

7 December 2018 ASX Code: WCN

Geochemical Survey defines Large Scale Copper Porphyry System

Highlights

- Soil geochemical survey defines large scale copper porphyry system
 - Copper porphyry core is 1 kilometre in diameter
 - Mineralised system is over 8 kilometres in diameter
 - Identified gold mineralisation covers 2.4km of strike to the West
 - New mapping identifies gold mineralisation to the East and North

White Cliff Minerals Limited ("White Cliff" or the "Company") is pleased to report that it has completed an extensive soil geochemistry survey at the Aucu Gold Project in the Kyrgyz Republic.

The geochemical survey has delineated the core of the copper porphyry system which has a diameter of approximately 1 kilometre. The mineralised zone around this system extends across 8 kilometres and includes the existing JORC compliant Aucu gold resource of 484,000 ounces (2.95Mt at 5 g/t gold).

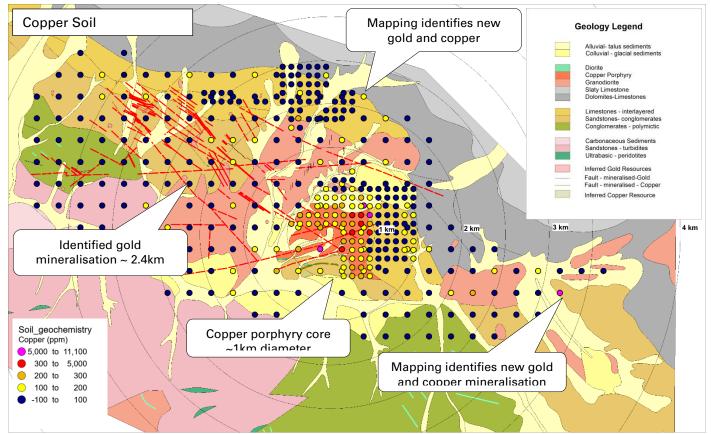


Figure 1: Soil geochemistry (Copper) highlights core of mineralised system and hints at additional mineralised porphyry intrusions.

The central copper porphyry is responsible for both the outlying high grade gold mineralisation and the core copper mineralisation. In a classical copper porphyry system, metals are typically deposited in zones above and around the porphyry depending on temperature and distance from the core of the system. The typical metal zonation from the core to the periphery of the system is: Copper > Molybdenum >Tin >Tellurium > Gold > Bismuth > Arsenic > Antimony >Thallium >Lithium.

At the Aucu Gold project, the central copper porphyry is surrounded by mainly by limestone and granodiorite. Soil sampling and mapping has identified copper-magnetite skarn style mineralisation along the contact of the mineralised porphyry and the overlying limestone. The mineralisation is generated by the interaction of hot mineralised fluids with the colder limestone. Copper grades in the soil results are up to 0.7% copper.

In contrast, gold mineralisation has formed 1-4 kilometres from the core of the system at lower temperatures as the mineralised fluids have flowed out and away for the central porphyry. Mineralisation has developed strongly within sandstone due to its brittle and layered nature. There is a strong association between gold mineralisation within epithermal veins and the distribution of anomalous arsenic results in the soil samples. This relationship has enabled the identification of the new gold and copper zones described in the next section.

New mineralised zones Identified

The survey has also assisted in the identification of new gold and copper anomalies to the North and East of the porphyry system which may indicate additional potential mineralised porphyries and additional structurally controlled gold mineralisation. The Company has conducted detailed mapping and sampling which will be released when assays are available.

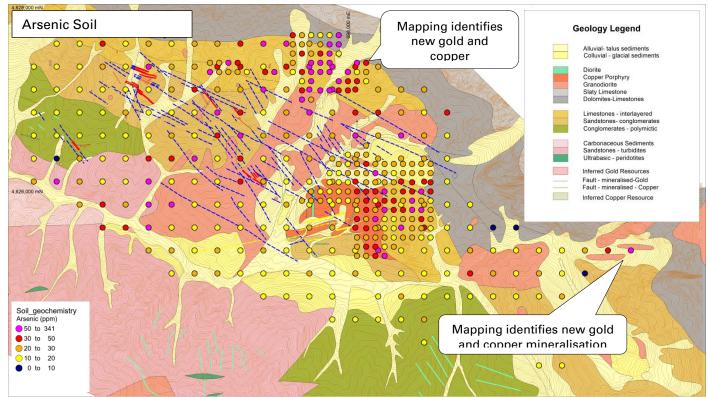


Figure 2: Soil geochemistry (Arsenic) highlights upper levels of mineralised system that occurs at depth. Resources in red lines, epithermal veins in blue dash. Note the strong relationship between elevated arsenic and veins.

Exploration Update- Further Work

As discussed above, the Company has conducted further sampling and mapping which has resulted in the identification of new gold and copper zones. The Company will release a formal exploration update once this sampling and assaying is completed.

Project Summary: Aucu Gold Deposit

The Aucu copper and gold project currently contains Inferred Mineral Resources for the **Aucu** gold deposit above a cutoff grade of 1 g/t gold consists of **2.95 Million** tonnes grading **5.1 g/t gold** for **484,000 ounces** of contained gold and 17.2 Million tonnes grading 0.37% copper for 60,000 tonnes of contained copper.

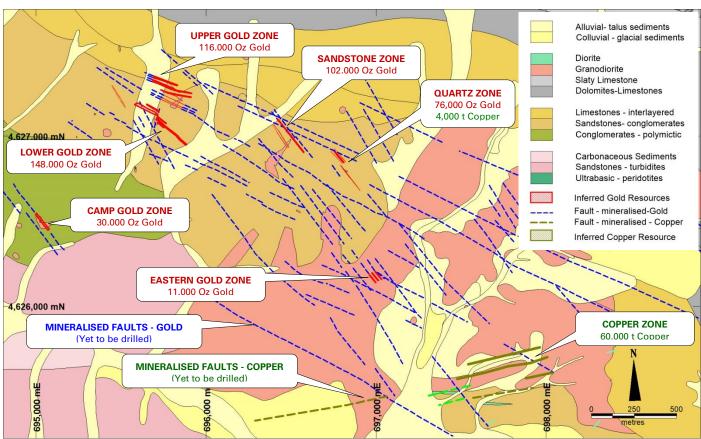


Figure 1: Location plan showing Inferred gold resources (red hatch), copper resources (green hatch) that represent less than 5% of the identified mineralised faults. 95% of the mineralised faults identified by rock chip sampling are still to be drilled (dashed blue and green lines)

