-06	3.802	2.19E-02	2.06E-02	0.94	6.94E-04	1.16E-03
324	2	32.078	33.2475	1.29E-06	3.806	2.15E-02	2.01E-02	0.94	6.83E-04	1.05E-03
325	2	32.125	33.295	1.42E-06	3.993	2.43E-02	2.31E-02	0.95	6.29E-04	1.31E-03
326	2	32.17	33.34	1.43E-06	3.667	2.40E-02	2.26E-02	0.94	6.93E-04	1.19E-03
327	2	32.21	33.38	1.78E-06	4.075	2.97E-02	2.81E-02	0.95	7.97E-04	1.56E-03
328	2	32.26	33.43	2.14E-06	4.764	3.42E-02	3.25E-02	0.95	8.69E-04	1.59E-03
329	2	32.305	33.475	2.29E-06	5.382	3.68E-02	3.50E-02	0.95	9.29E-04	1.65E-03
330	2	32.355	33.525	2.27E-06	5.279	3.63E-02	3.45E-02	0.95	8.93E-04	1.75E-03
331	2	32.398	33.5675	1.98E-06	5.522	3.15E-02	2.99E-02	0.95	8.11E-04	1.53E-03
332	2	32.445	33.615	2.44E-06	5.7	3.97E-02	3.78E-02	0.95	9.93E-04	1.75E-03
333	2	32.49	33.66	2.33E-06	5.715	3.71E-02	3.51E-02	0.95	1.01E-03	1.64E-03
334	2	32.53	33.7	2.03E-06	6.073	3.18E-02	3.00E-02	0.95	8.65E-04	1.69E-03
335	2	32.575	33.745	1.01E-06	4.616	1.53E-02	1.42E-02	0.93	5.57E-04	8.56E-04
336	2	33.568	34.7375	1.39E-06	5.678	2.06E-02	1.94E-02	0.94	5.81E-04	1.27E-03
337	2	33.638	34.8075	1.66E-06	5.786	2.38E-02	2.24E-02	0.94	7.26E-04	1.16E-03
338	2	33.71	34.88	1.46E-06	5.617	2.09E-02	1.97E-02	0.94	5.92E-04	1.13E-03
339	2	33.775	34.945	1.50E-06	5.446	2.20E-02	2.09E-02	0.95	5.85E-04	1.23E-03
340	2	33.823	34.9925	1.74E-06	5.498	2.61E-02	2.45E-02	0.94	8.09E-04	1.23E-03
341	2	33.87	35.04	1.66E-06	5.419	2.43E-02	2.26E-02	0.93	8.38E-04	1.12E-03
342	2	33.915	35.085	1.50E-06	5.878	2.16E-02	2.02E-02	0.94	6.68E-04	1.11E-03
343	2	33.973	35.1425	1.44E-06	5.522	2.07E-02	1.94E-02	0.94	6.29E-04	1.17E-03
344	2	34.035	35.205	1.59E-06	5.239	2.32E-02	2.19E-02	0.94	6.84E-04	1.19E-03
345	2	34.095	35.265	1.53E-06	5.921	2.17E-02	2.04E-02	0.94	6.52E-04	1.15E-03
346	2	34.16	35.33	1.67E-06	5.438	2.33E-02	2.19E-02	0.94	7.16E-04	1.22E-03
347	2	34.22	35.39	1.86E-06	6.302	2.69E-02	2.50E-02	0.93	9.53E-04	1.23E-03
348	2	34.28	35.45	1.65E-06	5.478	2.36E-02	2.21E-02	0.94	7.31E-04	1.25E-03
349	2	34.338	35.5075	1.67E-06	6.515	2.36E-02	2.22E-02	0.94	7.29E-04	1.35E-03
350	2	34.39	35.56	1.65E-06	5.996	2.29E-02	2.16E-02	0.94	6.83E-04	1.33E-03
351	2	34.445	35.615	1.73E-06	5.448	2.42E-02	2.28E-02	0.94	6.87E-04	1.46E-03
352	2	34.49	35.66	1.87E-06	6.026	2.71E-02	2.53E-02	0.93	8.87E-04	1.31E-03
353	2	34.545	35.715	1.74E-06	5.619	2.44E-02	2.29E-02	0.94	7.38E-04	1.41E-03
354	2	34.61	35.78	1.71E-06	5.853	2.36E-02	2.22E-02	0.94	7.05E-04	1.40E-03
355	2	34.658	35.8275	1.90E-06	6.159	2.68E-02	2.52E-02	0.94	7.96E-04	1.42E-03
356	2	34.713	35.8825	1.83E-06	5.737	2.65E-02	2.47E-02	0.93	8.75E-04	1.39E-03
357	2	34.76	35.93	1.77E-06	5.884	2.57E-02	2.41E-02	0.94	8.02E-04	1.43E-03
358	2	34.803	35.9725	1.60E-06	5.747	2.35E-02	2.19E-02	0.93	7.70E-04	1.27E-03
359	2	34.85	36.02	1.58E-06	5.199	2.51E-02	2.30E-02	0.92	1.02E-03	1.02E-03
360	2	34.9	36.07	1.05E-06	4.301	1.72E-02	1.58E-02	0.92	6.89E-04	8.11E-04
361	2	34.945	36.115	8.91E-07	4.336	1.50E-02	1.38E-02	0.92	6.23E-04	7.32E-04
362	2	34.99	36.16	9.46E-07	4.246	1.64E-02	1.50E-02	0.92	6.71E-04	8.20E-04
363	2	35.033	36.2025	9.32E-07	4.552	1.58E-02	1.45E-02	0.92	6.38E-04	8.81E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
364	2	35.083	36.2525	7.64E-07	4.444	1.28E-02	1.18E-02	0.92	5.36E-04	6.84E-04
365	2	35.125	36.295	7.32E-07	4.365	1.23E-02	1.13E-02	0.92	5.12E-04	7.00E-04
366	2	35.165	36.335	7.17E-07	3.488	1.21E-02	1.10E-02	0.92	5.09E-04	6.07E-04
367	2	35.208	36.3775	6.76E-07	3.844	1.14E-02	1.05E-02	0.92	4.54E-04	5.33E-04
368	2	35.25	36.42	8.13E-07	4.265	1.39E-02	1.27E-02	0.92	5.84E-04	6.76E-04
369	2	35.3	36.47	5.46E-07	4.379	9.26E-03	8.46E-03	0.91	3.98E-04	5.18E-04
370	2	35.35	36.52	6.00E-07	4.487	9.92E-03	8.94E-03	0.90	4.90E-04	5.09E-04
371	2	35.395	36.565	6.58E-07	4.381	1.10E-02	9.93E-03	0.90	5.51E-04	6.09E-04
372	2	35.435	36.605	6.07E-07	3.968	1.02E-02	9.17E-03	0.90	5.10E-04	5.72E-04
373	2	35.475	36.645	6.50E-07	4.744	1.10E-02	9.81E-03	0.89	5.84E-04	4.99E-04
374	2	35.515	36.685	5.84E-07	3.698	9.86E-03	8.82E-03	0.89	5.19E-04	4.96E-04
375	2	35.568	36.7375	6.51E-07	4.301	1.12E-02	9.97E-03	0.89	6.04E-04	4.58E-04
376	2	35.623	36.7925	6.82E-07	4.502	1.16E-02	1.03E-02	0.89	6.48E-04	3.99E-04
377	2	36.68	37.85	7.37E-07	4.807	1.12E-02	9.88E-03	0.88	6.57E-04	4.18E-04
378	2	36.73	37.9	6.44E-07	3.801	9.76E-03	8.63E-03	0.88	5.68E-04	3.66E-04
379	2	36.783	37.9525	5.37E-07	4.085	7.96E-03	7.10E-03	0.89	4.31E-04	2.87E-04
380	2	36.83	38	5.62E-07	4.529	8.49E-03	7.53E-03	0.89	4.80E-04	3.10E-04
381	2	36.878	38.0475	7.45E-07	4.326	1.14E-02	1.02E-02	0.89	6.13E-04	4.02E-04
382	2	36.915	38.085	8.59E-07	4.693	1.33E-02	1.18E-02	0.89	7.45E-04	4.14E-04
383	2	36.955	38.125	8.98E-07	4.874	1.40E-02	1.25E-02	0.89	7.52E-04	4.14E-04
384	2	37.003	38.1725	8.73E-07	4.596	1.37E-02	1.22E-02	0.89	7.63E-04	4.12E-04
385	2	37.05	38.22	8.04E-07	4.877	1.30E-02	1.12E-02	0.87	8.55E-04	2.32E-04
386	2	37.095	38.265	7.85E-07	5.617	1.29E-02	1.11E-02	0.86	8.96E-04	1.85E-04
387	2	37.15	38.32	5.63E-07	5.927	9.51E-03	8.04E-03	0.85	7.33E-04	1.20E-04
388	2	37.19	38.36	5.61E-07	5.682	9.30E-03	7.94E-03	0.85	6.84E-04	1.14E-04
389	2	37.238	38.4075	3.70E-07	4.237	5.88E-03	5.03E-03	0.86	4.24E-04	7.74E-05
390	2	37.28	38.45	5.68E-07	3.75	9.00E-03	7.94E-03	0.88	5.31E-04	2.50E-04
391	2	37.33	38.5	8.05E-07	4.211	1.25E-02	1.12E-02	0.90	6.45E-04	4.39E-04
392	2	37.375	38.545	8.34E-07	4.717	1.30E-02	1.16E-02	0.89	6.94E-04	4.24E-04
393	2	37.42	38.59	8.02E-07	4.358	1.23E-02	1.09E-02	0.89	6.57E-04	4.21E-04
394	2	37.463	38.6325	8.49E-07	4.742	1.32E-02	1.18E-02	0.90	6.84E-04	4.40E-04
395	2	37.505	38.675	8.37E-07	4.507	1.31E-02	1.16E-02	0.89	7.14E-04	4.10E-04
396	2	37.55	38.72	6.97E-07	4.258	1.05E-02	9.32E-03	0.88	6.08E-04	3.30E-04
397	2	37.58	38.75	6.49E-07	3.34	1.00E-02	8.87E-03	0.88	5.87E-04	2.72E-04
398	2	37.623	38.7925	6.69E-07	3.551	1.06E-02	9.26E-03	0.87	6.84E-04	2.52E-04
399	2	37.665	38.835	6.19E-07	4.414	9.70E-03	8.46E-03	0.87	6.23E-04	2.34E-04
400	2	37.72	38.89	4.44E-07	2.861	7.06E-03	6.07E-03	0.86	4.94E-04	1.59E-04
401	2	37.76	38.93	5.04E-07	3.083	8.01E-03	6.98E-03	0.87	5.13E-04	2.04E-04
402	2	37.815	38.985	5.51E-07	3.171	8.81E-03	7.71E-03	0.87	5.51E-04	2.14E-04
403	2	37.86	39.03	6.06E-07	2.566	9.46E-03	8.41E-03	0.89	5.25E-04	2.58E-04
404	2	37.9	39.07	6.91E-07	3.556	1.06E-02	9.30E-03	0.88	6.33E-04	3.00E-04
405	2	37.95	39.12	6.50E-07	3.302	1.01E-02	8.91E-03	0.88	5.97E-04	2.69E-04
406	2	38.003	39.1725	5.50E-07	3.306	8.55E-03	7.48E-03	0.87	5.36E-04	1.96E-04
407	2	38.05	39.22	4.03E-07	3.645	6.16E-03	5.11E-03	0.83	5.27E-04	9.74E-05

