ASX Announcement **14 September 2022**

Douglas Creek Update: Target zone increases as drill preparations commence

Highlights:

- **Results from 574 geochemical soil samples have confirmed the presence of extensive mineralised zones at the Douglas Creek Intrusion-Related Gold System (IRGS) discovery**
- **Highly anomalous results – gold up to 38.1 ppb, silver to 4.0 g/t Ag, copper to 1,023 ppm in soils**
- **Anomalous soil results coincide with previous rockchip results, bolstering these areas as potential drill targets**
- **Drill preparation activities have commenced - initial drill program design completed, landholder access agreement has been signed and Native Title clearance will shortly commence**
- **Aiming to commence drilling by November 2022**

Great Northern Minerals Limited ("**GNM**" or the "**Company**") (**ASX: GNM**) is pleased to update the market on progress at GNM's exciting Douglas Creek IRGS (Intrusion-Related Gold System) discovery, located on EPM 27522, part of GNM's Golden Ant Project in North Queensland.

GNM have received assay results from 574 geochemical soil samples which, to date, have delineated five anomalous (gold-silver-copper) zones which are strongly associated with previous high grade rock chip sampling.

The coincident anomalous zones (soils and rock chip assays) represent highly attractive drill targets and GNM has commenced drill preparation activities and aims to commence drilling by November 2022.

Work carried (mapping and satellite imagery review) out by the GNM geology team indicated that the Douglas Creek IRGS mineralisation extends beyond the boundaries EPM 27522 and GNM recently applied for EPM 28598 to target the extensions to the Douglas Creek system.

Ground mapping and sampling and remote sensing activities continue at Douglas Creek, as GNM continues to grow this exciting new greenfield discovery.

GNM CEO & Managing Director, Cameron McLean said: *"Our exploration team continues to grow our exciting Douglas Creek IRGS discovery, and assays from our recently completed soil sampling program have confirmed both the prospectivity and size of the system we have found.*

Work carried out by our team indicates that the Douglas Creek IRGS mineralisation likely extends beyond the boundaries of EPM 27522, so we recently applied for EPM 28598, to ensure GNM controls any potential extensions of the system

GNM has commenced planning the first phase of drilling. We have signed an access agreement with the landowner to enable us to drill, and we are engaging with Gugu Badhun People to arrange site clearance activities. At this stage we aim to commence drilling by November 2022."

Figure 1 Outcropping Zone 4 Mineralisation (sheared-brecciated quartz veined, gossanous fragmental volcaniclastic with malachite staining)

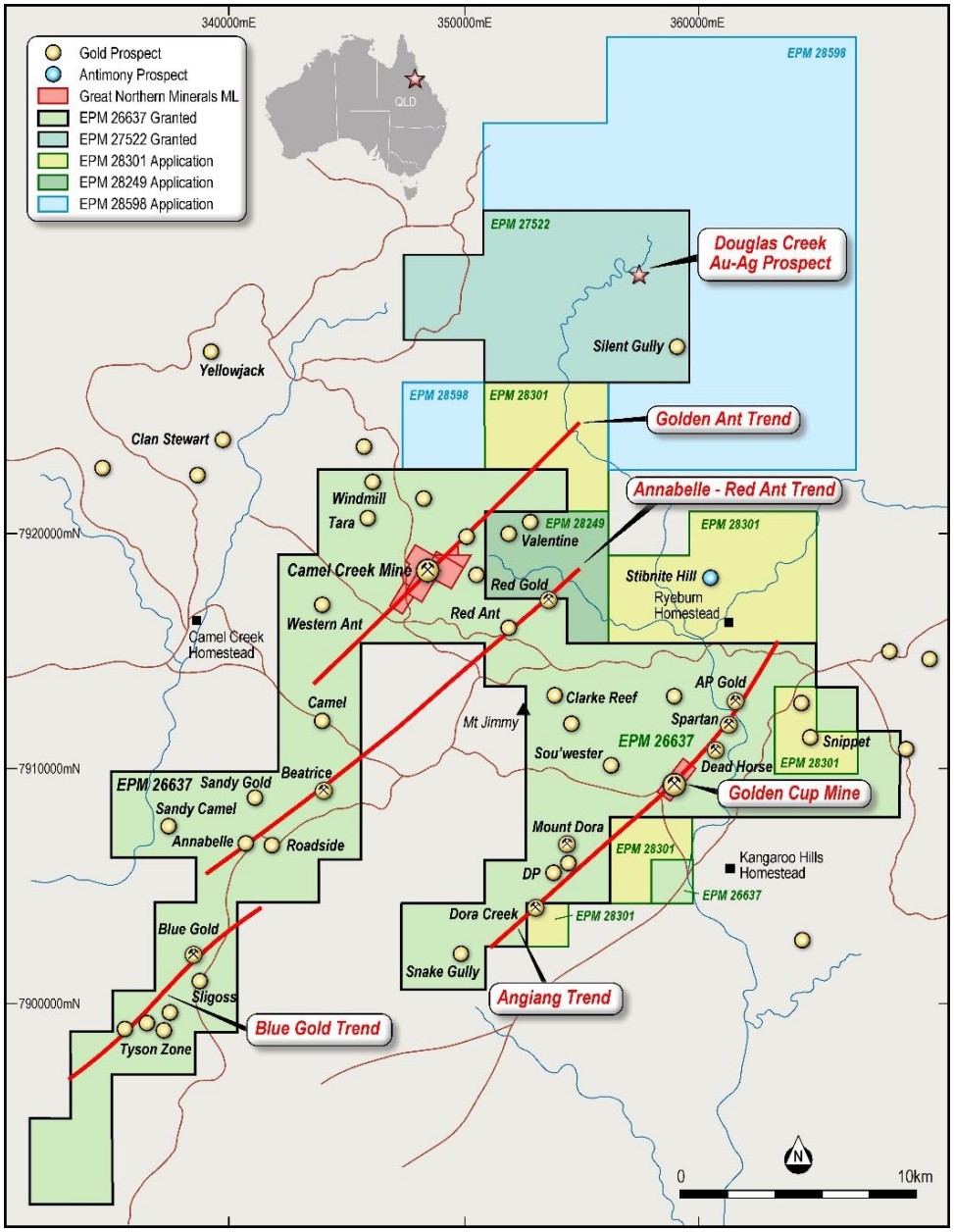
Note: outcrop has been sampled and assay results are pending

