



15 March 2022

ASX:BCA

# Grant of Davis River Exploration Licence significantly expands Oakover West

## HIGHLIGHTS

- Grant of the 100% owned Davis River Exploration Licence (E46/1382), adds another 618km<sup>2</sup> to the prospective Oakover West Project
- Davis River is located adjacent to several advanced projects, including the Sunday and Ant Hill manganese deposits and significant manganese occurrences at Bee Hill, Honey Bee and Mt Rove.
- Historic drilling from the adjacent Carawine JV tenure within the Oakover West Project highlight the prospective nature of the area and include:
  - 6m @ 21.4% Mn from 5m (BLVR006)
  - 9m @ 14.3% Mn from 26m (BLVR022)
  - 11m @ 9.7% Mn from 22m (BLVR024)
  - 6m @ 17.8% Mn from 24m (BLVR028)
- Multiple rock chip samples gathered over prospective corridors and structure assaying greater than 30% Manganese
- Potential to discover both hydrothermal Woodie Woodie and manganese enriched shale styles of mineralisation
- Several other exploration licence applications proceeding through to grant with ongoing land access negotiations with the relevant Native Title parties.

Black Canyon ("**Black Canyon**" or '**the Company**") (ASX: BCA) is pleased to advise that the 100% owned Davis River Exploration Licence (E46/1382) has been granted and will significantly expand the Oakover West Project by 618km<sup>2</sup>, now totalling 820km<sup>2</sup>.

The Oakover West Project now comprises five tenements, two of which (E46/1069 & E46/1119 over 130km<sup>2</sup>) are part of the Company's Carawine JV and are subject to a farm-in and joint venture agreement with Carawine Resources Ltd (ASX:CWX), whereby Black Canyon can earn up to a 75% interest in the Carawine Project tenements (Figure 1).

Oakover West is well located in a highly prospective stratigraphic and structural corridor as evidenced by the Sunday and Ant Hill manganese deposits, owned by Resource Development Group, the historic Davis

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River manganese mine and well known manganese occurrences at Bee Hill, Mt Rove and Honey Bee owned by Consolidated Minerals.

The enlarged tenement package consolidates a large footprint in the region with the potential to delineate both manganese enriched shales and higher-grade hydrothermal styles of mineralisation.

**Black Canyon's Executive Director, Brendan Cummins, said** "The expansion of the Oakover West Project is in line with the Company's strategy to become a dominant ASX-listed manganese explorer and developer with a focus on the eastern Pilbara.

"The initial trip to the area confirmed the prospectivity of this corridor, with the identification of large structures and the right geology. This was further supported by widespread historic rock chip assay data that has shown high-grade manganese related to significant north to northeast trending structures across the licences.

"Whilst the Company is currently focussing on the LR1 and FB3 manganese discoveries at Flanagan Bore, it is preparing to undertake additional mapping, review and targeting activities across the Oakover West Project in preparation for the upcoming field season."

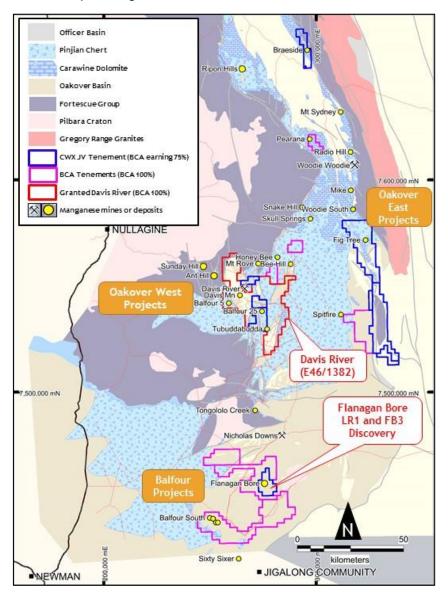


Figure 1. Black Canyon tenements – CWX JV (BCA earning 75%) and other BCA 100% owned tenements that are granted or under application.



#### Davis River (E46/1382) and Oakover West Project Summary

Manganese enriched shale across the tenements is associated with sub-horizontal units of lower Manganese Group sediments assumed to be the prospective Balfour Formation. There is also hydrothermal style manganese mineralisation associated with sub-vertical brecciated fault structures along the valley margins in contact with Pinjian Chert and Carawine Dolomite.

Historic rock chip and drillhole data has confirmed the association between significant structures hosting manganese and highlights the prospective nature of the tenement package (Figure 2.

Of the 288 historic and recent rock chip samples taken from across the Carawine JV and 100%-owned Oakover West Project tenements, 116 samples returned values greater than 30% Mn (Appendix 1). Whilst rock chip sampling is typically selective the high portion and wide geographical distribution of samples showing high-grade manganese is encouraging and supports the potential to locate further mineralisation.

Stratabound manganese mineralisation in this region of the Oakover Basin is typically associated with elevated iron contents that are commonly equal to or may locally exceed manganese concentrations. An example of this is the Blue Valley Prospect (located within Carawine JV tenement - E46/1069) where manganese and iron enrichment is encountered across two 500m to 650m long NE- and E-trending zones of prominent surface enrichment.