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
408	2	38.1	39.27	5.86E-07	4.019	8.92E-03	7.89E-03	0.88	5.13E-04	2.72E-04
409	2	38.16	39.33	5.59E-07	3.448	8.48E-03	7.57E-03	0.89	4.55E-04	2.90E-04
410	2	38.215	39.385	6.29E-07	3.869	9.55E-03	8.47E-03	0.89	5.37E-04	3.27E-04
411	2	38.263	39.4325	6.66E-07	5.258	1.02E-02	9.02E-03	0.89	5.67E-04	3.83E-04
412	2	38.325	39.495	7.35E-07	4.412	1.14E-02	1.02E-02	0.89	6.01E-04	4.28E-04
413	2	38.375	39.545	7.88E-07	4.615	1.26E-02	1.12E-02	0.89	6.81E-04	4.80E-04
414	2	38.415	39.585	6.86E-07	4.774	1.09E-02	9.68E-03	0.89	5.89E-04	4.41E-04
415	2	39.66	40.83	1.04E-06	4.749	1.68E-02	1.48E-02	0.88	9.74E-04	4.39E-04
416	2	39.713	40.8825	1.15E-06	5.36	1.89E-02	1.67E-02	0.89	1.08E-03	4.95E-04
417	2	39.765	40.935	1.08E-06	5.749	1.78E-02	1.57E-02	0.88	1.05E-03	4.19E-04
418	2	39.82	40.99	1.15E-06	4.877	1.95E-02	1.72E-02	0.89	1.11E-03	4.59E-04
419	2	39.88	41.05	1.54E-06	5.037	2.70E-02	2.40E-02	0.89	1.48E-03	6.18E-04
420	2	39.935	41.105	1.34E-06	5.748	2.21E-02	1.98E-02	0.90	1.14E-03	6.29E-04
421	2	39.975	41.145	1.15E-06	5.213	1.90E-02	1.70E-02	0.89	1.01E-03	5.20E-04
422	2	40.025	41.195	1.19E-06	5.417	2.02E-02	1.80E-02	0.89	1.09E-03	5.20E-04
423	2	40.078	41.2475	1.22E-06	4.508	2.09E-02	1.88E-02	0.90	1.06E-03	5.45E-04
424	2	40.14	41.31	1.19E-06	4.97	2.06E-02	1.84E-02	0.89	1.09E-03	5.37E-04
425	2	40.208	41.3775	1.42E-06	4.635	2.58E-02	2.32E-02	0.90	1.28E-03	6.37E-04
426	2	40.265	41.435	1.67E-06	5.531	3.08E-02	2.78E-02	0.90	1.49E-03	8.14E-04
427	2	40.313	41.4825	1.82E-06	5.314	3.47E-02	3.14E-02	0.90	1.65E-03	8.94E-04
428	2	40.368	41.5375	1.94E-06	5.121	3.84E-02	3.48E-02	0.91	1.81E-03	9.44E-04
429	2	40.42	41.59	2.12E-06	5.457	4.47E-02	4.07E-02	0.91	2.00E-03	1.04E-03
430	2	40.475	41.645	2.06E-06	5.141	4.38E-02	3.98E-02	0.91	2.01E-03	8.91E-04
431	2	40.525	41.695	1.97E-06	5.979	4.08E-02	3.71E-02	0.91	1.82E-03	9.34E-04
432	2	40.578	41.7475	1.75E-06	5.856	3.30E-02	3.02E-02	0.91	1.42E-03	8.75E-04
433	2	40.62	41.79	1.60E-06	6.565	2.79E-02	2.55E-02	0.91	1.20E-03	8.58E-04
434	2	40.665	41.835	1.48E-06	6.198	2.47E-02	2.26E-02	0.91	1.07E-03	8.32E-04
435	2	40.72	41.89	1.48E-06	5.913	2.46E-02	2.24E-02	0.91	1.13E-03	8.22E-04
436	2	40.78	41.95	1.61E-06	6.955	2.80E-02	2.54E-02	0.91	1.28E-03	8.79E-04
437	2	40.83	42	1.52E-06	5.837	2.58E-02	2.34E-02	0.91	1.20E-03	8.96E-04
438	2	40.905	42.075	1.31E-06	5.827	2.16E-02	1.96E-02	0.91	9.87E-04	7.94E-04
439	2	40.978	42.1475	1.38E-06	5.284	2.34E-02	2.14E-02	0.91	1.04E-03	7.74E-04
440	2	41.03	42.2	1.57E-06	5.664	2.75E-02	2.52E-02	0.91	1.20E-03	9.25E-04
441	2	41.085	42.255	1.73E-06	6.312	3.07E-02	2.80E-02	0.91	1.35E-03	9.54E-04
442	2	41.13	42.3	1.73E-06	5.884	3.18E-02	2.90E-02	0.91	1.39E-03	8.94E-04
443	2	41.17	42.34	1.82E-06	6.481	3.39E-02	3.07E-02	0.91	1.59E-03	9.04E-04
444	2	41.22	42.39	1.78E-06	6.219	3.39E-02	3.07E-02	0.91	1.60E-03	8.90E-04
445	2	41.288	42.4575	1.89E-06	6.477	3.97E-02	3.57E-02	0.90	1.99E-03	9.16E-04
446	2	41.33	42.5	1.91E-06	6.414	4.08E-02	3.67E-02	0.90	2.03E-03	9.81E-04
447	2	41.425	42.595	1.99E-06	5.997	4.69E-02	4.19E-02	0.89	2.50E-03	9.87E-04
448	2	41.49	42.66	9.14E-07	4.984	2.51E-02	2.23E-02	0.89	1.41E-03	3.59E-04
449	2	41.54	42.71	7.18E-07	5.145	1.25E-02	1.06E-02	0.85	9.62E-04	2.25E-04
450	2	41.59	42.76	6.56E-07	4.506	1.10E-02	9.23E-03	0.84	8.96E-04	2.08E-04
451	2	41.643	42.8125	8.07E-07	4.181	1.25E-02	1.10E-02	0.88	7.47E-04	2.63E-04

