

Spruce Bark Biogeochemistry - Arch Grid August 2014																				
line	station	map easting	map northing	ELEVATION	date sampled	sampler	bark sample #	BARK DUP	bark easting	bark northing	tree diameter	# OF TREES	SAMPLE tree species	tree health	site drainage	slope	aspect	vegetation	sample horizon	texture
1000	0S	571158	6819184		AUG 14/13	DEB, WINSTON, CODY	S10000		571157	6819183	34	1	WHITE SPRUCE	MODERATE	MODERATE	SLOPE	SW	SPRUCE, MOSSBERRY, LAB TEA, BLUEBERRY, DWARF BIRCH	HUMUS	ORGANIC, DAMP
1000	50S	571133	6819141	1219	AUG 16/13	DEB AND CODY	S10050		571126	6819137	38	1	WHITE SPRUCE		GOOD TO MODERATE	SLOPED RIDGETOP	S	WHITE SPRUCE, WILLOW, DWARF BIRCH	HUMUS - MIDDLE	ORGANIC +/- ASH
1000	100S	571108	6819098	1196	AUG 16/13	DEB AND CODY	S10100		571109	6819098	40	1	WHITE SPRUCE	MODERATE	GOOD	RIDGE TOP TO SLOPE	S	SPRUCE, WILLOW, ALDER, ROSE, VETCH, FIREWEED, LAB TEA, GRASS	HUMUS - LOWER	ORGANIC
1000	150S	571083	6819054	1197	AUG 16/13		S10150		571055	6819056	20	1	WHITE SPRUCE	MODERATE	MODERATE	RIDGE TOP - RIM	SW	SPRUCE, ALDER, WILLOW, ROSE, FIREWEED, LAB TEA, BLUEBERRY	HUMUS	ORGANIC, MIXED WITH MIDDLE LAYER
1000	200S	571058	6819011	1191	AUG 16/13	DEB, WINSTON, CODY	S10200		571049	6819012	22	1	WHITE SPRUCE	MODERATE TO GOOD		RIDGE TOP TO SLOPE	S	SPRUCE, WILLOW, CRANBERRY, LAB TEA, ASPEN, SOAPBERRY, HORSETAILS, ROSE	HUMUS - MIDDLE	ORGANIC +/- ASH
1000	250S	571033	6818968	1182	AUG 16/13	DEB, WINSTON, CODY	S10250		571039	6818975	32	1	WHITE SPRUCE	MODERATE	GOOD	SLOPE	S	SPRUCE, ASPEN, WILLOW, ROSE, FIREWEED, LAB TEA, SOAPBERRY, CRANBERRY	HUMUS	ORGANIC
1000	300S	571008	6818924	1151	AUG 16/13	DEB, WINSTON, CODY	S10300		571004	6818919	35	1	WHITE SPRUCE	MODERATE	GOOD	SLOPE	S	SPRUCE, WILLOW, PEA, ALDER, SOAPBERRY	HUMUS	ORGANIC
1000	350S	570983	6818881	1160	AUG 16/13	DEB, WINSTON, CODY	S10350		570988	6818886	35	1	WHITE SPRUCE	MODERATE	GOOD	SLOPE	SE	SPRUCE, ALDER, ROSE, FIREWEED, WINTERGREEN, FIREWEED, ASPEN, SOAPBERRY	HUMUS	ORGANIC
1000	400S	570958	6818838		AUG 16/13	DEB AND WINSTON	S10400		570954	6818833	30	1	WHITE SPRUCE	MODERATE	GOOD	RIDGE TOP TO SLOPE	S	W/ SPRUCE, WILLOW, JUNIPER, ASPEN,	HUMUS - MIDDLE	ORGANIC, DEAD MOSS
1000	450S	570933	6818795	1144	AUG 16/13	DEB AND WINSTON	S10450		570945	6818809	40	1	WHITE SPRUCE		GOOD	SLOPE	S	SPRUICE, WILLOW, SOAPBERRY, WINTERGREEN, ROSE, JUNIPER	HUMUS - MIDDLE	ORGANIC + SILT/CLAY
1000	500S	570908	6818751	1135	AUG 16/13	DEB AND WINSTON	S10500		570911	6818756	35	1	WHITE SPRUCE		GOOD	SLOPE	W	SPRUCE, WILLOW, ASPEN, SOAPBERRY, JUNIPER	HUMUS - MIDDLE	ORGANIC +/- SILT
1000	550S	570883	6818708	1130	AUG 16/13	DEB AND WINSTON	S10550		570883	6818713	25	1	WHITE SPRUCE	MODERATE	GOOD	RIDGE TOP	NW	SPRUCE, WILLOW, LAB TEA, ALDER, ROSE, CRANBERRY, MOSS BERRY	HUMUS - LOWER	ORGANIC - DAMP
1000	600S	570858	6818665	1102	AUG 16/13	DEB AND WINSTON	S10600		570846	6818668	23	1	WHITE SPRUCE		MODERATE	SLOPE	W	SPRUCE, ALDER, LAB TEA, ROSE, CRANBERRY	HUMUS	ORGANIC
1000	650S	570833	6818621		AUG 16/13	DEB AND WINSTON	S10650		570830	6818622	35	1	BLACK SPRUCE	MODERATE TO POOR	GOOD	SLOPE	W	W>B SPRUCE, FIREWEED, ROSE, CRANBERRY, JUNIPER, WINTERGREEN	HUMUS - LOWER	ORGANIC
1000	700S	570808	6818578		AUG 16/13	DEB AND WINSTON	S10700		570810	6818577	25	1	SPRUCE	MODERATE	GOOD	SLOPE	W	SPRUCE, WILLOW, SOAPBERRY, ROSE, W>B SPRUCE	HUMUS	ORGANIC
1000	700A							S10700A												
1000	800S	570758	6818491	1042	AUG 10 AND 16/13	DEB AND WINSTON	S10800		570752	6818511	20	1	WHITE SPRUCE	MODERATE	MODERATE	SLOPE	NE	ALDER, MINOR W. SPRUCE, FIREWEED, GRASS, WINTERGREEN	HUMUS - LOWER	ORGANIC - DAMP
1200	0S	571331	6819084	1169	AUG 14/13	DEB AND WINSTON	S12000		571339	6819089	45	1	SPRUCE	MODERATE	GOOD	SLOPE	W	SPRUCE, ALDER, JUNIPER, FIREWEED, GRASS, WINTERGREEN, MOSSBERRY	JUMUS - MIDDLE AND SILT	ORGANICS AND SILT
1200	50S	571306	6819041	1152	AUG 14/13	DEB	S12050		571317	6819039	55	1	SPRUCE	MOD	GOOD	SLOPE	W	SRUCE, JUNIPER, ALDER, GRASS, WILLOW	HUMUS - MIDDLE	DEAD MOSS AND PEAT
1200	100S	571281	6818998	1129	AUG 14/13	DEB	S12100		571291	6818999	38	1	SPRUCE		MODERATE	VALLEY BOTTOM	W	BLACK>WHITE SPRUCE, WILLOW, ALDER, FIREWEED, WINTERGREEN	HUMUS-MIDDLE	ORGANIC MIXED WITH SILT
1200	150S	571256	6818954		AUG 14/13	DEB AND WINSTON	S12150		571260	6818954	35	1	BLACK SPRUCE	MODERATE	MODERATE	SLOPE	NW	BLACK>WHITE SPRUCE, WILLOW, ALSER, LAB TEA, CRANBERRY, MOSS BERRY	HUMUS-LOWER	PEAT
1200	200S	571231	6818911	1116	AUG 14/13	DEB AND WINSTON	S12200		571239	6818911	54	1	SPRUCE		GOOD	SLOPE	W	SPRUCE, WILLOW, GRASS, WINTERGREEN, SOAPBERRY, LAB TEA	JUMUS - MIDDLE AND LOWER	ORGANIC
1200	250S	571206	6818868	1105	AUG 14/13	DEB AND WINSTON	S12250		571215	6818870	43	1	SPRUCE	MOD	MODERATE	VALLEY BOTTOM	SW	SPRUCE, WILLOW, LAB TEA, WINTERGREEN, HORSETAIL, ALDER, GRASS, CRANBERRY	HUMUS	ORGANIC, CLAY
1200	300S	571181	6818824	1098	AUG 14/13	DEB AND WINSTON	S12300		571190	6818825	14	1	SPRUCE	MOD	MODERATE	SLOPE	SW	SPRUCE, ALDER, WILLOW, ROSE, WINTERGREEN, LAB TEA, GRASS, CRANBERRY, FIWEED	HUMUS - MIDDLE	ORGANIC
1200	350S	571156	6818781	1090	AUG 14/13	DEB AND WINSTON	S12350		571169	6818782	15	1	SPRUCE		MODERATE	VALLEY BOTGTOM	SW	SPRUCE, WILLOW, ALDER, JUNIPER, WINTERGREEN, SOAPBERRY, CRANBERRY	JUMUS - MIDDLE	
1200	400S	571131	6818738	1093	AUG 14/13	DEB AND WINSTON	S12400		571146	6818740	25	1	SPRUCE		MODERATE	SLOPE	SW	SPRUCE, WILLOW, SOAPBERRY, GRASS, JUNIPER, ALDER	HUMUS - MIDDLE	ORGANIC, DEAD MOSS
1200	450S	571106	6818695	1088	AUG 14/13	DEB AND WINSTON	S12450		571101	6818693	27	1	SPRUCE	MOD	MODERATE	SLOPE	S	SPRUCE, WILLOW, HORSETAIL, MOSS BERRY, WILLOW, ROSE, FIREWEED, ALDER, LAB TEA, CRANBERRY	HUMUS	PEATY
1200	500S	571081	6818651	1085	AUG 14/13	DEB AND WINSTON	S12500		571085	6818649	18	1	BLACK SPRUCE	MOD	MODERATE	SLOPE	SW	SPRUCE, ROSE, LAB TEA, WILLOW, ALDER, FIREWEED, CRANBERRY	HUMUS - MIDDLE	ORGANIC AND CLAY
1200	550S	571056	6818608		AUG 14/13	DEB AND WINSTON	S12550		571054	6818608	27	1	SPRUCE	MOD	MODERATE	SLOPE	SW	BLACK.WHITE SPRUCE, OPEN FOREST, SPRUCE DOMINANT, MIXED AGE. MOD HEALTH STAND.	HUMUS - MIDDLE	DEAD MOSS AND ROOTS
1200	600S	571031	6818565	1054	AUG 14/13	DEB AND WINSTON	S12600		571038	6818567	20	1	SPRUCE	GOOD	MODERATE	VALLEY BOTTOM	W	SPRUCE, WILLOW, ALDER, POPLAR, SOAPBERRY, GRASS	HUMUS - UPPER AND MIDDLE	DEAD MOSS AND ROOTS
1200	650S	571006	6818521	1043	AUG 14/13	DEB AND WINSTON	S12650		571009	6818516	36	1	SPRUCE	MODERATE TO GOOD	MODERATE	SLOPE	W	SPRUCE, ALDER, SOAPBERRY, CRANBERRY, WINTERGREEN.	HUMUS - MIDDLE	DEAD MOSS
1200	700S	570981	6818478		AUG 10/13	DEB	NO SAMPLE								MODERATE	VALLEY BOTTOM	N	SPRUCE, ALDER, LAB TEA	HUMUS- MIDDLE	PEAT AND ORGANICS
1200	750S	570956	6818435	1055	AUG 14/13	DEB, WINSTON, CODY	S12750		570952	6818435	28	1	SPRUCE	MODERATE	MODERATE	SLOPE	NE	B AND W SPRUCE, WILLOW, MOSSBERRY, ALDER, LAB TEA, CRANBERRY	HUMUS	ORGANIC AND CLAY
1200	800S	570931	6818391		AUG 10 AND 14/13	DEB, WINSTON, CODY	S12800		570934	6818389	13	1	SPRUCE		POOR	VALLEY BOTTOM	N	SPRUCE, WILLOW, ALDER, LAB TEA, SUB ALPINE, DWARF BIRCH, WINTERGREEN, CRANBERRY, MOSS BERRY, BLUE BERRY	HUMUS	PEAT + CLAY
1400	0S	571505	6818984		aug 11/13 AND 18	DEB, WINSTON, CODY	S14000		571503	6818982	15	1	SPRUCE		MODERATE TO POOR	RIDGE TOP TO SLOPE	W	SPRUCE, WILLOW, LOTS OF DWARF BIRCH, SUB ALPINE, GRASS, LOW BUSH CRANBERRY, BLUEBERRY, MOSSBERRY, LAB TEA	HUMUS MAYBE Ah	ORGANIC - WET
