



24th August 2016

High-Grade Gold Results Continue from Kavaklitepe

On-going, preliminary shallow drill testing at the Kuzey (North) Zone at Kavaklitepe has returned further encouraging gold intersections. Results have now been received for six of nine holes completed, with all holes to date intersecting intervals of +1 grams per tonne gold ("g/t Au") mineralisation.

New results with acceptable core recoveries (see page 2 & Table 1) include:

- KT-01 - 3.5m @ 5.5 g/t Au from surface
- KT-05 - 1.2m @ 10.8 g/t Au from 14.7m (part of a 16.9m zone with lower core recovery)
- KT-06 - 6.3m @ 4.3 g/t Au from surface, and
 - 7.7m @ 1.2 g/t Au from 66.0m in a deeper primary zone.

These drill results extend and support high-grade, near surface gold intersections previously reported over +360m strike including:

- KT-02 – 9.0m @ 5.2 g/t Au from surface (reported to ASX 16th June 2016);
- KT-03 - 7.8m @ 7.3 g/t Au from 3.3m depth (reported to ASX 20th July 2016).

In addition all drill holes intersected other significant widths and grades of gold mineralisation which are not quoted as length weighted averages due to lower core recovery.

Assay results are awaited for holes KT-06A, KT-07 and KT-08.

Zenith Minerals Limited ("Zenith" or "the Company") is pleased to advise that ongoing short-hole drilling at the Kavaklitepe gold project in western Turkey has continued to deliver encouraging near surface high-grade oxide and transition gold mineralisation, and includes the first deeper primary fresh rock intersections.

Nine diamond drill holes (totalling 669.5m depth) have tested the Kuzey Zone target, the first of three targets to be drill tested, using a man-portable rig. To date drilling has provided an initial wide spaced test of only 360m of the 900m by 250m wide Kuzey Zone gold-in-soil anomaly target. The first hole (KT-01) was drilled at the southern end of the prospect area, holes KT-02, KT-03, KT-04 and KT-05 form a section 180m to the northeast along the strike of the high-grade gold surface rock samples whilst holes KT-06, KT-06A, KT07 and KT08 have been drilled on a section a further 180m north east (Figure 1).

New drill results include hole KT-01; 3.5m @ 5.5 g/t Au from surface, hole KT-05; 1.2m @ 10.8 g/t Au from 14.7m (as part of a 16.9m mineralised zone with lower core recovery) and hole KT-06; 6.3m @ 4.3 g/t Au from surface and a zone from 58.4m to 73.7m depth including 2.9m @ 1.1g/t Au and 7.7m @ 1.2 g/t Au. These new results support and extend high-grade near surface gold intersections previously reported

Corporate Details

ASX: ZNC

Issued Shares (ZNC)	172.9 m
Listed options (ZNCO)	22.1 m
Unlisted options	1.0 m
Mkt. Cap. (\$0.10)	A\$ 17.9m
Cash 30 June 16	A\$1.5M
Debt	Nil

Directors

Michael Clifford:
Managing Director

Mike Joyce:
Non Exec Chairman

Stan Macdonald:
Non Exec Director

Julian Goldsworthy:
Non Exec Director

Major Shareholders

City Corp Nom	7.09%
HSBC Custody, Nom.	6.66%
Granich	6.12%
GDR PL	4.27%
Miquilini	3.49%

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including 9.0m @ 5.2 g/t Au from surface in hole KT-02 (reported to ASX 16th June 2016) and 7.8m @ 7.3 g/t Au from 3.3m depth in hole KT-03 (reported to ASX 20th July 2016). The intersections quoted from hole KT-05 (1.2m @ 10.8 g/t Au) and the deeper zones in KT-06 are the first sulphide mineralisation reported to date (refer to Figure 2).

