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16/08/2023

POLYMETALLIC MINERALISATION: 9-KM CORRIDOR IDENTIFIED

Key Highlights

- **Anomalous polymetallic outcrop identified over a 9-km strike extent presents opportunity for base metal targeting. Grades of up to 1,760 ppm cobalt, 7,100 ppm nickel, 1.0% lead, and manganese over 10%.**
- **Buntine tenement renewal prioritisation reduces rent expenditure.**
- **Barkly rare earths metallurgical studies continuing.**

SIGNIFICANT POLYMETALLIC BASE METALS CORRIDOR

Transition Minerals Limited has identified, from historical data, anomalous polymetallic mineralisation along a 9-km strike length of exposed Palaeoproterozoic-age sedimentary rocks. The outcropping mineralisation occurs within its 100%-held Buntine Zone tenements in the Birrindudu Basin (western Northern Territory), which lie within 5 km of the Buntine Highway and approximately 300 km SSE of the Port of Wyndham, Western Australia. The project area is accessed via the Buntine Highway from Top Springs (NT) or Halls Creek (WA).

Historical laboratory analyses of rock chip samples (Figure 1) contain manganese exceeding the laboratory reporting threshold of 10%, lead to 1%, cobalt to 0.18%, and nickel to 0.71% (Figure 2). In particular, the northern portion of the corridor appears particularly anomalous in cobalt (Figure 3). A table of data is provided within Appendix 1.

Figure 1. Sample MBLL, containing anomalous levels of battery metals including cobalt, copper, manganese and lead. (Source: Daylight Jack, 2010).

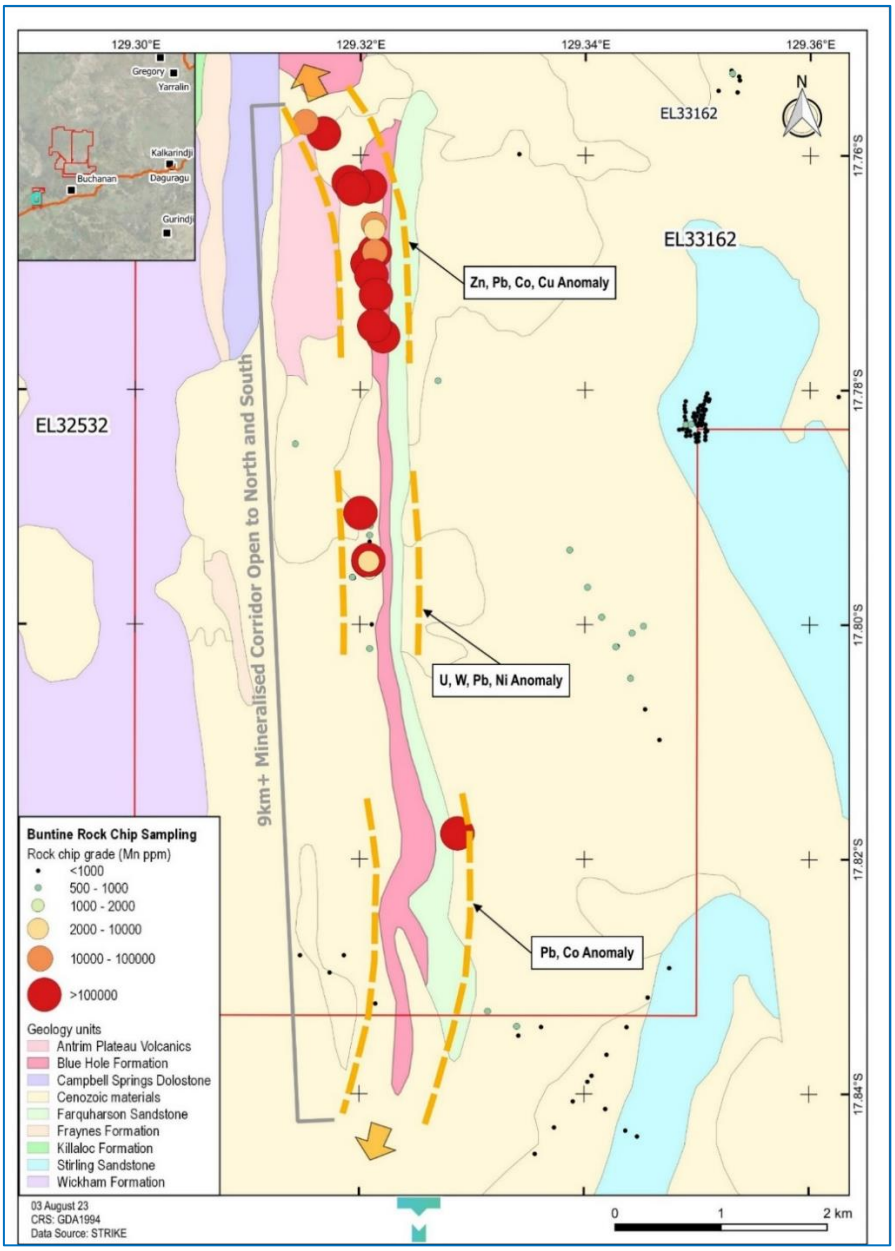

Figure 2. The outcropping base-metals mineralised corridor extends over 9 km and remains open to the north and south.