1400	50S	571480	6818941	1200	aug 11/13 AND 18	DEB, WINSTON, CODY	S14050		571478	6818946	25	1	SPRUCE	MOD	MODERATE TO POOR	RIDGE TOP	N	SPRUCE, WILLOW, DWARF BIRCH, LAB TEA, MOSSBERRY, LOWBUSH CRANBERRY, SOAPBERRY, BLUEBERRY	HUMUS AND Ah?	PEAT AND SILT-CLAY
1400	50S							S14050A												
1400	100S	571455	6818898	1193	aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14100		571454	6818899	30	1	WHITE SPRUCE	MOD	POOR TO MOD	RIDGE	SW	SPRUCE, WILLOW, DWARF BIRCH, LAB TEA, SUB ALPINE, BOGGY, GRASS, BLUEBERRY, LOW BUSH CRANBERRY, HORSETAIL	HUMUS - LOWER, MAYBE Ah	organic, silt and clay
1400	150S	571430	6818854	1191	aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14150		571431	6818854	20	1	WHITE SPRUCE	mod	POOR TO MOD	RIDGE	SW	SPRUCE, WILLOW, DWARF BIRCH, LAB TEA, SUB ALPINE, MOSSBERRY, BLUEBERRY, GRASS, LOW BUSH CRANBERRY	HUMUS - LOWER, MAYBE Ah	organic, silt and clay
1400	200S	571405	6818811	1185	aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14200		571404	6818811	15	1	WHITE SPRUCE	MOD	MODERATE TO POOR	RIDGE	SW	SPRUCE, WILLOW, DWARF BIRCH, LAB TEA, GRASS, BLUEBERRY, MOSSBERRY, BOGGY, LOW BUSH CRANBERRY	HUMUS	PEATY
1400	250S	571380	6818768	1176	aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14250		571378	6818770	20	1	WHITE SPRUCE	GOOD	MODERATE	SLOPE	SW	SPRUCE, LAB TEA, ROSE, WILLOW, SUB ALPINE, BOGGY, WINTERGREEN, BIG OVAL, LOW BUSH CRANBERRY, PEA, DWARF BIRCH, MOSSBERRY, GRASS	HUMUS - LOWER, MAYBE A	PEAT, SILT CLAY

line	station	map easting	map northing	ELEVATION	date sampled	sampler	bark sample #	BARK DUP	bark_easting	bark_northing	tree diameter	# OF TREES	SAMPLE tree species	tree health	site drainage	slope	aspect	vegetation	sample horizon	texture
1400	300S	571355	6818724	1161	aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14300		571362	6818728	25	1	WHITE SPRUCE	MOD	MODERATE TO GOOD	SLOPE	NW	SPRUCE, WILLOW, ALDER, LESSER LAB TEA, SOAPBERRY, MOSSBERRY, LOW BUSH CRANBERRY, BIG OVAL	HUMUS - MIDDLE	MOSSY TO PEATY
1400	350S	571330	6818681		aug 11/13 AND 18/13	DEB AND WINSTON	S14350		571328	6818678	10 AND 15	2	WHITE SPRUCE	MOD	MODERATE TO POOR	SLOPE	N	SPRUCE, ALDER, WILLOW, SUB-ALPINE, SOME LAB TEA, CRANBERRY, HORSETAIL, BLUEBERRY	HUMUS - LOWER	PEATY
1400	400S	571305	6818638		aug 11/13 AND 18/13	DEB, WINSTON, CODY	S14400		571307	6818644	35	1	SPRUCE		POOR	RIDGE TOP	FLAT	SPRUCE, LAB TEA, DWARF BIRCH, SUB ALPINE, LOW BUSH CRANBERRY, BIG OVAL, GRASS, HORSETAIL	HUMUS	ORGANIC, PEATY
1400	450S	571280	6818595		AUG 18/13	DEB, WINSTON, CODY	S14450		571322	6818598	21	1	WHITE SPRUCE	MOD TO GOOD	MODERATE	RIDGE TOP	FLAT	SPRUCE, DWARF BIRCH, LAB TEA, GRASS, STUNTED TREES, BLUBERRY, WILLOW	HUMUS	ORGANIC
1400	500S	571255	6818551		AUG 11/13 AND 18/13	DEB, WINSTON, CODY	S14500		571249	6818551	35	1	WHITE SPRUCE	GOOD HEALTH	GOOD	RIDGETOP	S	SPRUCE, POPLAR, ALDER, BIG OVAL, SOAPBERRY	HUMUS	PEAT, ORGANIC
1400	550S	571230	6818508	1136	AUG 11/13 and 18/13	DEB, WINSTON, CODY	S14550		571237	6818511	30	1	WHITE SPRUCE	HEALTHIER THAN DOWNSLOOE	GOOD	SLOPE	S	SPRUCE, WILLOW, ALDER, GRASS, POPLAR, LAB TEA, BIG OVAL, FIREWEED. TREE DOMINANT	HUMUS	ORGANIC - PEAT
1400	600S	571205	6818465	1085	AUG 10/13 AND AUG 11/13	DEB	S14600		571203	6818464	20	1	WHITE SPRUCE	MODERATE	MODERATE TO POOR	SLOPE	S	SPRUCE, MINOR WILLOW, LAB TEA, ALDER	HUMUS	ORGANIC +/- SILTY
1400	650S	571180	6818421		AUG 10 AND 11/13	DEB	S14650		571180	6818422	30	1	SPRUCE	MOD	POOR	SLOPE TO VALLEY BOTTOM	S	SPRUCE, ALDER, WILLOW, LAB TEA, MOSS	HUMUS	PEAT AND ORGANIC
1400	700S	571155	6818378	1065	AUG 10/13 13/13	DEB	S14700		571162	6818389	20	1	WHITE SPRUCE	GOOD	MODERATE	SLOPE	SW	SPRUCE, WILLOW, LAB TEA, CRANBERRY	HUMUS	PEATY, SOME CLAY
1400	750S	571130	6818335	1066	AUG 13/13	DEB	NO SAMPLE					1	WHITE SPRUCE		MODERATE	VALLEY BOTTOM	N	WILLOW, ALDER, HORSETAIL, FIREWEED	HUMUS MIXED WITH SILT	SILT AND ROTTED PLANTS
1400	800S	571105	6818291	1062	AUG 13/13	DEB	S14800		571112	6818292	25	1	SPRUCE	MOD	MODERATE	SLOPE	NE	SPRUCE, WILLOW, ALDER, LAB TEA	HUMUS	ORGANIC - PEAT
1400	800S							S14800A												
1600	0S	571678	6818884	1236	AUG 13/13	DEB, WINSTON, CODY	H16000		571677	6818881	29	1	SPRUCE		MODERATE TO GOOD	SLOPE	SW	SPRUCE, WILLOW, ALDER, LAB TEA, CRANBERRY, HORSETAIL, GRASS	HUMUS	PEAT +/- ASH
1600	50S	571653	6818841	1224	AUG 12/13	DEB, WINSTON, CODY	S16050		571653	6818843	22	1	SPRUCE		MODERATE	SLOPE	SW	SPRUCE, WILLOW, BLUEBERRY, ALDER, LAB TEA, CRANBERRY, MOSSBERRY	HUMUS	PEATY, CLAY
1600	100S	571628	6818798	1211	AUG 12/13	DEB, WINSTON, CODY	S16100		571627	6818798	8	1	SPRUCE		MODERATE	SLOPE	SW	SPRUCE, WILLOW, ALDER, LAB TEA, CRANBERRY, BLUEBERRY	HUMUS	PEATY
1600	150S	571603	6818754	1190	AUG 12/13	DEB, WINSTON, CODY	S16150		571609	6818750	10	1	SPRUCE		MODERATE	SLOPE	SW	SPRUCE, WILLOW, CRANBERRY, GRASS, HORSETAIL, ALDER, JUNIPER	HUMUS	PEATY, DAMP
1600	200S	571578	6818711	1180	AUG 12/13	DEB, WINSTON, CODY	S16200		571580	6818708	12	1	SPRUCE		POOR	SLOPE	SW	SPRUCE, WILLOW, DWARF BIRCH, MOSSBERRY, LAB TEA, GRASS, HORSETAIL	HUMUS	PEATY, DAMP
1600	250S	571553	6818668	1180	AUG 12/13	DEB, WINSTON, CODY	S16250		571551	6818669	15	1	SPRUCE	MOD	POOR	SLOPED RIDGETOP	W	SPRUCE, GRASS, LAB TEA MUTANT, DWARF BIRCH, HORSETAIL, LAB TGEA,	HUMUS	ORGANIC
1600	300S	571528	6818625	1179	AUG 12/13	DEB, WINSTON, CODY	S16300		571534	6818621	18	1	SPRUCE	MODERATE	POOR	SLOPING RIDGE TOP	W	SPRUCE, WILLOW, DWARF BIRCH, LAB TEA, "RED MOSS"	HUMUS	ORGANIC
1600	350S	571503	6818581	1179	AUG 12/13	DEB, WINSTON, CODY	S16350		571496	6818585	25	1	SPRUCE	GOOD	MODERATE	RIDGE TOP	W	SPRUCE, WILLOW, SUB ALPING, DWARF BIRCH, LAB TEA, GRASS, MOSSBERRY, LOW BUSH CRANBERRY	HUMUS	ORGANIC
1600	400S	571478	6818538	1176	AUG 13/13	DEB, WINSTON, CODY	S16400		571479	6818538	25	1	SPRUCE	GOOD	MODERATE	RIDGE TOP TO SLOPE	W	SPRUCE, WILLOW, DWARF BIRCH, GRASS, BLUEBERRY, CRANBERRY, MINOR LAB TEA	HUMUS	ORGANIC
1600	450S	571453	6818495	1166	AUG 13/13	DEB, WINSTON, CODY	S16450		571457	6818497	36	1	SPRUCE		POOR TO MODERATE	RIDGE TOP	W	SPRUCE, WILLOW, LAB TEA, BLUEBERRY, SAUB ALPINE	HUMUS	ORGANIC
1600	500S	571428	6818451	1155	AUG 13/13	DEB, WINSTON, CODY	S16500		571432	6818452	40	1	SPRUCE	MODERATE	GOOD	SLOPE	S	SPRUCE, WILLOW, ROSE, FIREWEED, CRANBERRY, SOAPBERRY	HUMUS	PEATY
1600	550S	571403	6818408	1110	AUG 12/13	DEB, WINSTON, CODY	S16550		571398	6818397	38	1	SPRUCE		GOOD	SLOPE	S	SPRUCE, ALDER, CRANBERRY, ROSE, GRASS	HUMUS - DEAD MOSS	MOSSY, PEATY
1600	600S	571378	6818365	1108	AUG 12/13	DEB, WINSTON, CODY	S16600		571373	6818352	19	1	SPRUCE		MODERATE TO POOR	SLOPE	S	SPRUCE, WILLOW, ALDER, GRASS, HORSETAIL, SPARSE LAB TEA	HUMUS	ORGANIC
1600	650S	571353	6818321	1130	AUG 12/13	DEB, WINSTON, CODY	S16650		571350	6818322	34	1	SPRUCE	GOOD	MODERATE	SLOPE	NW	SPRUCE, ALDER, WILLOW, LAB TEA, CRANBERRY	HUMUS	ORGANIC
1600	700S	571328	6818278	1135	AUG 12/13	DEB, WINSTON, CODY	NO SAMPLE								MODERATE TO GOOD	SLOPE FOR SGH, RIDGETOP FOR HUMUS	SW	WILLOW, ALDER FOR SGH - WILLOW, ALDER, POPLAR, LAB TEA, FIREWEED FOR HUMUS	CLAY +/- ORGANICS FOR SGH, HUMUS FOR HUMUS	ORGANIC
1600	750S	571303	6818235		AUG 13/13	DEB	NO SAMPLE								POOR	VALLEY BOTTOM	SW	POPLAR, FIREWEED, WILLOW, HORSETAIL	ALLUVIUM	CLAY
1600	800S	571278	6818191	1076	AUG 13/13	DEB, WINSTON, CODY	S16800		571278	6818188	34	1	SPRUCE	MODERATE	MODERATE	VALLEY BOTTOM	FLAT, N	SPRUCE, ALDER, POPLAR	HUMUS	ORGANIC
1601	800S							S16800A												
0E	30S			1085	AUG 18/13	DEB, WINSTON, CODY	S0E30S		571140	6818643	40	1	WHITE SPRUCE	POOR	MODERATE	VALLEY BOTTOM	N	SPRUCE, WILLOW, ALDER	HUMUS - LOWER	ORGANIC
