

Corporate Details

Zenith Minerals Limited (ASX:ZNC)

ABN: 96 119 397 938

 Issued Shares
 294.4M

 Unlisted options
 16.55M

 Mkt. Cap. (\$0.28)
 A\$82M

 Cash (31-Mar-21)
 A\$3.1M

 Debt
 Nil

Directors

Peter Bird Exec Chair
Michael Clifford Director-CEO
Stan Macdonald Non-Exec Director
Julian Goldsworthy Non-Exec Director
Graham Riley Non-Exec Director
Nicholas Ong CFO & Co Sec

Major Shareholders

Directors	~7%
HSBC Custody. Nom.	10.4%
BNP Paribas. Nom.	5.0%
Granich	4.6%
Citicorp Nom	4.3%

Our Vision

Zenith has a vision to build a gold and base metals business with a team of proven project finders.

Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities using partner funds.

Contact Us

Level 2, 33 Ord Street WEST PERTH WA 6005 PO Box 1426 WEST PERTH WA 6872 Telephone: (08) 922

Telephone: (08) 9226 1110 Email:info@zenithminerals.com.au Web:www.zenithminerals.com.au

NEW GOLD PROJECT - INVESTMENT

- New gold feeder project added to the Zenith portfolio by way of result based, staged equity investment in a pre-IPO vehicle (Oxley Resources Limited). Funds will be used to advance the Cowarra gold project in NSW.
- The investment will see Zenith own up to 22.5% equity for \$210,000 allocated in two stages.
- Oxley's Cowarra gold project comprises multiple gold zones hosted in Lachlan Orogenic Belt sedimentary rocks associated with gold mineralised strike extensive shear zones. Host rocks and structural setting like that of some of the major Victorian gold deposits.
- Previous drilling results from the Cowarra-Victoria gold deposit include:
 - 35m @ 2.3 g/t Au from 23m depth in CRC001
 - 15m @ 4.2 g/t Au from 57m depth in CRC022
- A walk-up staged drill program is planned to test the Victoria gold deposit for both open-pit and underground potential. Initial program of 7 x 100m depth holes to validate previous work and to define a shallow gold mineral resource. In addition, there is significant upside below the existing shallowly drilled prospects and targets.
- Multiple regional prospects and targets extend for over 8km of strike around the Victoria gold deposit with rock chip sampling up to 23 g/t Au and previous drill results providing significant project upside, including:
 - Democrat Prospect
 - 4m @ 10.5 g/t Au in CRC029
 - 12m @ 1.9 g/t Au in CRC013
 - Ambassador Prospect
 - 8.1m @ 4.3 g/t Au in 10CWD-A1
 - 1m @ 12.0 g/t Au & 5m @ 3.0 g/t Au in CWD101
 - Vanderbilt Prospect
 - 5m @ 4.2 g/t Au in CRC014
 - JMT Target 75 rock samples over 1km of strike, average 6.1 g/t
 Au, no drilling to date.
- Cowarra gold project on NSW State Lands set aside for minerals, permitting for drilling is well advanced, with drilling anticipated to commence in the third quarter of 2021.
- The Cowarra gold project was previously mined by BHP in the 1930's and later Horizon Pacific in the 1980's with average run-of mine grades between 6 8 g/t Au with gold recovered by an industry standard carbon in leach (CIL) on site processing plant.

Project Background

The Cowarra Gold Project (EL5992) owned 100% by Oxley Resources Ltd ("Oxley") presents a compelling early-stage gold exploration investment opportunity with a technical team in place ready to rapidly advance the project. A direct equity investment was chosen by Zenith over a project-based transaction structure as it potentially provides a faster pathway towards monetisation, whilst also allowing Zenith's current technical team to focus on its existing core Company gold and copper projects and its own gold project pipeline in Western Australia and Queensland.

The Cowarra gold project is located between Canberra and Cooma and consists of one granted exploration licence. The project is located on NSW state lands set aside for minerals. Historic underground mining (150m depth) by BHP in the 1930's (14,000 oz Au) and more recent small scale open pit mining by Horizon Pacific (19,300 oz Au) of the main Victoria gold prospect exploited run-of-mine grades between 6-8 g/t Au with gold recovered by CIL. Mineralisation is hosted within Ordovician sediments associated with sulphides and quartz lodes. Gold mineralisation at Cowarra extends over some 8km within the granted EL with soil and rock chip anomalies requiring follow-up.

Oxley, an unlisted public company, is raising capital at \$0.03 per share (total proceeds of up to \$270,000) to allow for the first phase of evaluation/confirmatory drilling.

Commenting on the staged investment, Executive Chairman Peter Bird said: "The Oxley opportunity is a good fit for Zenith, whereby the Company can potentially add to its gold inventory at a very competitive "discovery cost" in a region that has been very underexplored when compared to recent proxies located within the state of Victoria within the same Lachlan Orogenic Belt. The Lachlan Orogenic Belt has not been well explored by current contemporary methods in the immediate region where the Cowarra Gold Project is located. There are a series of very well-defined drill targets which will need follow up around previously defined high-grade gold mineralisation. We are keen to advance this project as a "feeder" into our current portfolio of projects. The major projects in the portfolio currently include, Red Mountain (gold 100%), Split Rocks (gold 100%) Earaheedy Zinc Lead (25% free carried) and Develin Creek (copper, silver & base metals 100%). This is an exceptional strategic portfolio which we believe will continue to add value for our business."

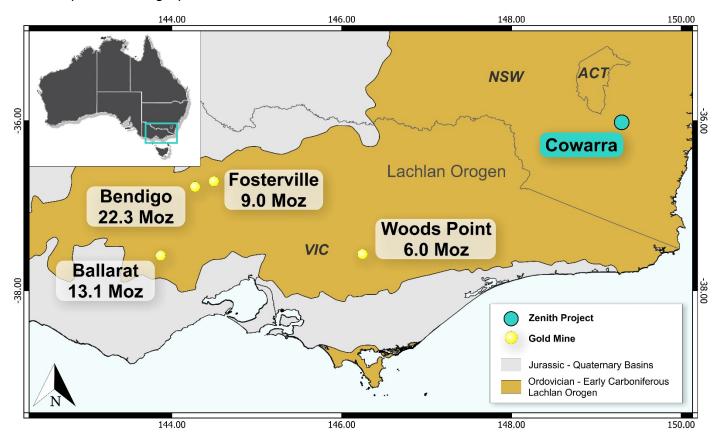


Figure 1: Location of Oxley's Cowarra Gold Project with Respect to Major Gold Deposits of Similar Age in the Lachlan Orogen