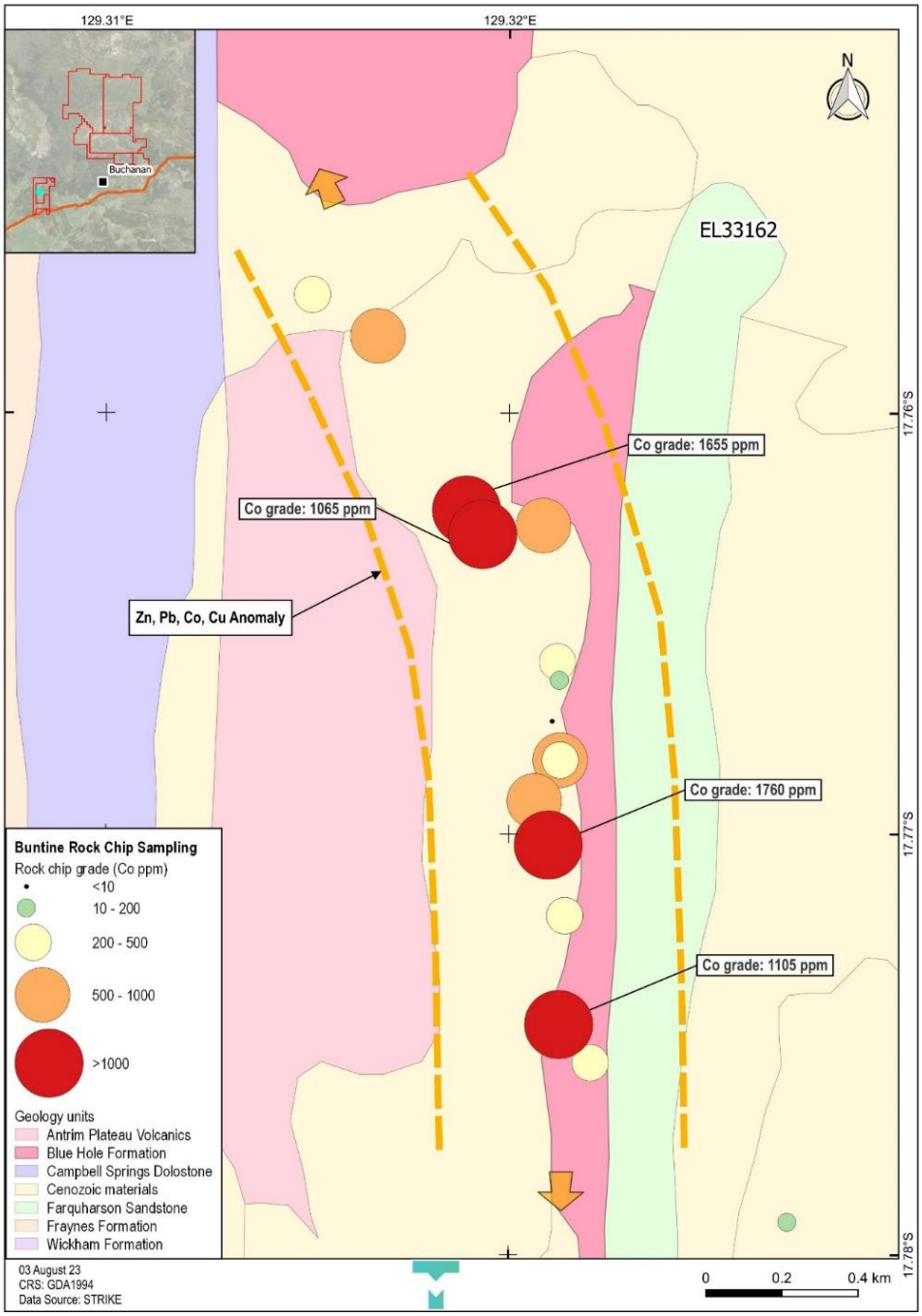

Figure 3. Anomalous cobalt recorded in the northern section of the outcropping corridor.

The mineralisation occurs in outcropping units of the Blue Hole and Farquarson formations which form part of the Limbunya Group. Importantly, the Limbunya Group formations are spatially and temporally regarded as a lithostratigraphic correlation to the formations of the Umbolooga subgroup of the McArthur Group (Figure 4), and are thought to be linked in the subsurface, forming part of a Superbasin (Munson et al., 2019). The southern McArthur Basin hosts world-class Zn-Pb-Ag deposits, including McArthur River (HYC) and Reward. The Limbunya Group formations may thus provide a suitable source and the necessary reservoir rocks (i.e. target stratigraphy) to host analogous base metal deposits to those of the southern McArthur Basin.

