

ASX Release

Fully Funded Acquisition of Greater Liontown

4.94mt @ 12.0% ZnEq & Underdone Au at Ravenswood Consolidated

Highlights (Upon Completion)

Sunshine Gold Ltd (Sunshine) to acquire 100% of Greater Liontown (16 tenements, ~684kms²) for \$3.25m in cash with a further \$2m of cash payable on production milestones.

- Greater Liontown is adjacent to Sunshine's Ravenswood West project (together **Ravenswood Consolidated**) and located 35kms WSW of Charters Towers and 135kms from Sunshine's Townsville head office.
- Sunshine will control ~80% of the highly prospective Mt Windsor Volcanogenic Massive Sulphide (**VMS**) horizon and ~1,760kms² of highly prospective Au/Cu-Au ground.
- Greater Liontown is comprised of the following:
 - a Zn-Cu-Pb-Au VMS Resource of **4.94mt @ 12.0% ZnEq (32% Indicated)**;
 - 25 drill-ready Zn-Cu-Pb-Au IP geophysical targets;
 - the under-drilled Carrington Au Lode in the footwall of the Liontown VMS deposits with significant intersections including:
 - **2.0m @ 82.5 g/t Au** from 344m (LTD0022)
 - **2.0m @ 68.6 g/t Au** from 24m (LRC0043)
 - **3.0m @ 46.2 g/t Au** from 20m (LRC0018)
 - **7.0m @ 13.0 g/t Au** from 115m (LLRC184)
 - advanced Cu-Au VMS targets at Coronation, analogous to the nearby Highway-Reward Mine (4mt @ 6.2% Cu & 1.0 g/t Au mined); and
 - overlooked gold potential (see Table 4: 50 Best Au Intersections) with drill ready targets including the Tigertown-Cougartown trends and Truncheon. Historic intersections include:
 - **17m @ 3.1 g/t Au** from 22m (LLRC003, Tigertown)
 - **33m @ 1.95 g/t Au** from 12m (MWR037, Tigertown)
- Previous owners completed 25 infill and extensional, diamond holes (5,904m). Of these, 16 holes (3,865m) remain unlogged and unsampled. In addition, 9 holes (2,039m) have been assayed but not announced to the ASX with results including:
 - **8.1m @ 10.7 g/t Au**, 0.2% Cu from 152.2m (LTDD22055)
 - **5.3m @ 14.5% ZnEq** comprised of 2.5% Zn, 1.4% Cu, 1.0% Pb, **5.0 g/t Au**, 25 g/t Ag from 192.5m (LTDD22054)
 - **3.7m @ 19.6% ZnEq** comprised of 0.5% Zn, **6.5% Cu**, 0.2% Pb, 0.6 g/t Au, 14 g/t Ag from 219.3m (LTDD22061)
- Strongly supported placement for \$3.6m and existing cash of \$2.15m (as at 31 March 2023) sees Sunshine fully funded for completion of the Acquisition and working capital.

Cautionary Statement: Sunshine has entered into binding agreements to acquire 100% of Greater Liontown in two separate transactions with unrelated, third parties. These acquisitions are subject to the satisfaction of certain conditions prior to completion of the transactions. Greater Liontown is not yet owned by Sunshine. Conditions precedent are to be satisfied prior to completion.

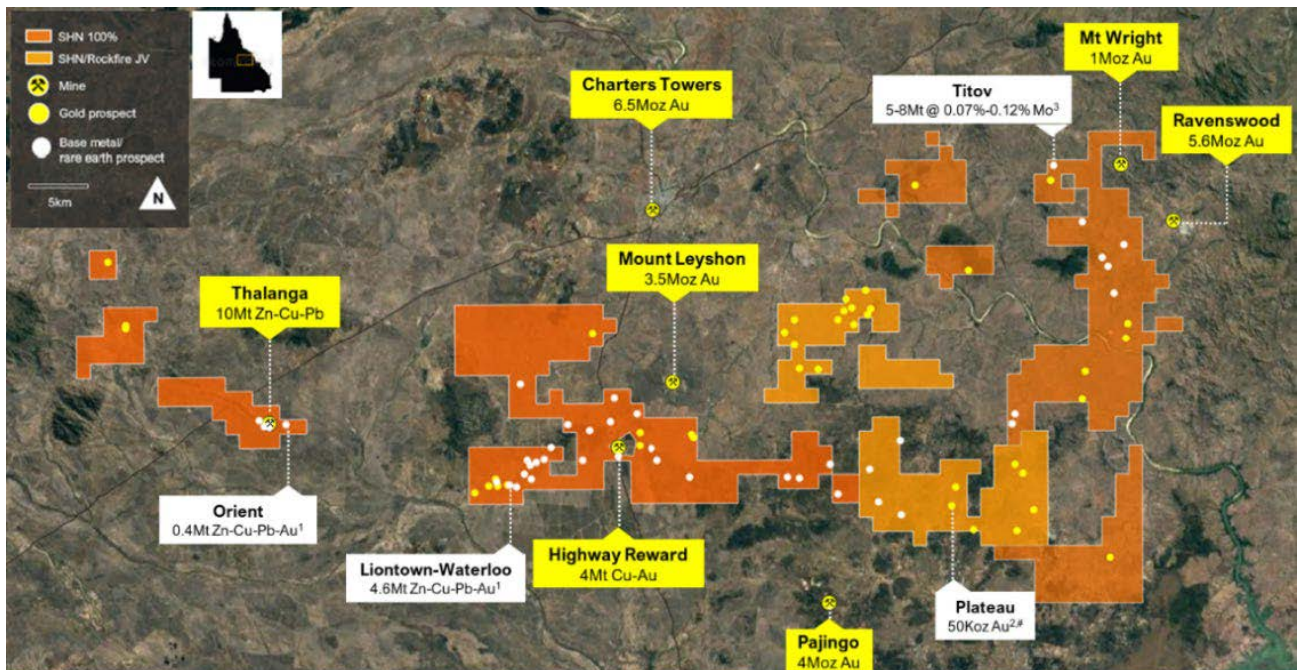


Figure 1: Ravenswood Consolidated showing Sunshine's tenements and large mines in the district.

Sunshine Gold Managing Director, Dr Damien Keys, commented "This is a transformational acquisition for Sunshine. The acquisition consolidates our foothold in the Charters Towers-Ravenswood district which has produced over 20Moz Au and 14mt of VMS ore (Zn-Cu-Pb-Au). We now control ~80% of the prospective Mt Windsor VMS horizon and 1,760 sq kms of highly prospective Au/Cu-Au ground.

Previous owners focussed on the VMS base metals potential at Greater Liontown which already comprises a high-grade 4.94mt @ 12.0% ZnEq Resource (32% Indicated). Zinc is a critical mineral and we have plenty of it with strong growth potential in 25 untested Zn-Cu-Pb-Au IP survey targets. The 1.47mt @ 11.0% ZnEq Liontown East Resource was discovered from drilling just 1 of the 30 targets from the IP survey.

Forgotten or overlooked is the Au/Cu-Au potential. The Cu-Au rich Carrington Lode sits in the footwall of the Liontown VMS deposits and presents an under-drilled, immediate Resource extension target. Previous drilling into the Carrington Lode intersected high-grade gold including **3m @ 46.2 g/t Au from 20m and 2m @ 68.6 g/t Au from 24m.**

Furthermore, 26 infill and extensional diamond holes (5,904m) were completed by the previous owner. Only 9 (2,039m) of the holes have been assayed (unreleased to ASX) highlighting the strong Au-Cu potential of the Liontown footwall. Best results include **8.1m @ 10.3 g/t Au and 5.3m @ 8.0 g/t Au & 1.2% Cu.** We look forward to fast-tracking the remaining 3,865m of drilling through logging, cutting and assaying.

The gold potential here is underdone and the 50 best Au intersections in Table 4 speaks for itself. Limited RC drilling at Tigertown and Cougartown has intersected broad, shallow mineralisation including **17m @ 3.05 g/t Au, 36 g/t Ag from 22m and 33m @ 1.95 g/t Au, 28g/t Ag from 12m.** Furthermore, the Coronation Cu-Au prospect is analogous to the Highway Reward Mine (4mt @ 6.2% Cu & 1.0 g/t Au mined) located 2.7km to the south. Coronation contains 4 distinct, pipe-like gravity anomalies with elevated Au, Zn and Ba in soils and rock chips to 13.8 g/t Au.

As a consequence of this transformational consolidation, it has been decided (subject to shareholder approval) to change the Company's name to Sunshine Metals Ltd and to focus on projects with existing Resources, being Ravenswood Consolidated and Triumph. Accordingly, our Investigator Cu and Hodgkinson Au-W projects will be divested in an orderly manner in due course."

Location & Infrastructure

Greater Lontown is located ~35km WSW of Charters Towers, North Queensland. The area is accessed via the sealed Flinders Highway and the sealed Gregory Development Road. Charters Towers is a regional mining and agricultural centre with a population of ~13,000. Facilities at Charters Towers include mining service providers, workforce, schools, a technical college, airport and a hospital. In addition, mains power runs through and is adjacent to Greater Lontown.

Greater Lontown is ~135km southwest of Sunshine's head office in Townsville. Townsville also hosts a concentrate export port and the Sun Metals Holdings zinc smelter (ultimately owned by the A\$12b Korea Zinc Company, Ltd. (KRX: 010130.KS). Furthermore, rail infrastructure passes through Greater Lontown between Townsville and Mt Isa. The A\$100b Glencore PLC (LSE: GLEN) operates a lead/copper smelter in Mt Isa and a copper refinery in Townsville.

Greater Lontown is contiguous with Sunshine's existing ground being the Lighthouse Farm-In tenements and Ravenswood West. The entire project is now referred to as **Ravenswood Consolidated** and is comprised of 1,760kms².

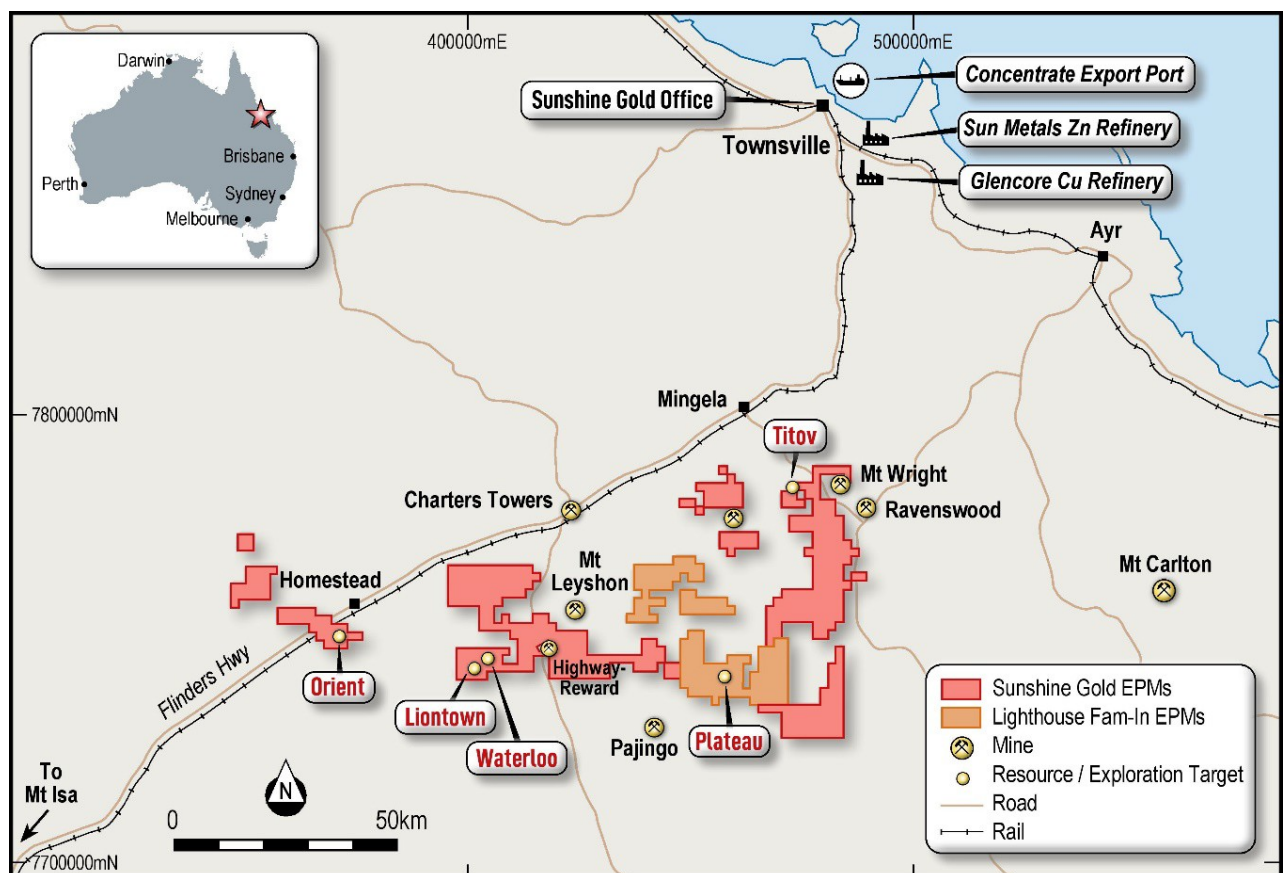


Figure 2: Ravenswood Consolidated Project displaying Townsville head office and major regional infrastructure.

JORC 2012 Mineral Resources (“Resources”)

Resources

Greater Lontown currently hosts a Zn-Cu-Pb-Au VMS Resource of 4.94mt @ 12.0% ZnEq (32% Indicated) as shown below (Tables 1 and 2). The Resource is composed of the Lontown, Lontown East, Waterloo and Orient deposits.

Gold was first discovered at Lontown in 1905 at the Carrington Au-Cu Lode. The Carrington Au-Cu Lode was worked from 1905 to 1911, to a depth of 205m over a strike length of 280m. Gold production is estimated at 13,000 oz @ 10.5 g/t Au. Mining returned to Lontown in 1951 on the New Queen and Lontown lodes which produced 9,434t of ore (2,998 oz Au, 53,957 oz Ag, 528t Pb) grading ~5.6% Pb, 9.9 g/t Au and 180 g/t Ag.

No historic mining has occurred at Lontown East, Waterloo or Orient.

Mining Lease applications have been submitted over the Lontown, Lontown East and Waterloo deposits.

Refer to pages 18 to 27 for supporting information for the Resource.

Prospect	Resource Class	Tonnage (kt)	Copper (%)	Lead (%)	Zinc (%)	Gold (g/t)	Silver (g/t)	Zinc Eq. (%) *
Lontown Oxide	Inferred	144	0.6	1.7	1.0	2.1	30	5.76
	Total	144	0.6	1.7	1.0	2.1	30	5.76
LIONTOWN								
Main Lode	Indicated	529	0.5	2.2	7.8	0.4	48	11.04
Main Lode	Inferred	717	0.6	1.8	6.4	0.3	32	9.32
	Total	1,246	0.6	2.0	7.0	0.4	39	10.05
Western Footwall	Indicated	-	-	-	-	-	-	-
Western Footwall	Inferred	200	1.4	0.5	2.5	3.8	15	12.48
	Total	200	1.4	0.5	2.5	3.8	15	12.48
Gap	Indicated	-	-	-	-	-	-	-
Gap	Inferred	376	1.7	0.8	1.9	3.6	13	12.87
	Total	376	1.7	0.8	1.9	3.6	13	12.87
New Queen	Indicated	328	0.3	2.1	5.5	2.3	44	11.14
New Queen	Inferred	129	0.2	1.7	5.9	0.9	12	8.35
	Total	457	0.3	2.0	5.6	1.9	35	10.35
Carrington	Indicated	-	-	-	-	-	-	-
Carrington	Inferred	14	0.4	1.4	4.8	1.4	28	8.66
	Total	14	0.4	1.4	4.8	1.4	28	8.66
LIONTOWN TOTAL	Total	2,293	0.8	1.7	5.5	1.5	32	10.78
Lontown East	Inferred	1,470	0.5	2.5	7.5	0.7	29	10.96
	Total	1,470	0.5	2.5	7.5	0.7	29	10.96
Waterloo	Indicated	402	2.6	2.1	13.3	1.4	68	23.40
Waterloo	Inferred	271	0.8	0.8	6.8	0.4	24	9.26
	Total	673	1.9	1.6	10.7	1.0	50	17.71
Orient	Indicated	329	1.1	2.5	10.9	0.2	55	15.20
Orient	Inferred	32	0.9	2.2	14.5	0.2	51	17.74
	Total	361	1.0	2.5	11.2	0.2	55	15.43
GRAND TOTAL		4,941	0.8	2.0	7.1	1.1	35.00	11.97

Table 1: Resource tonnage & grade by metal, deposit and category. Recoverable zinc equivalent is also calculated (ZnEq formula below).

Recoverable Zinc Equivalent calculation

The zinc equivalent grades for Greater Lontown (% ZnEq) are based on the following prices: US\$2,500t Zn, US\$8,500t Cu, US\$2,000t Pb, US\$1,900oz Au, US\$20oz Ag

Metallurgical metal recoveries are supported by metallurgical test work undertaken and are:

88.8% Zn, 80% Cu, 70% Pb, 65% Au, 65% Ag

The ZnEq calculation is as follows:

$ZnEq = Zn\ grade\ \% * Zn\ recovery\ \% + (Cu\ grade\ \% * Cu\ recovery\ \% * (Cu\ price\ \$/t / Zn\ price\ \$/t)) + (Pb\ grade\ \% * Pb\ recovery\ \% * (Pb\ price\ \$/t / Zn\ price\ \$/t * 0.01)) + (Au\ grade\ g/t / 31.103 * Au\ recovery\ \% * (Au\ price\ \$/oz / Zn\ price\ \$/t)) + (Ag\ grade\ g/t / 31.103 * Ag\ recovery\ \% * (Ag\ price\ \$/oz / Zn\ price\ \$/t * 0.01))$.

For Waterloo transition material, recoveries of 76% Zn, 58% Cu and 0% Pb have been substituted into the ZnEq formula.

For Lontown oxide material, recoveries of 44% Zn, 40% Cu and 35% Pb have been substituted into the ZnEq formula. Further metallurgical testwork is required on the Lontown oxide domain.

It is the opinion of Sunshine and the Competent Person that all elements and products included in the ZnEq formula have reasonable potential to be recovered and sold.

Prospect	Resource Class	Contained Copper (t)	Contained Lead (t)	Contained Zinc (t)	Contained Gold (Koz)	Contained Silver (Koz)
Liontown Oxide	Inferred	807	2427	1465	10	139
	Total	807	2427	1465	10	139
LIONTOWN						
Main Lode	Indicated	2,732	11,897	41,397	7	813
Main Lode	Inferred	4,220	13,016	46,081	7	738
	Total	6,951	24,913	87,477	15	1,552
Western Footwall	Indicated					
Western Footwall	Inferred	2,711	915	5,040	25	99
	Total	2,711	915	5,040	25	99
Gap	Indicated					
Gap	Inferred	6,487	2,971	7,138	43	152
	Total	6,487	2,971	7,138	43	152
New Queen	Indicated	956	6,888	18,040	24	464
New Queen	Inferred	258	2,193	7,611	4	50
	Total	1,214	9,081	25,651	28	514
Carrington	Indicated					
Carrington	Inferred	51	196	682	1	13
	Total	51	196	682	1	13
LIONTOWN TOTAL	Total	17,415	38,076	125,988	111	2,329
Liontown East	Inferred	7,190	37,133	109,862	34	1,378
	Total	7,190	37,133	109,862	34	1,378
Waterloo	Indicated	10,595	8,491	53,596	18	874
Waterloo	Inferred	2,093	2,082	18,498	4	207
	Total	12,687	10,573	72,094	21	1,081
Orient	Indicated	3,517	8,212	35,772	2	581
Orient	Inferred	273	704	4,640	0	52
	Total	3,790	8,916	40,412	2	633
GRAND TOTAL		41,889	97,125	349,822	179	5,561

Table 2: Total contained metal in Resource by metal, deposit and category.

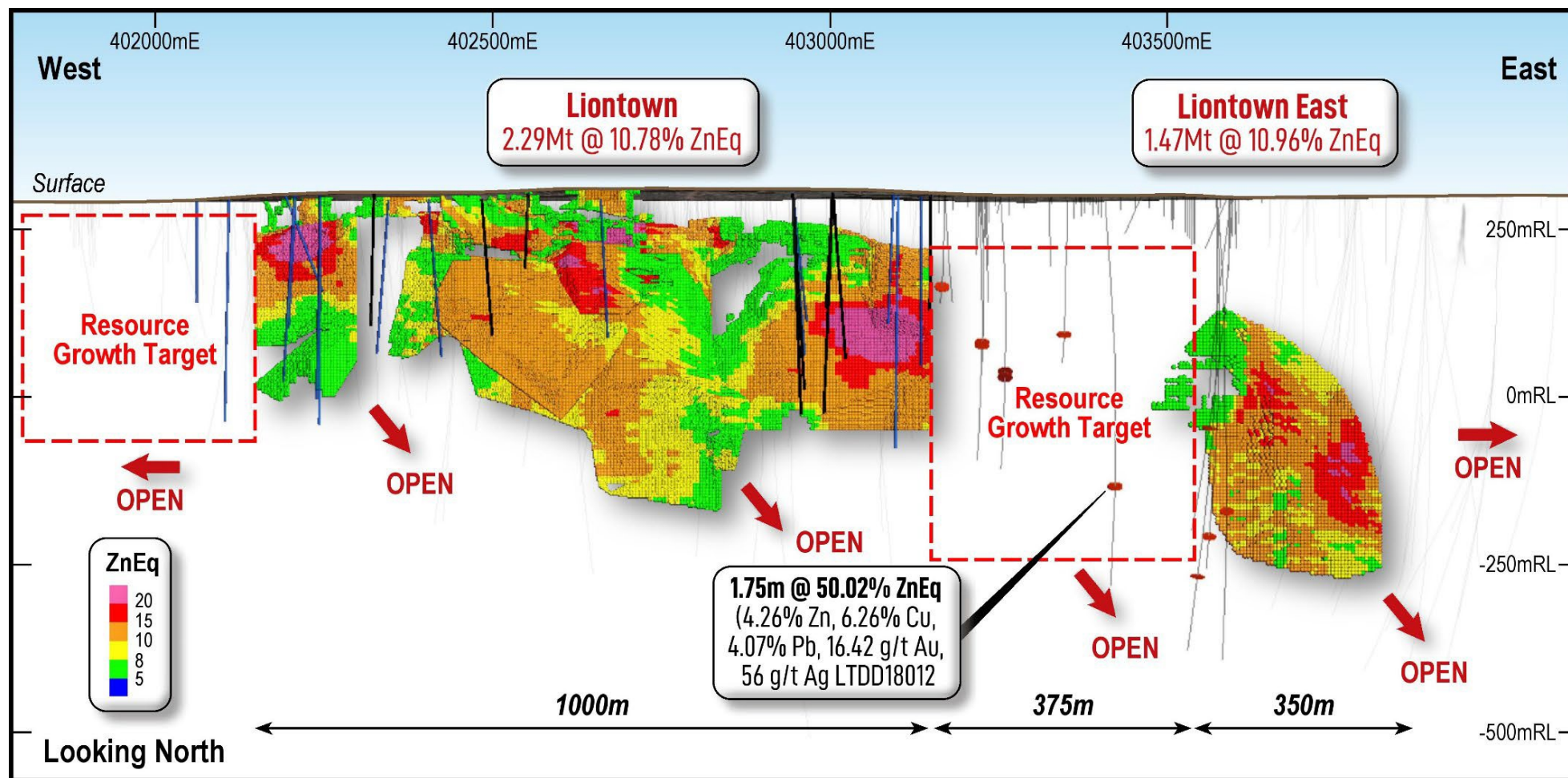


Figure 3: Long section of current Resources at Liontown and Liontown East Resource highlighting clear growth potential between the two deposits, west of Liontown and at depth.