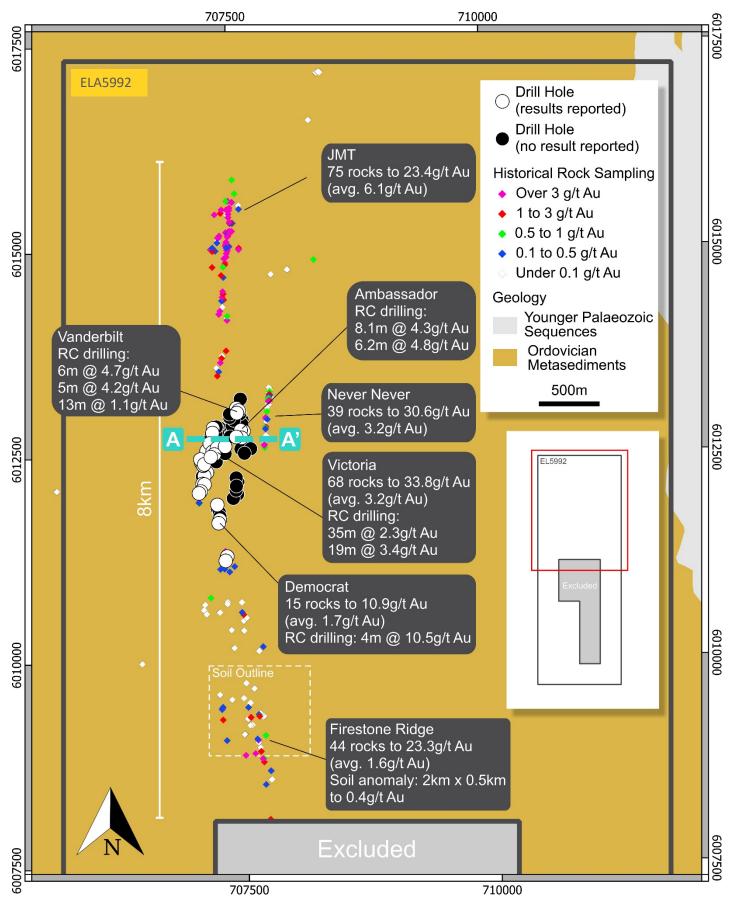


Figure 2: Cowarra Targets Showing Historic Drill Results & Surface Samples (Note ELA5992 has been approved for grant)

Investment Metrics

Zenith's staged investment approach in Oxley is as follows:

- **Stage 1** invest \$140,000 (at \$0.03 per share) to assist with in ground confirmatory work including RC drilling. This stage provides a 16.2% equity position in Oxley, excluding any potential future dilution of 4M vendor options exercisable at \$0.08.
- **Stage 2** Zenith has the option to invest a further \$70,000 (at \$0.03 per share) after 3 months from Stage 1 but before the commencement of drilling at Cowarra. Stage 2 investment takes Zenith holding to 22.5%, excluding any potential future dilution of 4M vendor options exercisable at \$0.08.

At its election Zenith can contibute to a subsequent **Stage 3** investment of \$250,000 within 12 months from Stage 1 investment. This amount will be by mutual agreement to fund ongoing work required to either advance the Cowarra gold project with additional drilling or alternately prepare Oxley for an initial public offering on a securities exchange. At each stage along the investment pathway Zenith will assess if it should advance the project via additional funding or hold or reduce its position.

Upon completion of Stage 1 investment, Zenith will be granted a right to top up its shareholding to maintain its pro rata interest in Oxley. The top up right will lapse upon the unconditional admission of Oxley to a stock exchange.

The investment in Oxley is subject to the condition precedent that Oxley is granted a licence to operate (Crown Land Licence) that will allow exploration to proceed within state crown lands set aside for minerals on which the project resides and Oxley and Zenith agreeing on the proposed exploration program and budget, in both cases, acting reasonably.

Oxley Resources Limited is not a related party to Zenith Minerals Limited.

Cowarra Gold Project Technical Details

The Cowarra project area consists of a series of old mines and workings, which have a history of gold production dating back to the 1860's. Production from the field has been sporadic, with the high points being mining of oxides by prospectors in the period 1860 to 1920, development of the Cowarra mine by BHP Ltd in the period 1936 to 1947 (Figure 3 below), and redevelopment of the mine by Horizon Pacific Ltd in 1984 to 1990. During the BHP and Horizon mining phases fresh/sulphide gold ore was processed via an onsite carbon in leach (CIL) facility with a proportion of the ore reporting as gravity gold. The CIL plant has since been removed from site, a tailings dam remains with some potential for re-treatment of historic tailings. Due to wartime conditions, production ceased in 1942 with total production having been 53,650 tons yielding 14,700 fine ozs (an average metric grade of approximately 8.6g/t Au) (Source - Corkery & Co, 1983).

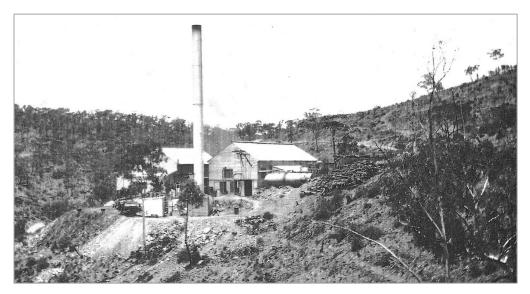


Figure 3: Historic Photo of BHP Gold Processing Facility at Cowarra circa 1940

The Cowarra area is underlain by a series of tightly folded meta-sediments of Ordovician age which lie to the west of the Silurian age Bega Batholith. The metasediments consist of interbedded steeply dipping phyllites and quartzites which trend north-south and are correlated with the Late Ordovician Foxlow Beds, part of the Lachlan Orogenic Belt. The sequence has been subjected to low grade greenschist facies metamorphism (Rickard, et al., 1996).

The stratigraphic sequence consists of a succession of steeply dipping interbedded sandy and shaly deposits that include shale, silty shale, shaly mudstone, mudstone, silty mudstone, fine to coarse grained siltstone and black shale. Individual beds vary in thickness from 1cm to 1m to a maximum thickness of 3m. The Cowarra gold mineralisation lies along a major zone of shearing. Individual shear structures can be traced over the 8km north-south extent of the project area.

Individual pyrite-rich parallel to sub-parallel 1 to 3 metre wide gold lodes were exploited by histroical miners. These zones generally follow the bedding or the axial-plane cleavage of the slates, with the mineralised veins trending north and northeast to northwest and typically dipping steeply $(60^{\circ} \text{ to } 80^{\circ})$ to the east. Wider gold mineralised intervals up to 5 – 20m true width grading 0.5 to 3 g/t Au are evident based on more recent drilling (refer to Table 1).

In the Cowarra Mine area there are at least 5 main sub-parallel lines of lode varying from 150m to almost 2200m long (Capp 2003). The shear zones are not quite parallel to the bedding, and shearing concentrated on competent - incompetent boundaries with maximum development of gold mineralisation in that zone. In the Cowarra Mine the Victoria lodes dip steeply to the east (70° to 80°) and plunge shallowly (20° to 30°) to the north.

