

Table 1-7. Chemical and isotopic data for Mahogany zone samples from the BC core (see text for description of analytical methods).

[blanks indicate no data]

Field ID	Depth (ft)	Depth (m)	Description	Thin section	C _{organic} %	C _{carbonate} %	δ ¹³ C _{calcite} ‰ (PDB)	δ ¹⁸ O _{calcite} ‰ (PDB)	δ ¹⁸ O _{calcite} ‰ (SMOW) ¹	δ ¹³ C _{dolomite} ‰ (PDB)	δ ¹⁸ O _{dolomite} ‰ (PDB)	δ ¹⁸ O _{dolomite} ‰ (SMOW) ¹
B151	151	46.0	A-groove. oil shale w/pyrite lenses	polished	6.0	5.2	6.9	-1.8	29.1	7.3	-0.4	30.5
B154	154	46.9	pyritic oil shale w/pyritized laminae	polished	2.6	5.0	6.3	-3.3	27.5	6.7	-0.7	30.1
B163	163	49.7	oil shale	polished	3.5	6.7	8.3	-2.2	28.6	8.8	-0.6	30.3
B166	166	50.6	oil shale w/ silty lenses	polished	8.4	5.6	7.9	-1.2	29.6	8.4	-0.1	30.8
B194	194	59.1	oil shale	polished	4.5	6.4	7.1	-2.4	28.4	8.9	-0.3	30.5
B197	197	60.0	oil shale w/ pyritic lenses	polished	9.1	5.1	6.7	-2.5	28.3	8.1	-0.5	30.4
B200	200	61.0	oil shale	polished	6.0	5.9	7.3	-1.9	28.9	9.5	0.1	30.9
B203	203	61.9	oil shale w/pyrite lense	polished	6.4	5.6	6.8	-1.7	29.2	7.4	-1.1	29.7
B206	206	62.8	oil shale w/ small pyrite lenses	polished	3.1	4.7	6.6	-2.0	28.8	7.8	-1.6	29.2
B208	208	63.4	pyritic tuffaceous sand	polished			7.3	-2.4	28.4	8.6	-0.7	30.1
B212	212	64.6	oil shale	polished	3.6	6.0	5.0	-4.6	26.1	7.6	-2.3	28.5
B215	215	65.5	oil shale	polished	1.8	4.2	-1.2	-8.7	21.9	0.8	-5.4	25.3
B218	218	66.4	pyritic fine sandstone		1.3	1.0						
B221	221	67.4	oil shale w/ pyritic lense	polished	1.0	1.2	-0.2	-8.0	22.6	3.1	-2.5	28.2
B224	224	68.3	oil shale	polished	1.6	5.4	6.4	-3.8	27.0	8.8	-0.7	30.1
B227	230	70.0	oil shale	polished	1.1	2.4	5.1	-4.2	26.6	6.7	-2.4	28.4
B229.6	229.6	70.0	oil shale	polished								
B230	230	70.1	oil shale w/ small tuffaceous lenses	polished	13	5.4	8.5	-0.7	30.1			
B233	233	71.0	oil shale w/ small clear crystals	polished	8.4	7.1	8.6	-1.7	29.1	9.5	0.3	31.1
B236	236	71.9	poil shale w/small clear crystals	polished	8.9	7.1	9.6	-1.2	29.6	10.8	0.3	31.1
B239	239	72.8	oil shale w/tuffaceous lenses	polished	7.1	6.6	9.1	-2.0	28.8	10.7	0.2	31.1
B242	242	73.8	oil shale w/silty lenses	polished	3.2	11	8.8	-1.6	29.2	9.9	0.4	31.3
B251	251	76.5	Mahagony bed. oil shale	polished	23	3.3	9.6	-0.4	30.5	11.3	0.9	31.8
B254	254	77.4	oil shale	polished	8.7	7.2	7.2	-2.8	28.0	10.7	-0.2	30.7
