



27th September 2017

Exploration Update – American Lithium JV

Activities on USA/Mexican lithium projects are progressing well, fully funded under the BraddaHead Ltd Joint Venture, with positive results received from several projects:

Zacatecas Lithium Brine Project - Mexico

- ◆ 11 shallow auger holes (15-27m deep) completed at San Juan Salar. Assay results show strong lithium in salt lake sediments up to 874ppm Li, confirming highly anomalous surface sample results;
- ◆ Near surface water samples are not strongly saline, perhaps due to rainwater dilution. However lithium and total salinity in brine samples increase with depth in all holes pointing to deeper target;
- ◆ MT geophysical survey planned to assess deeper brine targets prior to drill testing.

Nevada USA Lithium Brine Projects

- ◆ A new lithium brine discovery in Nevada announced recently by a competitor company adds strong endorsement to the Company's lithium brine targeting methodology, and overall prospectivity of Zenith's nearby Wilson Salt Flat and Spencer projects.
- ◆ Recently completed MT geophysics at Wilson Salt Flat highlights a strong conductive target similar to new discovery. Permitting in progress for initial drilling.

Burro Creek Lithium Clay Project – Arizona USA

- ◆ Further metallurgical testwork has continued to impress with calcine-water leaches recovering 89% lithium on Burro Creek clay samples;
- ◆ New results are in addition to previous testwork that resulted in high lithium recoveries to 90% from simple acid leaching;
- ◆ Permitting is progressing well to allow resource drilling of a flat lying, thick lithium clay horizon with potential for a large tonnage deposit.

American Lithium Joint Venture partner Bradda Head Ltd anticipates listing its interests in the Joint Venture on London's Alternative Investment Market (AIM) before year end. Zenith looks forward to accelerated exploration spend post-listing and the benefit of potential transparent market valuation of this asset.

Zenith Minerals Limited ("Zenith" or "the Company") is pleased to provide an update on its USA and Mexican lithium joint venture exploration projects, with work being sole funded by private company BraddaHead Ltd, associated with prominent UK investor Jim Mellon. Shallow auger results at the Zacatecas lithium brine project corroborate a deeper lithium brine target, metallurgical testwork on Burro Creek clay samples continue to confirm high lithium recoveries whilst the permitting process to allow resource drilling to commence at Burro Creek is continuing to progress well.

Additionally, a new lithium brine discovery in Nevada announced by a competitor company adds strong endorsement to the Zenith's lithium brine targeting methodology and to the overall prospectivity of the Wilson Salt Flat and Spencer projects, also located in Nevada.

Corporate Details

ASX: ZNC

Issued Shares (ZNC)	189 M
Listed options (ZNCO)	24 M
Unlisted options	3.5M
Mkt. Cap. (\$0.10)	A\$19 M
Cash (Jun 2017)	A\$2.0 M
Debt	Nil

Directors

Michael Clifford:
Managing Director

Mike Joyce:
Non Exec Chairman

Stan Macdonald:
Non Exec Director

Julian Goldsworthy:
Non Exec Director

Major Shareholders

HSBC Custody, Nom.	6.6%
City Corp Nom	6.2%
Nada Granich	6.1%
Abingdon	4.1%
Miquilini	4.1%

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Zacatecas Lithium Brine Project - Mexico

A program of 11 shallow auger holes (from 15m to 27m maximum depth) was completed at the Zacatecas Lithium Project in central Mexico as foreshadowed in the ASX Release on the 26th June 2017. The access to a local auger rig provided an opportunity to assess the very near surface waters and sediments of the San Juan Salar where Zenith's surface sediment results returned highly encouraging values up to 1046ppm lithium in the top 1 metre over an area 4km x 2km.

The auger holes revealed subsurface clay and sand horizons with salt and gypsum, and returned persistent strong lithium values up to 874ppm Li. As expected, basement was not reached in any of the holes (Figure 1).

Encouragingly, all auger holes intersected brine at depths ranging from 5 metres to 15 metres, with both the lithium concentration (maximum 7mg/l Li) and salinity increasing with depth in all holes.