Exploration drilling conducted during the period 2004 to 2011, extends over approximately 300m of strike but is mostly very shallow testing 50m below surface, with the historic underground workings extending to approximately 125m below surface (Figure 4). The plunge of mineralisation on other prospects has not been defined. Quartz is not abundant in most of the lode material. Mineralised sections alternate with barren sections along major shear zones.

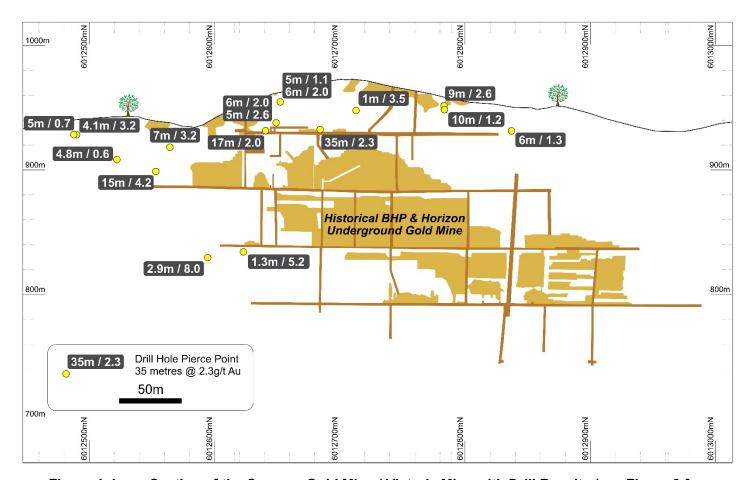


Figure 4: Long Section of the Cowarra Gold Mine / Victoria Mine with Drill Results (see Figure 2 for location of the Victoria Mine

Gold ore from the Cowarra mines consisted of fresh massive, semi-massive to disseminated sulphide containing mostly pyrite and arsenopyrite with minor pyrrhotite, sphalerite and galena. The association of gold and sulphides means that geophysical techniques such as induced polarisation (IP) may provide a very useful exploration targeting tool. An initial trial IP survey (2 lines of dipole-dipole) conducted in 2020 by Oxley shows a strong positive correlation between chargeability and the known gold mineralisation as well as outlining new chargeability targets to the east of exisiting drilling (Figure 5).

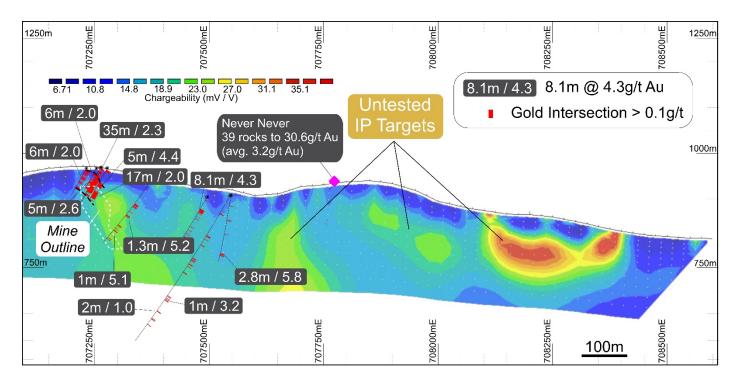
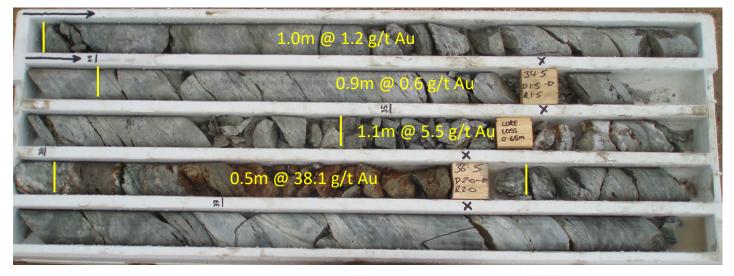
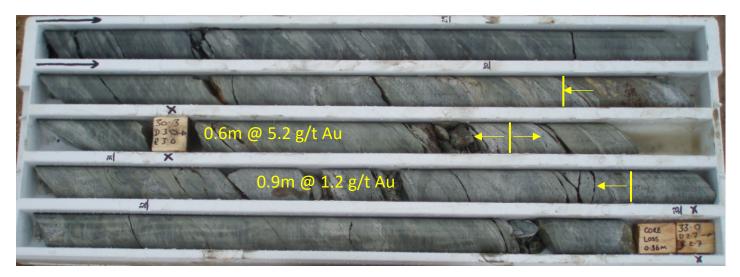


Figure 5: Geophysical Chargeability - Cross Section A – A' of the Cowarra Gold Mine with Drill Results (see Figure 2 for section location)

Gangue minerals consisted of chlorite, sericite, albite, minor quartz and abundant calcite. There is no positive correlation between the abundance of quartz and the gold mineralisation (Yousefpour,1990). An example of mineralised drill core is shown in Figure 6 below.



Photograph of Gold Mineralised Sedimentary Rocks from Drill Core 10CWD-A1 (33.0m to 37.6m) Prior to Core Cutting



Photograph of Gold Mineralised Sedimentary Rocks from Drill Core 10CWD-A1 (28.3m to 33.0m) Prior to Core Cutting

Figure 6: Examples of Gold Mineralisation and Associated Visibly Altered (lighter colour) Host Rocks (Note gold mineralisation is generally not associated with quartz veins, but wider shear zones)

Based on historical exploration results arsenic will likley provide a useful geochemcial exploration targeting tool along with other associated elements antimony, lead and zinc.

Historic drilling activity has focused in the Victoria deposit and Ambassador prospect areas with testing generally to a maximum depth of 150 metres below surface at Victoria and 250m below surface at Ambassador with significant exploration upside identified in the down-plunge extensions at the exisitng prospects and as well as the numerous strong geological, geochemical and historic mine targets that have had limited or no drill testing to date, that extend over greater than 8km of potential mineralised strike (Figure 7).