0E	30S							S0E30SA												
0E	15S			1089	AUG 18/13	DEB, WINSTON, CODY	S0E15S		571147	6818652	25	1	WHITE SPRUCE		MODERATE	SLOPE	NW	SPRUCE, WILLOW, ALDER	HUMUS-MIDDLE	PEAT- DEAD MOSS
0E				1091	AUG 18/13	DEB, WINSTON, CODY	S0E		571159	6818662	33	1	WHITE SPRUCE		MODERATE	SLOPE	NW	SPRUCE, ALDER, LAB TEA, CRANBERRY, WILLOW, MOSSBERRY, BLUEBERRY, GRASS	HUMUS	ORGANIC
0E	15N				AUG 18/13	DEB, WINSTON, CODY	S0E15N		571166	6818678	25	1	WHITE SPRUCE	GOOD	MODERATE	SLOPE	N	SPRUCE, ALDER, CRANBERRY, LAB TEA, WINTERGREEN	HUMUS - LOWER	ORGANIC
0E	30N				AUG 18/13	DEB, WINSTON, CODY	S0E30N		571170	6818681	36	1	WHITE SPRUCE	MODERATE	MODERATE TO GOOD	SLOPE	NW	SPRUCE, WILLOW, JUNIPER, ROSE, ALDER, WINTERGREEN, FIREWEED, SOAPBERRY	HUMUS-LOWER	ORGANIC
0W	30S				AUG 18/13	DEB, WINSTON, CODY	S0W30S		571120	6818649	30	1	WHITE SPRUCE		MODERATE	VALLEY BOTTOM	S	SPRUCE, WILLOW, ALDER, FIREWEED, SOAPBERRY, ROSE	HUMUS - MIDDLE	PEATY, DEAD MOSS
0W	15S				AUG 18/13	DEB, WINSTON, CODY	S0W15S		571143	6818656	30	1	WHITE SPRUCE		MODERATE	SLOPE	N	SPRUCE, WILLOW, WINTERGREEN, LAB TEA, OVAL LEAF	HUMUS - MIDDLE	PEATY
0W					AUG 18/13	DEB, WINSTON, CODY	S0W		571147	6818676	22	1	WHITE SPRUCE	MODERATE	MODERATE	SLOPE	W	SPRUCE, WILLOW, ALDER, FIREWEED	HUMUS - MIDDLE	PEATY
0W	15N				AUG 18/13	DEB, WINSTON, CODY	S0W15N		571147	6818692	19	1	WHITE SPRUCE	MODERATE	MODERATE	VALLEY BOTTOM	SW	SPRUCE, WILLOW, POPLAR, OVAL LEAF, ROSE	HUMUS -MIDDLE +/- ASH, SILT	PEATY AND SILT
0W	30N				AUG 18/13	DEB, WINSTON, CODY	S0W30N		571153	6818704	35	1	WHITE SPRUCE	MODERATE	MODERATE TO POOR	VALLEY BOTTOM	SW	SPRUCE, WILLOW, ALDER, VETCH, OVAL LEAF, WINTERGREEN	HUMUS - MIDDLE	PEATY

line	station	colour	sample depth	rock chips	round/angular	ash	ash location	nearby o/c, trench etc.	notes	COMMENTS	Auppm	Pdppm	Ptppm	agppm	Al%	Asppm	Bppm	Bappm	Beppm	Bippm	Ca%	Cdppm	Ceppm
1000	0S	DARK BROWN	55			Y	BENEATH		OPEN FOREST, MODERATE HEALTH, DWARF BIRCH		0.0002	0.002	<0.001	0.014	0	0.48	10	224	0.01	0.006	1.7	0.064	0.986
1000	50S	BROWN	15			Y	BENEATH		DRY, RIDGE AND SOUTH ASPECT SLOPE. OPEN FOREST, MIXED AGE, MOD TO GOOD HEALTH		<0.0002	0.001	<0.001	0.017	0	0.46	<10	158.5	0.01	0.008	1.3	0.047	1.32
1000	100S	DARK BROWN	40			Y	BENEATH		SILT/CLAY UNDERNEATH SAMPLE. W. SPRUCE DOMINANT, OPEN MOD HEALTH.		<0.0002	<0.001	0.001	0.031	0	0.24	10	170.5	0.01	0.004	1.4	0.036	0.669
1000	150S	DARK BROWN	40			N			MODERATELY OPEN, MODERATELY HEALTHY, WILLOW DOMINANT		<0.0002	<0.001	0.001	0.024	0	0.29	<10	143.5	0.01	0.004	1	0.028	1.035
1000	200S	BROWN	25			Y	TINY BIT IN SAMPLE		MOSTLY SPRUCE, MIXED AGE, FAIRLY OPEN, GOOD TO MODERATE HEALTH	ORGANIC +/- ASH	0.0002	<0.001	<0.001	0.012	0	0.37	10	171.5	0.01	0.007	1.5	0.039	1.515
1000	250S	DARK BROWN	25			Y	UNDERNEATH		MOSTLY SPRUCE AND WILLOW, MIXED AGE, FAIRLY OPEN, MODERATE HEALTH		0.0003	<0.001	<0.001	0.017	0	0.37	10	160	0.01	0.006	1.6	0.062	1.035
1000	300S	BROWN	17			N			NEARBY CREEK DRAW, CLOSE FOREST, MIXED AGE, MODERATE HEALTH, MOSTLY SPRUCE		<0.0002	<0.001	0.002	0.018	0	0.25	10	136.5	0.01	0.005	1.7	0.022	0.879
1000	350S	DARK BROWN	13			N			CLOSED FOREST, MOSTLY SPRUCE OR ALDER, MIXED AGE, MODERATE HEALTH		0.0002	<0.001	0.001	0.016	0	0.34	<10	67	0.01	0.006	1.1	0.027	1.27
1000	400S	RED BROWN	9			Y	BENEATH		SPRUCE DOMINANT, MIXED AGE. DRY CANYON RIM		<0.0002	0.001	<0.001	0.019	0	0.27	<10	214	0.01	0.007	1.2	0.03	1.31
1000	450S	BROWN	19			Y	MIXED IN SAMPLE		RIM OF CANYON. ACTUAL STATION IN SPACE. HUMUS SAMPLE MIX OF HUMUS, CLAY, ASH AND SILT.SPRUCE AND ASPEN AT RIM, SPRUCE BELOW.		0.0002	<0.001	0.001	0.019	0	0.46	<10	118.5	0.01	0.005	1.7	0.039	1.155
1000	500S	BROWN	36			N			CANYON RIM. DRY SITE. NO BLACK SPRUCE. SPRUCE ON LOWER SLOPELS, ASPEN ABOVE.		<0.0002	<0.001	<0.001	0.019	0	0.34	10	82.1	0.01	0.005	1.4	0.035	1
1000	550S	BROWN	36			Y	BENEATH		CANYON RIM, MOD HEALTH, MOD OPEN FOREST, SPRUCE DOMINANT.		<0.0002	0.001	0.002	0.025	0	0.4	10	204	0.01	0.006	1.9	0.046	1.265
1000	600S	BLACK	31			Y	BENEATH		MOD OPEN FOREST, MIXED AGE. W SPRUCE DOMINANT.		0.0003	<0.001	<0.001	0.045	0.1	0.82	10	203	0.02	0.014	1.9	0.059	2.58
1000	650S	DARK BROWN	30			Y	BENEATH		SPRUCE DOMINANT, MIXED AGE, MOD HEALTH		0.0003	<0.001	<0.001	0.015	0	0.3	20	89.9	0.01	0.008	1.1	0.016	1.285
1000	700S	DARK BROWN	32			N			CLAY UNDERNEATH HUMUS. MIXED AGE FOREST. SPRUCE DOMINANT.		0.0002	0.002	0.003	0.046	0	0.3	<10	123.5	0.01	0.005	1.4	0.043	0.857
1000	700A										<0.0002	<0.001	0.001	0.048	0	0.38	<10	119.5	0.01	0.006	1.4	0.045	1.12
1000	800S	BLACK	5 AND 33	BENEATH	SUBROUND	N		PLACER ROAD BELOW	UNSTABLE SLOPE WITH LOTS OF ALDER, MOD HEALTH OVERALL.		0.0002	0.001	<0.001	0.01	0	0.36	<10	110.5	0.01	0.005	1.6	0.026	1.01
1200	0S	DARK GREY BROWN	15			N		CUTLINE NEARBY	MIXED AGE. STAND HEALTH MOD TO GOOD.		<0.0002	<0.001	<0.001	0.009	0	0.25	10	104	0.01	0.004	0.9	0.026	0.631
1200	50S	DARK BROWN	20			Y	NENEATH		MIDDLE TO OLD AGED FOREST. MOD CLOSED, MOD HEALTH. STEEP SLOPE ON TILLABOVE CREEK.		<0.0002	0.001	0.001	0.02	0	0.55	20	151.5	0.02	0.008	1.9	0.044	1.345
1200	100S	BROWN GREY	5			N			OPEN FOREST ALONG CREEK. MATURE SPRUCE WITH ALDER. MOD TO GOOD FOREST HEALTH. PERIODIC INUNDATIONS OF SILT.		<0.0002	0.001	0.003	0.016	0	0.17	30	48.7	<0.01	0.004	1	0.014	0.793
1200	150S	DARK BROWN	45			Y	BENETH	LINE OF OLD FLAGGING	OPEN FOREST, MODERATE HEALTH, SIDE OF VALLEY		0.0003	0.001	0.001	0.015	0	0.25	20	188.5	0.01	0.003	1.4	0.023	0.63
1200	200S	DARK BROWN	32			Y	A LITTLE IN SAMPLE		ENCLOSED FOREST, STEEP SLOPE, DOMINANT SPRUCE AND ALDER, MODERATELY HEALTHY, MIXED AGE TREES		<0.0002	<0.001	<0.001	0.025	0	0.17	10	117	<0.01	0.004	1.2	0.015	0.653
1200	250S	DARK BROWN	25			N			CLOSING FOREST, MIXED AGE, DOMINANTLY ALDER, MODERATE HEALTH		0.0006	<0.001	<0.001	0.014	0	0.22	20	151.5	0.01	0.004	1.1	0.028	0.638
1200	300S	DARK BROWN	30			Y	BENEATH AND MIXED		MODERATELY OPEN, MIXED AGE, MODERATELY HEALTHY		<0.0002	0.001	<0.001	0.026	0	0.26	10	141.5	0.01	0.006	1	0.033	0.764
1200	350S	BROWN	15	BENEATH	SUBANGULAR	N		OLD CUT LINE	TIGHT GROWTH, MIXED AGE, MODERATELY HEALTHY, SPRUCE AND ALDER DOMINANT		<0.0002	0.001	<0.001	0.018	0	0.31	10	100.5	0.01	0.006	1	0.024	1.26
1200	400S	BROWN	15	BEANEATH	SUBANGULAR	N			MODERATELY OPEN, MIXED AGE, MODERATE HEALTH, SPRUCE DOMINANT		0.0002	0.001	<0.001	0.011	0	0.23	<10	209	0.01	0.005	1.3	0.038	1.085
1200	450S	DARK BROWN	25			Y		CLAIM LINE	MODERATELY OPEN, SPRUCE DOMINANT, MODERATE HEALTH		<0.0002	<0.001	0.001	0.013	0	0.47	<10	208	0.01	0.005	1.6	0.04	1.195
1200	500S	DARK BROWN	20	BENEATH	SUBANGULAR	N			MOD OPEN FOREST OF BLACK SPRUCE. MIXED AGE, MOD HEALTH.		0.0002	<0.001	0.004	0.02	0	0.22	30	118.5	0.01	0.006	1.3	0.034	1.005
1200	550S	BROWN	27			Y	BENEATH		OPEN FOREST, SPRUCE DOMINANTSTAND HEALT MOD.		<0.0002	0.001	0.001	0.02	0	0.27	<10	198	0.01	0.004	2	0.045	0.679
1200	600S	BROWN	12	BENEATH	ANGULAR	N			OPEN SPRUCE AND POPLAR FOREST. BENCH ABOVE CREEK, BESIDE SECONDARY CHANNEL.		0.0004	<0.001	0.003	0.016	0	0.24	30	67.4	0.01	0.005	1.1	0.028	0.944
1200	650S	BROWN	15	BENEATH	ANGULAR	N		WATERLINE FOR PLACEDR DOWN CREEK	MOD OPEN FOREST, MIXED AGE. MOD HEALTH.		<0.0002	0.001	<0.001	0.014	0	0.29	20	154.5	0.01	0.006	1.7	0.034	0.968
1200	700S	DARK BROWN	45			N		PLACER DISTURBANCE, ROADS	MOVED OFF LINE TO SAMPLE UNDISTURBED MATERIAL. RECENT BULLDOZING NEARBY. SPRUCE DYING	TRAIL SAMPLE. SGH DUPLICATE.													
