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#### 9 October 2024

Company Announcement Officer ASX Limited Exchange Centre 20 Bridge Street SYDNEY NSW 2000

# Drilling to commence at Bara Creek Prospect, a high-priority epithermal target

#### **HIGHLIGHTS**

- Drilling is set to commence at the Company's Bara Creek Prospect, located seven kilometres to the north of the globally significant Bowdens Silver Project.
- The Bara Creek prospect is interpreted to be a high-sulphidation, epithermal system, originally identified in 1989 from anomalous Au-As-Ag-Cu-Sb stream sediments sampled by CRA Exploration.
- Until recently, limited exploration had been undertaken with no drilling completed.
- Silver Mines commenced a major program of field work in 2023, including mapping, geochemical surveying and a close-spaced, ground-based gravity survey, which has identified an extensive hydrothermal system at surface on the southern extent of the Bara Creek caldera<sup>1</sup>.
- Rock chip and soil sampling results highlight the prospectivity of the Bara Creek caldera with anomalous Au, Ag, Bi, Mo and As.
- The geochemical anomalism is situated between major NW trending and EW trending faults, confirmed from both mapping and geophysics, interpreted to be potential fluid conduits to an epithermal mineral system.
- Both the Bara Creek caldera and the Bowdens Silver Deposit are located within the highly prospective Rylstone Volcanics.
- The Stage 1 drilling program will consist of eight diamond drill holes for 2,600m.

  All approvals are in place with drilling schedule to commence on 14 October.

Silver Mines Limited

<sup>&</sup>lt;sup>1</sup> Silver Mines Limited (ASX:SVL) release "Results from Seismic Surveying Identify Potential New Calderas within the Bowdens District" dated 28 June 2024.



#### **Introduction**

Silver Mines Limited (ASX:SVL) ("Silver Mines" or "the Company") is pleased to announce that the first ever drilling program will commence at the Bara Creek Prospect ("Bara Creek"), situated within the Bowdens Silver Project. The Bowdens Silver Project is located 26 kilometres east of Mudgee in Central NSW. The drilling activity has been approved by the NSW Resources Regulator.

Bara Creek represents a greenfield discovery opportunity. CRA Exploration ("CRAE") identified Bara Creek in 1989 after anomalous gold, arsenic, silver, copper and antimony assays were returned from regional stream sediment sampling. Limited follow up work confirmed gold in some rock chip samples, extensive quartz veining and significant silica and clay alteration of felsic volcanics. No exploration has been completed at the Prospect since. Bara Creek is situated about seven kilometres to the northwest of the Bowdens Silver Deposit ("the Deposit"). It was suggested by CRAE geologists that Bara Creek resembles a high-sulphidation epithermal equivalent to the Deposit, which is characteristically low to intermediate sulphidation.



Figure 1: Location of the Bara Creek prospect within the Bowdens Silver Project.



#### **Bara Creek Geochemistry**

Comprehensive rock chip sampling throughout the Bowdens Volcanic Complex defines the Bara Creek prospect in various indices of alteration relevant to epithermal systems. One shown in Figure 2 shows the sericite alteration index (from low to high) within the Rylstone Volcanics where high values indicate the likely change in primary feldspar minerals to sericite, which is a key alteration mineral within epithermal mineral systems. At the Bowdens Silver Deposit, sericite (illite and muscovite) are key alteration minerals found around the ore body.

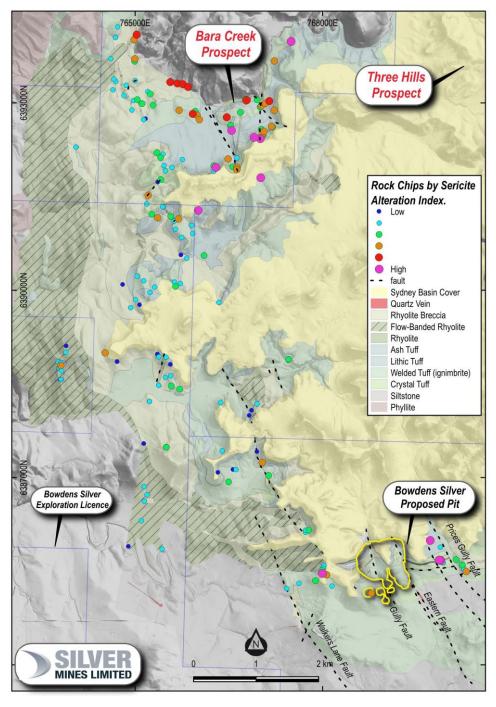


Figure 2: Geology of the Bowdens Volcanic Complex with rock chips indexed for alteration (sericite).



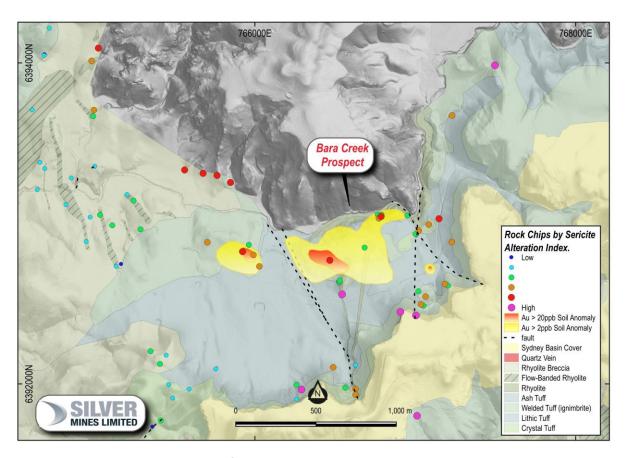


Figure 3: Bara Creek prospect with gold from soil samples above 2 parts per billion.

