ASX: GSN

ASX Announcement – 26 October 2018

Epithermal Gold-Silver Targets identified at Edinburgh Park Project

Great Southern Mining Limited ("GSN" or "the Company") is pleased to provide an update on exploration activities at its 100% owned Edinburgh Park Project located 60km north of Collinsville, near Mt Carlton, North Queensland (Figure 1).

HIGHLIGHTS

- Maiden on-ground exploration commenced on EPM 26527 located in an epithermal gold province which hosts the Mt Carlton deposit (>1 Moz Au, 33 Moz, Ag);
- First pass geological reconnaissance mapping and rock chip sampling has confirmed epithermal gold-silver mineralisation at the Whydah Prospect;
- Mapping has delineated outcropping high sulphidation epithermal style mineralisation and alteration presenting as a series of structurally controlled breccia zones and widespread silica alteration;
- Numerous rock chips returned anomalous gold (up to 1.65 g/t) and silver (up to 185 g/t) as well as a range of pathfinder elements (As, Bi, Sb and Pb);
- Early work has enhanced the prospectivity of the prospect with a number of targets delineated for follow-up Reverse Circulation (RC) drilling.

GSN's Executive Chairman, John Terpu, comment:

"The Edinburgh Park project along with the rest of the Company's North Queensland assets are seen as a potential growth area. We believe the geology has all the right attributes to host a deposit of porphyry and/or epithermal mineralisation.

One of the attractive features of the project is the combination of good exposure to geology, the close proximity to Mt Carlton and the fact the tenements are underexplored. This provides the opportunity to identify potential deposits at the early reconnaissance stage. The results are encouraging and the gold and silver grades identified at Whydah are the stepping stone to more results as we work to undertake detailed geological mapping to define 'walk up' drill targets.

These results warrant follow-up drilling programs which are currently being planned."

For more information:
John Terpu
Executive Chairman
(08) 9240 4111

Contact Details

Registered Office and Postal Address
Suite 4, 213 Balcatta Rd
BALCATTA WA 6021
Phone: 61 8 9240 4111
Fax: 61 8 9240 4054

Website
www.gsml.com.au

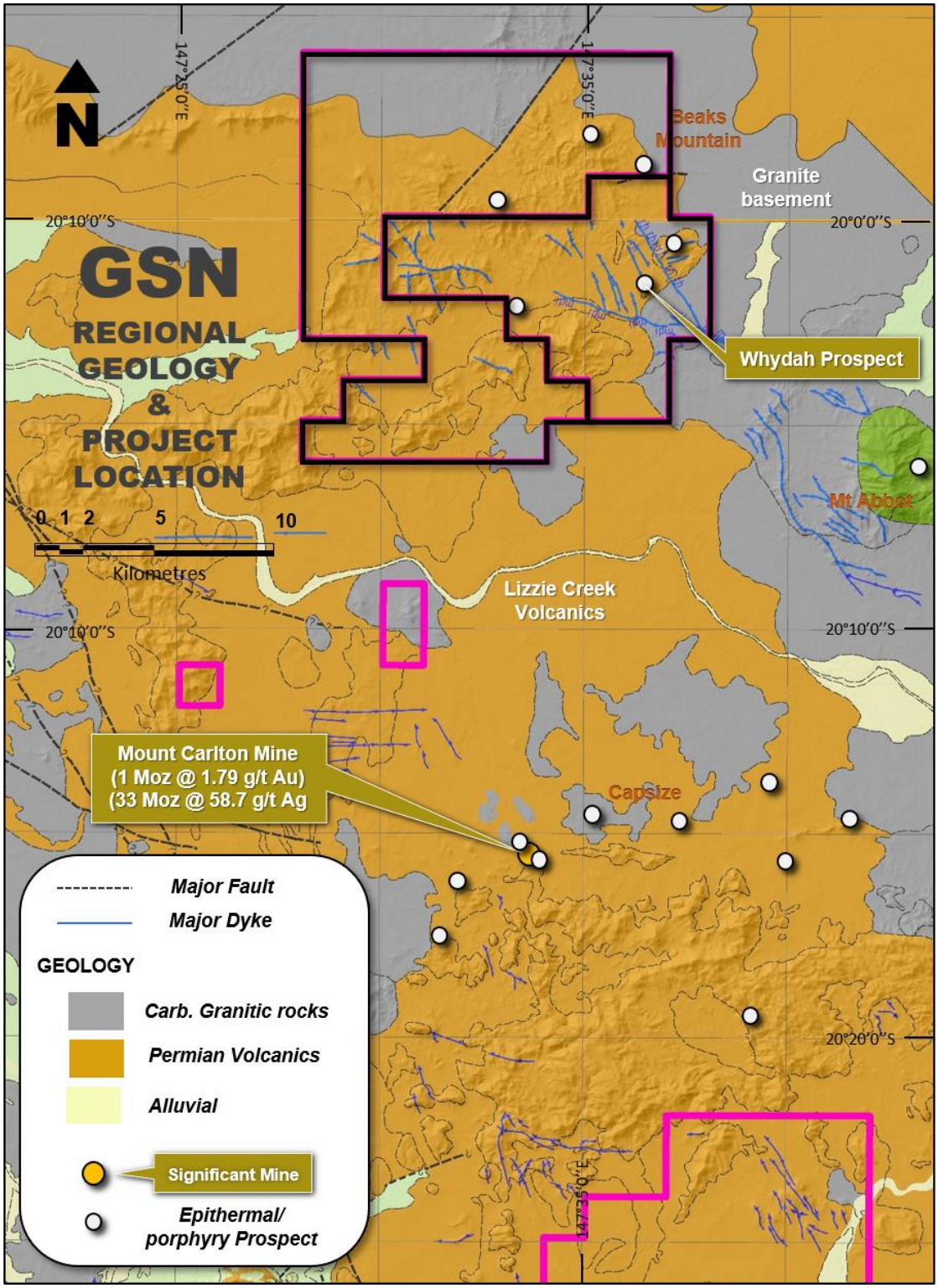

Figure 1: Location of EPM 26527, the Whydah Prospect.