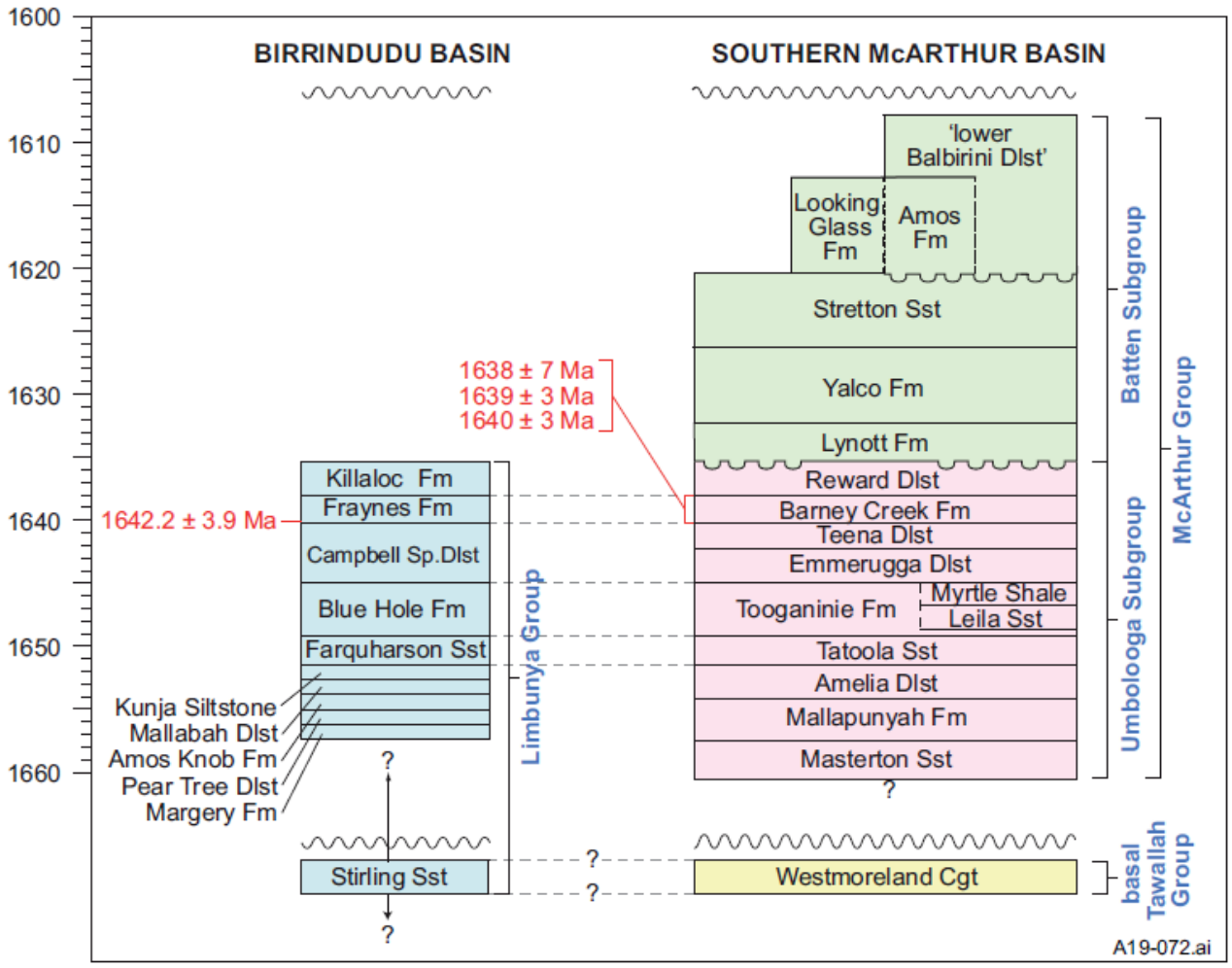

Figure 4. Chart showing stratigraphic correlation between the Limbunya Group and McArthur sub-groups (Source: Munson et al., 2019).

A limited amount of historical exploration has been conducted over Transition Minerals' Buntine tenements. Much of this work was focussed on targeting the Antrim Plateau Basalts for Noril'sk-style Ni-Cu-PGE mineralisation, kimberlites, and base metals. A more comprehensive list of exploration activities and companies active in the area since 2000 is listed in the (JORC) Table 1 within Appendix 2.

The Company is investigating the potential reprocessing of existing gravity and magnetic data for improved target definition and confirmation of the extension of mineralised units under soil cover. Detailed field geological mapping and systematic sample collection is planned, pending funding, to verify existing anomalies and optimise drilling targets for this exciting polymetallic prospect.

Tenement Rationalisation

Transition Minerals is pleased to advise a significant rationalisation of its tenement portfolio has been undertaken. This has been instigated upon the 2nd year anniversary for each of the Barkly, Mathison and Buntine tenement areas that were originally granted in 2021. The *Mineral Titles Act 2010* and *Mineral Titles Regulations 2011* requires that companies relinquish 50% of their tenement area every two years.

Following detailed assessment of the Barkly vanadium and rare-earth-element mineralisation model and mapped geology, the Company has retained approximately 90% of the exploration licence area at Barkly's 10 tenements following successful application to the Northern Territory Department of Industry, Tourism and Trade for waiver of the mandatory 50% relinquishment. This enables Transition Minerals to maintain its competitive advantage in the new vanadium and rare earths district of the northern Barkly region, and test the mineralisation model that indicates a vast lateral extent of mineralisation. Transition Minerals still holds ten exploration licences at Barkly covering 7,327.80 km^2.

Concurrently, and considering the Company's finite resources, the decision has been made to fully surrender the Mathison tenements, west of Katherine, NT. These tenements were deemed non-core assets, following a prospectivity review by Transition Minerals.

The vast Buntine exploration tenure has also been significantly reduced, including the full surrender of 10 tenements and partial surrender of 6 exploration licences. Transition Minerals has retained highly prospective area totalling 2,749.17km^2 in two areas with outcropping Limbunya Group lithologies.

Transition Minerals' tenement holdings, as of the date of this announcement, are tabulated below in Table 2 and depicted in Figure 5. The tenement rationalisation has delivered significant savings for the Company, while still maintaining maximum exposure for its key assets.

Barkly Metallurgical Test Work

Metallurgical test work is continuing, to evaluate the capacity to upgrade and assess the extractability of rare earth element (REE) minerals. The test work includes flotation testing, heavy liquid separation, and size fraction analysis, in addition to leach tests with common acids and reagents at ambient and elevated temperatures. Results will be communicated upon completion of the test work.

For further information, please contact:

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Competent Persons Statement

The information presented here that relates to exploration results complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012) and is based on information compiled by Mr Richard Hall of Transition Minerals Limited. Mr Hall is a member of the Australian Institute of Mining and Metallurgy (AusIMM) and was elected to Fellow in 2014. He is also a member of the Geological Society of Australia. Mr Hall has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Hall consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