1200	750S	DARK BROWN	35			Y	BENEATH	NEARBY PLACER MINING	MODERATLEY OPEN FOREST, MODERATE HEALTH		<0.0002	0.001	<0.001	0.013	0	0.39	10	146.5	0.01	0.01	1.3	0.036	1.77
1200	800S	DARK BROWN	20	BENEATH	SUBANGULAR TO ROUNDED PEBBLES, SAND, GRAVEL	N		15M FROM PPLACER	SPRUCE>LAB TEA>ALDER>DWARF BIRCH. YOUNG TO MIDDLE AGED STAND. OPEN, BOGGY, HUMMOCKY. MOD OPEN STAND. SGH TAKEN SEPARATELY FROM OTHERS.		0.0002	<0.001	0.001	0.025	0	0.37	<10	150.5	0.01	0.005	1.8	0.034	1.1
1400	0S	BLACK	25			Y	BENEATH	OLD CUTLINE, SQUARED POST	DWARF BIRCH DOMINANT. OPEN STUNTED SPRUCE GIVING WAY TO SHRUBS. MIXED AGE	SGH SAMPLED LATER	<0.0002	0.001	0.001	0.034	0	0.44	<10	169.5	0.01	0.005	1.5	0.044	0.902
1400	50S	DARK BROWN	25			Y	BENEATH		SUB ALPINE, BOG FOREST, SHRUBS INCREASING. OPEN SPRUCE, STUNTED, MOD HEALTH, MOSTLY SPRUCE, MIXED AGE	SGH SAMPLED LATER	0.0002	0.001	<0.001	0.036	0	0.31	10	348	0.01	0.005	1.2	0.039	0.847
1400	50S										<0.0002	0.001	<0.001	0.034	0	0.33	20	273	0.01	0.01	1.1	0.04	1.85
1400	100S	BLACK	35			Y	BENEATH		OPEN SPRUCE FOREST, SUB ALPINE RIDGE TOP. HUMMOCKY, MIXED AGE. MOD HEALTH. Lots of willow and birch.		0.0003	<0.001	0.002	0.046	0	0.35	20	119	0.01	0.006	1.1	0.046	0.866
1400	150S	black	25			Y	BENEATH		OPEN SPRUCE FOREST, SUB ALPINE, BOGGY, MIXED AGE, MOD HEALTH.		0.0002	<0.001	0.005	0.061	0	0.26	20	213	0.01	0.003	1.5	0.04	0.704
1400	200S	BLACK	25			Y	BENEATH	OLD CUTLINE TO NW	HUMMOCKY RIDGETOP. SPRUCE DOMINANT, OPEN FOREST, MIXED AGE. SOME DEAD, REST MOD HEALTH.		<0.0002	0.001	<0.001	0.023	0	0.31	<10	137	0.01	0.004	1.1	0.029	0.769
1400	250S	BLACK	30			Y	BENEATH		AT EDGE OF BENCH. NEAR TOP OF GLACIAL OVERBURDEN? MOD TO GOOD HEALTH STAND, OPEN FOREST, SPRUCE DOMINANT, MIXED AGE.	SGH SAMPLED LATER	<0.0002	<0.001	<0.001	0.025	0	0.52	<10	226	0.01	0.007	1.6	0.05	1.25

line	station	colour	sample depth	rock chips	round/angular	ash	ash location	nearby o/c, trench etc.	notes	COMMENTS	Auppm	Pdppm	Ptppm	agppm	Al%	Asppm	Bppm	Bappm	Beppm	Bippm	Ca%	Cdppm	Ceppm
1400	300S	BROWN	15			Y	BENEATH	LINE OF OLD FLAGGING	SPRUCE DOMINANT, VARIABLY OPEN, MIXED AGE SPRUCE, SOME DEAD, MAJORITY MOD HEALTH.	SGH SAMPLED LATER	<0.0002	<0.001	0.001	0.014	0	0.5	20	182.5	0.01	0.008	1.3	0.058	1.39
1400	350S	BLACK-DARK BROWN	35	BENEATH		N		OLD FLAGGING	HUMMOCKY, SOLIFLUCTION SLOPE OF SIDE OF DRAW. MOD HEALTH, STUNTED OR SUB ALPINE. PERMAFROST BELOW SAMPLE. SPRUCE AND ALDER DOMINANT, FAIRLY OPEN.		<0.0002	<0.001	<0.001	0.01	0	0.31	20	104.5	0.01	0.007	1.1	0.032	1.195
1400	400S	BROWN	40			Y	BENEATH		FLAT, HUMMOCKY, SLIGHTLY BOGGY, SPRUCE, OPEN FOREST, MIXED AGE, MOD HEALTH, MOSTLY SPRUCE		0.0006	<0.001	0.001	0.014	0	0.34	20	98.3	0.01	0.006	1	0.036	1.22
1400	450S	DARK BROWN	25			Y	BENEATH		MOVED 36M EAST OFF LINE TO SAMPLE. STAKE IN MIDDLE OF STEEP DRAW. ON TOP OF GRAVEL BOWL, OPEN FOREST, MIXED AGE, MOD HEALTH, MOSTLY SPRUCE		<0.0002	<0.001	0.002	0.016	0	0.21	<10	111	<0.01	0.005	0.9	0.031	0.817
1400	500S	DARK BROWN/BLACK	30			Y	BENEATH AND SOME IN SAMPLE		ON EDGE OF BIG GRAVEL BOWL, SPRUCE DOMINANT, OLD GROWTH FOREST, LIMITED VEGT UNDER CANOPY, GOOD HEALTH, VERY DRY		<0.0002	<0.001	<0.001	0.011	0	0.24	10	241	0.01	0.01	1.3	0.042	1.35
1400	550S	DARK BROWN	20			N			MATURE FOREST, MODERATE HEALTH. OLD GROWTH, SPRUCE DOMINANT, CLOSED CANOPY		0.0002	<0.001	<0.001	0.032	0	0.35	10	215	<0.01	0.004	1.6	0.041	0.681
1400	600S	DARK BROWN	25			Y	UNDERNEATH		MANY TREES IN POOR HEALTH OR DYING.		<0.0002	<0.001	<0.001	0.026	0.1	0.55	<10	117	0.01	0.008	1.7	0.038	1.925
1400	650S	BLACK	25			N			MIXED AGE STAND, SOME DEAD, OTHERS WITH DEAD BRANCHES. YOUNG SPRUCE.		<0.0002	0.001	0.001	0.01	0	0.18	30	209	0.01	0.006	1.4	0.04	1.08
1400	700S	DARK BROWN	30			Y	BENEATH	AT EDGE OF NEW ROAD	POOR HEALTH FOREST. LOTS OF LAB TEA AND CRANBERRY. MODERATELY OPEN FOREST NEAR CREEK.	SGH SAMPLED EARLIER. MOVED FROM STATION TO AVOID RECENT ROAD BUILDING,.	<0.0002	0.001	0.002	0.017	0	0.35	30	203	0.01	0.005	1.6	0.043	0.911
1400	750S	GREY BROWN	5			N			VEGETATED POINT BAR. TREES 5-10 YEARS OLD. NO SPRUCE OR HUMUS. LEAF LITTER UNDER TREES.														