Project Background

EPM 26527 covers an area of 84 km^2 and is located 60 km north of Collinsville and less than 20 km from Mt Carlton. The EPM was granted on the 23 of September 2017 for a period of five (5) years.

The project is located at the northern end of the Bowen Basin, at the margin between the Carboniferous basement and the overlying Permian Volcanics (Lizzie Creek Volcanics). In the east of the EPM, the majority of the areas mapped are underlain by granitoids that are interpreted to be part of Carboniferous-Permian Coast Range Igneous Province. A few outliers of intermediate to acid pyroclastic and volcanoclastic rocks (Permo-Triassic Lizzie Creek Volcanics) overly the granitoids.

The area was first explored by Ashton Mining Limited ("Ashton") in the late 1980's. Regional soil and stream sediment sampling programs led to identification of strong soil and surface rock Au, Ag, As, and Pb anomalism (historic rock chip samples of up to 3.5 g/t Au and 200 g/t Ag) at the Whydah prospect.

Ashton subsequently drilled eight short open-hole percussion drill holes (aggregate 491m) where drill intercepts indicated the presence of shallow epithermal gold-silver mineralisation with weak to moderate Au-Ag anomalism with peak intersections of 14m from 12m @ 4.3ppm Ag and 0.42 ppm Au (PDH4) and 18m from 12m @ 2.2 ppm Ag and 0.37 ppm Au (PDH5). The maximum single two meter drill interval analyses achieved were of 21 ppm Ag and 0.98 ppm Au (Figure 2 and 3).

Recent Program

GSN's exploration team completed their first field visit to the Edinburgh Park tenement in August 2018 and commenced a small confirmatory geological mapping and rock chip sampling program across the Whydah Prospect. The field team collected 41 rock chip samples (Figure 2), with results of laboratory analysis, comprising geochemical and mineralogical analysis, now received.

As a consequence of the recent work, an epithermal system has been delineated, with a number of structural targets with demonstrated Au-Ag mineralisation defined. A follow-up drill program designed to sample these untested targets has been proposed by the exploration team.

Mapping and Geochemical Sampling

Detailed geological mapping at Whydah has focused on an area of outcrop approximately 600m by 1,000m that comprises a volcanic package (within the Lizzie Creek Volcanics) with abundant outcrops of hydrothermal breccia and strong silica alteration zones (Figure 2 and Figure 4). Surface exposures of mineralisation are characterised by narrow zones of hydrothermal breccia with broad envelopes of strong silica-clay-pyrite alteration (Figure 2). Mineralogy of the breccia fill and alteration suggest a system that is transitional between low and high sulphidation models. Mineralisation consists of irregular quartz breccia, stockwork and vein zones within envelopes of silica-clay-pyrite alteration. Quartz infill has a saccharoidal, crustiform and chalcedonic texture with traces of pyrite and an unidentified black sulphide.

Mapping suggests that the breccia zones are generally planar with near vertical dips. This model has been poorly tested by previous historic drilling.

Geochemical analysis of recent rock chip samples has indicated that gold and silver grades are closely correlated with the proportion of quartz infill in outcrops. Maximum grades of 1.65g/t Au and 185g/t Ag were obtained from well veined material. There is a good correlation between gold and silver grades. There is a very good correlation between gold and lead. Lesser correlations are evident between gold and copper, antimony and arsenic. These are common signatures of high sulphidation systems.