Significant manganese intervals from previous RC drilling at Blue Valley include:

- 6m @ 21.4% Mn from 5m (BLVR006)
- 9m @ 14.3% Mn from 26m (BLVR022)
- 11m @ 9.7% Mn from 22m (BLVR024)
- 6m @ 17.8% Mn from 24m (BLVR028) (refer ASX announcement 23<sup>rd</sup> September for details)

Significant iron intervals from previous RC drilling at Blue Valley include:

- 8m @ 57.6% Fe from 27m (BLVR004)
- 9m @ 52.4% Fe from 52m (BLVR012)
- 13m @ 58.2% Fe from 1m (BLVR018)
- 7m @ 56.5% Fe from 17m (BLVR024)
- 19m @ 62.1% Fe from 10m (BLVR029)

(refer ASX announcement 23<sup>rd</sup> September for details)

The drilling was undertaken by Pilbara Manganese Pty Ltd (Consolidated Minerals Ltd) as part of a much larger group of tenements it explored in 2010. There has not been a significant follow-up program to investigate the significance of these results.



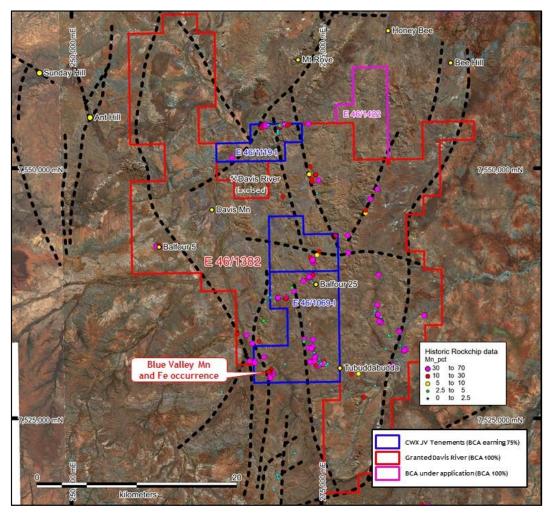


Figure 2. Oakover West Project showing the Blue Valley prospect, rock chip sample results highlighting the recently granted Davis River licence (E46/1382).



Figure 3. Blue Valley Manganese and Iron mineralisation



This announcement has been approved by the Board of Black Canyon Limited.

For further details:

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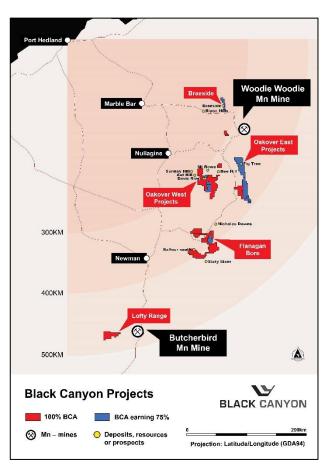
About Black Canyon

Black Canyon has entered into a farm-in and joint venture with ASX listed Carawine Resources Limited (ASX:CWX) to acquire a majority interest in the Carawine Project in Western Australia. The Carawine Project covers approximately 800km<sup>2</sup> of tenure located south of the operating Woodie-Woodie manganese mine, providing a large footprint in a proven and producing manganese belt. Black Canyon has also applied for and acquired other exploration licences adjacent to the Carawine Project that would increase the total land holdings to over 2500km<sup>2</sup> on grant. In addition to manganese, the Carawine Project also hosts multiple copper occurrences including the Western Star prospect which comprises a large zone of surface copper enrichment.

The Company has also secured the Lofty Range manganese project located immediately to the west of the Butcherbird manganese deposit being developed by Element 25.

Manganese and copper continue to have attractive fundamentals with growing utilisation in the battery mineral sector and challenging supply conditions. For media and broker enquiries:

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#### **Compliance Statements**

#### **Reporting of Exploration Results and Previously Reported Information**

The information in this report that relates to historic Exploration Results is based on, and fairly represents, information and supporting documentation reviewed by Mr Brendan Cummins, Executive Director of Black Canyon Limited. Mr Cummins is a member of the Australian Institute of Geoscientists and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken 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 Cummins consents to the inclusion in this release of the matters based on the information in the form and context in which they appear. Mr Cummins is a shareholder of Black Canyon Limited.

For further information, please refer to ASX announcement dated 23 September 2021 which is available from the ASX Announcement web page on the Company's website. The Company confirms that there is



no new information or data that materially affects the information presented in the JORC Table 1 appendices that relate to historic Exploration Results and Mineral Resources in the original market announcements.

<b>APPENDIX 1- Previous rock chip</b>	samples	results <sup>·</sup>	from	within	the	boundaries	of t	he Oakover	West
Project tenements									