Results from soil sampling highlight coherent gold, arsenic, bismuth, antimony, silver and molybdenum anomalies across the geology where alteration is strongest. Figure 3 shows an elevated area of gold (above 2 parts per billion (ppb)) that encapsulates a 20ppb gold anomaly, with values as high as 85 ppb. This area is a priority target for drill testing, situated between two clear NW trending faults and a N trending fault.

#### **Bara Creek Geology**

Initial mapping work by the Company has found there to be a felsic volcanic centre (Bara Creek caldera) with a multitude of faults transecting the caldera rim and through the centre of the system. When viewed regionally, a number of these faults are inferred to be direct continuations of the fault system that borders the mineralisation at the Bowdens Silver Deposit (Gully, Eastern and Prices Gully faults).

Associated with these faults at Bara Creek are multi-phase hydrothermal breccia veins with oxidised ex-sulphide pits (Figure 4). Some fresh pyrite and sphalerite are observable in quartz veins.



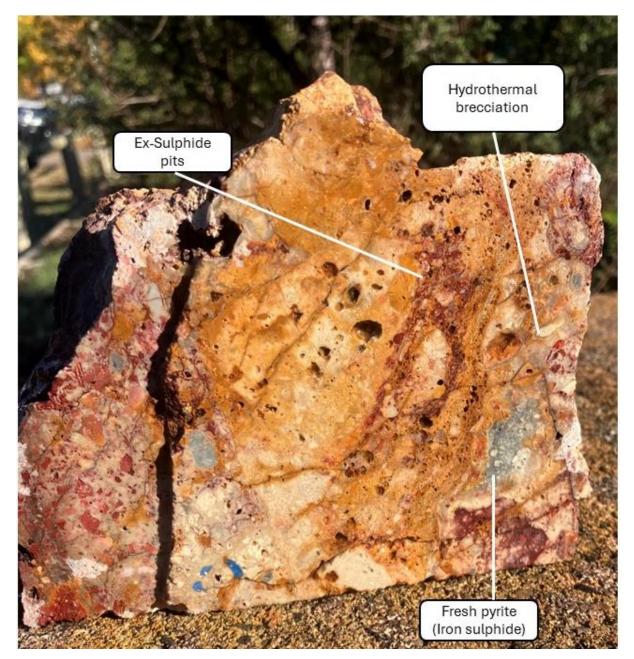


Figure 4: polyphasal hydrothermal breccia vein with oxidation and some fresh sulphides (sample 72452).

Within the centre of the Bara Creek caldera, pyroclastics, epiclastics and lavas are significantly altered to green clays (some silica), and narrow sheeted quartz vein networks are developed in proximity to two key northwest trending faults. These quartz veins have visible fresh pyrite and minor sphalerite and are associated with the anomalous geochemistry in both soil and rock samples.

The southwest rim of the caldera appears to have been destroyed by the resurgence of a rhyolite lava dome. The lava has flowed north and south stretching nearly six kilometres and is distinct in magnetic and gravity data. Within the caldera, the lava is glassy (vitreous) green and exhibits multiple auto brecciated phases which are also glassy green in nature. Samples of strongly spherulitic rhyolite lava show the extremely hydrous nature of the volcanic system.





Figure 5: spherulitic rhyolite in creek (not mineralised).



Figure 6: glassy green rhyolite (sample 71670).

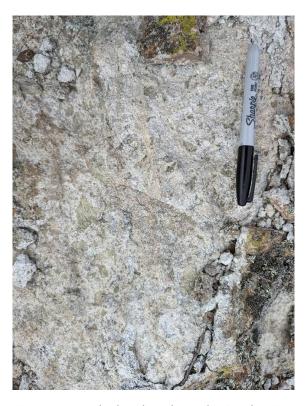


Figure 7: strongly clay altered pyroclastic volcanic (sample 72432).



Figure 8: green, glassy auto brecciated rhyolite (sample 71668).



#### **Exploration Program**

The Company has completed a ground-based gravity survey across Bara Creek, Three Hills caldera and around areas not yet surveyed at the Bowdens Silver Deposit. This dataset highlights the structure of the Bara Creek caldera, as well as providing direct drill targets. The Bowdens Silver Deposit is associated with higher density material relative to the surrounding Rylstone Volcanics and it's anticipated that any new mineralisation targeted will be analogous to Bowdens.

The first stage of the drilling program will include eight diamond drill holes for a total of 2,600 metres. Dependent on results, a second stage of drilling has also been planned, which include an additional four diamond holes for 1,600 metres (Figure 9).