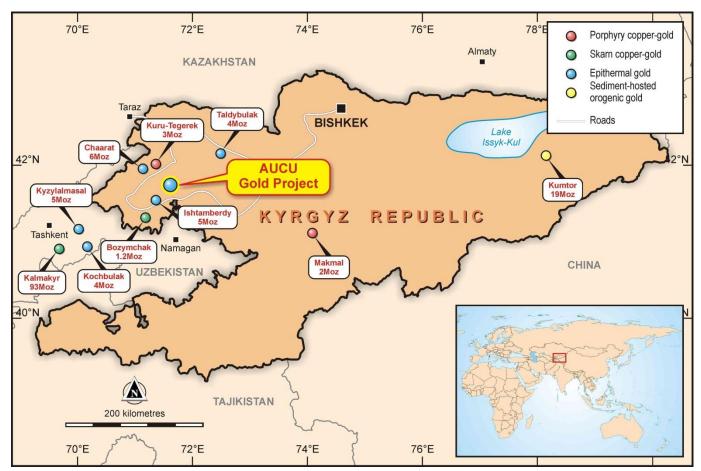


Figure 2: Location Map: Northwest Kyrgyz Republic, Central Asia

For further information please contact: www.wcminerals.com.au

info@wcminerals.com.au

Todd Hibberd
Managing Director
+61 8 9321 2233
Suite 2, Level 1,
47 Havelock Street, West Perth WA 6872

Table 1: Soil geochemistry results

	Feet UTM42N		A	Cu nnm
Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS17-0017	701,081	4,625,358	52	13
CHS17-0024	700,831	4,625,358	48	15
CHS17-0029	700,581	4,625,108	8	11,070
CHS17-0030	700,581	4,625,358	27	73
CHS17-0031	700,331	4,624,108	14	72
CHS17-0033	700,331	4,624,608	16	18
CHS17-0034	700,331	4,624,858	25	25
CHS17-0035	700,331	4,625,108	16	17
CHS17-0036	700,331	4,625,358	10	316
CHS17-0037	700,081	4,624,108	14	26
CHS17-0038	700,081	4,624,358	16	15
CHS17-0039	700,081	4,624,608	13	23
CHS17-0040	700,081	4,624,858	13	9
CHS17-0041	700,081	4,625,108	23	44
CHS17-0042	700,081	4,625,358	17	51
CHS17-0044	699,831	4,624,358	17	23
CHS17-0045	699,831	4,624,608	15	11
CHS17-0046	699,831	4,624,858	17	4
CHS17-0047	699,831	4,625,108	17	32
CHS17-0048	699,831	4,625,358	14	319
CHS17-0049	699,831	4,625,608	9	5
CHS17-0050	699,581	4,624,358	16	19
CHS17-0051	699,581	4,624,608	18	15
CHS17-0052	699,581	4,624,858	16	19
CHS17-0053	699,581	4,625,108	27	799
CHS17-0054	699,581	4,625,358	12	60
CHS17-0055	699,581	4,625,608	9	10
CHS17-0056	699,331	4,624,358	21	17
CHS17-0057	699,331	4,624,608	17	18
CHS17-0058	699,331	4,624,858	15	9
CHS17-0059	699,331	4,625,108	44	114
CHS17-0060	699,331	4,625,358	21	35
CHS17-0061	699,331	4,625,608	15	38
CHS17-0062	699,331	4,625,858	14	12
CHS17-0063	699,081	4,624,358	15	12
CHS17-0064	699,081	4,624,608	17	13
CHS17-0065	699,081	4,624,858	15	(1)
CHS17-0066	699,081	4,625,108	18	50
CHS17-0067	699,081	4,625,358	18	74

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS17-0068	699,081	4,625,608	19	111
CHS17-0069	699,081	4,625,858	17	32
CHS17-0070	699,081	4,626,108	19	12
CHS17-0071	699,081	4,626,358	12	(1)
CHS17-0072	699,081	4,626,608	17	5
CHS17-0073	699,081	4,626,858	42	41
CHS17-0074	698,831	4,624,358	16	12
CHS17-0075	698,831	4,624,608	20	14
CHS17-0076	698,831	4,624,858	13	3
CHS17-0077	698,831	4,625,108	17	55
CHS17-0078	698,831	4,625,358	16	8
CHS17-0079	698,831	4,625,608	33	313
CHS17-0080	698,831	4,625,858	26	88
CHS17-0081	698,831	4,626,108	49	126
CHS17-0082	698,831	4,626,358	23	15
CHS17-0083	698,831	4,626,608	24	2
CHS17-0084	698,831	4,626,858	19	3
CHS17-0085	698,831	4,627,108	20	(1)
CHS17-0086	698,581	4,624,608	15	6
CHS17-0087	698,581	4,624,858	21	26
CHS17-0088	698,581	4,625,108	14	2
CHS17-0089	698,581	4,625,358	15	9
CHS17-0090	698,581	4,625,608	52	36
CHS17-0091	698,581	4,625,858	17	8
CHS17-0092	698,581	4,626,108	31	35
CHS17-0093	698,581	4,626,358	27	22
CHS17-0094	698,581	4,626,608	75	102
CHS17-0095	698,581	4,626,858	20	7
CHS17-0096	698,581	4,627,108	25	213
CHS17-0097	698,331	4,624,608	19	19
CHS17-0098	698,331	4,624,858	12	9
CHS17-0099	698,331	4,625,108	17	16
CHS17-0100	698,331	4,625,358	117	347
CHS17-0101	698,331	4,625,608	27	354
CHS17-0102	698,331	4,625,858	30	316
CHS17-0103	698,331	4,626,108	11	8,530
CHS17-0104	698,331	4,626,358	27	50
CHS17-0105	698,331	4,626,608	26	67
CHS17-0106	698,331	4,626,858	45	15
CHS17-0107	698,331	4,627,108	22	10
CHS17-0108	698,331	4,627,358	24	155
CHS17-0109	698,081	4,624,608	16	17
CHS17-0111	698,081	4,625,108	21	64
CHS17-0112	698,081	4,625,358	19	229
CHS17-0113 CHS17-0114	698,081	4,625,608	48 27	2,076
CHS17-0114 CHS17-0115	698,081	4,625,858		289
	698,081	4,626,108	39 22	751
CHS17-0116	698,081	4,626,358		294
CHS17-0117	698,081	4,626,608	149	93