Sample ID	Prospect	East (GDA94)	North (GDA94)	RL	Mn (%)	Fe (%)	Previous Company	WAMEX ID	Sample Date
WS19514	Mordred	280908	7534676	400	60.2	1.1	PMPL	a106685	20-Oct-09
WS19507	Mordred	280915	7534692	400	58.5	1.5	PMPL	a106685	19-Oct-09
WS07953	Mount Divide	274116	7540853	400	57.9	1.1	PMPL	C62_2005_2016S	22-Sep-09
AZ-07	Davis River	270782	7554110	400	57.4	0.8	PMPL	C62_2005_2016S	12-Jul-13
PM69603		283319	7531795	400	56.9	3.5	PMPL	a077797	
PM69603	NRD	283319	7531795	400	56.9	3.5	PMPL	a106685	1-Jan-07
WS07952	Mount Divide	274155	7540877	400	56.4	1.7	PMPL	C62_2005_2016S	22-Sep-09
WS07948	Gawain	283433	7531902	400	56.3	0.7	PMPL	a106685	20-Sep-09
PM69607		280911	7534689	400	56.1	1.3	PMPL	a077797	
PM69607	NRD	280911	7534689	400	56.1	1.3	PMPL	a106685	1-Jan-07
WS19513	Mordred	280925	7534639	400	56	0.8	PMPL	a106685	19-Oct-09
CM10006	Pancho South	282112	7530044	400	55.5	5.3	CWX		Sep-16
PM102285	Davis River	270614	7537050	400	55.4	4.4	PMPL	a081476	13-Oct-08
WS19509	Mordred	280843	7534713	400	55.1	1.3	PMPL	a106685	19-Oct-09
WS19516	Mordred	280748	7534711	400	54.6	3.3	PMPL	a106685	19-Oct-09
PM102282	Davis River	274700	7548786	400	54.5	2.2	PMPL	a081476	13-Oct-08
WS07925	Galahad	270639	7537060	400	54.4	3.3	PMPL	a106685	10-Aug-09
WS07910	Mount Divide	274046	7540780	400	54.4	2.1	PMPL	C62 2005 2016S	9-Aug-09
WS07918	Constantine	273183	7538710	400	54.2	2.4	PMPL	 a106685	10-Aug-09
SS08327	Western star	274491	7530254	400	53.8	2	CWX		Jun-17
SS08343	Arizona	270837	7554116	400	53.8	5.5	CWX		Jun-17
PM102287	Davis River	274129	7540600	400	53.8	2.7	PMPL	a081476	13-Oct-08
SA079134	Western Star	274309	7530669	400	53.6	2.4	CWX		Aug-18
WS07916	Constantine	273732	7539155	400	53.1	1.4	PMPL	a106685	10-Aug-09
AZ-12	Davis River	270910	7554303	400	53	3.8	PMPL	C62 2005 2016S	12-Jul-13
OR17	Davis River	269259	7554299	400	52.5	2.5	PMPL	C62 2005 2016S	31-Oct-13
PM72380		266053	7551040	400	52.3	3.7	PMPL	a077797	
APSS005	Davis River	270830	7554126	400	52.2	6.1	PMPL	C62 2005 2016S	27-May-12
PM72394		268320	7530698	400	52.1	2.1	PMPL	a077797	
WS07931	Blue Valley	269905	7529055	400	51.9	3.2	PMPL	a106685	10-Aug-09
WS19515	Mordred	280930	7534600	400	51.8	10.4	PMPL	a106685	20-Oct-09
OR18	Davis River	269344	7554378	400	51.7	4.9	PMPL	C62 2005 2016S	31-Oct-13
PM106972	Blue Valley	269854	7529160	400	51.5	5.8	PMPL	a106685	3-Apr-09
PM69605		280824	7534762	400	51.3	3.5	PMPL	a077797	0 . ipi 00
PM69605	NRD	280824	7534762	400	51.3	3.5	PMPL	a106685	1-Jan-07
WS07908	Mount Divide	274053	7540769	400	51.1	6.1	PMPL	C62_2005_2016S	9-Aug-09
WS19510	Mordred	280855	7534648	400	50.4	5.7	PMPL	a106685	19-Oct-09
SS042190	Western Star	275047	7530454	400	50.2	2.5	CWX	0100000	Feb-17
APSS004	Davis River	270809	7554106	400	50.2	7.3	PMPL	C62 2005 2016S	27-May-12
SA042190	Western Star	275047	7530454	400	50.2	2.5	SFX	002_2003_20103	19-Feb-17
SA062474	Western Star	274353	7531134	400	50	5.6	CWX		Jun-17
SA062474	Western Star	274333	7531009	400	49.8	6.4	CWX		Jun-17
WS07949	Gawain	283288	7531003	400	49.3	4.4	PMPL	a106685	20-Sep-09
SW17	Davis River	273671	7554436	400	49.2	4.5	PIVIPL	C62 2005 2016S	11-Jul-14
SB002	Pancho	283317	7531791	400	48.8	7.7	CWX	202_2003_20103	Feb-17
WS07924				400	48.5	11.6		2106685	10-Aug-09
SS08377	Galahad Bancho North	270642	7537032		48.5	9.4	PMPL	a106685	
	Pancho North	285317	7535306	400			CWX	2081476	Jun-17
PM79441	Bee Hill	279890	7546930	400	47.4	9.4	PMPL	a081476	
PM79442	Bee Hill	280584	7547920	400	47.3	8.8	PMPL	a081476	