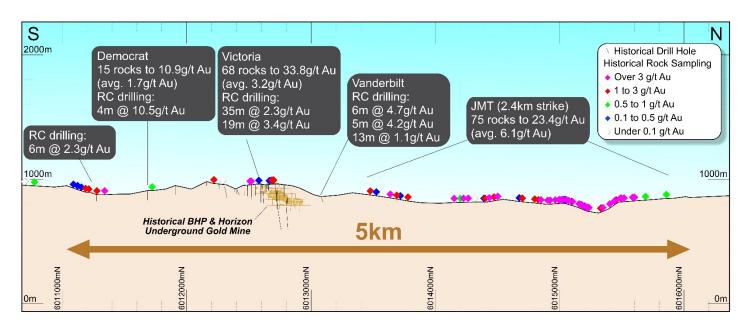


Figure 7: Long Section of the Cowarra Gold Project – Democrat Prospect to JMT Prospect through Victoria Mine with Significant Drill and Rock Sample Gold Results (see Figure 2 for location of prospects)

As has been recently illustrated there have been a number of high-quality gold discoveries made and or developed and operated in the Lachlan Orogenic Belt of south eastern Australia. Notable examples include Kirkland Lake Gold Ltd's Fosterville gold mine operation and Catalyst Minerals recent exploration successes (Figure 1). Due diligence work consisting of reviews of historical exploration activity and published research papers and a site visit by Zenith's

techncial team on the Cowarra gold property located in NSW, indicates that the mineralisation style, host rock sequences, geological age of host rocks and macro-structural setting is very similar to those of the gold deposits in Victoria. The style of gold mineralisation is typically referred to as syndeformational, turbidite-hosted, shear and fault controlled gold mineralised within Ordovician age metasedimentary rocks deformed during the Lachlan Orogen, (refer Solomon and Groves, 2000, p686). As in the state of Victoria the gold mineralisation at Cowarra is post peak metamorphism and cleavage developent, whereas noteable differences include no saddle reefs or dilational-jog veins on faults at Cowarra (Rickard, 1996), although diamond drilling post 1996 shows some clear zones of gold associated with quartz veining.

Table 1: Significant Gold Intersections from Cowarra Drilling

Hole	From (m)	To (m)	Interval (m)	Grade (g/t Au)
10CWD A1	30.1	38.2	8.1	4.3
10CWD_A1	99.0	99.8	0.8	1.3
10CWD_P3	8.0	9.0	1.0	0.8
10CWD_P3	16.0	17.0	1.0	0.8
10CWD_P3	24.0	28.1	4.1	3.2
10CWD_P3	132.3	133.1	0.8	6.7
10CWD_P3	135.0	136.0	1.0	0.9
10CWD_P4	9.9	10.9	1.0	0.5
10CWD_P4	49.0	49.3	0.3	2.4
10CWD_P4	56.6	57.6	1.0	0.8
10CWD_P4	59.0	61.5	2.4	0.9
10CWD_P4	79.2	79.9	0.7	1.1
10CWD_P4	123.0	123.6	0.6	0.8
10CWD_V1	8.8	12.2	3.4	0.6
10CWD_V1	40.2	40.9	0.7	1.4
10CWD_V1	58.5	61.1	2.6	1.1
10CWD_V1	67.7	68.8	1.1	2.0
10CWD_V1	78.9	79.2	0.3	1.1
10CWD_V1	81.9	82.3	0.4	1.5
10CWD_V1	88.5	88.8	0.3	1.0
10CWD_V1	90.8	93.3	2.5	1.6
10CWD_V1	97.8	98.0	0.2	2.1
10CWD_V1	111.3	111.5	0.3	0.4
10CWD_V1	112.7	117.2	4.5	1.2
10CWD_V1	121.4	122.8	1.4	2.9
10CWD_V1	137.0	137.5	0.5	0.4
10CWD_V1	157.8	160.7	2.9	8.0
10CWD_V1	167.3	168.3	1.1	3.7
10CWD_V1	178.5	178.7	0.1	0.5
10CWD_V3A	18.7	18.9	0.2	0.7
10CWD_V3A	69.0	69.3	0.3	2.3
10CWD_V3A	78.8	81.8	3.0	1.2
10CWD_V3A	85.3	86.4	1.1	1.0
10CWD_V3A	97.1	98.1	1.1	1.2
10CWD_V3A	107.1	108.5	1.3	5.2
10CWD_V3A	111.0	112.1	1.1	0.6
10CWD_V3A	136.4	137.4	1.1	0.5
10CWD_V3A	151.0	152.0	1.0	5.1
CRC001	23.0	58.0	35.0	2.3
CRC002	11.0	17.0	6.0	2.0

CDCOO2	20.0	27.0	1.0	0.5
CRC002	26.0	27.0	1.0	0.5
CRC002	31.0	36.0	5.0	2.6
CRC002	46.0	47.0	1.0	4.4
CRC003	7.0	8.0	1.0	3.7
CRC003	40.0	45.0	5.0	4.4
CRC003	57.0	74.0	17.0	2.0
CRC004	48.0	49.0	1.0	0.4
CRC004	57.0	63.0	6.0	0.7
CRC004	92.0	94.0	2.0	0.8
CRC005	5.0	10.0	5.0	0.7
CRC005	17.0	19.0	2.0	1.5
CRC005	70.0	71.0	1.0	0.5
CRC006	0.0	3.0	3.0	1.3
CRC006	21.0	28.0	7.0	3.2
CRC006	41.0	44.0	3.0	0.5
CRC006	52.0	54.0	2.0	2.6
CRC007	2.0	3.0	1.0	0.4
CRC007	5.0	6.0	1.0	0.8
CRC007	8.0	11.0	3.0	8.1
CRC008	12.0	13.0	1.0	1.0
CRC008	37.0	45.0	8.0	1.9
CRC009	93.0	94.0	1.0	0.6
CRC010	27.0	28.0	1.0	1.6
CRC010	31.0	33.0	2.0	0.6
CRC010	60.0	61.0	1.0	0.9
CRC010	66.0	67.0	1.0	2.9
CRC010	70.0	71.0	1.0	2.4
CRC011	39.0	41.0	2.0	0.7
CRC011	46.0	47.0	1.0	0.5
CRC012	28.0	32.0	4.0	0.6
CRC012	68.0	75.0	7.0	0.7
CRC012	89.0	90.0	1.0	0.8
CRC013	5.0	17.0	12.0	1.9
CRC013	20.0	24.0	4.0	0.4
CRC014	18.0	23.0	5.0	4.2
CRC015	35.0	36.0	1.0	0.5
CRC016	17.0	30.0	13.0	1.1
CRC010	-			3.5
	22.0	23.0	1.0	
CRC017	29.0	32.0	3.0	0.9
CRC017	40.0	42.0	2.0	0.8
CRC017	44.0	48.0	4.0	0.7
CRC017	51.0	56.0	5.0	1.5
CRC018	16.0	22.0	6.0	1.3
CRC018	30.0	31.0	1.0	2.3
CRC018	33.0	34.0	1.0	0.5
CRC019	1.0	10.0	9.0	2.6
CRC019	38.0	44.0	6.0	0.5
CRC019	49.0	53.0	4.0	1.5
CRC019	58.0	60.0	2.0	2.0
CRC019	63.0	64.0	1.0	1.7
CRC020	0.0	5.0	5.0	0.9