Douglas Creek IRGS Discovery

GNM's Douglas Creek IRGS discovery is located on EPM 27522, part of GNM's Golden Ant Project in North Queensland (refer to Figure 2). To date, GNM has defined multiple zones of outcropping IRGS mineralisation at Douglas Creek (over 125ha), with rock chips of up to 8.6 g/t Au, 288 g/t Ag and 11% Cu, plus extensive associated geochemical soil anomalies.

Reconnaissance mapping and a review of satellite imagery recently completed by GNM indicated that the Douglas Creek IRGS system extends beyond the boundaries of EPM27522 and GNM has lodged an application (EPM 28598, refer to Figure 2) to ensure that GNM controls any extensions of the system.

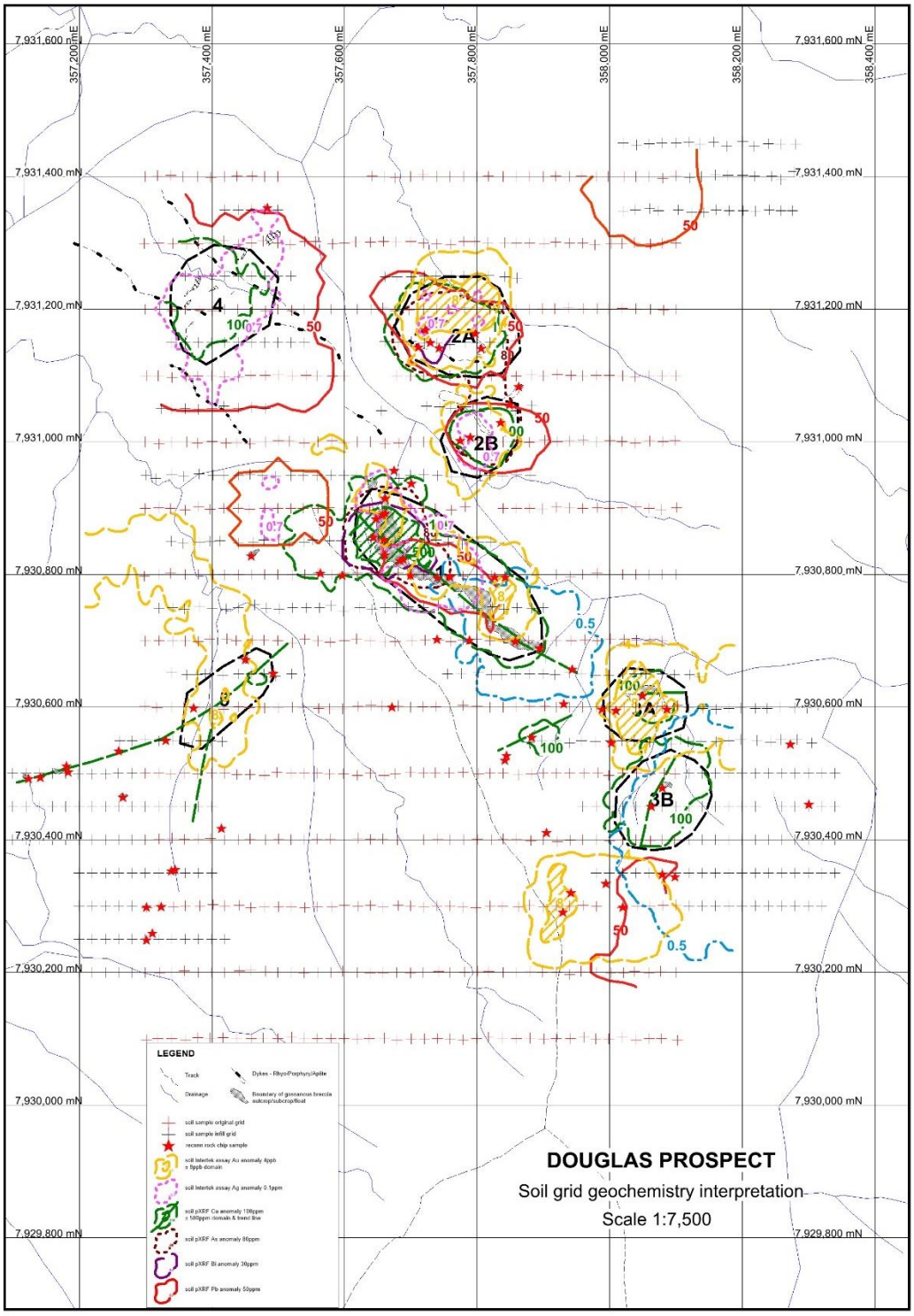
Figure 2 Douglas Creek IRGS Discovery Location



Douglas Creek Soil Sampling Program

GNM have received assay results from 574 soil samples, which were taken on an initial 100m x 20m spaced grid over the Douglas Creek area (refer to Figure 3).

