Table 1.

Analyses of high-volatile bituminous coal from beds in mines and drill holes on Moose Creek, lower Matanuska Valley coal field, Alaska.

(Samples taken by U.S. Bureau of Mines, 1942-43. Proximate analyses by M. L. Sharp, Chief Coal Sampler and Analyst, Alaska Railroad, Anchorage, Alaska. Ultimate analyses by Central Experiment Station, Bureau of Mines, Pittsburgh, Pa.)

Mine or diamond-drill hole	Bed sampled	Location of sample in mine or footage in drill hole	Core recovery in percent.	Air-drying loss, percent.	Form of analysis[1]	Proximate, percent: Moisture.	Proximate: Volatile matter.	Proximate: Fixed carbon.	Proximate: Ash.	Ultimate, percent: Sulphur.	Ultimate: Hydrogen.	Ultimate: Carbon.	Ultimate: Nitrogen.	Ultimate: Oxygen.	Calorific value, B.t.u.	Ash-softening temperature, °F.	Laboratory number (Pittsburgh laboratory numbers prefixed by letter B; others are Anchorage laboratory numbers)	Character of bed sampled (from hanging wall to foot-wall). C-coal, BC-bony coal, B-bone, M-marker bed. Underlining of unit denotes exclusion from sample and analysis.
Buffalo mine	1 bed	South face of no. 1 gangway 65' from main entry	---	1.5	A	5.1	36.7	45.9	12.3	0.5	5.2	65.5	1.3	15.2	11,670	2,800	B-98926	C 6", M 1½", C 2' 0", M ½", C 2", M ½", C 1' 5", M ½", C 7", BC 1' 1"
					B	3.7	37.2	46.6	12.5	0.5	5.1	66.5	1.3	14.1	11,850			
					C	-	38.7	48.3	13.0	0.5	4.9	69.0	1.3	11.3	12,300			
					D	-	44.4	55.6	-	0.5	5.6	79.4	1.5	13.0	14,140			
	2 bed	In shaft, 92' feet below no. 2 gangway, 210' SW of main entry	---	0.9	A	3.9	40.0	49.7	6.4	0.2	5.6	72.2	1.3	14.3	12,920	2,660	B-98928	B 2' 0", C 6' 8"
					B	3.0	40.3	50.3	6.4	0.3	5.5	72.9	1.3	13.5	13,030			
					C	-	41.6	51.8	6.6	0.3	5.4	75.2	1.3	11.2	13,440			
					D	-	44.5	55.5	-	0.3	5.8	80.5	1.4	12.0	14,390			
	2 bed	Six feet from north face of no. 2 gangway about 850' NE of main entry adit.	---	1.6	A	4.7	39.8	48.8	6.7	0.4	5.6	70.9	1.2	15.2	12,670	2,800	B-98927	BC 1' 2", C 4' 4", B 6"
					B	3.1	40.5	49.6	6.8	0.4	5.5	72.0	1.2	14.1	12,870			
					C	-	41.8	51.1	7.1	0.4	5.3	74.3	1.3	11.6	13,280			
					D	-	44.9	55.1	-	0.4	5.8	80.0	1.4	12.4	14,290			
	3 bed	North face of no. 3 gangway 185' from main entry adit.	---	1.4	A	4.6	40.0	51.0	4.4	0.4	5.7	73.0	1.2	15.3	13,070	2,710	B-98929	C 2' 5"
					B	3.2	40.6	51.7	4.5	0.4	5.7	74.1	1.3	14.0	13,260			
					C	--	41.9	53.5	4.6	0.4	5.5	76.6	1.3	11.6	13,700			
					D	--	44.0	56.0	-	0.4	5.7	80.3	1.4	12.2	14,370			