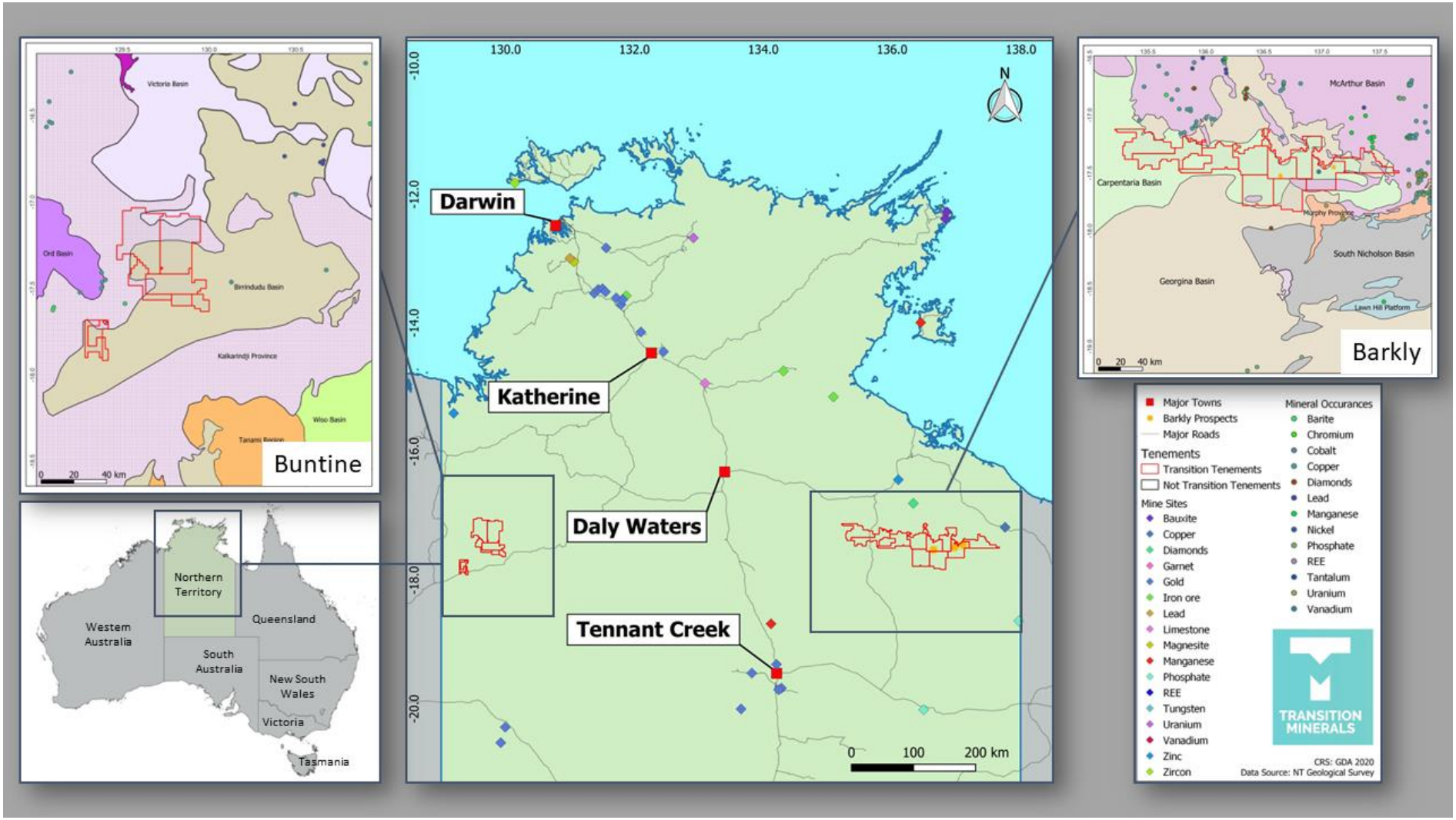

Figure 5. Transition Minerals' Northern Territory exploration licences.

Table 1. Transition Minerals' current tenement holdings.

Title ID	PROJECT	Status	Granted Date	Expiry Date	Party Name	Percentage	Area km²	Area Units
EL32450	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	747.23	228
EL32451	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	730.89	223
EL32452	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	727.66	222
EL32453	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	658.77	201
EL32454	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	629.39	192
EL32455	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	814.89	249
EL32456	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	814.71	249
EL32472	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	802.94	249
EL32473	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	658.82	201
EL32474	Barkly	Current	2021-05-21	2027-05-20	TRANSITION MINERALS LIMITED	100	742.5	233
EL32529	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	435.76	133
EL32530	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	215.39	66
EL32531	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	39.23	12
EL32532	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	127.54	39
EL32534	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	91.34	28
EL32535	Buntine	Current	2021-06-29	2027-06-28	TRANSITION MINERALS LIMITED	100	91.33	28
EL33086	Buntine	Current	2022-11-03	2028-11-02	TRANSITION MINERALS LIMITED	100	815.6	249
EL33087	Buntine	Current	2022-11-03	2028-11-02	TRANSITION MINERALS LIMITED	100	816.91	249
EL33162	Buntine	Current	2022-11-03	2028-11-02	TRANSITION MINERALS LIMITED	100	116.07	37

Appendix 1 Historic Assay Results

Table 2. Historic Assay results for Co, Cu, Mn, Ni, Pb, U, V, W and Zn (Source: compiled by Transition Minerals)

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
298031C	ROCK	129.3536	-17.7533	8	2	126	22	-2	10	90	-10	-2
298031-C	ROCK	129.3535	-17.7546	10	5	284	27	3	10	159	-10	-2
298031D	ROCK	129.3518	-17.7545	9	5	206	24	8	10	134	-10	-2
298031E	ROCK	129.3529	-17.7453	12	6	359	17	4	10	215	-10	31
298031F	ROCK	129.3626	-17.7806	10	5	92	33	-2	10	131	-10	-2
29803D	ROCK	129.3531	-17.753	13	19	528	21	15	-10	171	-10	29
29803D1	ROCK	129.3537	-17.7536	2	17	131	10	4	-10	21	-10	2
29803DF	ROCK	129.3173	-17.7186	20	8	233	36	7	10	95	-10	-2
29803E	ROCK	129.353	-17.7527	5	4	122	11	2	10	84	-10	-2
29803F	ROCK	129.3531	-17.7531	25	32	286	26	31	-10	604	-10	6
CR1	ROCK	129.3452	-17.8001	14	16	574	14	12	-10	70	-10	18
CR10	ROCK	129.3387	-17.7936	12	24	520	20	13	-10	96	-10	29
CR2	ROCK	129.3442	-17.8007	10	14	516	12	11	-10	60	-10	17
CR3	ROCK	129.3429	-17.8018	10	16	462	14	9	-10	75	-10	19
CR4	ROCK	129.3441	-17.8046	17	19	739	19	13	-10	86	-10	20
CR5	ROCK	129.3454	-17.8072	12	15	401	15	12	-10	88	-10	15
CR6	ROCK	129.3467	-17.8098	17	15	364	20	11	-10	98	-10	16
CR7	ROCK	129.3428	-17.8019	10	14	516	14	9	-10	68	-10	19
CR8	ROCK	129.3415	-17.7994	13	17	599	17	13	-10	68	-10	21