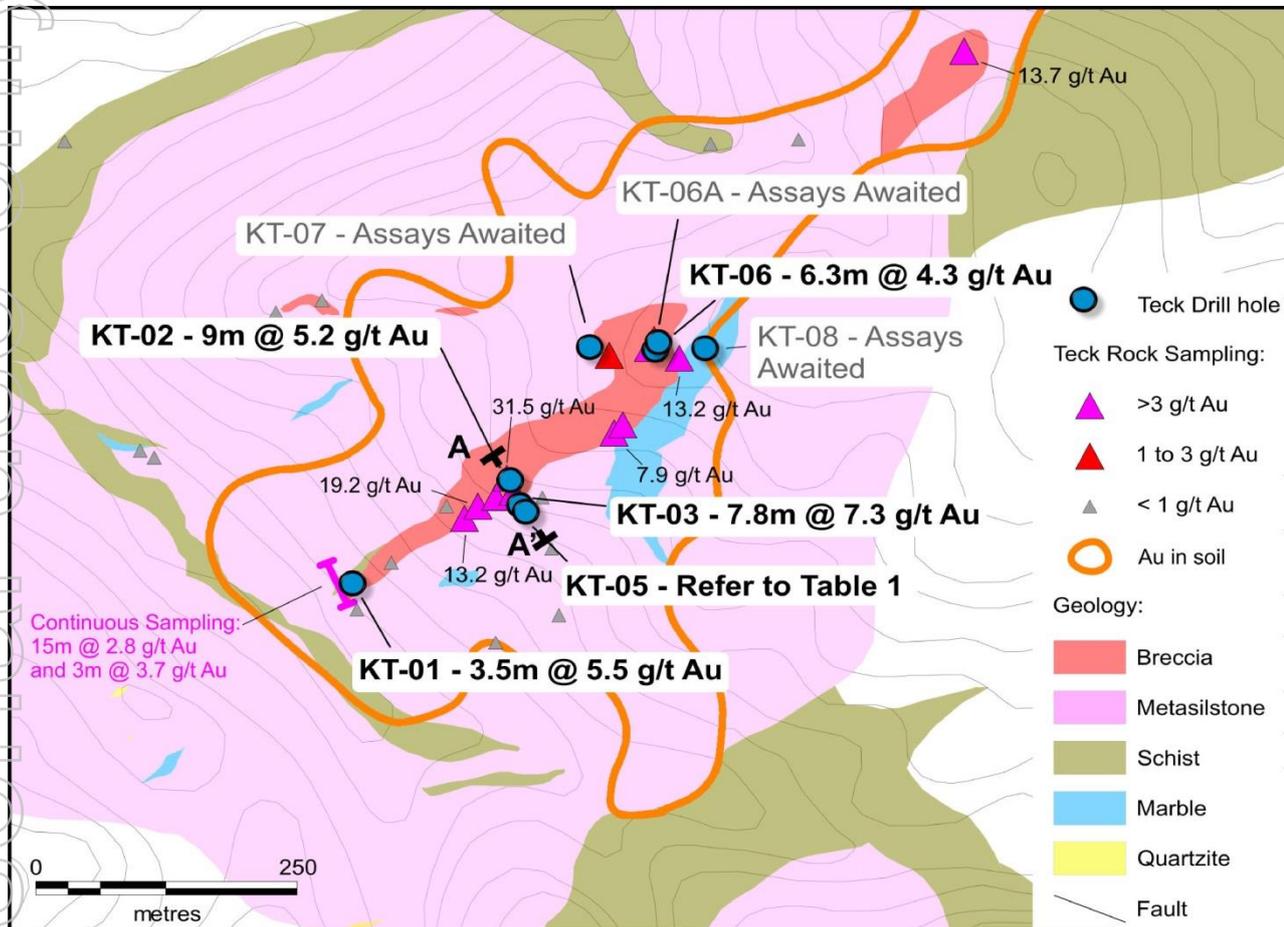


Figure 1: Kavaklitepe Kuzey Zone Drill Hole Locations, Gold Intersections and Location of Cross Section A-A'

The gold intersections reported for all holes are down-hole widths as the orientation of mineralisation is currently unknown.

Diamond drill core recovery continues to be locally problematic within the gold mineralised zones generally due to broken ground, particularly in oxidised near surface zones. The Company has set a minimum core recovery for reporting mineralised drill intervals of 50% and all intersections reported in full herein meet those criteria. However, several other gold mineralised intervals are not reported as JORC compliant length weighted average gold grade intersections due to lower core recovery. For those mineralised sections the individual samples with gold assays and their corresponding core recovery are included in full in Table 1 below.