SA079133	Western Star	274331	7531113	400	46.1	11.9	CWX		Aug-18
SS09212	Mt Divide	274164	7540668	400	44.7	9.5	CWX		Aug-17
WS07946	Gawain	283220	7531765	400	44.6	10.7	PMPL	a106685	20-Sep-09
PM78217	Bee Hill	268340	7530540	400	44.4	10	PMPL	a081476	
WS07919	Galahad	272222	7537741	400	44.3	11.3	PMPL	a106685	10-Aug-09
WS07915	Constantine	273766	7539094	400	44.1	13.6	PMPL	a106685	10-Aug-09
WS07905	Mount Divide	274195	7540575	400	44.1	11.7	PMPL	C62_2005_2016S	9-Aug-09
PM69604		273264	7532906	400	44	5.1	PMPL	a077797	
PM69604	NRD	273264	7532906	400	44	5.1	PMPL	a106685	1-Jan-07
PM69602		273699	7532044	400	43.6	4.5	PMPL	a077797	
PM69602	NRD	273699	7532044	400	43.6	4.5	PMPL	a106685	1-Jan-07
SA079127	Western Star	274108	7532141	400	43	16.5	CWX		Aug-18
TD-03	Teddy	258750	7542227	400	43	1.1	PMPL	a106685	23-Oct-11
SA062405	Western Star	275016	7530664	400	42.8	2.9	CWX		Feb-17
OR21	Davis River	269366	7554165	400	42.8	14.4	PMPL	C62 2005 2016S	31-Oct-13
PM72389		267795	7530722	400	42.2	14.7	PMPL	a077797	
WS07912	Constantine	274008	7539179	400	42.2	11.5	PMPL	a106685	9-Aug-09
TD-07	Teddy	259327	7542097	400	42.1	15.6	PMPL	a106685	23-Oct-11
SA079126	Saddleback	280745	7534717	400	42	18.2	CWX		Aug-18
PM78215	Bee Hill	267518	7533309	400	42	1	PMPL	a081476	7.008 20
WS19512	Mordred	280886	7534609	400	41.8	16.5	PMPL	a106685	19-Oct-09
WS17912 WS07927	Blue Valley	269819	7529130	400	41.3	18.6	PMPL	a106685	10-Aug-09
SA079086	Regional	273865	7530626	400	40.9	16.2	CWX	8100005	Jun-18
PM72393	Regional	268070	7532500	400	40.6	5.5	PMPL	a077797	JUII-10
PM69601		280570	7536343	400	40.1	1.8	PMPL	a077797	
	Mount Divido				40.1	1.8			1 lan 07
PM69601	Mount Divide	280570	7536343	400	39.9	1.8	PMPL	C62_2005_2016S	1-Jan-07
SA042188	Western Star	274725	7530360	400			CWX	. 077707	Feb-17
PM69606	NDD	273989	7531978	400	39.8	6.7	PMPL	a077797	4 1 07
PM69606	NRD	273989	7531978	400	39.8	6.7	PMPL	a106685	1-Jan-07
WS07922	Galahad	271428	7537033	400	39.6	14.6	PMPL	a106685	10-Aug-09
SS08380	Pancho South	282133	7530273	400	39.2	11.1	CWX		Jun-17
SS08378	Pancho North	285280	7535291	400	38.8	12.2	CWX		Jun-17
TD-08	Teddy	258500	7542160	400	38.8	13.9	PMPL	a106685	23-Oct-11
WS07921	Galahad	271408	7537019	400	38.2	18.2	PMPL	a106685	10-Aug-09
SA079132	Western Star	274401	7531212	400	38.1	22.6	CWX		Aug-18
WS07926	Blue Valley	269823	7529117	400	38.1	21.8	PMPL	a106685	10-Aug-09
OR19	Davis River	269389	7554387	400	37.5	24.5	PMPL	C62_2005_2016S	31-Oct-13
WS07904	Mount Divide	274188	7540609	400	37.5	15.5	PMPL	C62_2005_2016S	9-Aug-09
SS08345		258772	7542231	400	37.2	22	CWX		Jun-17
PM102283	Davis River	277610	7543300	400	36.6	22.3	PMPL	a081476	13-Oct-08
CM10014	Western Star	273805	7530706	400	36.1	23.6	CWX		Sep-16
SA079128	Western Star	274139	7532175	400	36.1	20.4	CWX		Aug-18
SA079090	Regional	282788	7533692	400	36	6.2	CWX		Jun-18
SS09214		277682	7541544	400	35.3	3.5	CWX		Aug-17
WS19508	Mordred	280911	7534729	400	35.1	25.9	PMPL	a106685	19-Oct-09
OR22	Davis River	269419	7554242	400	34.7	21	PMPL	C62_2005_2016S	31-Oct-13
SA079131	Western Star	274366	7531247	400	34.4	25.5	CWX		Aug-18
PM106973	Blue Valley	269814	7529141	400	34	25.9	PMPL	a106685	3-Apr-09
EDBV007	Blue Valley	270071	7529380	400	33.9	26.1	PMPL	a106685	8-Feb-09
WS07928	Blue Valley	269863	7529159	400	33.9	21.8	PMPL	a106685	10-Aug-09
WS07929	Blue Valley	269840	7529174	400	33.4	25.1	PMPL	a106685	10-Aug-09
AZ27	Davis River	271434	7554382	400	33.4	18.3	PMPL	C62_2005_2016S	1-Nov-13
SA042189	Western Star	274735	7530305	400	33.3	2.2	CWX		Feb-17
SS09221		269235	7531126	400	33.3	5.9	CWX		Aug-17
TD-01	Teddy	258485	7542254	400	33.2	7.7	PMPL	a106685	23-Oct-11
WS07930	Blue Valley	269904	7529030	400	33	22.6	PMPL	a106685	10-Aug-09
3658181	Donkan	274136	7532902	400	32.8	20	CRA	a39518	<u> </u>
PM102286	Davis River	274136	7539330	400	32.5	24.9	PMPL	a081476	13-Oct-08
PM78220	Bee Hill	270180	7529520	400	32.4	27.3	PMPL	a081476	