CRC020	13.0	14.0	1.0	0.9
CRC020	18.0	28.0	10.0	1.2
CRC020	34.0	37.0	3.0	0.9
CRC021	5.0	10.0	5.0	1.1
CRC021	18.0	24.0	6.0	2.0
CRC021	31.0	32.0	1.0	0.4
CRC021	35.0	36.0	1.0	1.8
CRC021	44.0	45.0	1.0	2.9
CRC022	0.0	2.0	2.0	1.6
CRC022	23.0	24.0	1.0	2.1
CRC022	27.0	28.0	1.0	1.0
CRC022	34.0	35.0	1.0	0.9
CRC022	41.0	43.0	2.0	1.5
CRC022	53.0	54.0	1.0	0.5
CRC022	57.0	72.0	15.0	4.2
CRC022	95.0	100.0	5.0	0.9
CRC023	20.0	30.0	10.0	1.3
CRC023	33.0	35.0	2.0	2.0
CRC024	30.0	39.0	9.0	0.9
CRC024	44.0	48.0	4.0	1.1
CRC025	16.0	22.0	6.0	1.4
CRC025	26.0	36.0	10.0	3.6
CRC025	40.0	41.0	1.0	0.4
CRC025	42.0	43.0	1.0	0.5
CRC026	47.0	54.0	7.0	0.4
CRC027	8.0	11.0	3.0	0.8
CRC027	18.0	42.0	24.0	0.9
CRC028	55.0	63.0	8.0	1.8
CRC029	69.0	73.0	4.0	10.5
CRC029	79.0	80.0	1.0	0.7
CRC030	63.0	64.0	1.0	0.7
CRC031	27.0	33.0	6.0	2.3
CRC031	38.0	39.0	1.0	0.6
CRC032	18.0	20.0	2.0	2.8
CWD101	96.2	98.2	2.0	3.5
CWD101	122.0	122.6	0.6	2.5
CWD101	159.7	160.7	1.0	2.3
CWD101	201.5	202.5	1.0	3.0
CWD101	209.4	210.4	1.0	12.0
CWD101	279.5	284.5	5.0	3.0
CWD102	67.9	70.0	2.1	1.5
CWD103	102.1	103.0	0.9	7.4
CWD103	110.0	111.0	1.0	0.6
CWD103	125.8	126.4	0.7	7.2
CWD103	163.0	164.0	1.0	1.7
CWD103	174.2	175.2	1.0	0.7
CWD103	258.0	259.0	1.0	1.2
CWD103	266.2	267.2	1.0	3.2
CWD103	269.0	270.0	1.0	1.7
	+			
CWD103	299.0	301.0	2.0	1.0
CWD104	128.7	131.5	2.8	5.8

CWD104	133.6	134.6	1.0	0.5
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(Minimum length weighted average grade of 0.4 g/t Au, 0.4 g/t Au lower cut off, maximum of 2m of consecutive internal dilution, no top cut applied).

Table 2: Drill Hole Collar Locations

Hole	Easting	Northing	RL	Dip	Azimuth	Depth	Hole_Type	Company
10CWD A1	707495.7	6012730	904.487	-60	270	120.6	DDH	CAPITAL
10CWD_P3	707238.5	6012491	951.677	-60	270	151.3	DDH	CAPITAL
10CWD_P4	707273.1	6012522	958.423	-55	270	163.47	DDH	CAPITAL
10CWD_V1	707300.9	6012597	965.896	-60	270	178.65	DDH	CAPITAL
10CWD_V3A	707382.9	6012616	953.037	-55	270	187.6	DDH	CAPITAL
CRC001	707264.7	6012687	968.7	-60	270	90	RC	ATLAS
CRC002	707254.2	6012652	967.1	-60	270	50	RC	ATLAS
CRC003	707277.7	6012645	967.5	-60	260	79	RC	ATLAS
CRC004	707273.2	6012523	958.3	-60	270	102	RC	ATLAS
CRC005	707231.2	6012489	951	-60	270	100	RC	ATLAS
CRC006	707199.5	6012567	935.2	-50	90	54	RC	ATLAS
CRC007	707144.1	6012423	918.4	-60	299	36	RC	ATLAS
CRC008	707170.6	6012403	920.8	-60	270	60	RC	ATLAS
CRC009	707196	6012303	947.5	-70	308	100	RC	ATLAS
CRC010	707168.2	6012263	961.9	-60	288	90	RC	ATLAS
CRC011	707148.9	6012167	982.8	-60	270	75	RC	ATLAS
CRC012	707168.4	6012159	981.5	-60	270	100	RC	ATLAS
CRC013	707129.7	6012076	972.7	-60	270	50	RC	ATLAS
CRC014	707504.5	6013079	862	-60	314	50	RC	ATLAS
CRC015	707526.5	6013051	864	-60	270	42	RC	ATLAS
CRC016	707508.5	6013021	875	-60	270	40	RC	ATLAS
CRC017	707262.4	6012716	968.3	-60	270	100	RC	ATLAS
CRC018	707268.4	6012841	949.6	-60	270	60	RC	ATLAS
CRC019	707262.4	6012784	954.7	-80	270	97	RC	ATLAS
CRC020	707261.4	6012784	954.7	-60	270	60	RC	ATLAS
CRC021	707232.1	6012657	966.9	-60	270	66	RC	ATLAS
CRC022	707257.7	6012554	955.5	-60	270	102	RC	ATLAS
CRC023	707159.5	6012392	922.9	-60	270	50	RC	ATLAS
CRC024	707160.1	6012388	923.4	-60	233	60	RC	ATLAS
CRC025	707134.4	6012465	924.3	-60	90	60	RC	ATLAS
CRC026	707172	6012404	920.8	-60	310	60	RC	ATLAS
CRC027	707111.2	6012052	972.2	-60	90	60	RC	ATLAS
CRC028	707289.5	6011907	948	-60	270	85	RC	ATLAS
CRC029	707309.5	6011724	907.5	-60	270	100	RC	ATLAS
CRC030	707297.5	6011684	907.5	-60	270	87	RC	ATLAS
CRC031	707372.5	6011276	875.5	-60	270	60	RC	ATLAS
CRC032	707356.5	6011225	892.5	-60	270	60	RC	ATLAS
CWD101	707569.64	6012799	878.283	-60	270	351.4	DDH	Commissioners
CWD102	707541.29	6012810	878.494	-60	271	102.7	DDH	Commissioners
CWD103	707546.14	6012720	907.842	-60	277	381.3	DDH	Commissioners
CWD104	707547.87	6012720	907.91	-80	277	146.6	DDH	Commissioners

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Material ASX Releases Previously Released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

References:

Capp.S.,2003 Annual Report EL5923 Cowarra Project Bredbo NSW 30th April 2002 to 29th April 2003. Atlas Resources Pty Ltd.

Corkery. R.W and Co., 1983 Environmental Impact Statement for the Re-opening of the Cowarra Gold Mine, Bredbo, NSW for Swan Resources Limited, NSW Dept of Primary Industries (#AB019264)

Capp.S.,2009 Resource Estimation, Cowarra Mine Bedbo NSW. Prepared for Capital Mining Ltd by Derwent Geoscience Pty Ltd. In McCann. L and Hine. 2010., Captal Mining Annual Report on Exploration Licence 5939 Cowarra unpublished report to the NSW Mines Dept.