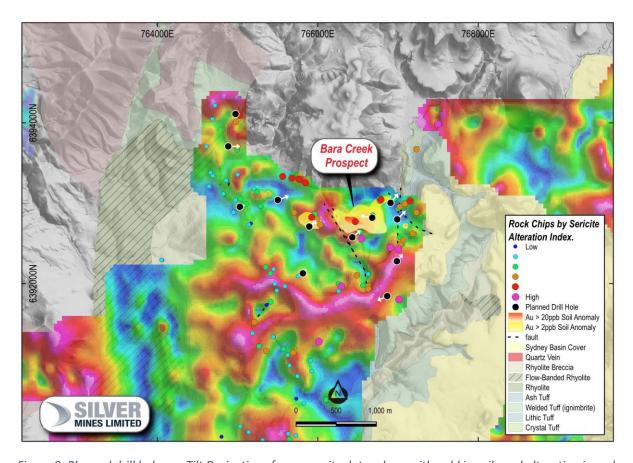


Figure 9: Planned drill holes on Tilt Derivative of new gravity data, along with gold in soils and alteration in rock samples.



#### **About the Bowdens Silver Project**

The Bowdens Silver Project is in central New South Wales, approximately 26 kilometres east of Mudgee (Figure 10). The consolidated project area comprises 2,115 km² (521,000 acres) of titles covering approximately 80 kilometres of strike of the highly mineralised Rylstone Volcanics. Multiple target styles and mineral occurrences have potential throughout the district including analogues to Bowdens Silver, high-grade silver-lead-zinc epithermal and volcanogenic massive sulphide (VMS) systems and copper-gold targets.

Bowdens Silver is the largest undeveloped silver deposit in Australia with substantial resources and a considerable body of high-quality technical work completed. The project boasts outstanding logistics for mine development.

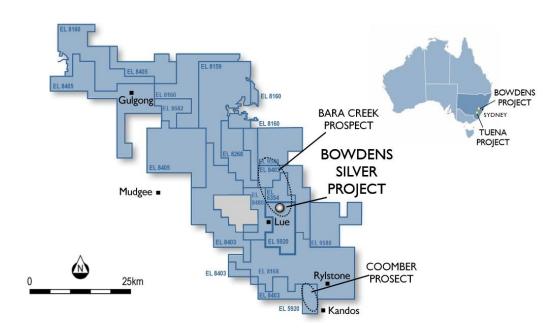


Figure 10: Silver Mines Limited tenement holdings in the Mudgee district.

This document has been authorised for release to the ASX by the Company's Managing Director, Mr Jonathan Battershill.

#### **Further information:**

Jo Battershill Managing Director Silver Mines Limited +61 2 8316 3997 Christina Granger Account Director M+C Partners +61 438 117 286



#### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Thomas Klein who is an employee of Silver Mines Limited. Mr Klein is a Member of the Australian Institute of Geoscientists and 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). Mr Klein consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Table 1: Rock chip details including relevant chemistry reported in this release. ISER = Index of Sericite (details outlined in JORC Table).

Prospect	Sample ID	GDA94 East	GDA94 North	Au (ppm)	Ag (ppm)	As (ppm)	Bi (ppm)	Sb (ppm)	Pb (ppm)	Zn (ppm)	ISER
Bara Creek	71362	765725	6390108	-	0.01	0.10	0.01	-	14.00	16.00	89.66
Bara Creek	71651	765268	6391217	0.02	0.16	5.00	0.09	3.19	8.00	7.00	94.64
Bara Creek	74869	765695	6391142	-	0.06	2.30	0.22	1.60	12.50	13.00	93.90
Bara Creek	73288	765138	6390150	-	0.01	0.30	0.04	0.09	14.40	7.00	90.63
Bara Creek	74866	765646	6390978	0.01	0.01	2.70	0.09	0.76	14.80	8.00	93.68
Bowdens	78422	766827	6387994	-	0.01	0.10	0.01	-	10.00	12.00	63.64
Quarry	73278	764711	6388856	0.01	0.02	0.50	0.19	0.14	14.60	18.00	62.59
Quarry	73278	764711	6388856	0.01	0.02	0.50	0.19	0.14	14.60	18.00	62.59
Quarry	68837	763808	6388796	-	0.01	0.10	0.01	-	14.00	25.00	51.28
Bara Creek	78427	764052	6392292	-	0.01	9.00	0.01	-	14.00	28.00	94.91
Bara Creek	73289	765031	6390222	-	0.01	0.40	0.05	0.11	7.60	10.00	90.69
Bara Creek	72457	765447	6391333	-	0.02	5.20	0.08	0.46	18.40	10.00	88.34
Bara Creek	72437	766766	6393055	0.01	0.26	2.70	0.46	6.25	5.50	20.00	97.57
Bara Creek	72443	766544	6392558	-	0.04	11.20	0.01	1.14	44.00	14.00	98.10
Bara Creek	71653	765571	6391183	-	0.03	1.80	0.12	0.24	7.40	15.00	94.51
Bara Creek	72458	765408	6392124	-	0.02	5.10	0.03	4.20	18.00	44.00	92.09
Quarry	72045	765486	6388600	-	0.14	4.50	0.14	1.26	13.70	13.00	88.78
Quarry	73279	764520	6388996	0.01	0.01	1.60	0.39	0.26	11.60	7.00	87.59
Bowdens	72099	767427	6385222	-	0.05	13.30	0.06	0.71	22.90	14.00	94.60
Bara Creek	71365	765732	6390566	-	0.01	0.10	2.00	-	14.00	11.00	76.84
Bara Creek	72468	764948	6392887	-	0.04	7.90	0.34	1.22	17.80	11.00	94.48
Quarry	73280	765495	6388927	-	0.01	1.50	0.19	0.38	16.30	33.00	63.55
Bara Creek	71667	764690	6393342	0.01	0.03	3.90	0.26	0.54	11.20	15.00	94.08
Bara Creek	71658	765488	6391912	-	0.02	2.70	0.08	2.08	16.50	33.00	93.14
Bara Creek	74863	766012	6391278	0.01	0.02	2.40	0.24	1.81	7.80	7.00	88.02
Bara Creek	74854	766291	6391965	-	0.01	2.60	0.03	0.53	4.80	39.00	97.12
Bara Creek	71360	765631	6390129	0.01	0.01	5.00	0.01	-	9.00	9.00	90.21
Bara Creek	71652	765360	6391162	-	0.04	3.70	0.33	0.51	11.60	16.00	96.07
Bara Creek	74857	766627	6391968	-	0.01	1.40	0.08	0.67	4.10	25.00	98.02
Bara Creek	72405	767035	6392495	-	0.02	2.90	0.27	2.79	27.20	44.00	95.75