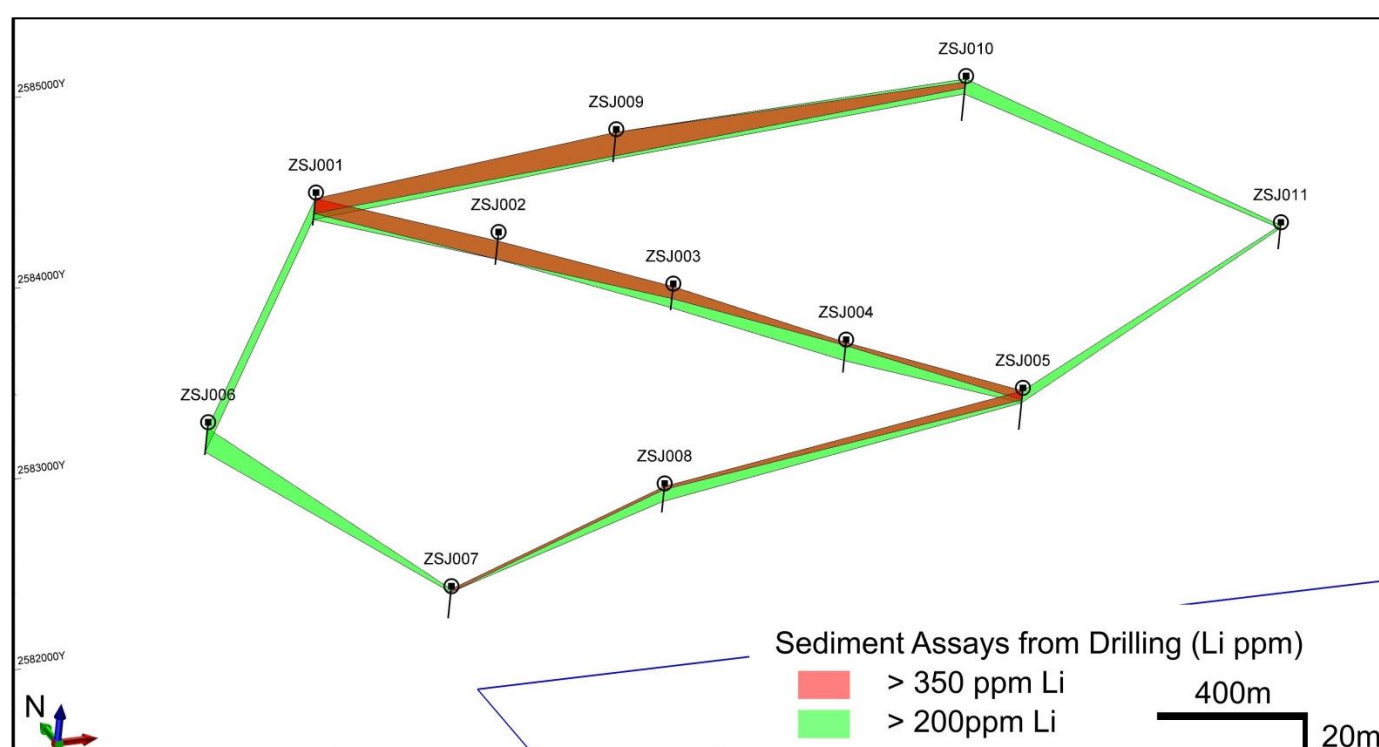


Figure 1: Zacatecas Auger Drilling Sediment Results – 3D View Looking northeast

Nearest to surface the water samples were not strongly saline and may have been diluted by rainwater. The lithium brine concentration and total salinity increased with depth in all holes pointing towards a deeper drill target. The Zacatecas brine targets are considered by the Company to be most similar to those hosted in the immature salt lake systems such as at Clayton Valley (host to the USA's only lithium brine operation, Silver Peak in Nevada where the lithium brines aquifers are stratified and occur in specific aquifers towards the deeper portions of the host basins (Figure 2). Lithium brine projects can be subdivided into two broad deposit types, depending on the salt lake/salt basin (salar) characteristics (Houston et al., 2011):

- Mature salars (those containing extensive thicknesses – often hundreds of meters - of halite (salt), such as those in the Argentina and Chile- the Salar de Atacama, and the FMC Hombre Muerto operation). These Mature salt dominated salars are characterized by having high permeability and specific yields (to a maximum of ~ 15 % Sy) near surface, with the porosity and permeability decreasing rapidly with depth. In these salars the brine resource is essentially between surface and 50 m below surface, as below this depth there is limited permeability in the salt, due to salt recrystallization and cementation of fractures; and
- Immature salars, which are dominated by clastic sediments, with limited thicknesses of halite.-, such as those known at Clayton Valley in Nevada. and Zenith's model for Zacatecas Immature salars conversely have porosity and