1400	800S	BROWN - DARK BROWN	40			N			MOD OPEN FOREST, POOR HEALTH. PERMAFRSOT BENEATH SAMPLE. 15M AWAY FROM CREEK.		<0.0002	<0.001	0.001	0.011	0	0.18	20	99.9	<0.01	0.006	1.1	0.016	0.937
1400	800S										<0.0002	<0.001	<0.001	0.009	0	0.15	20	111	<0.01	0.006	1.1	0.015	0.83
1600	0S	BROWN	25			Y	SOME MIXED IN		OPEN FOREST, ALDER DOMINANT, MODERATE HEALTH. SLOPE AT BASE OF MOUNTAIN.		<0.0002	0.001	<0.001	0.042	0	0.23	20	192	0.01	0.007	0.9	0.022	1.31
1600	50S	DARK BROWN	20			N			CLOSING CANOPY, SPRUCE DOMINANT, A FEW ALDER, MODERATE HEALTH		<0.0002	<0.001	0.001	0.021	0	0.25	20	106.5	0.01	0.006	1.2	0.041	0.869
1600	100S	DARK BROWN	30			Y	BENEATH		OPEN, MODERATE HEALTH, MIXED AGE, LAB TEA DOMINANT		<0.0002	0.001	<0.001	0.008	0	0.29	10	188	0.01	0.013	1.2	0.025	2.29
1600	150S	DARK BROWN	20			Y	BENEATH		CANOPY CLOSING, MODERATE HEALTH, MIXED AGE, SPRUCE DOMINANT		<0.0002	<0.001	<0.001	0.024	0	0.33	10	156	0.01	0.006	1.2	0.036	0.857
1600	200S	DARK BROWN	15			Y	BENEATH	OLD FLAGGING NEARBY	OPEN, MODERATE HEALTH, MIXED AGE, SPRUCE DOMINANT		0.0002	0.001	0.001	0.051	0	0.21	10	197	0.01	0.007	1.6	0.04	1.64
1600	250S	DARK BROWN	35			Y	BENEATH		OPEN, MODERATE HEALTH BOG FOREST, SMALL STANDING WATER, MIXED AGE, DWARF BIRCH DOMINANT		<0.0002	0.002	<0.001	0.068	0	0.32	10	226	0.01	0.007	1.6	0.047	1.08
1600	300S	DARK BROWN	30			Y	BENEATH		OPEN, MILDLY UNHEALTHY, BOGGY		<0.0002	<0.001	<0.001	0.017	0	0.31	10	143	0.01	0.007	1.1	0.03	1.32
1600	350S	DARK BROWN	25			N			SMALL Ah MIXED IN. DWARF BIRCH DOMINANT, MIXED AGE STAND, VERY OPEN FOREST, SOMEWHAT UNHEALTHY		<0.0002	<0.001	<0.001	0.018	0	0.27	20	160	0.01	0.007	1.1	0.029	1.065
1600	400S	DARK BROWN	40			Y	BENEATH	BASELINE OF OLD GRID. 56 +50N	SLIGHT SLOPE OUT OF BOGGY AREA. STAND OF OLD SPRUCE. MORE CLOSED IN THAN BOG. DWARF BIRCH DOMINANT. MOD TO POOR HEALTH.		0.0003	0.001	0.001	0.019	0	0.24	20	177	0.01	0.008	1.3	0.041	1.285
1600	450S	DARK BROWN BLACK	45			Y	BENEATH		FLATTISH, SEMI-BOGGY, LOTS OF MOSS, OPEN FOREST, SMALLER TREES.		<0.0002	<0.001	<0.001	0.013	0	0.16	20	179	0.01	0.009	1.4	0.03	1.775
1600	500S	BROWN	15			N			MATURE FOREST, MOD HEALTH, WELL DRAINED SLOPE, SPRUCE DOMINANT		0.0002	<0.001	<0.001	0.012	0	0.21	10	77.9	0.01	0.006	0.9	0.027	1.12
1600	550S	BROWN	10			Y	UNDERNEATH AND MIXED IN		WELL DRAINE DSLOPE ABOVE CREEK, MOD FOREST CANOPY, MOD HEALTH.		0.0004	<0.001	0.001	0.011	0	0.32	30	164.5	<0.01	0.007	1.6	0.05	1.015
1600	600S	DARK BROWN	25			N			CLOSE TO CREEK. SPRUCE UNHEALTHY, DECIDUOUS HEALTHY, MOD CLOSED, MIXED AGE SPRUCE		<0.0002	0.001	<0.001	0.024	0	0.54	10	197.5	0.02	0.009	1.5	0.04	1.905
1600	650S	DARK BROWN	30			N			SPRUCE AND ALDER OPEN FOREST, MIXED AGE, UNHEALTHY TREES. ABOVE CREEK		0.0006	0.001	0.004	0.019	0	0.32	30	117.5	0.01	0.005	1.2	0.031	0.883
1600	700S	BROWN GREY FOR SGH, BROWN FOR HUMUS	5 FOR SGH, 10 FOR HUMUS			Y	ASH IN HUMUS, NOT IN SGH	ROAD BELOW	ON GRAVEL/CALY BANK ABNOVE ROAD. DIFF LOCATION FOR SGH AND HUMUS SAMPLES.														
1600	750S	GREY	12			N		ROAD ABOVE PLACER CREEK	EARLY SUCCESSION RIVERBANK. 5-10 YEAR OLD POPLAR, WILLOW. LOTS OF HORSETAIL														
1600	800S	BROWN	30			Y	BENEATH		GOOD-MODERATE HEALTH STAND, MIXED OLDER FOREST. LOCATED ON BENCH 2M ABOVE CREEK.		<0.0002	0.001	<0.001	0.007	0	0.3	20	305	<0.01	0.009	1.3	0.018	1.75
1601	800S																						
0E	30S	DARK BROWN	23			N		ABOVE TECK SHOWING	MINI GRID AROUND TECK SHOWING. BESIDE INTERMITTENT CREEK. ALDER DOMINANT. WHITE SPRUCE POOR HEALTH.		<0.0002	0.001	<0.001	0.016	0	0.38	20	137	0.01	0.01	1.5	0.038	1.885
0E	30S										<0.0002	0.002	<0.001	0.015	0	0.3	10	144.5	0.01	0.008	1.5	0.045	1.305
0E	15S	BROWN	25			N		OLD FLAGGING. ABOVE TECK SHOWING	MINI GRID AROUND TECK SHOWING. MODERATELY OPEN, MOD TO GOOD EHALTH.		0.0002	0.001	<0.001	0.032	0	0.58	20	95.9	0.01	0.009	1.3	0.053	1.665
0E		DARK BROWN	52	BENEATH SAMPLE		N		OLD FLAGGING 18+25E 9+25N. ABOVE TECK SHOWING O/C	MINI GRID AROUND TECK SHOWING. FAIRLY OPEN, MIXED AGE, MODERATE HEALTH, ALDER AND SPRUCE DOMINANT		0.0003	<0.001	<0.001	0.037	0	0.16	20	86.9	0.01	0.006	1.1	0.016	0.871
0E	15N	DARK BROWN	25			N		OLD FLAGGING 8+25E 9+40N	MINI GRID AROUND TECK SHOWING. ALDER DOMINANT. CLAY AND GRAVEL UNDER SAMPLE. OPEN FOREST.		<0.0002	0.002	<0.001	0.021	0	0.24	10	117	0.01	0.011	1.2	0.032	1.9
0E	30N	DARK BROWN	20	YES	ANGULAR TO SUBROUND	N		ABOVE TECK TRENCH	MOD OPEN FOREST, SPRUCE DOMINANT	MINI GRID AROUND TECK SHOWING	<0.0002	0.001	<0.001	0.009	0	0.26	10	149	0.01	0.02	1	0.038	2.59
0W	30S	BROWN	15	Y	SUBROUND, SUBANGULAR	Y		ON OLD CAT TRACK	BENCH ABOVE CREEK. WILLOW AND ALDER ON OLD CAT ROAD. MIXED AGE, MOD HEALTH.		<0.0002	0.001	0.002	0.012	0	0.26	20	99.3	<0.01	0.012	1	0.025	2.54
0W	15S	BROWN	24			N		O/C ABOVE	MINI GRID AROUND TECK SHOWING. MIXED AGE, MOD HEALTH. ON SLOPE ABOVE CREEK.		<0.0002	<0.001	0.002	0.011	0	0.22	30	116	<0.01	0.005	1.2	0.021	1.065
0W		BROWN	15	BENEATH	SUBANGULAR	N		BELOW TECK TRENCH	ON SIDE OF CREEK. MOD HEALTH STAND, ALDERA ND SPRUCE STAND ON BENCH ABOVE CREEK.		<0.0002	<0.001	<0.001	0.019	0	0.3	10	127.5	0.01	0.005	1.3	0.031	0.867
0W	15N	BROWN	10	YES	SUBROUND	Y		5M AWAY FROM TRENCH	MINI GRID AROUND TECK SHOWING. FLOODPLAIN, SILT AND ASHJ MIXED WITH HUMUS. MIXED ALDER>POPLAR AND WHITE SPRUCE, CLOSED FOREST.		0.0002	0.002	0.001	0.015	0	0.34	10	118.5	0.01	0.006	1.1	0.042	1.22
0W	30N	DARK BROWN	20			N		TRENCH AND O/C	BENCH ABOVE CREEK. LESS INUDATION THAN 15N		<0.0002	0.001	<0.001	0.005	0	0.29	10	111	0.01	0.004	1.3	0.031	0.602

line	station	Coppm	Crppm	Csppm	Cuppm	Dyppm	Erppm	Euppm	Fe%	Gappm	Gdppm	Geppm	Hfppm	Hgppm	Hoppm	Inppm	K%	Lappm	Lippm	Luppm	Mg%	Mnppm	Moppm	Na%	Nbppm	Ndppm	Nippm	P%	Pbppm	Prppm	Rbppm	Reppm	5%	Sbppm
1000	0S	0.52	1.4	0.03	6.1	0.067	0.04	0.022	0.063	0.09	0.078	<0.005	0.007	0.043	0.012	<0.005	0.2	0.506	0.3	0.005	0.075	65	0.11	0.092	0.054	0.434	1.92	0.018	0.26	0.106	1.32	<0.001	0.1	0.07
1000	50S	0.455	1.3	0.054	6.47	0.079	0.042	0.026	0.08	0.13	0.096	<0.005	0.008	0.04	0.013	<0.005	0.1	0.689	0.3	0.005	0.071	54	0.12	0.091	0.066	0.58	1.97	0.017	0.37	0.152	1.17	<0.001	0.09	0.06
1000	100S	0.303	2.1	0.034	6.39	0.036	0.021	0.014	0.039	0.07	0.049	<0.005	0.005	0.023	0.006	<0.005	0.1	0.363	0.2	0.002	0.057	71	0.08	0.182	0.038	0.309	2.25	0.013	0.2	0.075	1.1	<0.001	0.17	0.03
1000	150S	0.364	0.9	0.023	4.95	0.051	0.027	0.019	0.074	0.09	0.073	<0.005	0.004	0.023	0.009	<0.005	0.1	0.555	0.2	0.004	0.049	47	0.09	0.212	0.054	0.479	1.04	0.011	0.25	0.119	0.71	<0.001	0.2	0.04
1000	200S	0.512	1.2	0.057	4.64	0.066	0.03	0.027	0.107	0.12	0.093	<0.005	0.009	0.043	0.011	<0.005	0.1	0.806	0.3	0.004	0.073	90	0.14	0.056	0.085	0.678	1.54	0.018	0.34	0.169	1.88	<0.001	0.06	0.06
1000	250S	0.575	1	0.04	7.19	0.067	0.032	0.024	0.06	0.09	0.072	<0.005	0.004	0.043	0.012	<0.005	0.2	0.564	0.3	0.006	0.075	84	0.12	0.115	0.045	0.484	1.71	0.02	0.3	0.125	1.63	<0.001	0.12	0.06
1000	300S	0.304	1.1	0.017	4.66	0.036	0.018	0.014	0.085	0.08	0.055	<0.005	0.002	0.033	0.006	<0.005	0.1	0.441	0.2	0.002	0.058	39	0.13	0.012	0.058	0.364	0.94	0.015	0.22	0.096	0.56	<0.001	0.01	0.03
1000	350S	0.459	2.2	0.038	7.57	0.054	0.031	0.025	0.099	0.11	0.074	<0.005	0.008	0.063	0.01	<0.005	0.1	0.618	0.3	0.004	0.065	38	0.15	0.159	0.08	0.543	2.2	0.019	0.31	0.139	0.93	<0.001	0.15	0.05