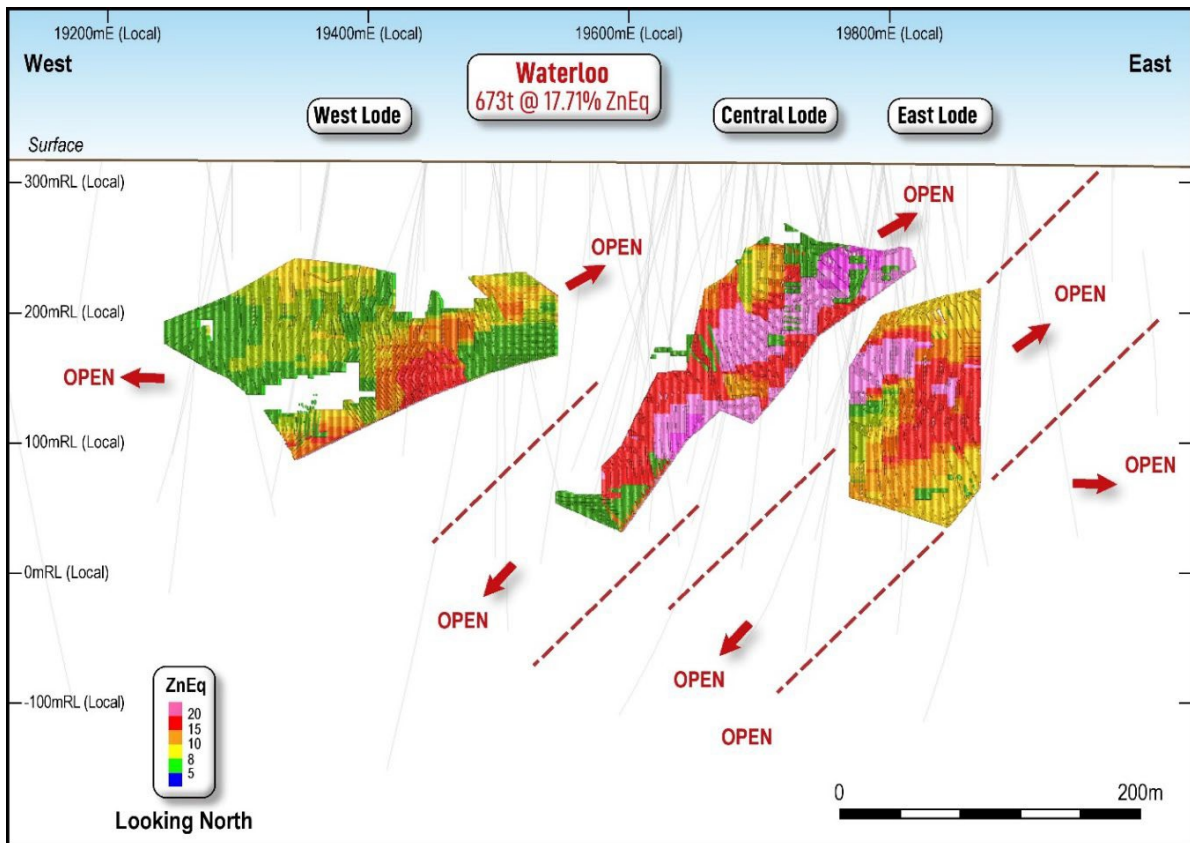


Figure 4: Waterloo Resource model long section.

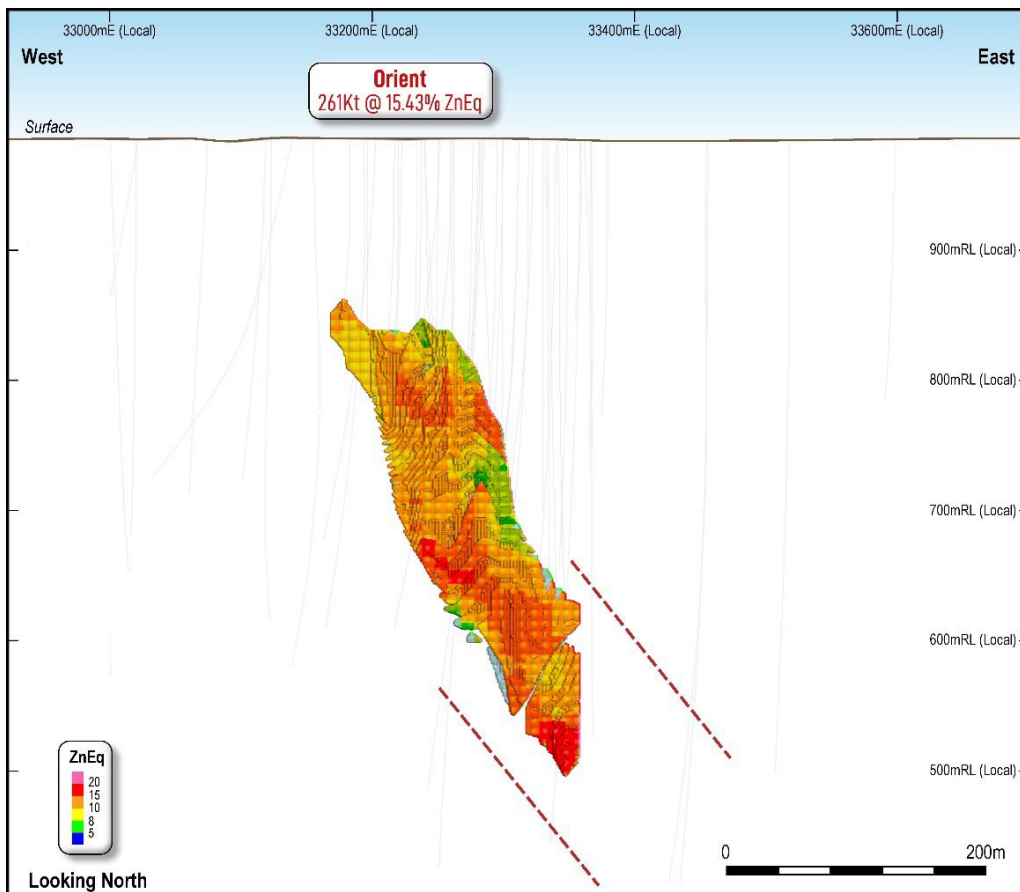


Figure 5: Orient Resource model long section.

Outstanding Resource Infill and Extensional drilling

The previous owners completed a 25 hole (5,904m) infill and extensional diamond drill program at Liontown and Liontown East in August 2022. The program targeted the Gap Lode (between Liontown and Liontown East), and the Western Footwall, Carrington and the New Queen Lodes at Liontown. Only 9 of the holes (2,039m) were logged, sampled and assayed – but not announced to the ASX. Results highlight the high-grade Au-Cu potential of the Liontown East footwall (Table 1).

The unassayed 16 holes (3,865m) core will be logged, cut and dispatched for assay. Results from program will be incorporated into a Resource update in the December 2023 quarter.

BHID	From	To	Interval	Cu %	Pb%	Zn%	Au (g/t)	Ag (g/t)	%ZnEq	Lode
LTDD22053	249.60	250.90	1.30	3.00	0.02	0.09	0.27	6.38	8.79	Gap Lode
LTDD22053	257.00	261.55	4.55	0.64	0.04	0.29	2.31	2.22	5.73	Gap Lode
LTDD22053	270.00	271.00	1.00	0.71	0.19	0.11	3.14	13.90	7.34	Gap Lode
LTDD22053	280.80	284.00	3.20	0.52	0.11	0.85	2.26	2.57	5.85	Gap Lode
LTDD22054	197.50	198.80	1.30	0.78	0.03	0.16	7.65	1.80	14.45	Gap Lode
LTDD22054	195.00	200.30	5.30	1.36	0.99	2.46	4.95	12.39	14.46	Gap Lode
LTDD22054	196.70	198.35	<i>incl.</i> 1.65	1.68	2.83	7.00	7.97	25.07	25.40	Gap Lode
LTDD22055	132.60	134.40	1.80	0.04	6.35	11.10	0.28	10.20	14.04	Gap Lode
LTDD22055	152.20	160.30	8.10	0.16	0.25	0.28	10.65	3.50	17.77	Gap Lode
LTDD22055	152.20	154.00	<i>incl.</i> 1.80	0.06	0.01	0.01	18.93	1.87	30.23	Gap Lode
LTDD22055	156.0	160.30	<i>and</i> 4.30	0.30	0.46	0.51	12.10	5.78	20.82	Gap Lode
LTDD22055	161.25	162.25	1.00	2.17	0.01	0.05	0.15	3.30	6.24	Gap Lode
LTDD22061	219.30	223.00	3.70	6.54	0.15	0.49	0.63	14.55	19.56	Gap Lode
LTDD22061	219.30	221.35	<i>incl.</i> 2.05	10.48	0.15	0.76	1.03	23.50	31.29	Gap Lode
LTDD22062	257.50	258.70	1.20	0.43	0.05	0.06	16.34	6.85	27.28	Gap Lode
LTDD22062	264.10	266.30	2.20	2.03	0.90	2.64	6.73	27.73	19.50	Gap Lode
LTDD22065	152.82	158.40	5.60	0.29	2.78	6.45	0.88	62.79	10.47	Gap Lode
LTDD22065	161.80	162.80	1.00	0.06	0.61	4.77	0.10	11.10	5.06	Gap Lode
LTDD22065	171.00	173.60	2.60	0.25	1.68	4.45	0.37	33.75	6.71	Gap Lode
LTDD22065	175.75	180.10	4.35	1.37	1.73	8.55	0.18	23.30	12.91	Gap Lode
LTDD22071	46.45	48.10	1.65	3.08	9.82	0.65	1.06	10.62	16.30	WFW/Carrington
LTDD22071	50.60	54.30	3.70	1.74	2.43	1.07	1.14	106.63	10.66	WFW/Carrington
LTDD22071	65.80	67.00	1.20	1.84	0.08	0.07	0.07	8.20	5.35	WFW/Carrington
LTDD22179A	117.00	117.90	0.90	1.08	1.08	11.98	2.39	20.33	18.23	Gap Lode
MET02	72.95	83.10	10.15	0.15	2.34	4.21	0.67	12.04	6.69	New Queen
MET02	91.00	92.00	1.00	0.02	2.27	4.46	0.03	8.40	5.43	New Queen

Table 3: Significant intercepts for the 9 holes logged, sampled and assayed – but not announced to the ASX.

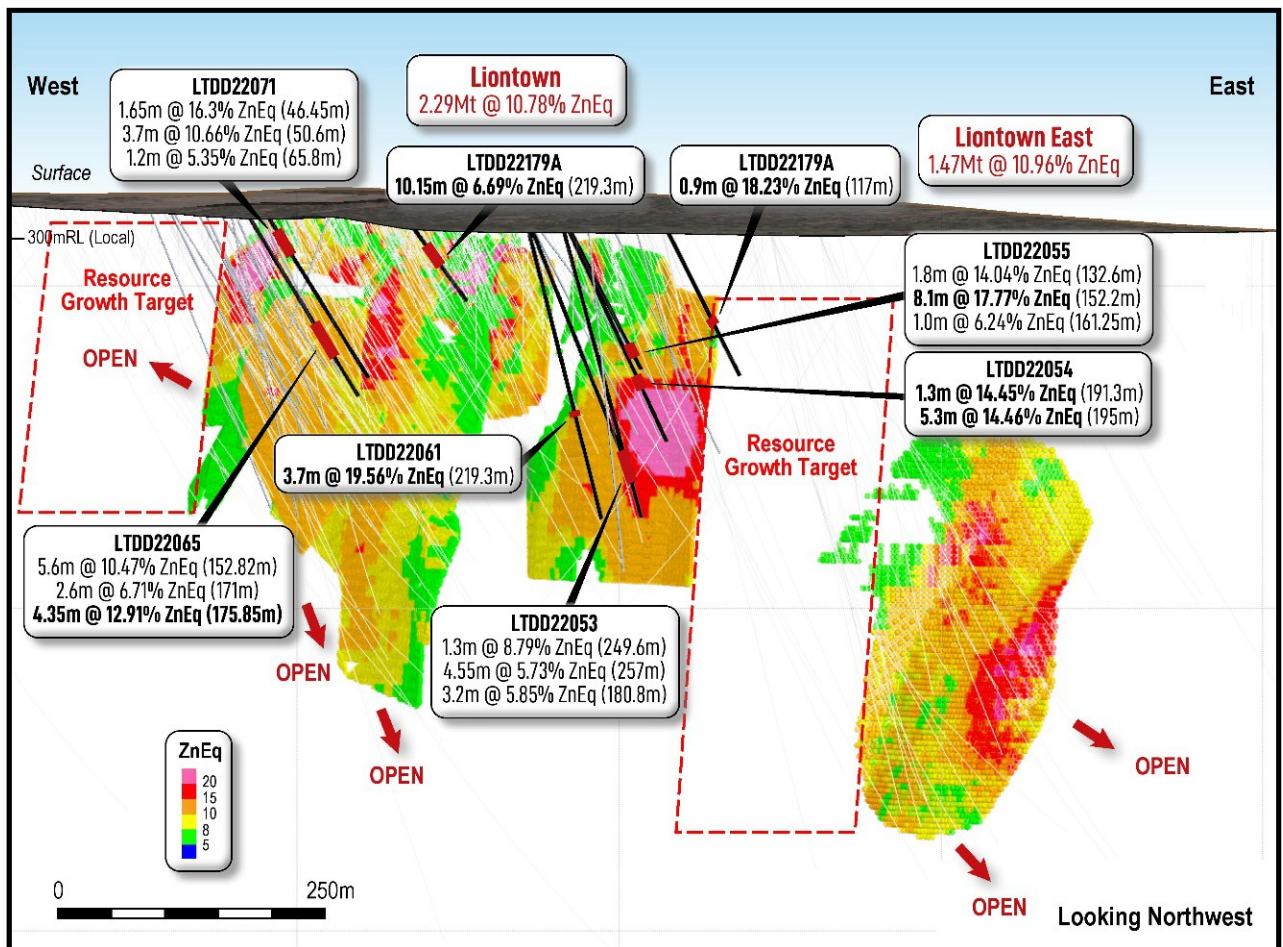


Figure 6: Long section of the current Resource at Lontown with results from the 9 holes annotated.

Sunshine intends to update the Resource estimate in the December 2023 quarter incorporating:

- all drilling results undertaken after estimation of the initial Resource;
- Sunshine interpretations and modifying factors; and
- further metallurgical test work.

Greater Lontown Exploration Potential

Previous owners have focussed on the VMS Zn-Cu-Pb-Au potential at Greater Lontown which remains strong. In addition, there is the forgotten or overlooked Au/Cu-Au potential with numerous historic gold workings at Greater Lontown.

Figure 7 shows the main exploration trends at Greater Lontown being:

- VMS Zn-Cu-Pb-Au IP survey targets;
- Western Orogenic Au;
- Epithermal and intrusion related (including breccia-hosted) Au deposits; and
- VMS Cu-Au IP targets.

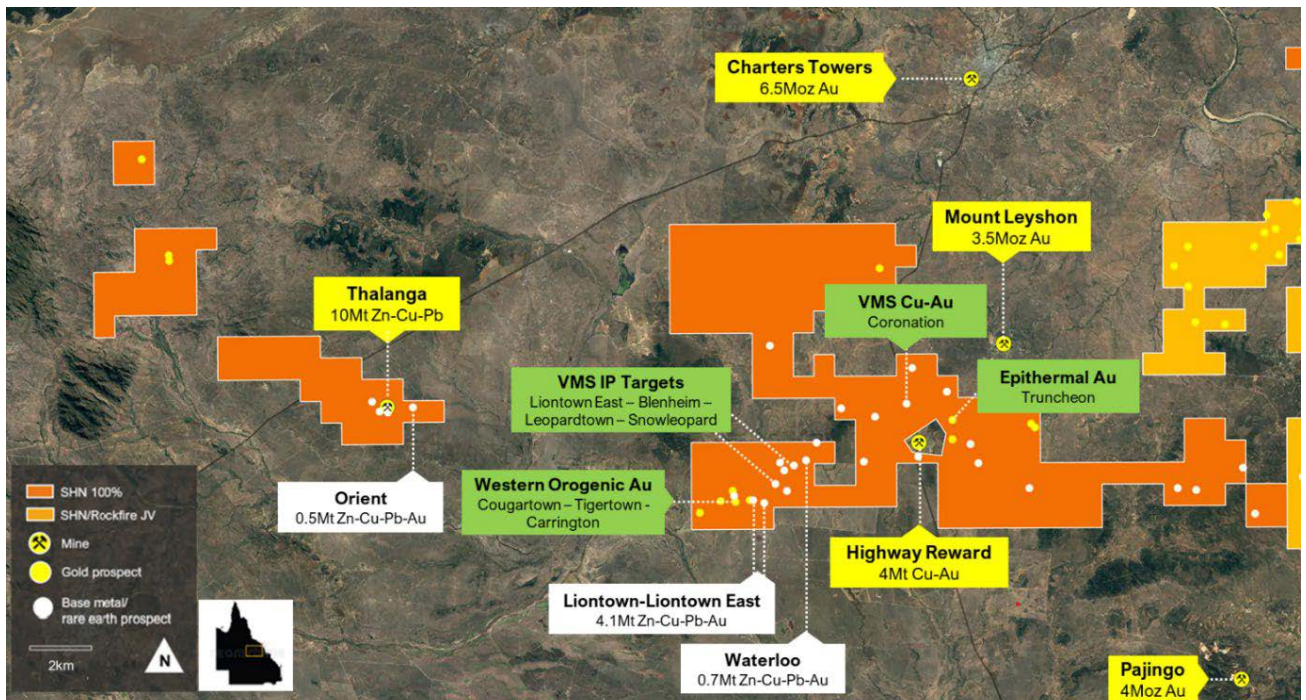


Figure 7: Current Resources at Greater Lontown (white), adjacent mining centres (yellow) and highly prospective exploration trends (green).

These exploration trends are discussed below.

VMS Zn-Cu-Pb-Au IP Targets

VMS systems form on or below the seafloor as a result of volcanic and hydrothermal activity. They are typically composed of metal sulphide minerals such as copper, zinc, lead, gold and silver. VMS deposits are typically high grade and small to medium-sized, occurring in clusters or belts, often in association with submarine volcanic rocks and hydrothermal vents.

The contact between the Mt Windsor Volcanics and the overlying Trooper Creek Formation represents a VMS prospective stratigraphic zone. This zone hosts the nearby Thalanga deposits where these clusters have produced ~10mt of high-grade Zn-Cu-Pb-Au ore. Individual deposits have also been identified at Lontown, Lontown East and Waterloo, which are ~5km apart. The Orient Resource is located 30km west.

A detailed IP survey was completed in 2017 over the area around Lontown and Waterloo. The survey identified 30 chargeable IP targets of which 4 were drilled with significant success:

- Lontown East discovery: one target lead to the Lontown East discovery which hosts a current Resource of 1.47mt @ 11.0% ZnEq;
- Esso's Waterhole: where there is unfinished business with an encouraging intersection of **7.8m @ 5.24% ZnEq** from 350.2m ESCD18001A (4.80% Zn, 0.22% Cu, 0.1 g/t Au & 11 g/t Ag); and
- Agincourt: where the IP anomaly sits over a historic intersection of **8.3m @ 9.52% ZnEq** from 263.25m AGDD2 (5.70% Zn, 0.55% Cu, 1.15 g/t Au & 19 g/t Ag).

The success rate already achieved on drilling 5 of the 30 IP targets makes drilling of the remaining 25 drill-ready Zn-Cu-Pb-Au targets a priority with ~10 to be drilled over the next 12 months with the objective of discovering more “Liontown East”.

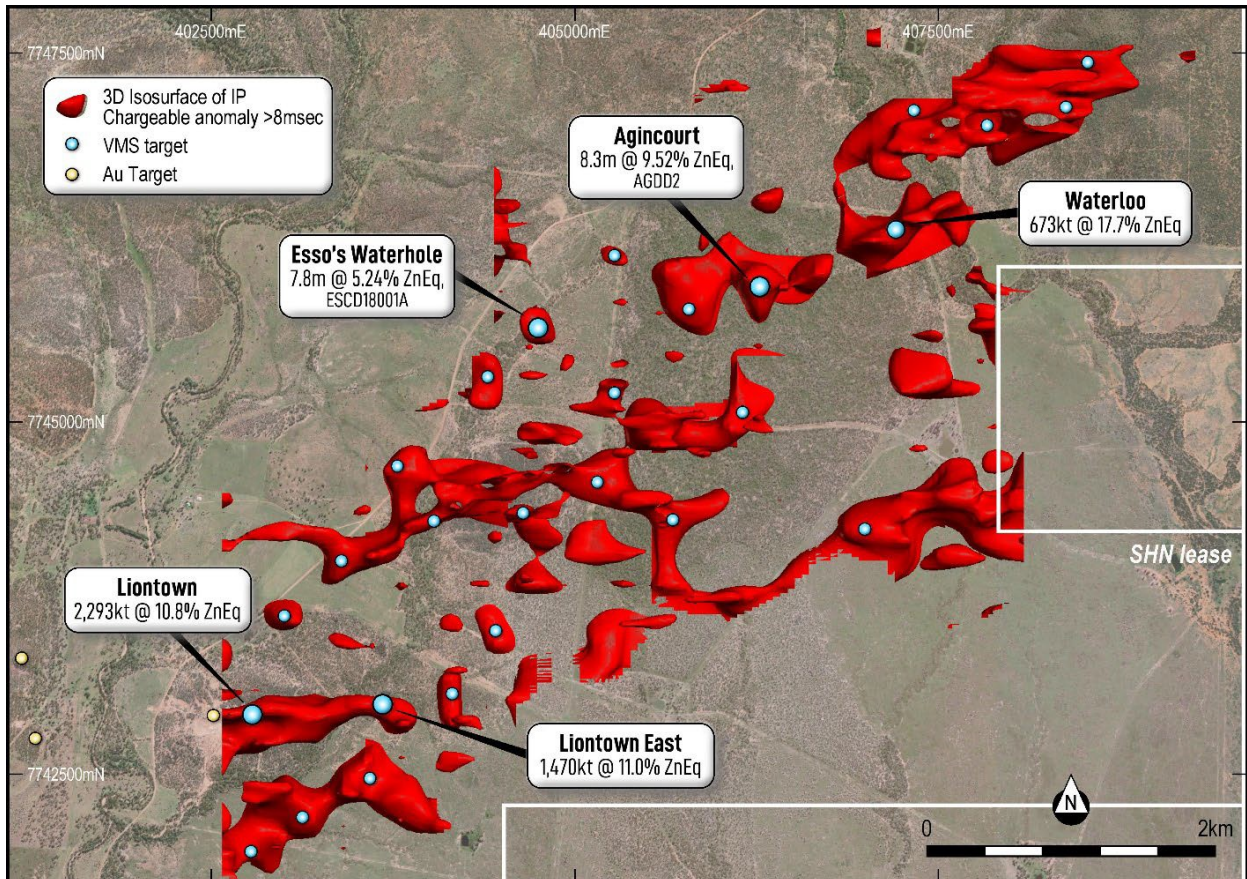


Figure 8: 5 advanced and 25 untested IP targets in the area around Liontown and Waterloo.

VMS Cu-Au IP targets

Coronation is 2.7km north of the high-grade, historic Highway-Reward Cu-Au Mine. **Highway-Reward produced ~4mt @ 6.2% Cu & 1.0g/t Au** from a series of steep plunging, pipe-like massive sulphide lenses. A detailed 2020 ground gravity survey identified four dense pipe-like anomalies at Coronation. These anomalies coincide with soil Au, Cu and Zn anomalism.

Coronation has surface outcrop of quartz-barite veins bearing sulphides and gold in rock chip samples grading up to 13.8 g/t Au, similar to those outcropping above Highway Reward. Coronation is a priority target for Sunshine.

