

11th December 2018

Drilling Returns Thick High-Grade Gold Intercepts at Kavaklitepe Gold Project in Turkey

- Preliminary 4-metre composite assay results received from the recently completed 2,276 metre RC drill program (15 holes) at the Kuzey Prospect:
 - KT-35: 24.0m @ 4.15 g/t Au, including 16.0m @ 5.20 g/t Au;
 - KT-29: 28.0m @ 2.78 g/t Au, including 8.0m @ 6.01 g/t Au;
 - KT-38: 32.0m @ 1.28 g/t Au; including 4.0m @ 3.20 g/t Au, and
 - KT-33: 8.0m @ 2.45g/t Au, including 4.0m @ 3.33 g/t Au.
- New continuous surface rock samples taken along access tracks constructed for this RC drill program returned:
 - o 10.0m @ 12.2 g/t Au;
 - 44.0m @ 3.37 g/t Au;
 - o 15.0m @ 10.10 g/t Au and
 - 6.5m @ 5.18 g/t Au.
- New results are in addition to 2016 drill results that included: 16m @ 4.7 g/t (fresh rock), 9m @ 5.2g/t and 7.8m @ 7.3g/t gold (surface oxide zone);
- This RC drill program has successfully defined gold mineralisation over the length of the 900-metre-long Kuzey Prospect;
- Kuzey Prospect defined by high order gold in soil anomaly (+50 ppb), with peak soil sample values up to 6.05 g/t gold and continuous rock chip sampling of 54.0m grading 3.33 g/t gold, including 21.5m grading 7.2 g/t gold at southern end of the prospect; Additional drill targets including the nearby Discovery Zone require further follow-up drill testing; and
- Individual 1 metre samples of the 4 metre RC composite gold mineralised intervals have been submitted to the assay laboratory for analysis with assay results expected by mid-January;
- Upon receipt of the 1 metre sample results the Kavaklitepe JV partners will be in a better position to comment on the significance of the gold mineralisation defined in this RC drill campaign and future work on the project.

Zenith Minerals Limited ("Zenith" or "the Company") is very pleased to advise that initial 4 metre composite assay results from follow-up drill testing have now been received from the Kavaklitepe Gold Project located within the highly gold endowed western region of Turkey.

Based on these preliminary 4 metre composite results the drill program has successfully defined gold mineralisation over the length of the 900 metre long Kuzey Prospect (north prospect) one of three gold mineralised zones within the Kavaklitepe Project. New results include: drill hole KT-35: 24.0m @ 4.15 g/t Au, including 16.0m @ 5.20 g/t Au and KT-29: 28.0m @ 2.78 g/t Au, including 8.0m @ 6.01 g/t Au and drill hole KT-38: 32.0m @ 1.3 g/t

Corporate Details

ASX: ZNC

Issued Shares (ZNC) 212.8M

Unlisted options 2.5M

Mkt. Cap. (\$0.08) A\$18M

Cash (30th Sep 18) A\$1.9 M

Debt Nil

Directors

Michael Clifford:

Managing Director

Mike Joyce:

Non-Exec Chairman

Stan Macdonald:

Non-Exec Director

Julian Goldsworthy:

Non-Exec Director

Graham Riley:

Non-Exec Director

Major Shareholders

HSBC Custody. Nom. 12.8%

Nada Granich 5.4%

Miquilini 4.3%

J P Morgan 4.1%

Abingdon 4.1%

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Au; including 4.0m @ 3.20 g/t Au (Figures 1, 2, 3 & 4). These drill intersections are interpreted to be close to true thickness of the gold mineralisation.

Individual 1 metre samples of the 4 metre composite gold mineralised intervals have been submitted to the assay laboratory for analysis with assay results expected by mid-January. It is anticipated that the mineralised intervals based on the yet to be received 1 metre samples may be higher in gold grade but narrower than those reported in these broader 4 metre composite samples.

New continuous surface rock samples taken along access tracks constructed for this RC drill program also returned significant gold mineralisation including: 10.0m @ 12.2 g/t Au, 44.0m @ 3.37 g/t Au, 15.0m @ 10.10 g/t Au and 6.5m @ 5.18 g/t Au (Figure 1).