Rickard, M. L., McQueen, K. & Hayden, P., 1996. Structural controls on the Cowarra gold deposit near Bredbo, south-eastern New South Wales.. Australian Journal of Earth Sciences, Volume 43, pp. 201-215.

Solomon. M and Groves. D., 2000. The Geology and Origin of Australia's Mineral Deposits. Reprinted by the Centre for Ore Deposit Research and the Centre for Global Metallogeny by arrangement with Oxford University Press.

Swan Resources., 1984. Final Report on Exploration Activities on EL1359. (Swan Feasibility Dtudy Document), unpublished report to the NSW Mines Dept (#GS1984/423).

Yousefpour, M.V, 1990. Cowarra gold deposit, Bredbo. In Hughes F.E. ed. Geology of the Mineral Deposits of Australia and Papua New Guinea, pp 1409-1413. The Australasian Institute of Mining and Metallurgy: Melbourne.

For further information please refer to the Company's website or contact the Company directly.

Authorised for release by the Zenith Minerals Limited Board of Directors - 13 May 2021

For further information contact:

Zenith Minerals Limited

Directors Michael Clifford or Peter Bird
E: mick@zenithminerals.com.au/peter@zenithminerals.com.au/
Phone +61 8 9226 1110

Media Enquiries

Fraser Beattie

E: fbeattie@canningspurple.com.au

Phone +61 8 6314 6300

About Zenith

Zenith has a vision to build a gold and base metals business with a team of proven project finders. Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities using third party funds.

Zenith is continuing to focus on its core Australian gold and copper projects including:

- Red Mountain Gold Project in Queensland (100% owned) where ongoing drilling is following-up the high-grade near surface gold and silver intersected in the maiden & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21), including:
 - o 13m @ 8.0 g/t Au & 3.2 g/t Ag from surface
 - o 15m @ 3.5 g/t Au, incl. 2m @ 22.4 g/t Au
 - o 5m @ 10.4 g/t Au, and
 - o 12m @ 4.9 g/t Au
- Split Rocks Gold Project in Western Australia (100% owned), where recent drilling returned, high-grade near surface gold mineralisation at multiple targets (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20), including:
 - o <u>Dulcie North</u>: 32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au.
 - Dulcie Laterite Pit:
 - 2m @ 14.5 g/t Au, incl. 1m @ 20.8 g/t Au,
 - 18m @ 2.0 g/t Au (EOH) incl. 1m @ 23.7 g/t Au &
 - 14m @ 3.5 g/t Au
 - o Estrela Prospect: 2m @ 9.8 g/t Au (open to north & south)
 - Dulcie Far North: 5m @ 5.6 g/t Au incl. 4m @ 6.8 g/t Au
 - o Water Bore: 3m @ 6.6 g/t Au
- Develin Creek Copper-Zinc Project in Queensland (100% owned) maiden drill test of the new Snook copper target located 30km south of Zenith's JORC resources discovers massive copper-zinc sulphides (ASX Release 17-Dec-20).
- Jackadgery Gold Project in New South Wales (option to earn initial 90%), historic trenching returned 160m @ 1.2 g/t Au. No drilling to date. Zenith planning maiden drill test (ASX Release 10-Sep-20).
- Earaheedy Zinc Project in Western Australia (25% free carry to end BFS). New major zinc discovery to be fast tracked with extensive accelerated exploration program underpinned by a recent \$40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Release 28-Apr-21).

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard	1m assay results for 32 historic reverse circulation drill holes completed in 2004 & 2005 by Atlas Resources Pty Ltd.
	measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples	1m assay results and selected sample intervals for 5 diamond drilling completed in 2010 by Capital Mining Limited.
	should not be taken as limiting the broad meaning of sampling.	1m assay results and selected sample intervals for 4 diamond drilling completed in 2011 by Commissioners Gold Limited.
	Include reference to measures taken to ensure sample representivity and the	RC samples were systematic samples for full length of drill holes.
	appropriate calibration of any measurement tools or systems used.	Selected sample intervals were analysed based on geological observations for Commissioners Gold and Capital drill holes.
Sampling techniques		Reverse circulation drilling was used to obtain 1 m to samples from which ~2kg was pulverised to produce a 50 g charge for fire assay – Atlas Resources Pty Ltd.
tecimiques	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	Diamond drilling was used to obtain selected sub-1m to 1 m to samples from ½ sawn NQ core which ~2kg was pulverised to produce a 50 g charge for fire assay – Capital Mining Ltd & Commissioners Gold.
	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.	Insufficient documentation is currently available to report any historic BHP or Horizon Pacific Ltd exploration drilling to JORC 2012 standards, although reports for that work including gold assays for 60 drill holes are available to the Company. The Company will use that additional historic information to assist in guiding future exploration activity on the project, but no gold drill results from that work are being reported in this ASX release. BHP completed 15 holes for 1,190m. Horizon Pacific conducted both underground (17 holes for 716.4m) and surface drilling (28 holes for 5,222.9m). Should additional information become available for this drilling dataset then results for these additional holes may be reported in the future.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Reverse circulation & diamond drilling.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC samples recoveries were recorded by field crew based on visual estimates and are recorded in a digital database.
	assesseu.	Diamond core recoveries based on core measurements and recorded in a digital database, drill

		core photographs were used by the author to cross check against historic drill core recoveries.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Drilling produced generally dry samples with excellent recoveries, 1m samples were riffle split to ensure a representative sample was collected for assay. Drill core was logged and generally 1m sample intervals were selected for assay. Core photos show sample interval marks that can be correlated with the digital data.
	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.	No indications of sample bias based on evaluation of results to date. Further confirmatory drilling will provide a more definitive assessment.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	The core and drill chip samples are adequately geologically logged. Geotechnical logs are provided for the drill core from Commissioners Gold Limited including RQD, fracture frequency orientation of structures and structure orientation confidence. The information contained in this report will alone not be used to report a Mineral Resource.
Logging	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Drill chip & drill core logging is qualitative.
	The total length and percentage of the relevant intersections logged.	All relevant intervals logged and sampled. 2010 & 2011 diamond core programs – sampling based on visual identification of mineralised and altered intervals plus an additional 1m buffer.
	If core, whether cut or sawn and whether quarter, half or all core taken.	Drill core was sawn half NQ core, minor portions of broken core zones in the 2010 diamond program were sampled by hand splitting as is industry standard.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples were riffle split.
Sub-sampling techniques and sample preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were crushed, pulverised and assayed by gold using fire assay with selected holes analysed for 35 multi-elements using aqua regia ICP-AES.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	RC chips riffle split at site, ~2kg of drill sample was crushed and pulverised and a sub-sample was taken in the laboratory and analysed. Selected intervals were initially analysed as 4m composites with 1m intervals later resampled.
Sub-sampling techniques and sample preparation - continued	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.	Field duplicates were collected during sampling by riffle splitting selected 1m RC samples. Selected 4m composite samples and weighted average 1m samples for the same intervals show reasonable reproducibility.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes ~2kg in weight which are appropriate to test for the grain size of mineralised material.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The samples were crushed and assayed for gold using ore grade Au 50g fire assay with AA finish which is considered a near total assay technique. Atlas RC analysed by Genalysis – Perth, Drill core analysed by ALS in Orange NSW and ALS in Brisbane QLD.