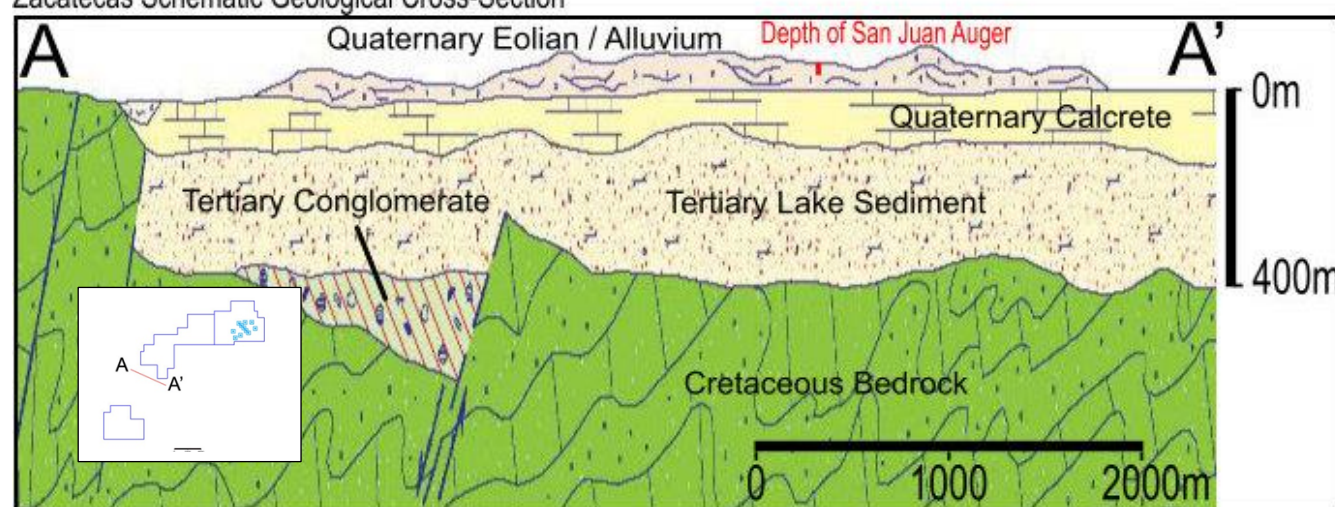
permeability controlled by individual layers within the salar sequence. The porosity and permeability may continue to depths of hundreds of meters in clastic salars.

A schematic cross section produced by the Servicio Geológico Mexicano (Figure 2a) located immediately west of Zenith's San Juan Salar at Zacatecas, shows interpreted deep (to 400m) Tertiary Lake Sediments beneath a calcrete layer that may act as an aquaclude (water barrier), segregating ground water layers potentially of different salinity and composition.

A comparative schematic section of the Clayton Valley basin is shown in Figure 2b at the same scale to highlight similarities in the model, illustrating the near surface nature of the recent 15-27m deep auger holes at San Juan Salar.

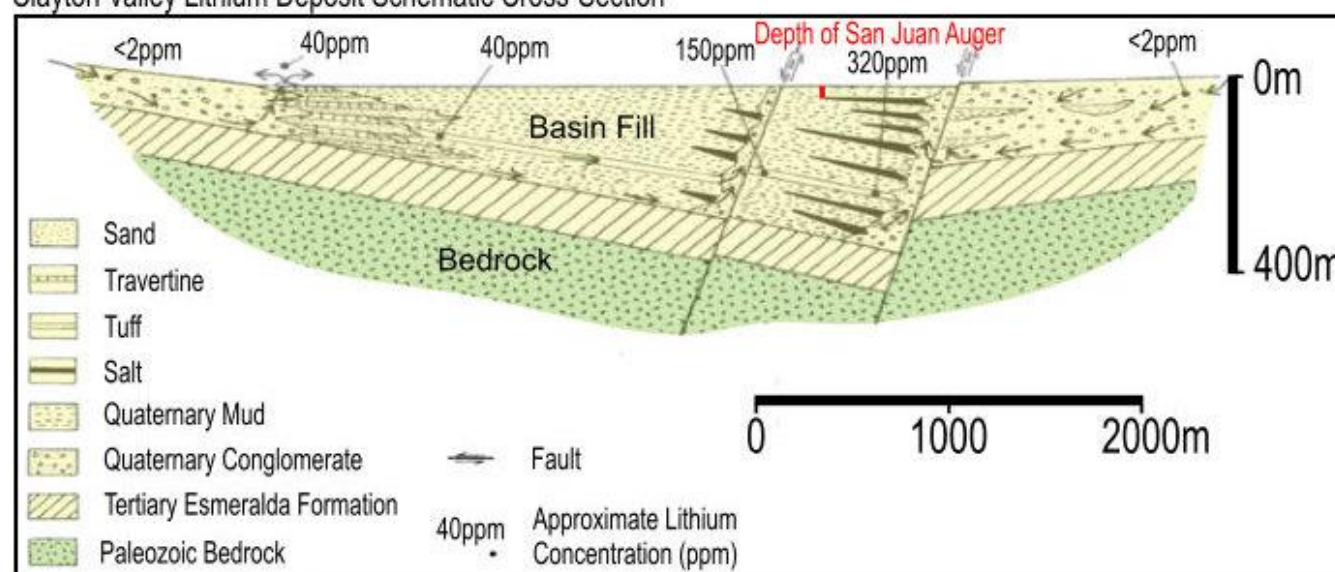
An MT geophysical survey is planned to assess these deeper brine targets at San Juan and Illescas prior to drill testing.