_		GDA94	GDA94	Au	Ag	As	Bi	Sb	Pb	Zn	
Prospect	Sample ID	East	North	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	ISER
Bowdens	72397	765148	6386620	-	0.03	12.20	0.21	1.30	14.00	24.00	87.41
Bara Creek	71661	765562	6393333	-	0.06	2.90	0.17	12.50	3.50	15.00	97.89
Bara Creek	72459	765447	6392179	0.01	0.06	5.80	0.10	1.97	10.60	16.00	91.69
Bara Creek	71655	765443	6391335	-	0.01	4.20	0.09	0.47	11.50	22.00	90.38
Bara Creek	72439	766684	6392849	-	0.02	7.80	0.06	2.15	5.90	11.00	97.13
Quarry	72046	765569	6388631	-	0.02	11.30	0.14	0.85	9.90	11.00	86.98
Quarry	68836	763811	6388793	-	0.01	0.10	0.01	-	11.00	41.00	94.40
Bowdens	72145	765191	6386723	-	0.01	24.90	0.01	0.63	12.80	48.00	85.81
Bara Creek	71367	766340	6389805	-	0.01	9.00	0.01	-	24.00	9.00	85.49
Bara Creek	71659	765413	6391772	-	0.01	4.80	0.12	2.09	17.70	40.00	94.49
Quarry	72044	765377	6388476	-	0.01	2.20	0.38	0.18	19.60	38.00	87.56
Bowdens	72398	765432	6385853	-	0.18	3.50	0.11	0.28	18.80	5.00	85.12
Bara Creek	72404	767185	6392622	0.01	0.02	2.60	0.23	4.50	11.40	47.00	94.24
Bara Creek	72461	765590	6391967	0.01	0.03	2.90	0.05	3.34	9.80	36.00	93.01
Bara Creek	73287	764928	6389719	-	0.02	4.30	0.34	0.14	21.00	75.00	66.52
Bara Creek	72471	765243	6393142	-	0.01	4.60	0.72	2.19	9.80	23.00	96.91
Bara Creek	73285	765312	6390049	-	0.01	0.60	0.25	0.18	6.50	18.00	88.69
Bara Creek	72424	767011	6391801	-	0.05	5.00	0.17	0.66	15.60	24.00	90.66
Bara Creek	71657	765209	6391518	-	0.01	2.60	0.18	3.59	10.50	21.00	93.02
Bara Creek	71662	765677	6393312	-	0.04	26.70	0.25	5.50	11.40	14.00	98.27
Bara Creek	72401	767229	6393672	-	0.02	4.70	0.18	2.13	22.70	60.00	97.45
Bara Creek	72407	767004	6392426	-	0.03	7.40	0.27	3.44	11.40	58.00	96.95
Bara Creek	71665	765001	6393356	-	0.01	6.30	0.14	1.27	7.90	5.00	96.35
Quarry	73282	765356	6388976	-	0.01	0.10	0.10	0.27	21.70	43.00	49.33
Bowdens	72098	767624	6385304	-	0.04	20.20	0.07	0.76	187.00	25.00	88.40
Bowdens	68071	769895	6385671	0.02	0.01	6.00	0.01	-	5.00	13.00	92.04
Bara Creek	72406	767051	6392487	-	0.12	3.90	0.08	6.24	27.90	162.00	96.40
Bara Creek	71656	765185	6391382	-	0.05	1.80	0.05	3.01	16.20	53.00	92.18
Bara Creek	72402	767148	6393029	-	0.01	2.20	0.26	0.35	14.90	30.00	98.09
Bowdens	68830	766566	6387128	-	0.01	14.00	0.01	-	17.00	55.00	54.91
Bara Creek	72470	765165	6392747	-	0.03	8.70	0.36	2.74	16.00	17.00	82.99
Bara Creek	72423	767064	6392544	-	0.01	3.40	0.15	6.16	12.40	46.00	96.57
Bara Creek	71663	765764	6393299	0.17	0.58	35.20	0.21	7.56	9.30	19.00	98.06
Bara Creek	72469	765135	6392733	0.01	0.02	18.50	0.13	3.11	12.20	14.00	94.27
Bowdens	72396	765100	6386307	-	0.10	10.20	0.96	0.86	23.40	41.00	92.02
Bara Creek	74870	764992	6393668	-	0.08	60.30	1.32	12.60	20.80	19.00	97.52
Bara Creek	74874	764718	6394217	-	0.02	6.90	0.06	4.49	12.90	19.00	94.78
Bara Creek	72465	765111	6392988	0.01	0.02	4.50	0.31	0.57	7.20	34.00	97.24
Bara Creek	72466	765035	6393053	0.01	0.02	7.10	0.43	5.23	5.40	44.00	97.95
Bara Creek	72464	765287	6392963	0.01	0.02	7.90	0.17	2.83	16.00	34.00	96.34
Bara Creek	71668	764660	6393381	-	0.02	7.20	0.17	6.65	10.60	11.00	95.03
Bara Creek	72426	766907	6392448	-	0.01	3.50	0.12	1.26	18.30	93.00	97.49