Figure 3 Douglas Creek Soil Sampling Program Results



The soil sampling delineated multiple zones with highly anomalous geochemical results, with peak assays of gold up to 38.1 ppb, silver to 4.0 g/t Ag and copper to 1,023 ppm in soil. To date, five main mineralised zones have been defined (based on soil and rock chip sampling).

Table 1 Douglas Creek IRGS Mineralised Zones

Zone	Description
Zone 1	450m x 30m NW-SE trending semi-continuous sub crop zone of brecciated gossanous prismatic quartz veined diorite
Zone 2A & 2B	Two separate zones over a 300m x 150m area comprising outcropping prismatic gossanous quartz vein stockwork in sericitic altered coarse grained sandstone
Zone 3A & 3B	Two separate N-S trending zones covering a 275m x 100m area comprising subcrop of brecciated gossanous prismatic quartz veined diorite
Zone 4	220m x 75m NE-SW trending zone of intermittent stacked linear outcrop of sheared gossanous prismatic quartz veining in fragmental volcaniclastics
Zone 5	Intermittent subcrop and float zones of gossanous prismatic quartz veined breccia along a 550m curvilinear NE to N trend

Douglas Creek Planned Exploration

The GNM exploration team has commenced drill preparation activities, with a target of commencing drilling by November 2022. To date:

- Initial drill designs have been completed;
- Landowner access and compensation agreement has been signed; and
- GNM has engaged with the Gugu Badhun People to commence the Native Title clearance activities (proposed drill sites and any associated access roads).

The GNM geology team are continuing exploration activities at the site, with reconnaissance mapping and sampling in conjunction with airborne magnetic data reprocessing and hyperspectral remote sensing continuing to expand the exciting Douglas Creek IRGS discovery.

*****ENDS*****

This announcement has been authorised for release to the market by the Board of Great Northern Minerals Limited.

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About Great Northern Minerals Limited

Great Northern Minerals Limited is an ASX-listed gold focused explorer and developer. The Company's Golden Ant Project is located in Far North Queensland and includes the Amanda Bell and Big Rush Goldfields.
Total gold production from the Amanda Bell Goldfield was approximately 95,000 oz Au (57,000 oz from Camel Creek and 14,000 oz from Camel Creek satellite deposits plus 18,000 oz from Golden Cup and 6,000 oz from Golden Cup satellite deposits). Total gold production from the Big Rush Goldfield was 60,000 oz Au. Three heap leach gold mines were operated (Camel Creek, Golden Cup and Big Rush). Mining activities commenced in 1989 and ceased in 1998 with the depletion of oxide gold mineralisation. Great Northern Minerals aims to develop a new gold camp in North Queensland based on the Golden Ant Project.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled under the supervision of Simon Coxhell, Non-Executive Director of Great Northern Minerals Limited and Consultant Geologist (CoxsRocks Pty Ltd). Mr. Coxhell is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and type of deposit under consideration and to the activity which 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." Mr. Coxhell consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Table 2 Douglas Creek Soil Sampling Assay Results

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
1	357302	7930098	2.5	0.1	12
2	357319	7930100	2.0	0.1	17
3	357340	7930100	0.5	0.1	10
4	357361	7930098	2.7	0.1	10
5	357379	7930102	1.1	0.1	14
6	357398	7930101	2.4	0.1	22
7	357417	7930102	1.7	0.1	10
8	357438	7930101	1.7	0.1	20
9	357460	7930100	1.3	0.1	19
10	357478	7930101	0.3	0.1	9
11	357500	7930100	0.9	0.1	19
12	357521	7930102	1.1	0.1	69
13	357540	7930101	1.1	0.1	18
14	357560	7930100	1.3	0.1	15
15	357580	7930100	0.6	0.1	13
16	357600	7930100	0.8	0.0	10
17	357619	7930099	0.4	0.1	12
18	357638	7930100	1.6	0.1	15
19	357661	7930101	2.0	0.2	18
20	357680	7930098	0.5	0.1	8
21	357701	7930099	0.3	0.1	8
22	357721	7930099	0.5	0.1	9
23	357741	7930100	0.8	0.1	9
24	357760	7930099	4.9	0.2	18
25	357780	7930099	1.0	0.1	8
26	357800	7930100	1.2	0.0	8
27	357817	7930102	1.4	0.1	17
28	357839	7930101	0.7	0.0	13
29	357860	7930100	0.5	0.1	7
30	357880	7930100	0.5	0.1	8
31	357902	7930100	0.8	0.1	7
32	357920	7930100	0.8	0.1	8
33	357942	7930100	0.2	0.0	5
34	357962	7930102	0.4	0.0	5
35	357979	7930100	1.6	0.1	4
36	357999	7930100	0.7	0.1	7
37	358020	7930102	0.4	0.1	7
38	358040	7930098	0.2	0.1	7
39	358060	7930100	0.3	0.1	13
40	358079	7930100	0.3	0.1	8
41	358103	7930098	0.3	0.2	10
42	357300	7930200	2.3	0.1	40
43	357322	7930200	0.7	0.2	27
44	357340	7930200	1.8	0.1	25
45	357359	7930203	0.6	0.2	34
46	357380	7930200	4.5	0.1	32
47	357400	7930200	3.3	0.2	43
48	357420	7930200	0.9	0.1	21
49	357442	7930202	2.0	0.2	17
50	357459	7930203	1.0	0.1	13