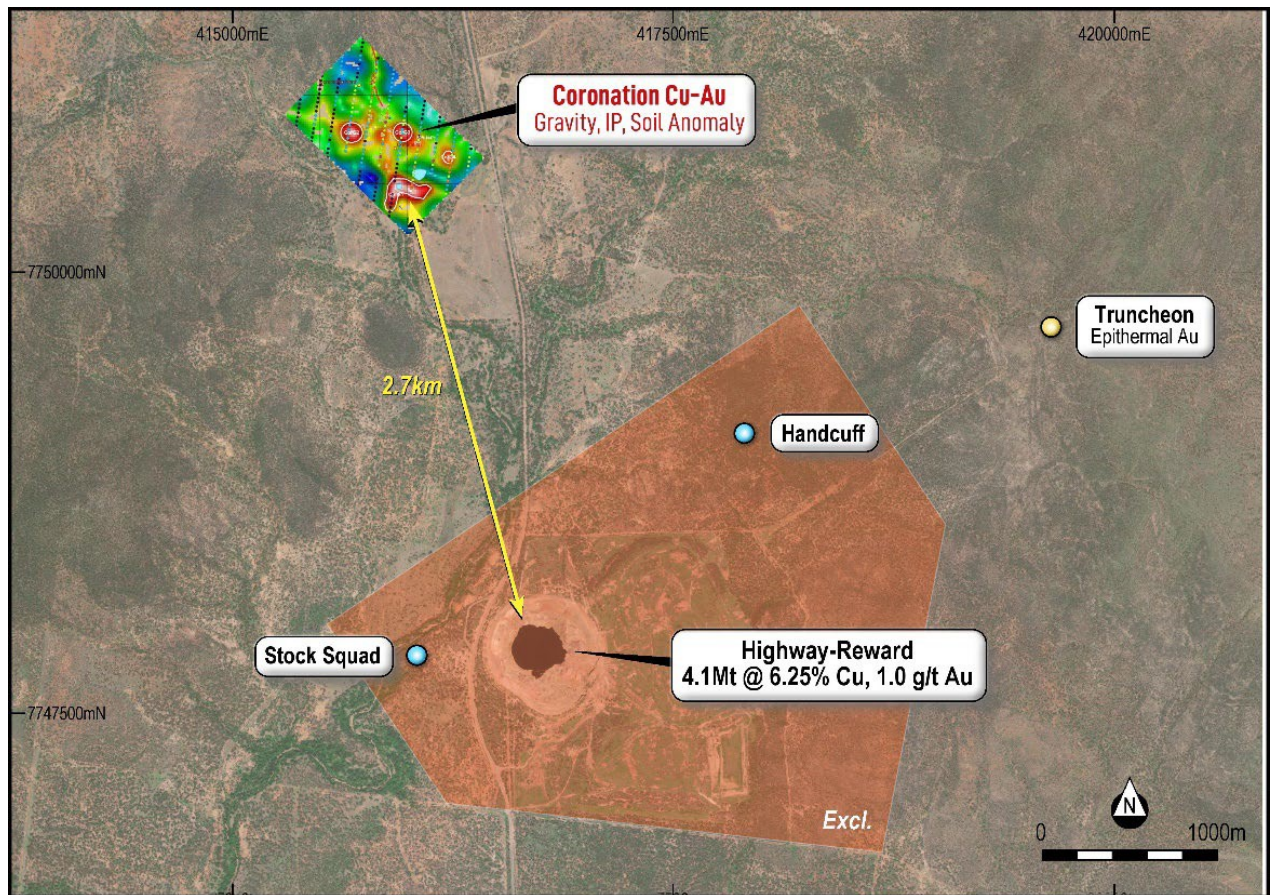


Figure 9: Ground gravity survey showing dense, pipe-like anomalies only 2.7km north of the high-grade Cu-Au, Highway-Reward Mine (~4mt @ 6.2% Cu & 1.0g/t Au mined).

Western Orogenic Au

Greater Lione town also contains numerous historic gold workings and significant, overlooked gold potential. The Tigertown and Cougartown trends are located ~1km west of Lione town. At Tigertown drilling is limited to shallow RC with historic intersections requiring follow up that include:

- **17m @ 3.05 g/t Au** from 22m (LLRC003)
- **33m @ 1.95 g/t Au** from 12m (MWR037)
- **11m @ 1.70 g/t Au, 146 g/t Ag** from 79m (LLRC004)
- **3m @ 3.41 g/t Au** from 33m (LLRC034)

Cougartown contains historic rock chips to 34.7 g/t Au and a series of shallow RC holes displaying Au and Ag anomalism. One drill hole (LCP501) shows potential for the Zn and Pb VMS horizon to be situated beneath the Western Orogenic Au targets. Results include:

- **1m @ 1.81 g/t Au, 181 g/t Ag** from 3m (MWR008)
- **2m @ 12.45% ZnEq comprised 9.54% Zn, 2.06% Pb, 1.81 g/t Au** from 54m (LCP501)

Epithermal and intrusion related (including breccia-hosted) Au deposits

The tenure is considered prospective for both epithermal and intrusion-related gold systems. Example deposits nearby include the Pajingo Mine (Yuxin Holdings, 3.5 Moz Au produced) and Mt Leyshon (Newmont Mining, 2.5 Moz Au produced) respectively. Epithermal alteration characteristics have been noted at the Truncheon prospect where historical drilling returned:

- 3m @ 2.49g/t Au and 48g/t Ag from 15m (TRDD17001)

Kitchen Rock shares similar characteristics to Mt Leyshon, with phyllic-altered, brecciated rhyolite at surface and elevated Au in drill core up to 0.90g/t Au (KTDD18001). Both prospects are considered underexplored and under-drilled by SHN.

Best 50 Au drill intersections at Greater Liontown

The gold potential at Greater Liontown is underdone and the 50 best Au intersections table shown below.

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Grade x Interval	Prospect
LTD0022	344	346	2	82.50	165.00	Liontown
LRC043	24	28	4	35.08	140.30	Liontown
LRC018	20	23	3	46.20	138.60	Liontown
LLRC184	115	123	8	11.74	93.89	Liontown
LTDD22055	152.2	160.3	8.1	10.65	86.29	Liontown
LLD135	115	126	11	6.97	76.70	Liontown
LTDD19013	75	92.5	17.5	4.37	76.55	Liontown
LRC001	50	61	11	5.94	65.35	Liontown
MWR037	12	45	33	1.95	64.38	Tigertown
LLD105	92.8	95.8	3	19.30	57.90	Tigertown
LLRC200	40	54	14	4.12	57.70	Tigertown
PC005	43	45	2	27.53	55.05	Toomba
LLD122	211	213	2	27.30	54.60	Liontown
LLRC082	131	136	5	10.53	52.65	Liontown
LLRC003	22	39	17	3.05	51.86	Tigertown
LTD0004	122	131	9	5.39	48.49	Liontown
WT36	142.4	158.9	16.5	2.93	48.36	Waterloo
LLD109	106.8	111.8	5	8.57	42.84	Liontown
LLD101	81	85	4	10.68	42.72	Liontown
LTDD19002	39.85	48.24	8.39	4.94	41.46	Liontown
LTDD19030	100.6	105.3	4.7	8.82	41.44	Liontown
LLRC220	89	92	3	13.34	40.03	Liontown
LLRC091	97	105	8	4.99	39.91	Liontown
LRC048	12	15	3	13.27	39.80	Liontown
LTDD18015	236.3	238.9	2.6	15.29	39.76	Liontown East
LTDD19027	62.4	64.9	2.5	15.35	38.38	Liontown
LTDD22054	191.3	200.3	9	4.05	36.44	Liontown
LRC005	25	31	6	5.79	34.75	Liontown
LRC050	19	33	14	2.48	34.72	Liontown
LLRC068	16	18	2	17.05	34.10	Liontown
WTRC2	24	27	3	11.20	33.60	Waterloo
WT85	214.4	221	6.6	4.98	32.88	Waterloo
LRC050	39	47	8	4.10	32.80	Liontown
LTDD19015	84.15	95.4	11.25	2.88	32.40	Liontown
WT84	84	90.9	6.9	4.63	31.92	Waterloo
WT86	46.25	53.2	6.95	4.41	30.66	Waterloo
LRC035	34	40	6	4.94	29.65	Liontown
LTDD18012	419.05	420.8	1.75	16.42	28.73	Liontown East
LTDD19033	53.07	55.25	2.18	12.94	28.21	Liontown
MVRC1	75	87	12	2.35	28.20	Agincourt
DNRC001	34	35	1	27.99	27.99	The Don
LLD106	49.2	50.2	1	27.50	27.50	Liontown
LLRC224	40	50	10	2.67	26.73	Liontown
LTED07W1	554.15	557.5	3.35	7.96	26.65	Liontown East
LTED07	557	564.7	7.7	3.45	26.53	Liontown East
LTDD19023	88.08	90	1.92	13.61	26.14	Liontown
LTD0006	86	89.9	3.9	6.68	26.05	Liontown
LLRC207	25	29	4	6.26	25.06	Liontown
LTDD19027	73.9	77.8	3.9	6.38	24.87	Liontown
LRC040	41	47	6	3.97	23.80	Liontown

Table 4: Top 50 gold intercepts across the Greater Liontown project.

(Au intercepts were calculated using a 1g/t Au cutoff, allowing 5m of internal dilution and no more than 3m of consecutive internal dilution)

Best 50 ZnEq drill intersections at Greater Lontown

The high-grade nature of the Zn-Cu-Pb-Au at Greater Lontown is demonstrated by the 50 best ZnEq intersections shown below.

Hole ID	From (m)	To (m)	Interval (m)	ZnEq %	Grade x Interval	Prospect
WT84	81.7	93.5	11.8	47.45	559.93	Waterloo
LTDD19013	77	90	13	31.89	414.60	Lontown
WT5	176.35	183.8	7.45	49.72	370.41	Waterloo
LTDD19010	187.65	205.15	17.5	20.29	355.07	Lontown
WT27	113.2	119.6	6.4	46.78	299.40	Waterloo
WT85	214.4	221	6.6	44.72	295.12	Waterloo
WT37	222.7	229	6.3	42.62	268.50	Waterloo
LTD0022	344	346	2	131.30*	262.60	Lontown
WT80	114.7	122	7.3	34.34	250.67	Waterloo
LRC050	29	47	18	13.91	250.33	Lontown
LRC018	18	23	5	49.54	247.72	Lontown
WL17A	248.2	256	7.8	31.16	243.06	Waterloo
LRC005	25	44	19	12.54	238.33	Lontown
LRC046	35	57	22	10.63	233.85	Lontown
LLRC221	53	59	6	38.28	229.68	Lontown
LLD101	81	91	10	22.70	227.01	Lontown
LTD0004	116.8	131	14.2	15.83	224.82	Lontown
LTDD19015	84.15	95.4	11.25	19.59	220.40	Lontown
LRC043	24	26	2	109.24^	218.47	Lontown
WL37	195	204.3	9.3	22.86	212.64	Waterloo
LLD135	114	126	12	17.49	209.92	Lontown
WL22	210.1	215.6	5.5	38.09	209.48	Waterloo
LTDD22057A	173.4	184.35	10.95	19.02	208.28	Lontown
WL06	279	294	15	12.98	194.72	Waterloo
LTD0002	99	108	9	20.81	187.29	Lontown
WT41	254.7	261	6.3	29.14	183.57	Waterloo
WT10	191.85	200	8.15	22.28	181.62	Waterloo
WL33	241.2	248	6.8	26.60	180.85	Waterloo
WT43	204.05	210	5.95	30.06	178.85	Waterloo
LTED05	504.7	516	11.3	15.74	177.89	Lontown East
LLRC184	115	123	8	21.89	175.11	Lontown
LTED09	419.02	429.3	10.28	17.00	174.79	Lontown East
WT9A	239	247.3	8.3	19.11	158.64	Waterloo
LTDD19005	36.7	48.2	11.5	13.20	151.86	Lontown
LLRC082	129	141	12	12.61	151.37	Lontown
LTDD19027	73.9	79.3	5.4	27.64	149.25	Lontown
LTDD19027	61	64.9	3.9	38.10	148.61	Lontown
WT64	163.15	168.3	5.15	28.70	147.79	Waterloo
WTRC5	84	87	3	48.95	146.84	Waterloo
LLD105	92.8	95.8	3	48.72	146.16	Lontown
LTDD19002	39.85	49.35	9.5	15.19	144.28	Lontown
LLD116	91.2	97.5	6.3	21.97	138.41	Lontown
LTDD21037	250.9	265.2	14.3	9.62	137.55	Lontown
LRC035	32	40	8	16.56	132.52	Lontown
LLRC074	52	70	18	7.29	131.29	Lontown
LLRC091	97	105	8	16.31	130.50	Lontown
LTDD19008	105.88	111.55	5.67	22.45	127.30	Lontown
WL01	100.6	111.2	10.6	11.89	126.00	Waterloo
LTED05W1	169.9	176	6.1	20.57	125.46	Lontown East
WT56	152.2	155.8	3.6	34.68	124.85	Waterloo

Table 5: Top 50 zinc equivalent intercepts across the Greater Lontown project.

* Interval included 2m @ 82.5g/t Au, ^ Interval included 2m @ 68.2g/t Au

(ZnEq intercepts were calculated using a 5% ZnEq cutoff, allowing 3m of internal dilution. ZnEq calculation as per page 5)

Key Commercial Terms

Cautionary Statement: Greater Liontown is not yet owned by Sunshine. Certain conditions precedent are to be satisfied prior to Completion.

Sunshine has entered into binding agreements to acquire 16 tenements (684 km²) in two separate transactions with unrelated, third parties. Both parties are ultimately, wholly owned subsidiaries of Red River Resources Ltd (Administrators Appointed) (ASX:RVR). The transactions are subject to Completion and key terms are shown below.

Sale Purchase Agreement - Key Terms	Cromarty	Hebrides
Area	463 km ²	221 km ²
Tenements	EPM10582, EPM12766, EPM16929, EPM26718, EPM27357, EPM27520, EPM14161, ML10277, ML100221 (Application), ML100290 (Application), ML100302 (Application)	EPM25815, EPM18471, EPM18470, EPM18713, EPM25895
Cash Payments		
Non-Refundable Deposit/Fee	\$400,000 (Paid)	\$25,000 (Paid)
Cash Payable on Completion	\$2,100,000	\$225,000
Deferred Cash - 31 October 2023	\$500,000	-
Total Cash Payments	\$3,000,000	\$250,000
Milestone Payments		
- \$1m of Production Revenue	\$1,000,000	-
- \$1m of Production Revenue + 1 Year	\$1,000,000	-
Total Milestone Payments	\$2,000,000	-
Total Consideration	\$5,000,000	\$250,000
Resource		
Resource	4.94mt @ 12.0% ZnEq = 591kt ZnEq	N/A
Total Cash Payments per ZnEq Resource Tonne	5.08	N/A
Total Consideration per ZnEq Resource Tonne	8.46	N/A
Environmental Bonds		
Environmental Bonds	\$30,033	\$14,500
Conditions		
Conditions	Subject to Completion, regulatory approvals, good standing	Subject to Completion, regulatory approvals

Table 6: Summary of key commercial terms for the tenements to be acquired.

For the avoidance of doubt, the acquisition excludes the processing facility and open pit and underground mines at Thalanga. Accordingly, Sunshine assumes none of the associated care and maintenance costs and rehabilitation liabilities. Environmental bonds required in relation to the tenements being acquired are minimal and estimated to amount to \$44,533.

Funding

Sunshine is pleased to announce that firm commitments have been received to raise \$3.6m (before costs) by way of a placement at an issue price of \$0.015 per share ("**Placement**"). The Placement was strongly supported by existing shareholders and new institutional, sophisticated and professional investors.

Approximately 189.4 million Placement Shares will be issued in Tranche 1 of the Placement, under ASX Listing Rule 7.1 and 7.1A, with settlement expected to occur on or about Friday 12 May 2023.

An additional 50.6 million shares will be issued in a second tranche of Placement Shares, subject to shareholder approval. Included in this second tranche, Sunshine directors have applied to invest \$500,000. This brings the total investment by Directors to \$3.2 million (to date).

A general meeting of shareholders is expected to be held on 21 June 2023 to approve the issues. Shareholders will also be asked to approve a change of company name to Sunshine Metals Limited to better reflect the range of exciting commodities the Company is leveraged to.

An Appendix 3B for the proposed issue Placement Shares will follow this announcement.

Funds provided from the Placement (after costs) will be applied to the initial cash consideration for the acquisitions, growth of Resources and for general working capital.

Bell Potter acted as sole lead manager to the Placement and will receive a fee of 6% on the proceeds of the Placement (excluding funds contributed by Directors of the Company). Bell Potter will also subject to shareholder approval receive 20 million options exercisable at a 50% premium to the price of the Placement Shares.

Sunshine welcomes new investors to the register and thanks existing shareholders for their ongoing support.

A pro-forma capital structure and indicative timetable is shown below.

Capital Structure & Funding Timetable	Current	Transaction Funding	Pro Forma
Fully Paid Ordinary Shares			
Current Shares on Issue	769,722,730	-	-
Placement Shares – Listing Rules 7.1 and 7.1A	-	189,433,334	-
Placement Shares – Subject to Shareholder Approval (inc directors)	-	50,566,666	-
Proforma Shares on Issue Post Placement	-	-	1,009,722,73
Options @ \$0.03 expiring 30/09/2025	66,600,000	-	66,600,000
Options @ \$0.07 expiring 31/07/2024	1,700,000	-	1,700,000
Performance rights expiring 24 November 2023	8,500,000	-	8,500,000
Performance shares expiring 24 November 2023	50,000,000	-	50,000,000
Broker Options \$0.0225 expiring 30/06/2027	-	20,000,000	20,000,000
Director Incentive Options \$0.0225 expiring 30/06/2027	-	20,000,000	20,000,000
Total Issued Capital	896,522,730	280,000,000	1,176,522,73

Indicative Timetable	
Announcement of Acquisition	5/05/2023
Issue of Listing Rules 7.1 and 7.1A Placement Securities	15/05/2023
General Meeting of Shareholders for approval of Securities	21/06/2023

Table 7: Pro-forma capital structure and indicative timetable.

Resource – Supporting Information

Geology and Geological Information

The Lontown, Lontown East, Waterloo and Orient deposits are located in the prospective Seventy Mile Range Group volcano-sedimentary sequences of the Cambro-Ordovician-age Mt Windsor Sub-province. These rocks host VMS-style massive sulphide deposits in the Charters Towers region. Principal amongst the VMS deposits are the Thalanga group of deposits including Waterloo, Lontown, Magpie and Highway-Reward.

The Mt Windsor Sub-province forms an east-west trending belt extending for about 165km from the Leichardt Range, south of Ravenswood in the east, to Homestead in the west. Rocks of the sub-province have been extensively intruded and dismembered along the northern margin by emplacement of the Ordovician to Permian Ravenswood Batholith and Lolworth Igneous Complex. To the south they are overlain by the Devonian to Carboniferous Drummond Basin succession.

A discontinuous cover of Tertiary alluvium, Campaspe Formation, obscures much of the terrane, particularly in the central and western parts of the belt.

The volcanic and sedimentary rocks of the Mt Windsor Sub-province are assigned to the Seventy Mile Range Group and comprise, from oldest to youngest, the Puddler Creek Formation, Mt Windsor Formation, Trooper Creek Formation and Rollston Range Formation. The succession has a minimum thickness of 14 km but the true thickness of the succession is poorly constrained due to structural complexities, particularly in the Puddler Creek Formation (Henderson, 1986; Doyle, 1997). Regional metamorphism increases from prehnite-pumpellyite facies in the east, to greenschist facies around Highway-Reward, to amphibolite facies in the westernmost parts (Berry et al, 1992). Regional metamorphic assemblages have been overprinted by contact metamorphic aureoles around granitic intrusive.

The Puddler Creek Formation is dominated by clastic sediments and has a minimum thickness of 9km (Henderson, 1986). Rhyolite dykes and sills, mostly in the upper parts of the formation, were interpreted as possible feeders to the overlying volcanic-dominant formations by Berry et al (1992).

The Mt Windsor Formation is dominated by rhyolite lavas, domes and volcanoclastic facies with minor dacite and rare andesite and varies in thickness from a minimum of around 300-400 metres in the west, to 5km in the east (Simpson, 2001). The formation is absent north of Highway-Reward where the Puddler Creek Formation is conformably overlain by the Trooper Creek Formation (Doyle, 1997).

The Trooper Creek Formation mainly comprises basaltic, andesitic, dacitic and rhyolitic lavas, intrusions and volcanoclastic rocks and well-bedded mudstone and ranges in thickness from 4km in the central part of the sub-province, to a minimum of 500 m along the Thalanga Range to the west (Henderson, 1986).

The mineralised systems of **Liontown and Liontown East** occur within units of the Trooper Creek Formation. The deposit stratigraphy is dominated by a footwall sequence of rhyodacite pumice breccia (footwall), grading through a series of interbedded schistose, dacitic volcanoclastics and sediments into a hangingwall sequence of capping cherts and arenites.

The **Pumice Breccia unit** hosts both VMS and structure related quartz \pm Cu \pm Au mineralisation which occur super-imposed on each other in places. The unit also hosts chalcopyrite-quartz-pyrite \pm chlorite stringer veining and the New Queen mineralisation. The New Queen mineralisation is discussed separately.

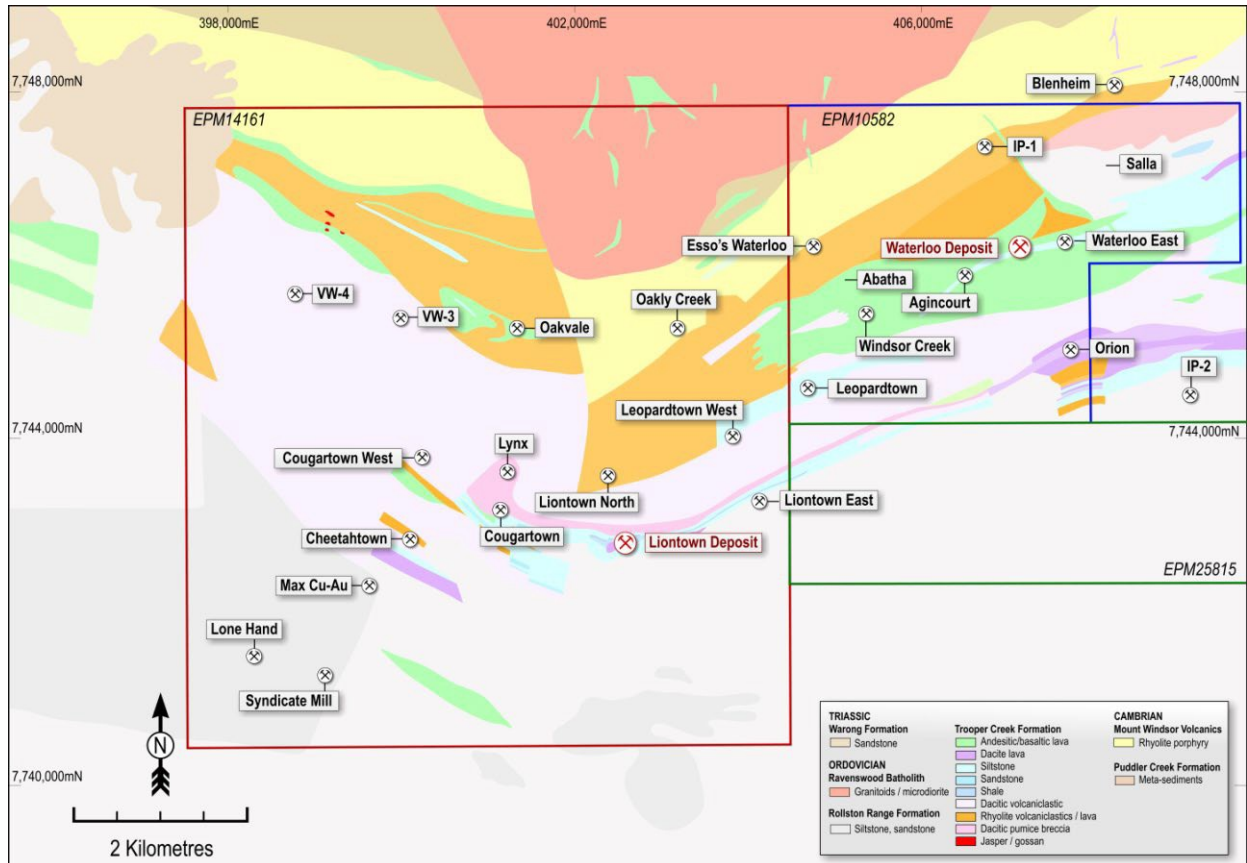
- **Structural mineralisation, the Carrington Lode** – a continuous planar shear hosting echelon quartz-Au \pm Cu veins, generally 1m wide with strikes to 15m and dipping steeply to the south. The shear changes in nature depending on host rock. This mineralisation was previously mined in Carrington workings at Liontown, and can be extended west, east and as copper rich mineralisation at depth.
- **The Gap Lode** – sub-seafloor replacement massive, sphalerite and galena. Relic rock within the massive sulphide indicates hydrothermal fluids exploited a porous siltstone/tuff unit at the top of a pumice breccia flow near completely replacing it. VMS has been crosscut by later quartz Au-Cu bearing veining forming a plunging lode of Cu-Au-Zn-Pb. The hanging and footwalls are intensely sericite-chlorite altered.
- **Western Footwall Lode** – Mineralisation is similar to the Gap Lode described above with semi-massive sphalerite dominated sulphides that have been cross cut by quartz-chalcopyrite veins. The footwall of the lode is variable quartz-sericite-chlorite altered with rare sphalerite-galena stringers and upwards of 10% chalcopyrite-pyrite stringer veins.

The **New Queen Horizon** of interbedded schistose dacitic volcanoclastics and sediments is found within the top of the Pumice Breccia sequence. It hosts the New Queen Lens, a complex body of massive to semi massive VMS mineralisation.

The **Liontown Horizon** is a conformable transition from PBX into finer grained mixed volcanic sedimentary units at the upper boundary of the Pumice Breccia. The horizon hosts the Liontown Main Lens system which comprises three (Upper, Central and Lower) sheet like “primary” VMS sulphide lodes as well as fine grained remobilised sulphides occurring disseminated to cleavage fill. Mineralisation occurs in variable intensities from disseminations to massive sulphides as a fine (0.1-6mm) cleavage-controlled layering of low iron sphalerite-pyrite-galena-tetrahedrite-tennantite-chalcopryrite sulphides, interspaced with barite-chlorite-sericite-carbonate layers. Mineralisation is also present as rotated blocks of massive sulphide that are distinctively preserved and lacking the intense schistosity of the host sequence.