Zacatecas Schematic Geological Cross-Section



Modified after El Rucio Geological Map (F13-B39) 2001 - Servicio Geológico Mexicano

Clayton Valley Lithium Deposit Schematic Cross-Section



Modified after Davis et al. 1986

Figures: 2a and 2b: Comparative Schematic Cross Sections - Zacatecas and Clayton Valley Lithium Brine Operation Area. The location of the Zacatecas section in relation to Zenith's tenements is shown in the inset plan.



Lithium Brine Projects – Nevada USA

A new lithium brine discovery in Nevada by Caeneus Minerals Limited announced to the ASX on the 19th September 2017 adds strong endorsement to the Company's lithium brine targeting methodology and the overall prospectivity of Zenith's nearby Wilson Salt Flat and Spencer projects. The Company is using a near identical exploration approach to Caeneus in the assessment of its two lithium brine properties (Figure 3).

Recently released (27th July 2017) geophysical results for the Company's Wilson Salt Flat project (Figure 4a) show striking similarities to those of the Caeneus' Columbus Marsh discovery (Figure 4b).

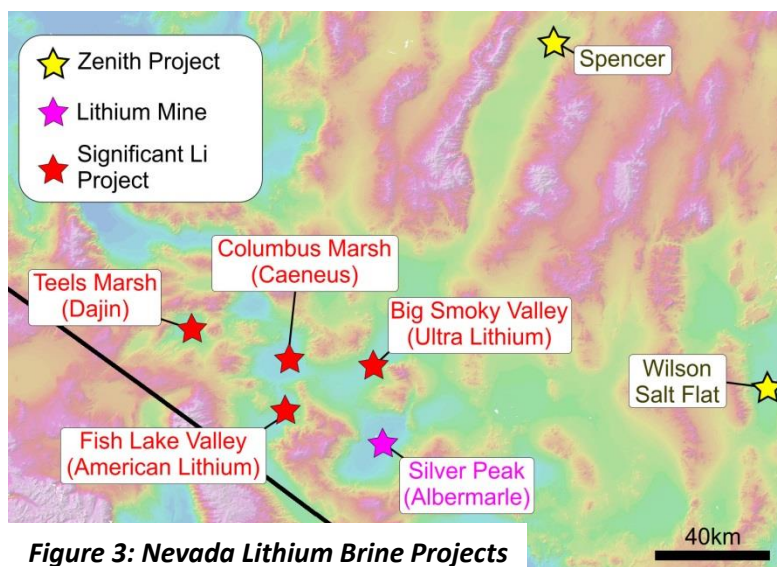
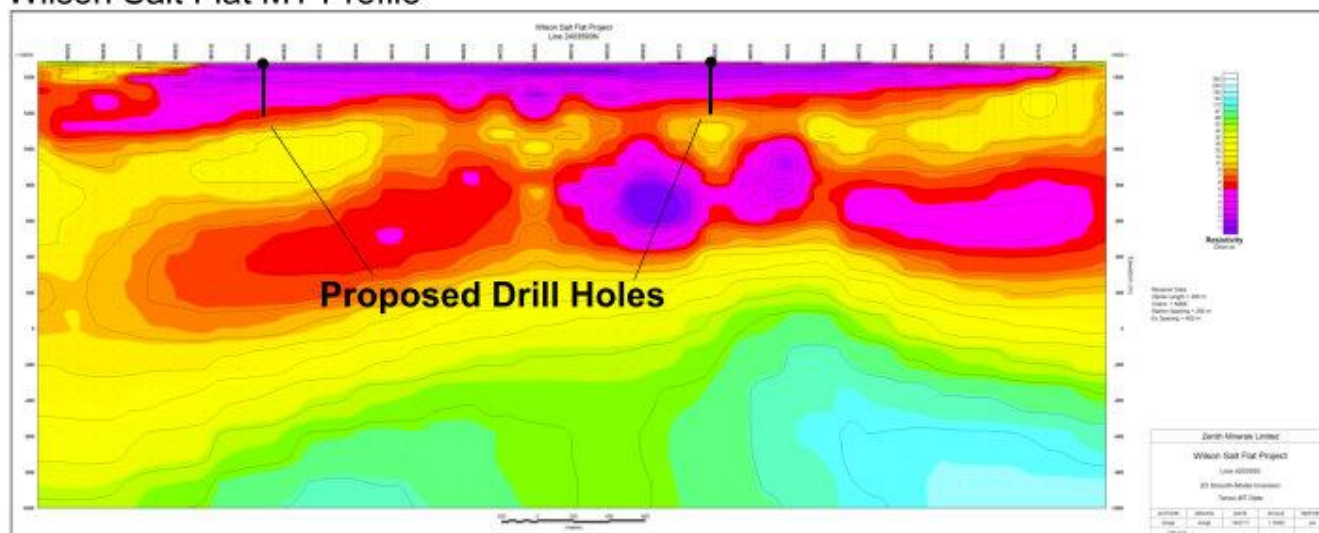