	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.	No geophysical tools used in these drilling programs.
	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.	Certified reference material, blanks and duplicates samples were included, and appropriate levels of precision and accuracy were confirmed in QA/QC reviews.
	The verification of significant intersections by either independent or alternative company personnel.	Company personnel have been to site and also reviewed core photos of the logged and assayed core samples to verify selected significant drill intersections. Core photos are consistent with logged geology observations. Gold mineralised and altered intervals can are observed in core photos. The RC chips have not been sited.
Verification of sampling and assaying	The use of twinned holes.	No twinning to date. The planned upcoming drill hole program will duplicate but not necessarily twin some historic drill holes that have uncertain collar locations (BHP drilling). As the project evolves a twin hole program will be considered.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Documentation of primary data is not specified however data is stored in a digital database and data verification was undertaken by checking historic drill core photos against drill logs and original certified PDF assay certificates against the assay database.
	Discuss any adjustment to assay data.	No adjustments were made.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Hole locations are based on GPS collar coordinates +/-5m accuracy. 2011 NQ2 diamond drilling downhole surveys at 50-60m intervals, using a digital Ezishot downhole camera. 2010 NQ downhole surveys were via an Eastman single shot camera, generally at 50m intervals. RC holes were not surveyed downhole but given relatively short depths (max 100m) downhole deviation is not considered a major risk.
	Specification of the grid system used.	The grid system used to compile data was MGA94 Zone 55.
Location of data points - continued	Quality and adequacy of topographic control.	Topography control is +/- 5m
	Data spacing for reporting of Exploration Results.	Drill holes shown in Figures 2 to 7 and Tables 1 & 2
Data spacing and distribution	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.	The data alone will not be used to estimate a Mineral Resource or Ore Reserve.
	Whether sample compositing has been applied.	No sample compositing except for selected 4m composite RC samples. The same intervals were resampled at 1m intervals and the weighted average 1m samples for the same 4m intervals show reasonable reproducibility.

Orientation of	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The intersections in all drill holes are interpreted to be close to true widths based on cross section analysis and where available orientated drill core structural measurements.
data in relation to geological structure	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.	As above – no bias should have been introduced.
Sample security	The measures taken to ensure sample security.	Unknown and not reported but assumed to be industry standard.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Data verification was undertaken by checking historic drill core photos against drill logs and original certified PDF assay certificates against the assay database and QA/QC Excel spreadsheets. Capp (2009) completed a Mineral Resource Estimate for the Cowarra Mine for Capital Mining Ltd. The 184-page detailed document reports Mineral Resources classified according to the JORC2004 guidelines. The Mineral Resources are not reported in this ASX Release however, a reference to that work is reported herein as it is comprehensive in its compilation, review and audit of historic exploration activity including sampling techniques, QA/QC and data.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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	Historic gold mine tailings are located within the project area, Oxley retains gold rights to these tailings but no legacy environmental liability.

		Power is available from the state grid, however the power line installed by Horizon Pacific Ltd in 1988 has been removed.
	held at the time of	A licence to operate has been applied for to allow exploration to proceed within state crown lands set aside for minerals on which the project resides.
	obtaining a licence to operate in the area.	No non-standard environmental conditions have been imposed on the tenements, and no additional bond has been either requested or lodged.
		The Project area contains a number of historic gold mines and workings, which have a long history of gold production dating back to the 1860's. Production from the field has been sporadic, with the high points being mining of oxides by prospectors in the period 1860 to 1920, development of the Cowarra Mine – Victoria Deposit by BHP Ltd in the period 1936 to 1947, and redevelopment of the mine by Horizon Pacific Ltd in 1984 to 1990.
		Delta Gold NL held EL4244 covering the area from Fiery Creek to Cowarra from Apr 1992 to Sep 1992. Delta assessed previous work, a preliminary stream sediment sampling program, a helimag survey and two diamond drillholes on the Peak View prospect (outside of the project area).
		The area was explored by Michelago Resources and Denehurst Ltd between 1992 and 1998, including: geochemical sampling and heli-mag survey.
Exploration done	Acknowledgment and	Atlas Resources conducted exploration within the area from 1998 to 2009, consisting of geochemical sampling, RC drilling 32 holes for 2,285m.
by other parties	appraisal of exploration by other parties.	In 2009, Capital Mining undertook further exploration programs including re-processing airborne geophysical data, geochemical sampling, tailings sampling, inspection of UG workings, diamond drilling (5 holes for 801.62m) & resource estimation.
		During Sep-Oct 2011, Commissioners Gold (CGU) completed a f4-hole 982m diamond drilling program, including 304.5m of HQ core drilling and 677.5m of NQ core drilling. CGU changed its name to Gold Mountain Limited (GMN) in Dec 2014. During 2014 to 2018 there was limited field activities, work included auger sampling of historic tailings (15 auger holes) that returned variable but encouraging results.
		Oxley Resources Ltd carried out DDIP geophysical surveying and geophysical modelling on EL8823 in 2020. A larger licence (EL5992) was subsequently applied for following a positive assessment of historic results and the new geophysical survey results.
		Historic exploration results referred to in this release is sourced from company reports publicly available from the DIGS open file report system. DIGS is maintained by the Geological Survey of NSW (GSNSW), which sits within the Resources and Geoscience Division of NSW Department of Planning and Environment.
Geology		Syndeformational, turbidite-hosted, shear and fault-controlled gold mineralised within Ordovician age metasedimentary rocks deformed during the Lachlan Orogen, refer Solomon and Groves (2000) p686.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following	

	information for all Material drill holes:	Refer to Figures 1 - 7 and Tables 1 & 2 and descriptions in body of text of this ASX release.
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the	
	Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Reported intersections are length weighted average grades with minimum cut-off grade of 0.4g/t Au and maximum 2m of consecutive internal dilution. No top cuts have been applied.
	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.	As above and included in Table 1.
Data aggregation methods - continued	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents used.
Relationship between mineralisation		The intersections in all drill holes are interpreted to be close to true widths based on drill core structural measurements.