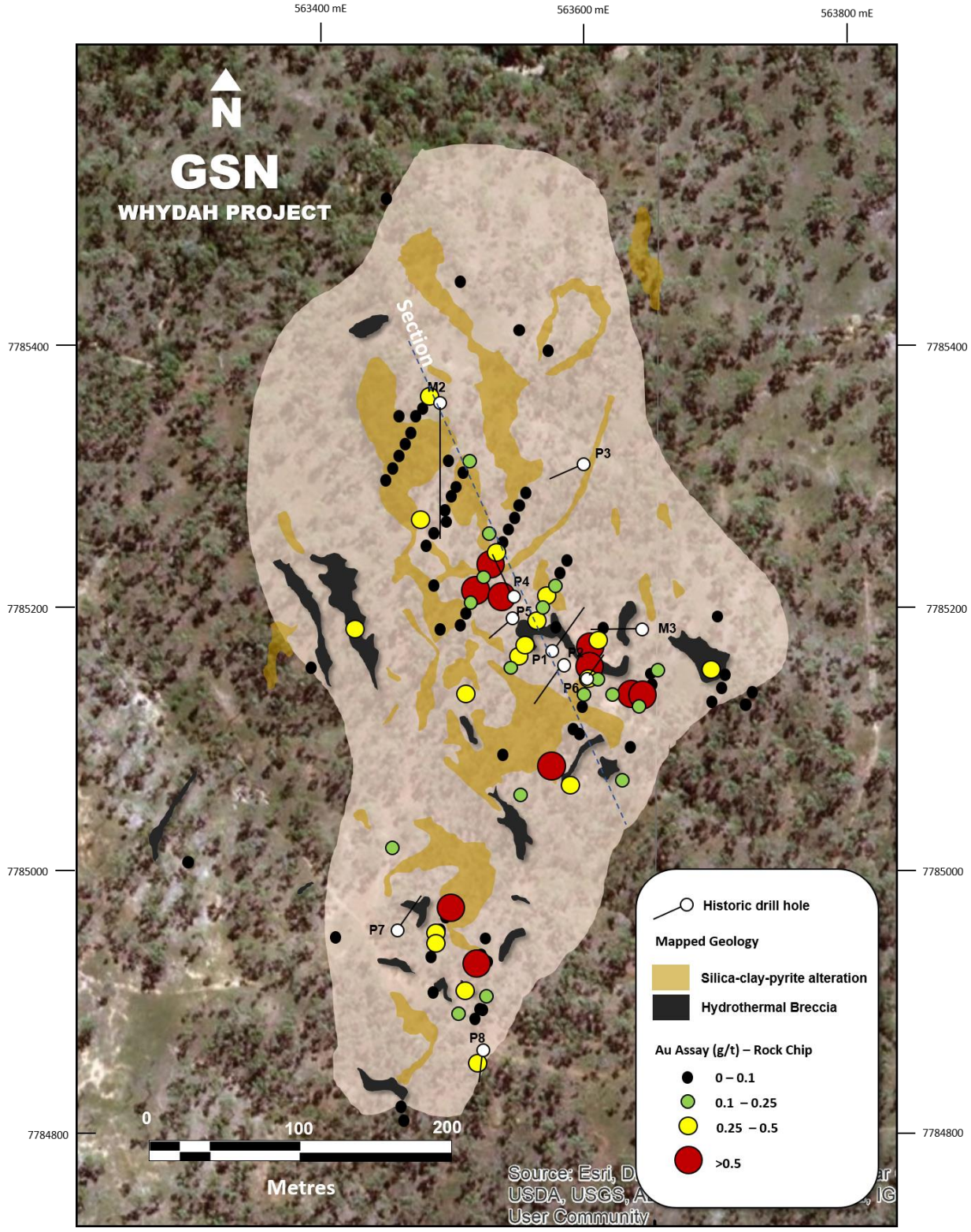

Figure 2: Geological Mapping and sampling at the Whydah Prospect

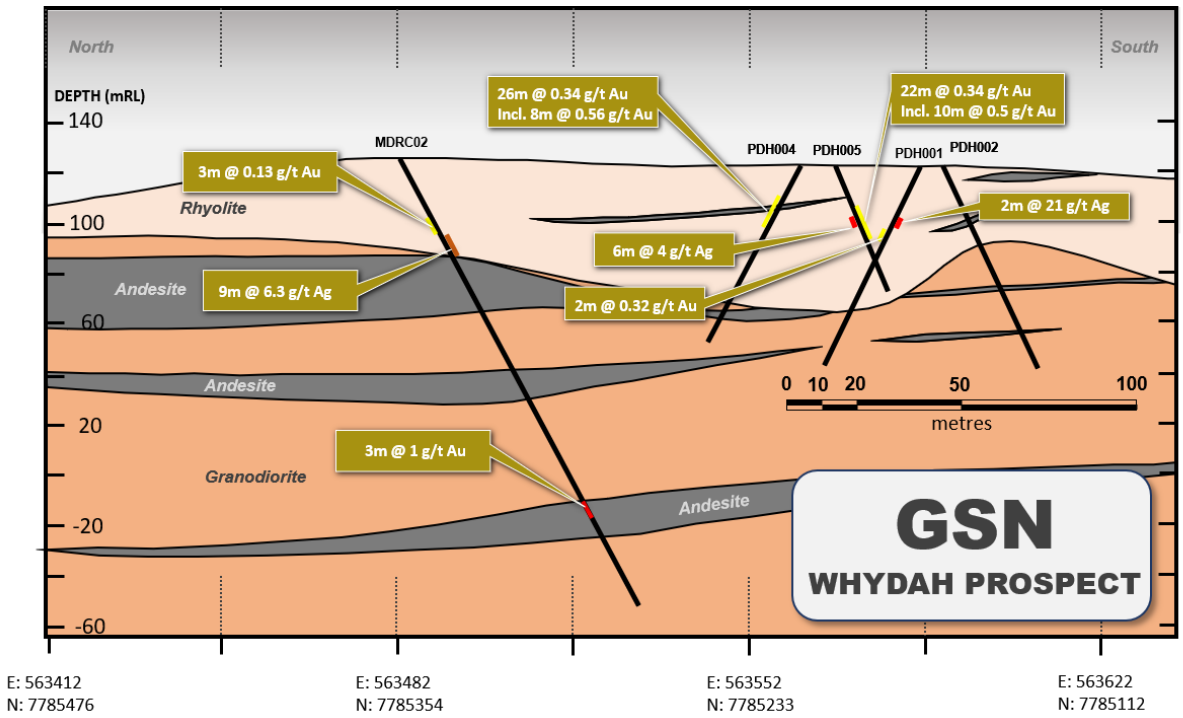

Figure 3: Section through the interpreted geology of the Whydah Prospect

Interpretation of Results and Next Steps

Previous drilling at Whydah has targeted a mixture of geophysical and geochemical anomalies targeting analogues of the stratabound mineralisation at Mt Carlton. The recent sampling and current mapping data suggest that future drilling should target the steep dipping structurally controlled breccia/stockwork mineralisation, particularly in zones with significant quartz infill.