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
452	2	41.69	42.86	1.16E-06	4.809	1.52E-02	1.37E-02	0.90	7.30E-04	3.24E-04
453	2	41.735	42.905	8.04E-07	4.318	1.15E-02	1.02E-02	0.89	6.33E-04	3.36E-04
454	2	41.783	42.9525	1.28E-06	4.995	1.94E-02	1.79E-02	0.92	7.73E-04	7.99E-04
455	2	41.835	43.005	1.21E-06	5.107	1.99E-02	1.82E-02	0.91	8.82E-04	7.27E-04
456	2	41.893	43.0625	9.76E-07	4.09	1.44E-02	1.29E-02	0.90	7.32E-04	4.30E-04
457	2	41.945	43.115	8.36E-07	3.799	1.15E-02	1.01E-02	0.88	6.84E-04	2.83E-04
458	2	42	43.17	9.96E-07	4.137	1.38E-02	1.25E-02	0.90	6.65E-04	4.24E-04
459	2	42.048	43.2175	1.40E-06	4.817	2.00E-02	1.87E-02	0.93	6.85E-04	8.35E-04
460	2	42.113	43.2825	1.48E-06	5.15	2.14E-02	2.01E-02	0.94	6.67E-04	1.03E-03
461	2	42.748	43.9175	1.37E-06	4.172	1.93E-02	1.80E-02	0.93	6.63E-04	8.58E-04
462	2	42.8	43.97	1.40E-06	4.484	1.98E-02	1.85E-02	0.93	6.88E-04	8.67E-04
463	2	42.85	44.02	1.34E-06	4.44	1.87E-02	1.74E-02	0.93	6.37E-04	7.99E-04
464	2	42.895	44.065	1.43E-06	4.614	1.98E-02	1.85E-02	0.93	6.57E-04	8.41E-04
465	2	42.935	44.105	1.37E-06	4.642	1.95E-02	1.83E-02	0.94	6.10E-04	8.90E-04
466	2	42.978	44.1475	1.32E-06	4.622	1.89E-02	1.77E-02	0.94	5.78E-04	8.81E-04
467	2	43.023	44.1925	1.43E-06	4.543	2.03E-02	1.90E-02	0.93	6.66E-04	8.95E-04
468	2	43.065	44.235	1.82E-06	9.29	2.35E-02	2.21E-02	0.94	6.97E-04	9.27E-04
469	2	43.11	44.28	2.43E-06	6.74	2.93E-02	2.78E-02	0.95	7.51E-04	9.22E-04
470	2	43.18	44.35	1.70E-06	5.252	2.39E-02	2.26E-02	0.95	6.16E-04	1.22E-03
471	2	43.233	44.4025	1.71E-06	5.609	2.35E-02	2.23E-02	0.95	6.30E-04	1.16E-03
472	2	43.293	44.4625	1.95E-06	5.7	2.75E-02	2.61E-02	0.95	7.03E-04	1.39E-03
473	2	43.34	44.51	1.91E-06	5.69	2.71E-02	2.56E-02	0.94	7.71E-04	1.33E-03
474	2	43.383	44.5525	1.92E-06	5.743	2.78E-02	2.64E-02	0.95	7.09E-04	1.39E-03
475	2	43.433	44.6025	1.90E-06	5.938	2.75E-02	2.62E-02	0.95	6.59E-04	1.36E-03
476	2	43.48	44.65	1.78E-06	6.28	2.59E-02	2.46E-02	0.95	6.41E-04	1.37E-03
477	2	43.523	44.6925	1.71E-06	5.849	2.44E-02	2.32E-02	0.95	6.07E-04	1.25E-03
478	2	43.57	44.74	1.75E-06	5.448	2.52E-02	2.40E-02	0.95	6.20E-04	1.32E-03
479	2	43.615	44.785	1.72E-06	5.684	2.49E-02	2.37E-02	0.95	5.92E-04	1.28E-03
480	2	43.66	44.83	1.87E-06	5.828	2.81E-02	2.67E-02	0.95	6.71E-04	1.31E-03
481	2	43.705	44.875	1.92E-06	6.046	2.93E-02	2.79E-02	0.95	7.40E-04	1.25E-03
482	2	43.75	44.92	1.90E-06	6.176	2.59E-02	2.46E-02	0.95	6.50E-04	1.31E-03
483	2	43.79	44.96	1.95E-06	6.982	2.56E-02	2.42E-02	0.94	7.13E-04	1.36E-03
484	2	43.825	44.995	1.93E-06	6.68	2.49E-02	2.36E-02	0.95	6.69E-04	1.31E-03
485	2	43.883	45.0525	1.86E-06	6.784	2.47E-02	2.34E-02	0.95	6.53E-04	1.32E-03
486	2	43.943	45.1125	1.99E-06	6.73	2.69E-02	2.55E-02	0.95	6.79E-04	1.43E-03
487	2	44	45.17	1.91E-06	6.094	2.63E-02	2.48E-02	0.95	7.17E-04	1.37E-03
488	2	44.05	45.22	1.97E-06	6.593	2.67E-02	2.53E-02	0.95	7.05E-04	1.44E-03
489	2	44.11	45.28	1.93E-06	6.567	2.80E-02	2.65E-02	0.95	7.51E-04	1.42E-03
490	2	44.19	45.36	1.98E-06	6.343	2.79E-02	2.66E-02	0.95	6.59E-04	1.51E-03
491	2	44.245	45.415	1.93E-06	6.02	2.76E-02	2.62E-02	0.95	7.11E-04	1.41E-03
492	2	44.295	45.465	1.82E-06	6.214	2.58E-02	2.45E-02	0.95	6.78E-04	1.33E-03
493	2	44.345	45.515	2.06E-06	6.627	2.86E-02	2.69E-02	0.94	8.46E-04	1.41E-03
494	2	44.4	45.57	2.15E-06	6.298	3.03E-02	2.86E-02	0.94	8.53E-04	1.53E-03
495	2	44.455	45.625	2.08E-06	6.235	2.88E-02	2.74E-02	0.95	7.23E-04	1.43E-03