Figure 3: Nevada Lithium Brine Projects

Wilson Salt Flat MT Profile



Columbus Marsh MT Profile

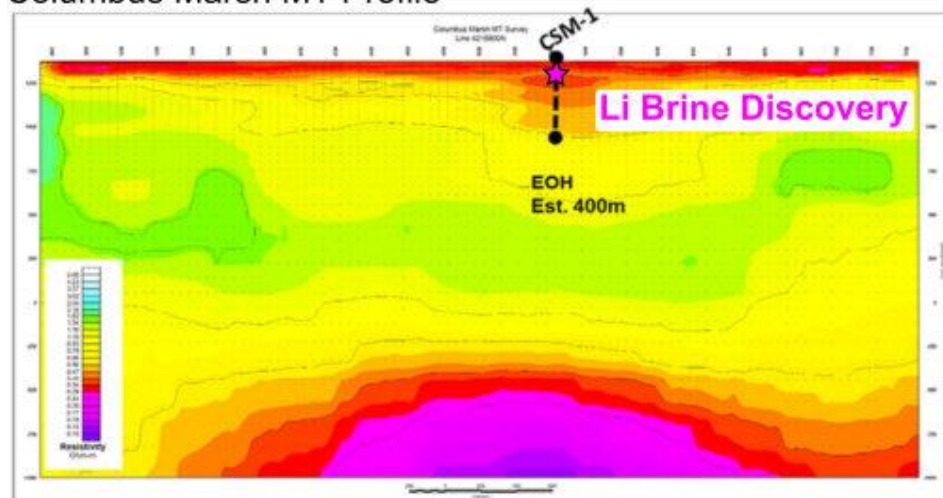


Figure 4a and 4b : Wilson Salt Flat (Zenith JV) & Columbus Salt Marsh Lithium Brine (Caeneus Minerals) Comparative Magnetotellurics Geophysical Signatures



The **Wilson Salt Flat Project** is located 140km east of the lithium production area of Silver Peak in Clayton Valley. The 3,360 acre project is located in the Railroad Basin and encompasses highly anomalous lithium in surface sediment samples up to 192ppm lithium coincident with a salt lake and discrete gravity low interpreted to be a closed basin.

Passive seismic geophysical surveying by Zenith confirmed the presence of a thick, sedimentary sequence bounded by basin margin faults. The geophysical modelling identified structures and architecture that are consistent with the lithium-bearing brine deposit models identified in the nearby Clayton Valley lithium production area. Whilst an MT geophysical survey shows a strong conductive layer in the upper 200 – 300 metres from surface that confirms the lithium brine target.

Drill permitting is in progress with a plan to commence testing in late 2017.