WS07914	Constantine	273829	7539095	400	31.2	23.7	PMPL	a106685	10-Aug-09
WS07920	Galahad	271468	7537001	400	31.2	25.9	PMPL	a106685	10-Aug-09
SA079125	Saddleback	280596	7535393	400	31	30.2	CWX		Aug-18
PM69608		280653	7535394	400	31	32.3	PMPL	a077797	
PM69608	NRD	280653	7535394	400	31	32.3	PMPL	a106685	1-Jan-07
WS07907	Mount Divide	274116	7540780	400	30.4	30.5	PMPL	C62_2005_2016S	9-Aug-09
SA079129	Western Star	274088	7531939	400	30	31.7	CWX		Aug-18
AZ-33	Davis River	271727	7554379	400	29.8	24.2	PMPL	C62_2005_2016S	15-Nov-14
PM72388		279250	7527170	400	29.4	30.5	PMPL	a077797	
PM78221	Bee Hill	269960	7529450	400	29.4	25.1	PMPL	a081476	
PM78218	Bee Hill	270000	7529820	400	29.2	32.8	PMPL	a081476	
AZ26	Davis River	271464	7554331	400	29.1	28.8	PMPL	C62_2005_2016S	1-Nov-13
WS07906	Mount Divide	274170	7540678	400	29	28.5	PMPL	C62_2005_2016S	9-Aug-09
SS08346	Stirrup	280660	7535397	400	28.4	32	CWX		Jun-17
WS19506	Mordred	280841	7534755	400	28	34	PMPL	a106685	19-Oct-09
WS07923	Galahad	271439	7536972	400	27.7	28.4	PMPL	a106685	10-Aug-09
SS08344	Illinois	271136	7547148	400	27.6	31.7	CWX		Jun-17
SA062403	Western Star	275256	7530702	400	27.5	7.7	CWX		Feb-17
PM106976	Blue Valley	269767	7529696	400	27	29.8	PMPL	a106685	3-Apr-09
WS07947	Davis River	274029	7548645	400	26.9	14.8	PMPL	C62 2005 2016S	21-Sep-09
SSC004	Davis River	274428	7549340	400	26.1	22.2	PMPL	C62 2005 2016S	14-May-12
SS08340	Davis Niver	279404	7545527	400	26	31.6	CWX	2005_20105	Jun-17
CDRK002	Davis River	268903	7554081	400	25.6	1.9	PMPL	C62 2005 2016S	25-Mar-14
WS07950	Davis River	273991	7548956	400	25.4	16.5	PMPL	C62 2005 20165	21-Sep-09
SB001	Stirrup	273991		400	25.2	32.7	CWX	02_2005_20103	
		-	7535378		25.2	34.3		-100005	Feb-17
EDBV003	Blue Valley	269797	7529442	400	24.9	37.7	PMPL	a106685	8-Feb-09
EDBV001	Blue Valley	269818	7529450	400			PMPL	a106685	8-Feb-09
SSC003	Davis River	274381	7549356	400	24.6	28.8	PMPL	C62_2005_2016S	14-May-12
SA079124	Saddleback	280524	7535234	400	24.4	34.1	CWX	100005	Aug-18
PM106977	Blue Valley	269744	7529682	400	24.4	35.7	PMPL	a106685	3-Apr-09
CDRK003	Davis River	269004	7554041	400	24.3	1.7	PMPL	C62_2005_2016S	25-Mar-14
PM102289	Davis River	276394	7543265	400	23.8	38.2	PMPL	a081476	14-Oct-08
EDBV008	Blue Valley	269894	7529484	400	23.8	31	PMPL	a106685	8-Feb-09
WS07913	Constantine	274141	7539360	400	23.7	35.9	PMPL	a106685	9-Aug-09
SS09210	Mt Divide	274169	7539386	400	23.6	33	CWX		Aug-17
PM106975	Blue Valley	269799	7529690	400	23.4	38.7	PMPL	a106685	3-Apr-09
AZ-08	Davis River	270803	7554113	400	23.3	26.7	PMPL	C62_2005_2016S	12-Jul-13
PM79180	Bee Hill	266588	7533403	400	23	33.2	PMPL	a081476	
WS19511	Mordred	280874	7534687	400	22.8	39.4	PMPL	a106685	19-Oct-09
PM106978	Blue Valley	269743	7529638	400	22.7	41	PMPL	a106685	3-Apr-09
PM78216	BV2	268736	7532718	400	22	35.7	PMPL	a081476	
WD1266/1		279225	7527177	400	21.7	55.9	PMPL	a074686	
AZ25	Davis River	271469	7554399	400	21.5	33	PMPL	C62_2005_2016S	1-Nov-13
PM106974	Blue Valley	269816	7529680	400	21.4	39.7	PMPL	a106685	3-Apr-09
OR20	Davis River	269371	7554243	400	21.3	2.7	PMPL	C62_2005_2016S	31-Oct-13
AZ-09	Davis River	270834	7554128	400	20.6	45.1	PMPL	C62_2005_2016S	12-Jul-13
OR16	Davis River	269164	7554354	400	20.2	13.3	PMPL	C62_2005_2016S	31-Oct-13
AZ-34	Davis River	271572	7554274	400	20	36.8	PMPL	C62_2005_2016S	15-Nov-14
PM79381	Bee Hill	281682	7550566	400	19.4	35.8	PMPL	a081476	
TD-04	Teddy	258815	7542253	400	19	1.4	PMPL	a106685	23-Oct-11
SA062407	Regional	278004	7529432	400	17.6	38.1	CWX		Feb-17
PM79440	Bee Hill	279395	7545778	400	17.5	39.6	PMPL	a081476	
SS09213		274760	7541685	400	17	26.6	CWX		Aug-17
AZ-11	Davis River	270971	7554283	400	17	5.5	PMPL	C62 2005 2016S	12-Jul-13
APSS003	Davis River	270802	7554147	400	16.9	44.6	PMPL	C62_2005_2016S	27-May-12
WS07911	Mount Divide	273878	7541072	400	16.7	9.8	PMPL	C62 2005 2016S	9-Aug-09
PM72387		269810	7529683	400	16.4	46.2	PMPL	a077797	
PM72391		269940	7529083	400	16.4	47.5	PMPL	a077797	
WS07902	Mount Divide	274751	7529930	400	16.4	33.6	PMPL	C62_2005_2016S	9-Aug-09