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
496	2	44.56	45.73	2.23E-06	6.213	3.10E-02	2.95E-02	0.95	7.34E-04	1.55E-03
497	2	44.62	45.79	2.17E-06	6.27	3.01E-02	2.86E-02	0.95	7.14E-04	1.50E-03
498	2	44.66	45.83	2.16E-06	6.804	2.88E-02	2.74E-02	0.95	6.80E-04	1.51E-03
499	2	44.708	45.8775	2.03E-06	6.541	2.76E-02	2.62E-02	0.95	6.67E-04	1.44E-03
500	2	44.76	45.93	2.04E-06	6.894	2.75E-02	2.62E-02	0.95	6.46E-04	1.46E-03
501	2	44.81	45.98	2.09E-06	6.51	2.91E-02	2.75E-02	0.95	7.66E-04	1.44E-03
502	2	44.865	46.035	1.93E-06	6.074	2.74E-02	2.59E-02	0.95	7.20E-04	1.36E-03
503	2	44.915	46.085	1.77E-06	6.389	2.55E-02	2.40E-02	0.94	7.43E-04	1.25E-03
504	2	44.968	46.1375	1.77E-06	6.49	2.44E-02	2.31E-02	0.95	6.32E-04	1.30E-03
505	2	45.02	46.19	1.92E-06	6.527	2.66E-02	2.53E-02	0.95	6.29E-04	1.43E-03
506	2	45.78	46.95	9.40E-07	5.358	1.38E-02	1.31E-02	0.95	3.45E-04	8.54E-04
507	2	45.845	47.015	9.57E-07	4.884	1.49E-02	1.40E-02	0.94	4.55E-04	8.44E-04
508	2	45.905	47.075	1.14E-06	5.032	1.74E-02	1.63E-02	0.94	5.65E-04	9.36E-04
509	2	45.97	47.14	1.11E-06	5.2	1.72E-02	1.62E-02	0.94	4.99E-04	9.87E-04
510	2	46.02	47.19	1.05E-06	5.181	1.65E-02	1.54E-02	0.93	5.68E-04	8.29E-04
511	2	46.07	47.24	1.00E-06	5.59	1.43E-02	1.34E-02	0.94	4.12E-04	8.34E-04
512	2	46.115	47.285	9.63E-07	5.213	1.29E-02	1.22E-02	0.94	3.57E-04	6.83E-04
513	2	46.158	47.3275	1.04E-06	5.558	1.36E-02	1.28E-02	0.94	3.95E-04	6.93E-04
514	2	46.22	47.39	1.13E-06	5.673	1.52E-02	1.43E-02	0.94	4.50E-04	7.35E-04
515	2	46.265	47.435	1.25E-06	6.434	1.58E-02	1.48E-02	0.93	5.17E-04	7.85E-04
516	2	46.32	47.49	1.35E-06	5.923	1.71E-02	1.59E-02	0.93	6.19E-04	7.02E-04
517	2	46.37	47.54	1.32E-06	6.026	1.63E-02	1.50E-02	0.92	6.55E-04	6.56E-04
518	2	46.415	47.585	1.40E-06	6.012	1.73E-02	1.58E-02	0.92	7.21E-04	7.05E-04
519	2	46.47	47.64	1.54E-06	6.402	2.00E-02	1.84E-02	0.92	7.84E-04	8.41E-04
520	2	46.52	47.69	1.63E-06	6.419	2.14E-02	1.98E-02	0.92	8.26E-04	9.10E-04
521	2	46.57	47.74	1.80E-06	6.618	2.47E-02	2.26E-02	0.92	1.05E-03	9.47E-04
522	2	46.63	47.8	2.12E-06	6.69	2.67E-02	2.50E-02	0.94	8.54E-04	1.08E-03
523	2	46.683	47.8525	2.62E-06	6.553	3.44E-02	3.20E-02	0.93	1.16E-03	1.22E-03
524	2	46.74	47.91	2.14E-06	5.586	3.00E-02	2.86E-02	0.95	7.20E-04	1.48E-03
525	2	46.8	47.97	2.56E-06	6.445	3.39E-02	3.18E-02	0.94	1.05E-03	1.32E-03
526	2	46.86	48.03	2.20E-06	5.915	3.09E-02	2.94E-02	0.95	7.74E-04	1.43E-03
527	2	46.915	48.085	2.32E-06	6.397	3.21E-02	3.04E-02	0.95	8.78E-04	1.41E-03
528	2	46.968	48.1375	2.36E-06	6.127	3.29E-02	3.10E-02	0.94	9.46E-04	1.38E-03
529	2	47.138	48.3075	2.27E-06	6.398	3.10E-02	2.93E-02	0.95	8.38E-04	1.34E-03
530	2	47.193	48.3625	2.19E-06	5.978	3.08E-02	2.93E-02	0.95	7.59E-04	1.40E-03
531	2	47.24	48.41	2.19E-06	7.053	2.99E-02	2.84E-02	0.95	7.73E-04	1.37E-03
532	2	47.285	48.455	2.14E-06	5.486	2.99E-02	2.85E-02	0.95	7.12E-04	1.38E-03
533	2	47.345	48.515	2.43E-06	6.526	3.20E-02	3.02E-02	0.94	8.85E-04	1.37E-03
534	2	47.395	48.565	2.23E-06	6.178	3.12E-02	2.97E-02	0.95	7.32E-04	1.49E-03
535	2	47.443	48.6125	2.14E-06	5.952	3.02E-02	2.88E-02	0.95	7.29E-04	1.42E-03
536	2	47.49	48.66	2.08E-06	5.656	2.94E-02	2.79E-02	0.95	7.24E-04	1.35E-03
537	2	47.54	48.71	2.08E-06	5.942	2.90E-02	2.76E-02	0.95	6.97E-04	1.38E-03
538	2	47.59	48.76	2.13E-06	6.242	2.96E-02	2.82E-02	0.95	6.95E-04	1.44E-03
539	2	47.638	48.8075	2.16E-06	6.263	2.96E-02	2.81E-02	0.95	7.16E-04	1.38E-03