The **Spencer Project** is located in near the lithium production area of Silver Peak-Clayton and is comprised of two claim blocks totalling 2,920 acres. The project encompasses highly anomalous lithium in surface sediments and water samples, in close proximity to the Spencer hot spring that lies on the eastern margin of the North Smoky Valley basin, coincident with inferred major basin margin faults.

Initial surface sediment samples taken from the salt lake surface by Zenith are enriched in lithium up to 550ppm (ASX Release 6th December 2016) supporting the hypothesis of lithium brines being present in the sub-surface.

The conceptual target model is the same as that described for the Wilson Salt Flat lithium brine project. Infill surface sampling and electrical geophysical surveys followed by drilling are the next steps in exploration of the Spencer project.

Burro Creek Lithium Clay Project – Arizona USA

Further metallurgical testwork has continued to impress with calcine-water leaches recovering 89% lithium (up from 75% on previous tests (ASX Release 27th July 2017) on Burro Creek clay samples using a similar method as being used in a pilot plant for the Sonora lithium clay project located in Mexico owned by Bacanora Minerals Limited (TSX:BCN, market capitalisation \$C219 million).

New results are in addition to previous testwork (ASX Release 27th July 2017) that resulted in high lithium recoveries to 90% from simple acid leaching using a simple sulphuric acid leach at a temperature of 80°C. Acid consumption in those tests was similar to that from tests on raw ore from the Rhyolite Ridge lithium project in Nevada reported on 1st June 2017 by Global Geoscience Limited (ASX:GSC, market capitalisation \$A209 million).

Background - On the 10th November 2016 the Company announced that it had secured an exclusive option to acquire a 100% interest in the Burro Creek lithium clay project located in central western Arizona, USA. Located in an active mining district, Freeport M^cMoRan's operating Bagdad porphyry copper mine is located 10km from the Burro Creek project.

Surface sampling by the Company of the lithium clay exposures (ASX releases 10th November 2016 & 13th January 2017) returned results up to 33.6m @ 980ppm Li whilst grab samples of relict drill spoil from shallow holes completed during a small, historical program to test the clay for industrial purposes returned results including: 1650ppm Li and 1290ppm Li. The lithium bearing clay zone is a near surface, flat lying horizon, with a true thickness greater than 30 metres, indicating excellent potential for large tonnages of lithium bearing clay within the Burro Creek project.

Permitting to allow resource drilling to commence is progressing well.

American Lithium Portfolio

Zenith has assembled an outstanding 100% owned lithium project portfolio including lithium brine, lithium pegmatite and lithium clay targets in the USA and Mexico.



Lithium projects worldwide are of three types: brines, pegmatites and clays. The major lithium brine operations are located in South America (Chile, Argentina and Bolivia), China and Nevada, USA. Traditionally lithium brines are extracted from salt lakes into surface ponds where they are concentrated by solar evaporation and then fed into a processing facility with output as lithium carbonate for sale to battery manufacturers. Zenith's Mexican and Nevada lithium projects are lithium brine plays. Zenith's **Spencer** and **Wilson Salt Flat** brine projects in Nevada, USA are close to both Tesla's Gigafactory and to Albermarle Corporation's Silver Peak-Clayton Valley lithium brine operation, the only operational lithium project in the USA. Zenith's three new concessions: Illescas, San Juan and San Vicente make up the **Zacatecas** lithium brine project in the emerging lithium brine district of San Luis Potosi State, Mexico.

Lithium pegmatite projects are exploited as traditional hard rock open pit mines (eg Australia's Greenbushes Mine) where concentrates of the primary lithium mineral spodumene are sold to third party processors who convert the concentrates to lithium compounds suitable for use by battery manufacturers. Zenith's **San Domingo** project in Arizona contains abundant spodumene bearing lithium pegmatites over 9 km strike.

Zenith's **Burro Creek** lithium clay project in Arizona is comparable to other lithium clay projects in the USA and Mexico subject to resource and development studies (e.g: Sonora project (Banacora –TSX).

Zenith's Nevada, Arizona and Mexico lithium projects are perfectly positioned to provide future supply to the growing USA domestic lithium battery market. Tesla Corporation has commenced construction of its lithium battery manufacturing facility (Gigafactory) outside Reno Nevada.