- Upper Lens - 270m strike x 240m vertical extent & 0.5m to 4m thickness – mineralisation has an overall banded appearance near the stratigraphic top of the Liontown Horizon. Banding consists primarily of sphalerite-galena-carbonate-barite and is interpreted to be deposited by exhalation of hydrothermal fluids onto the seafloor. Where shearing occurs, banding is often disjointed. Compared to the Central and Lower lenses, the upper lens has elevated Au and Ag.
- Central Lens – 170m strike x 130m vertical extent & 0.5m and 7.5m thickness – located in the central portion of the Liontown Horizon. Moderately to strongly sheared with increased chlorite content.
- Lower Lens – 500m strike 380m vertical extent & 0.5m to 8m thickness - The most continuous lens within the Main Lens system resting on or within 5m of the Liontown Horizon-Pumice Breccia contact. Mineralisation is dominated by massive and semi-massive, low iron sphalerite with minor galena and chalcopryrite and trace amounts of tennantite and tetrahedrite (Miller, 1996). The lower lens has a strong calcite-sphalerite ± barite association and elevated manganese up to 2% (Miller, 1996). Banding is rare to absent. Primary textures have been modified by deformation but features favour formation as near seafloor replacement. The Lens is occasionally crosscut by chalcopryrite bearing quartz-carbonate veins with pyrite halos which have exploited the weakness of the lithological contact, raising the chalcopryrite-pyrite content of the lens.

Waterloo contains a series of three high grade VMS lenses occurring at the contact of a subvertical pyritic, sericite-quartz schist and overlying sequence of coarse rhyolitic volcanoclastics. The mineralisation runs east to west, plunging to the west. Mineralisation has been disrupted by faulting and folding. The upper part of the Waterloo sequence consists of coherent andesite lavas, dacitic volcanics and interbedded sediments. The prospect is covered by 30-60m of Tertiary sediments. Bedding at Waterloo strikes east-northeast, dips sub-vertically and youngs to the south.



Orient is a VMS style deposit with a rhyolite footwall and a “quartz eye” porphyry hangingwall (occasionally clastic) which lies ~100m below the Campaspe Tertiary gravels and sands. The mineralisation is massive sphalerite, galena and chalcopyrite (Zn, Pb, and Cu) with minor amounts of silver and gold present in the sulphides. Pyrite is also present in high levels (Fe up to 30%) throughout the deposit. The massive sulphide lens strikes East-West and dips mostly at ~80 degrees to the south but is almost vertical in some places nearer the top of the deposit. A stringer, or feeder, zone is present in the footwall. It runs sub-parallel with the massive sulphide lens abutting the mineralisation in most cases and moving further out into the footwall at depth. This stringer zone has minor sulphide mineralisation, mostly pyrite with minor chalcopyrite and occasionally sphalerite. Ground conditions are generally good around the mineralised zone with some shearing and faulting in the footwall, and one known fault through the deposit below 600RL.

Sampling and sub sampling techniques

Lioatown

Geological logging was carried out by Red River Resources geologists applying industry standard practices. RC samples were collected on a 1m interval and split using a rig-mounted cone splitter to collect samples of 3-5kg in size. Drill core was sampled to mineralised boundaries and sawn in half longitudinally while onsite with sample lengths targeting 1m with 97.5% of sample ranging from 0.3 to 2.0m. The samples from 2016 to 2019 drilling programs were sent to Intertek Laboratories in Townsville for analysis. In addition, 5 holes were sampled as quarter core with half core used for metallurgical test work.

Hole count and metre count of samples intersecting the mineralised domains is shown below for each respective drill program:

Program	Hole Count	Metre Count
Nickel Mines	50	711.48
Eso	25	274.46
Great Mines Limited	43	623.00
Pancontinental (1994, DD)	8	100.00
Pancontinental (1994 – 1996, RC)	26	341.00
Liontown Resources	35	268.87
Red River Resources (2016 - 2019)	20	75.98
Red River Resources (2019)	34	987.42

Liontown East

Geological logging was carried out by Red River Resources geologists applying industry standard practices. RC samples were collected on a 1m interval and split using a rig-mounted cone splitter to collect samples 3-5kg in size. Drill core was sampled to mineralised boundaries and sawn in half longitudinally while onsite, with sample lengths targeting 1m and ranging from 0.2 to 1.5m. Samples were sent to Intertek Laboratories Townsville for analysis.

Waterloo

All core has been geologically logged by previous company geologists. The deposit was primarily sampled via NQ2 diamond drill core sawn in half longitudinally to mineralised boundaries with half the core submitted to the laboratory for assay and half retained in the core tray for reference. Some core was quarter cored if sampling for metallurgy test work was required. The sample intervals were primarily 1m but broken at lithological contacts. The laboratories used and the assaying methods are not clear for the Penarroya and Pancontinental drill programs. RGC samples were submitted to the Australian Laboratory Services laboratory in Charters Towers.

Orient

All core has been geologically logged by previous company geologists. The deposit was primarily sampled via NQ2 diamond drill core sawn in half longitudinally to mineralised boundaries with half the core submitted to the laboratory for assay and half retained in the core tray for reference. BQ sized drill core was whole sampled. Samples were sent Australian Laboratory Services (ALS) in Charters Towers for analysis.

Liontown

Diamond drilling (DD) and reverse circulation (RC) techniques were used to obtain samples during 8 major drilling programs between 1970-2019:

Program	Year	Drilling Method
Nickel Mines	1970-1973	Diamond Drilling
Esso	1982-1983	Diamond Drilling
Great Mines	1987	Reverse Circulation
Pancontinental	1994	Diamond Drilling
Pancontinental	1994-1996	Reverse Circulation
Liontown Resources	2007-2008	Diamond Drilling
Red River Resources (2016 - 2019)	2016-2018	Diamond Drilling
Red River Resources (2019)	2019	Diamond Drilling

Liontown East

Drilling was completed using diamond and RC methods. Most drilling passing through the Resource area is NQ2 or BQ sized diamond core. One hole passing through the Resource is RC. The holes were utilised as part of the Liontown East Resource estimation process to either define or constrain the mineralised envelope. Samples from holes passing through the mineralised envelope were used in estimation process.

Waterloo

Penarroya (Australia) Pty Ltd, Pancontinental Pty Ltd and RGC (Thalanga) Pty Ltd drilled a total of 39 diamond holes between 1984 and 1997. Kagara Copper Pty Ltd ("Kagara") drilled a total of 53 further diamond holes in 2007 and 2008. The majority of older core intersections through the mineralised horizon are NQ2/NQ3 with some BQ drilling completed by Penarroya in earlier programs. Most of Kagara's diamond drilling was HQ3. Downhole surveys have been taken at 30m intervals on average for each of the holes with single shot Eastman cameras used for the earlier programs and a digital shot Reflex camera for the more recent Kagara programs. All Kagara drill collar co-ordinates have been confirmed to an accuracy of 0.1m by a licensed surveyor. Previous holes were either surveyed by a licensed surveyor (Brazier and Motti) or measured off existing grid pegs to an accuracy of +/-1m.

A total of 13 RC holes were drilled by Pancontinental Pty Ltd to test the gold potential of the oxidised portion of the Waterloo deposit. All 13 of these holes were utilized in the geological interpretation of Waterloo and two of them were used in the Resource for transitional polymetallic material.

Penarroya (Australia) Pty Ltd and Pancontinental Pty Ltd drill holes were picked up by contract surveyors Brazier and Motti prior to the RGC (Thalanga) Pty Ltd drill program commencing. The RGC (Thalanga) Pty Ltd collar co-ordinates were then measured from existing grid pegs (set out by Brazier and Motti) to an accuracy of +/-1m. All holes from the Kagara drill programs in 2007 and 2008 were picked up by contract surveyor John Weber.

Down hole surveys were carried out on average every 30m for all holes. For the programs prior to 2007, an Eastman single shot camera was utilized and for the 2007 and 2008 programs a Reflex digital camera was used.

Orient

A total of 38 holes have been drilled into the Orient deposit by Rowe Drilling and Mitchell Drilling. All holes were drilled with a rotary mud precollar through the Campaspe beds with an NQ2 diamond tail which became BQ if the ground conditions or deviation of the hole warranted. Downhole surveys were conducted every 30m using Eastman, Surtronic or AusMine single shot cameras.

Classification Criteria

Liontown and Liontown East

The Resources have been reported above a 5% ZnEq. Cut-off, a value considered appropriate for potential economic extraction (as used for mining parameters at the nearby Thalanga mines).

Resources have been classified according to the sample spacing and demonstrated continuity and consistency of the mineralised thickness and grade. A higher confidence in sample data is given to more recent drilling programs. Indicated and Inferred blocks have been reported. The distribution of drilling provides drill intersection spacing of:

10-40m for majority of New Queen Lode (Indicated)
20-70m for the Main Lens upper sections (Indicated)
60-100m for other areas in the Main Lode (Inferred)
15-70m for the Western Footwall Lode (Inferred)
15-150m for the Gap Lode (Inferred)
60-90m for Liontown East (Inferred)

At Liontown East, material considered not sufficiently defined for Inferred classification includes lesser Zn-Pb-Cu stringer sulphide mineralisation of undetermined continuity below the footwall contact of the current Resource and Cu-Au mineralisation within the footwall pumice breccia. The Cu-Au mineralisation has similarities to the Carrington Lode along strike at the Liontown deposit. Further drilling at closer spacing may provide sufficient continuity for Resource in these areas.

Due to the age of some data and the multiple project owners, complete records were not always available. In these circumstances, lower confidence is placed on the results. In general, the drilling programs overlap spatially allowing for the comparison of programs between each other and eliminating the dominance of one sampling program in any specific area of the Resource.

Waterloo

The Resource at takes into account drill hole spacing, geological confidence and block model estimation results. A spacing of ~80-100m in drilling within the Western Lens has resulted in that entire lens being classified as Inferred. Central and Eastern lenses are reported as Indicated when spacing is typically < 60m.

Orient

The aim was to drill the deposit out on 40m x 40m pattern, but due to difficulties with holes hitting targets, the spacing towards the top of the deposit is closer to 20m x 20m and down lower the drill density is sparser. The shallow section of the Resource is largely considered Indicated given consideration of the drill hole spacing in these areas, and hence the confidence in the geological interpretation and grade interpolation.

Sample analysis method

Liontown and Liontown East

Between 2016 and 2019, drill core samples were sent to Intertek Laboratories in Townsville. Samples were crushed to sub-6mm, split and pulverised to sub-75 µm in order to produce a representative sub-sample for analysis. Analysis consisted of a four-acid digest and Inductively Coupled Plasma Optical Emission Spectrometry for the following elements: Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn & Zr. Samples were assayed for Au using a 25g Fire Assay technique. Standards were submitted at an overall rate of 1 in 20 with greater than 90% of results for mineralised standards returning within 3 standard deviations of certified values for Zn, Pb, Cu and Ag.

For earlier sampling programs, industry practices of the day were applied. In general, samples were crushed to sub-6mm, split and pulverised to sub-75 µm in order to produce a representative sub-sample for analysis. Most samples were analysed following a three or four-acid digest by either Atomic Absorption Spectrum (AAS) or Inductively Coupled Plasma Optical Emission Spectrometry for the base metal analysis. For gold analysis, a fire assay method using either a 25g, 30g or 50g charge with an AAS finish was used.

Waterloo

Kagara samples were submitted to the SGS laboratory in Townsville for assay analysis. Samples were dried, crushed and pulverised to 75 microns. Analysis techniques included FAA505 for Au, and either ICP40Q or ICP41Q for the elements Cu, Pb, Zn, Ag, As, Cd, Ba, S and Fe. Over range Cu, Pb, Zn and Ag were retested using the AAS22D, AAS23C, AAS23Q or ICP23Q techniques.

Standards were placed throughout the samples sent to SGS, with one standard for every 20 samples submitted. Standards were certified and supplied by Gannet Holdings, Perth.

Orient

Samples were submitted to the ALS laboratory, Charters Towers. The laboratory completed internal standard and duplicate samples. Systematic insertion of standards, blanks and duplicates was not undertaken during the drilling stage. A total of 108 quarter core samples were taken in January 2015 and were then compared to the original assay dataset. The correlation coefficient for all metals was 0.88 from this resampling program. The results of the resampling program provide verification of the original Orient assay dataset.

Estimation methodology

Liontown and Liontown East

Geological and geochemical interpretation including sectional assessment of hanging wall and foot wall strata was undertaken and 3D wireframes of the mineralised domains were created. The mineralised domains are defined by continuous and consistent mineralisation style and grade continuity. The domains contain massive, semi-massive and stringer sulphide mineralisation which approximates a 5% combined recoverable zinc equivalent grade.

The New Queen domains are similar but contain a larger portion of sheared and low-grade mineralisation. The Gap, Carrington and Western Footwall domains are modelled with Au and Cu as the dominant mineralisation style. A 0.5 g/t Au domain was used for estimation of the oxide Au Resource.

The Resource for Liontown was undertaken using ordinary kriging and inverse distance estimation methods depending on data availability for the generation on variograms and 3D estimation software.

The Resource for Liontown East was undertaken using inverse distance estimation methods and 3D estimation software. 3D wireframes of the mineralised envelope were filled with modelled blocks of appropriate size. Drill samples were top capped where appropriate to reduce the impact of extreme high-grade samples. Samples were composited to 1m to reduce sample size bias. Estimation of copper, zinc, lead, silver, gold, iron and barium grades in the model blocks was undertaken using sample limitations and octant requirements to reduce sample distribution bias. Multiple increasing search distances for sample selection were used. The mineralised domain envelopes were considered a hard boundary for estimation purposes.

Cut-off grades, including the basis for the selected cut-off grades

Liontown, Liontown East, Waterloo and Orient

The sulphide ("fresh") Resource has been reported above a 5% ZnEq cut-off into Inferred and Indicated categories. The basis for cut-off grade is that a 5% ZnEq grade was assessed as the lower cut-off for definition of potential economic mineralisation using a proposed underground mining methodology.

The oxide Inferred Resource has been reported above a 1g/t Au cut off as this is assessed as appropriate for the mineralisation style and the likelihood of providing a potentially economic reserve for a shallow open pit. The oxide Inferred Resource is shallow and located above the sulphide lodes and further drilling may allow conversion of this material to an Indicated Resource.

Mining and metallurgical methods and parameters, and other material modifying factors considered

Liontown and Liontown East

The bulk density of the Resource was calculated into blocks from content estimates of dense minerals based on the estimated block grades of Zn, Pb, Cu, Fe and Ba and measured gangue densities. The density calculation incorporates void and porosity influences through an assigned gangue density.

The density calculation was validated by a regression assessment against empirical test work on the Liontown and Liontown East core following the Archimedes principle. The densities are reported on a dry basis.

The Resource has been estimated with the intent of being mined by selective mining methods such as underground drive development and long hole stoping techniques. For conversion to Ore Reserve, material that is sub 2m thick will require a higher cut-off grade to accommodate the additional minimum mining width dilution. Approximately 5% of the reported Resource is of sub-2m thickness and no exclusion of this material has been made.

It is assumed that the Resource would be treated via crushing, milling and conventional flotation to produce concentrates containing Zn, Pb, Cu, Ag and Au. Historic metallurgical test work exists across all deposits and further test work is planned. Ore sorting may be applicable.

Planned activities.

The Company has a busy period of activity ahead including the following key activities and milestones:

- May 5, 2023: Issue of Placement Shares
- May 2023: Assay results from RC drilling, Triumph
- May 2023: RC drilling of Targets 1 and 2 at Wilbur's Hill, Ravenswood Consolidated
- June 21, 2023: General Meeting
- May/June 2023: 16 holes (3,865m) from Greater Liontown logged and assayed
- June 2023: Greater Liontown transaction completion
- June 2023: Drilling commences Liontown & Lighthouse, Ravenswood Consolidated
- July 2023: Quarterly Activities Report

Attending:

- 22-23 June 2023: RIU Investment Showcase, Gold Coast
- 29-30 August 2023: Australian Gold Conference, Sydney

Sunshine Gold's Board has authorised the release of this announcement to the market.

For more information, please contact:

Dr Damien Keys
Managing Director
Phone: +61 428 717 466
dkeys@shngold.com.au

Mr Alec Pismiris
Director & Company Secretary
Phone +61 402 212 532
alec@lexconservices.com.au

Competent Person's Statement

The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Matt Price, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG) and the Australian Institute of Mining and Metallurgy (AusIMM). Mr Price has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Price consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at Waterloo and Orient is based on information compiled and reviewed by Mr Stuart Hutchin, who is a Member of the Australian Institute of Geoscientists (AIG) and is a Principal Geologist employed by Mining One Pty Ltd. Mr Stuart Hutchin 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 Mineral Resources. Mr Stuart Hutchin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at Liontown and Liontown East is based on information compiled and reviewed by Mr Peter Carolan, who is a Member of the Australasian Institute of Mining and Metallurgy and was a Principal Geologist employed by Red River Resources Ltd. Mr Peter Carolan 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 Mineral Resources. Mr Peter Carolan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Sunshine Gold

Two projects. Big System Potential.

Triumph Project (Au): More than 85% of Triumph's Inferred Resource of 118,000oz @ 2.03g/t Au¹ is <100m deep and largely located within 1.2km of strike within a 6km long trend. Recent drilling has confirmed Triumph's intrusion-related gold system is analogous to the large Ravenswood Mine (5.6Moz Au Resource).

Ravenswood Consolidated (Zn-Cu-Pb-Au-Ag-Mo): Located in the Charters Towers-Ravenswood district which has produced over 20Moz Au and 14mt of VMS Zn-Cu-Pb-Au ore. The project comprises:

- a Zn-Cu-Pb-Au VMS Resource of 4.94mt @ 12.0% ZnEq (32% Indicated);
- 26 drill ready VMS Zn-Cu-Pb-Au IP geophysical targets where testing of a similar target has already lead to the Lontown East discovery which hosts a current Resource of 1.47mt @ 11.0% ZnEq;
- the under-drilled Carrington Au Lode in the footwall of the Lontown VMS deposits with significant intersections including **3m @ 46.2 g/t Au from 20m** (LRC0018) and **2m @ 68.6 g/t Au from 24m** (LRC0043);
- advanced Cu-Au VMS targets at Coronation analogous to the nearby Highway-Reward Mine (4mt @ 6.2% Cu & 1.0 g/t Au mined);
- overlooked orogenic, epithermal and intrusion related Au potential with numerous historic gold workings and drill ready targets; and
- a Mo-Cu Exploration Target at Titov of 5-8mt @ 0.07-0.12% Mo & 0.28-0.44% Cu.

***Investigator Project (Cu):** Located 100km north of the Mt Isa, home to rich copper-lead-zinc mines that have been worked for almost a century. Investigator is hosted in the same stratigraphy and similar fault architecture as the Capricorn Copper Mine, located 12km north.

***Hodgkinson Project (Au-W):** Located between the Palmer River alluvial gold field (1.35 Moz Au) and the historic Hodgkinson gold field (0.3 Moz Au) and incorporates the Elephant Creek Gold, Peninsula Gold-Copper and Campbell Creek Gold prospects.

** A number of parties have expressed interest in our other quality projects (Investigator Cu and Hodgkinson Au-W). These projects will be divested in an orderly manner in due course.*

¹ SHN ASX Release, 31st March 2022, "Robust Maiden Resource at Triumph Gold Project".
No new information has been collected and all material assumptions remain unchanged.

Two projects. Big system potential.

01

Highly prospective projects in under explored Tier 1 jurisdiction.

02

Experienced, successful management team, North Queensland based.

03

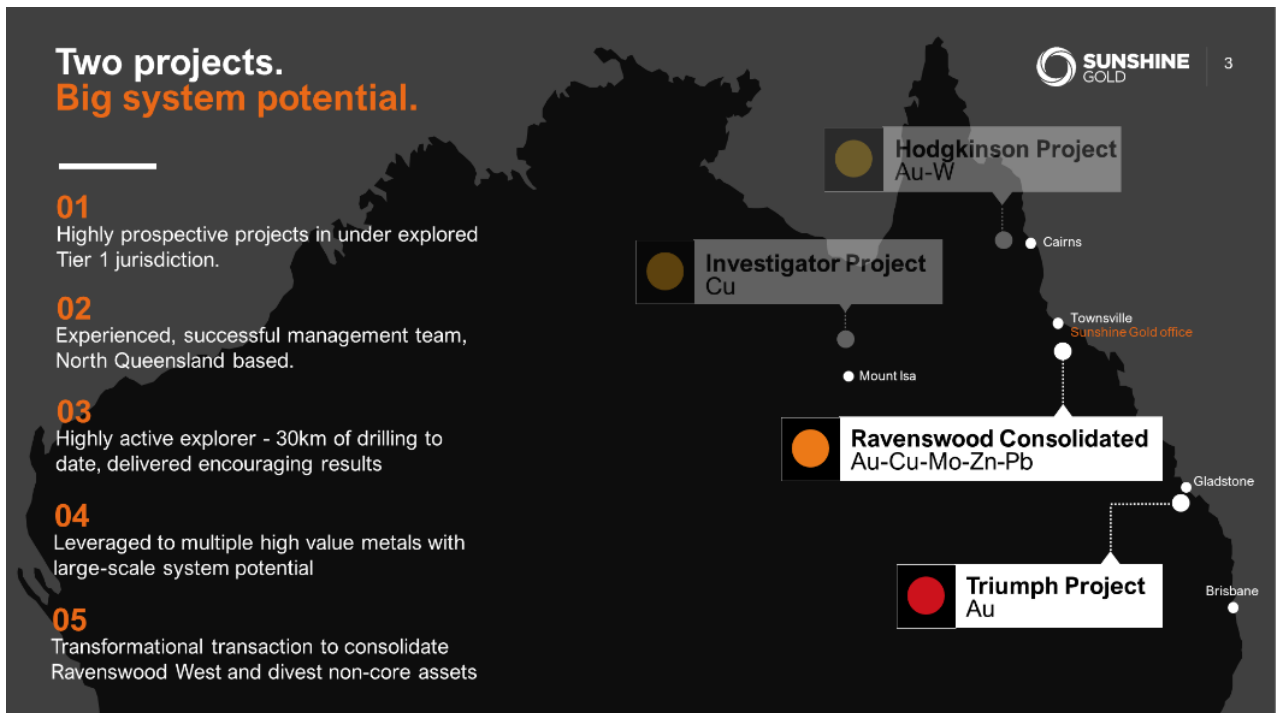
Highly active explorer - 30km of drilling to date, delivered encouraging results

04

Leveraged to multiple high value metals with large-scale system potential

05

Transformational transaction to consolidate Ravenswood West and divest non-core assets





Attachment B: Drill Collar, Survey and Status of Outstanding Resource Infill and Extensional Drilling, Liontown Resource.