	4 bed	North wall of main entry adit at intersection with no. 4 bed.	---	1.7	A	4.8	39.0	50.6	5.6	0.3	5.6	71.9	1.1	15.5	12,860	2,340	B-98931	C 2' 10"
					B	3.1	39.7	51.5	5.7	0.3	5.5	73.2	1.1	14.2	13,080			
					C	-	41.0	53.2	5.8	0.3	5.3	75.5	1.1	12.0	13,510			
					D	-	43.5	56.5	-	0.4	5.7	80.2	1.2	12.5	14,340			
	5 bed (upper bench)	North wall of main entry adit at intersection with no. 5 bed	---	1.3	A	4.2	38.6	49.9	7.3	0.3	5.5	71.0	1.2	14.7	12,690	2,780	B-98933	C 2' 2", M 10"
					B	3.0	39.1	50.5	7.4	0.3	5.4	71.9	1.2	13.8	12,850			
					C	-	40.2	52.2	7.6	0.3	5.3	74.1	1.2	11.5	13,240			
					D	-	43.5	56.5	-	0.3	5.7	80.2	1.3	12.5	14,320			
	(lower bench)		---	1.5	A	4.3	37.0	44.8	13.9	0.3	5.2	64.7	1.0	14.9	11,540	2,780	B-98932	C 1' 8", M 1", C 1' 8"
					B	2.9	37.6	45.4	14.1	0.3	5.1	65.7	1.1	13.7	11,710			
					C	-	38.7	46.7	14.6	0.3	4.9	67.6	1.1	11.5	12,060			
					D	-	45.3	54.7	-	0.3	5.8	79.1	1.3	13.5	14,120			
	6 bed	North wall of "badger-hole" extension of main entry adit at intersection with no. 6 bed.	---	1.5	A	3.9	30.7	31.4	34.0	0.3	4.2	47.3	0.9	13.3	8,420	2,910	B-98935	BC 4' 6"
					B	2.4	31.2	31.9	34.5	0.3	4.1	48.1	0.9	12.1	8,560			
					C	--	31.9	32.7	35.4	0.3	3.9	49.3	0.9	10.2	8,770			
					D	--	49.4	50.6	-	0.5	6.1	76.2	1.4	15.8	13,564			
	7 bed (upper bench)	North wall of "badger-hole" extension of main entry adit at intersection with no. 7 bed.	---	0.7	A	3.2	34.0	35.6	27.2	0.2	4.7	54.2	1.1	12.6	9,760	2,910 + (start)	B-98937	C 1' 6", M 5"
					B	2.5	34.3	35.8	27.4	0.3	4.7	54.6	1.1	11.9	9,830			
					C	-	35.1	36.8	28.1	0.3	4.5	56.0	1.1	10.0	10,080			
					D	-	48.9	51.1	-	0.4	6.2	77.9	1.6	13.9	14,020			
	(lower bench)		--	1.1	A	3.8	39.9	43.9	12.4	0.3	5.5	66.4	1.3	14.1	11,940	2,910+ (start)	B-98936	C 1' 10"
					B	2.8	40.4	44.2	12.6	0.3	5.4	67.1	1.3	13.3	12,070			
					C	-	41.5	45.6	12.9	0.3	5.3	69.1	1.3	11.1	12,410			
					D		47.7	52.3	-	0.4	6.0	79.3	1.5	12.8	14,260			
Premier mine.	1 bed	Southwest face of short drift on second level.	---	1.4	A	3.3	42.2	44.7	9.8	0.4	-	-	-	-	12,355	--	9991	B 6", C 1' 2", M 7", C 2' 8"
					B	1.9	42.8	45.4	9.9	0.4	-	-	-	-	12,530			
					C	-	43.6	46.2	10.2	0.4	-	-	-	-	12,775			
					D	-	48.6	51.4	-	0.5	-	-	-	-	14,220			
	2 bed	Intersection of bed with south wall of crosscut off no. 2 gangway, second level	--	1.8	A	3.5	40.3	45.9	10.3	0.3	-	-	-	-	12,335	--	9992	B 1' 0", C 1' 9", M 10", C 11", M 1", C 7", B 2' 6"
					B	1.7	41.1	46.7	10.5	0.3	-	-	-	-	12,560			
					C	-	41.7	47.6	10.7	0.3	-	-	-	-	12,780			