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
CR9	ROCK	129.3403	-17.7968	14	15	680	14	12	-10	63	-10	16
DJM10	ROCK	129.3147	-17.8282	11	13	263	17	10	-10	95	-10	13
DJM11A	ROCK	129.3186	-17.8282	10	15	252	19	12	-10	126	-10	16
DJM11B	ROCK	129.3174	-17.8297	9	17	215	24	16	-10	154	-10	18
DJM12A	ROCK	129.3314	-17.833	12	22	532	19	11	-10	100	-10	25
DJM12B	ROCK	129.334	-17.8343	12	18	539	16	14	-10	88	-10	20
DJM12C	ROCK	129.3362	-17.8343	11	15	416	12	12	-10	62	-10	16
DJM12D	ROCK	129.3342	-17.8351	9	15	276	16	10	-10	71	-10	14
DJM12E	ROCK	129.3403	-17.839	8	11	256	12	10	-10	47	-10	11
DJM12F	ROCK	129.3419	-17.8413	7	13	138	15	7	-10	49	-10	14
DJM12G	ROCK	129.3437	-17.8431	8	14	148	15	8	-10	49	-10	13
DJM12H	ROCK	129.3447	-17.8436	4	16	244	11	12	-10	38	-10	7
DJM12I	ROCK	129.3476	-17.8293	7	11	198	14	8	-10	45	-10	11
DJM12J	ROCK	129.3457	-17.8318	8	14	317	15	13	-10	52	-10	13
DJM12K	ROCK	129.3438	-17.8343	11	15	366	15	10	-10	54	-10	13
DJM12L	ROCK	129.342	-17.8367	9	12	262	13	10	-10	48	-10	11
DJM12M	ROCK	129.3407	-17.8385	6	10	225	9	8	-10	47	-10	9
DJM12N	ROCK	129.339	-17.8406	7	14	232	15	6	-10	53	-10	13
DJM12O	ROCK	129.3373	-17.8429	9	12	272	13	9	-10	69	-10	11
DJM12P	ROCK	129.3356	-17.8451	11	13	352	14	10	-10	54	-10	18
DJM13	ROCK	129.3666	-17.8611	9	12	249	13	8	-10	74	-10	9
DJM3	ROCK	129.3197	-17.735	11	14	289	16	10	-10	93	-10	15
DJM6	ROCK	129.3294	-17.747	6	15	191	9	-2	-10	20	-10	5

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
DJM7	ROCK	129.3341	-17.7599	6	12	327	6	6	-10	59	-10	17
DL 15	ROCK	129.4266	-18.0001	19	18	812	18	20	-10	70	-10	21
DL 16	ROCK	129.4272	-18.0043	18	17	666	16	15	-10	99	-10	16
DL 19	ROCK	129.3649	-18.0179	34	540	350	79	16	10	34	-10	27
DLJCB	ROCK	129.3193	-17.7959	41	5	191	71	7	-10	219	-10	14
MBC 006	ROCK	129.3167	-17.7582	418	82	100000	28	1390	-10	200	10	101
MBC 1	ROCK	129.322	-17.7754	211	94	100000	75	212	-10	116	-10	148
MBC 10	ROCK	129.3213	-17.7682	493	19	100000	27	30	10	285	20	34
MBC 10a	ROCK	129.3213	-17.7682	541	16	100000	20	36	-10	311	30	30
MBC 10b	ROCK	129.3213	-17.7682	470	94	92200	38	17	-10	289	-10	126
MBC 11	ROCK	129.3206	-17.7692	533	66	100000	39	84	-10	232	-10	97
MBC 12a	ROCK	129.321	-17.7703	1105	110	100000	40	115	-10	231	-10	145
MBC 12b	ROCK	129.321	-17.7703	113	5	17650	5	12	-10	55	-10	7
MBC 13a	ROCK	129.3214	-17.7719	216	67	70200	62	19	-10	192	-10	123
MBC 13b	ROCK	129.3214	-17.7719	385	105	100000	99	23	-10	243	-10	230
MBC 14a	ROCK	129.3212	-17.7745	1760	157	100000	107	296	-10	945	-10	345
MBC 14b	ROCK	129.3212	-17.7745	973	142	100000	75	96	-10	299	-10	240
MBC 2	ROCK	129.3211	-17.7673	6	14	576	20	17	-10	183	10	4
MBC 3	ROCK	129.3208	-17.7627	845	108	100000	28	64	20	374	10	107
MBC 4	ROCK	129.3193	-17.7629	1065	116	100000	69	131	-10	488	-10	156
MBC 5a	ROCK	129.3189	-17.7623	1655	135	100000	47	107	-10	491	-10	139
MBC 5b	ROCK	129.3189	-17.7623	190	73	22700	7	29	-10	38	-10	14
MBC 6	ROCK	129.3167	-17.7582	560	90	100000	56	99	-10	284	-10	179