Further work is required but gold mineralisation appears to be hosted in fault zone breccias that are both subparallel to and cross-cut foliation in the host shales and schists in association with arsenic and antimony.

Exploration and evaluation of the Kavaklitepe gold project is managed by Teck Anadolu Madencilik Sanayi v. Ticaret A.S. ("Teck"), a Turkish affiliate of Teck Resources Limited through the Turkish joint venture company Kavak Madencilik A.S. that is 30% owned by Zenith Minerals Limited. As previously advised (ASX Release 30th Oct 2018) both Teck & Zenith parent entities agreed to contribute their share (70% and 30% respectively) of joint venture funds towards the drill program to maintain their respective project interests.

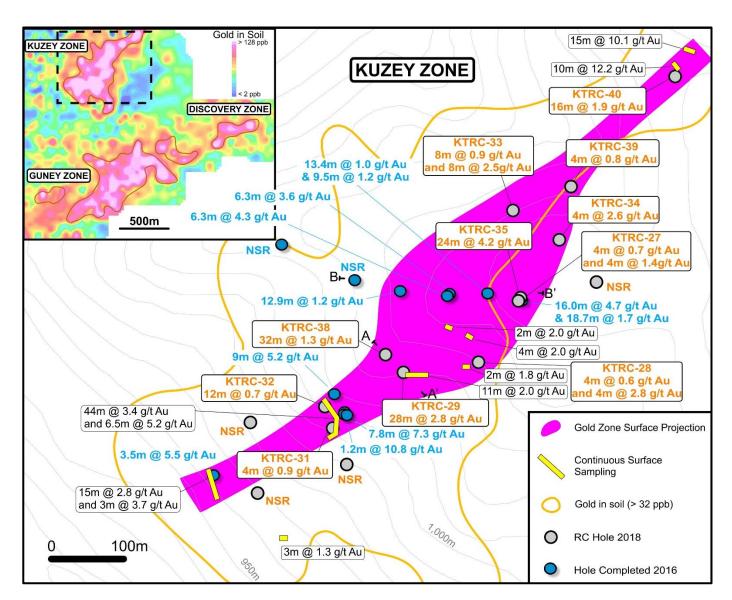


Figure 1: Kavaklitepe Kuzey Zone Drill Hole Locations, Gold Intersections & Location of Cross Sections (A-A' & B-B')



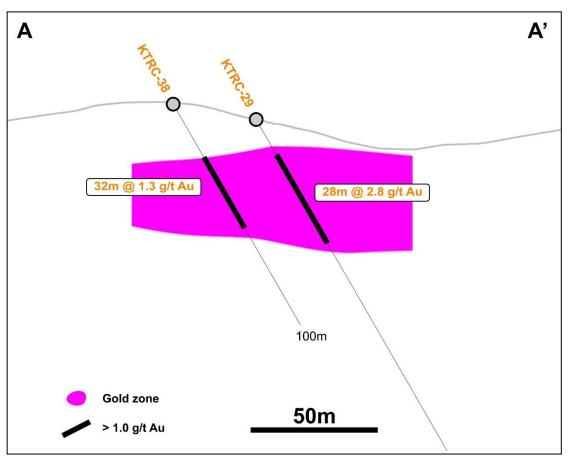


Figure 2: Kavaklitepe Kuzey Zone Preliminary Cross Section A-A'- (Refer to Figure 1 for Location of Cross Section)

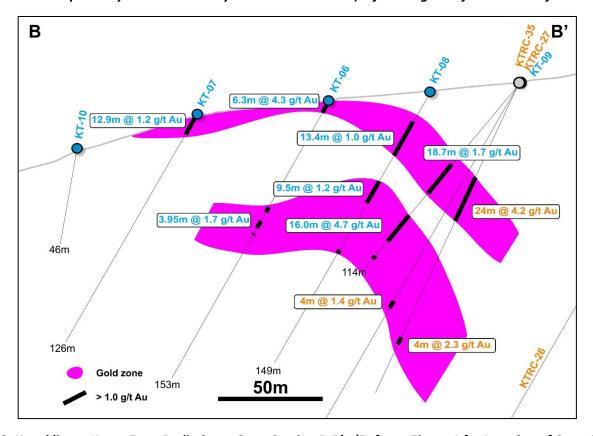


Figure 3: Kavaklitepe Kuzey Zone Preliminary Cross Section B-B'- (Refer to Figure 1 for Location of Cross Section)