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
51	357481	7930202	1.5	0.1	9
52	357500	7930200	0.9	0.1	9
53	357520	7930200	0.5	0.1	8
54	357539	7930199	0.3	0.0	11
55	357561	7930200	0.3	0.1	11
56	357580	7930200	0.7	0.1	10
57	357598	7930202	3.1	0.0	18
58	357620	7930200	3.0	0.1	8
59	357639	7930198	0.6	0.1	10
60	357658	7930199	3.5	0.0	6
61	357679	7930200	0.7	0.0	8
62	357700	7930200	0.8	0.1	9
63	357719	7930200	0.6	0.1	7
64	357742	7930201	0.6	0.1	5
65	357760	7930200	1.1	0.1	6
66	357782	7930201	9.5	0.1	13
67	357802	7930202	1.3	0.0	10
68	357818	7930201	1.5	0.1	20
69	357840	7930200	1.2	0.1	5
70	357860	7930200	2.3	0.1	8
71	357881	7930202	2.7	0.1	9
72	357899	7930200	9.8	0.2	8
73	357921	7930200	2.2	0.1	9
74	357940	7930197	1.0	0.2	13
75	357957	7930202	1.5	0.1	13
76	357980	7930200	4.3	0.1	14
77	358002	7930199	1.2	0.2	12
78	358022	7930199	4.0	0.8	27
79	358038	7930201	3.6	0.5	14
80	358060	7930199	1.8	0.6	15
81	358077	7930202	2.7	0.3	17
82	358100	7930200	1.8	0.4	21
83	357302	7930298	1.3	0.2	28
84	357320	7930300	6.1	0.2	63
85	357342	7930299	0.6	0.1	24
86	357360	7930300	0.7	0.2	42
87	357383	7930300	0.5	0.2	34
88	357402	7930302	0.7	0.3	45
89	357420	7930300	0.5	0.1	14
90	357442	7930301	0.6	0.1	14
91	357459	7930297	0.8	0.3	16
92	357480	7930298	1.4	0.1	23
93	357501	7930299	0.6	0.2	17
94	357521	7930299	0.7	0.1	18
95	357541	7930298	2.1	0.1	23
96	357560	7930299	0.6	0.1	18
97	357582	7930299	0.4	0.1	11
98	357600	7930301	0.6	0.1	11
99	357621	7930300	0.3	0.1	10
100	357640	7930301	0.3	0.1	11
101	357659	7930298	0.4	0.1	12

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
102	357682	7930301	0.3	0.0	11
103	357700	7930300	0.8	0.0	15
104	357721	7930299	0.6	0.1	19
105	357740	7930300	1.0	0.1	16
106	357760	7930300	0.5	0.0	10
107	357779	7930298	1.7	0.1	16
108	357799	7930298	1.0	0.1	12
109	357820	7930300	0.5	0.1	14
110	357839	7930299	0.5	0.1	14
111	357863	7930299	0.9	0.1	15
112	357879	7930301	0.8	0.2	15
113	357900	7930298	2.4	0.1	9
114	357920	7930300	32.3	0.1	19
115	357940	7930300	8.8	0.2	18
116	357960	7930301	2.6	0.2	15
117	357981	7930300	10.1	0.3	22
119	358020	7930298	2.3	0.2	12
120	358042	7930300	13.7	0.4	9
121	358061	7930301	8.6	0.4	7
122	358081	7930301	2.3	0.5	8
123	358101	7930302	1.6	0.2	47
124	357300	7930400	0.5	0.1	10
125	357321	7930401	0.7	0.3	28
126	357340	7930402	0.7	0.2	30
127	357359	7930400	0.5	0.1	24
128	357380	7930402	0.4	0.1	18
129	357399	7930402	0.4	0.1	29
130	357420	7930400	0.8	0.1	19
131	357440	7930400	0.6	0.1	14
132	357458	7930401	0.9	0.1	15
133	357481	7930400	0.6	0.1	13
134	357501	7930401	0.6	0.1	14
135	357520	7930400	0.2	0.2	16
136	357540	7930400	1.9	0.0	21
137	357559	7930401	5.1	0.1	25
138	357579	7930401	1.1	0.1	18
139	357600	7930400	1.6	0.1	15
140	357620	7930403	1.0	0.1	14
141	357640	7930401	0.9	0.1	13
142	357658	7930401	0.5	0.1	15
143	357680	7930400	1.7	0.1	20
145	357720	7930400	1.2	0.1	21
146	357741	7930401	1.8	0.1	30
147	357759	7930400	0.8	0.1	16
148	357780	7930400	0.7	0.1	20
149	357801	7930401	0.9	0.1	19
150	357822	7930400	1.0	0.1	23
151	357840	7930401	0.6	0.1	22
152	357860	7930401	1.1	0.1	21
153	357882	7930399	1.0	0.1	23
154	357900	7930400	0.8	0.1	34

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
155	357922	7930397	1.4	0.2	21
156	357941	7930400	1.0	0.2	21
157	357960	7930400	2.5	0.2	19
158	357980	7930400	0.6	0.3	34
159	358001	7930399	3.4	0.2	32
160	358020	7930400	1.0	0.3	33
161	358040	7930400	1.0	0.3	37
162	358062	7930398	0.8	0.5	46
163	358080	7930400	1.3	0.9	38
164	358098	7930400	0.8	0.8	96
165	357300	7930500	1.6	0.3	51
166	357320	7930500	2.1	0.1	32
167	357339	7930499	2.3	0.1	24
168	357360	7930500	2.4	0.3	43
169	357379	7930500	3.2	0.1	54
170	357400	7930500	1.9	0.1	24
171	357420	7930500	1.8	0.1	19
172	357438	7930498	0.4	0.1	12
173	357458	7930499	0.7	0.1	13
174	357480	7930497	0.4	0.1	12
175	357499	7930502	1.0	0.1	16
176	357520	7930500	0.6	0.1	12
177	357540	7930500	0.5	0.1	17
178	357560	7930500	0.7	0.3	19
179	357578	7930499	1.1	0.1	19
180	357599	7930500	2.4	0.1	16
181	357620	7930497	0.3	0.0	6
182	357640	7930500	0.4	0.1	18
183	357660	7930497	0.4	0.1	14
184	357677	7930499	0.4	0.1	19
185	357700	7930502	1.5	0.1	14
186	357720	7930501	0.4	0.1	14
187	357737	7930501	0.4	0.1	15
188	357759	7930501	0.4	0.1	36
189	357780	7930501	0.8	0.1	15
190	357803	7930500	2.3	0.1	16
191	357820	7930500	1.0	0.1	17
192	357840	7930500	1.1	0.1	16
193	357863	7930498	1.2	0.1	14
194	357882	7930500	0.6	0.1	17
195	357900	7930500	1.3	0.1	18
196	357920	7930500	1.0	0.2	23
197	357940	7930500	1.1	0.1	25
198	357962	7930500	1.1	0.1	19
199	357982	7930501	2.3	0.2	40
200	357999	7930497	1.4	0.1	24
201	358020	7930500	0.5	0.3	30
202	358041	7930501	0.7	0.2	22
203	358062	7930499	4.3	0.3	228
204	358083	7930500	2.0	0.5	372
205	358099	7930500	1.6	0.5	99

