

## Cameco Australia Pty. Ltd.

### Stockdale Project - Outcrop Samples PIMA Analysis: TSG (The Spectral Assistant)

Sample	Pima File (*.fos)	TSA Error	Crystallinity		Kandite Group			Sericite Group				Others										
			Kaol_XT	AlOH_XT	Kaolinite	Dickite	Halloysite	Muscovite	Illite	Phengite	Paragonite	Gypsum	Opal	Phlogopite1	Diaspore	Palygorskite	NH4_Alunite	Na_Alunite	K_Alunite	Dolomite	Ankerite	Jarosite
SD00C10001	SD00C1A0001	129.2	1.04	1.15	58.2%		41.8%															
SD00C10002	SD00C1A0002	173.5	1.00	0.74					100.0%													
SD00C10003	SD00C1A0003	172.7	1.00	0.86					100.0%													
SD00C10004	SD00C1A0004	80.2	1.01	0.87	60.1%				39.9%													
SD00C20004	SD00C2A0004	134.3	1.00	0.65			38.6%		61.4%													
SD00C30004	SD00C3A0004	221.3	1.05	0.71	100.0%																	
SD00C10005	SD00C1A0005	241.2	0.99	0.68								12.4%	87.6%									
SD00C10007	SD00C1A0007	604.2	1.01	0.44					84.5%			15.5%										
SD00C50008	SD00C5A0008		1.00	0.08																		
SD00C40008	SD00C4A0008		1.02	0.12																		
SD00C30008	SD00C3A0008		0.98	0.15																		
SD00C10008	SD00C1A0008		1.01	0.07																		
SD00C20008	SD00C2A0008	117.2	1.01	1.36	100.0%																	
SD00C40009	SD00C4A0009		1.00	0.12																		
SD00C10009	SD00C1A0009	508.1	0.99	0.37	73.2%							26.8%										
SD00C20009	SD00C2A0009		1.00	0.44																		
SD00C30009	SD00C3A0009		0.99	0.29																		
SD00C10010	SD00C1A0010	399.7	1.02	0.81	75.1%												24.9%					
SD00C10011	SD00C1A0011	228.9	1.01	1.12	92.4%							7.6%										
SD00C10012	SD00C1A0012	120.6	1.01	0.93	49.8%				50.2%													
SD00C10013	SD00C1A0013		1.01	0.51																		
SD00C10014	SD00C1A0014	384.0	1.00	0.37	49.7%										50.3%							
SD00C10015	SD00C1A0015	235.1	1.02	0.78	100.0%																	
SD00C20015	SD00C2A0015	163.3	1.03	0.80	100.0%																	
SD00C30015	SD00C3A0015		1.00	0.28																		
SD00C10016	SD00C1A0016	67.6	1.08	7.30	100.0%																	
SD00C10017	SD00C1A0017	61.4	1.10	3.06	100.0%																	
SD00C10018	SD00C1A0018	49.5	1.10	3.21	100.0%																	
SD00C10019	SD00C1A0019	170.9	1.02	1.22	55.9%			44.1%														
SD00C10020	SD00C1A0020	401.4	1.02	0.89	92.8%							7.2%										
SD00C10021	SD00C1A0021	31.3	1.02	1.89				59.1%	40.9%													
SD00C10022	SD00C1A0022	172.9	1.01	1.31	100.0%																	
SD00C10023	SD00C1A0023	244.9	0.98	0.53							55.8%					44.2%						
SD00C10024	SD00C1A0024	194.1	1.03	0.91	100.0%																	
SD00C10025	SD00C1A0025	127.6	1.02	0.98					100.0%													
SD00C10026	SD00C1A0026	70.7	1.02	1.34	70.1%		29.9%															
SD00C10027	SD00C1A0027	231.9	1.02	0.56										42.1%			57.9%					
SD00C10028	SD00C1A0028	443.7	1.00	0.40	81.1%							18.9%										
SD00C10029	SD00C1A0029	39.4	1.05	1.79	77.3%		22.7%															
SD00C10030	SD00C1A0030	91.0	1.00	0.83					100.0%													
SD00C10031	SD00C1A0031	243.1	1.03	1.07			100.0%															