Table 1: Kavaklitepe – Kuzey Zone: Significant (+0.5 g/t Au) Drill Hole Assays

HOLE	FROM (m)	TO (m)	CORE RECOVERY (%)	INTERVAL (m)	GOLD (g/t)	COMMENT
KT-01	0	3.5	63	3.5	5.52	Not previously reported
	3.5	9	17	5.5	0.83	Not previously reported
	9	9.8	79	0.8	0.83	Not previously reported
KT-02	0	9	82	9.0	5.2	ASX Release 16/06/16
	11.6	12.0	100	0.4	2.48	Not previously reported
KT-03	3.3	11.1	76	7.8	7.34	ASX Release 20/07/16
	23.9	25.6	93	1.7	0.94	Not previously reported
KT-04	2	3	38	1	1.03	New results
	3	5.7	63	2.7	1.53	
KT-05	3	4.5	43	1.5	0.53	
	5.5	6.5	26	1	3.79	
	7	8.5	41	1.5	2.24	
	14.7	15.9	60	1.2	10.8	
	15.9	17.9	34	2	2.65	
	17.9	19.9	66	2	0.84	
KT-06	0	6.3	71	6.3	4.29	
	58.4	61.3	84	2.9	1.13	
	66.0	73.7	78	7.7	1.17	
	80	83.8	83	3.80	0.56	
KT-06A	Results awaited					
KT-07						
KT-08						

Note that the actual gold grade of intersections with low core recovery may be either higher or lower than the individual assays reported above depending on the amount of core recovered, and the grade of the unrecovered core. As an example: if only 0.5m of drill core is recovered whilst diamond drilling over a 1m interval then the core recovery is calculated as 50%. If the 0.5m of core recovered is assayed and returns a gold grade of 10 g/t Au then we can be confident that material is mineralised, however we do not know the grade of the missing 50% of the sample interval. If that missing 0.5m was waste containing zero gold, the full 1m intersection would have a gold grade of half the assayed interval (5 g/t Au) which is the minimum theoretically possible for that interval. If the missing 0.5m of core was higher grade than the recovered core, then the actual gold grade of the 1m interval will exceed 10 g/t Au.