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
206	357299	7930602	0.6	0.1	23
207	357318	7930600	7.0	0.1	24
208	357340	7930600	1.3	0.1	27
209	357358	7930600	4.8	0.1	45
210	357382	7930599	2.8	0.1	37
211	357398	7930597	2.7	0.1	20
212	357418	7930597	31.6	0.3	222
213	357441	7930601	2.5	0.1	33
214	357458	7930600	2.0	0.1	15
215	357480	7930599	0.6	0.1	10
216	357501	7930599	1.2	0.1	20
217	357522	7930600	0.8	0.1	14
218	357539	7930598	1.0	0.1	10
219	357562	7930598	4.8	0.1	42
220	357578	7930597	0.4	0.1	14
221	357598	7930598	0.6	0.1	10
222	357621	7930601	0.7	0.1	11
223	357640	7930602	1.5	0.1	9
224	357657	7930602	1.9	0.1	16
225	357682	7930602	0.7	0.1	15
226	357700	7930600	1.3	0.1	27
227	357719	7930601	2.3	0.2	60
228	357738	7930600	0.7	0.1	22
229	357759	7930600	1.7	0.1	19
230	357779	7930603	0.4	0.1	15
231	357800	7930601	0.3	0.2	16
232	357820	7930600	0.7	0.4	17
233	357840	7930600	0.6	0.3	30
234	357860	7930600	0.7	0.2	19
235	357880	7930602	1.2	0.2	38
236	357903	7930602	1.3	0.4	45
237	357920	7930600	0.8	0.4	48
238	357940	7930600	0.3	0.2	27
239	357960	7930600	0.5	0.3	27
240	357980	7930600	0.4	0.4	25
241	358000	7930600	0.3	0.5	21
242	358022	7930600	16.3	0.3	44
243	358040	7930600	38.1	0.3	45
244	358060	7930601	8.2	0.8	421
245	358080	7930601	4.2	0.8	96
246	358103	7930603	1.0	0.2	47
247	357300	7930700	2.3	0.1	21
248	357321	7930700	1.9	0.1	18
249	357341	7930700	1.3	0.1	28
250	357360	7930700	2.8	0.1	18
251	357380	7930699	2.6	0.1	20
252	357397	7930702	7.5	0.1	37
253	357423	7930703	6.8	0.3	73
254	357437	7930700	4.9	0.3	44
255	357461	7930701	3.8	0.1	41
256	357479	7930701	3.4	0.2	24

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
257	357500	7930700	2.2	0.1	45
258	357522	7930697	0.5	0.1	20
259	357541	7930702	1.1	0.0	15
260	357560	7930700	0.4	0.1	10
261	357579	7930698	1.1	0.1	14
262	357600	7930700	1.0	0.1	19
263	357619	7930703	2.7	0.2	34
264	357639	7930700	2.1	0.1	25
265	357662	7930699	1.3	0.1	33
266	357677	7930699	1.3	0.1	13
267	357702	7930700	0.5	0.2	17
268	357722	7930701	0.5	0.1	19
269	357743	7930702	1.0	0.1	23
270	357761	7930699	0.9	0.5	63
271	357780	7930701	0.8	0.2	73
272	357800	7930702	0.6	0.6	67
273	357820	7930700	7.7	0.4	47
274	357840	7930702	2.2	0.4	102
275	357860	7930700	4.1	0.8	294
276	357878	7930700	1.5	0.5	255
277	357900	7930700	2.0	0.2	37
278	357920	7930700	1.5	0.3	44
279	357943	7930700	0.6	0.2	15
280	357963	7930702	4.7	0.1	13
281	357982	7930700	1.3	0.2	16
282	358002	7930703	0.5	0.2	11
283	358023	7930703	1.0	0.2	20
284	358041	7930701	0.5	0.2	11
285	358061	7930700	0.8	0.5	13
286	358080	7930700	0.4	0.2	9
288	357299	7930798	1.0	0.1	17
289	357320	7930800	1.5	0.2	22
290	357338	7930802	19.5	0.3	87
291	357360	7930800	4.0	0.3	73
292	357380	7930800	2.6	0.3	98
293	357402	7930800	6.4	0.2	68
294	357419	7930800	1.4	0.4	64
295	357441	7930799	3.7	0.4	90
296	357460	7930800	3.3	0.2	33
297	357480	7930800	2.4	0.2	53
298	357500	7930800	3.3	0.4	64
299	357521	7930800	1.3	0.2	42
300	357541	7930800	1.5	0.2	42
301	357561	7930802	1.9	0.2	75
302	357582	7930800	4.8	0.3	156
303	357600	7930802	2.7	0.3	60
304	357620	7930802	1.6	0.3	46
305	357642	7930802	2.3	0.2	16
306	357660	7930802	0.6	0.2	13
307	357682	7930802	2.1	0.4	27
308	357700	7930800	1.2	0.2	49