The presence of anomalous moderate to high gold and silver grade in rock chips, the associated pathfinder element suite, the alteration mineralogy, and the style of mineralisation observed at the Whydah Prospect are indicative of the presence of epithermal mineralising systems with common signatures of a high sulphidation system.

As a result of the recent work, an epithermal system has been delineated, with a number of structural targets with demonstrated Au-Ag mineralisation defined. A follow-up RC program designed to sample these untested targets is currently being planned.

Figure 4: Examples of epithermal mineralisation in outcrop and rock chip sample from the Whydah Prospect

Table 1: Selected rock chip assay results

Sample Number	Easting (MGA94)	Northing MGA94)	Au (g/t)	Ag (g/t)	Epithermal Pathfinder Elements (ppm)			
					As	Bi	Sb	Pb
3015631	563464	7785279	<0.01	<0.5	<5	<2	<5	11
3015632	563466	7785314	<0.01	<0.5	<5	2	<5	<2
3015633	563456	7785348	0.03	2.4	45	6	10	83
3015634	563503	7785412	0.03	1.2	28	5	<5	48
3015635	563488	7785436	0.04	3.7	23	10	12	87
3015636	563474	7785467	0.25	2.3	49	5	<5	159
3015637	563493	7785250	0.06	0.6	65	4	<5	181
3015638	563506	7785274	0.02	<0.5	<5	4	<5	32
3015639	563531	7785330	0.46	5.7	82	2	17	152
3015640	563535	7785368	0.06	2.6	13	4	<5	56
3015641	563594	7785391	0.09	1.2	25	3	9	45
3015642	563638	7785468	0.05	4.5	48	2	<5	170
3015643	563619	7785368	<0.01	<0.5	24	3	<5	92
3015644	563606	7785336	0.01	<0.5	19	2	<5	107
3015645	563591	7785290	<0.01	<0.5	23	3	<5	17
3015646	563583	7785300	0.2	6	46	4	<5	176
3015647	563555	7785307	<0.01	<0.5	55	5	8	175
3015648	563573	7785264	0.01	2.1	39	3	<5	158
3015649	563547	7785241	0.05	<0.5	29	5	<5	41
3015650	563684	7785168	0.08	<0.5	57	4	7	170
3015651	563619	7785167	0.19	2.3	44	2	19	321
3015652	563608	7785161	0.06	11.3	12	5	12	363
3015653	563580	7785135	0.3	38.1	497	155	1075	650
3015654	563574	7785182	0.36	59.7	55	3	74	447
3015655	563526	7785177	1.65	10.8	84	3	41	1370
3015656	563508	7785205	0.42	30.5	157	3	122	2000
3015657	563468	7785191	1.48	13.5	83	2	22	3830
3015658	563417	7785212	0.39	15.7	66	6	10	1045
3015659	563393	7785208	0.06	2.9	41	4	8	167
3015660	563368	7785175	0.02	1.1	40	11	5	202
3015661	563455	7785119	0.01	1.5	31	7	<5	496
3015662	563488	7785158	0.38	21.4	38	20	28	192
3015663	563507	7785112	0.26	6.1	13	9	14	120
3015664	563546	7785050	0.04	1.6	78	<2	5	162
3015665	563469	7784979	0.04	1.5	7	2	19	65
3015666	563504	7784964	0.11	33.4	21	23	125	1810
3015667	563534	7784936	1.21	185	86	41	155	1740
3015668	563490	7784918	0.22	27	60	5	76	180
3015669	563459	7784931	0.02	3.4	13	3	14	95
3015670	563488	7785546	0.08	32.3	43	8	184	373
3015671	562686	7784645	0.33	13.5	93	48	198	642