Bradda Head Joint Venture

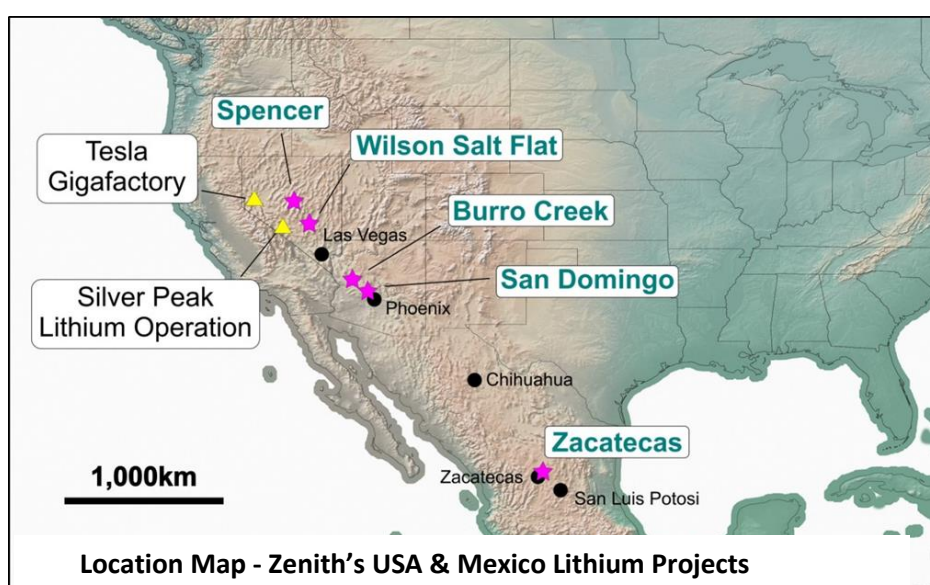
The American lithium transaction with Bradda Head included a cash refund of Zenith's historic expenditure of US\$500,000 (~A\$660,000), US\$5 million (A\$6.6 million) in exploration expenditures over 3 years by Bradda Head to earn 55% project interest, a one off right for Zenith to contribute at 45%, or be free carried at 30% to the end of pre-feasibility studies on two projects. Bradda Head must spend a minimum of US\$500,000 on exploration on the projects and drill at least one project before it can withdraw.

In addition, Jim Mellon and other sophisticated investors completed a concurrent share placement of A\$1.5 million (ASX Release 15th March 2017) comprising 15 million ZNC ordinary shares @ 10c plus one free attaching ZNCO listed option for every 5 shares issued.

Key Zenith personnel will initially dedicate up to 25% of their time to the advancement of the American lithium projects at cost, to ensure seamless progression of the projects and allow transfer of the technical knowledge base. The partners have also agreed to collaborate on any additional lithium projects that either party acquires within the same jurisdictions.

The transaction brings together the financial strength and market contacts of Bradda Head with the strong technical knowledge of the Zenith team and its USA and Mexican associates to advance these exciting lithium projects.

Bradda Head Ltd anticipates listing its interests in the joint venture on London's Alternative Investment Market (AIM) before years end.



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.

27th September 2017

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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, including 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 and 16.4m @ 4.7 g/t Au from 82.1m depth. Drilling to recommence in mid-September 2017.

American Lithium Projects (Bradda Head earning initial 55%)

Zacatecas Lithium Brine Project, Mexico

- New tenure (26,000 acres) over extensive system of salt lakes within an emerging lithium brine district
- 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).
- Electrical geophysical surveys planned

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 - Surface sampling and mapping prior to drill testing

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)

- Large scale lithium (Li) clay target under exclusive option - Metallurgical testwork to assess ease of extracting lithium – ongoing, permitting for trenching and drilling in progress

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

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

- 100% owned exploration licences covering 500km² in emerging Forrestania lithium district - Surface sampling defined two new gold drill targets - permitting in progress.

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

- New gold zone discovery with rock chip sampling results up to 6.74 g/t gold. Trenching shows widespread bedrock gold including 5m @ 3.92g/tAu.

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. Follow-up sampling planned

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

- Extensive outcropping pegmatites (3km x 2km) in north east of tenure, encouraging lithium rock chip sample results up to 0.34% Li₂O as well as widespread, high-grade tantalum up to 1166ppm Ta₂O₅.