					D	—	46.7	53.3	-	0.3	-	-	-	-	14,310			
	2½ bed	Intersection of bed with south wall of crosscut off no. 3 gangway, second level.	--	2.2	A	4.2	42.9	46.7	6.2	0.3	-	-	-	-	12,515	—	9994	C 3' 3"
					B	2.0	43.9	47.8	6.3	0.3	-	-	-	-	12,795			
					C	-	44.8	48.7	6.5	0.3	-	-	-	-	13,065			
					D	-	47.9	52.1	-	0.3	-	-	-	-	13,965			
	2½ bed	Upper level; face of short drift 10' south of main entry.	--	1.8	A	3.3	44.6	46.6	5.5	0.3	-	-	-	-	12,875	--	9702	C 9", M 1", C 1' 3"
					B	1.5	45.4	47.5	5.6	0.3	-	-	-	-	13,110			
					C	--	46.1	48.2	5.7	0.3	-	-	-	-	13,310			
					D	--	48.9	51.1	-	0.3	-	-	-	-	14,110			
	3 bed	Across back of gangway 10' south of main entry.	--	1.8	A	3.5	41.1	48.7	6.7	0.4	-	-	-	-	12,830	--	9703	B 11", M 1", C 7", M 10", C 1' 9", M 2", C 7", M 2", C 8", M 1", C 1' 11"
					B	1.7	41.9	49.6	6.8	0.4	-	-	-	-	13,065			
					C	-	42.6	50.5	6.9	0.4	-	-	-	-	13,290			
					D	-	45.8	54.2	-	0.4	-	-	-	-	14,290			
	4 bed	Face of bed in gangway 75' south of main entry	—	1.8	A	3.5	40.2	50.6	5.7	0.4	-	-	-	-	13,025	—	9704	C 2' 2"
					B	1.7	40.9	51.6	5.8	0.4	-	-	-	-	13,265	—		
					C	-	41.7	52.4	5.7	0.6	-	-	-	-	13,495	—		
					D	-	44.3	55.7	-	0.4	-	-	-	-	14,340	—		
	4½ bed	Across roof of gangway 60' south of main entry	—	1.6	A	3.4	41.4	50.8	4.4	0.4	-	-	-	-	13,190	—	9705	C 2' 1"
					B	1.8	42.1	51.6	4.5	0.4	-	-	-	-	13,405	—		
					C	-	42.8	52.6	4.6	0.4	-	-	-	-	13,650	—		
					D	-	44.9	55.1	-	0.4	-	-	-	-	14,310	—		
	5 bed	Across roof of gangway 45' north of main entry	—	2.2	A	3.9	39.4	47.1	9.6	0.4	-	-	-	-	12,365	—	9706	C 1' 9", B 4", C 5", M 9", C 2", M 1", C 6", M 2", C 3", M 2", BC 2"
					B	1.7	40.3	48.2	9.8	0.4	-	-	-	-	12,645	—		
					C	-	41.0	49.0	10.0	0.4	-	-	-	-	12,870	—		
					D	-	45.6	54.4	-	0.5	-	-	-	-	14,295	—		
	6 bed	Across back of bed along south wall of main entry.	--	1.6	A	3.2	38.2	43.3	15.3	0.3	-	-	-	-	11,630	—	9707	C 1' 5", M 3", BC 2", M 2", BC 8".
					B	1.6	38.8	44.0	15.6	0.3	-	-	-	-	11,820	—		
					C	-	39.5	44.7	15.8	0.3	-	-	-	-	12,015	—		
					D	-	46.9	53.1	-	0.4	-	-	-	-	14,270	—		
Diamond-drill hole 4, near Buffalo mine	"Premier" coal group	94' 5" - 100' 6"	10.9	-	A	1.8	41.2	43.5	13.5	0.3	-	-	-	-	12,030	—	9846	C 6' 1" Coal somewhat bony. Two 1" markers eliminated; position undetermined.
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	41.9	44.3	13.8	0.3	-	-	-	-	12,245			
					D	-	48.6	51.4	-	0.4	-	-	-	-	14,205			
		100' 9" - 106' 8"	27.0	-	A	1.9	39.5	41.5	17.1	0.3	-	-	-	-	11,395	—	9847	C 3' 0", M 1", C 2' 11".