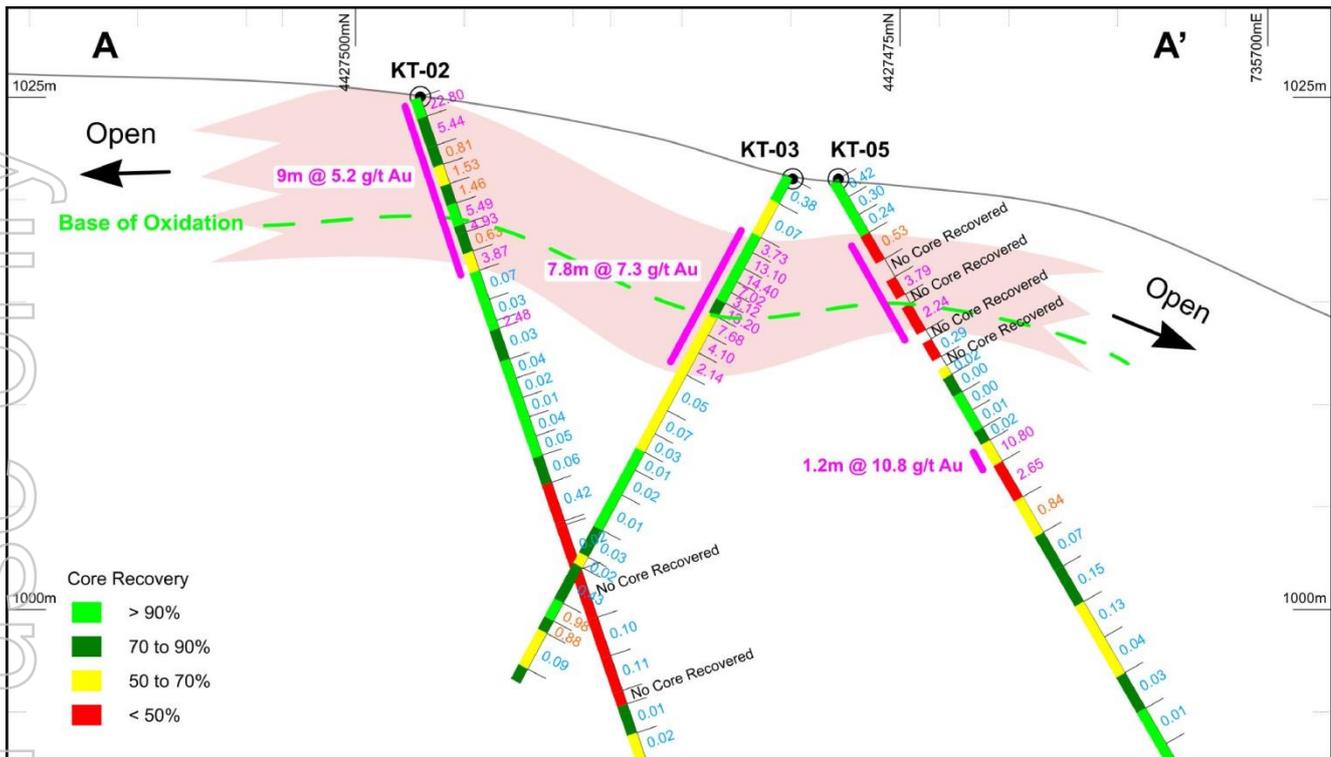


Figure 2: Kavaklitepe Kuzey Zone Cross Section A-A'

Reporting cut-off criteria and associated JORC tables are appended to the end of this release, whilst drill locations are shown in Figures 1 & 2 and Table 2.

Based on drilling and surface mapping to date, gold mineralisation in the Kuzey (North) Zone appears to be hosted in silicified and altered breccia zones that crosscut a meta-siltstone rock sequence.

As previously reported on the 16th June 2016, 11 out of 20 individual rock samples taken within the central core of the Kuzey gold-in-soil anomaly over a strike of 680m returned: 31.5 g/t Au, 19.2 g/t Au, 13.7 g/t Au, 13.2 g/t Au, 9.3 g/t Au, 8.3 g/t Au, 7.8 g/t Au, 4.8g/t Au, 4.3 g/t Au, 2.5 g/t Au and 1.1 g/t Au. The samples confirmed the location and tenor of high-grade gold previously reported along the axis of the gold-in-soil anomaly at Kuzey. **A new sample taken close to the collar of hole KT-08 returned 13.2 g/t Au from a finely crystalline quartz feldspar schist (Figure 1 & 3).**

Continuous rock chip samples taken along a forestry track returned 42.0m @ 1.5 g/t Au (entire mineralised interval, no cut-off grade applied), including: 3.0m @ 3.7 g/t Au and 15.0m @ 2.8 g/t Au (open ended to the south east) from the southern end of the Kuzey Zone. The zone partially replicated sampling by Columbus Copper that returned 54.0m @ 3.3 g/t Au, but as the new sample interval is open ended a direct comparison of the results cannot be made.



At the Kuzey Zone, a strong chargeability anomaly (>15-20 Mv/v) was identified by a gradient array survey trial completed by Zenith in 2015 directly beneath coincident high-grade surface rock chip samples (7.6 g/t Au, 22.7 g/t Au) and a 50 ppb gold-in-soil anomaly (maximum 6050 ppb Au).

Hole	Easting	Northing	RL	Depth	Azimuth	Dip
KT-01	735536	4427391	958	45	180	-70
KT-02	735687	4427497	1025	45.8	140	-70
KT-03	735693	4427480	1021	74.3	320	-60
KT-04	735695	4427477	1021	17.0	320	-50
KT-05	735694	4427478	1021	93.9	165	-60
KT-06	735825	4427630	1058	152.6	289	-60
KT-07	735762	4427633	1052	125.5	270	-60
KT-06A	735825	4427631	1058	15.0	280	-60
KT-08	735874	4427631	1062	100.4	280	-60

Table 2: Kavaklitepe Kuzey Zone Drill Hole Collars

Discovery Zone

Continuous rock chip samples taken along the northern edge of a forestry track in the Discovery Zone gold-in-soil anomaly (400m length) returned: 27.0m @ 1.4 g/t Au (entire mineralised interval, no cut-off grade applied), including: 12.0m @ 1.6 g/t Au, 3.0m @ 2.4 g/t Au and 4.4m @ 1.6 g/t Au (open ended to the south east). This gold mineralised zone was previously sampled by Columbus Copper and returned 21.0m @ 2.6 g/t Au. A direct comparison is not possible as the mineralised zone reported above remains open ended. A series of discontinuous rock chip samples taken along the southern edge of the forestry track and parallel to the interval reported above returned: 1.9m @ 1.1 g/t Au, 3.9m @ 1.5 g/t Au, 3.3m @ 1.6 g/t Au and 2.5m @ 2.6 g/t Au.