Sample ID	East UTM42N	North UTM42N	As_ppm	Cu_ppm
CHS17-0118	698,081	4,626,858	31	219
CHS17-0119	698,081	4,627,108	44	34
CHS17-0120	698,081	4,627,358	42	14
CHS17-0121	697,831	4,624,608	17	17
CHS17-0122	697,831	4,624,858	19	41
CHS17-0123	697,831	4,625,108	19	25
CHS17-0124	697,831	4,625,358	15	243
CHS17-0125	697,831	4,625,608	28	6,155
CHS17-0126	697,831	4,625,858	17	732
CHS17-0127	697,831	4,626,108	22	228
CHS17-0128	697,831	4,626,358	29	69
CHS17-0129	697,831	4,626,608	24	167
CHS17-0130	697,831	4,626,858	27	78
CHS17-0131	697,831	4,627,108	67	43
CHS17-0132	697,831	4,627,358	71	10
CHS17-0133	697,581	4,624,858	16	13
CHS17-0134	697,581	4,625,108	22	43
CHS17-0135	697,581	4,625,358	19	384
CHS17-0136	697,581	4,625,608	23	457
CHS17-0137	697,581	4,625,858	17	235
CHS17-0138	697,581	4,626,108	18	34
CHS17-0139	697,581	4,626,358	20	80
CHS17-0140	697,581	4,626,608	27	82
CHS17-0141	697,581	4,626,858	67	95
CHS17-0142	697,581	4,627,108	117	611
CHS17-0143	697,581	4,627,358	198	9
CHS17-0144	697,581	4,627,608	22	18
CHS17-0145	697,331	4,624,858	15	37
CHS17-0146	697,331	4,625,108	14	44
CHS17-0147	697,331	4,625,358	15	774
CHS17-0148	697,331	4,625,608	15	309
CHS17-0149	697,331	4,625,858	25	38
CHS17-0150	697,331	4,626,108	17	65
CHS17-0151	697,331	4,626,358	18	97
CHS17-0152	697,331	4,626,608	22	55
CHS17-0153	697,331	4,626,858	26	81
CHS17-0154	697,331	4,627,108	23	82
CHS17-0155	697,331	4,627,358	34	28
CHS17-0156	697,331	4,627,608	119	44
CHS17-0157	697,081	4,624,858	16	27
CHS17-0158	697,081	4,625,108	15	42
CHS17-0159	697,081	4,625,358	27	33
CHS17-0160	697,081	4,625,608	15	391
CHS17-0161	697,081	4,625,858	15	37
CHS17-0162	697,081	4,626,108	20	42
CHS17-0163	697,081	4,626,358	14	40
CHS17-0164	697,081	4,626,608	20	88
CHS17-0165	697,081	4,626,858	13	131
CHS17-0166	697,081	4,627,108	91	31

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS17-0167	697,081	4,627,358	18	54
CHS17-0168	697,081	4,627,608	68	280
CHS17-0169	696,831	4,625,108	15	157
CHS17-0170	696,831	4,625,358	17	265
CHS17-0171	696,831	4,625,608	16	65
CHS17-0172	696,831	4,625,858	13	95
CHS17-0173	696,831	4,626,108	33	160
CHS17-0174	696,831	4,626,358	44	59
CHS17-0175	696,831	4,626,608	50	118
CHS17-0176	696,831	4,626,858	35	185
CHS17-0177	696,831	4,627,108	20	14
CHS17-0178	696,831	4,627,358	32	46
CHS17-0179	696,831	4,627,608	31	43
CHS17-0180	696,581	4,625,108	21	66
CHS17-0181	696,581	4,625,358	22	58
CHS17-0182	696,581	4,625,608	16	59
CHS17-0183	696,581	4,625,858	19	29
CHS17-0184	696,581	4,626,108	15	34
CHS17-0185	696,581	4,626,358	18	41
CHS17-0186	696,581	4,626,608	36	86
CHS17-0187	696,581	4,626,858	57	111
CHS17-0188	696,581	4,627,108	25	43
CHS17-0189	696,581	4,627,358	42	32
CHS17-0190	696,581	4,627,608	21	30
CHS17-0191	696,331	4,625,108	22	78
CHS17-0192	696,331	4,625,358	18	27
CHS17-0193	696,331	4,625,608	17	95
CHS17-0194	696,331	4,625,858	18	91
CHS17-0195	696,331	4,626,108	19	46
CHS17-0196	696,331	4,626,358	112	72
CHS17-0197	696,331	4,626,608	15	34
CHS17-0198	696,331	4,626,858	14	9
CHS17-0199	696,331	4,627,108	44	90
CHS17-0200	696,331	4,627,358	27	4
CHS17-0201	696,331	4,627,608	26	319
CHS17-0202	696,081	4,625,108	13	16
CHS17-0203	696,081	4,625,358	20	42
CHS17-0204	696,081	4,625,608	17	70
CHS17-0205	696,081	4,625,858	335	110
CHS17-0206	696,081	4,626,108	18	46
CHS17-0207	696,081	4,626,358	38	92
CHS17-0208	696,081	4,626,608	20	15
CHS17-0209	696,081	4,626,858	18	12
CHS17-0210	696,081	4,627,108	21	24
CHS17-0211	696,081	4,627,358	20	16
CHS17-0212	696,081	4,627,608	14	9
CHS17-0213	695,831	4,625,358	24	26
CHS17-0214	695,831	4,625,608	136	124
CHS17-0215	695,831	4,625,858	133	127