Hole ID	Resource	Tenement (collar)	Prospect	Drill Method	Planned Easting	Planned Northing	Planned Elevation	Dip	NAT Grid AZI	Est PCD Depth	Actual EOH Depth	Status
LTDD22071	Liontown	ML10277	Western Footwall	PCD-NQ	402397	7742817	298.3	-54.7	358.2	40	213.2	Assays received
LTDD22179A	Liontown	EPM14161	The Gap	NQ	403133	7742904	213.8	-60.5	359.0	0	174.6	Assays received
LTDD22062	Liontown	EPM14161	The Gap	PCD-NQ	402951	7742808	299.3	-67.0	8.0	60	281.7	Assays received
LTDD22055	Liontown	EPM14161	The Gap	PCD-NQ	403003	7742819	299.0	-58.9	354.7		176.9	Assays received
LTDD22065	Liontown	EPM14161	Main Lode Upper	PCD-NQ	402549	7742729	292.0	-57.0	6.8	70	213.8	Assays received
LTDD22054	Liontown	EPM14161	The Gap	PCD-NQ	403003	7742819	299.0	-64.0	9.0		243.2	Assays received
MET02	Liontown	ML10277	New Queen Met	HQ	402602	7742855	300.0	-50.0	357.0	20	128.2	Assays received
LTDD22053	Liontown	EPM14161	The Gap	PCD-NQ	403003	7742819	299.0	-71.9	353.0		304.9	Assays received
LTDD22061	Liontown	EPM14161	The Gap	PCD-NQ	402951	7742808	299.3	-75.0	8.0	60	302.2	Assays received
LTDD22181A	Liontown	EPM14161	The Gap	NQ	403120	7742807	293.0	-62.0	0.0		252.0	Unsampled
LTDD22063	Liontown	EPM14161	The Gap	PCD-NQ	402951	7742808	299.3	-62.0	8.0	60	242.2	Unsampled
LTDD22072	Liontown	ML10277	Western Footwall	PCD-NQ	402279	7742969	297.5	-54.0	147.5	70	157.9	Unsampled
LTDD21039	Liontown	EPM14161	Main Lode Lower	PCD-NQ	402697	7742600	290.5	-60.0	5.0		210.0	Unsampled
LTDD22066	Liontown	EPM14161	Main Lode Upper	PCD-NQ	402469	7742689	291.0	-56.0	7.0	70	251.0	Unsampled
LTDD22067	Liontown	EPM14161	Main Lode Upper	PCD-NQ	402416	7742715	290.0	-59.0	352.8	70	235.9	Unsampled
LTDD22064	Liontown	EPM14161	The Gap	PCD-NQ	402951	7742808	299.3	-52.0	8.0	60	215.2	Unsampled
LTDD22069A	Liontown	EPM14161	The Gap	PCD-NQ	403090	7742802	296.9	-83.0	355.0	60	337.2	Unsampled
LTDD22075	Liontown	ML10277	Western Footwall	PCD-NQ	402162	7742879	291.9	-61.0	359.8	68	156.8	Unsampled
LTDD22076	Liontown	ML10277	Western Footwall	PCD-NQ	402205	7742802	292.8	-65.0	357.8	80	326.0	Unsampled
LTDD22080	Liontown	ML10277	Western Footwall	PCD-NQ	402205	7742869	291.6	-52.0	358.9	64	209.0	Unsampled
LTDD22078	Liontown	ML10277	Western Footwall	PCD-NQ	402292	7742813	294.7	-62.0	353.5	70	278.0	Unsampled
LTDD22068	Liontown	ML10277	Western Footwall	PCD-NQ	402293	7742867	297.1	-60.0	355.0	59	203.1	Unsampled
LTDD22074	Liontown	ML10277	Western Footwall	PCD-NQ	402326	7742826	296.1	-64.0	357.9	70	299.2	Unsampled
LTDD22073	Liontown	ML10277	Western Footwall	PCD-NQ	402326	7742826	295.7	-76.0	359.0	70	311.2	Unsampled
LTDD22070	Liontown	EPM14161	The Gap	PCD-NQ	403084	7742852	296.9	-71.0	353	60	180.2	Unsampled

Section 1 - Sampling Techniques and Data

Criteria	Explanation	Commentary																								
Sampling techniques	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Diamond drilling (DD) and Reverse Circulation (RC) techniques were used to obtain samples during eight major programs of drilling carried out between 1970 and 2019. <table> <tr> <td>Nickel Mines</td><td>1970-1973</td><td>Diamond Drilling</td></tr> <tr> <td>Great Mines Limited</td><td>1987</td><td>Reverse Circulation</td></tr> <tr> <td>Pancontinental</td><td>1994-1996</td><td>Reverse Circulation</td></tr> <tr> <td>Red River Resources (2016 - 2019)</td><td>2016-2018</td><td>Diamond Drilling</td></tr> </table> <ul style="list-style-type: none"> Hole count and metre count of samples intersecting the mineralised domains is shown below for each respective drill program: <table> <tr> <td>Nickel Mines</td><td>50</td><td>711.48</td></tr> <tr> <td>Great Mines Limited</td><td>43</td><td>623</td></tr> <tr> <td>Pancontinental</td><td>26</td><td>341</td></tr> <tr> <td>Red River Resources (2016 - 2019)</td><td>20</td><td>75.98</td></tr> </table> <p>Various industry standard preparation and analysis methods were used. Most samples were analysed following a three or four acid digest by either Atomic Absorption Spectrum (AAS) or Inductively Coupled Plasma Optical Emission Spectrometry. (ICP-OES) for the base metal analysis. For gold analysis a fire assay method using either</p>	Nickel Mines	1970-1973	Diamond Drilling	Great Mines Limited	1987	Reverse Circulation	Pancontinental	1994-1996	Reverse Circulation	Red River Resources (2016 - 2019)	2016-2018	Diamond Drilling	Nickel Mines	50	711.48	Great Mines Limited	43	623	Pancontinental	26	341	Red River Resources (2016 - 2019)	20	75.98
Nickel Mines	1970-1973	Diamond Drilling																								
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Pancontinental	26	341																								
Red River Resources (2016 - 2019)	20	75.98																								

Criteria	Explanation	Commentary
		<p>25g, 30g or 50g charge with an AAS finish was used. For the 2019 Red River Resources drilling the following applied:</p> <ul style="list-style-type: none"> • Sample intervals were selected by company geologists based on visual mineralisation and geological boundaries with an ideal sample length of one metre. • Samples were sawn if half or quarter onsite using an automatic core saw. • Independent certified assay laboratories were used for analysis. • Recent sampling was analysed at Intertek Genalysis Laboratory in Townsville where samples were crushed to sub 6mm, split and pulverised to sub 75µm and a sub sample collected for a four-acid digest and ICP-OES analysis of the following elements; Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn & Zr. Samples were assayed for Au using a 30g Fire Assay technique. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> • Diamond drilling and reverse circulation (RC) techniques were used to obtain samples at Liontown East. • The Mineral Resource estimate is based on diamond drill samples and RC samples • Diamond core was placed in core trays for logging and sampling. Half core samples were nominated by the geologist based on visual mineralisation. Intervals ranged from 0.2 to 1.5m based on geological boundaries. • Diamond core samples were sawn in half using an onsite core saw • RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-5kg in size. • All samples were sent to Intertek Genalysis Laboratories Townsville. • Samples were crushed to 6mm, split and pulverised to sub 75µm to produce a representative sub sample for analysis. • Analysis consisted of a four-acid digest and Inductively Coupled Plasma Optical Emission Spectrometry. (ICP-OES) for the following elements Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn & Zr. • Samples were assayed for Au using a 25g Fire Assay technique. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • The deposit was primarily sampled via NQ2 half core samples based on geological considerations within diamond drill holes drilled on a 40m x 40m pattern through the deposit area. • The holes were orientated to ensure drill intersections were approximately perpendicular to the dip and strike of the ore lenses and overall geological package. • Diamond core samples were analyzed for Cu, Pb, Zn, Ag and Fe by atomic absorption spectrum (A103) that used a mixed acid digest. Gold was analyzed for via 50g fire assay with an atomic absorption spectrum finish (method PM209).

Criteria	Explanation	Commentary
		<p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The deposit was primarily sampled via NQ2 half core samples based on geological considerations within diamond drill holes drilled on a 40m x 40m pattern through the deposit area. All holes used for the resource estimate were drilled between 1995 and 1997. The holes were orientated to ensure drill intersections were approximately perpendicular to the dip and strike of the ore lenses and overall geological package. Diamond core samples were analyzed for Cu, Pb, Zn, Ag and Fe by atomic absorption spectrum (A103) that used a mixed acid digest. Gold was analyzed for via 50g fire assay with an atomic absorption spectrum finish (method PM209). <hr/> <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – Samples were reportedly selected by the field geologist to be representative of rock and vein types in the area. Samples were bagged and sent to Intertek laboratory in Townsville. Samples were crushed to sub-6mm, split and pulverised to sub-75µm to produce a representative sub-sample for analysis. Analysis consisted of 25g fire assay with AAS finish for Au and 4-acid digest with ICP-MS analysis all other elements.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) – The geophysical survey utilised a dipole-dipole IP configuration with transmitter stations were spaced at 200m intervals along each line. Receivers were spaced at 100m. Survey lines were oriented perpendicular to the interpreted stratigraphy.</p> <p>Ground Gravity (2021) – The survey consisted of 50 – 100m spaced lines with 50m spaced stations at which precise measurements of the Earth's gravitational field were made.</p>
Drilling techniques	<i>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.).</i>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Conventional and wireline diamond drilling techniques were used through the various programs. Recent (2007-2019) core sizes are NQ and HQ with selected holes orientated. Reverse circulation holes were between 4 ¼ and 5 ½ inch sizes. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Mud rotary, RC and Diamond drilling methods were used.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> Mud rotary was used to establish hole collars to the base of the cover sequence then a change of drilling method to Diamond core (HQ size) or RC was undertaken. For most holes a further change in method to Diamond core NQ2 or BQ size took place for intersecting the target zone and drilling to end of hole. Some holes were drilled as wedges off a parent hole. Parent holes were drilled as HQ size diamond core, followed by wedging and navigational drilling to establish daughter holes which were then completed with NQ2 or BQ size diamond core drilling. All drilling through the current Resource area is NQ2 or BQ size diamond core. Reverse circulation drilling used a 5.5" bit Mud rotary drilling used a 7 7/8" PCD bit. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> A total of 92 diamond and RC holes have been drilled in the Waterloo project area, of these a total of 45 diamond holes have been used to estimate resources for the project. The diamond core size drilled was predominately with standard tube HQ3/NQ2 sized core and sometimes down to BQ sized core where difficult ground conditions were encountered. Downhole surveys have been taken at 30m intervals on average for each of the holes with single shot Eastman cameras used for the earlier programs and a digital shot Reflex camera for the Kagara programs. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> A total of 37 diamond holes have been drilled in the Orient project area, of these a total of 26 diamond holes have been used to estimate resources for the project. The diamond core size drilled was predominately with standard tube NQ2 sized core and sometimes down to BQ sized core where difficult ground conditions were encountered. Holes were pre-collared through the 50-120m thick cover sequence. All diamond core was orientated.
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Core loss was recorded by company geologists. Records available for the 2019 diamond program indicate that recovery within the sulphide zones was 98%. Similar results were achieved from the 2018 and 2007 drill programs. Partial core loss occurs within shear zones. Core loss in the oxide mineralised domains was significant with a recovery of 70% achieved. This recovery generates uncertainty for the estimated Oxide Resource. <p>LIONTOWN EAST RESOURCE</p>

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> Sample recovery is effectively 100% through the area of the Mineral Resource. Intervals of core loss are measured and recorded by geologists. Moisture content and sample recovery were recorded for each RC sample. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The diamond core drill recovery was monitored using a combination of the drillers run sheets, core block markings and manual piecing together of core and measurement by Geologists and Field Assistants in the core processing facility. Any core loss was noted within the logging sheets. The resource is based on diamond drilling, the deposit predominately consists of zinc, lead and copper mineralization, there are no concerns regarding loss of fine material during the core sampling process for this deposit. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The diamond core drill recovery was monitored using a combination of the drillers run sheets, core block markings and manual piecing together of core and measurement by RGC Thalanga Pty Ltd Geologists and Field Assistants in the core processing facility. Any core loss was noted within the logging sheets. The resource is based on diamond drilling, the deposit predominately consists of zinc, lead and copper mineralization, there are no concerns regarding loss of fine material during the core sampling process for this deposit.
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Holes were logged to a level of detail that would support mineral resource estimation. Qualitative logging includes lithology, alteration and textures. Quantitative logging includes sulphide and gangue mineral percentages. All drill core from 2007 onwards was photographed. Drill holes were logged in full. <p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Holes were logged to a level of detail that would support mineral resource estimation. Qualitative logging includes lithology, alteration and textures. Quantitative logging includes sulphide and gangue mineral percentages. All drill core and RC chips were photographed. All drill holes were logged in full. RC drilling contractors adjust their drilling approach to specific conditions to maximise sample recovery

Criteria	Explanation	Commentary				
		<p>WATERLOO RESOURCE</p> <ul style="list-style-type: none">All diamond core was logged for geological and geotechnical characteristics. Rock type, alteration style and sulphide mineral content were logged by a site geologist. The logging was sufficient to enable creation of detailed geological model that supports the resource estimate. Core photographs are taken of each core tray and stored as part of the resource database dataset. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none">All diamond core was logged for geological and geotechnical characteristics. Rock type, alteration style and sulphide mineral content were logged by a site geologist. The logging was sufficient to enable creation of detailed geological model that supports the resource estimate. Core photographs are taken of each core tray and stored as part of the resource database dataset. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – A brief description of the rock samples was completed. Photos of each sample were taken for reference. SHN has not viewed these images.</p>				
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none">Reverse circulation samples were split onsite and sent for assay.Diamond core was placed in core trays for logging and sampling.Diamond core was cut in half for the majority of programs using a core saw.Sample intervals were either nonselective or sampled to geological boundaries. The non-selective nature of the Esso diamond drill program and the RC sample programs produces a degree of smoothing to this data.97.5% of sample length is within 0.3 and 2m in length. Sample programs containing higher proportion of shorter length sample intervals displaying greater analyte variance.The sample sizes are considered to be sufficient to correctly represent the mineralisation style. Sample methods specific to each program is shown below: <table><thead><tr><th>Program</th><th>Sample Type</th></tr></thead><tbody><tr><td>Nickel Mines</td><td>Half Core (hand split) - sampled to contacts - predominantly 1ft or 5ft samples</td></tr></tbody></table>	Program	Sample Type	Nickel Mines	Half Core (hand split) - sampled to contacts - predominantly 1ft or 5ft samples
Program	Sample Type					
Nickel Mines	Half Core (hand split) - sampled to contacts - predominantly 1ft or 5ft samples					

Criteria	Explanation	Commentary
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<div> <div>Great Mines Limited</div> <div>RC Split - non selective 1m samples</div> <div>Half Core (core saw) - selective samples - predominantly 1m</div> </div> <div> <div>Pancontinental</div> <div>1/2 NQ2 core (core saw) - sampled to contacts - predominantly 0.5-1m</div> </div> <div> <div>Red River Resources (2016 - 2019)</div> </div> <hr/> <ul style="list-style-type: none"> Records for sample preparation and analysis for programs pre 2007 are limited. In general samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis. Most samples were analysed following a three or four acid digest by either Atomic Absorption Spectrum (AAS) or ICP-OES for the base metal analysis. For gold analysis a fire assay method using either a 25g, 30g or 50g charge with an AAS finish was used. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> NQ2 and BQ size core was sawn and half core sent for assay. Sample preparation is industry standard, occurring at an independent commercial laboratory. Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis. Standards were submitted at an overall rate of 1 in 20 with greater than 90% of results for standards returning within 3 standard deviations of certified values for Zn, Pb, Cu and Ag. 90% of ore grade standards returned within 2 standard deviations of their certified value. The samples sizes are appropriate to correctly represent the mineralisation style.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> All RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-5kg in size. All samples were intended and assumed to be dry, moisture content was recorded for every sample. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> HQ3 sized diamond core was marked up and cut in half with a diamond core saw. The right side of the core as sampled according to the geological intervals selected by the site Geologist. The methodology of selecting half core via geological intervals guarantees that the core samples are representative. The sample sizes vary from material sourced from the core samples given the varying sample lengths. The sample sizes are appropriate given the relatively even distribution of base metal grades within the deposit. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> NQ2 sized diamond core was marked up and cut in half with a diamond core saw. BQ sized core was whole sampled. The right side of the core as sampled according to the geological intervals selected by the site Geologist. The methodology of selecting half core via geological intervals guarantees that the core samples are representative. The sample sizes vary from material sourced from the core samples given the varying sample lengths. The sample sizes are appropriate given the relatively even distribution of base metal grades within the deposit <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – No sub-sampling was undertaken, with the entire sample sent to the laboratory for analysis. Samples were crushed to sub-6mm, split and pulverised to sub-75µm to produce a representative sub-sample for analysis. Sample size is not reported but was considered by RVR to be appropriate to represent the mineralisation style.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) – The geophysical survey utilised a dipole-dipole IP configuration with transmitter stations were spaced at 200m intervals along each line. Receivers were spaced 100m.</p> <p>Ground Gravity (2021) – The survey consisted of 50 – 100m spaced lines with 50m spaced stations.</p>

Criteria	Explanation	Commentary
Quality of assay data and Laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> The assay methods employed are considered appropriate for near total digestion. Various degrees of Quality Assurance and Quality Control processes were implemented through the different drilling programs. Records post 2007 are available. Red River Resources used blanks and standard reference material inserted at a rate of 1 in 20. Certified standards returned results within an acceptable range. No field duplicates were submitted for diamond core. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The assay methods employed are considered to achieve a near total digestion and analysis. Standards were submitted at an overall rate of 1 in 20 with greater than 90% of results for standards returning within 3 standard deviations of certified values for Zn, Pb, Cu and Ag. 90% of ore grade standards returned within 2 standard deviations of their certified value. Certified standards returned results within an acceptable range for Mineral Resource estimation. The Intertek Genalysis Laboratory applied its internal quality control processes including standard, blank and duplicate analysis. Field duplicates are taken for RC samples at a rate of 1 in 40. No field duplicates were submitted for diamond core. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The ALS laboratory – Charters Towers completed internal standard and duplicate samples. In addition to this Red River Resources have completed a series of 81 duplicate samples on remnant Waterloo drill core to add further support to the QAQC process relating to the deposit. The results from the January 2015 duplicate sampling indicate a 0.97 correlation coefficient with the original drill core samples, this provides confirmation that the original source assay database is suitable for use in resource estimation. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The ALS laboratory – Charters Towers completed internal standard and duplicate samples. Systematic insertion of standards, blanks and duplicates was not undertaken during the drilling stage. 108 quarter core samples were taken in January 2015 that were compared to the original assay dataset. The correlation coefficient for all metals was 0.88 from this recent resampling program. The results of the resampling program provide verification of the original Orient assay dataset.

Criteria	Explanation	Commentary
		<p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – Rock chips were assayed using a 25g fire assay for gold with AAS finish, which is considered appropriate for this style of mineralisation. Fire assay is considered total assay for gold. All other elements were assayed using an ICP-MS. No quality control samples were inserted into the sample batch. A check of internal laboratory CRMs and duplicates by RVR reportedly showed the results were within confidence limits.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) – Raw data was delivered daily to a third-party Geophysical Consultant, who undertook QAQC and informed the field crew if any repeat readings were required.</p> <p>Ground Gravity (2021) – Survey QAQC included reading of a known gravity station in Charters Towers, the establishment of a base station near the survey area and repeat reading of approximately 3% of stations. The third-party Geophysical Consultant reviewed data during the program to validate data quality.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> • Laboratory results have been reviewed by Company geologists and laboratory technicians. • A series of twin holes was carried out by Esso on original Nickel Mines holes. Red River holes also twin previous drilling. In these twinned holes the replication of mineralised width and grade are reasonable. • Scans of or original logging sheets for the majority of drill programs are available. • Au and Ag results for Nickel Mines holes were excluded from the Resource estimation. These were originally identified by Esso as likely erroneous, and similarly considered by all following parties. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> • Laboratory results have been reviewed by Company geologists and laboratory technicians. • Visual verification of core reported for significant intersections has been undertaken. • No twinned holes were drilled for this data set. • Data was entered into a central database then validated by a series of validation checks to ensure erroneous data was not saved into the resource database. • Below detection limit results were replaced with values half to the detection limit. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • Holes are drilled to within 25m of each other in some areas of the deposit as either twins or scissor holes, the assay data in these holes is consistent through the mineralized zone between the holes.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> Data was entered into a central database and then validated by a series of validation checks to ensure erroneous data was not saved into the resource database. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> Holes are drilled to within 15m of each other in some areas of the deposit as either twins or scissor holes, the assay data in these holes is consistent through the mineralized zone between the holes. Data was entered into a central database and then validated by a series of validation checks to ensure erroneous data was not saved into the resource database. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – Laboratory results were reviewed by RVR Geologists. Raw assay files were stored on the Company Server and no adjustments were made to data.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) & Ground Gravity (2021) – Raw data was reviewed daily by a third-party Geophysical Consultant. No data has been reviewed or verified following the initial programs.</p>
Location of data points	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> All Red River collars were surveyed with RTKGPS and a pickup of available historic collars was also carried out. A resurvey of 105 historic drill collars was carried out by Liontown Resources Limited in 2007. Recent down hole surveys conducted with digital magnetic multi-shot camera at 20-40m intervals. Historic drill hole surveys were taken using Eastman single shot cameras. Coordinate system used is MGA94 Zone 55. Topographic control is based on a detailed 3D Digital Elevation Model. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Collars surveyed with RTKGPS and handheld GPS instruments Down hole surveys conducted with digital magnetic multi-shot camera Coordinate system used is MGA94 Zone 55. Topographic control is based on a detailed 3D Digital Elevation Model.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> A 10-20m sterilisation zone was generated around the digitised workings of the Carrington Mine. The digitised workings were generated from historic level plans and survey pickup of surface shaft locations. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The Waterloo local grid was used to cover the Waterloo deposit. All holes were surveyed using the site survey team who used an EDM theodolite. The topography surface is represented by a wireframe file that has been edited over time by the site survey team. The surface covers the complete Waterloo deposit area. The surface is an accurate representation of the actual topographic surface at the site. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The Thalanga mine grid was extended to cover the Orient deposit. All holes were surveyed using the site survey team who used an EDM theodolite. The topography surface is represented by a wireframe file that has been edited over time by the site survey team. The surface covers the complete Orient deposit area. The surface is an accurate representation of the actual topographic surface at the site. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – Sample locations are located as points using handheld GPS in GDA94, Zone 55 format.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) – Survey points are recorded by a Search Exploration SSIP32 receiver and WB50 transmitter.</p> <p>Ground Gravity (2021) – Stations were reportedly located using handheld GPS</p>
Data spacing and distribution	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <p>The distribution of drilling provides drill intersection spacings of:</p> <p>10 – 40m for majority of New Queen Lode</p> <p>20 – 70m for the Main Lens upper sections</p> <p>60 – 100m for the Inferred area of the Main Lode</p> <p>15 – 70m for the Western Footwall Lode</p>

Criteria	Explanation	Commentary
	<i>Whether sample compositing has been applied.</i>	<p>15 – 150m for the Gap Lode</p> <p>The drill spacing provides evidence of mineralised zone continuity for the purposes of resource estimation. Compositing of within mineralised domains of raw assay data to approximate 1m intervals was completed in preparation for the resource estimation process.</p> <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> • Drill spacing is predominantly between 60 and 90m, ranging up to 100m and down to 15m • This distribution confirms a degree of geological continuity within the mineralised system such that Mineral Resource Estimation and Inferred classification is appropriate. • Compositing of samples to 1m was applied. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • The Waterloo deposit has been drilled on an average spacing of 40m x 40m in the main resource area and down to 25m x 25m in some places. This drill spacing provides evidence of mineralized zone continuity for the purposes of resource estimation. • No sampling compositing was necessary in the initial diamond drilling however compositing of raw assay data was completed in preparation for the resource estimation process. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> • The Orient deposit has been drilled on an average spacing of 40m x 40m in the main resource area and down to 20m x 20m in some places. This drill spacing provides evidence of mineralized zone continuity for the purposes of resource estimation. • No sampling compositing was necessary in the initial diamond drilling however compositing of raw assay data was completed in preparation for the resource estimation process. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – No data spacing has been applied to the rock chip samples due to the nature of the technique.</p> <p>GEOPHYSICS</p> <p>Induced Polarisation (2017) – The program consisted of 100 – 200m dipole spacing and 150 – 400m line spacing.</p> <p>Ground Gravity (2021) – The survey consisted of 50 – 100m spaced lines with 50m spaced stations.</p>

Criteria	Explanation	Commentary
Orientation of data in relation to geological structure	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> Where possible holes were orientated to ensure drill intersections were approximately perpendicular to the strike of the ore lenses and overall geological sequence. Dip intersections to the plane of mineralisation generally occur between 45° and 80°. The orientation of the multiple lenses varies resulting in some intersections being less than perpendicular. Some holes were drilled approximately down dip for comprehensive investigation of the ore zones. The effect of local sampling biases due to orientation and spacing of drill holes is mitigated in the estimation process. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Drill holes are orientated perpendicular to the strike of the host lithologies and mineralised zone. The drilling direction and inclination is designed to not bias sampling The orientation of the drill core for structural assessment is determined using a downhole digital orientation tool. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The majority of diamond holes were orientated to provide an approximate perpendicular intersection angle with the main mineralized zones. No sampling bias is assessed as been caused by the orientation of the drilling orientation. Scissor holes provide confirmation of domain orientations and thickness. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The majority of diamond holes were orientated to provide an approximate perpendicular intersection angle with the main mineralized zones. No sampling bias is assessed as been caused by the orientation of the drilling orientation. Scissor holes provide confirmation of domain orientations and thickness. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – Samples are collected as “point” samples with no bearing on overall orientation of the possible structure.</p>

Criteria	Explanation	Commentary
		GEOPHYSICS Induced Polarisation (2017) & Ground Gravity (2021) – Lines were oriented to be as perpendicular to the strike of the interpreted stratigraphy as logistically possible.
Sample security	<i>The measures taken to ensure sample security.</i>	LIONTOWN RESOURCE <ul style="list-style-type: none"> During Red River drill programs, samples were overseen by company staff during transport from site to Laboratories. Sample security for earlier programs cannot be validated. Given the primarily base metal nature of the deposit, sample security is not considered as a significant risk. LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> Samples have been overseen by company staff during transport from site to Intertek Genalysis laboratories, Townsville. WATERLOO RESOURCE <ul style="list-style-type: none"> Samples were supervised by either the drill crew, field assistant or geologist and at all times. Given the base metal nature of the deposit sample security was no assessed as a significant risk. ORIENT RESOURCE <ul style="list-style-type: none"> Samples were supervised by either the drill crew, field assistant or geologist and at all times. Given the base metal nature of the deposit sample security was no assessed as a significant risk. GEOCHEMICAL SAMPLING RVR Rock Chip – Samples were reportedly overseen by RVR staff during transport from site to the laboratory.
		GEOPHYSICS Induced Polarisation (2017) – Raw data was directly delivered electronically between the field team and the overseeing Geophysical Consultant.