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
540	2	47.68	48.85	2.09E-06	6.022	2.95E-02	2.83E-02	0.96	6.47E-04	1.49E-03
541	2	47.795	48.965	2.08E-06	5.955	2.90E-02	2.77E-02	0.95	6.54E-04	1.47E-03
542	2	47.843	49.0125	2.31E-06	6.49	3.10E-02	2.95E-02	0.95	7.49E-04	1.50E-03
543	2	47.885	49.055	2.36E-06	6.668	3.14E-02	2.98E-02	0.95	7.68E-04	1.45E-03
544	2	47.93	49.1	2.29E-06	6.545	3.07E-02	2.92E-02	0.95	7.59E-04	1.49E-03
545	2	48.018	49.1875	2.35E-06	6.973	2.96E-02	2.79E-02	0.94	8.31E-04	1.28E-03
546	2	48.068	49.2375	2.18E-06	6.482	2.86E-02	2.71E-02	0.95	7.55E-04	1.33E-03
547	2	48.115	49.285	2.35E-06	6.376	3.18E-02	3.03E-02	0.95	7.44E-04	1.49E-03
548	2	48.173	49.3425	2.09E-06	6.534	2.85E-02	2.72E-02	0.95	6.68E-04	1.44E-03
549	2	48.228	49.3975	2.43E-06	6.899	3.16E-02	3.00E-02	0.95	7.96E-04	1.35E-03
550	2	48.315	49.485	2.08E-06	6.178	2.85E-02	2.72E-02	0.95	6.83E-04	1.38E-03
551	2	48.828	49.9975	1.21E-06	6.238	1.60E-02	1.50E-02	0.93	5.39E-04	7.68E-04
552	2	48.895	50.065	1.07E-06	6.403	1.39E-02	1.28E-02	0.93	5.17E-04	6.38E-04
553	2	48.945	50.115	1.17E-06	6.488	1.51E-02	1.38E-02	0.92	6.05E-04	6.28E-04
554	2	49.023	50.1925	1.38E-06	7.293	1.80E-02	1.66E-02	0.93	6.66E-04	7.77E-04
555	2	49.075	50.245	1.50E-06	7.67	1.84E-02	1.69E-02	0.92	7.62E-04	6.81E-04
556	2	49.128	50.2975	1.85E-06	7.834	2.14E-02	1.98E-02	0.92	8.25E-04	8.28E-04
557	2	49.175	50.345	1.57E-06	7.579	1.87E-02	1.73E-02	0.93	6.62E-04	7.50E-04
558	2	49.223	50.3925	1.89E-06	7.853	2.14E-02	1.98E-02	0.93	7.92E-04	7.88E-04
559	2	49.27	50.44	1.97E-06	8.235	2.17E-02	2.01E-02	0.93	8.02E-04	8.03E-04
560	2	49.323	50.4925	2.47E-06	8.628	2.62E-02	2.45E-02	0.94	8.50E-04	1.04E-03
561	2	49.423	50.5925	2.40E-06	8.07	2.79E-02	2.62E-02	0.94	8.22E-04	1.09E-03
562	2	49.503	50.6725	2.38E-06	8.435	2.61E-02	2.44E-02	0.94	8.33E-04	1.06E-03
563	2	49.61	50.78	2.82E-06	9.39	2.84E-02	2.65E-02	0.93	9.52E-04	1.08E-03
564	2	49.66	50.83	2.66E-06	9.082	2.71E-02	2.51E-02	0.93	9.61E-04	1.03E-03
565	2	49.718	50.8875	2.89E-06	9.005	2.79E-02	2.60E-02	0.93	9.73E-04	1.07E-03
566	2	49.793	50.9625	3.74E-06	10.28	2.91E-02	2.67E-02	0.92	1.20E-03	1.10E-03
567	2	49.885	51.055	3.93E-06	10.45	2.87E-02	2.62E-02	0.91	1.26E-03	1.04E-03
568	2	49.958	51.1275	4.25E-06	10.11	2.77E-02	2.51E-02	0.91	1.27E-03	1.01E-03
569	2	50.085	51.255	3.82E-06	8.972	1.92E-02	1.72E-02	0.90	9.91E-04	4.31E-04
570	2	50.195	51.365	6.45E-07	6.907	2.54E-02	2.25E-02	0.89	1.46E-03	1.68E-04
571	2	51.863	53.0325	1.01E-06	6.581	2.54E-02	2.16E-02	0.85	1.91E-03	4.15E-04
572	2	51.92	53.09	5.78E-07	8.161	1.65E-02	1.29E-02	0.78	1.83E-03	1.60E-04
573	2	51.96	53.13	6.16E-07	8.311	1.60E-02	1.26E-02	0.79	1.71E-03	1.65E-04
574	2	52.01	53.18	6.38E-07	8.477	1.74E-02	1.35E-02	0.78	1.94E-03	1.69E-04
575	2	52.055	53.225	7.03E-07	8.226	1.83E-02	1.44E-02	0.78	1.99E-03	1.77E-04
576	2	52.11	53.28	7.23E-07	8.205	1.76E-02	1.39E-02	0.79	1.84E-03	1.67E-04
577	2	52.16	53.33	4.20E-07	8.095	1.18E-02	9.08E-03	0.77	1.38E-03	1.17E-04
578	2	52.21	53.38	3.88E-07	7.782	1.03E-02	7.98E-03	0.77	1.18E-03	9.53E-05
579	2	52.26	53.43	3.18E-07	6.102	8.18E-03	6.32E-03	0.77	9.29E-04	7.85E-05
580	2	52.315	53.485	2.03E-07	5.624	4.82E-03	3.67E-03	0.76	5.73E-04	4.72E-05
581	2	54.925	56.095	8.79E-07	8.104	2.42E-02	1.92E-02	0.80	2.47E-03	2.21E-04
582	2	55	56.17	4.99E-07	8.342	1.40E-02	1.09E-02	0.77	1.58E-03	1.19E-04
583	2	55.025	56.195	3.55E-07	8.948	7.58E-03	5.97E-03	0.79	8.09E-04	8.65E-05