1000	400S	0.45	1.1	0.027	4.12	0.045	0.019	0.021	0.038	0.07	0.076	<0.005	0.004	0.03	0.007	<0.005	0.2	0.688	0.2	0.003	0.075	61	0.1	0.124	0.047	0.558	1.78	0.015	0.29	0.146	2.98	<0.001	0.11	0.04
1000	450S	0.542	2.6	0.047	6.67	0.045	0.026	0.02	0.088	0.09	0.077	0.007	0.006	0.031	0.009	<0.005	0.1	0.559	0.2	0.004	0.071	83	0.13	0.054	0.066	0.497	3.19	0.02	0.22	0.122	1.48	<0.001	0.05	0.05
1000	500S	0.803	1.9	0.035	8.15	0.057	0.034	0.02	0.07	0.1	0.077	<0.005	0.005	0.032	0.011	<0.005	0.2	0.535	0.3	0.004	0.086	64	0.1	0.113	0.052	0.444	4.71	0.02	0.24	0.118	0.94	<0.001	0.12	0.06
1000	550S	0.558	1.7	0.041	5.82	0.067	0.036	0.027	0.105	0.12	0.096	0.007	0.009	0.024	0.013	<0.005	0.1	0.631	0.3	0.005	0.08	80	0.18	0.063	0.082	0.558	2.09	0.015	0.27	0.141	1.38	<0.001	0.06	0.06
1000	600S	0.801	2.1	0.103	6.09	0.129	0.066	0.049	0.148	0.22	0.183	0.01	0.016	0.037	0.024	<0.005	0.1	1.34	0.6	0.01	0.101	91	0.23	0.108	0.147	1.12	2.99	0.026	0.53	0.284	2.39	<0.001	0.11	0.11
1000	650S	0.387	<0.5	0.032	5.35	0.051	0.024	0.024	0.075	0.09	0.077	0.015	0.007	0.026	0.01	<0.005	0.1	0.718	0.2	0.004	0.055	46	0.13	0.375	0.071	0.58	1.85	0.011	0.24	0.148	0.9	<0.001	0.35	0.05
1000	700S	0.435	2.3	0.044	4.39	0.051	0.026	0.018	0.06	0.09	0.068	<0.005	0.006	0.017	0.01	<0.005	0	0.418	0.3	0.004	0.073	37	0.11	0.228	0.046	0.382	2.17	0.012	0.24	0.096	0.47	<0.001	0.22	0.1
1000	700A	0.458	1.1	0.039	4.81	0.066	0.038	0.024	0.074	0.11	0.085	<0.005	0.006	0.022	0.012	<0.005	0	0.595	0.3	0.005	0.077	41	0.11	0.136	0.057	0.521	1.5	0.013	0.29	0.125	0.54	<0.001	0.13	0.06
1000	800S	0.391	0.9	0.037	4.62	0.049	0.023	0.019	0.054	0.1	0.073	<0.005	0.004	0.031	0.01	<0.005	0	0.525	0.3	0.003	0.061	36	0.08	0.088	0.045	0.458	1.11	0.012	0.25	0.115	0.58	<0.001	0.09	0.04
1200	0S	0.236	0.7	0.043	4.79	0.027	0.013	0.014	0.03	0.05	0.044	<0.005	0.003	0.047	0.005	<0.005	0.1	0.334	0.2	0.002	0.055	40	0.07	0.135	0.027	0.269	0.7	0.019	0.17	0.071	2.14	<0.001	0.13	0.04
1200	50S	0.548	<0.5	0.062	4.63	0.076	0.035	0.031	0.12	0.15	0.099	0.017	0.011	0.034	0.016	<0.005	0.1	0.725	0.4	0.006	0.093	60	0.21	0.356	0.109	0.637	2.9	0.02	0.34	0.162	1.38	<0.001	0.34	0.07
1200	100S	0.191	0.5	0.014	6.06	0.025	0.01	0.014	0.047	0.05	0.044	0.011	0.003	0.027	0.004	<0.005	0.1	0.405	0.1	0.001	0.042	28	0.14	0.019	0.042	0.328	0.64	0.012	0.15	0.084	0.63	<0.001	0.01	0.03
1200	150S	0.328	<0.5	0.019	3.56	0.027	0.015	0.01	0.057	0.05	0.036	0.009	0.006	0.034	0.005	<0.005	0.1	0.35	0.1	0.002	0.076	64	0.1	0.457	0.04	0.286	1.61	0.01	0.19	0.07	0.82	<0.001	0.43	0.03
1200	200S	0.234	1.2	0.015	4.39	0.02	0.01	0.012	0.056	0.05	0.033	<0.005	0.002	0.018	0.004	<0.005	0.1	0.345	0.1	0.001	0.069	55	0.07	0.159	0.042	0.282	1	0.015	0.14	0.073	1.12	<0.001	0.16	0.02
1200	250S	0.366	<0.5	0.012	3.69	0.027	0.013	0.013	0.072	0.06	0.042	0.009	0.005	0.039	0.005	<0.005	0.1	0.341	0.1	0.002	0.059	59	0.23	0.423	0.047	0.291	2.76	0.01	0.2	0.072	0.89	<0.001	0.4	0.03
1200	300S	0.282	0.5	0.046	5.59	0.031	0.015	0.014	0.029	0.05	0.053	<0.005	0.002	0.033	0.006	<0.005	0.2	0.436	0.2	0.002	0.067	100	0.07	0.12	0.03	0.367	0.78	0.017	0.23	0.085	2.54	<0.001	0.11	0.02
1200	350S	0.354	1.1	0.025	4.43	0.044	0.02	0.024	0.092	0.09	0.076	<0.005	0.005	0.04	0.008	<0.005	0.1	0.672	0.2	0.003	0.056	51	0.11	0.051	0.083	0.556	1.1	0.014	0.31	0.138	0.74	<0.001	0.04	0.04
1200	400S	0.362	0.7	0.015	3.84	0.043	0.022	0.022	0.038	0.06	0.071	<0.005	0.002	0.043	0.007	<0.005	0.2	0.67	0.2	0.003	0.063	62	0.08	0.128	0.041	0.483	1.04	0.014	0.27	0.126	0.79	<0.001	0.13	0.04
1200	450S	0.518	1.4	0.042	5.08	0.061	0.035	0.026	0.108	0.12	0.088	<0.005	0.007	0.052	0.012	<0.005	0.1	0.596	0.3	0.004	0.077	60	0.15	0.101	0.076	0.556	1.54	0.019	0.35	0.138	1.35	<0.001	0.1	0.05
1200	500S	0.343	0.7	0.028	3.69	0.038	0.02	0.019	0.049	0.07	0.062	0.011	0.007	0.039	0.007	<0.005	0.1	0.494	0.2	0.002	0.062	68	0.08	0.034	0.046	0.418	1.07	0.013	0.27	0.106	0.73	<0.001	0.02	0.03
1200	550S	0.455	0.9	0.02	4.07	0.041	0.024	0.018	0.045	0.07	0.058	<0.005	0.005	0.037	0.009	<0.005	0.1	0.355	0.2	0.004	0.079	67	0.1	0.202	0.033	0.326	1.31	0.011	0.21	0.079	0.53	<0.001	0.2	0.04
1200	600S	0.316	0.6	0.023	4.31	0.036	0.021	0.018	0.045	0.06	0.056	0.01	0.005	0.032	0.007	<0.005	0.1	0.472	0.2	0.003	0.052	34	0.09	0.022	0.037	0.406	1.02	0.015	0.26	0.101	0.6	<0.001	0.01	0.05
1200	650S	0.394	0.9	0.022	4.92	0.043	0.027	0.02	0.074	0.07	0.063	<0.005	0.004	0.044	0.007	<0.005	0.1	0.511	0.2	0.003	0.073	55	0.12	0.059	0.058	0.417	1.1	0.015	0.22	0.107	0.8	<0.001	0.06	0.06
1200	700S																																	
1200	750S	0.467	1	0.032	5.05	0.065	0.03	0.034	0.088	0.11	0.109	0.005	0.005	0.023	0.011	<0.005	0.1	0.944	0.3	0.004	0.076	61	0.15	0.083	0.081	0.755	1.43	0.013	0.36	0.187	1.19	<0.001	0.08	0.06
1200	800S	0.414	1.3	0.039	4.54	0.064	0.032	0.022	0.058	0.1	0.076	<0.005	0.006	0.025	0.012	<0.005	0.1	0.579	0.3	0.004	0.067	58	0.11	0.138	0.054	0.506	1.4	0.015	0.26	0.132	1.03	<0.001	0.14	0.05
1400	0S	0.415	1.2	0.034	3.93	0.049	0.026	0.02	0.054	0.09	0.067	<0.005	0.008	0.038	0.01	<0.005	0.2	0.485	0.3	0.004	0.063	78	0.08	0.141	0.044	0.409	1.49	0.015	0.31	0.109	1.71	<0.001	0.14	0.05
1400	50S	0.403	1	0.027	4.88	0.046	0.025	0.014	0.054	0.08	0.065	<0.005	0.008	0.043	0.009	<0.005	0.1	0.445	0.2	0.004	0.065	49	0.08	0.09	0.038	0.356	1.46	0.012	0.27	0.093	0.83	<0.001	0.09	0.05
1400	50S	0.555	<0.5	0.032	5.2	0.06	0.031	0.033	0.118	0.13	0.102	0.022	0.01	0																				

line	station	Coppm	Crppm	Csppm	Cuppm	Dyppm	Erppm	Euppm	Fe%	Gappm	Gdppm	Geppm	Hfppm	Hgppm	Hoppm	Inppm	K%	Lappm	Lippm	Luppm	Mg%	Mnppm	Moppm	Na%	Nbppm	Ndppm	Nippm	P%	Pbppm	Prppm	Rbppm	Reppm	5%	Sbppm
1400	300S	0.715	<0.5	0.035	5.96	0.067	0.033	0.028	0.12	0.12	0.098	0.026	0.01	0.069	0.012	<0.005	0.3	0.755	0.3	0.004	0.077	91	0.2	0.431	0.102	0.66	3.1	0.018	0.34	0.163	1.94	<0.001	0.41	0.06
1400	350S	0.375	1.5	0.044	3.6	0.059	0.029	0.025	0.122	0.11	0.084	0.006	0.006	0.034	0.01	<0.005	0.1	0.627	0.3	0.004	0.056	54	0.21	0.07	0.098	0.535	1.31	0.016	0.31	0.135	1.53	<0.001	0.06	0.06
1400	400S	0.463	<0.5	0.037	4.79	0.058	0.03	0.023	0.093	0.12	0.083	0.017	0.006	0.022	0.01	<0.005	0.1	0.644	0.3	0.003	0.062	61	0.11	0.326	0.066	0.552	2.04	0.012	0.29	0.14	1.22	<0.001	0.32	0.05
1400	450S	0.28	0.6	0.024	3.88	0.031	0.017	0.015	0.041	0.06	0.051	<0.005	0.004	0.025	0.006	<0.005	0.1	0.457	0.2	0.003	0.048	59	0.06	0.136	0.033	0.367	0.77	0.011	0.2	0.094	1.03	<0.001	0.13	0.03
1400	500S	0.317	1.6	0.025	3.96	0.05	0.023	0.025	0.081	0.09	0.082	<0.005	0.006	0.033	0.009	<0.005	0.1	0.724	0.2	0.003	0.062	67	0.13	0.135	0.079	0.6	1.48	0.013	0.29	0.151	0.99	<0.001	0.13	0.04
1400	550S	0.241	0.8	0.225	4.71	0.037	0.019	0.012	0.046	0.07	0.048	<0.005	0.003	0.031	0.006	<0.005	0.2	0.35	0.2	0.003	0.073	47	0.08	0.152	0.033	0.322	0.73	0.023	0.24	0.08	5.68	<0.001	0.16	0.03
1400	600S	0.68	2.3	0.057	4.95	0.091	0.046	0.035	0.206	0.21	0.128	0.011	0.014	0.034	0.016	<0.005	0.1	0.999	0.4	0.006	0.083	57	0.23	0.039	0.104	0.902	2.23	0.023	0.35	0.221	1.35	<0.001	0.04	0.08
1400	650S	0.505	1.5	0.02	4.43	0.034	0.018	0.021	0.055	0.06	0.062	0.011	0.005	0.034	0.005	<0.005	0.1	0.618	0.2	0.002	0.075	106	0.12	0.464	0.038	0.487	6.63	0.011	0.23	0.125	0.98	<0.001	0.44	0.04