Criteria	Explanation	Commentary
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> A review of the resource estimation process for Liontown was completed by Mining One Consultants in November 2015. A due diligence review of the resource estimation was also completed by Mining One Consultants in November 2013. A review of the assay data was completed by McDonald Speijers Consultants in 2008. Earlier data reviews were carried out and documented by the various previous owners of the project. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> No external audits or reviews have been carried out at this point. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> A due diligence review of the resource estimation was completed by Mining One Consultants was completed in November 2013. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> A due diligence review of the resource estimation was completed by Mining One Consultants was completed in November 2013. <p>GEOCHEMICAL SAMPLING</p> <p>RVR Rock Chip – No audits were carried out by RVR or SHN on rock chip sampling practise and assaying.</p> <p>GEOPHYSICS</p> <p>No audit has been undertaken on the geophysical survey practise or data by RVR or SHN at this time.</p>

Section 2 - Reporting of Exploration Results

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<p><i>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.</i></p> <p><i>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.</i></p>	<p>The acquired leases consist of those granted to Cromarty Resources Pty Ltd and Hebrides Resources Pty Ltd. The Exploration Permits are: EPMs 10582, 12766, 14161, 16929, 26718, 27168, 27221, 27223, 27357, 27520 and 27731 and Mining Lease Applications 100221, 100290 and 100302 (Cromarty) for a total of 463km²; and EPMs 18470, 18471, 18713, 25815 and 25895 (Hebrides) for a total of 221km². The tenements are in believed to be in good standing and no known impediments exist.</p> <p>The Thalanga mill and mining operation was abandoned by administrators to Red River Resources. A restricted area has been placed over the mill, dumps and tailings facilities. The Queensland Department of Environment is now responsible for the rehabilitation of the aforementioned facilities. There are no known other Restricted Areas located within the tenure.</p> <p>Five third-party Mining Leases are present exist on the Exploration Permits – named MLs 1571, 1734, 1739 and 10028 (Thalanga Copper Mines Pty Ltd) and 100021 (Clyde Ian Doxford).</p> <p>Liontown, Waterloo and the majority of tenure exist on the native land of the Jangga People #2 claim, with northwestern tenure located on the native land of the Gudjala People.</p> <p>A 0.8% Net Smelter Return (NSR) royalty is payable to Osisko Ventures Ltd and a 0.7% NSR royalty payable to the Guandong Guangxin Mine Resources Group Co Ltd (GMRG) on sale proceeds of product extracted form EPM14161.</p>
Exploration done by other parties	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>LIONTOWN RESOURCE</p> <p>Exploration activities have been carried out by Nickel Mines(1970-1973), Esso (1982-1983), Great Mines (1987), Pancontinental (1994-1995), and Liontown Resources (2007). Work programs included surface mapping, and sampling, costeans, drilling and geophysics.</p> <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Historic exploration was carried out by Esso Exploration and Pancontinental Mining. This included drilling and geophysics. Historic drilling over the Liontown East area is shallow and did not intercept the current Mineral Resource mineralisation. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> Penarroja (Australia) Pty Ltd, Pancontinental Pty Ltd and RGC (Thalanga) Pty Ltd drilled a total of 39 diamond holes between 1984 and 1997. KCPL drilled a total of 53 further diamond holes in 2007 and 2008. The majority of older core intersections through the ore horizon are NQ2/NQ3 with some BQ drilling completed by Penarroja in the earlier programs. Most of Kagara's diamond drilling was HQ3.

Criteria	Explanation	Commentary
		ORIENT RESOURCE <ul style="list-style-type: none"> RGC Thalanga Pty Ltd drilled the deposit between 1995-1997.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> The Liontown and Liontown East deposits are hosted within Cambro-Ordovician marine volcanic and volcano-sedimentary sequences of the Mt Windsor Volcanic sub-province The Liontown and Liontown East deposits are volcanogenic massive sulphide (VMS) base metal style deposits. Liontown East consists of stratiform massive and stringer sulphide zones developed within the lower units of a thick sedimentary package immediately above a rhyodacite pumice breccia. Lenses of Cu Au dominated mineralisation continue into the footwall. The Carrington Au lodes are considered to be formed during a later orogenic Au event. WATERLOO RESOURCE <ul style="list-style-type: none"> The Waterloo prospect contains a series of three high grade VMS lenses occurring at the contact of a subvertical pyritic, sericite-quartz schist and overlying sequence of coarse rhyolitic volcanoclastics. The mineralisation runs east to west, plunging to the west. Mineralisation has been disrupted by faulting and folding. The upper part of the Waterloo sequence consists of coherent andesite lavas, dacitic volcanics and interbedded sediments. The prospect is covered by 30-60 metres of Tertiary sediments. Bedding at Waterloo strikes east-northeast, dips sub-vertically and youngs to the south. ORIENT RESOURCE <ul style="list-style-type: none"> Orient is VMS style deposit with a rhyolite footwall and a “quartz eye” porphyry hangingwall (occasionally clastic) which lies approximately 100 metres below the Campaspe Tertiary gravels and sands. The mineralisation is massive sphalerite, galena and chalcopryite (Zn, Pb, and Cu ore) with minor amounts of silver and gold present in the sulphides. Pyrite is also present in high levels (Fe up to 30%) throughout the deposit. The massive sulphide lens strikes East-West and dips mostly at approximately 80 degrees to the south but is almost vertical in some places nearer the top of the ore body. A stringer, or feeder, zone is present in the footwall. It runs sub parallel with the massive sulphide lens abutting the ore in most cases and moving further out into the footwall at depth. This stringer zone has minor sulphide mineralisation, mostly pyrite with minor chalcopryite and occasionally sphalerite. Ground conditions are generally good around the ore zone with some shearing and faulting in the footwall, and one known fault through the ore body below 600RL.
Drill hole Information	<i>A summary of all information material to the understanding of the exploration results including a</i>	LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> The estimate is based on 7 major drilling programs by 6 companies over a period spanning 40 years. Drill intersections from 241 drill holes were used in the Liontown estimation.

Criteria	Explanation	Commentary
	<p>tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. <p>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</p>	<p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • A list of each resource drillhole location and interval is located as an appendix to this table, see below. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> • A list of each resource drillhole location and interval is located as an appendix to this table, see below. <p>All drill holes comprising the resources are listed in Appendix A at the end of this report.</p>
Data aggregation methods	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>The zinc equivalent grades for Greater Lontown (Zn Eq) are based on zinc, copper, lead, gold and silver prices of US\$2500/t Zinc, US\$8500/t Copper, US\$2000/t Lead, US\$1900/oz Gold and US\$20/oz Silver with metallurgical metal recoveries of 88.8% Zn, 80% Cu, 70% Pb, 65% Au and 65% Ag and are supported by metallurgical test work undertaken.</p> <p>The zinc equivalent calculation is as follows: $Zn\ Eq = Zn\ grade\% * Zn\ recovery + (Cu\ grade\% * Cu\ recovery\% * (Cu\ price\ \\$/t / Zn\ price\ \\$/t)) + (Pb\ grade\% * Pb\ recovery\% * (Pb\ price\ \\$/t / Zn\ price\ \\$/t)) + (Au\ grade\ g/t / 31.103 * Au\ recovery\% * (Au\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01)) + (Ag\ grade\ g/t / 31.103 * Ag\ recovery\% * (Ag\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01))$.</p> <p>It is the opinion of Sunshine Gold and the Competent Person that all elements and products included in the metal equivalent formula have a reasonable potential to be recovered and sold.</p> <p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> • The exploration results reported for Lontown and Lontown East were included as weighted average assay intervals for Zn, Cu, Ag and Pb. No cutting of high grades was completed when reporting as exploration results <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • The exploration results reported for the Waterloo despoit were included as weighted average assay intervals for Zn, Cu, Ag and Pb. No cutting of high grades was completed when reporting as exploration results.

Criteria	Explanation	Commentary
		ORIENT RESOURCE <ul style="list-style-type: none"> The exploration results reported for Orient were included as weighted average assay intervals for Zn, Cu, Ag and Pb. No cutting of high grades was completed when reporting as exploration results
Relationship between mineralisation widths and intercept length	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> The mineralisation is statabound and interpreted to be dipping at ~70 degrees, drill holes have been designed to intercept the mineralisation as close to perpendicular as possible. Where down hole intercepts are reported, true widths are likely to be ~75%. The typical drill sample interval is 1m in length At Liontown East the average downhole thickness of the mineralised zone is 8.2m. WATERLOO RESOURCE <ul style="list-style-type: none"> The typical drill sample interval is 1m in length, the average thickness of the mineralized zone is 5m, there are no issues with reporting the results based on this. The drillholes intercepted the mineralized lenses at an approximately perpendicular angle. All exploration results were reported as downhole thicknesses. ORIENT RESOURCE <ul style="list-style-type: none"> The typical drill sample interval is 1m in length, the average thickness of the mineralized zone is 5m, there are no issues with reporting the results based on this. The drillholes intercepted the mineralized lenses at an approximately perpendicular angle. All exploration results were reported as downhole thicknesses.
Diagrams	<p><i>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.</i></p>	<ul style="list-style-type: none"> All diagrams are located within the body of this report

Criteria	Explanation	Commentary
Balanced reporting	<i>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.</i>	<ul style="list-style-type: none"> All drill intercepts are recorded within the body of this report
Other substantive exploration data	<i>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.</i>	<ul style="list-style-type: none"> All meaningful and material data is reported
Further work	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> Further infill drilling will be required within the deposit areas to increase confidence to Measure or Indicated Resource status. Further extensional drilling will be required to test possible extensions to mineralisation. Exploration will continue within the target VMS horizons Further metallurgical testwork is required to improve confidence in the resource and ZnEq calculation.

Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	<p><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></p> <p><i>Data validation procedures used.</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The survey, sampling and logging data was electronically imported into the resource database. Checks were made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was made of the drill traces, assay and logging data in the 3D environment of Datamine to ensure that results correlated between drill holes and were in line with the geological interpretation. Exclusion of Au and Ag assays from the first drill program by Nickel Mines was carried out due to uncertainty of their recorded values. Three other drill holes were excluded from the resource estimate due to suspect location and/or assay records. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The survey, sampling and logging data was electronically imported into the resource database. Checks were also made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drillholes and were in line with the geological interpretation and mineralization continuity. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The survey, sampling and logging data was electronically imported into the resource database. Checks were also made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drillholes and were inline with the geological interpretation and mineralization continuity.
Site visits	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Site visits to Liontown, Liontown East and Thalanga Mine Site Core Facility were undertaken by the competent person in April and June 2018. Review of the data collection processes was undertaken No material issues were identified. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> A site visit was completed by Stuart Hutchin during 2013 where the Waterloo prospect and core samples were inspected. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> A site visit was completed by Stuart Hutchin on 16/10/2013 where Orient core samples were inspected.

Criteria	Explanation	Commentary
Geological interpretation	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> Confidence in the geological interpretation of the mineral deposit as a VMS is high based on its characteristics and their affinities with other well-known deposits within the Seventy Mile Range Group Consistency of the host sequence between holes through and around the Mineral Resource is high. The sequence continues along strike and is well drilled both Liontown and Liontown East where mineralisation is located within the same horizons. This repetition being a function of contemporaneous deposition. The assumption that mineralisation is continuous between holes within the resource area is fair considering consistency of host and mineralisation and the drill hole spacing defining them. There is moderate potential for local discontinuities of the mineralised system from depositional facies variations, faulting and dykes interruptions. There is low potential for these to have major impact on the global Mineral Resource. The main lens of mineralisation is contained between a fine-grained siltstone and a thick package of rhyodacite pumice breccia. A mineralised envelope containing massive, banded and network stringer sulphide mineralisation (sphalerite, galena, chalcopyrite and pyrite) was used to constrain the resource estimate. At Liontown East, within the immediate footwall lesser Zn Pb Cu stringer sulphide mineralisation of undetermined continuity has been excluded from this resource estimate. Similarly, Cu Au mineralisation within the footwall pumice breccia below the defined resource has not been included in the estimate. This Cu Au mineralisation has similarities to the Carrington Lode mined at the Liontown deposit. Further drilling at closer spacing may prove continuity of these areas. Little recent data has been collected in the Oxide domain and the Western Footwall domain of the Resource and as such a lower confidence in the interpretation of these areas exists. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The confidence in the overall geological interpretation is high given the continuity of the mineralized zone defined at the 40m x 40m drill spacing. The dacite, quartz eye volcanoclastics and rhyolite geological units have been modelled and are used to define general areas of rock types within the deposit. The mineralized zones typically occur within the quartz eye volcanoclastics. The mineralized lenses occur within the quartz eye volcanoclastic package, they are discrete pods of massive sulphide and stringer mineralization. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The confidence in the overall geological interpretation is high given the continuity of the mineralized zone defined at the 40m x 40m drill spacing.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> The dacite, quartz eye volcanoclastics and rhyolite geological units have been modelled and are used to define general areas of rock types within the deposit. The mineralized zones typically occur within the quartz eye volcanoclastics. The mineralized lenses occur within the quartz eye volcanoclastic package, they are discrete pods of massive sulphide and stringer mineralization.
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	<p>LIONTOWN RESOURCE</p> <ul style="list-style-type: none"> The deposit has a complex geometry. An East-West striking and moderately (60') south dipping sequence occurs. The Main Lode consists of 3 stacked narrow lenses (domains 104 105 and 102) hosted within sediments above and conformable to a sediment to pumice breccia contact. Below the contact and within the pumice breccia occurs the New Queen domains. The New Queen area contains a broad lower grade domain (201) with an internal narrow massive high grade lode (204). In the FW of these lodes are lesser almost pod like lenses (203 and 205). And to the east along strike is a lesser lode (202) West of New Queen is the Cu dominant Western Footwall lode (407). Carrington-style Au, Au-Cu, and Cu mineralisation (401 and 402) overlap the New Queen lodes near surface but display a near vertical dip. Extension of these lodes into the Gap area to the east through to the footwall of the Liontown East Resource are defined in Gap lode 404. Individual lenses are between 199 and 500m strike and 100 to 400m dip extent. The true thickness of mineralisation that makes up the majority of the Mineral Resource is between 1 and 8m. The weathering profile is shallow over the Pumice Breccia but steepens in the south following the Pumice Breccia – Sediment contact. A singular Main lode Oxide Gold domain (112) is defined above the Main Lodes. Two further Oxide Au domains 411 and 412 are defined over the Carrington and New Queen Lodes. <p>LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The defined Mineral Resource has dimensions of a narrow lens that strikes at a bearing of 075 and dips at 60 degrees to the South-East. The extents of the Mineral Resource span 250m in strike and 480m down plunge The Mineral Resource ranges from 0.5m to 14m in true thickness with an area weighted average true thickness of 5.1m. The Mineral Resource is defined between 170m and 570m below surface level. The Resource is open at depth. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The strike length of the overall mineralized zone is 600m, thickness of the zones ranges from 5m to 10m. The resource domains are located from 50m below the surface topography and extend to a depth of 200m below surface.

Criteria	Explanation	Commentary
		ORIENT RESOURCE <ul style="list-style-type: none"> The strike length of the overall mineralized zone is 340m, thickness of the zones ranges from 5m to 10m. The resource domains are located from 150m below the surface topography and extend to a depth of 500m below surface.
Estimation	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p>	LIONTOWN RESOURCE <ul style="list-style-type: none"> The resource model was constructed using Datamine Studio RM software, variography in Snowden Supervisor. Main Lens and New Queen lens modelling constrained Pb and Zn dominant mineralisation whereas the Gap and Western Footwall lenses were developed to constrain Cu and Au dominant mineralisation. A 0.5 gt/ Au cut off was used to constrain the Oxide Au mineralisation. Wireframe domains were used as hard boundaries to constrain the estimate. To limit the effect of any anomalously high results, top cuts were applied to the composited sample intervals following a review of sample distribution. Main lode domains were estimated by ordinary kriging using variogram models derived from the top-cut and composited sample data. Interpolation of grades into the Western Footwall, Fap and Oxide domains was undertaken by inverse distance squared methods. Extrapolation of data is constrained by the mineralised domain to generally 10-40m. The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data, volume checks of the ore domain wireframe vs the block model volume and comparison of composites and block grades by RL. Comparison with inverse distance estimates was undertaken. The validation steps taken indicate that the block estimates are a realistic representation of the source assay data and that the block model volumes are valid in comparison to the modelled interpretation. LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> The resource model was constructed using Datamine Studio RM software. A mineralised envelope containing continuity of massive, banded and network stringer sulphide mineralisation (sphalerite galena chalcopryrite and pyrite) was used to constrain the resource estimate. This envelope equates to ~ 5% ZnEq cut off. Extrapolation of mineralised envelope beyond the extents of drill hole confirmed mineralisation was ~1/3 of drill spacing. Top capping of high grade Cu, Pb, Ag and Au samples was applied to raw assay data. 9 Cu samples (>2% Cu), 7 Pb composites (>10% Pb), 5 Ag samples (>140ppm Ag) and 5 Au samples (>4ppm Au) were top capped to their population means. The sample data was composited to a length ~1m.

Criteria	Explanation	Commentary
	<p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<ul style="list-style-type: none"> • An inverse distance squared estimate was carried out using a multiple pass method with sample limitations and octant requirements and increasing search distances. A block size 1/3 of the sample spacing was used. • This method is suitable for an Inferred Resource estimation at Lione East given the style and orientation of the mineralisation and the current drill spacing. • The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data, volume checks of the ore domain wireframe vs the block model volume and comparison of composites and block grades by RL. • The validation steps taken indicated that the block estimates are a realistic representation of the source assay data and that the block model volumes are valid in comparison to the modelled interpretation. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> • The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed by modelling the geological cut-off seen in the logging for both the massive sulphide zone and the stringer zone. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground operation. • High grade Zn, Cu, Pb, Ag and Au were top cuts were applied using the 95th percentile method. For the Central massive sulphide zone a total of 8 copper assay values were cut and 7 for lead and zinc. • A composite file was created using an average composite length of 1m. The average sample length within the assay dataset is also 1m. • Variograms were not created due insufficient quantity of sample pairs within the relatively small dataset, meaningful variograms were not created. • An inverse distance estimate was run given the lack of variograms. This method is however deemed to be suitable given the style and orientation of the mineralization. • A 12.5m x 12.5m x 2.5m (RL) parent block size was used with sub blocking to 0.78125m x 0.78125m x 0.15625m (RL) used. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> • The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed by modelling the geological cut-off seen in the logging for both the massive sulphide zone and the stringer zone. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground operation. • High grade Zn, Cu, Pb, Ag and Au were applied using the 95th percentile method. For the massive sulphide zone a total of 8 assay values were cut for all metals except zinc where 7 were cut. For the stringer zone a total of eight samples were cut for all metals. • A composite file was created using an average composite length of 1m. The average sample length within the assay dataset is also 1m.

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> Variograms were not created due insufficient quantity of sample pairs within the relatively small dataset, meaningful variograms were not created. An inverse distance estimate was run given the lack of variograms. This method is however deemed to be suitable given the style and orientation of the mineralization. A 10m x 10m x 5m (RL) parent block size was used with sub blocking to 1.25m x 1.25m x 0.625m (RL) used. This is deemed appropriate in relation to the style of mineralization, ore zone geometry and potential future mining methods.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The resource tonnages have been estimated on a dry basis <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The resource tonnages have been estimated on a dry basis <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The resource tonnages have been estimated on a dry basis
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> A cutoff using 5% Zn Eq has been used to report resources. This was chosen as the lower limit of potentially economically extractable material within an underground mining operation in this style of deposit. The zinc equivalent formula used is: $Zn\ Eq = Zn\ grade\% * Zn\ recovery + (Cu\ grade\% * Cu\ recovery\% * (Cu\ price\ \\$/t / Zn\ price\ \\$/t)) + (Pb\ grade\% * Pb\ recovery\% * (Pb\ price\ \\$/t / Zn\ price\ \\$/t)) + (Au\ grade\ g/t / 31.103 * Au\ recovery\% * (Au\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01)) + (Ag\ grade\ g/t / 31.103 * Ag\ recovery\% * (Ag\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01))$ <p>Where zinc, copper, lead, gold and silver prices of US\$2500/t Zinc, US\$8500/t Copper, US\$2000/t Lead, US\$1900/oz Gold and US\$20/oz Silver with metallurgical metal recoveries of 88% Zn, 80% Cu, 70% Pb, 65% Au and 65% Ag and are supported by metallurgical test work undertaken.</p> <ul style="list-style-type: none"> The zinc equivalent calculation has been applied to oxide ore, despite limited metallurgical work. Half of the current Cu, Pb and Zn recoveries are assumed (40% Cu 35% Pb and 44% Zn) and substituted into the formula above. Further metallurgical work will be prioritised. The oxide ore contributes <3% of the global Resource tonnage. <p>WATERLOO RESOURCE</p>

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> A cutoff using 5% Zn Eq has been used to report resources within the “High Grade” domains and 1% Zn Eq within the “Low Grade” domains. This was chosen as the lower limit of potentially economically extractable material within an underground mining operation in this style of deposit. The zinc equivalent formula used is: $\text{Zn Eq} = \text{Zn grade\%} * \text{Zn recovery} + (\text{Cu grade \%} * \text{Cu recovery \%} * (\text{Cu price \\$/t} / \text{Zn price \\$/t})) + (\text{Pb grade \%} * \text{Pb recovery \%} * (\text{Pb price \\$/t} / \text{Zn price \\$/t})) + (\text{Au grade g/t} / 31.103 * \text{Au recovery \%} * (\text{Au price \\$/oz} / \text{Zn price \\$/t} * 0.01)) + (\text{Ag grade g/t} / 31.103 * \text{Ag recovery \%} * (\text{Ag price \\$/oz} / \text{Zn price \\$/t} * 0.01))$ <p>Where zinc, copper, lead, gold and silver prices of US\$2500/t Zinc, US\$8500/t Copper, US\$2000/t Lead, US\$1900/oz Gold and US\$20/oz Silver with metallurgical metal recoveries of 88% Zn, 80% Cu, 70% Pb, 65% Au and 65% Ag and are supported by metallurgical test work undertaken.</p> <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> A cutoff using 5% Zn Eq has been used to report resources. This was chosen as the lower limit of potentially economically extractable material within an underground mining operation in this style of deposit. The zinc equivalent formula used is: $\text{Zn Eq} = \text{Zn grade\%} * \text{Zn recovery} + (\text{Cu grade \%} * \text{Cu recovery \%} * (\text{Cu price \\$/t} / \text{Zn price \\$/t})) + (\text{Pb grade \%} * \text{Pb recovery \%} * (\text{Pb price \\$/t} / \text{Zn price \\$/t})) + (\text{Au grade g/t} / 31.103 * \text{Au recovery \%} * (\text{Au price \\$/oz} / \text{Zn price \\$/t} * 0.01)) + (\text{Ag grade g/t} / 31.103 * \text{Ag recovery \%} * (\text{Ag price \\$/oz} / \text{Zn price \\$/t} * 0.01))$ <p>Where zinc, copper, lead, gold and silver prices of US\$2500/t Zinc, US\$8500/t Copper, US\$2000/t Lead, US\$1900/oz Gold and US\$20/oz Silver with metallurgical metal recoveries of 88% Zn, 80% Cu, 70% Pb, 65% Au and 65% Ag and are supported by metallurgical test work undertaken.</p>
Mining factors or assumptions	<p><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions.</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The Resource has been estimated with the intent of being mined by selective mining methods such as underground drive development and long hole stoping techniques. A minimum mining extraction thickness of 2m would be likely. For conversion to Reserve, material that is sub 2m thick will require a higher cutoff to accommodate the additional minimum mining width dilution. ~5% of the reported resource is of sub 2m thickness and no exclusion of this material has been made. Potential for an initial open cut mining the Oxide Au and shallow parts of the sulphide Resource to a limited depth exists. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The resources have been estimated using a minimum thickness of 2m for each of the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground long hole stoping techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.