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS17-0216	695,831	4,626,108	93	109
CHS17-0217	695,831	4,626,358	49	67
CHS17-0218	695,831	4,626,608	18	50
CHS17-0219	695,831	4,626,858	17	45
CHS17-0220	695,831	4,627,108	16	46
CHS17-0221	695,831	4,627,358	143	150
CHS17-0222	695,831	4,627,608	25	34
CHS17-0223	695,581	4,625,608	43	58
CHS17-0224	695,581	4,625,858	23	35
CHS17-0225	695,581	4,626,108	14	4
CHS17-0226	695,581	4,626,358	13	3
CHS17-0227	695,581	4,626,608	10	4
CHS17-0228	695,581	4,626,858	22	33
CHS17-0229	695,581	4,627,108	16	5
CHS17-0230	695,581	4,627,358	15	27
CHS17-0231	695,581	4,627,608	16	31
CHS17-0232	695,581	4,627,858	15	11
CHS17-0233	695,331	4,625,608	38	63
CHS17-0234	695,331	4,625,858	40	51
CHS17-0235	695,331	4,626,108	18	72
CHS17-0236	695,331	4,626,358	13	10
CHS17-0237	695,331	4,626,608	10	(1)
CHS17-0238	695,331	4,626,858	14	33
CHS17-0239	695,331	4,627,108	14	10
CHS17-0240	695,331	4,627,358	22	142
CHS17-0241	695,331	4,627,608	30	163
CHS17-0243	695,081	4,625,858	20	44
CHS17-0244	695,081	4,626,108	21	24
CHS17-0245	695,081	4,626,358	20	3
CHS17-0246	695,081	4,626,608	12	3
CHS17-0247	695,081	4,626,858	11	31
CHS17-0248	695,081	4,627,108	14	16
CHS17-0249	695,081	4,627,358	11	(1)
CHS17-0250	695,081	4,627,608	14	10
CHS17-0251	695,081	4,627,858	12	16
CHS17-0252	694,831	4,626,108	91	40
CHS17-0253	694,831	4,626,358	9	14
CHS17-0254	694,831	4,626,608	11	8
CHS17-0255	694,831	4,626,858	18	21
CHS17-0256	694,831	4,627,108	10	22
CHS17-0257	694,831	4,627,358	14	9
CHS17-0258	694,831	4,627,608	17	10
CHS17-0259	694,581	4,626,108	22	39
CHS17-0260	694,581	4,626,358	13	29
CHS17-0261	694,581	4,626,608	14	23
CHS17-0262	694,581	4,626,858	17	27
CHS17-0263	694,581	4,627,108	16	18
CHS17-0264	694,581	4,627,358	10	4
CHS18-0001	698,100	4,625,300	23	257

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS18-0002	698,200	4,625,300	23	488
CHS18-0003	698,300	4,625,300	45	570
CHS18-0004	698,400	4,625,300	83	397
CHS18-0005	698,100	4,625,400	23	155
CHS18-0006	698,200	4,625,400	38	512
CHS18-0007	698,300	4,625,400	37	1,075
CHS18-0008	698,400	4,625,400	17	254
CHS18-0009	698,500	4,625,400	27	30
CHS18-0010	698,100	4,625,500	22	131
CHS18-0011	698,200	4,625,500	23	153
CHS18-0012	698,300	4,625,500	23	153
CHS18-0013	698,400	4,625,500	24	166
CHS18-0014	698,500	4,625,500	17	42
CHS18-0015	698,600	4,625,500	22	42
CHS18-0016	698,700	4,625,500	21	24
CHS18-0017	698,800	4,625,500	19	29
CHS18-0018	698,900	4,625,500	17	167
CHS18-0019	698,400	4,625,600	17	39
CHS18-0020	698,200	4,625,600	35	341
CHS18-0021	698,300	4,625,600	28	318
CHS18-0022	698,500	4,625,600	18	35
CHS18-0023	698,700	4,625,600	28	86
CHS18-0024	698,800	4,625,600	29	205
CHS18-0025	698,900	4,625,600	18	364
CHS18-0026	698,100	4,625,700	34	558
CHS18-0027	698,200	4,625,700	26	448
CHS18-0028	698,300	4,625,700	50	327
CHS18-0029	698,400	4,625,700	18	55
CHS18-0030	698,500	4,625,700	16	18
CHS18-0031	698,600	4,625,700	20	40
CHS18-0032	698,700	4,625,700	21	46
CHS18-0033	698,800	4,625,700	33	69
CHS18-0034	698,900	4,625,700	27	149
CHS18-0035	698,100	4,625,800	16	235
CHS18-0036	698,200	4,625,800	34	1,321
CHS18-0037	698,300	4,625,800	23	301
CHS18-0038	698,400	4,625,800	58	3,461
CHS18-0039	698,500	4,625,800	34	56
CHS18-0040	698,600	4,625,800	42	40
CHS18-0041	698,700	4,625,800	86	26
CHS18-0042	698,800	4,625,800	103	204
CHS18-0043	698,900	4,625,800	26	59
CHS18-0044	697,500	4,625,900	27	808
CHS18-0045	697,600	4,625,900	24	153
CHS18-0046	697,700	4,625,900	24 13	165
CHS18-0047 CHS18-0048	697,800	4,625,900 4,625,900	10	477
CHS18-0049	697,900 698,000	4,625,900	10	311 334
CHS18-0050			25	590
СПЭТО-0000	698,100	4,625,900	20	290

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS18-0051	698,200	4,625,900	40	1,056
CHS18-0052	698,300	4,625,900	16	1,946
CHS18-0053	698,400	4,625,900	41	731
CHS18-0054	698,500	4,625,900	42	7
CHS18-0055	698,600	4,625,900	26	82
CHS18-0056	698,700	4,625,900	79	33
CHS18-0057	698,800	4,625,900	21	40
CHS18-0058	698,900	4,625,900	15	31
CHS18-0059	697,600	4,626,000	28	718
CHS18-0060	697,700	4,626,000	17	104
CHS18-0061	697,800	4,626,000	19	117
CHS18-0062	697,900	4,626,000	18	152
CHS18-0063	698,000	4,626,000	21	298
CHS18-0064	698,100	4,626,000	45	798
CHS18-0065	698,200	4,626,000	39	1,629
CHS18-0066	698,300	4,626,000	34	1,226
CHS18-0067	698,400	4,626,000	51	9,483
CHS18-0068	698,500	4,626,000	22	65
CHS18-0069	698,600	4,626,000	31	80
CHS18-0070	698,700	4,626,000	39	45
CHS18-0071	698,800	4,626,000	67	178
CHS18-0072	698,900	4,626,000	43	125
CHS18-0073	697,800	4,626,100	13	190
CHS18-0074	697,900	4,626,100	12	369
CHS18-0075	698,000	4,626,100	16	581
CHS18-0076	698,200	4,626,100	21	393
CHS18-0077	698,300	4,626,100	26	231
CHS18-0078	698,400	4,626,100	22	219
CHS18-0079	698,500	4,626,100	25	185
CHS18-0080	698,700	4,626,100	39	79
CHS18-0081	698,900	4,626,100	30	64
CHS18-0082	697,800	4,626,200	16	139
CHS18-0083	697,900	4,626,200	17	209
CHS18-0084	698,000	4,626,200	22	134
CHS18-0085	698,100	4,626,200	22	104
CHS18-0086	698,200	4,626,200	22	336
CHS18-0087	698,300	4,626,200	57	648
CHS18-0088	698,400	4,626,200	22	109
CHS18-0089	698,500	4,626,200	12	8
CHS18-0090	698,600	4,626,200	21	22
CHS18-0091	698,700	4,626,200	24	28
CHS18-0092	698,800	4,626,200	23	27
CHS18-0093	698,900	4,626,200	21	31
CHS18-0094	697,900	4,626,300	29	188
CHS18-0095	698,000	4,626,300	18	83
CHS18-0096	698,100	4,626,300	21	75
CHS18-0097	698,200	4,626,300	34	303
CHS18-0098	698,300	4,626,300	23	31
CHS18-0099	698,400	4,626,300	25	35