PM72395		270086	7529411	400	15.5	38.4	PMPL	a077797	
T47	Tubbuddabudda	274459	7530329	400	15.4	28.2	GRE		
PM72385		269812	7529448	400	15.3	47.4	PMPL	a077797	
TD-05	Teddy	258803	7542283	400	14.9	2	PMPL	a106685	23-Oct-11
SA079089	Western Star	275051	7530580	400	14.7	7.2	CWX		Jun-18
SS09203	Mt Rundall	269815	7529692	400	14.6	40.1	CWX		Aug-17
PM78222	Bee Hill	269770	7529590	400	14	46.9	PMPL	a081476	
CDRK001	Davis River	268929	7554059	400	13.9	9.1	PMPL	C62_2005_2016S	25-Mar-14
SS09206	Mt Rundall	269961	7529453	400	13.8	47.7	CWX		Aug-17
CM10008	Stirrup	280709	7534698	400	13.1	54.2	CWX		Sep-16
WS07903	Mount Divide	274172	7540631	400	12.5	42.1	PMPL	C62_2005_2016S	9-Aug-09
WS07917	Constantine	273304	7538814	400	12.1	49.1	PMPL	a106685	10-Aug-09
WS07951	Davis River	273864	7550154	400	12.1	25.9	PMPL	C62_2005_2016S	21-Sep-09
SS09209		274514	7541357	400	11.7	8.6	CWX		Aug-17
SSC005	Davis River	274407	7549352	400	11.6	42.7	PMPL	C62_2005_2016S	14-May-12
SS08342	Arizona	271490	7554372	400	11	40.7	CWX		Jun-17
OR15	Davis River	269123	7554370	400	10.6	4	PMPL	C62_2005_2016S	31-Oct-13
TD-06	Teddy	259365	7542130	400	10.2	3.8	PMPL	a106685	23-Oct-11
SS09204	Mt Rundall	269806	7529681	400	9.9	52.8	CWX		Aug-17
SA079136	Western Star	275179	7530524	400	9.6	6.7	CWX		Aug-18
TD-02	Teddy	258554	7542256	400	8.5	1.1	PMPL	a106685	23-Oct-11
SA042192	Regional	278696	7529472	400	8.2	5	CWX		Feb-17
EDBV004	Blue Valley	269883	7529413	400	7.8	47.6	PMPL	a106685	8-Feb-09
SSC006	Davis River	273760	7549408	400	7.7	11.2	PMPL	C62_2005_2016S	14-May-12
PM79439	Bee Hill	279400	7545528	400	7.7	47.4	PMPL	a081476	
EDBV006	Blue Valley	270065	7529404	400	7.5	47.1	PMPL	a106685	8-Feb-09
WS07901	Mount Divide	274535	7541331	400	7.4	8	PMPL	C62_2005_2016S	9-Aug-09
CB20003		278710	7529480	400	7.4	8	CWX		Sep-16
AZ-10	Davis River	270916	7554214	400	7.3	5.5	PMPL	C62_2005_2016S	12-Jul-13
SA042191	Regional	278699	7529485	400	7.1	4.4	CWX		Feb-17
OR14	Davis River	269113	7554368	400	7	3.2	PMPL	C62_2005_2016S	31-Oct-13
PM78219	Bee Hill	270230	7529600	400	6.1	46.8	PMPL	a081476	
EDBV005	Blue Valley	269937	7529442	400	6	54.4	PMPL	a106685	8-Feb-09
APSS001	Davis River	270608	7554274	400	4.9	33.1	PMPL	C62_2005_2016S	27-May-12
SA079087	Western Star	274907	7530684	400	4.5	4	CWX		Jun-18
CB20002	Old Mia	281787	7533240	400	4.4	4.4	CWX		Sep-16
SA079085	Western Star	274865	7530712	400	4.1	3.8	CWX		Jun-18
APSS002	Davis River	270614	7554244	400	4.1	35	PMPL	C62_2005_2016S	27-May-12
AZ-13	Davis River	270798	7554273	400	3.8	4.6	PMPL	C62_2005_2016S	12-Jul-13
3658139	Donkan	269196	7534762	400	3.4	30.2	CRA	a39518	
SA079084	Western Star	274939	7530690	400	3.3	4.9	CWX		Jun-18
3658114	Donkan	273247	7532662	400	3.2	5.6	CRA	a39518	
3658167	Donkan	272026	7538052	400	2.8	1.2	CRA	a39518	
SSC002	Davis River	273754	7549382	400	2.7	29.4	PMPL	C62_2005_2016S	14-May-12
SA079088	Western Star	274937	7530674	400	2.6	10.5	CWX		Jun-18
SS08341	Arizona	271489	7554370	400	2.5	46.5	CWX		Jun-17
SA079079	Western Star	274976	7530631	400	2.4	3.1	CWX		Jun-18
SS09202	Donkan	273290	7532763	400	2.3	4.8	CWX		Aug-17
SA079080	Western Star	274990	7530626	400	2	1.6	CWX		Jun-18
WD1206/1		281717	7533297	400	2	4.3	PMPL	a074686	
AZ29	Davis River	271222	7554401	400	1.9	17.8	PMPL	C62_2005_2016S	1-Nov-13
SA079081	Western Star	275013	7530615	400	1.7	1.7	CWX		Jun-18
SA042187	Western Star	274769	7530416	400	1.6	6	CWX		Feb-1
SA079083	Western Star	274964	7530638	400	1.6	6.5	CWX		Jun-1
CM10007	Pancho	282858	7532275	400	1.4	1.8	CWX		Sep-10
SA079130	Western Star	274271	7531567	400	1.2	65.7	CWX		Aug-18
CA07007C	Western Star	275000	7530510	400	1	0.8	CWX		Jun-18
SA079076					1	51.3			14-May-12