Criteria	Explanation	Commentary
		ORIENT RESOURCE <ul style="list-style-type: none"> The resources have been estimated using a minimum thickness of 2m for each of the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground long hole stoping techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.
Metallurgical factors or assumptions	<p><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></p>	LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> The assumed processing is via crushing and milling and conventional flotation to produce concentrates containing Zn, Pb, Cu, Au and Ag. Further metallurgical test work will be required to confirm the processing metrics of the ore material. Ore sorting may be applicable WATERLOO RESOURCE <ul style="list-style-type: none"> The ore is planned to be crushed and a concentrate containing Zn, Pb, Ag and Cu produced. Metallurgical test work has shown that a saleable concentrate can be produced from the Waterloo ore. ORIENT RESOURCE <ul style="list-style-type: none"> The ore is planned to be crushed and a concentrate containing Zn, Pb, Ag and Cu produced. Metallurgical test work has shown that a saleable concentrate can be produced from the Orient ore.
Environmental factors or assumptions	<p><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been</i></p>	LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE <ul style="list-style-type: none"> Government approvals would need to be obtained for mining at Liontown and Liontown East. Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage. Waste rock would likely be required as stope fill following ore extraction. Mining Lease applications have been submitted over the Liontown and Liontown East deposits. WATERLOO RESOURCE <ul style="list-style-type: none"> Government approvals would need to be obtained for mining at Waterloo. Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage. Waste rock would likely be required as stope fill following ore extraction. A Mining Lease application has been submitted over the Waterloo deposit. ORIENT RESOURCE

Criteria	Explanation	Commentary
	<i>considered this should be reported with an explanation of the environmental assumptions made.</i>	<ul style="list-style-type: none"> Government approvals would need to be obtained for mining at Orient. Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage. Waste rock would likely be required as stope fill following ore extraction.
Bulk density	<p><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <p><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The bulk density of the Mineral Resource was calculated from content estimates of dense minerals based on modelled block grades of Zn, Pb, Cu, Fe and Ba and measured gangue densities. The density calculation incorporates void and porosity influences through an assigned (and validated) gangue density. The density calculation was validated by empirical test work on the Liontown East core following the Archimedes principle. 16% of samples within the resource area were tested. Oxide Resource blocks were allocated a density of 2.3 as supported by limited sampling. The densities are reported on a dry basis. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight)). Bulk density measurements were obtained for all sample intervals within the diamond drill holes with a total 1,174 samples collected. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight)). Bulk density measurements were obtained for all sample intervals within the diamond drill holes.
Classification	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralised zones in the view of the competent geologist. The Liontown East Resource classification of Inferred is deemed appropriate in relation to the drill spacing, likely geological continuity of the mineralised domains and the reliability of supporting data. With the reliability being demonstrated through quality assessment processes. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralized zones in the view of the resource geologist. Only indicated and inferred blocks

Criteria	Explanation	Commentary
		<p>have reported for the resource, no measured blocks are reported.</p> <ul style="list-style-type: none"> The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralized domains. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralized zones in the view of the resource geologist. Only indicated and inferred blocks have reported for the resource, no measured blocks are reported. The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralized domains.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The Liontown Resource is an updated Resource, previously estimated buy various parties. Recently collected additional data has been incorporated into the estimate which has increased the area of definition, Resource size and refined the accuracy of the estimate. New data has not changed the fundamentals of the interpretation. No additional recent external reviews or audits have been carried out. The Liontown East Resource has not been externally reviewed or audited. <p>WATERLOO RESOURCE</p> <ul style="list-style-type: none"> Mining One consultants completed a review of the Waterloo resource as part of a due diligence program. No critical flaws were highlighted with the source data set or the modelling methodology. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> Mining One consultants completed a review of the Orient resource as part of a due diligence program. No critical flaws were highlighted with the source data set or the modelling methodology.
Discussion of relative accuracy/ confidence	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy</i>	<p>LIONTOWN RESOURCE AND LIONTOWN EAST RESOURCE</p> <ul style="list-style-type: none"> The Resource estimate is deemed to be an accurate reflection, to the precision allowable via the current data spacing of both the geological interpretation and the deposits potentially economic tonnage and grade distribution. The Resource is reported at a 5% ZnEq cutoff. Within the Resource model local smoothing of grade occurs The Resource area is open at depth and footwall mineralisation has been excluded from the Liontown East Resource estimate. Further drilling will allow inclusion of Resources from these areas. No production history occurs at Liontown East. <p>WATERLOO RESOURCE</p>

Criteria	Explanation	Commentary
	<p><i>and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<ul style="list-style-type: none"> The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit. <p>ORIENT RESOURCE</p> <ul style="list-style-type: none"> The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit.

Appendix A: Drill Hole Collar Information

All drill holes below are reported in GDA 94, Zone 55.

Liontown:

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
CGD001	401,103	7,743,332	298	215.3	-60	192
LCD101	401,087	7,743,135	290	200.0	-60	0
LCP501	401,093	7,743,186	293	102.0	-61	0
LCP502	401,176	7,743,155	289	108.0	-61	0
LCP503	400,371	7,743,653	293	150.0	-60	5
LCR203	401,345	7,743,264	287	43.0	-90	0
LED101	403,626	7,742,927	292	235.0	-60	0
LEP501	403,526	7,742,935	292	110.0	-60	0
LER201	403,143	7,743,179	299	27.0	-90	0
LER202	403,140	7,743,129	300	12.0	-90	0
LER203	403,136	7,743,079	300	9.0	-90	0
LER204	403,132	7,743,030	300	2.0	-90	0
LER205	403,128	7,742,980	302	2.0	-90	0
LER206	403,125	7,742,930	300	8.0	-90	0
LER207	403,121	7,742,880	299	31.0	-90	0
LER208	403,117	7,742,830	298	18.0	-90	0
LER209	403,114	7,742,780	296	51.0	-90	0
LER210	403,110	7,742,730	291	69.0	-90	0
LER211	403,106	7,742,681	290	36.0	-90	0
LER212	403,320	7,742,865	291	26.0	-90	0
LER213	403,324	7,742,915	294	10.0	-90	0
LER214	403,328	7,742,965	294	7.0	-90	0
LER215	403,332	7,743,015	295	27.0	-90	0
LER216	403,335	7,743,064	296	24.0	-90	0
LER217	403,339	7,743,114	296	10.0	-90	0
LER218	403,343	7,743,164	296	12.0	-90	0
LER223	403,527	7,742,950	291	48.0	-90	0
LER224	403,531	7,743,000	292	51.0	-90	0
LER225	403,535	7,743,050	292	48.0	-90	0
LER226	403,538	7,743,099	294	36.0	-90	0
LER227	403,477	7,742,954	294	65.0	-90	0
LER228	403,481	7,743,003	297	66.0	-90	0
LER229	403,479	7,742,979	297	66.0	-90	0
LER230	403,581	7,742,996	293	66.0	-90	0
LER231	403,583	7,743,021	292	51.0	-90	0
LER232	403,633	7,743,017	293	54.0	-90	0
LER233	403,631	7,742,992	293	63.0	-90	0
LER234	403,681	7,742,989	292	72.0	-90	0
LER235	403,682	7,743,013	293	66.0	-90	0

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LER236	403,684	7,743,038	293	69.0	-90	0
LER237	403,736	7,743,060	293	84.0	-90	0
LER238	403,480	7,742,991	298	42.0	-90	0
LER239	403,582	7,743,009	292	54.0	-90	0
LER240	403,632	7,743,005	293	48.0	-90	0
LER241	403,673	7,743,027	293	54.0	-90	0
LER242	403,838	7,743,077	295	73.0	-90	0
LER243	403,841	7,743,127	295	89.0	-90	0
LER244	403,839	7,743,097	294	91.0	-90	0
LER249	404,059	7,743,361	298	89.0	-90	0
LER253	403,838	7,743,087	294	81.0	-90	0
LER254	403,840	7,743,107	294	89.0	-90	0
LER255	403,735	7,743,045	293	89.0	-90	0
LLD001	402,155	7,742,915	292	50.3	-45	8
LLD002	402,164	7,742,899	292	126.0	-68	8
LLD003	402,193	7,742,896	293	68.6	-68	8
LLD004	402,210	7,742,897	294	81.7	-68	8
LLD005	402,225	7,742,897	294	59.7	-68	8
LLD006	402,224	7,742,892	294	119.9	-68	8
LLD007	402,228	7,742,865	293	208.5	-72	8
LLD008	402,240	7,742,894	295	121.9	-68	8
LLD009	402,254	7,742,896	295	51.8	-68	8
LLD010	402,253	7,742,890	295	121.0	-68	8
LLD011	402,269	7,742,892	296	121.9	-68	8
LLD012	402,285	7,742,893	297	54.0	-68	8
LLD013	402,284	7,742,887	297	121.9	-68	8
LLD014	402,299	7,742,889	298	119.2	-68	8
LLD015	402,317	7,742,883	299	115.9	-68	8
LLD016	402,346	7,742,881	300	126.5	-68	8
LLD017	402,352	7,742,770	294	228.3	-60	8
LLD018	402,376	7,742,880	300	122.4	-68	8
LLD019	402,404	7,742,877	301	121.6	-68	8
LLD020	402,421	7,742,879	302	124.4	-68	351
LLD021	402,437	7,742,879	302	121.6	-68	350
LLD022	402,436	7,742,874	302	122.8	-68	8
LLD023	402,467	7,742,872	301	216.7	-68	8
LLD024	402,497	7,742,869	300	140.5	-68	8
LLD025	402,521	7,742,867	300	120.7	-68	8
LLD026	402,553	7,742,869	300	124.7	-68	8
LLD027	402,552	7,742,862	300	121.6	-68	8
LLD028	402,569	7,742,863	300	146.9	-68	8
LLD029	402,585	7,742,865	301	125.9	-68	8
LLD030	402,585	7,742,859	300	123.4	-68	8
LLD031	402,586	7,742,754	293	228.0	-75	8

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLD032	402,573	7,742,779	294	234.6	-68	8
LLD033	402,555	7,742,706	292	303.0	-68	8
LLD034	402,626	7,743,001	303	135.5	-90	8
LLD035	402,615	7,742,936	305	168.3	-90	8
LLD036	402,599	7,742,860	301	121.9	-68	8
LLD037	402,612	7,742,863	302	120.4	-68	8
LLD038	402,611	7,742,856	300	125.0	-68	8
LLD039	402,479	7,743,033	298	31.4	-68	8
LLD040	402,645	7,742,864	303	90.8	-68	8
LLD041	402,645	7,742,858	301	119.5	-68	8
LLD042	402,660	7,742,861	302	122.2	-68	8
LLD043	402,675	7,742,867	302	96.8	-68	8
LLD044	402,675	7,742,861	302	123.4	-68	8
LLD045	402,690	7,742,864	301	92.1	-68	8
LLD046	402,706	7,742,867	301	117.4	-68	8
LLD047	402,705	7,742,861	300	121.9	-68	8
LLD048	402,719	7,742,866	300	115.2	-68	8
LLD049	402,691	7,742,786	297	341.1	-68	8
LLD050	402,674	7,742,696	298	51.8	-68	8
LLD051	402,729	7,742,926	307	145.4	-90	8
LLD052	402,733	7,742,862	300	95.1	-68	8
LLD053	402,768	7,742,868	303	122.8	-45	8
LLD054	402,831	7,742,924	307	155.2	-90	8
LLD055	402,823	7,742,874	304	111.3	-68	8
LLD056	402,892	7,742,813	302	205.8	-75	8
LLD057	402,944	7,742,880	303	146.6	-68	8
LLD059	403,151	7,742,824	296	164.4	-68	8
LLD060	403,225	7,742,901	296	31.4	-50	348
LLD101	402,702	7,742,864	301	215.5	-65	5
LLD102	402,589	7,742,862	301	220.5	-65	5
LLD103	402,718	7,742,995	306	287.1	-60	185
LLD104	402,692	7,742,692	298	333.4	-62	5
LLD105	402,229	7,742,863	293	192.8	-60	5
LLD106	402,230	7,742,895	294	187.5	-60	5
LLD107	402,576	7,742,776	294	187.5	-60	5
LLD108	402,210	7,742,741	292	394.5	-60	5
LLD109	402,237	7,742,966	293	218.3	-60	185
LLD110	402,810	7,742,699	296	325.5	-60	5
LLD111	402,821	7,742,865	303	235.0	-60	5
LLD112	402,480	7,742,863	300	181.2	-60	5
LLD113	402,360	7,742,840	298	256.0	-60	3
LLD114	402,697	7,742,786	297	293.8	-60	3
LLD115	402,515	7,742,801	296	271.8	-60	5
LLD116	402,433	7,742,778	294	320.7	-60	5

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLD117	402,117	7,742,851	291	247.8	-60	5
LLD118	402,607	7,742,664	294	388.5	-61	5
LLD119	402,815	7,742,773	302	252.5	-59	5
LLD120	402,915	7,742,791	300	260.5	-60	5
LLD121	402,504	7,742,672	291	490.5	-60	5
LLD122	403,067	7,742,806	298	295.3	-60	5
LLD123	403,312	7,742,836	291	243.0	-60	5
LLD124	402,693	7,742,689	298	406.0	-75	0
LLD125	402,377	7,742,600	290	385.6	-60	0
LLD126	402,825	7,742,598	290	439.5	-60	0
LLD127	402,912	7,742,524	288	721.3	-72	5
LLD128	402,743	7,742,632	292	399.3	-60	0
LLD129	402,607	7,742,694	295	284.9	-60	6
LLD130	402,429	7,742,728	292	232.0	-60	7
LLD131	402,898	7,742,563	290	419.5	-60	5
LLD132	402,671	7,742,880	306	120.6	-70	5
LLD133	402,671	7,742,883	305	102.2	-50	5
LLD134	402,961	7,742,876	303	111.0	-70	5
LLD135	402,758	7,742,842	301	165.0	-70	5
LLD136	402,782	7,742,823	301	219.0	-70	5
LLD137	402,839	7,742,787	302	339.0	-70	5
LLRC001	401,032	7,743,083	289	100.0	-60	13
LLRC002	401,028	7,743,033	289	100.0	-60	24
LLRC003	401,024	7,742,983	289	94.0	-60	13
LLRC004	401,021	7,742,933	290	100.0	-60	16
LLRC005	401,017	7,742,883	292	100.0	-60	13
LLRC006	401,013	7,742,833	294	100.0	-60	13
LLRC007	401,010	7,742,784	294	100.0	-60	13
LLRC008	401,442	7,743,202	287	88.0	-60	8
LLRC009	401,435	7,743,103	288	88.0	-60	8
LLRC010	401,427	7,743,003	290	100.0	-60	8
LLRC011	401,420	7,742,903	288	63.0	-60	8
LLRC012	401,423	7,742,953	290	103.0	-60	8
LLRC013	401,416	7,742,853	287	73.0	-60	8
LLRC014	401,412	7,742,804	285	57.0	-60	8
LLRC015	401,408	7,742,754	285	100.0	-60	8
LLRC016	401,405	7,742,704	284	103.0	-60	8
LLRC017	401,401	7,742,654	286	100.0	-60	8
LLRC018	401,397	7,742,604	286	91.0	-60	8
LLRC019	401,394	7,742,554	285	96.0	-60	8
LLRC020	401,390	7,742,504	285	97.0	-60	8
LLRC021	401,386	7,742,455	285	97.0	-60	8
LLRC022	400,382	7,743,783	295	120.0	-50	186
LLRC023	400,945	7,742,999	291	91.0	-60	8

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLRC024	401,102	7,742,947	288	80.0	-60	8
LLRC025	401,099	7,742,907	289	80.0	-60	5
LLRC026	401,096	7,742,867	289	80.0	-60	5
LLRC027	401,093	7,742,827	290	80.0	-60	5
LLRC028	401,090	7,742,788	293	80.0	-60	5
LLRC029	401,087	7,742,748	294	80.0	-60	5
LLRC030	401,600	7,742,639	286	100.0	-60	5
LLRC031	401,597	7,742,589	285	100.0	-60	5
LLRC032	401,593	7,742,539	286	100.0	-60	5
LLRC033	400,875	7,743,125	293	100.0	-60	5
LLRC034	400,912	7,743,092	292	100.0	-60	5
LLRC035	400,950	7,743,059	293	100.0	-60	5
LLRC036	400,987	7,743,022	290	100.0	-60	5
LLRC037	401,382	7,742,405	285	100.0	-60	5
LLRC038	401,379	7,742,355	285	100.0	-60	5
LLRC039	401,375	7,742,305	285	100.0	-60	5
LLRC040	401,589	7,742,489	287	98.0	-60	5
LLRC041	401,586	7,742,440	286	100.0	-60	5
LLRC042	401,582	7,742,390	285	100.0	-60	5
LLRC043	401,578	7,742,340	286	89.0	-60	5
LLRC044	401,574	7,742,290	286	100.0	-60	5
LLRC045	401,571	7,742,240	285	100.0	-60	5
LLRC046	401,785	7,742,425	286	100.0	-60	5
LLRC047	401,781	7,742,375	287	100.0	-60	5
LLRC048	401,786	7,742,525	301	100.0	-60	5
LLRC051	400,872	7,743,085	293	114.0	-60	5
LLRC052	400,948	7,743,029	291	100.0	-60	5
LLRC053	401,213	7,742,818	287	100.0	-60	5
LLRC054	401,209	7,742,769	289	100.0	-60	5
LLRC055	401,205	7,742,719	292	100.0	-60	5
LLRC056	401,202	7,742,669	293	100.0	-60	5
LLRC057	401,198	7,742,619	290	100.0	-60	5
LLRC058	401,194	7,742,569	289	100.0	-60	5
LLRC059	400,738	7,743,180	292	102.0	-60	5
LLRC060	400,742	7,743,230	292	100.0	-60	5
LLRC061	400,746	7,743,280	293	100.0	-60	5
LLRC062	400,866	7,743,005	293	102.0	-60	5
LLRC063	400,869	7,743,045	293	100.0	-60	5
LLRC064	400,182	7,743,793	294	100.0	-60	5
LLRC065	402,685	7,743,059	301	100.0	-60	5
LLRC066	402,681	7,743,010	304	100.0	-60	5
LLRC067	402,677	7,742,960	307	100.0	-60	5
LLRC068	402,674	7,742,920	306	100.0	-60	5
LLRC069	402,762	7,742,879	303	103.0	-70	5

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLRC070	402,842	7,742,882	304	103.0	-70	5
LLRC071	402,922	7,742,880	303	109.0	-70	5
LLRC072	402,802	7,742,880	305	100.0	-70	5
LLRC073	402,882	7,742,882	304	100.0	-70	5
LLRC074	402,962	7,742,881	303	90.0	-70	5
LLRC075	402,301	7,742,889	298	96.0	-70	5
LLRC076	402,520	7,742,872	300	90.0	-70	5
LLRC077	402,025	7,742,958	288	90.0	-60	5
LLRC078	402,018	7,742,859	288	100.0	-60	5
LLRC079	402,022	7,742,908	288	103.0	-60	5
LLRC080	402,959	7,742,841	301	144.0	-70	5
LLRC081	403,001	7,742,858	300	126.0	-70	5
LLRC082	402,759	7,742,839	300	162.0	-70	5
LLRC083	403,043	7,742,882	301	104.0	-70	5
LLRC084	403,083	7,742,879	299	90.0	-70	5
LLRC085	402,839	7,742,842	303	150.0	-70	5
LLRC086	403,121	7,742,856	298	120.0	-70	5
LLRC087	403,205	7,742,910	297	100.0	-70	5
LLRC088	403,288	7,742,944	296	100.0	-70	5
LLRC089	403,535	7,743,026	294	72.0	-70	5
LLRC090	402,499	7,742,849	299	100.0	-70	5
LLRC091	402,598	7,742,840	298	140.0	-70	5
LLRC092	402,639	7,742,843	299	140.0	-70	5
LLRC093	402,678	7,742,840	300	140.0	-70	5
LLRC094	402,719	7,742,851	299	140.0	-70	5
LLRC095	402,841	7,742,862	303	132.0	-70	5
LLRC096	402,921	7,742,860	305	132.0	-70	5
LLRC097	402,961	7,742,861	304	120.0	-70	5
LLRC098	402,966	7,742,926	306	100.0	-70	185
LLRC099	402,999	7,742,838	300	140.0	-70	5
LLRC100	403,040	7,742,842	297	168.0	-70	5
LLRC101	403,081	7,742,859	297	120.0	-70	5
LLRC107	403,639	7,743,073	293	135.0	-60	5
LLRC108	404,591	7,743,744	310	137.0	-60	5
LLRC109	404,580	7,743,595	310	140.0	-60	5
LLRC110	404,574	7,743,520	310	130.0	-60	5
LLRC123	404,627	7,744,227	312	100.0	-60	5
LLRC159	403,413	7,744,054	302	66.0	-60	312
LLRC160	403,528	7,743,952	303	90.0	-60	312
LLRC162	402,593	7,743,477	295	90.0	-60	348
LLRC163	403,638	7,743,857	303	66.0	-60	312
LLRC164	402,374	7,743,523	293	93.0	-60	278
LLRC165	402,374	7,743,323	292	90.0	-60	357
LLRC166	402,374	7,743,223	290	60.0	-60	357

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLRC167	404,115	7,743,923	301	129.0	-60	357
LLRC168	404,115	7,743,823	301	111.0	-60	357
LRC001	402,426	7,742,908	299	85.0	-60	5
LRC002	402,427	7,742,928	299	65.0	-60	5
LRC003	402,480	7,742,924	299	60.0	-60	5
LRC004	402,476	7,742,905	299	80.0	-60	5
LRC005	402,519	7,742,901	299	80.0	-60	5
LRC006	402,533	7,742,920	300	50.0	-60	5
LRC007	402,571	7,742,923	301	50.0	-60	5
LRC008	402,570	7,742,902	300	80.0	-60	5
LRC009	402,624	7,742,924	303	50.0	-60	5
LRC010	402,622	7,742,903	302	80.0	-60	5
LRC011	402,672	7,742,919	303	60.0	-60	5
LRC012	402,672	7,742,900	303	80.0	-60	5
LRC013	402,724	7,742,919	303	50.0	-60	5
LRC014	402,722	7,742,911	303	80.0	-60	5
LRC015	402,173	7,742,927	289	50.0	-60	5
LRC016	402,172	7,742,912	289	66.0	-60	5
LRC017	402,223	7,742,928	290	50.0	-60	5
LRC018	402,222	7,742,913	290	53.0	-60	5
LRC019	402,272	7,742,915	293	70.0	-60	5
LRC020	402,322	7,742,911	295	47.0	-60	5
LRC021	402,375	7,742,950	297	50.0	-60	5
LRC022	402,373	7,742,932	298	50.0	-60	5
LRC023	402,371	7,742,912	298	50.0	-60	5
LRC024	402,517	7,742,851	297	50.0	-60	5
LRC025	402,515	7,742,831	295	50.0	-60	5
LRC026	402,678	7,742,939	304	59.0	-60	5
LRC027	402,774	7,742,922	303	47.0	-60	5
LRC028	402,773	7,742,902	303	50.0	-60	5
LRC029	402,825	7,742,928	303	50.0	-60	5
LRC030	402,823	7,742,908	303	65.0	-60	5
LRC031	402,875	7,742,934	303	47.0	-60	5
LRC032	402,874	7,742,915	303	60.0	-60	5
LRC033	402,575	7,742,937	301	78.0	-60	5
LRC034	402,620	7,742,914	302	26.0	-60	5
LRC035	402,571	7,742,912	300	81.0	-60	5
LRC036	402,598	7,742,905	301	93.0	-60	5
LRC037	402,571	7,742,887	299	90.0	-60	5
LRC038	402,596	7,742,890	301	93.0	-60	5
LRC039	402,570	7,742,872	299	84.0	-60	5
LRC040	402,516	7,742,887	299	85.0	-60	5
LRC041	402,568	7,742,847	298	80.0	-60	5
LRC042	402,517	7,742,872	298	88.0	-60	5