In addition, a single rock chip sample taken 12m north of the roadside sampling at the Discovery Zone returned 3.3-g/t Au over a 3.0 m sample length.

Guney Zone

The 1000m long Guney (South) Zone gold-in-soil anomaly is located approximately 500m southeast of the Kuzey Zone. Surface gold mineralisation has been identified in continuous rock chip samples taken at Guney, returning 4.7m @ 1.7 g/t Au, whilst another single rock sample taken 5m south returned 1.5 g/t Au. **New rock chip sampling has returned results of 1.3 g/t Au from one sample a further 300m west of the continuous rock chips sample traverse whilst another zone a further 400m south west returned a rock chip result of 1.6 g/t Au. Both zones sampled muscovite schists (Figure 3).**

A strong chargeability anomaly was also identified by Zenith's gradient array geophysical trial flanking the Guney Zone.

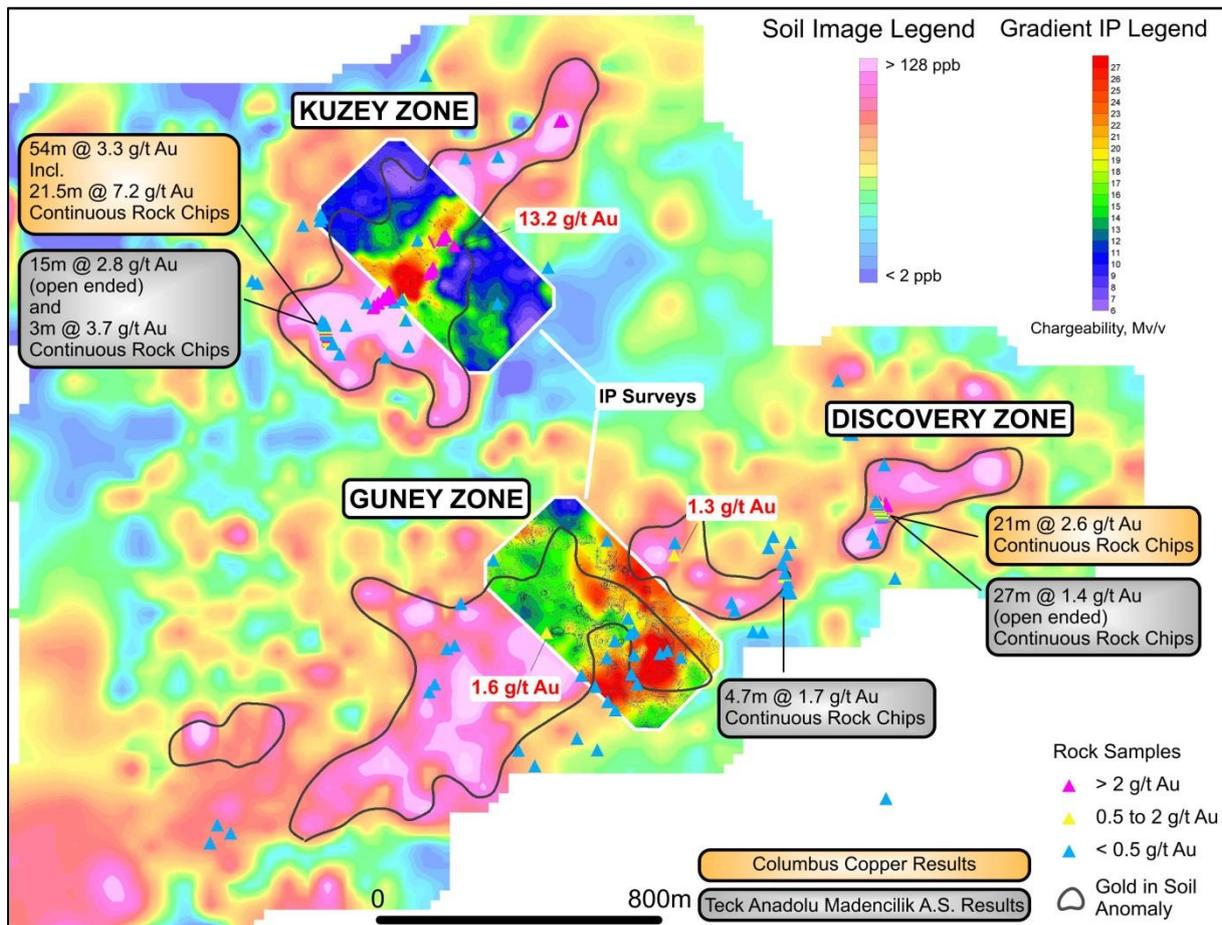


Figure 3: Plan Showing Kavaklitepe Project Gradient Array chargeability anomalies overlying Gold in Soil Geochemical Anomaly (only new rock chips results are annotated with gold grade)

Planned Programs at Kavaklitepe

This current program includes up to 1500 m of drilling, depending on the performance of the man-portable drill rig, along with geological mapping, a grid based hand pitting program to assess bedrock in areas of the gold-in-soil anomalies and more detailed ground geophysical surveys (IP and magnetics). It is anticipated that this program will be completed during the 2016 field season.

Background on the Kavaklitepe Project

Columbus Copper discovered mineralization at Kavaklitepe in 2013 by following up a stream sediment anomaly to a stream bed outcrop that returned 5.2 g/t Au. Subsequently a small trench in a nearby road cut returned 2.6 g/t Au over 21.0 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 Au 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 metres of continuous rock chips with an average grade of 3.3 g/t Au (no gold grade cut-off applied), including 21.5m grading 7.2 g/t Au. 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) Au. The soil sampling outlined a potentially mineralized zone measuring 850 metres by 250 metres and continuing for another 800 metres to the southwest. There are strong, coincident arsenic and antimony anomalies.

Kavaklitepe Joint Venture