sample no.	core no.	depth meters	adj. depth meters	MSLF	FDMS %	IRM 1.2T	IRM .3T	S	HIRM	ARM
584	2	55.09	56.26	2.37E-07	6.497	6.00E-03	4.60E-03	0.77	7.01E-04	6.16E-05
585	2	55.138	56.3075	2.99E-07	6.997	7.67E-03	5.84E-03	0.76	9.11E-04	7.84E-05
586	2	55.215	56.385	2.36E-07	6.24	5.94E-03	4.53E-03	0.76	7.06E-04	6.35E-05
587	2	55.28	56.45	3.92E-07	8.032	1.04E-02	7.99E-03	0.77	1.18E-03	1.03E-04
588	2	55.365	56.535	2.90E-07	7.01	8.44E-03	6.26E-03	0.74	1.09E-03	8.00E-05
589	2	55.45	56.62	5.09E-07	8.123	1.51E-02	1.16E-02	0.77	1.77E-03	1.34E-04
590	2	55.52	56.69	4.36E-07	7.655	1.30E-02	1.01E-02	0.78	1.47E-03	1.07E-04
591	2	55.59	56.76	4.97E-07	9.192	1.50E-02	1.13E-02	0.75	1.87E-03	1.24E-04
592	2	55.7	56.87	4.73E-07	8.024	1.39E-02	1.06E-02	0.76	1.68E-03	1.28E-04
593	2	55.815	56.985	7.45E-08	-0.304	1.84E-03	1.39E-03	0.76	2.23E-04	2.30E-05
594	2	55.945	57.115	9.03E-08	0.29	2.26E-03	1.64E-03	0.72	3.13E-04	2.77E-05
595	2	56.045	57.215	6.03E-08	-3.714	1.04E-03	8.15E-04	0.79	1.11E-04	1.46E-05
596	2	56.19	57.36	1.31E-07	3.625	3.14E-03	2.08E-03	0.66	5.33E-04	3.74E-05
597	2	57.973	59.1425	5.13E-07	11.14	9.47E-03	6.87E-03	0.73	1.30E-03	1.10E-04
598	2	58.028	59.1975	4.91E-07	10.91	8.72E-03	6.41E-03	0.74	1.15E-03	1.02E-04
599	2	58.29	59.46	3.92E-07	11.94	5.54E-03	4.32E-03	0.78	6.06E-04	7.62E-05
600	2	58.403	59.5725	4.21E-07	9.315	8.69E-03	6.90E-03	0.79	8.97E-04	1.13E-04
601	2	58.485	59.655	6.88E-08	0.473	9.32E-04	7.51E-04	0.81	9.01E-05	1.65E-05
602	2	58.575	59.745	4.50E-08	-7.497	5.69E-04	4.68E-04	0.82	5.06E-05	1.34E-05
603	2	58.725	59.895	4.01E-08	-8.22	9.51E-04	8.04E-04	0.84	7.39E-05	1.82E-05
604	2	58.883	60.0525	4.08E-08	-8.407	6.96E-04	5.85E-04	0.84	5.56E-05	1.69E-05
605	2	59.025	60.195	8.12E-08	1.564	1.14E-03	9.48E-04	0.83	9.67E-05	2.27E-05
606	2	59.285	60.455	1.65E-07	5.467	3.38E-03	2.86E-03	0.85	2.59E-04	5.30E-05
607	2	59.355	60.525	1.84E-07	5.032	4.52E-03	3.92E-03	0.87	2.98E-04	6.02E-05
608	2	59.455	60.625	1.81E-07	10.95	1.69E-03	1.33E-03	0.79	1.81E-04	3.00E-05
609	2	59.52	60.69	4.43E-07	15.76	5.15E-03	3.77E-03	0.73	6.88E-04	7.68E-05
610	2	59.575	60.745	3.43E-07	16.75	2.96E-03	2.26E-03	0.76	3.54E-04	4.63E-05
611	2	59.765	60.935	2.93E-07	5.124	8.91E-03	6.92E-03	0.78	9.95E-04	9.06E-05
612	2	59.905	61.075	1.31E-07	2.851	2.69E-03	2.25E-03	0.84	2.20E-04	4.25E-05
613	2	60.043	61.2125	9.07E-08	0.325	1.82E-03	1.59E-03	0.87	1.20E-04	2.83E-05
614	2	60.133	61.3025	6.51E-08	-8.444	1.32E-03	1.03E-03	0.78	1.46E-04	2.21E-05
615	2	60.24	61.41	1.60E-07	4.466	4.57E-03	3.32E-03	0.73	6.27E-04	4.85E-05
616	2	60.295	61.465	2.92E-07	6.636	9.83E-03	6.87E-03	0.70	1.48E-03	8.80E-05
617	2	60.355	61.525	1.14E-07	2.681	1.71E-03	1.33E-03	0.78	1.92E-04	2.79E-05

TABLE 3. Elemental Abundances from X-ray Fluorescence

Tule Lake Sample no.: A unique sample number used for all measurements. The first number in the sample number refers to the core from which the sample was taken.

Adjusted depth: Adjusted depth of sample in meters from top of core.

Elements: The elements analyzed are listed below. The units are either weight percent (Wt%) or parts per million (ppm).

Cr: Chromium-ppm	Rb: Rubidium-ppm
Cu: Copper-ppm	Sr: Strontium-ppm
Fe: Iron- Wt%	Ti: Titanium-Wt %
Mn: Manganese-ppm	V: Vanadium-ppm
Mo: Molybdenum-ppm	Y: Yttrium-ppm
Nb: Niobium-ppm	Zn: Zinc-ppm
Ni: Nickel-ppm	Zr: Zirconium-ppm

Tule Lake Sample no.	Adj. Depth (m)	Cr ppm	Cu ppm	Fe Wt.%	Mn ppm	Mo ppm	Nb ppm	Ni ppm	Rb ppm	Sr ppm	Ti Wt.%	V ppm	Y ppm	Zn ppm	Zr ppm
TL1-8	1.65	76	56	3.98	229	14	20	58	32	159	0.33	96	13	116	88
TL1-15	2.05	59	57	4.07	251	3	8	41	38	172	0.35	89	10	74	129
TL1-17	2.15	51	49	3.45	354	15	20	37	35	363	0.34	100	16	69	132
TL1-22	2.44	68	53	4.3	414	15	21	42	33	321	0.4	127	13	83	104
TL1-26	2.74	72	71	4.48	368	18	25	55	25	146	0.37	96	7	84	85
TL1-30	3.18	83	60	4.16	337	5	9	56	32	206	0.36	109	14	78	100
TL1-35	3.45	86	70	4.33	269	17	22	44	24	125	0.36	111	8	76	82
TL1-40	3.88	64	61	3.97	458	19	24	48	23	270	0.35	111	13	81	92
TL1-43	4.06	50	59	3.54	393	12	20	39	22	485	0.31	101	10	65	90
TL1-52	4.7	83	48	4.67	721	3	8	47	26	274	0.3	101	14	59	79
TL1-63	5.39	99	73	5.58	856	15	22	66	38	298	0.52	192	19	94	124
TL1-72	5.9	75	64	4.82	495	15	22	47	39	321	0.47	169	23	77	122
TL1-76	7.2	80	66	5.47	616	4	9	57	39	288	0.52	153	25	82	130
TL2-7	7.64	91	75	4.94	338	3	9	38	36	247	0.49	143	22	74	120
TL2-12	7.91	88	69	5.53	582	3	10	57	42	393	0.5	146	30	81	139
TL1-87	8.08	101	74	5.67	608	12	19	66	37	264	0.52	129	27	90	132
TL2-17	8.24	47	39	3.36	379	16	24	26	46	157	0.32	87	13	73	161
TL2-19	8.41	75	72	5.54	705	14	24	56	38	242	0.51	161	16	79	122
TL1-91	8.45	89	71	5.17	556	14	23	49	42	248	0.44	131	16	85	136
TL1-94	8.67	103	80	5.41	426	15	26	47	43	279	0.51	73	20	90	142
TL2-23	8.71	77	70	4.75	526	12	21	42	34	313	0.46	123	19	78	114
TL1-102	10.04	78	67	4.9	532	15	23	41	37	282	0.45	137	22	79	113
TL1-107	10.42	67	70	4.73	405	3	9	44	37	280	0.45	167	25	83	121
TL2-25	10.47	87	52	4.56	489	17	25	43	38	302	0.45	144	23	82	113
TL2-28	10.63	74	76	4.62	657	3	9	67	41	301	0.44	137	21	73	118
TL1-110	10.68	36	51	3.19	511	4	8	36	42	500	0.34	87	15	61	128
TL2-32	10.95	33	58	3.22	495	13	24	38	34	457	0.34	104	19	63	111