1400	700S	0.501	0.8	0.03	4.61	0.054	0.028	0.018	0.059	0.09	0.068	0.016	0.008	0.049	0.01	<0.005	0.1	0.447	0.2	0.004	0.076	86	0.1	0.029	0.045	0.398	1.39	0.016	0.25	0.103	1.05	<0.001	0.03	0.05
1400	750S																																	
1400	800S	0.301	<0.5	0.024	3.87	0.025	0.008	0.016	0.075	0.06	0.047	0.012	0.005	0.019	0.004	<0.005	0.2	0.516	0.1	0.001	0.055	51	0.1	0.4	0.055	0.416	1.9	0.01	0.19	0.105	1.36	<0.001	0.37	0.03
1400	800S	0.286	<0.5	0.022	3.74	0.02	0.011	0.014	0.056	0.06	0.042	0.009	0.005	0.02	0.004	<0.005	0.2	0.465	0.1	0.001	0.052	46	0.09	0.422	0.042	0.344	2.15	0.01	0.16	0.092	1.28	<0.001	0.39	0.03
1600	0S	0.298	<0.5	0.02	6.21	0.033	0.015	0.02	0.087	0.08	0.065	0.013	0.007	0.029	0.006	<0.005	0.1	0.712	0.2	0.002	0.051	73	0.12	0.277	0.067	0.561	1.76	0.011	0.31	0.145	0.69	<0.001	0.25	0.03
1600	50S	0.387	<0.5	0.025	3.67	0.041	0.021	0.015	0.075	0.08	0.059	0.017	0.007	0.027	0.007	<0.005	0.1	0.462	0.2	0.003	0.06	55	0.12	0.34	0.056	0.404	2.11	0.011	0.25	0.1	0.64	<0.001	0.33	0.04
1600	100S	0.4	1.2	0.021	3.85	0.057	0.024	0.041	0.102	0.1	0.119	<0.005	0.006	0.03	0.01	<0.005	0.1	1.235	0.2	0.002	0.058	64	0.12	0.137	0.101	0.965	1.16	0.009	0.41	0.243	0.78	<0.001	0.13	0.05
1600	150S	0.355	0.8	0.024	5.23	0.038	0.022	0.016	0.042	0.07	0.053	<0.005	0.005	0.031	0.008	<0.005	0.2	0.46	0.2	0.002	0.072	70	0.07	0.071	0.032	0.379	1.16	0.012	0.25	0.092	1.16	<0.001	0.07	0.03
1600	200S	0.461	1.1	0.024	4.38	0.049	0.024	0.026	0.112	0.1	0.077	0.015	0.003	0.043	0.008	<0.005	0.1	0.835	0.2	0.003	0.059	68	0.14	<0.001	0.083	0.673	1.14	0.01	0.43	0.178	0.59	<0.001	<0.01	0.04
1600	250S	0.458	1	0.031	6.26	0.061	0.034	0.023	0.07	0.1	0.08	<0.005	0.006	0.041	0.011	<0.005	0.1	0.593	0.3	0.005	0.065	67	0.1	0.123	0.05	0.509	1.49	0.014	0.29	0.129	0.68	<0.001	0.12	0.07
1600	300S	0.311	1	0.021	3.67	0.045	0.021	0.026	0.066	0.08	0.071	<0.005	0.004	0.022	0.008	<0.005	0.1	0.716	0.2	0.002	0.05	55	0.11	0.084	0.054	0.564	1.06	0.009	0.26	0.146	0.48	<0.001	0.08	0.05
1600	350S	0.389	<0.5	0.028	4.35	0.049	0.021	0.018	0.075	0.08	0.075	0.012	0.007	0.03	0.008	<0.005	0.1	0.565	0.2	0.003	0.061	70	0.13	0.332	0.056	0.481	1.69	0.012	0.3	0.115	1.12	<0.001	0.31	0.06
1600	400S	0.384	<0.5	0.031	4.46	0.051	0.021	0.025	0.084	0.08	0.079	0.016	0.007	0.032	0.008	<0.005	0.1	0.719	0.2	0.003	0.058	74	0.14	0.289	0.074	0.591	1.67	0.011	0.26	0.157	0.93	<0.001	0.26	0.05
1600	450S	0.255	0.9	0.016	3.94	0.047	0.017	0.032	0.044	0.06	0.096	<0.005	0.002	0.013	0.007	<0.005	0.1	0.978	0.1	0.002	0.055	81	0.1	0.143	0.074	0.722	0.92	0.01	0.29	0.188	0.75	<0.001	0.14	0.04
1600	500S	0.362	1.2	0.03	6.29	0.039	0.018	0.018	0.116	0.09	0.062	<0.005	0.004	0.027	0.006	<0.005	0.1	0.586	0.2	0.002	0.049	40	0.12	0.047	0.084	0.474	1.03	0.013	0.22	0.124	1	<0.001	0.05	0.05
1600	550S	0.509	<0.5	0.032	4.05	0.049	0.019	0.019	0.09	0.08	0.065	0.017	0.007	0.057	0.008	<0.005	0.1	0.539	0.2	0.003	0.068	65	0.12	0.315	0.055	0.466	3.3	0.016	0.3	0.118	1.01	<0.001	0.3	0.05
1600	600S	0.591	2.8	0.049	5.03	0.082	0.044	0.034	0.132	0.15	0.123	0.008	0.01	0.043	0.015	<0.005	0.1	0.944	0.4	0.006	0.079	59	0.16	0.196	0.111	0.806	2.65	0.017	0.4	0.215	0.91	<0.001	0.19	0.07
1600	650S	0.368	0.7	0.029	4.96	0.046	0.026	0.017	0.054	0.08	0.058	0.017	0.007	0.047	0.008	<0.005	0.2	0.448	0.2	0.004	0.066	50	0.11	0.039	0.045	0.384	1.22	0.016	0.25	0.096	1.19	<0.001	0.03	0.05
1600	700S																																	
1600	750S																																	
1600	800S	0.254	0.7	0.015	4.71	0.036	0.014	0.03	0.068	0.06	0.083	<0.005	0.002	0.041	0.005	<0.005	0.2	0.952	0.1	0.001	0.047	51	0.09	0.089	0.071	0.69	0.85	0.014	0.26	0.184	1.1	<0.001	0.09	0.03
1601	800S																																	
0E	30S	0.532	<0.5	0.033	6.25	0.076	0.03	0.034	0.146	0.13	0.11	0.023	0.009	0.03	0.012	<0.005	0.1	1.01	0.2	0.004	0.094	78	0.24	0.377	0.104	0.869	2.75	0.015	0.43	0.219	0.53	<0.001	0.36	0.06
0E	30S	0.423	1	0.029	5.95	0.066	0.031	0.023	0.052	0.09	0.08	<0.005	0.005	0.024	0.011	<0.005	0	0.686	0.2	0.005	0.088	46	0.1	0.101	0.047	0.569	2.24	0.014	0.29	0.139	0.43	<0.001	0.1	0.05
0E	15S	0.667	1.3	0.078	6.95	0.077	0.033	0.031	0.233	0.17	0.102	0.032	0.009	0.024	0.013	<0.005	0.1	0.898	0.3	0.005	0.073	76	0.4	0.386	0.179	0.734	4.08	0.02	0.38	0.199	1.41	<0.001	0.37	0.07
0E		0.309	<0.5	0.033	4.1	0.027	0.012	0.014	0.072	0.08	0.048	0.019	0.005	0.016	0.004	<0.005	0.1	0.493	0.2	0.002	0.053	72	0.1	0.425	0.056	0.394	2.58	0.011	0.16	0.101	0.87	<0.001	0.4	0.04
0E	15N	0.349	1.1	0.019	4.22	0.047	0.018	0.028	0.076	0.08	0.084	0.006	0.002	0.032	0.007	<0.005	0.2	0.993	0.2	0.002	0.064	66	0.16	0.106	0.08	0.724	1.15	0.012	0.3	0.197	0.99	<0.001	0.11	0.05
0E	30N	0.363	1.7	0.073	6	0.069	0.022	0.058	0.066	0.08	0.161	<0.005	0.004	0.024	0.009	<0.005	0.3	1.365	0.2	0.003	0.065	75	0.12	0.073	0.086	1.245	1.93	0.012	0.5	0.309	2.41	<0.001	0.06	0.04
0W	30S	0.245	0.7	0.017	4.83	0.057	0.016	0.049	0.047	0.06	0.123	<0.005	0.002	0.031	0.008	<0.005	0.2	1.42	0.2	0.002	0.058	48	0.1	0.105	0.077	0.967	0.69	0.014	0.48	0.264	0.86	<0.001	0.1	0.03
0W	15S	0.354	1.3	0.02	4.21	0.033	0.015	0.017	0.086	0.07	0.055	0.015	0.004	0.021	0.005	<0.005	0.1	0.556	0.1	0.002	0.049	36	0.11	0.039	0.055	0.452	1.91	0.014	0.21	0.113	0.48	<0.001	0.03	0.03
0W		0.56	1.4	0.029																														

line	station	Scppm	Seppm	Smppm	Snppm	Srppm	Tappm	Tbppm	Teppm	Thppm	Ti%	Tlppm	Tmppm	Uppm	Vppm	Wppm	Yppm	Ybppm	Znppm	Zrppm	
1000	0S	0.11	<0.1	0.087	0.03	67.8	<0.005	0.011	<0.02	0.084	0.002	0.006	0.005	0.047	1	0.08	0.363	0.035	105.5	0.28	
1000	50S	0.14	0.1	0.114	0.04	42.6	<0.005	0.014	<0.02	0.109	0.003	0.007	0.004	0.035	1	0.08	0.389	0.032	83.4	0.28	
1000	100S	0.07	<0.1	0.066	0.03	56.2	<0.005	0.007	0.02	0.056	0.001	0.003	0.003	0.023	1	0.05	0.19	0.017	85	0.17	
1000	150S	0.09	<0.1	0.098	0.05	44.8	<0.005	0.009	<0.02	0.091	0.002	0.004	0.003	0.034	1	0.07	0.274	0.024	67.5	0.19	
1000	200S	0.12	0.1	0.122	0.04	48	<0.005	0.012	<0.02	0.127	0.002	0.006	0.005	0.037	1	0.09	0.334	0.032	76	0.24	
1000	250S	0.09	0.1	0.094	0.04	59	<0.005	0.011	<0.02	0.084	0.002	0.006	0.005	0.054	1	0.09	0.315	0.031	81.3	0.25	
1000	300S	0.06	<0.1	0.069	0.06	57.3	<0.005	0.007	<0.02	0.06	0.001	0.003	0.003	0.019	1	0.05	0.189	0.017	61.6	0.15	
1000	350S	0.09	<0.1	0.105	0.04	36.5	<0.005	0.011	<0.02	0.121	0.002	0.005	0.003	0.036	1	0.1	0.291	0.023	61.8	0.28	
1000	400S	0.07	0.1	0.1	0.06	57.7	<0.005	0.008	<0.02	0.092	0.001	0.007	0.003	0.023	<1	0.08	0.21	0.017	73.4	0.16	
1000	450S	0.08	0.1	0.091	0.04	49.6	<0.005	0.009	<0.02	0.098	0.001	0.004	0.004	0.027	1	0.07	0.242	0.023	62.6	0.22	
1000	500S	0.1	0.1	0.1	0.04	38.4	<0.005	0.011	<0.02	0.1	0.002	0.006	0.005	0.048	1	0.06	0.341	0.032	62.4	0.21	
1000	550S	0.12	0.1	0.119	0.06	79.4	<0.005	0.014	<0.02	0.111	0.002	0.009	0.005	0.041	1	0.06	0.36	0.034	60.4	0.32	
1000	600S	0.22	0.1	0.218	0.1	66.7	<0.005	0.026	<0.02	0.196	0.004	0.01	0.009	0.082	2	0.09	0.675	0.057	78.5	0.52	
1000	650S	0.07	<0.1	0.106	0.07	32.7	<0.005	0.009	<0.02	0.111	0.002	0.004	0.003	0.038	1	0.07	0.261	0.021	78.6	0.23	
1000	700S	0.12	<0.1	0.077	0.04	48.5	<0.005	0.008	<0.02	0.065	0.002	0.003	0.004	0.027	1	0.06	0.29	0.029	81	0.24	
1000	700A	0.12	0.1	0.112	0.04	46.4	<0.005	0.011	<0.02	0.091	0.002	0.004	0.005	0.033	1	0.08	0.364	0.034	79.8	0.24	