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
MBC 7	ROCK	129.3151	-17.7572	267	316	65300	162	68	-10	209	10	667
MBC 8	ROCK	129.3212	-17.7659	322	32	58700	18	32	-10	178	-10	33
MBC 9	ROCK	129.3213	-17.7664	19	20	3580	8	19	-10	33	-10	34
MBC GM	ROCK	129.3269	-17.7792	18	15	703	27	66	-10	98	10	2
MBC11	ROCK	129.3193	-17.796	35	29	865	37	12	-10	131	-10	46
MBC16.1	ROCK	129.3194	-17.7961	5	4	43	5	-2	-10	167	10	-2
MBC3280	ROCK	129.3209	-17.8021	3	9	512	3	62	-10	72	-10	14
MBC3281	ROCK	129.3211	-17.8	2	19	230	6	223	10	217	-10	21
MBC3282	ROCK	129.3208	-17.7946	60	62	2110	172	2500	-10	77	-10	284
MBC3283	ROCK	129.3208	-17.7946	429	145	100000	54	10000	-10	308	-10	171
MBC3284	ROCK	129.3208	-17.7945	115	28	40300	17	213	20	61	-10	38
MBC3285	ROCK	129.3208	-17.7945	191	116	100000	88	297	40	109	-10	199
MBC3288	ROCK	129.3209	-17.7957	20	25	1945	87	49	-10	82	10	190
MBC3289	ROCK	129.3209	-17.796	5	202	213	7100	0.02	21	-1	20	
MBC3290	ROCK	129.321	-17.796	4	147	114	6050	0.02	41	-1	17	
MBC3292	ROCK	129.3207	-17.7939	-1	12	311	160	0.05	68	10	9	
MBC3293	ROCK	129.3207	-17.7939	4	17	871	150	0.03	71	10	8	
MBC3294	ROCK	129.3207	-17.7938	-1	15	275	120	0.03	71	10	10	
MBC3295	ROCK	129.3209	-17.793	3	26	465	400	0.04	134	10	11	
MBC3296	ROCK	129.3209	-17.7924	8	71	800	470	0.09	209	-1	55	
MBC3297	ROCK	129.3209	-17.7916	14	48	949	220	0.02	187	10	36	
MBC3298	ROCK	129.32	-17.7905	457	197	100000	1290	-2	272	-1	393	
MBCBCB	ROCK	129.3193	-17.7959	30	5	163	38	11	-10	175	-10	14

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
MBLL	ROCK	129.3287	-17.8178	1210	236	100000	56	1680	30	431	10	367
MN 1	ROCK	129.3484	-17.7834	4	8	380	1	15	-10	664	-10	-1
MN 10	ROCK	129.3507	-17.7836	2	5	61	2	3	-10	337	-10	-1
MN 11	ROCK	129.3507	-17.7839	1	8	152	2	11	-10	792	-10	-1
MN 12	ROCK	129.3507	-17.7842	2	4	27	-1	3	-10	568	10	-1
MN 13	ROCK	129.3504	-17.7827	-1	3	62	1	2	-10	435	-10	-1
MN 14	ROCK	129.3505	-17.7824	3	5	87	2	6	-10	554	10	-1
MN 15	ROCK	129.3506	-17.7821	-1	5	204	5	4	-10	531	-10	-1
MN 16	ROCK	129.3506	-17.7818	-1	2	9	-1	-1	-10	354	-10	-1
MN 17	ROCK	129.3507	-17.7817	-1	2	106	4	-1	-10	572	-10	-1
MN 19	ROCK	129.351	-17.7809	2	4	50	4	-1	10	456	10	-1
MN 19A	ROCK	129.351	-17.7809	3	3	185	3	-1	-10	378	-10	-1
MN 2	ROCK	129.3487	-17.7833	2	5	150	2	13	-10	685	-10	-1
MN 20	ROCK	129.3511	-17.7808	-1	1	46	-1	-1	-10	375	10	-1
MN 21	ROCK	129.3501	-17.7837	2	10	230	2	8	-10	768	10	3
MN 22	ROCK	129.3501	-17.784	2	4	132	5	-1	-10	524	-10	-1
MN 23	ROCK	129.3501	-17.7843	2	2	142	1	-1	-10	489	10	-1
MN 24	ROCK	129.3501	-17.7828	-1	3	40	2	-1	-10	550	10	-1
MN 25	ROCK	129.3502	-17.7825	-1	3	74	3	2	-10	401	-10	-1
MN 26	ROCK	129.3503	-17.7821	1	6	53	3	-1	-10	527	-10	-1
MN 27	ROCK	129.3504	-17.7817	1	5	242	2	-1	-10	541	10	-1
MN 27A	ROCK	129.3504	-17.7817	2	5	57	2	3	-10	574	-10	-1
MN 28	ROCK	129.3505	-17.7815	2	4	70	2	4	-10	494	-10	-1

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
MN 29	ROCK	129.3506	-17.7812	1	3	76	-1	-1	-10	410	-10	-1
MN 3	ROCK	129.349	-17.7833	1	4	261	3	4	-10	507	10	-1
MN 30	ROCK	129.3507	-17.7809	-1	1	33	1	-1	-10	789	-10	-1
MN 31	ROCK	129.3507	-17.7806	-1	7	332	4	7	-10	429	-10	-1
MN 32	ROCK	129.3509	-17.7803	18	40	439	33	28	-10	546	-10	9
MN 33	ROCK	129.3509	-17.7835	-1	3	56	1	-1	-10	374	-10	-1
MN 34	ROCK	129.3498	-17.7838	1	4	46	2	-1	-10	543	-10	-1
MN 35	ROCK	129.3499	-17.7841	1	5	63	1	-1	-10	505	10	-1
MN 36	ROCK	129.3499	-17.7844	2	7	87	2	4	-10	126	-10	-1
MN 37	ROCK	129.3498	-17.7828	-1	3	24	-1	-1	-10	200	10	-1
MN 38	ROCK	129.3498	-17.7826	-1	1	5	1	-1	-10	185	-10	-1
MN 39	ROCK	129.3499	-17.7822	2	5	39	1	3	-10	418	-10	-1
MN 4	ROCK	129.349	-17.7833	-1	4	61	3	-1	-10	597	10	-1
MN 40	ROCK	129.3501	-17.7819	3	5	129	1	4	-10	484	10	-1
MN 41	ROCK	129.3501	-17.7816	-1	4	10	1	5	-10	457	10	-1
MN 42	ROCK	129.3503	-17.7813	-1	3	62	1	-1	-10	370	10	-1
MN 43	ROCK	129.3495	-17.7829	12	28	720	27	30	-10	597	-10	10
MN 44	ROCK	129.3496	-17.7823	-1	4	59	2	2	-10	391	-10	-1
MN 44A	ROCK	129.3496	-17.7823	2	5	77	3	13	-10	572	-10	-1
MN 45	ROCK	129.3497	-17.782	-1	3	89	-1	-1	-10	451	10	-1
MN 46	ROCK	129.3493	-17.7835	1	7	151	3	6	-10	558	10	-1
MN 47	ROCK	129.3494	-17.7839	1	4	42	3	4	-10	448	10	-1
MN 48	ROCK	129.349	-17.7836	1	7	51	3	-1	-10	352	-10	-1