B257	257	78.3	pyritic oil shale	polished	13	4.2	11.1	0.1	31.0	11.5	0.6	31.5
B260	260	79.2	oil shale	polished	12	5.9	10.0	-0.7	30.1	11.9	1.3	32.1
B263	263	80.2	oil shale	polished	8.3	7.8	8.8	-2.2	28.6	11.2	0.1	31.0
B266	266	81.1	oil shale	polished	8.7	7.3	8.0	-2.5	28.3	9.7	-0.5	30.3
B269	269	82.0	oil shale	polished	17	4.0	12.4	0.8	31.7	13.1	1.5	32.4
B270.6	270.6	82.5	oil shale w/large tuffaceous lense	polished								
B272	272	82.9	oil shale	polished	17	2.9	11.6	0.9	31.7	11.9	0.8	31.7
B275	275	83.8	oil shale w/ silty tuffaceous lense	polished	4.0	6.9	7.4	-2.6	28.2	9.2	0.0	30.8
B278	278	84.7	oil shale	polished	8.1	6.6	8.9	-0.5	30.3	9.8	0.8	31.7
B281	281	85.6	oil shale w/small pyrite nodule	polished	12	4.2	10.7	0.9	31.7	11.4	1.6	32.5
B284	284	86.6	oil shale	polished	4.2	6.1	8.1	-2.2	28.6	9.0	-0.3	30.5
B287	287	87.5	oil shale	polished	7.4	7.2	9.0	-0.8	30.0	9.6	0.3	31.2
B290	290	88.4	oil shale w/ disintegrating nacolite nodul	polished	11	6.5	9.2	-0.7	30.2	10.9	0.7	31.6
B293	293	89.3	oil shale	polished	12	5.2	7.5	-2.6	28.2	9.6	-0.5	30.3
B296	296	90.2	oil shale	polished	12	6.8	10.3	-0.5	30.4	10.4	0.3	31.1
B299	299	91.1	oil shale w/ pyritic silty lenses	polished	7.2	6.8	8.3	-1.5	29.3	8.9	-1.2	29.6
B305	305	93.0	oil shale	polished	6.2	8.3	8.6	-0.7	30.1	9.1	0.8	31.7
B306.5	306.5	93.4	calcite associated with tuffaceous materi	polished					30.9			
B308	308	93.9	oil shale	polished	8.3	6.8	8.0	-0.9	29.9	8.7	0.1	30.9
B311	311	94.8	oil shale	polished	5.1	5.4	5.8	-0.5	30.4	6.1	0.1	31.0
B314	314	95.7	oil shale	polished	4.8	6.3	6.4	-0.5	30.4	7.8	1.2	32.1
B317	317	96.6	oil shale w/ some silty, pyritic lenses	polished	3.6	3.4	7.3	-1.4	29.4	7.6	-1.7	29.1
B317.8	317.8	96.9	oil shale and silty tuffaceous material	polished								
B320	320	97.5	oil shale	polished	5.3	6.1	6.7	-2.8	28.0	6.3	-2.7	28.1
B323	323	98.4	oil shale w/large tuffaceous lense	polished	4.3	3.9	6.8	-0.5	30.3			
B326	326	99.4	oil shale w/ arge tuffaceous lense	polished	4.6	4.4	7.7	-1.5	29.3	7.8	-1.8	29.0
B328.6	328.6	100.2	coaly oil shale w/ silty lenses	polished	18	3.4	8.6	-1.0	29.8	8.0	-1.4	29.5
B329	329	100.3	oil shale	polished	13	6.7	7.5	-2.4	28.4	8.6	-1.0	29.9
B332	332	101.2	oil shale	polished	1.9	6.5	6.2	-1.5	29.3	7.1	0.6	31.5

¹δ¹⁸O data converted from PDB to SMOW using δ¹⁸O_{SMOW} = 1.03086 (δ¹⁸O_{PDB}) + 30.86 (Hoefs, 1980)