1000	800S	0.11	0.1	0.087	0.04	46.9	<0.005	0.01	<0.02	0.082	0.002	0.003	0.004	0.042	1	0.06	0.269	0.024	71.6	0.18	
1200	0S	0.04	<0.1	0.058	0.02	34.1	<0.005	0.006	<0.02	0.049	0.001	0.003	0.002	0.018	1	0.05	0.144	0.014	60.4	0.12	
1200	50S	0.14	<0.1	0.134	0.06	56.2	<0.005	0.014	<0.02	0.126	0.003	0.008	0.006	0.04	1	0.07	0.408	0.038	62.1	0.37	
1200	100S	0.04	0.3	0.061	0.05	42.3	<0.005	0.005	<0.02	0.068	0.001	0.002	0.001	0.019	<1	0.09	0.117	0.007	75.1	0.08	
1200	150S	0.03	<0.1	0.055	0.05	58.7	<0.005	0.005	<0.02	0.057	0.001	0.004	0.002	0.015	<1	0.12	0.128	0.011	65.2	0.16	
1200	200S	0.03	<0.1	0.052	0.04	33	<0.005	0.004	<0.02	0.07	0.001	0.003	0.001	0.013	<1	0.06	0.101	0.008	123.5	0.1	
1200	250S	0.04	<0.1	0.053	0.07	49.4	<0.005	0.005	0.02	0.054	0.001	0.004	0.002	0.018	<1	0.1	0.138	0.011	87.8	0.15	
1200	300S	0.04	<0.1	0.072	0.04	47.4	<0.005	0.006	<0.02	0.056	0.001	0.004	0.002	0.017	1	0.1	0.152	0.016	102	0.12	
1200	350S	0.06	0.2	0.099	0.14	34.8	<0.005	0.009	<0.02	0.119	0.001	0.004	0.003	0.026	1	0.11	0.205	0.02	81.4	0.18	
1200	400S	0.05	<0.1	0.102	0.03	61.6	<0.005	0.01	<0.02	0.081	0.001	0.005	0.003	0.033	<1	0.1	0.224	0.019	84.3	0.15	
1200	450S	0.12	0.1	0.11	0.05	68.5	<0.005	0.013	<0.02	0.114	0.002	0.006	0.005	0.045	1	0.08	0.353	0.033	68	0.28	
1200	500S	0.07	0.2	0.082	0.04	45.3	<0.005	0.007	<0.02	0.069	0.001	0.004	0.003	0.021	1	0.08	0.22	0.017	68.7	0.18	
1200	550S	0.1	0.1	0.063	0.03	79.2	<0.005	0.009	<0.02	0.058	0.001	0.003	0.004	0.028	1	0.08	0.265	0.024	104	0.21	
1200	600S	0.06	0.4	0.071	0.05	31.2	<0.005	0.007	<0.02	0.076	0.001	0.005	0.003	0.024	1	0.08	0.233	0.019	45.1	0.15	
1200	650S	0.07	0.1	0.085	0.05	66.9	<0.005	0.008	<0.02	0.085	0.001	0.006	0.003	0.028	1	0.07	0.234	0.024	72.5	0.17	
1200	700S																				
1200	750S	0.1	<0.1	0.152	0.07	37.2	<0.005	0.012	<0.02	0.145	0.002	0.005	0.004	0.037	1	0.1	0.32	0.031	58.5	0.23	
1200	800S	0.13	<0.1	0.116	0.04	50.8	<0.005	0.011	<0.02	0.104	0.002	0.006	0.005	0.041	1	0.07	0.322	0.026	57.9	0.25	
1400	0S	0.08	0.1	0.085	0.03	46.5	<0.005	0.009	<0.02	0.076	0.002	0.006	0.004	0.03	1	0.11	0.29	0.025	123	0.22	
1400	50S	0.11	<0.1	0.064	0.04	61.8	<0.005	0.008	<0.02	0.067	0.001	0.004	0.004	0.029	1	0.08	0.257	0.024	88.3	0.2	
1400	50S	0.11	<0.1	0.16	0.07	56.2	<0.005	0.012	<0.02	0.142	0.002	0.006	0.004	0.035	1	0.14	0.31	0.026	78.2	0.3	
1400	100S	0.08	<0.1	0.069	0.05	45.9	<0.005	0.007	<0.02	0.083	0.001	0.005	0.002	0.025	1	0.19	0.204	0.016	73.8	0.22	
1400	150S	0.08	<0.1	0.055	0.03	59.8	<0.005	0.007	<0.02	0.05	0.001	0.004	0.003	0.026	1	0.13	0.248	0.021	113	0.22	
1400	200S	0.08	<0.1	0.073	0.04	42.9	<0.005	0.008	<0.02	0.069	0.002	0.003	0.004	0.025	1	0.1	0.235	0.021	58.3	0.2	
1400	250S	0.13	0.1	0.119	0.06	53.9	<0.005	0.015	<0.02	0.108	0.002	0.006	0.006	0.041	1	0.08	0.454	0.041	111.5	0.3	

line	station	Scppm	Seppm	Smppm	Snppm	Srppm	Tappm	Tbppm	Teppm	Thppm	Ti%	Tlppm	Tmppm	Uppm	Vppm	Wppm	Yppm	Ybppm	Znppm	Zrppm
1400	300S	0.09	<0.1	0.119	0.06	54.5	<0.005	0.012	<0.02	0.119	0.002	0.006	0.005	0.053	1	0.12	0.33	0.029	72.2	0.34
1400	350S	0.11	<0.1	0.105	0.05	38.2	<0.005	0.009	<0.02	0.105	0.002	0.007	0.004	0.035	1	0.16	0.292	0.025	50.9	0.24
1400	400S	0.11	<0.1	0.113	0.06	31	<0.005	0.01	<0.02	0.105	0.002	0.006	0.004	0.036	1	0.09	0.293	0.024	60.2	0.27
1400	450S	0.06	<0.1	0.07	0.04	29.7	<0.005	0.007	<0.02	0.064	0.001	0.003	0.003	0.034	<1	0.09	0.19	0.016	62.2	0.12
1400	500S	0.09	<0.1	0.111	0.07	57.7	<0.005	0.011	<0.02	0.113	0.001	0.005	0.003	0.029	1	0.06	0.231	0.02	74	0.19
1400	550S	0.06	0.1	0.06	0.04	53.1	<0.005	0.006	<0.02	0.053	0.001	0.005	0.003	0.019	1	0.07	0.199	0.016	54.1	0.15
1400	600S	0.17	0.1	0.175	0.09	54.5	<0.005	0.016	<0.02	0.186	0.003	0.007	0.006	0.056	2	0.09	0.498	0.044	55	0.41
1400	650S	0.05	<0.1	0.101	0.06	70.1	<0.005	0.007	<0.02	0.077	0.001	0.004	0.002	0.022	<1	0.11	0.191	0.018	103.5	0.16
1400	700S	0.11	0.3	0.079	0.08	63.8	<0.005	0.009	<0.02	0.076	0.001	0.005	0.005	0.037	1	0.08	0.318	0.026	93.4	0.24
1400	750S																			
1400	800S	0.03	<0.1	0.076	0.06	29.5	<0.005	0.005	<0.02	0.077	0.001	0.002	0.001	0.015	<1	0.08	0.119	0.009	64.1	0.13
1400	800S	0.04	<0.1	0.058	0.04	31.1	<0.005	0.005	<0.02	0.064	0.001	0.002	0.001	0.012	<1	0.05	0.11	0.009	64.8	0.15
1600	0S	0.03	<0.1	0.099	0.07	54.1	<0.005	0.007	<0.02	0.092	0.001	0.005	0.002	0.02	1	0.08	0.161	0.013	135	0.17
1600	50S	0.06	<0.1	0.064	0.04	39.4	<0.005	0.007	<0.02	0.094	0.001	0.004	0.003	0.024	1	0.15	0.204	0.021	99.7	0.22
1600	100S	0.07	<0.1	0.176	0.13	56.6	<0.005	0.013	<0.02	0.171	0.001	0.004	0.004	0.036	1	0.09	0.271	0.023	80.1	0.21
1600	150S	0.07	<0.1	0.088	0.03	46.1	<0.005	0.007	<0.02	0.066	0.001	0.004	0.003	0.025	1	0.12	0.201	0.022	87.4	0.17
1600	200S	0.07	<0.1	0.111	0.08	62.4	<0.005	0.01	<0.02	0.121	0.001	0.007	0.003	0.033	1	0.11	0.224	0.02	83.5	0.22
1600	250S	0.1	0.1	0.109	0.05	88.8	<0.005	0.011	<0.02	0.092	0.002	0.006	0.005	0.039	1	0.11	0.347	0.03	74.7	0.26
1600	300S	0.07	<0.1	0.104	0.1	41.1	<0.005	0.01	<0.02	0.105	0.001	0.004	0.002	0.027	1	0.12	0.22	0.021	76.2	0.16
1600	350S	0.07	<0.1	0.096	0.05	54.4	<0.005	0.009	<0.02	0.093	0.001	0.004	0.003	0.03	1	0.13	0.217	0.019	93.7	0.21
1600	400S	0.06	<0.1	0.108	0.05	54.8	<0.005	0.01	<0.02	0.114	0.001	0.005	0.003	0.025	1	0.09	0.236	0.019	112	0.18
1600	450S	0.04	<0.1	0.14	0.08	47.1	<0.005	0.011	<0.02	0.176	0.001	0.006	0.002	0.024	<1	0.14	0.187	0.012	136.5	0.13
1600	500S	0.06	<0.1	0.082	0.06	26	<0.005	0.007	<0.02	0.089	0.001	0.003	0.002	0.023	1	0.07	0.175	0.015	41.7	0.16
1600	550S	0.06	<0.1	0.076	0.06	47.4	<0.005	0.008	<0.02	0.08	0.001	0.005	0.004	0.025	1	0.09	0.228	0.021	85.9	0.23
1600	600S	0.14	0.1	0.156	0.05	63	<0.005	0.015	<0.02	0.159	0.003	0.008	0.006	0.048	2	0.08	0.457	0.034	51.1	0.35
1600	650S	0.09	0.6	0.066	0.04	40	<0.005	0.008	<0.02	0.073	0.001	0.005	0.003	0.039	1	0.11	0.271	0.021	71.3	0.21
1600	700S																			
1600	750S																			
1600	800S	0.03	0.1	0.124	0.07	38	<0.005	0.008	<0.02	0.121	0.001	0.002	0.002	0.021	1	0.06	0.147	0.01	116	0.13
1601	800S																			
0E	30S	0.1	<0.1	0.168	0.1	50.7	<0.005	0.013	0.02	0.152	0.002	0.006	0.005	0.033	1	0.08	0.344	0.03	127.5	0.29
0E	30S	0.1	0.1	0.101	0.05	55.1	<0.005	0.01	<0.02	0.097	0.001	0.005	0.005	0.032	1	0.06	0.327	0.023	108.5	0.22
0E	15S	0.1	<0.1	0.15	0.07	48.5	<0.005	0.013	<0.02	0.13	0.002	0.007	0.006	0.04	1	0.1	0.372	0.034	63.1	0.35
0E		0.03	<0.1	0.064	0.07	30.9	<0.005	0.005	<0.02	0.077	0.001	0.004	0.002	0.015	<1	0.05	0.129	0.008	78.1	0.16
0E	15N	0.05	<0.1	0.139	0.08	43.7	<0.005	0.01	<0.02	0.13	0.001	0.005	0.002	0.029	1	0.1	0.198	0.015	60	0.15
0E	30N	0.05	0.1	0.25	0.06	49.9	<0.005	0.016	<0.02	0.255	0.001	0.005	0.003	0.028	1	0.08	0.257	0.014	105.5	0.16
0W	30S	0.03	0.1	0.186	0.08	38.7	<0.005	0.013	0.02	0.224	0.001	0.005	0.002	0.035	<1	0.08	0.203	0.013	96.5	0.1
0W	15S	0.07	0.2	0.081	0.06	31	<0.005	0.006	<0.02	0.078	0.001	0.003	0.002	0.017	1	0.06	0.18	0.012	66.4	0.11
0W		0.13	<0.1	0.074	0.04	47.2	<0.005	0.009	<0.02	0.067	0.002	0.004	0.004	0.036	1	0.06	0.28	0.021	60.7	0.2
0W	15N	0.1	<0.1	0.099	0.05	45.8	<0.005	0.01	<0.02	0.087	0.002	0.003	0.004	0.03	1	0.07	0.283	0.023	73.5	0.22
0W	30N	0.05	<0.1	0.048	0.03	40.2	<0.005	0.006	<0.02	0.047	0.001	0.006	0.002	0.015	<1	0.08	0.168	0.015	73.6	0.13