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
309	357720	7930800	7.2	4.0	1,023
310	357740	7930800	13.9	2.7	848
311	357760	7930798	5.4	0.9	307
312	357779	7930798	0.7	1.0	173
313	357800	7930800	1.2	0.6	83
314	357822	7930798	31.3	0.9	237
315	357843	7930798	2.4	0.3	73
316	357860	7930800	1.2	0.3	20
319	357920	7930800	0.9	0.1	10
320	357942	7930797	0.8	0.1	12
321	357960	7930800	0.3	0.1	11
322	357981	7930802	0.9	0.1	10
323	358000	7930800	1.1	0.1	8
324	358020	7930800	0.8	0.1	8
325	358040	7930800	0.6	0.1	10
326	358060	7930800	1.5	0.3	22
327	358080	7930800	0.8	0.2	10
328	358100	7930800	1.1	0.2	37
329	357300	7930900	3.5	0.3	20
330	357320	7930901	2.7	0.2	18
331	357338	7930900	2.1	0.2	21
332	357360	7930897	3.5	0.5	35
333	357380	7930903	3.3	0.2	27
334	357397	7930899	3.1	0.2	34
335	357419	7930900	1.6	0.1	25
336	357440	7930900	1.1	0.1	24
337	357457	7930899	2.1	0.1	19
338	357480	7930900	2.7	0.1	28
339	357500	7930900	3.2	2.7	161
340	357520	7930900	1.1	0.3	38
341	357538	7930899	0.5	0.2	27
342	357560	7930900	1.2	0.6	103
343	357578	7930901	1.4	0.4	31
344	357600	7930899	1.0	0.3	43
345	357619	7930897	0.9	0.2	21
346	357638	7930900	1.5	0.3	45
347	357660	7930899	17.7	3.4	553
348	357681	7930900	0.7	0.3	60
349	357700	7930900	1.7	0.3	35
350	357720	7930900	1.8	0.4	27
351	357737	7930899	1.3	0.2	19
352	357762	7930897	1.1	0.2	17
353	357783	7930902	1.3	0.2	17
356	357840	7930900	0.4	0.1	9
357	357860	7930900	0.6	0.1	10
358	357880	7930900	0.8	0.1	13
359	357900	7930899	0.5	0.2	8
360	357921	7930902	1.1	0.2	9
361	357940	7930900	0.7	0.1	10
362	357960	7930900	0.9	0.1	9
363	357982	7930901	0.5	0.1	6

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
364	358000	7930900	0.7	0.1	8
365	358019	7930901	1.8	0.1	7
366	358041	7930903	0.7	0.1	15
367	358060	7930900	1.1	0.3	17
368	358078	7930898	1.3	0.4	20
369	358101	7930901	1.2	0.3	30
370	357300	7931000	1.7	0.2	26
371	357321	7930997	2.9	0.2	63
372	357340	7931000	1.8	0.2	60
373	357363	7931000	6.6	0.3	50
374	357379	7930998	1.9	0.3	35
375	357401	7931001	2.9	0.5	63
376	357422	7930998	1.5	0.3	44
377	357437	7930999	1.8	0.2	43
378	357458	7930998	2.5	0.5	79
379	357481	7931000	1.8	0.2	30
380	357500	7931002	1.7	0.2	29
381	357517	7931001	2.0	0.1	23
382	357540	7930998	5.7	0.1	29
383	357560	7931000	6.5	0.1	37
384	357582	7931002	1.8	0.2	66
385	357601	7930999	5.1	0.5	76
386	357620	7931000	5.7	0.3	38
387	357640	7931000	1.6	0.3	34
388	357662	7930997	0.5	0.1	11
389	357682	7930998	1.1	0.2	35
390	357700	7931000	1.6	0.1	80
391	357720	7931000	0.8	0.2	16
394	357780	7931000	8.2	1.1	217
395	357801	7931003	21.1	1.3	292
396	357818	7930999	2.7	0.9	125
397	357840	7931000	4.6	0.7	329
398	357861	7931001	1.8	0.2	19
399	357879	7930999	0.5	0.1	20
400	357903	7931003	0.6	0.3	17
401	357922	7931001	0.4	0.1	12
402	357939	7931001	1.5	0.1	22
403	357960	7931003	0.3	0.1	6
404	357980	7931000	0.4	0.2	9
405	358001	7931002	0.8	0.2	12
406	358019	7931001	1.3	0.2	12
407	358039	7930998	1.8	0.4	15
408	358061	7931001	0.6	0.2	10
409	358081	7931000	0.6	0.1	9
410	358099	7931002	1.1	0.2	13
411	357302	7931099	1.6	0.4	28
412	357320	7931100	1.6	0.3	26
413	357341	7931097	0.8	0.7	24
414	357362	7931099	0.9	0.7	34
415	357379	7931099	2.0	0.5	21
416	357400	7931100	1.9	1.2	57