SS09216	Mt Rundall North	269850	7537057	400	0.8	13.4	CWX		Aug-17
SA062479	Western Star	274798	7530357	400	0.7	1	CWX		-
				400	0.7	5.8			Jun-17
SS08329	Western star	274690	7530406	400	0.7	0.9	CWX		Jun-17
SS08332	Western star Mt Rundall	274797	7530360	400	0.7	0.9	CWX		Jun-17
SS09220	North	269398	7536693	400	0.7	8.5	CWX		Aug-17
SS09218	Mt Rundall North	269906	7537093	400	0.6	7.6	CWX		Aug-17
SA079082	Western Star	275013	7530615	400	0.5	0.8	CWX		Jun-18
SS09205	Mt Rundall	269815	7529692	400	0.5	1	CWX		Aug-17
SA062401	Western Star	275070	7530453	400	0.4	2.8	CWX		Feb-17
SS08326	Western star	274747	7530386	400	0.4	0.4	CWX		Jun-17
SS08331	Western star	274559	7530501	400	0.4	8.7	CWX		Jun-17
SS08334	Western star	275015	7530474	400	0.4	0.8	CWX		Jun-17
SS09211	Mt Divide	274206	7540676	400	0.4	0.9	CWX		Aug-17
	Mt Rundall				0.4	26.4			
SS09215	North Mt Rundall	269861	7537049	400			CWX		Aug-17
SS09217	North	269887	7537063	400	0.4	39	CWX		Aug-17
OR30	Davis River	269669	7554348	400	0.3	65.4	PMPL	C62_2005_2016S	1-Nov-13
CB20007	Western Star	275003	7530479	400	0.3	11.1	CWX		Sep-16
SA062471	Western Star	274737	7530584	400	0.3	7.4	CWX		Jun-17
SA062473	Western Star	274757	7530573	400	0.3	1.5	CWX		Jun-17
SA079074	Western Star	275034	7530386	400	0.3	7.4	CWX		Jun-18
SA079075	Western Star	275016	7530496	400	0.3	20.3	CWX		Jun-18
SA079077	Western Star	275024	7530383	400	0.3	3.1	CWX		Jun-18
SA079078	Western Star	274951	7530618	400	0.3	19.2	CWX		Jun-18
SS08330	Western star	274649	7530417	400	0.3	0.5	CWX		Jun-17
SS08330	Western star	274045	7530354	400	0.3	27.4	CWX		Jun-17
SA042193	Stirrup	280304	7535757	400	0.2	23.6	CWX		Feb-17
SA042195	Regional	277990		400	0.2	33.8	CWX		
			7529431		0.2	8.7			Feb-17
SA062477	Western Star	274550	7530453	400	0.2	5.5	CWX	CC2 2005 201CC	Jun-17
AZ-01	Davis River	270595	7553768	400			PMPL	C62_2005_2016S	10-Jul-13
WD1208/1		281424	7531953	400	0.2	13.2	PMPL	a074686	
WD1265/1		280359	7528279	400	0.2	14	PMPL	a074686	
AZ-04	Davis River	270651	7553453	400	0.1	17.4	PMPL	C62_2005_2016S	12-Jul-13
AZ-03	Davis River	270667	7553490	400	0.1	60.2	PMPL	C62_2005_2016S	12-Jul-13
CB20004	Western Star	275528	7530324	400	0.1	1.3	CWX		Sep-16
CB20005	Western Star	275528	7530325	400	0.1	0.9	CWX		Sep-16
CB20008	Western Star	274986	7530511	400	0.1	9.6	CWX		Sep-16
CB20009	Western Star	274942	7530536	400	0.1	12.2	CWX		Sep-16
CB20010	Western Star	274810	7530628	400	0.1	3.7	CWX		Sep-16
CB20012	Western Star	274788	7530307	400	0.1	7.2	CWX		Sep-16
CM10009	Stirrup	280923	7535128	400	0.1	63.9	CWX		Sep-16
CM10010	Stirrup	280518	7535227	400	0.1	64.7	CWX		Sep-16
CM10011	Stirrup	280463	7535388	400	0.1	60.2	CWX		Sep-16
CM10013	Western Star	275505	7530325	400	0.1	50.1	CWX		Sep-16
CM10015	Constantine Sou	274082	7538566	400	0.1	65.7	CWX		Feb-17
SA062404	Western Star	274850	7530873	400	0.1	45.7	CWX		Feb-17
SA062472	Western Star	274741	7530580	400	0.1	8.7	CWX		Jun-17
SA062476	Western Star	274520	7530450	400	0.1	6.7	CWX		Jun-17
SA062478	Western Star	274573	7530271	400	0.1	58.7	CWX		Jun-17
SS08328	Western star	274690	7530409	400	0.1	6.6	CWX		Jun-17
	Mt Rundall				0.1	2.6			
SS09219	North	269641	7537301	400			CWX		Aug-17
3658138	Donkan	269196	7534762	400	0.1	31.1	CRA	a39518	
AZ-02	Davis River	270635	7553763	400	0	28.7	PMPL	C62_2005_2016S	12-Jul-13
AZ-05	Davis River	270605	7553562	400	0	31	PMPL	C62_2005_2016S	12-Jul-13
AZ-06	Davis River	270590	7554160	400	0	23.3	PMPL	C62_2005_2016S	12-Jul-13
CB20006	Western Star	275323	7530350	400	0	1.2	CWX		Sep-16