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS18-0100	698,500	4,626,300	26	26
CHS18-0101	698,600	4,626,300	28	29
CHS18-0102	698,700	4,626,300	20	15
CHS18-0103	698,800	4,626,300	23	25
CHS18-0104	698,900	4,626,300	22	23
CHS18-0105	698,000	4,626,400	18	61
CHS18-0106	698,100	4,626,400	22	44
CHS18-0107	698,200	4,626,400	23	32
CHS18-0108	698,200	4,626,500	23	333
CHS18-0109	697,500	4,627,000	120	237
CHS18-0110	697,600	4,627,000	28	86
CHS18-0111	697,500	4,627,100	31	36
CHS18-0112	697,700	4,627,100	61	10
CHS18-0113	697,800	4,627,100	77	58
CHS18-0114	697,900	4,627,100	47	47
CHS18-0115	698,000	4,627,100	44	70
CHS18-0116	697,500	4,627,200	19	24
CHS18-0117	697,600	4,627,200	142	51
CHS18-0118	697,900	4,627,200	115	42
CHS18-0119	698,000	4,627,200	47	53
CHS18-0120	698,100	4,627,200	40	8
CHS18-0121	698,200	4,627,200	15	5
CHS18-0122	696,500	4,627,300	64	67
CHS18-0123	696,600	4,627,300	23	14
CHS18-0124	696,700	4,627,300	20	16
CHS18-0125	696,800	4,627,300	23	11
CHS18-0126	696,900	4,627,300	19	17
CHS18-0127	697,100	4,627,300	35	54
CHS18-0128	697,200	4,627,300	94	61
CHS18-0129	697,400	4,627,300	15	11
CHS18-0130	697,500	4,627,300	31	68
CHS18-0131	697,600	4,627,300	221	18
CHS18-0132	697,700	4,627,300	234	52
CHS18-0133	697,800	4,627,300	78	19
CHS18-0134	698,000	4,627,300	161	48
CHS18-0135	698,100	4,627,300	19	5
CHS18-0136	698,200	4,627,300	23	6
CHS18-0137	696,500	4,627,400	21	22
CHS18-0138	696,600	4,627,400	24	14
CHS18-0139	696,700	4,627,400	55	40
CHS18-0140	696,800	4,627,400	31	45
CHS18-0141	697,400	4,627,400	24	74
CHS18-0142	697,600	4,627,400	341	109
CHS18-0143	697,700	4,627,400	187	59
CHS18-0144	697,800	4,627,400	64	13
CHS18-0145	698,100	4,627,400	76	67
CHS18-0146	698,200	4,627,400	44	41
CHS18-0147	697,400	4,627,500	26	18
CHS18-0148	697,500	4,627,500	38	15

Sample ID	East_UTM42N	North_UTM42N	As_ppm	Cu_ppm
CHS18-0149	697,600	4,627,500	25	6
CHS18-0150	697,700	4,627,500	41	40
CHS18-0151	697,800	4,627,500	89	37
CHS18-0152	697,900	4,627,500	13	8
CHS18-0153	697,400	4,627,600	26	6
CHS18-0154	697,500	4,627,600	23	8
CHS18-0155	697,700	4,627,600	26	12
CHS18-0156	697,800	4,627,600	55	67
CHS18-0157	697,900	4,627,600	96	191
CHS18-0158	697,400	4,627,700	42	18
CHS18-0159	697,500	4,627,700	23	3
CHS18-0160	697,600	4,627,700	17	3
CHS18-0161	697,700	4,627,700	18	5
CHS18-0162	697,800	4,627,700	12	4
CHS18-0163	697,900	4,627,700	54	86

About White Cliff Minerals Limited

Cobalt-Nickel Projects:

Coglia Well Cobalt Project (100%): The project consists of two tenements (238km²) in the Merolia greenstone belt 50km south east of Laverton, WA. The tenements contain extensive ultramafic units that host zones of cobalt mineralisation associated with nickel mineralisation. Historical drilling has identified Cobalt grades including 16 metres at **0.16% cobalt** and 0.65% nickel.

Coronation Dam Cobalt Project (100%): The project consists of one tenement (16km²) in the Wiluna-Norseman greenstone belt 90km south of the Murrin Murrin nickel-cobalt HPAL plant. The tenement contains an extensive ultramafic unit that contains zones of cobalt mineralisation associated with nickel mineralisation. The Cobalt grades range for 0.01% to 0.69% cobalt and occur within the regolith profile above the ultramafic units.

Ghan Well Cobalt Project (100%): The project consists of one tenement (39km²) in the Wiluna-Norseman greenstone belt 25km southeast of the Murrin Murrin nickel-cobalt HPAL plant. The tenement contains an extensive ultramafic unit that contains zones of cobalt mineralisation associated with nickel mineralisation. The Cobalt grades range for 0.01% to 0.75% cobalt and occur within a zone of manganiferous oxides that form in the regolith profile.

Bremer Range Cobalt Project (100%): The project covers 127km² in the Lake Johnson Greenstone Belt prospective for shallow cobalt-nickel mineralisation. Historical drilling has identified extensive cobalt and nickel mineralisation associated with ultramafic rocks extending 15 kilometres in length and up to 1500 metres wide. The tenements are only 130 kilometres from the Ravensthorpe cobalt and nickel processing facility.