Sample ID	Sample Type	Longitude	Latitude	Co_PPM	Cu_PPM	Mn_PPM	Ni_PPM	Pb_PPM	U_PPM	V_PPM	W_PPM	Zn_PPM
MN 49	ROCK	129.349	-17.7839	8	25	96	16	26	-10	643	-10	4
MN 5	ROCK	129.349	-17.7833	3	6	103	2	7	-10	536	10	-1
MN 50	ROCK	129.349	-17.7829	7	16	572	15	16	-10	488	-10	4
MN 51	ROCK	129.349	-17.7826	2	7	158	4	5	-10	450	10	-1
MN 52	ROCK	129.3489	-17.7823	2	5	53	5	-1	-10	508	10	-1
MN 53	ROCK	129.3489	-17.7819	1	5	85	2	-1	-10	422	-10	-1
MN 54	ROCK	129.3489	-17.7816	-1	3	48	-1	-1	-10	530	10	-1
MN 55	ROCK	129.3489	-17.7813	2	7	58	7	6	-10	603	10	-1
MN 56	ROCK	129.3489	-17.7809	-1	4	48	2	-1	-10	511	10	-1
MN 6	ROCK	129.35	-17.783	1	5	69	2	-1	-10	502	10	-1
MN 7	ROCK	129.3504	-17.783	1	4	95	2	4	-10	560	10	-1
MN 8	ROCK	129.3507	-17.7829	-1	5	85	1	-1	-10	442	-10	-1
MN 9	ROCK	129.3507	-17.7833	3	4	73	3	4	-10	449	-10	-1
S12	ROCK	129.3142	-17.7846	1	5	966	5	7	-10	17	-10	6
S23	ROCK	129.3886	-17.8574	-1	4	191	6	25	-10	1430	10	3
WP1	ROCK	129.4671	-18.0055	2	3	632	4	2	-10	35	-10	-2
WP3	ROCK	129.3552	-17.987	11	15	816	22	9	-10	88	30	5
WP8	ROCK	129.3214	-17.8323	2	11	356	4	18	-10	82	-10	3

Appendix 2 JORC Table 1

JORC 2012 EDITION — TABLE 1

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 (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Soil samples and rock chips. • Sample representivity is unknown. • N/A • N/A
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• N/A
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.*	• N/A

Criteria	JORC Code explanation	Commentary
	• *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.*	
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.*	• All samples were identified according to formation type and host lithology. Laboratory assays were conducted using the ME-ICP61 method. Multi-element geochemistry was at a sufficient level of detail to support further metallurgical studies. • N/A .
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, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• N/A
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	

Criteria	JORC Code explanation	Commentary
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.*	• Sample verification is unknown
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.*	• The location of sample positions was undertaken using a hand-held GPS which has an accuracy of +/- 5 m using UTM MGA94 Zone 53. • The quality and precision of data locations are appropriate for this level of exploration.
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.*	• Spacing was defined by the occurrence of suitable exposure and riverine outcrops. • Data spacing and distribution are insufficient to establish the degree of geological and grade continuity for the Exploration Target estimation procedure. • It is unknown whether sample compositing has been applied.
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.*	• Rock chip samples were collected along strike, where exposed in the local river systems and other opportunistic outcrop. • There is a sampling bias along strike and not across it.
Sample security	• *The measures taken to ensure sample security.*	• Sample security is unknown.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques and data have yet been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.*	• The mineral tenement type is an Exploration Licence granted pursuant to the NT Mineral Titles Act. EL 28505 was granted 3/10/2006, date ceased: 06/10/2014. EL29803 was granted on 24/09/2013, date ceased: 23/09/2021. • The tenements are located in the northern Barkly region of NT on pastoral land. • Transition Minerals currently holds the area referred to in the 9-km mineralised base-metal corridor under EL 33162, EL 32532 and EL 32531, with 100% holding through direct grant of tenure. There are no overriding royalty arrangements or any other overriding obligation on Transition Minerals. • Transition holds no joint ventures or partnerships with respect to these tenements. • Transition Minerals has undertaken a review of all known historical sites, wilderness sites, national parks and significant environmental and cultural sensitivities known in the area. • The tenements are in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Earlier explorers going back to year 2000 have been summarised. Several generations of work from this time can be grouped according to commodity. 1. PGE-Cu-Ni 2. Au 3. Diamonds 4. Base metals 5. Sediment hosted U and; 6. Sedex McArthur River type mineralisation. A list of modern (post-2000) exploration activities and companies, obtained from STRIKE (NT Government Tenure and Geoscience information), are summarised below: • Otter Gold: Au; EL22152; 2004; One rock chip and one BCL sample. • Otter Gold: Au; EL22376; 2005; 7 rock chip samples. • Ausquest: Ni-Cu-PGE, Diamonds; EL22642-4, EL22751; 2005; magnetic, gravity and TEM geophysical surveys. • Kajeena Mining: Pb-Zn, Cu, Au, Diamonds; EL100096-7; 2009; stream and soil sampling. • Ausquest: Ni-Cu-PGE; EL22645; 2004; Desktop studies.