ANNEXURE 1 - Historic Exploration Data

Table 2: Historic rock chip assay results

Sample Number	Easting (MGA94)	Northing MGA94)	Au (g/t)	Ag (g/t)	Epithermal Pathfinder Elements (ppm)					
					As	Bi	Sb	Pb	Cu	Zn
SbR 410	563440	7784835	0.1	26	55	12	230	2200	120	28
SbR 411	563494	7784878	0.4	13	85	38	180	350	46	18
SbR 412	563463	7784975	0.3	21	90	12	160	1300	14	14
SbR 413	563502	7784955	0.1	<1	380	4	22	65	60	20
SbR 414	563430	7785041	0.2	2	42	<4	12	250	16	16
SbR 415	563370	7785177	<0.05	<1	34	4	<4	46	6	18
SbR 416	563403	7785205	0.5	<1	38	<4	<4	120	6	26
SbR 417	563421	7785217	<0.05	<1	6	4	<4	210	10	14
SbR 418	563466	7785206	<0.05	<1	32	<4	6	60	6	14
SbR 419	563462	7785239	<0.05	<1	13	<4	<4	28	6	6
SbR 420	563486	7785156	0.5	<1	75	4	<4	320	36	14
SbR 421	563514	7785111	<0.05	<1	28	<4	<4	46	14	8
SbR 422	563526	7785081	0.2	4	170	<4	4	200	24	16
SbR 423	563566	7785131	<0.05	<1	80	<4	8	48	10	40
SbR 424	563669	7785175	0.5	5	13	6	8	380	6	26
SbR 425	563624	7785171	0.1	16	3	6	10	780	12	12
SbR 426	563610	7785158	0.75	120	60	18	510	2750	65	42
SbR 427	563552	7785207	0.1	3	26	<4	14	450	10	14
SbR 428	563595	7785157	0.15	2	65	4	<4	1050	8	46
SbR 429	563513	7785230	0.9	3	30	<4	<4	700	4	32
SbR 430	563503	7785277	0.15	1	32	<4	<4	100	8	8
SbR 431	563548	7785416	0.05	<1	48	50	<4	42	36	18
SbR 432	563482	7785468	<0.05	<1	3	<4	<4	16	2	6
SbR 433	563436	7785366	<0.05	1	5	8	6	85	16	8
SbR 434	563474	7785332	<0.05	<1	40	<4	<4	34	24	20
SbR 435	563452	7785287	0.3	<1	26	<4	8	60	4	10
SbR 436	563471	7785286	0.05	5	14	6	6	240	8	12
SbR 464	563841	7785332	<0.05	1	2	n.s	<4	6	8	95
SbR 465	563673	7785214	<0.05	<1	7	n.s	<4	85	4	6
SbR 466	563609	7785117	<0.05	1	150	n.s	<4	140	28	95
SbR 467	563602	7785092	0.25	16	80	n.s	190	1500	30	65
SbR 468	563563	7785087	0.4	1	65	n.s	4	200	2	12
SbR 469	563551	7785103	0.6	2	100	n.s	16	2050	16	34
SbR 440	563700	7785158	0.25	1	80	n.s	30	4050	28	210
SbR 441	563695	7785149	0.05	1	140	n.s	4	38	55	24
SbR 442	563683	7785178	<0.05	1	34	n.s	<4	34	6	24
SbR 443	563679	7785170	<0.05	1	9	n.s	<4	140	12	8
SbR 444	563675	7785160	0.25	1	22	n.s	<4	230	12	36
SbR 445	563670	7785151	<0.05	1	16	n.s	<4	50	12	24
SbR 446	563633	7785183	<0.05	1	28	n.s	<4	65	36	12
SbR 447	563628	7785174	<0.05	<1	2	n.s	<4	190	28	10
SbR 448	563624	7785165	0.05	1	15	n.s	<4	130	34	14
SbR 449	563619	7785156	<0.05	<1	20	n.s	<4	32	10	22
SbR 470	563700	7785158	0.05	2	32	n.s	<4	360	2	14
SbR 471	563695	7785149	<0.05	1	20	n.s	<4	230	10	18
SbR 472	563683	7785178	0.05	12	38	n.s	10	540	6	26
SbR 473	563679	7785170	0.05	7	2	n.s	12	340	4	22
SbR 474	563675	7785160	<0.05	6	3	n.s	14	440	8	14
SbR 475	563670	7785151	0.05	1	9	n.s	<4	170	2	24
SbR 476	563633	7785183	0.05	20	14	n.s	14	280	16	65
SbR 477	563628	7785174	0.2	10	4	n.s	14	940	8	24
SbR 478	563624	7785165	0.1	6	130	n.s	20	85	10	14
SbR 479	563619	7785156	0.95	200	100	n.s	210	1350	30	34
SbR 480	563614	7785147	0.2	50	110	n.s	130	700	12	36
SbR 481	563589	7785206	0.05	1	100	n.s	42	430	40	50
SbR 482	563585	7785197	0.45	50	200	n.s	580	2150	50	30
SbR 483	563581	7785188	1.15	75	240	n.s	120	4100	26	70
SbR 484	563579	7785179	1.8	40	190	n.s	180	3200	22	60
SbR 485	563577	7785168	0.5	5	65	n.s	14	1500	8	38