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	40.3	42.3	17.4	0.3	-	-	-	-	11,610			
					D	-	48.8	51.2	-	0.4	-	-	-	-	14,070			
		109' 11" - 112' 8"	26.0	-	A	1.7	35.1	31.0	32.2	0.3	-	-	-	-	8,675	—	9848	C & B 2' 9"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	35.7	31.5	32.8	0.3	-	-	-	-	8,915			
					D	-	53.1	46.9	-	0.5	-	-	-	-	13,260			
		124' 8" - 132' 0"	25.2	-	A	2.1	44.3	50.2	3.4	0.4	-	-	-	-	13,275	—	9849	C 7' 4"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	45.2	51.3	3.5	0.4	-	-	-	-	13,555			
					D	-	46.7	53.3	-	0.4	-	-	-	-	14,045			
		151' 10" - 154' 0"	38.2	-	A	2.1	43.8	50.4	3.7	0.4	-	-	-	-	13,250	—	9850	C 2' 2", B 1' 4".
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	44.7	51.5	3.8	0.4	-	-	-	-	13,540			
					D	-	46.5	53.5	-	0.4	-	-	-	-	14,080			
		157' 5" - 164' 8"	74.3	-	A	1.7	43.4	47.8	7.1	0.3	-	-	-	-	12,870	—	9851	C 3' 8", M 2", C 3' 7".
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	44.2	48.6	7.2	0.3	-	-	-	-	13,090			
					D	-	47.6	52.4	-	0.3	-	-	-	-	14,105			
		172' 0" - 174' 0"	50.0	-	A	2.0	41.7	47.4	8.9	0.3	-	-	-	-	12,395	—	9852	C 2' 0"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	42.5	48.4	9.1	0.3	-	-	-	-	12,640			
					D	-	46.8	53.2	-	0.3	-	-	-	-	13,905			
		179' 7" - 183' 1"	66.0	-	A	2.1	39.8	50.3	7.8	0.3	-	-	-	-	12,425	—	9853	C 3' 6"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	40.6	51.4	8.0	0.3	-	-	-	-	12,685			
					D	-	44.2	55.8	-	0.3	-	-	-	-	13,790			
	1 bed (Buffalo mine)	254' 0" - 258' 11"	70.0	-	A	2.3	41.1	48.7	7.9	0.3	-	-	-	-	12,615	—	9854	C 3' 6", M 1", C 1' 5", B 7".
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	42.0	49.9	8.1	0.3	-	-	-	-	12,915			
					D	-	45.8	54.2	~~0.3~~	0.3	-	-	-	-	14,055			
Diamond-drill hole 1, near Buffalo mine.	Eska coal group	542' 1" - 545' 7"	59.0	-	A	2.0	35.8	36.6	25.6	0.3	-	-	-	-	9,895	—	9936	C 3' 6"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	36.6	37.3	26.1	0.3	-	-	-	-	10,095			
					D	-	49.4	50.6	-	0.4	-	-	-	-	13,665			
		562' 0" - 566' 11"	69.0	-	A	1.7	31.7	32.4	34.2	0.3	-	-	-	-	8,510	—	9937	C 4' 11"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	32.2	33.0	34.8	0.3	-	-	-	-	8,655			
					D	-	49.5	50.5	-	0.5	-	-	-	-	13,275			
		574' 5" - 579' 1"	77.0	-	A	1.6	31.8	31.6	35.0	0.3	-	-	-	-	8,485	—	9938	C 4' 8"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	32.3	32.1	35.6	0.3	-	-	-	-	8,620			
					D	-	50.1	49.9	-	0.5	-	-	-	-	13,380			
		597' 6" - 603' 0"	25.0	-	A	2.6	39.7	50.4	7.3	0.5	-	-	-	-	12,630	—	9939	C 5' 6"
					B	-	-	-	-	-	-	-	-	-	-			
					C	-	40.8	51.7	7.5	0.5	-	-	-	-	12,970			
					D	-	44.1	55.9	-	0.5	-	-	-	-	14,020			

1/ A, as received; B, air-dried; C, moisture-free; D, moisture- and ash-free.