CB20011	Western Star	274777	7530481	400	0	22.7	CWX		Sep-16
CM10012	Stirrup	280306	7535504	400	0	63.2	CWX		Sep-16
SA062470	Western Star	275629	7530449	400	0	28.1	CWX		Jun-17
565186	Tubbuddabudda	274936	7530462	400	0	0	GRE	a63083	
565186	Tubbuddabudda	274936	7530462	400	0	0	GRE	a63083	

# APPENDIX 2- JORC Table 1 for previous rock chip samples results from within the boundaries of the Oakover West Project tenements

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Point surface samples consisting of rock chips of outcropping bedrock, to a nominal 0.5- 2kg weight.</li> <li>Each sample was described at the site and time of collection to ensure accurate records of sampled material. Samples were selected based on mineralisation / alteration zones, or to distinguish low level alteration indicating potential mineralisation at depth.</li> <li>The samples are selective but representative of the outcrop from which they were taken.</li> <li>Rock chip sampling is an industry wide field technique for establishing metal content to understand potential tenor of the underlying mineralisation.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, openhole 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).</li> </ul>	Not applicable
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Not applicable
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All samples have been logged at the time and location of collection, enabling them to be placed in geological context.</li> <li>All surface samples have been logged to high detail.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the</li> </ul>	<ul> <li>Samples were collected dry and consisted of multiple chips dislodged and fractured by a geological pick.</li> <li>Samples were between a nominal 0.5-2kg weight and placed directly in to numbered calico bags at the collection point.</li> <li>Appropriate assay techniques were designated at the point of collection based on the perspective commodity.</li> <li>Single point samples.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>grain size of the material being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Assays for the PMPL/CML rock chip samples were analysed at the Woodie Woodie mine laboratory. No detailed information is provided on the quality of the analysis, but the mine relied upon the data for grade control management, so it is assumed to be robust with the insertion of internal laboratory standards and checks to ensure the data can pass control thresholds.</li> <li>Assays for the CWX rock chip samples were analysed at Genalysis</li> <li>Assays from the other Companies is not known.</li> <li>The assay data has sufficient quality for the reporting of Exploration Results.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Assay results summarised in the context of this report have been rounded appropriately.</li> <li>No assay data has been adjusted.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Sample locations were assumed to be surveyed by a hand held GPS +/-5m, at the time of sample collection.</li> <li>RL was not recorded and is not relevant to surface point samples.</li> <li>Coordinates reported are GDA Zone 51.</li> <li>Location data is considered to be of sufficient quality for reporting of exploration results at this early stage.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Selective sampling based on field observation and outcrops identified as hosting potential for mineralisation.</li> <li>Should not be considered representative of the rock mass as a whole but an indication of the local grade at surface</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Samples are representative only of the material sampled and based on surface outcrops it is unknown if the samples have a bias related to orientation of structures or mineralised horizons.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>The samples are generally placed in a calico bag and then secured in a polyweave bag that is zip locked.</li> <li>The analysing laboratories will normally report any tampering or missing samples.</li> <li>This is not considered a high risk given the Project location.</li> </ul>



Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Not applicable at this early stage of exploration

### Section 2 Reporting of Exploration Results

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

	JORC Code explanation	Commentary
Mineral tenement and land tenure status Exploration	<ul> <li>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.</li> <li>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.</li> <li>Acknowledgment and appraisal of exploration</li> </ul>	<ul> <li>The rock chip samples were taken across tenements E46/1382, E46/1119-I, E46/1069-I and E42/1422</li> <li>Black Canyon has a farm-in and joint venture agreement with Carawine Resources Ltd (ASX:CWX), giving Black Canyon the right to earn an initial 51% interest and up to 75% in the Oakover West Projects that includes E46/1119-I and E46/1069-I.</li> <li>The tenements are subject to Native title and forms part of a Heritage Agreements with the Palyku-Jartay, Njamal and Karlka Nyiyaparli People</li> <li>The exploration data reported was primarily gathered and</li> </ul>
done by other parties	by other parties.	validated by Consolidated Minerals (PMPL) and CWX between 2003 and 2018
Geology	Deposit type, geological setting and style of mineralisation.	The geology and mineralisation is described in the body of the release
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	<ul> <li>Not applicable to rock chips results</li> <li>Rock chip locations and analysis for Mn and Fe are provided in Appendix 1.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>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 used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>All sample results are listed in Appendix 1.</li> <li>Those considered significant in terms of grade and potential to indicate potential mineralisation are highlighted in the body of the release.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	No drill widths or intervals reported
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>See body of the release for geology and tabulation of surface sample assays.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable,	All information considered material to the reader's understanding and context of the Exploration Results have



Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul><li>been reported.</li><li>All rock chip data has been reported in Appendix 1</li></ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Information relating to the most advanced data from the primary prospects on the tenement have been reported.</li> <li>Surface mapping has been conducted at this tenement and is summarised in the plan within the body of the release.</li> <li>All information considered material to the reader's understanding and context of the Exploration Results has been reported.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work is planned to continue evaluating the prospects at the Oakover East Projects that will involve more prospecting, geophysics and drilling</li> </ul>