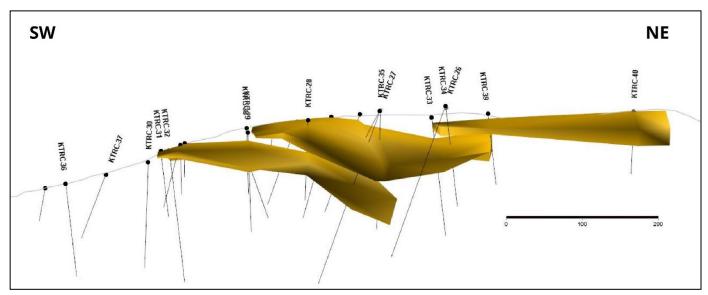


Figure 4: Kavaklitepe Kuzey 3D View of Gold Zones Looking North West (Preliminary Interpretation)

Significant gold results are summarised in Tables 1 - 3 whilst details are included in JORC 2012 tables appended to this release.

Background

RC drilling in late 2018 was completed to scope out the size and tenor of gold mineralisation intersected during the 2016 maiden short-hole diamond drilling program (25 holes/2558.5m) using a mobile rig at the Kavaklitepe gold project in western Turkey. Zenith considers the 2016 program to have been successful with sulphide-related gold mineralisation being discovered at both the Discovery Zone and Kuzey Zone, and with near surface high-grade oxide and transition gold mineralisation also intersected at Kuzey.

Kuzey Zone

Drilling completed in 2016 (11 holes (KT-01 to KT-11, including KT-06A) provided an initial wide spaced test of only 360m of the 900m by 250m wide Kuzey Zone gold-in-soil anomaly target (Figures 1 & 5).

Near surface oxide and transition gold mineralisation is interpreted to occur as a flat lying zone extending over the full 360m length that has been drill tested to date. Better intersections that are considered close to true width of high-grade, near surface, gold mineralisation (previously reported) include: KT-01; 3.5m @ 5.5 g/t Au from surface, KT-02; 9.0m @ 5.2 g/t Au from surface, KT-03; 7.8m @ 7.3 g/t Au from 3.3m depth, KT-05; 1.2m @ 10.8 g/t Au from 14.7m (as part of a 16.9m mineralised zone with lower core recovery), KT-06; 6.3m @ 4.3 g/t Au from surface, KT-06A; 6.3m @ 3.6 g/t Au from surface and KT-07; 12.9m @ 1.2 g/t Au from surface.

Deeper drill results previously reported (5th October 2016) from the Kuzey Zone include: hole KT-09; an overall 67.7m gold mineralised zone from 46.2 to end of hole at 113.9m (true width unknown) including several zones of higher grade: **18.7m @ 1.7 g/t Au** from 50.2m, **16.0m @ 4.7 g/t Au** from 82.1m, (including **8.0 m @ 7.1 g/t Au**) and **8.8m @ 1.0 g/t Au** with the drill hole ending in mineralisation at 113.9m and hole KT-08; an overall 76.0m gold mineralised zone from 12.5m to 88.5m including: **13.4m @ 1.0 g/t Au** from 16.1m, **1.5m @ 1.3 g/t Au** from 33.0m, **2.0m @ 3.0 g/t Au** from 48.8m, and **9.5m @ 1.2 g/t Au** from 56.8m.

The, high-grade, wide, gold intersections in hole KT-09 are particularly significant, as they represent the best sulphide gold mineralisation intersected to date at Kavaklitepe. Sulphide gold intersections are down-hole widths as the orientation of that style of mineralisation is currently unknown.