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
417	357420	7931099	1.0	1.0	62
418	357441	7931099	0.5	0.6	27
419	357459	7931100	0.8	0.4	32
420	357481	7931101	0.5	0.3	33
421	357501	7931101	0.6	0.6	25
422	357522	7931100	1.3	0.5	43
423	357543	7931100	0.6	0.4	25
424	357560	7931100	1.0	0.6	28
425	357583	7931099	2.5	0.6	26
426	357600	7931100	1.8	0.3	35
430	357680	7931100	0.6	0.1	10
431	357700	7931100	1.0	0.2	15
432	357720	7931100	2.2	0.3	26
433	357740	7931100	3.0	0.7	124
434	357760	7931100	1.0	0.3	27
435	357782	7931101	1.2	0.4	52
436	357801	7931100	0.3	0.2	20
437	357823	7931099	1.3	0.3	48
438	357840	7931100	0.4	0.2	12
439	357859	7931099	0.9	0.3	18
440	357882	7931101	0.6	0.3	22
441	357900	7931100	0.4	0.2	16
442	357921	7931101	2.8	0.1	19
443	357942	7931101	0.3	0.1	19
444	357960	7931100	0.3	0.1	8
445	357980	7931101	0.5	0.1	13
446	358000	7931100	0.3	0.2	16
447	358020	7931100	0.2	0.1	8
448	358038	7931099	0.1	0.1	7
449	358060	7931100	0.7	0.1	19
450	358080	7931100	0.4	0.1	29
451	358100	7931100	1.7	0.1	29
452	357300	7931200	1.9	0.2	24
453	357322	7931200	2.3	0.4	21
454	357341	7931197	0.9	0.7	18
455	357360	7931200	1.4	2.0	47
456	357382	7931199	1.0	0.7	19
457	357402	7931198	1.1	0.7	68
458	357420	7931200	2.2	1.7	265
459	357440	7931200	5.3	1.0	123
460	357462	7931200	0.8	0.3	39
461	357482	7931197	1.2	0.9	53
462	357500	7931200	1.3	0.6	143
463	357521	7931198	1.4	0.8	42
464	357540	7931200	1.7	0.3	23
465	357558	7931200	0.4	0.7	22
466	357580	7931200	1.4	0.5	29
468	357620	7931200	2.0	0.3	41
469	357640	7931200	1.1	0.3	27
470	357658	7931202	2.4	0.4	31
471	357677	7931198	1.6	0.7	123

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
472	357698	7931199	3.3	0.3	51
473	357720	7931200	18.1	1.1	327
474	357740	7931200	21.0	1.1	286
475	357758	7931200	9.3	0.3	61
476	357782	7931202	8.5	0.7	89
477	357800	7931202	16.3	0.6	115
478	357820	7931200	26.6	1.5	168
479	357840	7931200	1.1	0.2	24
480	357860	7931200	1.0	0.2	35
481	357880	7931200	1.1	0.2	17
482	357899	7931201	0.6	0.2	13
483	357918	7931200	0.7	0.2	21
484	357938	7931202	0.7	0.1	20
485	357960	7931201	0.8	0.3	24
486	357982	7931200	1.9	0.1	28
487	357998	7931201	2.4	0.1	26
488	358020	7931202	2.2	0.1	31
489	358040	7931201	0.9	0.1	28
490	358062	7931200	0.6	0.1	24
491	358082	7931199	0.7	0.1	26
492	358101	7931200	0.4	0.1	25
493	357299	7931299	7.2	0.4	17
494	357320	7931300	2.3	0.3	34
495	357342	7931299	4.4	0.7	39
496	357362	7931299	1.3	0.2	13
497	357380	7931299	0.7	0.3	11
498	357397	7931300	0.9	0.2	14
499	357419	7931303	0.8	0.4	30
500	357440	7931298	4.4	0.7	33
501	357460	7931300	1.0	0.9	101
502	357478	7931303	1.4	1.7	102
503	357500	7931300	0.9	0.5	87
504	357519	7931298	1.2	0.2	22
505	357541	7931302	0.4	0.5	36
506	357557	7931302	1.2	0.6	49
507	357582	7931299	1.7	0.1	13
508	357600	7931300	0.4	0.1	13
509	357618	7931302	0.3	0.1	9
510	357640	7931301	0.3	0.1	8
511	357659	7931302	0.3	0.0	7
512	357678	7931302	0.2	0.0	7
513	357701	7931302	0.3	0.0	7
514	357720	7931300	0.4	0.1	12
515	357740	7931299	0.7	0.2	12
516	357761	7931298	0.3	0.1	9
517	357780	7931302	0.4	0.1	10
518	357797	7931303	0.5	0.1	11
519	357817	7931300	0.2	0.0	6
520	357843	7931300	1.0	0.1	11
521	357860	7931300	0.8	0.1	11
522	357880	7931300	1.5	0.1	21

Sample ID	GDA94_E	GDA94_N	Au ppb	Ag ppm	Cu ppm
523	357902	7931299	1.3	0.2	22
524	357919	7931301	1.9	0.1	23
525	357940	7931300	1.2	0.1	29
526	357960	7931300	1.9	0.1	26
527	357978	7931297	4.3	0.1	27
528	358002	7931299	0.6	0.1	27
529	358019	7931299	0.8	0.1	17
530	358038	7931301	0.5	0.1	12
531	358062	7931299	0.6	0.2	14
532	358080	7931300	0.4	0.1	19
533	358100	7931300	0.6	0.3	17
534	357300	7931400	0.7	0.1	11
535	357318	7931402	0.7	0.1	11
536	357339	7931402	0.5	0.1	12
537	357357	7931400	0.9	0.1	11
538	357379	7931400	1.3	0.1	9
539	357399	7931399	0.2	0.0	8
540	357420	7931400	0.1	0.1	8
541	357438	7931401	0.1	0.1	8
542	357461	7931401	0.3	0.1	9
543	357480	7931400	0.7	0.3	19
544	357500	7931400	2.4	0.6	46
551	357642	7931401	5.0	0.1	17
552	357660	7931400	0.3	0.1	8
553	357677	7931399	0.4	0.1	10
554	357700	7931400	0.9	0.1	16
555	357719	7931403	0.9	0.1	17
556	357740	7931400	0.7	0.1	24
557	357760	7931400	0.5	0.2	20
558	357780	7931400	0.6	0.1	19
559	357800	7931400	0.7	0.1	22
560	357817	7931401	0.4	0.2	20
561	357840	7931400	0.4	0.2	18
562	357860	7931400	0.6	0.2	23
563	357880	7931400	4.0	0.2	22
564	357900	7931400	2.6	0.1	23
565	357919	7931401	0.8	0.1	19
566	357940	7931400	0.6	0.1	21
567	357958	7931401	0.7	0.1	25
568	357980	7931400	1.1	0.3	18
569	357998	7931400	0.3	0.4	17
570	358022	7931400	0.3	0.4	16
571	358040	7931400	0.5	0.9	21
572	358060	7931400	0.5	0.8	34
573	358080	7931398	1.4	0.5	23
574	358100	7931401	0.9	0.3	15