widths and intercept lengths		The intersections in all drill holes are interpreted to be close to true widths based on drill core structural measurements and cross section
	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').	Mineralised intervals reported are down-hole lengths but are believed to be close to true thickness.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures 1 - 7 and Table 1 and 2 in body of text of this ASX release.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Refer to Figures 1 - 7 and Table 1 and 2 in body of text of this ASX release.
Other substantive exploration data	results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential	processing route for the extraction of gold from the Cowarra project – Victoria mine. BHP Ltd utilising a combination of strake tables and tanks and Horizon Pacific Ltd (Horizon) a Knelson concentrator and CIL tanks. BHP Ltd recovered 20% of their gold via the gravity circuit the reminder in the CIL circuit, there is no information for the recovery of gravity gold versus CIL gold by Horizon (Capp 2003). The only documented metallurgical test work is sourced from the Swan Resources feasibility study and was conducted by Micron Research (W.A) in Mar-1982. Results from that work based on two underground composite samples noted that the ore is free milling but requires a fine grind (90% passing 45um) to achieve 90% recovery. Short retention times

Samples were also submitted for both bond ball mill work index and abrasion test work, the results of the testwork are summarised below:

P1 = 53um, Cbp = 0.88, F80 = 2250um, Psg = 38um, Wi = 15.49 kWh/t, Abrasion Index = 0.1006, Ca(OH)2 8 kg / tonne of ore, NaCN 2.4 Kg/tonne of ore. Agitation time 16hrs to achieve 90% recovery.

2010 - Underground Workings Access & Sampling

The entrance to the adit leading into 2 Level of the old Cowarra Mine was briefly reopened in February 2010. Level 2 adit, which was the main mine access for the Horizon operation, was still accessible. However, the main area of interest, the southern portion of the mine, was found to have been sealed off by a collapse. Survey control points were picked up in the Level 2 adit and a cross-cut and 5 rock chip samples were collected from the backs (underground roof). Following the inspection, the adit entrance was resealed.

Underground Diamond Drilling

Underground drilling was carried out from 1 and 4 level in 1988/1989. The drilling generally comprised flat or shallowly dipping holes drilled into both the hanging wall and footwall of the mine. The drilling was BQ in size and sampling tended to be whole core. Samples were selectively collected from intervals which were visually classified as being potentially mineralized and vary in length from 15 cm to several meters. Analysis was undertaken by bottle roll in the onsite Horizon laboratory at the mine, or by fire assay at ALS in Orange, although reporting of which laboratory was used is inadequate. The underground diamond drilling assay results are not reported in this ASX Release as they do not meet JORC 2012 reporting guidelines, however, a reference to that work is reported herein as it provides further details on the breadth of information available to the Company to assist it with future exploration activities.

Historic Rock & Soil Sampling

A total of 226 rock chip samples were collected by Capital Mining and Atlas Resources Pty Ltd and are shown in Figure 2. Samples were collected over the period 2005 to 2011.

Sample type includes rock, float and 1m channel samples generally 1kg in sample size. Location by GPS with nominal 5m accuracy. Analysis by fire assay at ALS, Genalysis – ADL and ALS Chemex.

A further 376 rock chip assay results are not reported in this ASX Release as they do not meet JORC 2012 reporting guidelines, however, a reference to that work is reported herein as it provides further details on the breadth of information available to the Company to assist it with future exploration activities.

87 soils were collected by Capital Mining from the Firestone Ridge grid (25m spaced samples on lines 100m apart). Samples were located using Garmin GPS with 5m accuracy. 1kg of B- and C-horizon soil was collected and sent to ALS Chemex. Samples were screened to -80# in the laboratory and analysed gold by fire assay with AA finish.

DDIP Geophysical Survey Results – Fender Geophysics

In 2020 Oxley Resources commissioned Fender Geophysics to complete a dipole-dipole induced polarisation (IP) geophysical trial survey. The following details the survey specifications:

Survey Type - Induced Polarisation

- Array Type Dipole-Dipole (Roll Along)
- Receiver Dipole Length 50m
- Transmitter Dipole Length 50m
- Line Length 2100m
- Line Separation 200m
- Number of Lines 3
- Total Line km 6.3 km
- Line Orientation E-W
- Domain and Cycle Time domain: 2 seconds / 0.125Hz
- Coordinate System GDA94 MGA zone 55

Lines surveyed:

- 6012300 from 706600 708700
- 6012500 from 706600 708700
- 6012700 from 706600 708700

Survey Equipment:

- Receiver GDD Rx-32 16-Channel Receiver
- Transmitter GDD 5kVA Transmitter
- Generator Honda Em65is
- Receiver Electrode Pots Non-polarizing porous pots
- Transmitter Electrode Plates 1200mm x 800mm x 5mm aluminum plate
- Rx Cables Irrigation control data cable
- Tx Wire 2.5mm single-core wire
- UHF Radios 5W handheld radios
- Handheld GPS Units Garmin 64s 3m accuracy

Instrumentation GDD Rx32 16-channel IP Receiver

- Voltage Measurement: Resolution 1µV, Accuracy ≤ 0,15%
- Chargeability measurement: Resolution 1µV/V, Accuracy ≤ 0.4%
- Adjustment: Automatic synch, SP compensation, gain setting and stacking
- ADCs: 24-bit
- Primary Voltage: ± 10µ to ± 15V for any channel
- Operating Temperature: -40° C to +60° C
- Full waveform acquisition: Yes QC with GDD Full Waveform post-processing software

Instrumentation GDD TxII 5kVA Transmitter

- Output current: 0.030A to 10A
- Output voltage: 150V to 2400V / 14 voltage scales
- Master-Slave configuration: Link 2 GDD IP Transmitters to double power (10kVA)
- Power source: Standard 220-240V / 50-60Hz

Field data was acquired by a geophysicist with the following verification processes in place:

- Manual recording of station location, current output, primary voltage, resistivity and chargeability
- Minimum 15-fold stacking for each reading, with visual inspection of individual decay stacks
- Minimum of 3 readings per station, thus verifying repeatability of the recorded values

		Data and any cultural features were recorded in the operator's field notes for review in conjunction with later quality control.
		Data was downloaded from the receiver at the end of each day. It then got uploaded to the project Dropbox. Further QA and processing of the data were completed off-site by a second geophysicist.
		The raw IP data was assessed in TQIPdb for individual decay curves for each reading as well as for overall data quality. The data was then exported in Geosoft ASCII format and loaded into Windisp for presentation as a raw data pseudosection.
		The IP data was inverted in 2D and 3D to gain resistivity and chargeability model sections and depth slices.
		Structural data collected from bore holes and mine records exists from approx. 30m north of survey line 6012700N. Correlation between this section and the IP section provides an excellent match between the location of the Victoria gold mine workings and the westernmost IP chargeability anomaly. This successful correlation between known gold-bearing structures and chargeability anomalies encourages further investigation of the remaining, yet untested chargeability anomalies in the eastern part of the survey area (Figure 7).
	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to figures in body of this report.