Table 2: Historic rock chip assay results

Sample Number	Easting (MGA94)	Northing MGA94)	Au (g/t)	Ag (g/t)	Epithermal Pathfinder Elements (ppm)				
					As	Bi	Sb	Pb	Cu	Zn
SbR 486	563574	7785158	0.15	5	90	n.s	8	400	4	20
SbR 487	563573	7785147	0.05	<1	85	n.s	10	150	6	30
SbR 488	563572	7785136	3.1	28	100	n.s	120	6600	28	75
SbR 489	563571	7785126	0.1	<1	170	n.s	22	150	16	50
SbR 490	563561	7785257	0.1	2	34	n.s	30	120	30	36
SbR 491	563556	7785248	0.05	<1	46	n.s	<4	180	16	50
SbR 492	563552	7785238	0.2	<1	100	n.s	6	180	18	85
SbR 493	563547	7785230	0.35	1	60	n.s	10	320	10	22
SbR 494	563543	7785222	0.2	16	130	n.s	42	2600	8	40
SbR 495	563539	7785212	0.5	8	70	n.s	100	1400	4	30
SbR 496	563530	7785194	0.4	<1	80	n.s	4	760	4	85
SbR 497	563525	7785185	0.35	3	24	n.s	12	1500	2	18
SbR 498	563520	7785176	0.15	2	50	n.s	8	450	10	55
SbR 499	563531	7785308	0.1	<1	32	n.s	<4	18	10	12
SbR 500	563526	7785299	<0.05	<1	19	n.s	6	14	4	16
SbR 501	563522	7785290	<0.05	<1	11	n.s	<4	26	8	16
SbR 502	563517	7785281	0.05	4	25	n.s	230	1200	26	24
SbR 503	563513	7785272	0.1	1	4	n.s	<4	150	24	22
SbR 504	563508	7785263	0.3	<1	65	n.s	<4	34	6	20
SbR 505	563504	7785254	0.85	<1	110	n.s	<4	22	8	16
SbR 506	563499	7785245	0.2	2	95	n.s	6	110	20	70
SbR 507	563495	7785236	0.65	<1	130	n.s	<4	75	8	30
SbR 508	563490	7785227	0.2	<1	48	n.s	<4	14	2	10
SbR 509	563486	7785218	0.1	<1	80	n.s	<4	22	4	28
SbR 510	563481	7785209	0.05	<1	48	n.s	6	20	2	14
SbR 511	563488	7785332	0.15	3	30	n.s	6	70	14	8
SbR 512	563484	7785323	<0.05	<1	60	n.s	<4	55	24	14
SbR 513	563479	7785314	0.05	<1	55	n.s	<4	16	10	24
SbR 514	563474	7785305	<0.05	<1	38	n.s	10	120	42	12
SbR 515	563470	7785295	<0.05	2	42	n.s	12	120	48	8
SbR 516	563471	7785286	0.05	75	20	n.s	26	380	120	20
SbR 517	563461	7785277	<0.05	<1	80	n.s	<4	24	20	24
SbR 518	563457	7785268	<0.05	<1	17	n.s	<4	42	20	18
SbR 519	563458	7785381	0.35	<1	46	n.s	<4	55	12	18
SbR 520	563454	7785373	<0.05	<1	16	n.s	<4	26	6	8
SbR 521	563448	7785366	<0.05	<1	34	n.s	4	30	6	8
SbR 522	563445	7785354	<0.05	2	17	n.s	<4	130	8	16
SbR 523	563441	7785345	<0.05	<1	40	n.s	<4	44	18	16
SbR 524	563436	7785336	0.05	<1	28	n.s	<4	26	6	18
SbR 525	563431	7785327	<0.05	<1	22	n.s	<4	16	4	18
SbR 526	563427	7785318	<0.05	<1	24	n.s	<4	10	4	22
SbR 527	563499	7784929	0.15	100	36	n.s	220	540	8	14
SbR 528	563496	7784920	<0.05	9	230	n.s	20	410	22	22
SbR 529	563492	7784911	<0.05	6	120	n.s	32	520	10	12
SbR 530	563501	7784972	0.05	<1	100	n.s	12	44	46	12
SbR 531	563497	7784960	0.05	1	75	n.s	16	80	8	8
SbR 532	563494	7784953	1.1	80	65	n.s	190	150	18	12
SbR 533	563485	7784934	0.3	2	400	n.s	6	470	38	44
SbR 534	563478	7784916	0.15	3	220	n.s	65	460	32	16
SbR 535	563475	7784995	0.7	5	4	n.s	22	130	2	8
SbR 536	563471	7784988	0.1	160	12	n.s	30	400	4	8
SbR 537	563467	7784978	0.1	13	11	n.s	26	480	8	12
SbR 538	563463	7784969	0.5	120	95	n.s	460	1400	26	18
SbR 539	563459	7784960	0.05	11	22	n.s	70	640	14	32

Table 3: Historic drill hole Information (as presented in Figure 2 and 3)

Hole ID	Easting (MGA94)	Northing MGA94)	RL	Azimuth	Dip	Total Depth
PHD1	563576	7785167	137	28	60	80
PDH2	563586	7785159	136	210	60	80
PDH3	563600	7785310	120	240	60	60
PDH4	563547	7785208	138	326	60	72
PDH5	563547	7785194	138	220	50	60
PDH6	563604	7785147	135	23	60	42
PDH7	563459	7784956	127	25	60	60
PDH8	563524	7784864	117	180	60	47

Table 4: Historic drill hole material assay results (as presented in Figure 3)

Hole ID	From	To	Au (g/t)	Ag (g/t)
PDH001	24	26	0.32	21
	34	36	<0.01	6
	42	44	<0.01	4
	44	46	0.21	3
PDH004	0	2	0.23	3
	2	4	0.32	3
	4	6	0.22	3
	6	8	0.62	3
	8	10	0.15	2
	12	14	0.22	4
	14	16	0.28	2
	16	18	0.66	4
	18	20	0.34	7
	20	22	0.27	5
	22	24	0.98	6
	24	26	0.16	2
	26	28	0.06	3
	56	58	0.12	<1
PDH005	12	14	0.11	1
	14	16	0.13	1
	16	18	0.22	2
	18	20	0.18	1
	20	22	0.65	1
	22	24	0.41	1
	24	26	0.19	3
	26	28	0.74	6
	28	30	0.44	4
	30	32	0.04	1
	32	34	0.02	<1
PDH006	22	24	0.02	6
	28	30	0.02	7
PDH007	14	16	0.17	2
	18	20	0.12	3
	52	54	0.01	3