Reporting cut-off criteria and associated JORC tables are included in ASX release dated 22nd December 2016.

Discovery and Guney Zones

2016 drilling at the Discovery Zone (2 holes (KT-18A and KT-23) intersected gold mineralisation over a 23.5m interval from 22.5m to 46.0m depth with results including: **9.4m @ 1.5 g/t Au** and **3.5m @ 2.1 g/t Au** (true width intervals). The near surface gold mineralisation dips to the northwest and is 60m down dip of previously reported continuous roadside



surface sample results that include: 21.0m @ 2.7 g/t Au and 27.0m @ 1.4 g/t Au (Figure 7). The roadside sampling was conducted as an initial test of the 400m long gold-in-soil anomaly at the Discovery Zone.

The new **Discovery Zone** gold mineralisation remains open to the northeast and southwest and is open down dip. A second drill hole 275m southwest along strike where surface rock chip samples returned up to 2.4g/t Au, intersecting 1.3m @ 1.3 g/t Au within a 17.9m wide altered zone from 17.5m to 35.4m with associated anomalous silver, arsenic and antimony.

Drilling at the **Guney Zone** (11 holes (KT-12 to KT-17 & KT-19 to KT-22 & KT-24 to KT-25) has been technically difficult, intersecting a thick, flat-lying, massive sequence of calc-silicate rocks which contained multiple underground cavities up to 4 metres deep that caused several holes to fail at shallow depths and provided locally only very poor diamond drill core sample recoveries. Hole KT-12 returned 1.2m @ 1.4g/t Au from 12.5m and 1.3m @ 0.6g/t Au from 17.2m before being abandoned in a cavity and drill hole KT-21 drilled on the northern part of the prospect intersected a wide zone (30.7 m) of silicified and altered breccia crosscutting a meta-siltstone rock sequence from 54.9m to 85.6m with associated higher concentrations of trace elements arsenic, antimony and silver more similar to those returning significant gold intersections at the Kuzey and Discovery zones.

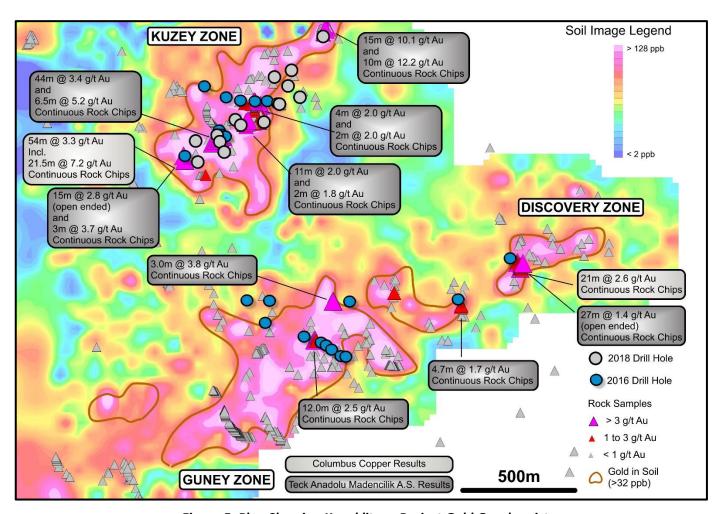


Figure 5: Plan Showing Kavaklitepe Project Gold Geochemistry

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Drilling and Sampling Data Summary

Table 1- Kuzey Prospect RC Drilling Significant Gold Intersections from Preliminary 4m Composite Assay Results (lower cut-off grade 0.5 g/t Au, max 4m internal dilution, higher cut-off grade 3.0 g/t Au)