Broomaat	Sample ID	GDA94	GDA94	Au	Ag	As	Bi	Sb	Pb	Zn	ISER
Prospect	Sample ID	East	North	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	ISER
Bara Creek	71664	765848	6393255	-	0.14	47.30	0.27	10.30	16.30	25.00	98.20
Bara Creek	74873	765024	6394092	-	0.21	41.50	0.25	14.05	27.80	44.00	98.05
Bara Creek	78425	764060	6392291	-	0.01	5.00	2.00	0.00	24.00	23.00	44.04
Bowdens	68067	770239	6385598	-	0.01	0.10	2.00	0.00	6.00	15.00	94.59
Bara Creek	72473	765704	6392882	0.03	0.34	50.80	0.34	8.25	13.00	15.00	97.70
Bara Creek	73286	765005	6389847	-	0.01	3.10	0.26	0.13	22.10	31.00	66.42
Bara Creek	73290	764799	6390092	-	0.01	1.60	0.24	0.25	21.00	25.00	72.42
Bowdens	68072	769867	6385678	-	0.01	0.10	0.01	0.00	6.00	20.00	92.82
Quarry	73281	765379	6388933	0.01	0.01	1.30	0.18	0.32	14.80	43.00	62.35
Bara Creek	74861	765922	6390909	-	0.04	12.00	0.10	0.44	15.00	24.00	85.67
Bara Creek	74879	767497	6393985	-	0.01	5.00	0.11	4.53	8.20	47.00	98.08
Bara Creek	72475	764688	6394054	-	0.05	36.90	0.37	0.65	20.10	44.00	75.44
Bara Creek	72467	764973	6393039	0.01	0.02	12.20	0.20	3.08	10.00	10.00	96.26
Bara Creek	72450	765991	6392804	-	0.07	19.40	0.39	2.19	17.70	29.00	97.65
Bara Creek	74853	766260	6391994	-	0.07	4.00	0.23	0.82	21.60	71.00	96.76
Bara Creek	71366	766103	6390554	-	0.01	0.10	2.00	-	9.00	39.00	89.92
Quarry	68834	763808	6388568	-	0.01	12.00	0.01	-	16.00	73.00	71.62
Bara Creek	72415	767022	6392955	0.02	1.55	21.00	1.18	8.21	59.50	10.00	97.15
Bara Creek	72421	767228	6392884	-	0.02	1.50	0.38	0.52	8.00	61.00	97.87
Bara Creek	74871	764996	6393706	0.01	0.07	227.00	0.08	23.40	12.50	7.00	96.94
Bowdens	72146	765142	6386853	-	0.07	9.40	0.03	0.63	17.40	40.00	72.89
Bara Creek	72462	765756	6392093	-	0.01	5.20	0.23	3.32	17.20	61.00	93.60
Bara Creek	71670	764822	6393117	-	0.03	30.70	0.24	1.75	8.20	6.00	96.71
Bara Creek	72436	766773	6393031	0.01	0.13	18.00	0.49	4.21	19.20	21.00	98.11
Bara Creek	72453	767005	6392933	-	0.09	9.00	0.15	4.28	12.20	12.00	96.61
Bowdens	68826	766949	6387414	-	0.01	26.00	0.01	-	23.00	59.00	51.68
Quarry	68832	763821	6388710	-	0.01	0.10	2.00	-	27.00	67.00	73.67
Bara Creek	71666	764855	6393283	-	0.04	12.00	0.26	1.42	11.60	4.00	97.15
Bara Creek	72449	766028	6392732	-	0.02	3.10	0.15	2.27	7.50	14.00	97.20
Bara Creek	73283	765070	6389767	-	0.01	7.80	0.18	0.27	22.90	10.00	75.29
Bara Creek	72474	764996	6393706	0.01	0.02	85.30	0.05	26.40	11.10	6.00	96.24
Quarry	72147	765138	6387544	-	0.04	2.00	0.06	0.15	18.60	35.00	60.84
Quarry	72147	765138	6387544	-	0.04	2.00	0.06	0.15	18.60	35.00	60.84
Bara Creek	74875	764686	6394047	-	0.08	9.50	0.37	1.96	19.60	45.00	86.09
Bara Creek	74862	765908	6391038	-	0.01	2.60	0.22	0.58	27.00	71.00	82.23
Bara Creek	72472	765203	6393180	0.01	0.05	13.90	0.32	2.87	22.00	26.00	92.15
Bowdens	68066	770236	6385590	-	0.01	0.10	0.01	0.00	6.00	11.00	90.54
Bara Creek	71669	764643	6393210	-	0.02	9.80	0.22	8.21	14.50	7.00	85.96
Bara Creek	74860	766628	6392117	-	0.06	2.60	0.20	4.71	13.70	19.00	88.98
Bara Creek	72403	767203	6392613	-	0.03	5.30	0.35	18.20	15.50	29.00	94.90
Bowdens	78029	768784	6385146	-	31.00	863.00	0.01	16.00	1990.00	703.00	97.63
Bara Creek	72456	766260	6391905	0.01	0.14	28.90	0.16	5.35	11.20	47.00	86.57