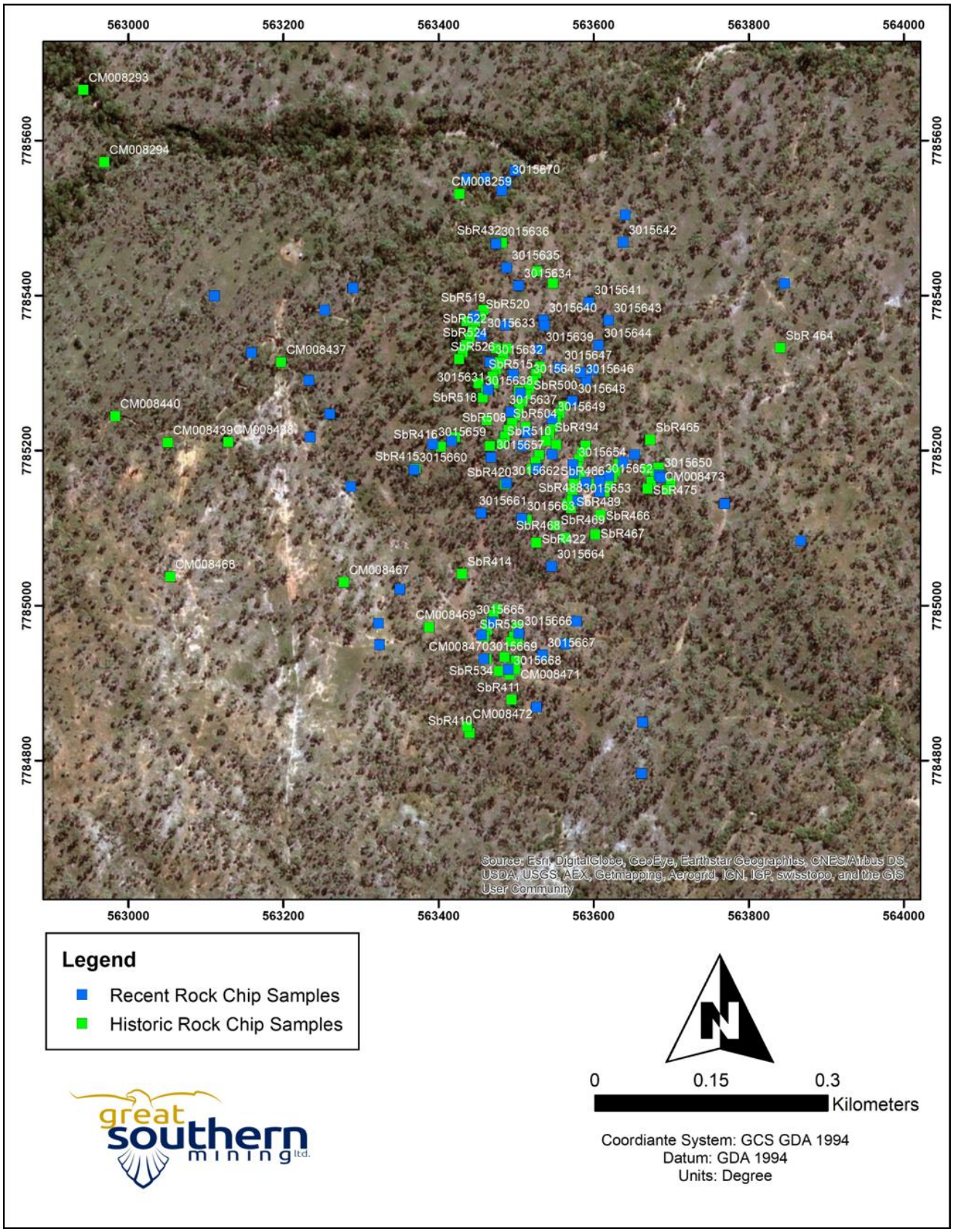

Figure 5: Location of historical and recent rock chip samples (Refer Table 1 and Table 2).

Competent Person's Statement

The information in this report that relates to exploration targets and exploration results on EPM 26527 is based on, and fairly represents, information and supporting documentation compiled by Dr Bryce Healy. Dr Healy is an employee of Noventum Group Pty Ltd (ACN 624 875 323) and has been engaged by Great Southern Mining Limited as Head of Exploration. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. Dr Healy is a Member of the Australasian Institute of Geoscientists and as such, is a Competent Person for the Reporting of Exploration Results, Mineral Resources and Ore Reserves under the JORC Code (2012). Dr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which they occur.

Forward Looking Statements

Forward- looking statements are only predictions and are not guaranteed. They are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of the Company. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecast. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to differ from those referred to in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward- looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company, its directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplate.

ANNEXURE 2 - JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	*Historic Drilling (Ashton Mining Ltd)* • *The mineralisation was systematically sampled using 2m intervals, collected from percussion drill holes.* • *Drill hole locations were designed as reconnaissance holes around specific geochemical or geophysical anomalies.* • *No Further sampling information is recorded* *Historic Rock Chip (Ashton Mining Ltd)* • *No Further sampling information is recorded* *GSN Rock Chip* • *Rock chip samples are grab samples collected from specific geological features of interest. 1-2 kg of sample was collected which was crushed, pulverized and split to produce charge for Fire assay and four acid digest.*
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.).	*Historic Drilling (Ashton Mining Ltd)* • *The PRD series drilling operation was undertaken by drilling contractor Civil Resources Queensland. Percussion drilling was conducted with a truck mounted drill rig using 5½" diameter face bit.* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *Not Applicable* *GSN Rock Chip* • *Not Applicable*
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	*Historic Drilling (Ashton Mining Ltd)* • *No further information is provided*
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.	*Historic Drilling (Ashton Mining Ltd)* • *All percussion drill samples are geologically logged on site. Details on the host lithologies, veining, mineralisation, alteration and weathering and oxidation are recorded. Evidence of structural features are noted.* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *Geological logging has primarily been quantitative and the database contains the lithological data for all rock chips*