Merolia Nickel Project (100%): The project consists of 325km² of the Merolia Greenstone belt and contains extensive ultramafic sequences including the Diorite Hill layered ultramafic complex, the Rotorua ultramafic complex, the Curara ultramafic complex and a 51 kilometre long zone of extrusive ultramafic lava's. The intrusive complexes are prospective for nickel-copper sulphide accumulations possibly with platinum group elements, and the extrusive ultramafic rocks are prospective for nickel sulphide and nickel-cobalt accumulations.

Gold Projects:

Kyrgyz Copper-Gold Project (90%): The Project contains extensive porphyry related gold and copper mineralisation starting at the surface and extending over several kilometres. Drilling during 2014-6 has defined a **gold deposit** currently containing an inferred resource of 2.95Mt at 5.1 g/t containing 484,000 ounces of gold and 700,000 tonnes at 0.51% copper containing 4,000 tonnes of copper. Drilling has also defined a significant **copper deposit** at surface consisting of 16.5 Mt at 0.36% copper containing 60,000 tonnes of copper.

Extensive mineralisation occurs around both deposits demonstrating significant expansion potential. The project is located in the Kyrgyz Republic, 350km west-southwest of the capital city of Bishkek and covers 57km². The Chanach project is located in the western part of the Tien Shan Belt, a highly mineralised zone that extending for over 2500 km, from western Uzbekistan, through Tajikistan, Kyrgyz Republic and southern Kazakhstan to western China.

Ironstone Gold Project (100%): The project consists of 175km² of the Merolia Greenstone belt consisting of the Ironstone, Comet Well and Burtville prospects. The project contains extensive basalt sequences that are prospective for gold mineralisation. including the Ironstone prospect where historical drilling has identified 24m at 8.6g/t gold.

Laverton Gold Project (100%): The project consists of one granted tenement (22km²) in the Laverton Greenstone belt. The Red Flag prospect is located 20km southwest of Laverton in the core of the structurally complex Laverton Tectonic zone immediately north of the Mt Morgan's Gold Mine (3.5 MOz) and 7 kilometres northwest of the Wallaby Gold Mine (7 MOz).

The Information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Todd Hibberd, who is a member of the Australian Institute of Mining and Metallurgy. Mr Hibberd is a full time employee of the company. Mr Hibberd has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (the JORC Code)`. Mr Hibberd consents to the inclusion of this information in the form and context in which it appears in this report.

¹The Information in this report that relates to Mineral Resources is based on information compiled by Mr Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Glacken is a full time employee of Optiro Pty Ltd. Mr Glacken has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Glacken consents to the inclusion of this information in the form and context in which it appears in this report.

Appendix 1

The following information is provided to comply with the JORC Code (2012) requirements for the reporting of the Exploration Results and Mineral Resources on tenement AP590.

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling	Soil Sampling: The prospect was sampled by manual scoop sampling on nominal 100m x 100m grid spacing at and at nominal 100m by 50m grid for areas of geological interest A total of 263 samples were collected consisting of 100-200 grams of soil.
	not be taken as illustring the block meaning of sampling	Drill Sampling: RC Drill samples were collected using a face sampling hammer with each metre of drilling deposited in a plastic bag that is fed through a three tier riffle splitter to obtain a 2.5-3kg sample.
		Diamond drill samples were collected by cutting NQ (50mm) core in half along its axis and sampling one half of the core. This collects approximately 2.5kg of core.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The sample locations are picked up by handheld GPS. Soil samples were logged for landform, and sample contamination. Sampling was carried out under standard industry protocols and QAQC procedures
		Sample bags were visually inspected for volume to ensure minimal size variation. Were variability was observed, sample bags were weighed. Sampling was carried out under standard industry protocols and QAQC procedures
	pects of the determination of mineralisation that are interial to the Public Report. In cases where 'industry indard' work has been done this would be relatively included in the control of the control	Reverse circulation drilling to obtain one metre samples from which 3 kg was crushed to 1mm or Diamond drilling to obtain 1 metre core samples that are cut in half with one half sampled. The 2.5kg sample is crushed in a Jaw crusher to 80% passing a 1mm screen.
	30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual	A 300 gram subsample was extracted using a Jones Splitter and pulverized to 200 mesh (75 micron).
	commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	For Soils, the entire sample is pulped and the following assay procedure applied
		A 30 gram sample is digested for gold analysis by Aqua Regia digest and Atomic Adsorption Spectrophotometry (AAS), and for copper analysis via pressed pellet X-ray florescence (XRF).
		A 0.2 gram sample is digested for multi-element analysis by Aqua-Regia digest and Inductive Coupled Plasma (ICP) using Mass Spectroscopy (MS) or Optical Emission Spectroscopy (OES)
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core	Reverse Circulation Drilling, 900CFM/350PSI compressor, with 133mm (5.25 inch) diameter face sampling hammer bit. Industry standard processes for RC drilling
	is oriented and if so, by what method, etc.).	Diamond drilling, NQ (50mm) diameter orientated core via Reflex ACT3
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	The calculated volume of 1m RC sample is 30kg based on rock density of 2.6 g/cm3. Sample bags were visually inspected for volume to ensure minimal size variation. Were variability was observed, sample bags were weighed. Sampling was carried out under standard industry protocols and QAQC procedures
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Visual inspection of sample size of 1 metre samples Diamond Core recovery calculations are based on recorded recovery measurements taken on core
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No studies have been carried out
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Drill samples have been geologically logged and have been submitted for petrological studies. Samples have been retained and stored. The logging is considered sufficient for JORC compliant resource estimations