Prognest	Sample ID	GDA94	GDA94	Au	Ag	As	Bi	Sb	Pb	Zn	ISER
Prospect	Sample ID	East	North	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	ISER
Quarry	68833	763770	6388850	-	0.01	0.10	0.01	-	123.00	59.00	77.39
Bara Creek	74878	764612	6393708	-	0.02	6.50	0.17	2.02	15.20	29.00	77.00
Bowdens	68070	769931	6385633	0.01	0.01	0.10	0.01	-	6.00	8.00	90.82
Bowdens	68065	770138	6385683	-	0.01	9.00	0.01	-	8.00	49.00	96.11
Bara Creek	74867	765627	6391112	-	0.02	5.00	0.15	0.48	11.20	41.00	95.94
Bowdens	68829	766614	6387127	-	0.01	0.10	0.01	-	15.00	51.00	79.78
Bara Creek	71660	765361	6391733	-	0.04	1.30	0.49	0.85	25.00	125.00	81.71
Bara Creek	72451	766787	6393043	0.01	0.21	6.40	0.25	4.40	13.40	10.00	97.48
Bara Creek	74872	764982	6394013	0.01	0.12	62.00	0.01	18.40	12.80	11.00	97.30
Bara Creek	72460	765463	6391996	0.01	0.08	8.00	0.08	7.26	14.60	57.00	91.96
Bowdens	68825	766271	6387378	-	0.01	15.00	0.01	-	15.00	36.00	70.77
Bara Creek	71364	765826	6390512	-	0.01	0.10	0.01	-	21.00	112.00	80.94
Bara Creek	72446	766527	6392636	-	0.07	16.60	0.17	4.40	6.20	10.00	95.00
Bara Creek	78426	764053	6392293	-	0.01	0.10	2.00	-	31.00	27.00	51.91
Bara Creek	72420	767084	6392993	-	0.03	7.60	0.26	2.16	18.40	17.00	97.47
Bowdens	68029	767451	6388877	0.01	0.03	3.00	0.07	0.51	15.50	67.00	71.88
Bara Creek	71361	765647	6390060	-	0.01	5.00	3.00	-	13.00	22.00	97.45
Bara Creek	72447	766467	6392770	0.08	0.36	109.50	0.37	4.11	24.40	19.00	97.88
Quarry	72048	765713	6388415	-	0.04	13.40	0.40	0.57	56.00	58.00	93.28
Bowdens	72143	764891	6385897	0.03	0.05	2.20	0.10	0.56	23.90	17.00	59.37
Bowdens	68828	767033	6387241	-	0.01	21.00	2.00	-	10.00	11.00	77.92
Bowdens	78028	768784	6385146	-	100.00	4010	0.01	35.00	2840.00	1235	97.12
Bara Creek	72445	766530	6392643	0.01	0.37	34.10	0.13	4.23	26.40	7.00	93.21
Bara Creek	72454	767002	6392933	0.01	0.10	29.80	0.72	6.52	21.60	9.00	96.43
Bara Creek	74858	766564	6391976	-	0.02	3.50	0.15	1.74	10.40	42.00	93.72
Bowdens	72097	767888	6385347	-	0.02	114.50	0.05	1.14	10.40	32.00	96.63
Bara Creek	74856	766628	6391932	-	0.08	13.40	0.02	14.45	16.40	48.00	96.56
Bowdens	68068	770302	6385494	0.01	0.01	34.00	0.01	-	41.00	54.00	93.27
Bowdens	78027	768784	6385146	-	100.00	6310	0.01	39.00	1640.00	392.00	98.15
Quarry	72149	765230	6388218	-	0.03	2.10	0.32	0.17	23.10	65.00	79.60
Quarry	72149	765230	6388218	-	0.03	2.10	0.32	0.17	23.10	65.00	79.60
Bowdens	68028	767454	6388893	-	0.08	10.90	0.09	0.47	51.50	87.00	91.18
Bara Creek	72422	767019	6392577	-	0.10	8.60	0.02	24.40	21.40	23.00	90.71
Bara Creek	74865	765745	6390845	-	0.02	3.20	0.18	0.50	34.10	117.00	91.08
Bara Creek	72427	766905	6392445	0.02	0.07	9.90	0.22	1.76	25.60	20.00	90.11
Bowdens	68074	769718	6386005	-	0.01	8.00	2.00	-	4.00	8.00	83.86
Bowdens	68076	766496	6386929	-	0.01	0.10	0.01	-	5.00	36.00	93.63
Bara Creek	74868	765625	6391110	-	0.02	3.70	0.16	0.33	27.90	137.00	94.07
Bara Creek	74851	765923	6392824	0.01	0.02	30.60	0.27	10.15	5.70	15.00	97.47
Quarry	72047	765579	6388464	0.01	0.05	34.60	0.30	5.27	13.40	11.00	95.01
Quarry	68835	763814	6388567	-	0.01	36.00	0.01	-	28.00	111.00	71.96
Bowdens	78424	766950	6388180	0.01	0.01	6.00	2.00	-	39.00	124.00	84.05