	From	То	Interval	Gold		
Hole ID	(m)	(m)	(m)	(g/t)	Comments	
KTRC-26					NSR	
KTRC-27	60	64	4	0.67		
and	120	124	4	1.42	Describ forces Ann agency asites Ann agency less than the state of few as	
KTRC-28	24	28	4	0.59	Result from 4m composites, 1m samples submitted for re-assay	
and	48	52	4	2.81		
KTRC-29	16	44	28	2.78	Interval 12m – 56m averages 44m @ 1.94g/t Au includes 8m of internal dilution. Result from 4m composites, 1m samples submitted for re-assay	
incl	32	40	8	6.01	Submitted for re-assay	
and	52	56	4	1.27	Result from 4m composites, 1m samples submitted for re-assay	
KTRC-30	32	30	7	1.27	NSR	
KTRC-31	0	4	4	0.87		
KTRC-32	0	12	12	0.68	Result from 4m composites, 1m samples submitted for re-assay	
KTRC-33	12	20	8	0.94	,	
and	44	52	8	2.45	Interval 32m – 56m averages 24m @ 1.02g/t Au includes 4m of internal dilution and results cut to 0.3 g/t Au. Result from 4m composites, 1m samples submitted for re-assay	
incl	48	52	4	3.34	,	
KTRC-34	64	68	4	2.62		
KTRC-35	52	76	24	4.15	VTDC 25 Internal 400m to 444m average 20m @ 0.65 a/t Ave	
incl	60	67	16	5.20	KTRC-35 Interval 108m to 144m averages 36m @ 0.65 g/t Au includes internal dilution and results cut to 0.4 g/t Au. Result from	
and	108	112	4	0.69	4m composites, 1m samples submitted for re-assay	
and	124	128	4	0.82	This composites, 1111 samples submitted for the assay	
and	132	136	4	0.56		
and	140	148	4	2.32		
KTRC-36					NSR	
KTRC-37					NSR	
					Interval 24m – 60m averages 36m @ 1.18g/t Au includes 4m of internal dilution and results cut to 0.3 g/t Au. Result from 4m	
KTRC-38	24	56	32	1.28	composites, 1m samples submitted for re-assay	
incl	28	32	4	3.20		
KTRC-39	72	76	4	0.78	Result from 4m composites, 1m samples submitted for re-assay	
KTRC-40	16	32	16	1.91		
incl	24	28	4	3.91		



Table 2- Kuzey Prospect RC Collars (15 RC holes)

HOLE	East (m)	North (m)	RL	Depth (m)	Azimuth	Dip
KTRC-26	6012	7645	1073	229	280	-60
KTRC-27	5916	7624	1067	262	280	-60
KTRC-28	5861	7543	1054	120	315	-60
KTRC-29	5767	7530	1038	150	135	-60
KTRC-30	5695	7414	999	160	315	-60
KTRC-31	5676	7460	1014	100	330	-60
KTRC-32	5667	7487	1015	200	330	-60
KTRC-33	5907	7736	1058	180	330	-60
KTRC-34	5964	7700	1071	150	330	-60
KTRC-35	5916	7625	1067	180	315	-60
KTRC-36	5582	7378	971	140	330	-60
KTRC-37	5573	7467	983	96	180	-60
KTRC-38	5744	7553	1044	100	135	-60
KTRC-39	5979	7766	1063	108	330	-60
KTRC-40	6111	7906	1066	100	315	-55

Table 3- Kuzey Prospect Continuous Rock Chip Samples from Drill Access Tracks - Significant Gold Intersections (lower cut-off grade 1.0 g/t Au, max 2m internal dilution) refer to Figure 1 for sample locations.

Interval (m)	Gold (g/t)	Comments	
2.0	1.84	Highly deformed/sheared meta-sandstone/fault gouge, pervasive jarosite and	
		hematite	
2.5	1.27	Highly deformed/sheared meta-sandstone/fault gouge, pervasive jarosite and	
		hematite	
3.0	1.33	Silicified & hematitic/jarosite oxidized clast rich colluvial material	
4.0	1.98	Intensely oxidised and manganese rich fault gouge / shear zone	
2.0	1.98	Moderately oxidised fault gouge / shear zone	
2.0	1.21	Intensely oxidised and manganese rich fault gouge / shear zone	
10.0	12.20	Iron oxide rich clasts within fault gouge	
15.0	10.10	Iron oxide rich clasts within fault gouge	
1.5	1.16	9% oxides - clast bearing shear zone	
11.0	2.03	4 to 20% iron oxide rich clasts within share zone	
44.0	3.37	Contains common iron oxides to 20% within fault gouge zone	
6.5	5.18	Contains 8 to 10% iron oxides within fault gouge zone	

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.