Sample	Pima File (*.fos)	TSA Error	Crystallinity		Kandite Group			Sericite Group				Others										
			Kaol_XT	AlOH_XT	Kaolinite	Dickite	Halloysite	Muscovite	Illite	Phengite	Paragonite	Gypsum	Opal	Phlogopite1	Diaspore	Palygorskite	NH4_Alunite	Na_Alunite	K_Alunite	Dolomite	Ankerite	Jarosite
SD00C10032	SD00C1A0032	242.4	1.00	1.02			100.0%															
SD00C10033	SD00C1A0033	434.1	1.00	0.93					85.7%									14.3%				
SD00C10034	SD00C1A0034	187.0	1.08	1.32	100.0%																	
SD00C10035	SD00C1A0035	232.1	1.01	1.24					100.0%													
SD00C10036	SD00C1A0036	52.6	1.02	1.38	68.5%			31.5%														
SD00C10037	SD00C1A0037	136.2	1.04	1.73	100.0%																	
SD00C10038	SD00C1A0038	60.3	1.07	4.61	100.0%																	
SD00C10040	SD00C1A0040	115.4	1.04	2.46	100.0%																	
SD00B10041	SD00B1A0041	55.9	1.06	2.14	100.0%																	
SD00B10042	SD00B1A0042	39.1	1.05	2.39	83.5%			16.5%														
SD00B10043	SD00B1A0043	55.5	0.99	0.97					100.0%													
SD00B10044	SD00B1A0044	73.0	0.99	0.93					62.5%		37.5%											
SD00B10045	SD00B1A0045	72.8	0.98	0.82					100.0%													
SD00B10046	SD00B1A0046	225.1	1.01	0.90					88.5%										11.5%			
SD00B10047	SD00B1A0047	79.6	0.97	1.11			21.9%				78.1%											
SD00C10047	SD00C1A0047	274.7	1.05	0.40															57.1%		42.9%	
SD00B10048	SD00B1A0048	21.4	1.01	1.05					61.1%	38.9%												
SD00B10049	SD00B1A0049	251.6	1.00	0.57			45.3%		54.7%													
SD00B10050	SD00B1A0050	158.8	1.01	0.78				100.0%														
SD00B10052	SD00B1A0052	88.7	1.00	0.79	26.4%				73.6%													
SD00B10053	SD00B1A0053	141.2	0.98	0.76					100.0%													
SD00B10054	SD00B1A0054		1.01	0.16																		
SD00B10055	SD00B1A0055		1.01	0.40																		
SD00B10056	SD00B1A0056	74.5	1.00	1.13	26.2%				73.8%													
SD00B10057	SD00B1A0057	237.9	0.99	0.71							100.0%											
SD00B10060	SD00B1A0060	259.4	1.01	0.58					86.3%			13.7%										
SD00B10061	SD00B1A0061	42.3	1.00	3.77				59.7%			40.3%											
SD00B10062	SD00B1A0062	328.7	1.01	0.56	30.3%						69.7%											
SD00B10063	SD00B1A0063	154.4	1.01	0.77	100.0%																	
SD00B10064	SD00B1A0064	198.5	1.00	0.78				100.0%														
SD00B10065	SD00B1A0065	457.4	0.99	0.34					76.9%			23.1%										
SD00B10066	SD00B1A0066	60.3	1.00	0.77					65.5%	34.5%												
SD00B10067	SD00B1A0067	375.0	1.01	0.35					65.8%								34.2%					
SD00B10069	SD00B1A0069	511.7	1.01	1.23			70.4%										29.6%					
SD00B10070	SD00B1A0070	63.9	1.00	1.12			15.9%		84.1%													
SD00B10071	SD00B1A0071	245.6	1.02	0.55					85.2%									14.8%				
SD00B10072	SD00B1A0072		0.99	0.35																		
SD00B10073	SD00B1A0073	385.6	1.01	0.52					88.5%										11.5%			
SD00B10074	SD00B1A0074	35.7	1.00	1.39			28.9%		71.1%													
SD00B10200	SD00B1A0200	233.0	0.99	0.55					89.9%			10.1%										
SD00B10201	SD00B1A0201	111.5	1.01	1.29					100.0%													
SD00B10202	SD00B1A0202	82.7	1.00	0.95	57.7%				42.3%													
SD00B10203	SD00B1A0203	125.0	0.99	0.79					100.0%													
SD00B10204	SD00B1A0204	125.7	1.00	2.06					100.0%													

