

APPENDIX 1 - TINTAGEL PROJECT MINERAL CHEMISTRY

Sample	Grain		Analysis_No	Mineral	Code	SiO2	TiO2	Al2O3	Cr2O3	V2O3	FeO	MnO	MgO	CaO	NiO	ZnO	Nb2O5	CoO	Total
05-040-001		31	NAD131	Niobian Rutile	RU	1.37	93.37	0.00	0.00	0.00	2.03	0.00	0.00	0.00	0.00	0.00	1.85		98.62
05-040-001		32	NAD132	Ilmenite	IL	0.00	58.41	0.00	0.00	0.00	39.51	1.17	0.00	0.00	0.00	0.00	0.00		99.09
05-040-001		33	NAD133	Pseudobrookite	PB	0.88	70.16	2.23	0.86	0.00	26.27	0.00	0.00	0.00	0.00	0.00	0.00		100.40
05-040-003		34	NAD134	Cr-Spinel	SP	0.00	1.33	28.51	36.55	0.00	23.77	0.00	8.59	0.00	0.00	0.00	0.00		98.75
05-040-003		35	NAD135	Ti-mag?	SP	0.00	2.82	0.00	0.00	0.00	98.43	0.00	0.00	0.00	0.00	0.00	0.00		101.25
05-050-001		19	NAD119	Cr-Spinel	SP	1.54	0.53	13.24	59.84	0.00	16.47	0.00	7.59	0.00	0.00	0.00	0.00		99.2
05-050-001		20	not analysed	Xenotime	XX														
05-050-002		21	NAD121	Leucoxene	IL	1.82	57.81	1.72	0.00	0.00	37.26	1.03	0.00	0.34	0.00	0.00	0.00		99.98
05-050-002		22	NAD122	Leucoxene	IL	0.56	58.38	0.00	0.00	0.00	38.26	0.00	1.11	0.00	0.00	0.00	0.00		98.31
05-050-002			NAD531	Cr-Spinel	SP		1.80	12.47	51.68	0.00	21.55	0.00	10.46		0.00	0.00		0.00	97.96
05-050-002	weathered		NAD532	Cr-Spinel	SP		0.00	45.66	28.03	0.54	12.58	0.00	12.75		0.00	0.00		0.00	99.56
05-050-003		39	NAD439	Ferropseudobrookite	XX	3.10	64.65	2.15	0.00	0.00	29.17	0.00	0.00	0.85		0.00	0.00		99.92
05-050-003		40	NAD440	Altered Ilmenite	IL	1.78	55.23	1.11	0.00	0.00	38.68	0.00	0.61	0.00		0.00	0.00		97.41
05-050-003		41	NAD441	Pseudorutile	XX	1.41	76.01	1.36	0.60	0.00	20.04	0.00	0.00	0.39		0.00	0.00		99.81
05-050-003		42	NAD442	Cr-Spinel	SP	0.47	1.50	17.76	40.25	0.71	31.93	0.00	5.84	0.00		0.00	0.00		98.46
05-050-003		43	NAD443	Cr-Pseudorutile	XX	1.18	81.35	2.00	0.96	0.00	13.52	0.00	0.50	0.42		0.00	0.00		99.93
05-050-003		44	NAD444	Ferropseudobrookite	XX	6.16	65.42	4.08	0.00	0.00	23.21	0.79	0.00	0.00		0.00	0.00		99.66
05-050-003		45	NAD445	Rutile	RU	3.10	93.09	1.64	0.00	0.00	1.43	0.00	0.00	0.00		0.00	0.00		99.26
05-050-003		46	NAD446	Cr-Spinel (Nice Indicator!)	SP	1.30	2.39	4.31	64.80	0.00	18.26	1.05	7.08	0.00		0.00	0.00		99.19
06-002-001		1	NAD401	Alteration Product ex. Ilmenite?	XX	20.81	24.20	13.94	0.00	0.00	19.65	0.00	0.00	17.15		0.00	0.00		95.75
06-002-001		2	NAD402	Leucoxene?	XX	0.00	86.99	0.00	0.00	0.00	31.61	0.00	0.00	35.13		0.00	0.00		153.73
06-002-001		3	NAD403	Alteration Product ex. Ilmenite?	XX	54.39	26.69	0.00	0.00	0.00	24.67	0.00	0.00	0.00		0.00	0.00		105.75
06-002-002		4	NAD404	Picroilmenite	IL	1.01	53.13	0.98	0.00	0.00	37.59	0.00	6.68	0.00		0.00	0.00		99.39
06-002-002		5	NAD405	Fe-Tourmaline	TO	41.48	0.48	38.37	0.00	0.00	10.97	0.00	6.95	1.20		0.00	0.00		99.45
06-002-002		6	NAD406	Ilmenite	IL	0.00	51.21	0.00	0.00	0.00	47.05	0.00	0.00	0.00		0.00	0.00		98.26
06-002-002		7	NAD407	Almandine	GT	37.35	0.00	20.84	0.00	0.00	33.69	0.80	3.91	3.68		0.00	0.00		100.27
06-002-003		8	NAD408	Ilmenite	IL	0.45	50.62	0.93	0.00	0.00	42.75	3.00	2.27	0.00		0.00	0.00		100.02
06-002-003		9	NAD409	Ilmenite	IL	0.00	57.63	0.49	0.00	0.00	39.16	0.65	1.01	0.00		0.00	0.00		98.94
06-002-003		10	NAD410	Ilmenite	IL	0.77	57.13	0.00	0.00	0.00	40.79	1.21	0.00	0.00		0.00	0.00		99.90
06-002-003		11	NAD411	Ilmenite	IL	0.81	49.51	0.47	0.00	0.00	42.04	5.42	0.00	0.00		0.00	0.00		98.25
06-002-003		12	NAD412	Altered Picroilmenite	IL	1.48	67.62	2.27	0.00	0.00	18.75	0.00	7.41	0.00		0.00	0.00		97.53
06-002-003		13	not analysed	Tantalite	XX														
06-002-005		14	NAD414	Pseudorutile	XX	0.98	78.06	0.64	0.56	0.00	18.27	0.00	0.00	0.34		0.00	0.00		98.85
06-002-009		15	NAD415	Altered Ilmenite	IL	4.79	48.42	1.87	0.00	0.00	42.31	0.00	0.00	3.11		0.00	0.00		100.50
06-002-010		16	NAD416	Ferropseudobrookite	XX	2.65	62.63	0.68	0.00	0.00	33.11	0.00	0.00	0.85		0.00	0.00		99.92
06-002-012		17	NAD417	Rutile	SP	0.41	96.91	0.00	0.00	0.00	1.86	0.00	0.00	0.00		0.00	0.00		99.18
06-002-012		18	NAD418	Hematite coating on Spinel?	IL	10.37	0.00	3.61	0.00	0.00	84.16	0.00	0.65	1.15		0.00	0.00		99.94
06-002-012		19	NAD419	Al-Cr-Spinel	SP	1.78	0.00	54.89	10.85	0.00	13.72	0.00	17.89	0.00		0.00	0.00		99.13
06-002-012		20	not analysed	Cassiterite	XX														