Criteria	JORC Code Explanation	Commentary
	Whether logging is qualitative or quantitative in nature.	Logging is considered qualitative
	Core (or costean, channel, etc.) Photography The total length and percentage of the relevant intersections logged.	All of the intersections have been logged.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	NQ core is cut via a diamond saw and half core sampled
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples were riffle split from 30kg down to 3kg. Where samples were too wet to riffle split, samples were tube sampled.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique	RC Samples were collected using a face sampling hammer which pulverises the rock to chips. The chips are transported up the inside of the drill rod to the surface cyclone where they are collected in one metre intervals. The one metres sample is riffle split to provide a 2.5-3kg sample for analysis. Industry standard protocols are used and deemed appropriate.
		Half NQ diamond core (2.5 kg) is sampled.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	At this stage of the exploration no sub sampling is undertaken during the collection stage
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling Whether sample sizes are appropriate to the grain size of the material being sampled	The whole sample collected is crushed to 1mm and a 200g sub-sample pulverised. A 2-10 gram sub sample of the pulverised sample is analysed. Field duplicates for diamond core are not routinely collected. The sample sizes are considered to be appropriate to correctly represent the mineralisation style
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The analytical techniques used Aqua Regia acid digest, Atomic adsorption Spectrophotometry for gold analysis and ICP MS or OES for multi-element analysis are considered suitable for the reconnaissance style sampling undertaken.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Gold analysis was carried out using a Thermo Scientific Solar S2 AA-Spectrometer with Atom Trap STAT (Slotted Tube Atom Trap), gaseous hydride generation system (VP100 Continuous Flow Vapour System)
		Multi-element analysis was carried out by aqua regia digest with ICP MS and OES analysis using an iCAP 6300 ICP-instrument manufactured by Thermo-Scientific (USA-UK).
		All mineralised intervals have been re-assayed at Bureau Veritas laboratory In Perth by Fire assay and ICP-OES using 40g samples and reported for Au, Pt, Pd
		All mineralised multi-element intervals have been digested and refluxed with a mixture of Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids.
		Cu and Zn have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.
		Ag, As, Mo, Pb, and Sb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	An executive director has visually verified significant intersections in rock samples from the Chanach project.
assaying	The use of twinned holes Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Twinned holes have not been used Primary data was collected using a set of standard Excel templates on paper and re-entered into laptop computers. The information was sent to WCN in-house database manager for validation and compilation into an Access database. Assay data is received in digital and hard copy directly from the laboratory and imported into the database
	Discuss any adjustment to assay data	No adjustments or calibrations were made to any assay data used in this report.
		White Cliff Minerals Limited 16

Criteria	JORC Code Explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Sample locations were recorded using handheld Garmin GPS60s. Elevation values were in AHD RL and values recorded within the database. Expected accuracy is + or - 5 m for easting, northing and 10m for elevation coordinates.
	Specification of the grid system used.	All holes are downhole surveyed to provide accurate 3D drill trace The grid system is WGS84 UTM (zone 42 north)
	Quality and adequacy of topographic control.	Topographic surface uses handheld GPS elevation data, which is adequate at the current stage of the project.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The nominal sample spacing is 1 metre intervals down the hole.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	In the opinion of the Competent Persons the mineralization has demonstrated sufficient continuity to be classified as a Mineral Resource under the guidelines of the JORC Code (2012). Samples have not been composited
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The sampling orientation for drilling is designed to be as perpendicular as possible to the known orientation of the structure
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material	No orientation based sampling bias has been identified in the data at this point.
Sample security	The measures taken to ensure sample security.	Sample security is managed by the Company. Samples are collected by Company employees and transported by Company vehicles to the Laboratory in Kara Balta. The sample processing facility has Security Officers on duty 24 hours per day. The Company stores all mineralised intervals and all laboratory samples in a secured steel vault within the secured processing facility.
Audits of reviews	The results of any audits or reviews of sampling techniques and data.	The Company carries out its own internal data audits. No problems have been detected.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence	The mineralisation is located within Exploration License AP590 which is a Joint Venture between White Cliff Minerals Limited (90%) and BW3 Pty Ltd (10%) There are no other material issues The tenement is in good standing and no known impediments exist.
	to operate in the area.	Impodimento exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No other exploration has been carried out
Geology	Deposit type, geological setting and style of mineralisation.	The geological setting is of Cambrian to Permian aged intrusive porphyry systems, bounded by overlying basaltic, and sedimentary rocks. Mineralisation is mostly situated within granitic porphyry units as broad alteration containing copper sulphides and within narrow quartz veins and faults.
Drill Hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not	This data is provided in the body of the main text and has been provided in previous announcements.
Data Aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of	No length weighting has been applied due to the nature of the sampling technique. No top-cuts have been applied in reporting of the intersections. Not applicable for the sampling methods used.
	high grade results and longer lengths of low grade results, the procedure used for such aggregation should	

Criteria	Explanation	Commentary
	be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated	No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results: If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The length of mineralised intercepts in the drill holes will be longer than the true width of the mineralised zones due to the angle between the orientation of the structure and the drill hole. In general the length relationship between true width and down hole length is 0.5
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views`	Refer to figures in the body of text and to previous announcements of exploration results.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results	All results within the mineralised zones have been reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	None carried out.
Further Work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Ongoing reverse circulation and diamond drilling will be used to further define the nature and extent of the geochemical anomalism, and to gain lithological information.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in the preceding section also apply to this section

Criteria	ceding section also apply to this section.)	Commentary
	Explanation Measures taken to ensure that data has not been	Commentary
Database integrity	corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	Assay data digitally received directly from the laboratory and electronically transferred into an access database. Geological and survey data is received in excel spreadsheets and imported electronically into the database. Once in the database, the data is exported to a Map-info drill hole file where it is validated for consistency. The drill-holes are displayed in sections and the geology visually validated for consistency
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person for Exploration results has been with White Cliff for 9 years and has managed the Chanach project since acquisition in 2009. He is intimately involved in the Chanach and Aucu deposits, with 18 site visits being undertaken including managing drilling programs on site, field mapping, drill hole logging and geological interpretation.
	If no site visits have been undertaken indicate why this is the case.	A Competent Person from Optiro Pty Ltd the consulting company that carried out the mineral resource estimate visited the site in July 2017 and confirmed all material aspects of the drilling programs, assay laboratory and qaqc.
Geological Interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is a moderate level of confidence in the geological interpretation due to the presence of outcropping mineralisation at surface.
		Wireframes used to constrain the estimation are based on drill hole intercepts and geological boundaries. All wireframes at the Chanach deposit have been constructed to 0.25% Cu cut-off grade and at the Aucu deposit have been constructed to a 0.3 ppm Au cut-off grade for shape consistency.
	Nature of the data used and of any assumptions made.	The mineralisation is generally quite consistent and drill intercepts clearly define the shape of the mineralised zones with limited options for large scale alternate interpretations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The controls on and interpretation of mineralisation are relatively straightforward and no alternative interpretations have been considered.
	The use of geology in guiding and controlling Mineral Resource estimation.	Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological boundaries.