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 - Seeking development partner/ buyer for iron project



Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	<ul style="list-style-type: none"> - Drill sediment samples were collected from auger 1.8m rods. - Drill brine samples were collected using a stainless steel bailey tube (1m long for 1 7/8" diameter). Samples were collected at 5m intervals and at end of hole.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples are believed to be representative of the layers they are derived from.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	<ul style="list-style-type: none"> - Each sediment sample was originally about 15kg (full length of auger flight along rod length), then homogenised and split (cone and quartered) until a 2-3kg sample was obtained for laboratory assays. A small portion was preserved for density measurements and 5kg were saved for future work. At the laboratory, samples were dried and pulverised before assaying. - Each brine sample was collected at least two days after drilling. A stainless steel bailey tube was introduced inside PVC casing for collection at desired depth. 500ml of brine was collected, 250ml was dispatched for laboratory assay and 250ml was saved for future tests.
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i>	Auger drilling was completed using an Atlas Copco D600 drill rig equipped with 1.80m long and 3 1/2" diameter rods.



Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Auger samples were visually checked in the field by a qualified geologist for recovery, moisture and contamination
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Drilling was performed dry, without using water or additives so as not to contaminate the brine samples.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	Sample recovery was very high and no sample bias is believed to have occurred.
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	<ul style="list-style-type: none"> - Sediment samples underwent detailed logging through the entire hole, with record kept of colour and lithology. A small representative sample of RC chips was collected for each interval sampled. An extra 5kg sample was preserved for future tests. - Brine samples were succinctly described. An extra 250ml sample was preserved for future tests.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Each sample was described in details
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No drill core
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<ul style="list-style-type: none"> - Sediment samples were collected at the rig from auger rods. Each sample (about 15kg) was homogenised and split to a 2-3kg sample for assay. Samples were recorded if dry or wet. - Brine samples were collected using a stainless steel bailey tube.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<ul style="list-style-type: none"> - Sediment samples were sent to SGS Durango where they were dried and pulverised prior to assaying. - Brine samples were sent to ALS Environmental Services Tucson, USA.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QAQC procedures included the insertion of two certified reference materials (one for sediments and one for brine sample) and one sediment blank for each drill hole.



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.	Samples are considered to be representative of the intervals sampled. No field duplicate was sampled
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul style="list-style-type: none"> - Each sediment sample was about 2 to 3kg in weight and selected to be representative of the selected column of material. - Each brine sample was 250ml, which is considered to be representative of the brine at the selected depth
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.	<ul style="list-style-type: none"> - Sediment samples were pulverised and assayed by ICP-AES after 2 acid (Aqua Regia) digest - Brine samples were assayed by ICP-OES after 2 acid (Aqua Regia) digest
	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 handheld tools used
	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.	Field QAQC procedures included the insertion of certified reference materials for lithium and blanks. QA/QC reviews indicated excellent correlation between reference materials and analyses reported by the laboratory.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	An independent contractor has observed the assayed samples.
	The use of twinned holes.	No hole was twinned
	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
	Specification of the grid system used.	The grid system used was UTM WGS 84 – Zones 13 & 14



<i>Location of data points - continued</i>	<i>Quality and adequacy of topographic control.</i>	Topography control is limited for these samples, as elevation data from GPS are reliable to plus minus 5m.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes were completed at several locations 500 to 1,500m apart.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	These data alone will not be used to estimate mineral resource or ore reserve
	<i>Whether sample compositing has been applied.</i>	No compositing applied
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	No bias is expected from sampling
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No sampling bias is expected to have occurred
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Samples were kept in numbered bags until delivered to the laboratory
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	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 Zacatecas project is located in San Luis Potosi State Central Mexico. 3 concessions comprise the project which is 100% beneficially owned by Zenith owned
	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.	The concessions are mining leases but any exploitation of mineral resources is subject to state and federal permitting.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No historical work is known to have occurred over the claim area
Geology	Deposit type, geological setting and style of mineralisation.	Clayton Valley-style lithium brine deposit
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 diagrams in this release showing all auger holes and results.
	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.	
Data aggregation methods	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.	
	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.	No cut-off was applied to the data.
	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	No aggregation used



	<i>be shown in detail.</i>	
<i>Data aggregation methods - continued</i>	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	All holes were drilled vertical and are appropriate to test horizontal sediment layers.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Drill holes are perpendicular to horizontal sediment layers.
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	Downhole lengths reported are interpreted to reflect true widths.
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Refer to descriptions and diagrams in body of text
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Results included in maps in the body of text
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<p>A passive seismic survey composed of 7 lines across the three concessions was completed in January 2017</p> <p>Surface sediment samples were collected over a succession of sampling campaigns in 2016-2017.</p>
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Geophysical methods (MT) will be used to define basin architecture and depth of potential brines. Deeper drilling will test for the presence of brine
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to diagrams in body of text