JORC Code, 2012 Edition

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 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 commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Soil samples were collected of 'B' horizon material sieved onsite to -1.6mm for an approx. 200gm soil sample. • All sample locations were recorded by handheld GPS survey with estimated accuracy of +/-2-3 metres. • Analysis of the soil samples was conducted by Intertek Laboratory in Townsville for gold by 0.5 gram Aqua Regia digest at a 0.01 ppb threshold with multielement analysis via multi acid digest followed by ICP MS.
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 is oriented and if so, by what method, etc.).*	• Soil samples were taken on an initial 100m x 20m spaced grid over the Douglas Creek area
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• One soil sample per sample site collected. • There is insufficient data available at the present stage to evaluate potential sampling bias.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Soil samples were not logged
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected,*	• No core • Sample preparation for all recent samples follows industry best practice and was undertaken by Intertek Laboratories in Townsville where they were crushed, dried and pulverised to produce a sub sample for analysis. • Sample preparation involving oven drying, followed by rotary splitting and pulverisation to 85% passing 75 microns. • QC for sub sampling follows Intertek

Criteria	JORC Code explanation	Commentary
	including for instance results for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	procedures. • No field duplicates were taken. • No Blanks were inserted. • No Standards were inserted. • Sample sizes are considered appropriate to the grain size of the material being sampled.
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.* • *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.* • *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.*	• The methods are considered appropriate to the style of mineralisation. Extractions are considered near total. • Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and duplicates as part of the in house procedures. Repeat and duplicate analysis for samples shows that the precision of analytical methods is within acceptable limits.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The Company's Geologists have collected and visually reviewed the samples collected. • No twin holes drilled • Data and related information are stored in a validated MapInfo or Micromine database. Data has been visually checked for import errors. • No adjustments to assay data have been made.
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All sample locations have been located by GPS with precision of sample locations considered +/-2-3m. • Location grid of plans and coordinates in this release samples use MGA94, Zone 55 datum. • No Topographic data was used.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.*	• Data spacing and distribution is considered sufficient to establish the likely trends of anomalous mineralisation • No Sample compositing has occurred.
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.* • *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.*	• Mineralised zones strike NE, NW and N-S with the sampling more or less orthogonal to this apparent strike'. A reasonable density of samples were collected at regular intervals across and along mineralised trends. No sampling bias was deemed to be material.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is managed by the Company and samples are transported to the laboratory via Company staff with samples safely consigned to Intertek Genalysis Laboratory in Townsville for preparation and analysis. Whilst in storage, they are kept in a locked yard. Tracking sheets are used track the

Criteria	JORC Code explanation	Commentary
		progress of batches of samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review or audit of sampling techniques or data compilation has been undertaken at this stage.

Section 2 JORC Code, 2012 Edition - Reporting of Exploration Results

Criteria	JORC Code 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 to operate in the area.*	• EPM 27522 is owned by Northern Exploration Pty Ltd, a 100% owned subsidiary of Great Northern Minerals Limited and was granted on the 1-12-2020. • The tenement is located 14 kilometres to the north of GNMs Camel Creek and Golden Cup mining leases.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Gold mineralization in the Camel Creek area was first recognized in 1987. • Previous exploration and mining activities have been undertaken by Lynch Mining in the district, with anomalous bulk cyanide leach work completed in 1989 which outlined a gold anomaly with a maximum value of 4000 ppt. The majority of previous exploration was completed between 1986 –1990.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• EPM 27522 is located in the NE quadrant of the Broken River Mineral Field. Orogenic quartz vein hosted gold mineralization was previously identified within Kangaroo Hills Fm sedimentary rock units within the project area.
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 Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Table 2 of this ASX Announcement which provides easting and northing of the soil samples
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 high-grade results and longer lengths of low-grade results, the procedure used*	• No high-grade cuts have been applied to the tabled intersections. • No metal equivalents are used or presented.

Criteria	JORC Code explanation	Commentary
	for such aggregation should 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.*	
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').*	• No mineralisation widths or intercept lengths were released in the announcement.
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.*	• Maps are presented in the announcement.
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.*	• The accompanying document is considered to represent a balanced report.
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.*	• The mineralization in the region was originally outlined by BCL and followed up by limited rock chip sampling returning anomalous and significant gold results. Follow up sampling by GNM has now highlighted this area as a new mineralised area, with very high silver values, and gold values. It lies at the intersection of subtle NEtrending structures and a NW trending corridor of cross cutting felsic dykes. Minor copper mineralisation on a dominant NW trend was also observed
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.*	• Further work will include; • Site Clearance surveys with Native title groups prior to any drilling will be required. • Earthworks to establish access and drill pads