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LRC043	402,594	7,742,852	298	80.0	-60	5
LRC044	402,499	7,742,918	299	80.0	-60	5
LRC045	402,620	7,742,863	298	93.0	-60	5
LRC046	402,496	7,742,883	299	69.0	-60	5
LRC047	402,617	7,742,824	296	74.0	-60	5
LRC048	402,551	7,742,914	300	68.0	-60	5
LRC049	402,553	7,742,892	299	78.0	-60	5
LRC050	402,496	7,742,898	299	48.0	-50	5
LTCD18001	403,529	7,742,771	291	306.0	-60	347
LTCD18002	403,602	7,742,806	292	276.0	-60	350
LTCD18003	403,689	7,742,838	295	318.7	-60	350
LTCD18004	403,759	7,742,892	295	209.0	-60.8	347
LTCD18004A	403,759	7,742,892	295	417.8	-60.8	347
LTCD18005	403,839	7,742,848	296	429.5	-61.5	351
LTCD18006	403,761	7,742,804	297	399.4	-60	344
LTDD18007	403,604	7,742,796	292	453.9	-76	352
LTDD18008	403,531	7,742,765	291	459.8	-77	344
LTDD18009	403,510	7,742,663	292	540.7	-69	0
LTDD18010	403,510	7,742,662	292	627.8	-76	4
LTDD18011A	403,510	7,742,660	292	680.0	-77	24
LTDD18012	403,363	7,742,673	289	570.6	-65	3
LTDD18013	403,224	7,743,055	296	460.5	-56	176
LTDD18014	403,961	7,742,820	295	598.4	-63.1	360
LTDD18015	403,070	7,743,021	301	484.2	-59.9	179
LTDD19001	402,485	7,742,710	291	347.8	-49	1
LTDD19002	402,505	7,742,945	300	257.7	-51	185
LTDD19003	402,484	7,742,763	293	176.5	-61	353
LTDD19004	402,459	7,742,788	295	214.2	-50	8
LTDD19005	402,507	7,742,945	300	224.0	-47	169
LTDD19007	402,585	7,742,788	294	173.4	-54	356
LTDD19008	402,620	7,742,784	294	278.6	-61	352
LTDD19010	402,642	7,742,948	306	222.5	-51	172
LTDD19011	402,506	7,742,946	300	158.8	-48	158
LTDD19012	402,558	7,742,906	302	83.9	-51	317
LTDD19013	402,642	7,742,948	306	144.5	-58	172
LTDD19014	402,593	7,742,857	299	116.5	-47	355
LTDD19015	402,700	7,742,957	306	204.7	-51	162
LTDD19016	402,497	7,742,850	299	112.9	-55	347
LTDD19017	402,627	7,742,894	304	95.4	-58	348
LTDD19018	402,500	7,742,848	299	127.2	-55	33
LTDD19019	402,554	7,742,860	299	108.5	-53	353
LTDD19020	402,555	7,742,859	299	159.5	-66	357
LTDD19021	402,667	7,742,857	301	117.5	-52	345
LTDD19022	402,788	7,742,976	306	148.9	-48	189

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LTDD19023	402,667	7,742,857	301	150.7	-63	345
LTDD19024	402,787	7,742,977	306	197.4	-57	166
LTDD19025	402,763	7,742,873	301	102.5	-50	327
LTDD19026	402,766	7,742,874	301	93.6	-57	2
LTDD19027	402,704	7,742,864	300	104.1	-48	358
LTDD19028	402,639	7,742,830	297	162.5	-52	350
LTDD19029	402,585	7,742,788	294	203.3	-47	349
LTDD19030	402,847	7,742,885	304	114.5	-53	5
LTDD19031	402,806	7,742,875	302	123.5	-50	10
LTDD19032	402,594	7,742,855	299	134.3	-50.75	11
LTDD19033	402,721	7,742,883	302	78.5	-50	7
LTDD19034	402,694	7,742,901	305	81.4	-53	355
LTDD19035	402,651	7,742,905	305	145.0	-56	356
LTDD19036	402,627	7,742,894	304	116.5	-71	347
LTD0001	402,730	7,742,862	300	174.0	-63	0
LTD0002	402,434	7,742,774	293	138.0	-60	0
LTD0003	402,433	7,742,773	293	213.0	-60	0
LTD0004	402,759	7,742,839	300	159.0	-70	0
LTD0005	402,811	7,742,872	304	135.0	-70	0
LTD0006	402,601	7,742,846	299	150.0	-58	0
LTD0007	402,585	7,742,757	293	219.0	-65	10
LTD0008	402,674	7,742,780	296	231.1	-56	12
LTD0009	402,694	7,742,688	298	327.0	-64	5
LTD0010	402,835	7,742,797	303	216.2	-60	5
LTD0011	402,838	7,742,832	303	186.2	-60	5
LTD0012	402,833	7,742,758	301	264.0	-60	5
LTD0013	402,829	7,742,711	296	309.2	-60	5
LTD0014	402,823	7,742,626	292	333.1	-60	5
LTD0015	402,818	7,742,556	289	449.0	-60	5
LTD0016	402,816	7,742,518	288	454.2	-60	5
LTD0017	402,669	7,742,620	292	360.5	-60	5
LTD0018	402,754	7,742,794	301	221.9	-60	5
LTD0019	402,753	7,742,760	301	269.3	-60	5
LTD0020	402,751	7,742,699	297	389.5	-60	5
LTD0021	402,737	7,742,570	290	389.0	-60	5
LTD0022	402,951	7,742,729	296	383.6	-60	5
LTD0023	402,672	7,742,742	295	287.7	-60	5
LTD0024	402,929	7,742,415	287	892.8	-60	5
LTD0025	402,807	7,742,424	287	624.0	-60	5
LTD0026	402,631	7,742,735	294	317.7	-60	5
LTD0027	403,063	7,742,813	298	510.4	-60	5
LTD0028	403,200	7,742,845	294	252.3	-60	5
LTD0029	402,946	7,742,667	293	534.2	-60	5
LTD0030	402,651	7,742,483	287	624.2	-60	5

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LTD0031	403,196	7,742,782	293	390.3	-60	5
LTD0032	403,203	7,742,893	296	159.4	-63	5
LTD0033	403,071	7,742,730	293	375.6	-63	5
LTD0034	402,234	7,742,798	292	291.3	-60	5
LTD0035	402,495	7,742,537	289	529.6	-60	5
LTD0036	402,510	7,742,721	292	297.3	-60	5
LTD0037	402,404	7,742,693	290	339.5	-60	12
LTD0038	402,347	7,742,702	292	315.4	-60	12
LTD0039	402,224	7,742,762	292	300.4	-60	12
LTD0040	402,412	7,742,747	292	224.8	-50	0
LTD0041	402,000	7,742,940	288	200.3	-60	18
LTED01	403,788	7,742,679	297	576.0	-65	0
LTED02	403,786	7,742,678	297	570.0	-64.5	20
LTED03	403,700	7,742,680	294	474.6	-57	7
LTED04	403,790	7,742,679	297	162.8	-60	3
LTED05	403,788	7,742,679	297	530.7	-68	3
LTED05W1	403,783	7,742,795	8	445.8	-67.6	3
LTED06	403,790	7,742,679	297	727.2	-72.5	352
LTED07	403,790	7,742,679	297	600.4	-74	330
LTED07W1	403,790	7,742,679	297	582.4	-74	330
LTED08	403,889	7,742,555	298	255.3	-76	331
LTED08W1	403,889	7,742,555	298	701.1	-76	331
LTED08W2	403,889	7,742,555	298	697.0	-76	331
LTED08W3	403,889	7,742,555	298	673.0	-76	331
LTED08W4	403,889	7,742,555	298	693.6	-76	331
LTED08W5	403,889	7,742,555	298	400.5	-76	331
LTED08W6	403,889	7,742,555	298	492.6	-76	331
LTED09	403,694	7,742,678	294	508.0	-66.6	358
LTED10	403,695	7,742,676	294	453.0	-56	344
LTED11	403,700	7,742,676	294	139.4	-61	338
LTED11A	403,698	7,742,675	294	501.5	-61	338
LTED12	403,698	7,742,675	294	592.1	-72.5	337
LTED13	403,694	7,742,677	294	574.7	-76	2
MWR002	401,038	7,743,279	297	152.0	-60	360
MWR003	401,039	7,743,233	295	152.0	-60	360
MWR004	401,035	7,743,184	293	152.0	-60	360
MWR005	401,034	7,743,140	291	80.0	-60	360
MWR006	401,037	7,743,158	292	80.0	-60	360
MWR007	401,100	7,743,263	299	150.0	-60	360
MWR008	401,089	7,743,223	294	80.0	-60	354
MWR009	401,138	7,743,159	290	80.0	-60	360
MWR010	401,186	7,743,134	288	100.0	-60	360
MWR011	400,878	7,743,157	293	80.0	-60	360
MWR012	400,945	7,743,105	291	80.0	-60	360

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
MWR013	400,874	7,743,503	292	80.0	-60	360
MWR014	400,879	7,743,466	292	90.0	-60	360
MWR015	400,885	7,743,431	293	120.0	-60	360
MWR017	400,879	7,743,351	295	80.0	-60	360
MWR018	400,800	7,743,474	294	90.0	-60	20
MWR019	400,802	7,743,424	293	80.0	-60	360
MWR020	400,795	7,743,350	293	100.0	-60	360
MWR021	401,092	7,743,250	297	80.0	-60	270
MWR022	401,185	7,743,185	289	80.0	-60	360
MWR023	401,185	7,743,160	289	53.0	-60	360
MWR024	401,185	7,743,110	288	80.0	-60	360
MWR025	401,185	7,743,085	287	80.0	-60	360
MWR026	401,185	7,743,060	287	80.0	-60	360
MWR028	401,098	7,743,186	293	80.0	-60	360
MWR029	401,098	7,743,156	291	98.0	-60	360
MWR030	401,097	7,743,124	290	80.0	-60	360
MWR031	401,141	7,743,211	293	80.0	-60	360
MWR032	400,905	7,742,822	292	80.0	-60	33
MWR033	400,933	7,742,859	293	80.0	-60	33
MWR034	400,948	7,742,914	292	46.0	-60	33
MWR035	400,975	7,742,935	291	50.0	-60	33
MWR036	400,982	7,742,949	290	80.0	-60	33
MWR037	401,006	7,742,990	290	50.0	-60	33
MWR039	401,600	7,743,400	287	71.0	-60	360
MWR043	402,401	7,743,192	292	38.0	-60	359
MWR046	403,204	7,744,006	299	69.0	-60	360
MWR047	403,199	7,743,801	302	80.0	-60	2
MWR048	403,192	7,743,601	301	98.0	-60	1
MWR049	403,195	7,743,403	301	88.0	-60	359
MWR050	403,596	7,743,610	303	101.0	-60	360
MWR051	403,996	7,743,601	296	95.0	-60	2
MWR052	404,194	7,743,453	302	101.0	-60	360
MWR053	404,207	7,743,200	299	138.0	-60	1
MWR054	404,397	7,743,397	304	116.0	-60	358
MWR077	402,795	7,743,595	299	89.0	-60	360
NS01	402,589	7,742,871	302	85.4	-45	360
NS02	402,550	7,742,875	301	90.9	-45	360
NS03	402,518	7,742,879	301	86.3	-45	360
NS04	402,672	7,742,848	301	80.5	-45	360
NS05	402,586	7,742,838	298	116.2	-45	360
NS06	402,582	7,742,787	294	97.7	-45	360
NS07	402,214	7,742,943	293	46.6	-45	360
NS08	402,547	7,742,845	298	89.1	-45	360
NS09	402,552	7,742,771	294	117.9	-45	360

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
NS10	402,245	7,742,942	295	49.7	-45	360
NS11	402,514	7,742,818	297	85.9	-45	360
NS12	402,640	7,742,815	298	93.9	-45	360
NS15	401,197	7,743,138	289	91.4	-45	360
NS16	401,176	7,742,989	288	91.7	-45	360
NS17	401,000	7,742,932	290	94.5	-45	30
NS18	400,999	7,743,077	289	94.4	-45	30
NS19	401,036	7,742,811	293	93.6	-45	360
NS21	401,188	7,743,249	294	91.8	-45	180
SCDD17005	403,045	7,741,993	293	645.1	-68.2	15
SCRC17002	402,880	7,742,461	300	126.0	-62	150
SCRC17003	402,994	7,742,468	300	168.0	-59	170
TTD001	401,012	7,742,838	294	219.5	-60	13
TTD002	401,010	7,742,813	294	249.3	-60	5
TTD003	401,010	7,742,808	294	268.4	-74	5

Liontown East:

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LTED01	403,788	7,742,679	297	576.0	-65	0
LTED02	403,786	7,742,678	297	570.0	-65	20
LTED03	403,700	7,742,680	294	474.6	-57	7
LTED04	403,790	7,742,679	297	162.8	-60	3
LTED05	403,788	7,742,679	297	530.7	-68	3
LTED05W1	403,783	7,742,795	8*	445.8	-68	3
LTED06	403,790	7,742,679	297	727.2	-73	352
LTED07	403,790	7,742,679	297	600.4	-74	330
LTED07W1	403,790	7,742,679	297	582.4	-74	330
LTED08	403,889	7,742,555	298	255.3	-76	331
LTED08A	403,890	7,742,554	298	132.6	-72	346
LTED08W1	403,889	7,742,555	298	701.1	-76	331
LTED08W2	403,889	7,742,555	298	697.0	-76	331
LTED08W3	403,889	7,742,555	298	673.0	-76	331
LTED08W4	403,889	7,742,555	298	693.6	-76	331
LTED08W5	403,889	7,742,555	298	400.5	-76	331
LTED08W6	403,889	7,742,555	298	492.6	-76	331
LTED09	403,694	7,742,678	294	508.0	-67	358
LTED10	403,695	7,742,676	294	453.0	-56	344
LTED11	403,700	7,742,676	294	139.4	-61	338
LTED11A	403,698	7,742,675	294	501.5	-61	338
LTED12	403,698	7,742,675	294	592.1	-73	337
LTED13	403,694	7,742,677	294	574.7	-76	2
LTCD18001	403,529	7,742,771	291	306.0	-60	347
LTCD18002	403,602	7,742,806	292	276.0	-60	350
LTCD18003	403,689	7,742,838	295	318.7	-60	350
LTCD18004	403,759	7,742,892	295	209.0	-61	347
LTCD18004A	403,759	7,742,892	295	417.8	-61	347
LTCD18005	403,839	7,742,848	296	429.5	-62	351
LTCD18006	403,761	7,742,804	297	399.4	-60	344
LTDD18007	403,604	7,742,796	292	453.9	-76	352
LTDD18008	403,531	7,742,765	291	459.8	-77	344
LTDD18009	403,510	7,742,663	292	540.7	-69	0
LTDD18010	403,510	7,742,662	292	627.8	-76	4
LTDD18011A	403,510	7,742,660	292	680.0	-77	24
LTDD18011	403,510	7,742,661	292	59.5	-77	24
LTDD18012	403,363	7,742,673	289	570.6	-65	3

Waterloo:

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
WT1	407,289	7,746,023	321	92.0	-65	348
WT10	407,161	7,746,132	323	214.1	-72	344
WT11	407,225	7,746,264	321	85.4	-60	164
WT12	407,163	7,746,122	323	299.8	-74	344
WT13	406,867	7,745,980	324	288.3	-64	344
WT14	407,316	7,746,340	322	166.2	-55	165
WT15	407,131	7,746,258	324	102.5	-53	165
WT16	407,288	7,746,446	323	358.3	-55	165
WT17	407,129	7,746,265	324	147.5	-60	165
WT18	407,019	7,746,297	325	337.4	-63	165
WT19	406,731	7,746,129	326	189.0	-55	165
WT1A	407,289	7,746,023	321	123.5	-65	348
WT2	407,289	7,746,025	321	475.6	-62	348
WT20	406,938	7,746,205	325	207.5	-55	165
WT21	406,713	7,746,196	326	340.6	-55	165
WT22	406,919	7,746,276	325	333.5	-55	165
WT23	407,199	7,746,009	323	509.3	-69	345
WT24	407,018	7,745,913	323	542.0	-67	345
WT25	407,391	7,746,068	318	488.1	-67	340
WT26	407,162	7,746,317	324	243.5	-63	165
WT27	407,174	7,746,286	323	149.4	-60	165
WT29	407,261	7,746,314	322	159.0	-62	165
WT3	407,031	7,746,294	325	241.9	-50	168
WT30	407,221	7,746,309	323	165.3	-61	165
WT31	407,246	7,746,372	323	279.0	-60	169
WT32	407,270	7,746,125	320	261.4	-58	345
WT33	407,281	7,746,087	320	90.0	-58	345
WT33A	407,282	7,746,085	320	339.3	-61	345
WT34	407,221	7,746,154	323	96.0	-60	345
WT34A	407,222	7,746,149	323	188.7	-59	345
WT35	407,163	7,746,372	324	321.0	-60	165
WT36	407,146	7,746,288	324	195.2	-62	165
WT37	407,125	7,746,081	323	258.7	-66	349
WT38	407,124	7,746,084	323	233.6	-63	349
WT39	407,126	7,746,077	323	312.7	-70	346
WT40	407,120	7,746,076	323	60.0	-72	318
WT41	407,119	7,746,077	323	306.6	-71	318
WT42	407,116	7,746,080	323	267.5	-68	323
WT43	407,287	7,746,147	320	249.7	-63	342
WT44	407,285	7,746,150	319	225.4	-52	10
WT45	407,287	7,746,145	320	318.5	-68	351
WT46	407,293	7,746,172	320	48.0	-63	359
WT47	407,293	7,746,174	320	207.5	-56	354
WT48	407,201	7,746,061	322	365.5	-66	353

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
WT49	407,010	7,745,958	324	414.3	-64	3
WT5	407,262	7,746,153	321	235.6	-60	344
WT50	407,010	7,745,961	324	366.5	-63	358
WT51	406,941	7,745,998	324	195.5	-59	344
WT52	406,941	7,745,995	324	219.8	-68	345
WT53	406,942	7,745,994	324	246.7	-71	347
WT54	406,941	7,746,003	324	171.4	-53	343
WT55	406,944	7,745,979	324	174.1	-63	322
WT56	407,150	7,746,129	324	183.5	-62	338
WT57	407,295	7,746,173	320	370.7	-81	348
WT58	406,868	7,745,983	324	246.7	-64	345
WT59	406,868	7,745,985	324	201.6	-61	342
WT6	406,854	7,746,029	324	185.3	-60	344
WT60	406,867	7,745,987	324	183.5	-51	348
WT61	406,801	7,745,947	324	288.5	-74	326
WT62	406,801	7,745,947	324	252.6	-69	323
WT63	407,155	7,746,118	323	267.5	-74	340
WT64	407,154	7,746,118	323	186.2	-60	325
WT65	407,153	7,746,119	323	173.9	-52	323
WT66	407,101	7,746,092	324	189.5	-53	349
WT67	407,101	7,746,091	324	234.3	-70	346
WT68	407,099	7,746,091	324	213.5	-63	350
WT69	407,182	7,746,116	323	216.4	-60	348
WT7	407,403	7,746,362	321	214.6	-63	164
WT70	407,182	7,746,115	323	150.0	-67	344
WT71	406,793	7,745,912	323	357.5	-76	341
WT72	407,073	7,746,015	324	351.1	-65	342
WT73	407,129	7,746,042	323	285.4	-61	334
WT74	407,036	7,745,971	324	76.2	-90	144
WT75	407,225	7,746,140	323	253.0	-71	343
WT76	406,879	7,745,855	323	53.4	-90	94
WT77	407,128	7,746,042	323	92.0	-90	306
WT78	407,224	7,746,145	323	240.5	-65	348
WT79	407,158	7,746,168	323	132.4	-89	168
WT8	407,352	7,746,194	319	224.0	-72	344
WT80	407,173	7,746,172	323	157.6	-65	351
WT81	407,224	7,746,146	323	180.1	-57	345
WT82	407,173	7,746,172	323	125.3	-55	352
WT83	407,173	7,746,090	322	102.0	-61	350
WT84	407,202	7,746,263	322	119.5	-64	155
WT85	407,174	7,746,088	322	249.5	-65	351
WT86	407,202	7,746,263	322	79.1	-51	162
WT87	407,230	7,746,291	322	127.8	-62	166
WT88	406,990	7,746,074	324	146.5	-68	347

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
WT89	407,295	7,746,176	320	114.0	-62	340
WT8A	407,352	7,746,194	319	250.2	-72	344
WT9	407,210	7,746,347	323	124.5	-68	164
WT9A	407,210	7,746,347	323	270.5	-68	164
WTRC1	407,134	7,746,239	323	72.0	-60	165
WTRC10	407,046	7,746,194	325	112.0	-65	165
WTRC11	407,050	7,746,175	325	76.0	-60	165
WTRC12	407,098	7,746,188	324	70.0	-65	165
WTRC13	406,954	7,746,141	325	112.0	-65	165
WTRC2	407,187	7,746,243	322	78.0	-60	165
WTRC3	407,181	7,746,257	323	96.0	-60	165
WTRC4	407,235	7,746,256	321	54.0	-60	165
WTRC5	407,226	7,746,284	322	102.0	-60	165
WTRC6	407,283	7,746,263	321	54.0	-60	165
WTRC7	407,275	7,746,298	321	102.0	-60	165
WTRC8	407,328	7,746,291	321	84.0	-60	165
WTRC9	407,093	7,746,207	324	100.0	-65	165

Orient:

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
TH046	373,695	7,750,836	316	331.8	-67	195
TH050	373,591	7,750,776	317	317.2	-67	186
TH153	373,695	7,750,636	316	330.0	-60	341
TH422	373,661	7,750,981	316	508.0	-65	159
TH427	373,554	7,750,815	316	380.0	-65	156
TH431	373,653	7,750,906	316	430.5	-65	161
TH432	373,732	7,750,921	316	370.4	-60	161
TH433	373,842	7,750,973	316	433.4	-60	161
TH434	373,807	7,750,950	316	559.3	-65	161
TH435	373,759	7,751,097	316	661.7	-63	161
TH435A	373,759	7,751,097	316	388.5	-63	161
TH436	373,883	7,750,734	315	302.8	-60	341
TH437	373,858	7,751,038	316	147.0	-72	157
TH438	373,858	7,751,037	316	583.4	-70	161
TH439	373,784	7,750,754	316	210.6	-66	341
TH440	373,664	7,750,862	316	307.5	-62	161
TH441	373,710	7,750,959	316	421.5	-66	161
TH442	373,866	7,751,023	316	283.4	-58	156
TH443	373,835	7,751,047	316	428.8	-58	161
TH444	373,785	7,750,919	316	171.4	-60	161
TH445	373,739	7,750,956	316	271.4	-61	161
TH446	373,720	7,750,897	316	192.4	-61	161
TH447	373,758	7,750,943	316	245.1	-62	161

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
TH448	373,779	7,750,934	316	220.4	-61	162
TH449	373,789	7,751,056	316	463.3	-60	161
TH450	373,865	7,751,082	316	251.3	-60	161
TH459	373,939	7,750,624	315	430.3	-60	341
TH460	373,930	7,751,124	316	132.0	-76	163
TH461	373,935	7,751,114	315	686.5	-70	161
TH461W	373,935	7,751,114	315	642.3	-70	161
TH462	373,823	7,751,018	316	381.3	-60	161
TH463	373,980	7,750,658	315	394.4	-60	341
TH464	373,751	7,750,929	316	229.5	-60	161
TH465	373,977	7,750,614	315	515.0	-61	343
TH466	373,836	7,751,014	316	334.4	-60	161
TH467	374,006	7,750,636	315	271.4	-70	341
TH468	373,813	7,750,931	316	198.0	-60	163
TH469	373,846	7,750,709	315	292.3	-63	345
TH470	373,524	7,750,878	316	490.4	-63	156
TH471	374,103	7,751,066	315	234.2	-60	161
TH473	373,970	7,750,641	315	535.7	-70	341
TH475	374,007	7,751,096	315	540.6	-65	160
TH476	373,528	7,750,950	317	330.3	-68	161
TH478	373,787	7,750,947	316	259.5	-60	161
TH478W	373,787	7,750,947	316	247.4	-60	161
TH479	373,803	7,750,946	316	244.5	-60	163
TH484	373,810	7,750,982	316	325.5	-60	161
TH485	373,751	7,750,975	316	327.2	-60	161
TH486	373,865	7,750,714	315	344.0	-70	341
TH489	373,829	7,750,758	315	201.5	-60	342
TH490	373,988	7,750,690	315	494.0	-70	341
TH491	373,952	7,750,716	315	422.0	-70	341
TH491A	373,952	7,750,716	315	422.0	-70	341
TH502	373,785	7,751,104	316	525.7	-57	160
TH502B	373,785	7,751,104	316	519.3	-57	160
TH503	373,757	7,751,029	316	466.5	-57	160
TH517	373,751	7,750,913	316	198.8	-60	161

Additional Drill Holes referenced in this release:

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
AGDD2	406,201	7,745,865	323	303.4	-65	165
DNRC001	350,956	7,771,792	448	89	-55	84
ESCD18001A	404,591	7,746,035	316	518.8	-75	291
KTDD18001	420,972	7,746,204	362	485.7	-58	72
LCP501	401,093	7,743,186	293	102.0	-61	0
LLD105	402,228	7,742,863	293	192.8	-60	5

Hole ID	East	North	RL	Depth (m)	Dip	Azimuth (Grid)
LLRC003	401,024	7,742,983	289	94.0	-60	13
LLRC004	401,021	7,742,933	290	100.0	-60	16
LLRC034	400,912	7,743,092	292	100.0	-60	5
LLRC200	402,749	7,742,944	307	70	-52	180
MWR008	401,089	7,743,223	294	80.0	-60	354
MWR037	401,006	7,742,990	290	50.0	-60	33
PC005	353,412	7,763,411	431	100	-65	270
TRDD17001	418,752	7,749,786	355	449.2	-49	214