Prospect	Sample ID	GDA94 East	GDA94 North	Au (ppm)	Ag (ppm)	As (ppm)	Bi (ppm)	Sb (ppm)	Pb (ppm)	Zn (ppm)	ISER
Bara Creek	73284	765238	6389964	-	0.03	7.40	0.41	0.60	15.50	15.00	95.00
Bowdens	68831	766324	6387082	-	0.01	0.10	2.00	-	18.00	80.00	41.98
Bowdens	78423	766863	6388076	-	0.01	5.00	2.00	-	40.00	177.00	72.19
Bowdens	68075	769885	6385882	-	0.01	65.00	0.01	5.00	76.00	50.00	91.11
Quarry	68840	763891	6389006	-	0.01	15.00	0.01	-	26.00	217.00	82.68
Bara Creek	72463	765350	6392203	-	0.01	5.10	0.12	2.79	32.30	138.00	94.18
Quarry	72148	765499	6387485	0.01	0.03	0.80	0.12	0.16	3.00	16.00	91.65
Quarry	72148	765499	6387485	0.01	0.03	0.80	0.12	0.16	3.00	16.00	91.65
Bowdens	62227	767138	6387033	-	0.03	126.50	0.13	0.16	13.40	17.00	94.80
Bowdens	62228	767138	6387033	-	0.03	116.50	0.16	0.15	11.60	38.00	95.24
Bowdens	68069	770260	6385530	-	0.01	0.10	0.01	-	16.00	112.00	78.61
Quarry	72049	765563	6388812	0.01	0.01	4.10	0.09	0.77	30.80	275.00	62.12
Bowdens	68820	766369	6388199	-	0.01	7.00	0.01	-	41.00	647.00	90.70
Bara Creek	72452	766790	6393054	0.14	3.82	922.00	0.32	111.00	17.70	9.00	97.49
Quarry	68839	763894	6389108	0.01	0.01	0.10	0.01	-	19.00	130.00	74.96
Bowdens	62385	767726	6386119	-	0.01	2.70	0.04	0.07	8.00	10.00	87.12
Bowdens	68824	766395	6387425	-	0.01	42.00	0.01	-	15.00	108.00	58.10
Bara Creek	74852	765962	6392866	0.20	8.34	1105	0.25	135.50	61.80	31.00	97.43
Bara Creek	74859	766488	6392103	0.01	0.03	2.90	0.15	1.71	12.20	89.00	97.05
Bowdens	62229	767138	6387033	-	0.19	105.00	0.14	2.30	10.30	17.00	96.28
Bowdens	62389	768151	6385259	-	1.29	50.80	0.03	4.47	71.00	85.00	94.80
Bara Creek	72444	766520	6392636	0.01	0.25	12.10	0.04	7.75	3.60	4.00	76.05
Bowdens	62386	767728	6386153	-	0.01	4.40	0.06	0.07	11.90	30.00	84.82
Bowdens	68073	769724	6385991	-	0.01	0.10	0.01	-	19.00	57.00	96.74
Bowdens	62226	767138	6387033	-	0.05	35.50	0.24	-	11.30	39.00	75.53
Bowdens	62373	768021	6385592	-	0.15	53.90	0.12	0.27	11.40	29.00	99.91
Quarry	68838	763809	6388845	0.02	0.01	15.00	0.01	5.00	39.00	341.00	79.58
Bara Creek	72438	766952	6393050	-	0.07	104.50	0.14	0.97	12.30	160.00	91.68
Bowdens	62374	768008	6385547	-	0.02	27.30	0.16	0.25	9.60	62.00	99.93
Bowdens	62388	768064	6385441	-	0.01	73.30	0.19	0.63	17.70	124.00	90.91
Bowdens	62375	767993	6385511	-	0.01	35.30	0.14	0.30	10.50	40.00	99.93
Bowdens	62387	767781	6386155	-	0.01	24.90	0.23	0.38	16.60	158.00	89.17
Bowdens	62376	767997	6385462	-	0.02	29.80	0.14	0.36	11.10	100.00	99.95
Bowdens	62651	766488	6386990	-	0.03	21.50	0.10	0.06	4.60	162.00	84.11



## **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 (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.</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 (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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.</li> </ul>	<ul> <li>Rock chip sampling has been completed on outcrops to gain a representation of the local geologies observed. Outcrops of interest, including mineralisation and alteration have also been sampled with more targeted samples taken.</li> <li>Soil samples have been collected from the 'C' horizon, which is below the organic layer and above the bedrock.</li> <li>Rock samples vary in weight but are generally between 0.25 and 1 kilogram of material.</li> <li>Soil samples vary in weight but are generally between 200 and 400 grams of material.</li> <li>Each Rock sample was sent for multi-element assay using four acid digest ME-MS61 with the entire sample pulverized and homogenized with a 25g extract taken for assay. This is a multi-element ultra trace detection method combining a four-acid digestion with ICP-MS instrumentation which quantitatively dissolves most geological material. Samples were also assayed for gold using fire assay Au-AA23 with a 30g sample taken for assay.</li> <li>The results of rock samples were assessed against indices of alteration using loGas. The Sericite Index (ISER) is based on the General Element Ratio (GER) of K2O and Na2O sensitive to sericite participation. Most often alteration indices have values that increase towards the deposit on district and(or) deposit scale. The index was developed by Saeki Y. and Date J., 1980 Computer application to the alteration data of the footwall dacite lava at the Ezuri Kuroko deposits Akita prefecture, Mining Geology 30, 241-250.</li> <li>Each Soil sample was sent for multi-element assay using aqua regia digest AuME-TL43. This method is a trace detection limit method for gold and multi elements.</li> <li>Assays are considered representative of the samples collected.</li> <li>Gravity Data Collection. Data was collected with the following specifications:</li> </ul>