Criteria	JORC Code explanation	Commentary
	• 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.	
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.	*Historic Drilling (Ashton Mining Ltd)* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *1-2 kg samples were collected from exposed outcrop and transported to ALS laboratories in Townsville for preparation and assay. All samples were crushed to >70% - 6mm and pulverized*
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	*Historic Drilling (Ashton Mining Ltd)* • *225 drill chip samples were submitted to Classic Comlabs Limited, Townsville for the determination of Au by fire assay (FA1) and Ag by acid digestion (AAS1 and 2)* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *Rock chip samples were submitted to Classic Comlabs Limited, Townsville and were assayed for Au by fire assay (FA1) and analysed for As, Pb, Sb and Bi (by x-ray fluorescence (XRF1) and Cu, Zn, Ag (by acid digestion AAS1 and 2).* • *No further information is provided* *GSN Rock Chip* • *44 rock chip samples were submitted to ALS Minerals laboratories, Townsville for the determination of Au by fire assay (AA26) and a 33 element suite (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn) by four acid ICP - AES.* • *Samples were sorted, dried, crushed, splitiing 1-2 kg and pulverizing >70% passing -75 micron.* • *No geophysical tools were used.* • *Inclusion of standards at a ratio of 1:20 were used by GSN as well as the laboratory.*

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.	*Historic Drilling (Ashton Mining Ltd)* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *All samples and locations are digitally logged in the field and all primary data is forwarded to GSN database in Perth. Assay data is electronically merged when received from the laboratory and made available to the project geologist to verify against the samples in the field.* • *No adjustments or calibrations are made to any of the assay data recorded in the database.*
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.	*Historic Drilling (Ashton Mining Ltd)* • *Historic drill hole collars were initially located and recorded using a hand held GPS with ±3m accuracy during recent mapping campaigns.* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* • *GSN estimated rock chip locations by registration of sample location maps in GIS software to obtain approximate sample co-ordinates* *GSN Rock Chip* • *Rock chip samples were recorded using a hand held GPS with ±3m accuracy.*
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.	*Historic Drilling (Ashton Mining Ltd)* • *Drill hole locations were designed as reconnaissance holes around specific geochemical or geophysical anomalies.* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *Data distribution is based on availability of relevant outcrop*
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.	*Historic Drilling (Ashton Mining Ltd)* • *Drill hole locations were designed as reconnaissance holes around specific geochemical or geophysical anomalies.* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *Rock chip sampling is based on outcrop distribution. A link between outcrop distribution and geological structure has not been established at this stage*

Criteria	JORC Code explanation	Commentary
Sample security	• The measures taken to ensure sample security.	*Historic Drilling (Ashton Mining Ltd)* • *No further information is provided* *Historic Rock Chip (Ashton Mining Ltd)* • *No further information is provided* *GSN Rock Chip* • *Samples for geochemical analysis were transported directly from site to ALS in Townsville in the custody of the field team where upon receipt the samples are officially checked in and appropriate chain of custody documentation received.* • *All sample information is kept in paper and digital form. Digital data is backed up onto the Company server regularly and then externally backed up daily.*
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• *No external audits have been completed to date*

JORC Code, 2012 Edition – Table 1

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• *GSN has a 100% interest in EPM 26527. An Exploration Agreement has been signed with the relevant Native Title Claim Group.* • *The tenement is in good standing and there are no known impediments to exploration in the area.*
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• *Exploration by other parties has been reviewed and is used as a guide to GSNs' exploration activities.* • *Ashton Mining Limited completed soil sampling, rock chip sampling, percussion drilling, geophysical data collection and interpretation 1989-1991.* • *This report concerns exploration results generated by GSN to help validate the historic exploration results.*
Geology	• Deposit type, geological setting and style of mineralisation.	• *The mineralisation at Whydah typical of epithermal systems. The mineralisation is hosted within a Permian age volcanic sequence near the margin of the basin. The mineralization controls on the system is still unclear but future drilling will test a number of steeply dipping structural targets.* • *A summary of the geology is outlined in the body of this report*
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 drillholes: • easting and northing of the drillhole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar • dip and azimuth of the hole • downhole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• *No drilling was undertaken*

Criteria	JORC Code explanation	
Data Aggregation Methods	• in reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• *No aggregate intercepts have been applied in reporting of the rock chip sampling exploration results.* • *No metal equivalents have been used in reporting.*
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 drillhole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• *No relevant program was undertaken*
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 drillhole collar locations and appropriate sectional views.	• *Appropriate diagrams, Figures 2 and 3, show the spatial distribution in plan view of the results relevant to this report*
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• *All Historic and Current samples are reported.* • *The competent person believes this report to be a balanced representation of exploration undertaken*
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 area has been explored by Ashton Mining in 1989 and 1990. A summary of their work is outlined in the body of this report and consists of rock chip sampling and 8 percussion drill holes.*
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• *The results will be further evaluated with a view to commencing a drilling program to target a number of more prospective hydrothermal breccias that have been mapped.*