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Zenith is advancing its project portfolio of high-quality, gold, lithium and base metal projects:

Kavaklitepe Gold Project, Turkey (ZNC 30%, Teck 70%)

➤ Recent (2013) grass roots gold discovery in Tethyan Belt. Continuous rock chip sampling to: 54m @ 3.33g/t gold, incl 21.5m @ 7.2 g/t gold. Initial 2016 drill results include: 9 m @ 5.2 g/t Au from surface, 7.8 m @ 7.3 g/t Au from 3.3 m & 16.4m @ 4.7 g/t Au from 82.1m depth (ASX Release 5th Oct 2016). Follow-up drilling in progress.

American Lithium Projects (Bradda Head earning initial 55%)

Zacatecas Lithium Brine Project, Mexico

➤ Lithium brines to 2.1% lithium reported in sampling conducted by the Mexican Government from solar evaporation ponds for salt production (10km west of Zenith's new tenure) - Compelling geophysical targets – permitting for drilling in progress.

San Domingo Lithium, Arizona USA

➤ 9km x 1.5km lithium pegmatite field, initial surface sampling returned: 5m @ 1.97%Li₂O including 2.4m @ 2.49% Li₂O (ASX Release 18th Oct 2017) - Drill permits received.

Spencer & Wilson Salt Flat Lithium Brine Projects, Nevada USA

> Two lithium brine targets in producing lithium region - Geophysical surveys & infill sampling prior to drilling

Burro Creek Lithium, Arizona USA (ZNC option to acquire)

Maiden Mineral Resource Estimate for Burro Creek East pending, further drilling planned to test Western Claim Area.

Australian Projects

Develin Creek Copper-Zinc-Silver-Gold, QLD (ZNC 100%)

- 3 known VHMS massive sulphide deposits JORC resources, 50km of strike of host rocks.
- ➤ 2011 drilling: 13.2m @ 3.3% copper, 4.0% zinc, 30g/t silver & 0.4g/t gold Drilling planned to extend known deposits, geophysics, geochemistry to detect new targets (ASX Release 15th Feb 2015).

Split Rocks Lithium, Nickel-Cobalt & Gold, WA (ZNC 100%)

> 100% owned exploration licences covering 500km² in emerging Forrestania lithium district.

Tate River Gold QLD (ZNC earning up to 70%)

➤ Trenching returned 5m @ 3.9g/t Au as well as widespread strongly anomalous gold zones such as 166m @ 0.14g/t Au (ASX Release 21st Sep 2017). New targets identified at Far East and Far North prospects.

Red Mountain Gold-Silver Project QLD (ZNC 100%)

➤ Initial reconnaissance rock chip sampling results up to 114 g/t silver and 0.69 g/t gold, associated with strong, open ended silver soil anomaly (ASX Release 25th July 2017). Follow-up sampling planned

Waratah Well Lithium -Tantalum Project WA (ZNC 100%)

Extensive outcropping pegmatites (3km x 2km) encouraging lithium rock chip sample results up to 1.75% Li₂O as well as widespread, high-grade tantalum up to 1166ppm Ta₂O₅ (ASX Release 29th Jul 2017 & 27th Apr 2018).

Earaheedy Manganese Project, WA (ZNC 100%) - Manganese province discovered by ZNC, potential DSO drill intersections (+40%Mn)

Mt Alexander Iron Ore, WA (ZNC 100%) - JORC magnetite Resource 566 Mt @ 30.0% Fe close to West Pilbara coast, 50% of target untested (ASX Release June Qtly 2015)- Seeking development partner/ buyer for iron project.

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for it'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.