Criteria	JORC Code explanation	Commentary
		• Ausquest: Ni-Cu-PGE; EL22749, EL22751; 2006; Heavy mineral samples from Antrim Plateau Basalt, ground magnetic and gravity surveys; drilling in JV with Rio Tinto. • Diamond Mines Australia & Ashton Mining: Diamonds; EL10209; 2005; surface sampling for diamonds. • Diamond Mines Australia & Ashton Mining: Diamonds; EL10298, EL22305, EL22329; 2005; airborne gravity, surface sampling for diamonds. • Diamond Mines Australia & Ashton Mining: Diamonds; EL22333; 2005; no activity. • Diamond Mines Australia & Ashton Mining: Diamonds; EL22328; 2006; airborne gravity, surface sampling for diamonds, soil sampling. • Tanami Gold: Au; EL23472; 2009; no fieldwork. • Scriven Exploration: Ni-Cu-PGE; EL24132; 2005; no fieldwork. • Newmont Tanami: Au; EL23367; 2007; no fieldwork. • Quantum Resources: U, EL25010; 2012; RadonX survey; gamma ray spectrometry and geological mapping. • Southstar Diamonds: Diamonds; EL26232; 2008; no fieldwork. • Proto Resources: Ni-Cu-PGE, Au; EL25307; 2014; two diamond drillholes, extensive soil sampling and fixed loop ground EM survey. FLTEM ground geophysics followed by another diamond drillhole and ground magnetic/gravity. • Vango Mining: Cu-Au-Ag; EL25761; 2014; airborne geophysical survey, 44 rock chip samples and 214 soil samples. • Anglo Australian: base metals; EL26442, EL26458; 2009; no field activity. • Frontier Uranium: Ni-Cu-PGE, Au, U; EL26200; 2011; no field activity. • United Uranium: U; EL25835; 2012; soil and rock chip sampling, XRF and scintillometer surveys. • Daylight Jack Minerals: diamonds, base metals; EL25084, EL25085; 2014; rock chip, gravel and soil sampling, high-resolution aeromagnetic survey. • Mithril: Ni-Cu-PGE: EL27383, EL27384; 2011; no field activity. • Spitfire: Ni-Cu-PGE; EL27398; 2011; no field activity. • Quantum: U, Au; EL27745; 2012; no field activity. • Spitfire: Ni-Cu-PGE; EL27399; 2013; geological mapping, rock-chip sampling, aeromagnetic and radiometric survey. • Toro Energy: U; EL28042, EL28624; 2012; no field activity. • Toro Energy: U; EL28040; 2013; small reconnaissance survey.

Criteria	JORC Code explanation	Commentary
		• Spitfire: Ni-Cu-PGE; EL27400; 2013; geological mapping, rock chip sampling, aeromagnetic and radiometric surveys. • Spitfire: Ni-Cu-PGE; El28939, EL28619; 2013; no field activity. • ABM: Au; EL29181; 2016; No field activity. • Kingsland: Ni-Cu-PGE; EL29857; 2015; no field activity. • Daylight Jack: Diamonds, base metals; EL29803, EL30219, EL30656; 2016; 113 rock chip samples, stream sediment samples. • Daylight Jack: diamonds, base metals; EL30655; 2017; no samples taken. • Territory Prospecting: barite; EL31953, EL31955; 2020; no field activity.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The deposit is within the Limbunya Group of the Birrundudu Basin, Northern Territory. • The Birrindudu Basin contains chronostratigraphic equivalents of the host rocks to McArthur River, Mount Isa, and Broken Hill, but it is significantly less explored. The Fraynes Formation of the Limbunya Group is a potentially exciting target for greenfields base metal exploration as it has been dated at 1642 ± 4 Ma, the same age as the Barney Creek Formation (Munson et al., 2020). Mineralisation indicates anomalous concentrations of Cu, Pb, Zn, Mn, Co, Ni, Cr and Ba in shallow water silts and dolostones of the Blue Holes and Farquharson formations. It is proposed that a sediment hosted deposit analogous to the McArthur River Pb-Zn-Ag style of deposit is responsible for this mineralisation. The reservoir rocks (rift-fill sequence), fault-bounded (graben) structures and brine fluid driving mechanisms ('kitchen') are similar.

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*
		• N/A

Criteria	JORC Code explanation	Commentary
	Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 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.*	• No new Exploration Results are reported here.
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 (eg 'down hole length, true width not known').*	• N/A
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.*	• Appropriate maps and sections and tabulations of sample localities and results have been included.
Balanced reporting	• *Where comprehensive reporting of all*	• All relevant data have been reported.

Criteria	JORC Code explanation	Commentary
	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 information reported here includes all relevant information that could be sourced.
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 project area has been subject to broad-scale exploration for uranium, base metals, diamonds and gold. • All relevant exploration data pertaining to the area of interest has been included in this report.
Further work	• *The nature and scale of planned further work (eg 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 exploration is required, with an initial step of interpreting existing NTGS and public domain geophysics data, followed by soil geochemical sampling and selected drilling over anomalous domains. Additional samples from the prospective area are planned to be recovered in the 2023 field season, to ensure repeatability of historical grades and to determine follow-up ground-based exploration activities. These data will allow further geological interpretations and planning of first-pass soil sampling and follow-up drilling. • Further diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, will be generated.

Bibliography

Munson, T.J, Denyszyn, S.W., Simmons, J.M. and Kunzmann, M. (2020). A 1642 Ma age for the Fraynes Formation, Birrindudu Basin, confirms correlation with the economically significant Barney Creek Formation, McArthur Basin, Northern Territory. Australian Journal of Earth Sciences 67(3), 321–330 pp.