Tule Lake Sample no.	Adj. Depth (m)	Cr ppm	Cu ppm	Fe Wt.%	Mn ppm	Mo ppm	Nb ppm	Ni ppm	Rb ppm	Sr ppm	Ti Wt.%	V ppm	Y ppm	Zn ppm	Zr ppm
TL2-34	11.08	69	64	4.71	445	2	8	43	37	339	0.46	157	24	79	123
TL2-36	11.21	102	58	4.89	845	15	22	60	34	298	0.45	112	20	80	110
TL2-38	11.34	92	52	4.68	848	15	23	56	36	328	0.44	108	16	71	104
TL1-112	11.56	101	61	4.67	378	13	24	43	33	335	0.45	125	19	83	99
TL2-42	11.84	80	84	4.96	702	14	23	59	36	236	0.44	138	17	82	100
TL1-117	11.89	77	75	4.81	663	18	24	46	38	279	0.46	148	19	87	114
TL2-47	12.1	109	64	4.54	466	3	10	41	37	331	0.45	101	30	71	129
TL2-53	12.35	78	67	4.66	327	14	22	47	37	358	0.44	125	23	76	105
TL2-59	12.71	86	59	4.46	533	14	25	47	34	341	0.43	42	31	73	122
TL2-72	12.78	45	72	3.64	336	17	22	33	32	242	0.34	139	8	54	87
TL2-63	13.53	94	81	4.1	654	16	23	45	33	290	0.41	130	13	72	114
TL2-65	13.62	66	98	4.01	351	17	22	51	24	149	0.36	152	11	75	82
TL2-66	13.67	75	75	3.47	292	20	26	46	25	150	0.35	163	6	72	86
TL2-74	14.05	41	58	3.06	379	16	24	38	47	254	0.32	130	18	63	127
TL2-76	14.13	10	40	2.56	294	18	26	30	56	120	0.27	92	27	59	183
TL2-82	14.44	87	82	5.06	466	15	21	45	27	174	0.41	143	17	70	77
TL2-82	14.44	94	81	5.07	420	18	24	49	27	168	0.42	210	14	76	82
TL2-94	15.02	64	76	4.87	515	3	8	47	28	204	0.41	158	22	68	91
TL2-107	15.72	86	69	4.79	463	19	24	44	28	254	0.45	146	13	74	100
TL2-115	16.51	66	81	4.79	359	17	24	49	32	235	0.44	180	19	78	114
TL2-123	16.9	89	78	4.73	445	14	22	52	32	204	0.41	128	7	71	83
TL2-129	17.25	78	78	4.86	463	18	24	48	31	193	0.42	139	12	73	90
TL2-136	17.63	60	69	4.83	627	14	22	42	36	254	0.42	132	13	79	91
TL2-141	17.88	82	67	4.57	508	14	22	42	34	266	0.44	159	15	71	101
TL2-143	18	49	60	4.41	774	13	18	54	38	392	0.46	187	24	72	116
TL2-146	18.14	66	69	4.78	395	3	9	35	34	203	0.41	159	15	78	98
TL2-147	19.53	57	67	3.86	443	19	25	42	24	211	0.33	116	8	71	76

Tule Lake Sample no.	Adj. Depth (m)	Cr ppm	Cu ppm	Fe Wt.%	Mn ppm	Mo ppm	Nb ppm	Ni ppm	Rb ppm	Sr ppm	Ti Wt.%	V ppm	Y ppm	Zn ppm	Zr ppm
TL2-158	20.09	78	67	4.59	944	15	22	56	35	190	0.43	125	17	81	98
TL2-178	21.21	46	55	3.41	504	3	8	32	38	328	0.34	110	17	65	96
TL2-181	21.34	55	65	3.8	530	16	22	42	31	310	0.37	108	11	73	92
TL2-183	21.44	61	63	3.89	445	3	8	49	22	332	0.35	112	16	69	83
TL2-191	21.84	62	58	3.45	435	3	7	50	29	416	0.28	124	19	62	74
TL2-192	22.55	64	111	4.39	707	17	23	53	30	222	0.43	145	15	97	105
TL2-194	22.69	49	63	3.19	969	18	22	36	24	496	0.28	138	7	64	60
TL2-208	23.51	64	57	4.08	532	13	20	45	29	497	0.31	77	11	60	56
TL2-213	23.78	62	59	4.59	797	14	18	44	33	255	0.34	132	9	69	75
TL2-215	23.94	67	60	4.7	460	4	8	47	43	210	0.37	117	22	75	107
TL2-217	24.49	100	80	4.68	358	14	23	53	38	411	0.52	112	29	91	134
TL2-216	25.61	58	65	4.07	380	7	9	56	29	237	0.37	114	17	77	99
TL2-220	25.86	39	63	4.34	404	12	22	53	42	385	0.48	196	28	88	141
TL2-224	26.09	43	67	4.32	371	14	22	42	29	411	0.48	152	24	77	134
TL2-229	26.32	93	66	4.4	343	3	11	37	38	334	0.45	130	33	82	156
TL2-236	26.7	84	62	4.55	360	15	25	42	37	328	0.48	88	17	70	130
TL2-253	27.64	71	76	4.5	312	15	22	53	29	248	0.42	170	14	72	100
TL2-279	29.75	76	72	4.45	313	4	8	41	32	288	0.44	172	23	67	111
TL2-292	31.87	82	85	4.78	566	3	9	54	32	301	0.49	134	24	83	124
TL2-308	32.57	60	74	5.13	19000	15	22	58	35	273	0.48	145	24	78	119
TL2-323	33.2	42	72	4.09	594	3	8	39	29	239	0.39	123	20	64	105
TL2-377	34.81	81	66	4.41	435	3	8	39	31	221	0.41	190	20	63	100
TL2-342	35.09	70	78	5.47	721	15	21	44	34	252	0.5	136	22	79	114
TL2-359	36.02	90	59	4.92	518	11	17	57	33	300	0.46	147	20	74	109
TL2-371	36.57	83	65	4	333	14	22	44	25	212	0.38	104	14	61	93
TL2-377	37.85	77	70	4.39	421	13	19	43	32	222	0.41	151	18	65	97
TL2-386	38.27	55	72	4.48	628	14	22	44	32	311	0.43	152	18	76	109