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			Kaol_XT	AlOH_XT	Kaolinite	Dickite	Halloysite	Muscovite	Illite	Phengite	Paragonite	Gypsum	Opal	Phlogopite1	Diaspore	Palygorskite	NH4_Alunite	Na_Alunite	K_Alunite	Dolomite	Ankerite	Jarosite
SD00B10205	SD00B1A0205	75.2	1.02	1.94	31.6%			68.4%														
SD00B10206	SD00B1A0206	128.2	0.99	0.70					100.0%													
SD00B10207	SD00B1A0207	223.8	0.99	0.62	45.2%						54.8%											
SD00B10208	SD00B1A0208	259.3	0.99	0.36					84.3%			15.7%										
SD00B10209	SD00B1A0209	64.4	1.02	1.54	36.3%				63.7%													
SD00B10210	SD00B1A0210	109.7	1.01	1.82			32.5%				67.5%											
SD00B10211	SD00B1A0211	54.4	1.00	2.83				58.2%			41.8%											
SD00B10212	SD00B1A0212	91.2	1.01	0.96	44.2%				55.8%													
SD00B10213	SD00B1A0213		1.00																			
SD00B10214	SD00B1A0214		1.02	0.87																		
SD00B10215	SD00B1A0215	540.7	0.99	0.32					82.8%			17.2%										
SD00B10216	SD00B1A0216	67.1	1.02	0.84			30.3%		69.7%													
SD00B10217	SD00B1A0217		1.00	0.22																		
SD00B10219	SD00B1A0219	130.0	1.00	0.89					100.0%													
SD00B10220	SD00B1A0220	190.1	1.00	0.55					100.0%													
SD00B10221	SD00B1A0221	541.8	1.00	0.52					62.4%							37.6%						
SD00B10222	SD00B1A0222	406.6	0.99	0.26								14.8%				85.2%						
SD00B10223	SD00B1A0223	296.5	1.01	0.47					69.9%								30.1%					
SD00B10224	SD00B1A0224		1.00	0.50																		
SD01C10001	SD01C1A0001	72.9	1.01	2.35	49.8%			50.2%														
SD01C10002	SD01C1A0002		1.00	0.57																		
SD01C10003	SD01C1A0003		0.99	0.33																		
SD01C10005	SD01C1A0005	53.1	1.01	2.32			21.0%	79.0%														
SD01C10006	SD01C1A0006	92.4	1.06	2.53	100.0%																	
SD01C10007	SD01C1A0007	46.5	1.02	1.58	52.9%			47.1%														
SD01C10008	SD01C1A0008	65.7	1.00	1.01			18.3%		81.7%													
SD01C10009	SD01C1A0009	226.6	0.99	0.62					100.0%													
SD01C10010	SD01C1A0010	98.2	0.99	1.16					100.0%													
SD01C10011	SD01C1A0011	92.6	0.99	1.16					100.0%													
SD01C10012	SD01C1A0012	32.0	0.97	1.53					75.2%		24.8%											
SD01C10013	SD01C1A0013	132.7	1.04	1.85	100.0%																	
SD01C10014	SD01C1A0014	109.8	1.01	1.22					100.0%													
SD01C10015	SD01C1A0015		1.00	0.18																		
SD01C10016	SD01C1A0016	180.7	1.03	6.38	100.0%																	
SD01C10200	SD01C1A0200	65.5	0.99	1.73	34.8%				65.2%													
SD01C10201	SD01C1A0201	52.3	0.98	1.22					100.0%													
SD01C10202	SD01C1A0202	82.3	1.03	2.15	100.0%																	
SD01C10203	SD01C1A0203	150.8	1.02	1.73	100.0%																	
SD01C10204	SD01C1A0204	120.0	1.03	1.94	100.0%																	
SD01C10205	SD01C1A0205		1.01	0.59																		
SD01C10206	SD01C1A0206	26.5	1.04	2.60	60.5%				39.5%													
SD01C10207	SD01C1A0207	98.0	1.05	1.72	81.7%															18.3%		
SD01C10209	SD01C1A0209	81.8	1.01	1.00	53.0%				47.0%													
SD01C10210	SD01C1A0210	95.9	1.01	0.90	36.5%			63.5%														

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			Kaol_XT	AlOH_XT	Kaolinite	Dickite	Halloysite	Muscovite	Illite	Phengite	Paragonite	Gypsum	Opal	Phlogopite1	Diaspore	Palygorskite	NH4_Alunite	Na_Alunite	K_Alunite	Dolomite	Ankerite	Jarosite
SD01C20210	SD01C2A0210	67.3	1.00	0.97					100.0%													
SD01C20211	SD01C2A0211	51.3	1.04	3.73	100.0%																	
SD01C10211	SD01C1A0211	38.3	1.08	3.88	100.0%																	
SD01C10212	SD01C1A0212	40.5	1.09	4.44	100.0%																	
SD01C10214	SD01C1A0214	233.2	1.02	1.03	88.4%																	11.6%
SD01C10215	SD01C1A0215	111.1	0.99	1.44					100.0%													
SD01C10216	SD01C1A0216		1.00	0.28																		
SD01C10217	SD01C1A0217		1.00	0.10																		
SD01C10218	SD01C1A0218	34.3	1.01	1.87	30.0%				70.0%													
SD01C10219	SD01C1A0219	86.6	1.02	2.27	66.6%				33.4%													
SD01C10220	SD01C1A0220	216.4	1.01	0.45				87.3%				12.7%										
SD01C10221	SD01C1A0220	216.4	1.01	0.45				87.3%				12.7%										