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06-002-012		21	not analysed	XX														
06-002-012		22	NAD422	IL	0.73	62.50	0.51	0.00	0.00	35.43	0.00	0.00	0.00		0.00	0.00		99.17
06-002-012		23	not analysed	XX														
06-002-012		24	NAD424	RU	0.53	92.81	0.38	0.00	0.00	2.46	0.00	0.00	0.00		0.00	2.70		98.88
06-002-012		25	NAD425	RU	3.38	92.66	2.44	0.00	0.00	0.68	0.00	0.00	0.00		0.00	0.00		99.16
06-002-012		26	NAD426	GT	34.50	0.00	19.14	0.00	0.00	37.05	1.52	6.04	1.65		0.00	0.00		99.90
06-002-012		27	not analysed	XX														
06-002-012		28	not analysed	XX														
06-002-014		29	NAD429	IL	0.00	52.02	0.00	0.50	0.00	46.72	0.00	0.00	0.00		0.00	0.00		99.24
06-002-014		30	NAD430	RU	0.39	97.09	0.38	0.00	0.00	1.04	0.00	0.00	0.00		0.00	0.83		99.73
06-002-014		31	NAD431A	SP	3.76	0.82	11.92	66.78	0.00	11.10	0.00	4.31	0.00		0.00	0.00		98.69
06-002-014		31	NAD431B	SP	2.46	0.00	17.98	59.08	0.00	12.72	0.00	5.49	0.00		1.52	0.00		99.25
06-002-014		32	NAD432	IL	4.13	0.67	2.68	0.92	1.20	90.84	0.00	0.43	0.63		0.00	0.00		101.50
06-002-014		33	NAD433	IL	14.14	0.00	2.42	0.66	0.00	82.10	0.00	0.00	0.85		0.00	0.00		100.17
06-002-014		34	NAD434	IL	14.31	0.58	6.08	0.00	3.41	74.58	0.00	0.68	0.55		0.00	0.00		100.19
06-002-014		35	NAD435	RU	2.50	87.59	1.61	0.00	1.70	2.30	0.00	0.00	0.00		0.00	4.42		100.12
06-002-014		36	NAD436	IL	1.95	0.95	3.14	0.00	1.43	92.55	0.00	0.00	0.66		0.00	0.00		100.68
06-002-014		37	NAD437	RU	0.00	97.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		97.66
06-002-014		38	NAD438	TO	33.58	0.00	28.35	0.00	0.00	36.19	0.00	1.26	1.79		0.00	0.00		101.17