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 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.	RC drilling and continuous roadcut rock chip channel sampling.				
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sample procedures are in line with industry standards. Current QAQC protocols include the analysis of field duplicates and the insertion of appropriate commercial standards. Based on statistical analysis of these results, there is no evidence to suggest the samples are not representative.				
Sampling techniques	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.	Reverse circulation drilling was used to obtain 4 m samples from which ~3 kg was crushed in the laboratory and then pulverised before analysis using 30g charge fire assay with an AAS finish. 1m samples of mineralised intervals have been submitted to the same laboratory for analysis and will be reported once assay results have been received. Continuous roadcut rock chip channel sampling was used to obtain 2.5 to 5m length samples from which ~3 kg was crushed in the laboratory and then pulverised before analysis using 30g charge fire assay with an AAS finish.				
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 (RC) face sampling hammer and continuous roadcut rock chip channel sampling by field technician supervised by field geologist.				



	<u> </u>	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC recovery based on visual estimates and cross-checked by weighing random intervals.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drill holes were generally completed in 1 day or less and samples were able to be kept dry and not impacted by ground water. The samples are therefore considered representative of the intervals drilled. Roadcut faces were cleaned down prior to sampling, continuous rock chip channels were cut using a geological pick and samples were collected and bagged.
	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.	Good sample recovery throughout drill program and roadcut sampling, no recovery -grade bias noted
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.	RC drill holes and roadcuts have been geologically logged by a qualified geologist
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging recorded the lithology, oxidation state, colour, alteration, veining, presence or absence of sulphide minerals and species. A representative chip sample is retained for each 1m interval of each drill hole.
	The total length and percentage of the relevant intersections logged.	All drill holes and roadcuts are logged in full.
	If core, whether cut or sawn and whether quarter, half or all core taken.	No drill core for new results reported in this release.
Sub-sampling techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples are 4m in length taken directly from rotary cone splitter on RC drill rig, 1m samples to be submitted for re-assay of gold mineralised intervals. Continuous roadcut channel samples were not subsampled or split.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were sent to Bureau Veritas laboratory in Ankara Turkey, the samples were crushed and assayed by fire assay in Vancouver Canada
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Commercial geochemical gold standards were included in the sample batch sent to the laboratory whilst there were also internal laboratory QC samples.



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.	No selective sampling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Each sample was approximately 3kg in weight and selected to be representative of the drill interval sampled. Maximum sample weight of continuous roadcut channel samples was 7.5kg, average 3.4kg.
	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 by fire assay (near total digestion).
Quality of assay data and laboratory tests	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 data from geophysical handheld tools has been reported in this release.
ŕ	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.	Commercial geochemical gold standards and blanks were included in the sample batch sent to the laboratory whilst there were also internal laboratory QC samples. The blanks and standards were determined to be within acceptable levels of accuracy and precision.
	The verification of significant intersections by either independent or alternative company personnel.	At least two joint venture company personnel observed the assayed samples.
Verification of	The use of twinned holes.	No twin holes have yet been completed.
sampling and assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data were all recorded on hardcopies and then entered into an electronic 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.	Sample coordinates were recorded using a handheld GPS with plus/minus 3m accuracy, RL's were adjusted to fit a 1m digital terrain model of the project area.
	Specification of the grid system used.	The grid system used is metric.
Location of data points - continued	Quality and adequacy of topographic control.	Topography control is based on 1m digital terrain model.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill sections are nominally 100m spacing with holes at approximately 40 – 50m along lines.



	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.	This data alone will not be used to estimate a mineral resource or ore reserve
	Whether sample compositing has been applied.	Samples are 4m in length taken directly from rotary cone splitter on RC drill rig, 1m samples to be submitted for re-assay of gold mineralised intervals. Continuous roadcut rock chip channel samples were 2.5 to 5m in length.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The drill orientation is appropriate to test the orientation of mineralisation. Near surface oxide mineralisation is interpreted to be flat lying, whilst deeper fresh rock intersections also appear to be relatively flat lying to east dipping and north east plunging. Continuous roadcut rock chip channel samples were generally taken across strike.
Siractare	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.	No material bias.
Sample security	The measures taken to ensure sample security.	Samples were subject to a chain of custody procedure until delivered to the laboratory
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are consistent with industry standards

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	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Kavaklitepe Project is in Central Western Turkey. Exploration and evaluation of the Kavaklitepe gold project is managed by a Turkish affiliate of Teck Resources Limited through the Turkish joint venture company Kavak Madencilik A.S. that is 30% owned by Zenith Minerals Limited. As previously advised (ASX Release 30th Oct 2018) both Teck & Zenith parent entities agreed to contribute their share (70% and 30% respectively) of joint venture funds towards the drill program to maintain their respective project interests.
	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.	All tenure is 100% held by a subsidiary company of Teck with no known impediment to future granting of a mining lease.



Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Columbus Copper discovered mineralization at Kavaklitepe in 2013 by following up a stream sediment anomaly to a stream bed outcrop that returned 5.2 grams per tonne ("g/t") gold. Subsequently a small trench in a nearby road cut returned 2.6 g/t gold over 21 metres of exposure. About 1.4 kilometres northwest from the discovery outcrop four samples from a gold bearing breccia zone returned 28.2 g/t, 21.7 g/t, 6.7 g/t and 3.6 g/t gold respectively (Columbus Copper release March 1, 2013). Further rock sampling along a road bank in this zone confirmed the presence of high-grade gold mineralization returning 54.0 metres of continuous rock chips with an average grade of 3.3 g/t gold, including 21.5 metres grading 7.2 g/t gold. A total of 2,127 soil samples were also collected on the Property in 50 metre x 50 metre and 100 metre x 100 metre grids covering an area of approximately 11 square kilometres, of which 176 samples returned gold grades higher than 50 ppb, 112 - higher than 100 ppb and 40 - higher than 250 ppb with 9 of these samples containing more than 1000 ppb (1 g/t) gold. The soil sampling outlined a potentially mineralized zone measuring 850 metres by 250 metres and continuing for another 800 metres to the southwest and possibly displaced by a northwest-southeast trending fault at its southern margin. There are strong, coincident arsenic and antimony anomalies.	
Geology	Deposit type, geological setting and style of mineralisation.	The project comprises gold mineralisation hosted in a variety of host rocks including schists, breccias and meta-sedimentary rocks, the style of mineralisation is not yet clearly understood.	
	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:		
	o easting and northing of the drill hole collar		
Drill hole	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	Refer to Figures 1-3 and Table 2 in body of text of	
Information	o dip and azimuth of the hole	this report.	
	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.	Drill intersections reported in this release are based on initial 4m composite samples calculated using the following criteria:	



		 Minimum reportable average gold grade of intercept of 0.5 g/t Au Length weighted arithmetic average gold grades; Lower cut-off gold grade of 0.5 g/t Au; Maximum length of internal dilution 4m; No high-grade gold top cuts; Continuous roadcut rock chip channel samples: Minimum reportable average gold grade of intercept of 1.0 g/t Au Length weighted arithmetic average gold grades; Lower cut-off gold grade of 1.0 g/t Au; Maximum length of internal dilution 2m; No high-grade gold top cuts; Treatment of repeat assays (arithmetic average of all repeat fire assay results).
	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.	Reporting of higher gold grade sub-intervals in RC only, Minimum reportable average gold grade intercept of 3.0 g/t Au; Lower cut-off gold grade of 1.0 g/t Au; Maximum length of internal dilution 1m; No high-grade gold top cuts; and Treatment of repeat assays (arithmetic average of all repeat fires assay results)
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	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its	Reported mineralised intercepts are down-hole lengths for RC holes and along roadcuts for continuous surface samples. Down hole lengths are interpreted to be close to true widths, whilst continuous surface samples are generally across strike samples and also reflect true
mineralisation widths and intercept lengths	nature should be reported. 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').	widths of the mineralised zone exposed at surface. Down hole lengths are interpreted to be close to true widths
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 descriptions and diagrams in body of text



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.	High- and low-grade cut-offs provided in Table 1 in body of text of this release
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	There is no other significant exploration data that is reportable at this stage of the project
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further drilling will be required to define a Mineral Resource. Upon receipt of the 1-metre sample results the Kavaklitepe JV partners will be in a better position to comment on the significance of the gold mineralisation defined in this RC drill campaign and the proposed future work programs.
	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 diagrams in body of text