Zenith's wholly owned subsidiary S2M2 Coal Pty Ltd previously announced that it had entered into an exclusive option to earn an interest in the Kavaklitepe gold property located in western Turkey from Columbus Copper (Zenith ASX release 23rd Dec 2013). That agreement was subsequently replaced by an option agreement with Teck Anadolu Madencilik A.S. ("Teck"), a Turkish subsidiary of Teck Resources Limited, (Zenith ASX release 30th November 2015) whereby Teck may earn a 70% interest in the Kavaklitepe gold project from Zenith by spending US\$700,000 in property expenditures including a minimum of 1500m of drilling. Following the initial option stage both companies can then continue to explore or develop the property by contributing their pro-rata costs or they may elect to dilute their interests according to a standard industry formula. If Zenith reduces its equity below 10% then the remaining interest is converted to a 5% net profit interest royalty.

Should Teck not exercise its initial option to earn 70% equity then Zenith will own 100% of the project with Teck retaining a 2% net smelter royalty.

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.

24th August 2016

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About Zenith

Zenith is advancing its project portfolio of high-quality, gold, lithium and base metal projects whilst building a superior project base of high-quality advanced exploration assets:

San Domingo Lithium, Arizona USA (ZNC 100%)

- 9km x 1.5km lithium pegmatite field, initial surface sampling returned: 5m @ 1.97%Li₂O including 2.4m @ 2.49% Li₂O Rock
- Surface sampling in progress

Kavaklitepe Gold Project, Turkey (Teck earning 70%)

- Recent (2013) grass roots gold discovery in Tethyan Belt
- Large, virtually drill-ready, high order gold soil / IP anomaly >1km strike
- Rock chip traverses to 54m @ 3.33g/t gold, including 21.5m @ 7.2 g/t gold
- Drilling in progress

Develin Creek Copper-Zinc-Silver-Gold, QLD (ZNC initial 51%, option for 100%)

- 3 known VHMS massive sulphide deposits with JORC resources, 50km of strike of host volcanics
- 2011 drilling outside resource; 13.2 metres @ 3.3% copper, 4.0% zinc, 30g/t silver and 0.4g/t gold
- Drilling to extend known deposits, geophysics, geochemistry to detect new targets

Mt Minnie Gold Project, WA (ZNC 100%)

- Major regional fault. Alteration, geochemistry, rock samples to 21.5 g/t Au
- Drill testing planned 2016

Earaheedy Manganese Project, WA (ZNC 100%)

- New 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.
- Seeking development partner/ buyer for iron project

Other

- Evaluating new lithium project opportunities