Criteria	Explanation	Commentary
	The factors affecting continuity both of grade and geology.	Wireframes are constructed to a 0.3 ppm Au cut-off grade at Aucu and a 0.25% Cu cut-off grade at Chanach for shape consistency.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The mineral resource at AuCu comprises four main zones, LGZ, UGZ, SSZ and QZ which have a strike length of 300 m and extend vertically for approximately 150 m below surface. along with three minor zones Chanach has one zone with a total strike length of 600 m and which extends vertically for approximately 350 m below surface.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Grade estimation using Ordinary Kriging (OK) was completed using Datamine software for Au and Cu at Aucu deposit and Cu at the Chanach deposit. Drill grid spacing at Aucu approximates 50 m and 100 m at Chanach. Variogram orientations were largely controlled by the strike of mineralization and downhole variography. Variograms for estimation purposes were determined for each deposit. Other estimation parameters, such as search distance, minimum and maximum sample numbers were derived from KNA. Search distances varied depending on the element being estimated and the domain.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The new estimate compares closely with the previous estimate at the LGZ and the UGZ. There is no previous estimation at the SSZ or the QZ hence no comparisons are available.
	The assumptions made regarding recovery of by-products.	There has been no production at Aucu or Chanach. No assumptions have been made regarding recovery of any by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements were estimated and none are known to exist.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The block model dimensions and parameters were based on the geological boundaries and average drill grid spacing. Sub-blocks were used to ensure that the block model honoured the domain geometries and volume. Block estimates were controlled by the original parent block dimensions. The individual parent block dimensions were 25 mE by 5 mN by 25 mRL, with sub-blocking allowed. Estimation into parent blocks used a discretisation of 10 (X points) by 5 (Y points) by 10 (Z points) to better represent estimated block volumes.
	Any assumptions behind modelling of selective mining units.	No selective mining units were modelled in this estimate due to the wide drill spacing. It is assumed that the SMU is equal to the block model parent cell or smaller.
	Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates.	There were only two elements estimated per deposit. Drill hole sample data was flagged using domain codes generated from three dimensional mineralisation domains. RC sampling was at 1 m intervals and diamond drilling was composited to 1 m. Mineralisation domains were treated as hard boundaries in the estimation process.
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were established by investigating univariate statistics and histograms of sample values. A top cut level was selected if it affected outliers, reduced the sample variance and did not materially change the mean value. Top cuts vary by domain.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Model validation was carried out using visual comparisons between composites and estimated blocks, checks for negative or absent grades, and statistical comparison against the input drill hole data and graphical profile (swath) plots.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not	No minimum mining assumptions were made for Chanach deposit during the resource wire framing or estimation process. The wire framing at AuCu required a minimum of 2 samples to be included in the wireframe. Mining parameters, including minimum width assumptions, will be applied during the conversion to Ore Reserves.

Criteria	Explanation	Commentary
	always be rigorous. Where this is the case, this should	
	be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or	The basis for assumptions or predictions regarding	No metallurgical factors or assumptions are made during the
assumptions	metallurgical amenability. It is always necessary as part	resource estimation process as this will be addressed during
	of the process of determining reasonable prospects for eventual economic extraction to consider potential	conversion to Ore Reserve.
	metallurgical methods, but the assumptions regarding	
	metallurgical treatment processes and parameters made	
	when reporting Mineral Resources may not always be	
	rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical	
	assumptions made.	
Environmental factors	Assumptions made regarding possible waste and	No environmental factors or assumptions are made during
or assumptions	process residue disposal options. It is always necessary as part of the process of determining reasonable	the resource estimation process.
	prospects for eventual economic extraction to consider	
	the potential environmental impacts of the mining and	
	processing operation. While at this stage the determination of potential environmental impacts,	
	particularly for a greenfields project, may not always be	
	well advanced, the status of early consideration of these	
	potential environmental impacts should be reported. Where these aspects have not been considered this	
	should be reported with an explanation of the	
Dollarda a No.	environmental assumptions made	Dulle Describe and a second the Assessed to th
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used,	Bulk Densities were collected across the Aucu gold project in the mineralised intervals from both RC and diamond drill
	whether wet or dry, the frequency of the measurements,	holes. The average bulk density was calculated as 2.54 t/m3
	the nature, size and representativeness of the samples.	based on 125 samples.
	The bulk density for bulk material must have been measured by methods that adequately account for void	Bulk density was measured using the wax encapsulation and
	spaces (vugs, porosity, etc), moisture and differences	weight in water displacement analytical method
	between rock and alteration zones within the deposit,	
	Discuss assumptions for bulk density estimates used in	A bulk density of 2.74 was used for the fresh material in the
	the evaluation process of the different materials.	Chanach deposit and 2.50 for the oxide material. These measurements were based on the host rock types and
		experience from similar deposits.
Classification	The basis for the classification of the Mineral Resources	Classification of the resource models is based primarily on drill density and geological understanding, in conjunction
	into varying confidence categories	with extensive QAQC data and bulk density measurements.
	Whether appropriate account has been taken of all	The classification takes into account the relative
	relevant factors (i.e. relative confidence in tonnage/grade	contributions of geological and data quality and confidence, as well as grade confidence and continuity.
	estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity	as well as grade confidence and continuity.
	and distribution of the data).	
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification reflects the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource	No external audits or reviews have been carried out. The
	estimates.	resource estimate has been internally peer reviewed.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the
addatady/doi:ii/doi:ioc	using an approach or procedure deemed appropriate by	guidelines of the 2012 JORC Code. The statement relates
	the Competent Person. For example, the application of	to global estimates of tonnes and grade.
	statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated	
	confidence limits, or, if such an approach is not deemed	
	appropriate, a qualitative discussion of the factors that	
	could affect the relative accuracy and confidence of the estimate	
	The statement should specify whether it relates to global	The estimate is considered to be relevant to a global report
	or local estimates, and, if local, state the relevant	of tonnage and grade.
	tonnages, which should be relevant to technical and economic evaluation. Documentation should include	
	assumptions made and the procedures used	
	These statements of relative accuracy and confidence of	There has been no production.
	the estimate should be compared with production data, where available	
	whore available	