Tule Lake Sample no.	Adj. Depth (m)	Cr ppm	Cu ppm	Fe Wt.%	Mn ppm	Mo ppm	Nb ppm	Ni ppm	Rb ppm	Sr ppm	Ti Wt.%	V ppm	Y ppm	Zn ppm	Zr ppm
TL2-407	39.22	95	82	4.53	466	3	7	54	34	224	0.42	139	29	66	105
TL2-421	41.14	89	78	4.48	504	16	25	49	28	301	0.43	147	14	73	93
TL2-429	41.59	73	69	4.22	520	15	21	39	28	379	0.43	101	17	74	91
TL2-434	41.84	67	71	4.42	481	3	9	37	33	315	0.44	118	22	69	108
TL2-447	42.6	67	79	4.67	524	2	9	40	29	351	0.49	204	21	74	114
TL2-448	42.66	71	73	3.92	332	3	8	30	26	293	0.4	102	15	62	107
TL2-452	42.86	64	67	3.47	378	19	22	43	26	315	0.37	146	11	63	104
TL2-460	43.28	79	78	4.21	300	13	22	45	28	233	0.44	107	21	75	105
TL2-463	44.02	68	74	4.16	426	18	25	51	27	234	0.42	156	16	71	99
TL2-469	44.28	53	56	3.87	495	13	21	34	30	423	0.4	128	19	72	99
TL2-477	44.69	53	76	4.26	511	15	22	49	29	228	0.43	178	21	72	107
TL2-500	45.93	77	73	4.75	997	4	10	54	37	235	0.48	96	24	78	129
TL2-512	47.29	69	74	3.68	220	19	26	39	21	161	0.37	208	16	67	89
TL2-520	47.69	42	76	4.2	317	4	9	51	35	245	0.43	154	28	68	117
TL2-523	47.85	84	62	4.6	511	13	23	50	37	295	0.49	126	24	78	121
TL2-540	48.85	89	80	5.59	580	4	10	42	48	230	0.56	108	28	92	147
TL2-552	50.07	70	55	3.99	288	4	10	36	31	176	0.38	170	20	152	100
TL2-558	50.39	62	58	3.94	472	17	22	34	34	237	0.39	122	19	75	103
TL2-568	51.13	53	64	4.57	663	12	20	35	53	274	0.48	153	24	80	154

TABLE 4. Carbon Abundances

Tule Lake Sample no.: A unique sample number used for all measurements. TL1-samples are from core 1; TL-2 samples from core 2.

Adjusted depth: Adjusted depth of sample in meters from top of core.

Total Carbon: Percent of carbon (both organic and inorganic) in sample.

Carbonate Carbon: Percent of inorganic carbon in sample. Blank entries indicate that samples were not analyzed for carbonate carbon. These samples came from intervals for which previous results (W. Dean, unpublished data) indicated lack of carbonate carbon. In the calculation of organic carbon for these samples, it is assumed that carbonate carbon is absent.

Organic Carbon: Percent of organic carbon in sample. Calculated as total carbon minus carbonate carbon.

Tule Lake Sample no.	Adjusted Depth (meter)	Total Carbon (wt. percent)	Carbonate Carbon (wt. percent)	Organic Carbon (wt. percent)
TL1-8	1.645	3.59	0.00	3.59
TL1-15	2.05	3.22		3.22
TL1-17	2.15	1.71		1.71
TL1-22	2.44	3.29		3.29
TL1-26	2.735	6.13	0.00	6.13
TL1-30	3.18	4.75		4.75
TL1-35	3.445	6.85		6.85
TL1-40	3.875	3.63		3.63
TL1-43	4.06	4.32		4.32
TL1-52	4.7	6.99	0.00	6.99
TL1-63	5.39	1.73		1.73
TL1-76	7.2	0.64		0.64
TL1-87	8.08	0.41		0.41
TL1-91	8.45	0.60		0.60
TL1-94	8.67	0.58	0.00	0.58
TL1-102	10.0425	1.46		1.46
TL1-107	10.4175	1.51	0.00	1.51
TL1-110	10.6825	0.24		0.24
TL1-112	11.56	0.71		0.71
TL1-117	11.8925	2.19	0.00	2.19
TL2-7	6.466	0.85	0.00	0.85
TL2-12	6.741	0.48		0.48
TL2-17	7.066	0.17		0.17
TL2-19	7.236	0.74		0.74
TL2-22	7.456	0.51		0.51
TL2-23	7.541	0.55	0.01	0.54
TL2-25	9.304	0.69		0.69
TL2-28	9.459	3.57		3.57
TL2-32	9.784	0.30		0.30
TL2-34	9.909	0.47		0.47
TL2-36	10.039	0.67	0.00	0.67
TL2-38	10.169	0.62		0.62
TL2-42	10.674	3.56		3.56
TL2-47	10.9265	1.08		1.08
TL2-53	11.179	0.74		0.74
TL2-59	11.539	0.77	0.00	0.76
TL2-63	12.362	2.07		2.07
TL2-65	12.4545	4.89		4.89
TL2-66	12.5045	4.86	0.00	4.86
TL2-72	12.782	4.37		4.37
TL2-74	12.877	2.27	0.01	2.26
TL2-76	12.962	2.04		2.04
TL2-82	13.267	7.15		7.15
TL2-94	13.847	4.25		4.25

Tule Lake Sample no.	Adjusted Depth (meter)	Total Carbon (wt. percent)	Carbonate Carbon (wt. percent)	Organic Carbon (wt. percent)
TL2-107	14.547	2.59	0.00	2.59
TL2-115	15.3425	2.62	0.00	2.62
TL2-123	15.73	3.31		3.31
TL2-129	16.085	2.34	0.02	2.32
TL2-136	16.4575	1.88		1.88
TL2-141	16.7125	1.50		1.50
TL2-143	16.8275	1.11	0.22	0.89
TL2-146	16.97	3.56		3.56
TL2-147	18.355	8.92	0.54	8.38
TL2-158	18.915	6.96	0.11	6.85
TL2-178	20.035	3.25		3.25
TL2-181	20.17	3.47	0.47	3.00
TL2-183	20.27	4.26		4.26
TL2-191	20.67	5.58		5.58
TL2-192	21.3825	5.48		5.48
TL2-194	21.5225	5.75	1.56	4.19
TL2-208	22.335	8.72	1.08	7.65
TL2-213	22.6125	3.54		3.54
TL2-215	22.765	2.83		2.83
TL2-216	24.445	3.58	0.00	3.58
TL2-217	24.495	0.34		0.34
TL2-220	24.685	0.51	0.00	0.51
TL2-229	25.15	0.52		0.52
TL2-236	25.53	0.49		0.49
TL2-253	26.4725	2.48	0.00	2.48
TL2-279	28.575	1.78	0.00	1.78
TL2-292	30.7025	0.89	0.00	0.89
TL2-308	31.395	0.79		0.79
TL2-323	32.0325	2.57		2.57
TL2-342	33.915	0.77		0.77
TL2-359	34.85	1.35		1.35
TL2-371	35.395	3.95	0.00	3.95
TL2-377	36.68	4.00		4.00
TL2-386	37.095	2.04		2.04
TL2-407	38.05	2.48		2.48
TL2-421	39.975	2.36		2.36
TL2-429	40.42	1.19	0.00	1.19
TL2-434	40.665	1.63		1.63
TL2-447	41.425	1.30		1.30
TL2-448	41.49	2.69		2.69
TL2-452	41.69	2.21		2.21
TL2-460	42.1125	1.14	0.00	1.14
TL2-463	42.85	2.51		2.51
TL2-469	43.11	1.49		1.49

Tule Lake Sample no.	Adjusted Depth (meter)	Total Carbon (wt. percent)	Carbonate Carbon (wt. percent)	Organic Carbon (wt. percent)
TL2-477	43.5225	1.08		1.08
TL2-500	44.76	0.83		0.83
TL2-512	46.115	2.05	0.00	2.05
TL2-520	46.52	1.04		1.04
TL2-523	46.6825	0.55		0.55
TL2-540	47.68	0.46	0.01	0.45
TL2-552	48.895	2.37		2.37
TL2-558	49.2225	1.10	0.00	1.09
TL2-568	49.9575	0.30		0.30