o Gravity Meter = Scintrex CG5 s/n 051000146



Criteria	JORC Code explanation	Commentary
		<ul> <li>GNSS Receivers x 2 = Trimble R8 Model 3</li> <li>GNSS Telemetry System = Trimble TDL450h</li> <li>Handheld GPS (for general navigation) = Garmin 62</li> <li>Gravity Data Processing. Data was processed with the following specifications:         <ul> <li>Observed Gravity (Tidal correction and Mechanical drift)</li> <li>Bouguer Gravity (Theoretical Gravity, Atmospheric Effect, Free Air correction, Bouguer correction and Terrain Correction)</li> <li>GNSS Processing</li> <li>Ellipsoid-Geoid Separation</li> </ul> </li> </ul>
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).	No Drilling reported.
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>	No Drilling reported.
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 rock chips are logged using lithology, alteration, veining and mineralisation by a geologist.</li> <li>All soil samples are recorded for depth, moisture content, colour and texture.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core were 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</li> </ul>	No Drilling reported.

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Criteria	JORC Code explanation	Commentary
	<ul> <li>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 grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul> <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, calibration factors applied and their derivation, etc.</li> <li>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.</li> </ul>	Previously listed assay methods are considered appropriate for the style of mineralisation under investigation at the Bowdens Silver Project.
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>All geological logging is entered digitally before inputting into the Silver Mines Limited Spatial database.</li> <li>Primary assay data is sent electronically from the laboratory to the SVL database administrator and then entered into the geological database for validation.</li> <li>All assays matched with the sample id's and loaded directly from the output provided by the laboratory with no manual entry of assays undertaken.</li> <li>No adjustments were made or required to be made to the assay data.</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>Rock and Soil sample positions are surveyed using hand-held GPS with accuracy of +- 3 metres.</li> <li>All samples recorded are in MGA94 zone 55.</li> <li>Gravity Data. Data was collected with the following specifications:         <ul> <li>Line spacing = generally 160 metres, 80 metres &amp; 320 metres.</li> <li>Station spacing = 80 metres</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Line direction = east to west</li> <li>Number of stations = 1968</li> <li>Number of repeats = 114 (5.8%)</li> <li>Surveying = Real Time Kinematic (RTK) GNSS</li> <li>Gravity Datum = AAGD07</li> <li>Survey/positioning Datum = GDA94, MGA Zone 55</li> <li>Elevation Datum = AHD (Australian Height Datum).</li> <li>GRS80 ellipsoid heights for gravity reduction were determined using AUSGeoid09.</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>Soil sampling has been collected on grids of 80 metres by 80 metres or 160 metres by 160 metres, with changes to account for different geology and prospectivity.</li> <li>Rock chip sampling was not completed to a defined grid spacing.</li> <li>No sample compositing has been applied.</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>	No Drilling reported.
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples bagged on site under the supervision of the senior geologist with sample bags tied with cable ties before being driven by site personnel to the laboratory in Orange, NSW (~200 kilometres from the site)</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	The exploration work includes on-going internal auditing with advice taken on process from external advisors.



### **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	<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> </ul>	<ul> <li>The Bowdens Silver Resource is located wholly within Exploration Licence No 5920, held wholly by Silver Mines Limited and is located approximately 26 kilometres east of Mudgee, New South Wales.</li> <li>The tenement is in good standing.</li> <li>The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US\$5 million over 100% of EL5920</li> <li>The project has a 0.85% Gross Royalty over 100% of EL5920.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Bowdens project was previously managed by Kingsgate Consolidated and Silver Standard Ltd, however the new results under this table are based on work conducted solely by Silver Mines Limited/Bowdens Silver Pty Limited.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Bowdens Deposit is a low to intermediate sulphidation epithermal base-metal and silver system hosted in Carboniferous aged Volcanic rocks and Ordovician aged sediments and volcanics.</li> <li>Mineralisation includes veins, breccias and fracture fill veins within tuff and ignimbrite rocks, and semi massive veins, breccias and fracture fill in siltstone, shale and sandstone.</li> <li>Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic intrusion and major fault fracture zones. There are several vein orientations within the broader mineralised zones including some areas of stock-work veins.</li> <li>The mineralisation reported in this release is hosted in the Rylstone Volcanics and the Coomber Formation.</li> </ul>
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> </ul>	<ul> <li>All sampling information is included in Table 1 of this report above.</li> <li>No Drilling is reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <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; and</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>	
Data aggregation methods	<ul> <li>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.</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 should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No Drilling is reported.
Relationship between mineralisatio n 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 (e.g. 'down hole length, true width not known').</li> </ul>	No Drilling is 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>	Maps are provided in the body of this report.
Balanced reporting	<ul> <li>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.</li> </ul>	All results received and compiled to date are reported in this release.



Criteria	JORC Code explanation	Commentary
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 and potential deleterious or contaminating substances.	This report relates to exploration data reported from this program.
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>This report relates to exploration work designed to explore prospect areas around the Bowdens Silver Deposit, namely the Bara Creek Prospect, as well as Three Hills Prospect.</li> </ul>