

## EXPLORATION UPDATE

- *Drill targeting underway at Fenton Gold Project*
- *Work programs commenced at the Shoobridge Lithium Project*
- *Regional sampling completed at Fenix Lithium Project*
- *High Priority Manganese projects identified*

DeSoto Resources Limited (ASX:DES or 'Company') is pleased to provide an update on its Northern Territory Gold and Lithium Projects, as well as its manganese project generation activities.

### Fenton Gold Project

- Fixed Loop Electrical Magnetic (FLEM) and Induced Polarisation (IP) geophysical surveys to be completed in April across key structures controlling the Fenton gold trend in advance of a +3,000m Diamond Drill (DD) Program.
- Re-processing of high-resolution aeromagnetic data (70m line spacing) and evaluation of historic Airborne EM has been completed.
- Structural information from historic drilling confirms the broadly antiformal structure (Fig. 1) with a major fault interpreted along the eastern limb of the Fenton fold complex, separating high and low magnetic intensity signatures.

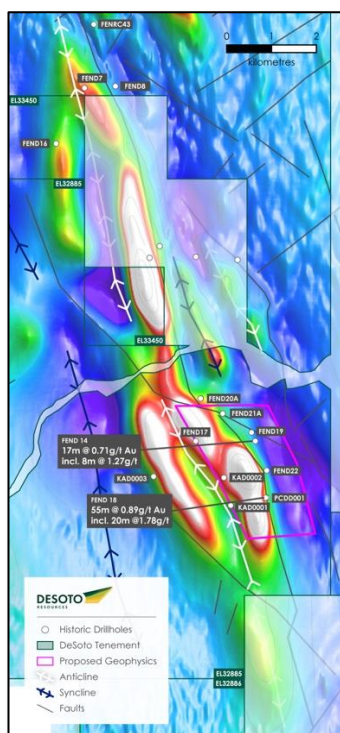


Figure 1 – Fenton Project - Proposed FLEM and PDIP areas over historic drilling.

- The work completed to date has demonstrated that geophysics is a powerful exploration tool at Fenton, with current and future work designed to identify key structures which have the potential to host iron sulphide rich gold mineralised zones.
- Historic drilling by Homestake Gold returned good grades at Fenton including FEND18 (55m at 0.89g/t gold from 418m incl. 20m at 1.74 g/t gold from 423m) and FEND14 (17m at 0.71g/t gold from 610m)<sup>1</sup>
- In the mid-1990's Homestake Gold, previously a 50% owner of the Super Pit in Kalgoorlie, the Plutonic gold mine and the +40Moz Lead Gold deposit in South Dakota, was undertaking a global search for "Lead-style" gold deposits.
- Fenton was identified as having similarities with the host rocks and structure at Lead, especially in the South Alligator Group, with specific similarities between the Koolpin Formation and Homestake Formation, which hosts the Lead deposit.

### Shoobridge Lithium Project

- Ground reconnaissance, mapping and field work to begin over the Company's Shoobridge Lithium Project (Shoobridge) in advance of a regional-scale stream sampling program targeting lithium potential approximately 1-3km outboard of mapped granite contacts.
- Shoobridge directly abuts the Company's Fenton Gold Project and Core Lithium's (ASX:CXO) Shoobridge Project, located within the Tipperary pegmatite district, including the Shoobridge pegmatite field and the Plateau Point pegmatite field.
- Shoobridge pegmatites are considered analogous to those in the Bynoe pegmatite district and presents potential for lithium-rich pegmatite systems.
- Tenements EL33188 and EL33225 (Fig.2) were still in application at the time of the Desoto initial public offering, however both are now granted and form a central part of the Company's Lithium exploration in the Northern Territory.

### Fenix Regional Lithium Sampling Program

- First-pass stream (129) and rock chip (8) sampling has been completed at the Company's Fenix Project, located in the Northern Territory, and has identified two broad areas of lithium anomalism (Fig.2).
- New areas of interest show elevated Lithium responses with pathfinder element support, including elevated Cs, Be, Ta, Rb, Sn, W and Tl.

<sup>1</sup>ASX Announcement - 1DES ASX Announcement – Prospectus (14th December 2022)

- A single granite sample returned a ratio that indicates a high degree of fractionation ( $K/Rb < 150$  &  $Mg/Li < 30$ ) providing potential to host (Lithium-Caesium-Tantalum) LCT mineralisation.
- This first pass lithium exploration program has identified areas of interest, and demonstrated evidence of granite fertility and fractionation, particularly in the south of the project.
- Lithium reconnaissance stream, soil and rock sampling programs testing areas of interest will recommence as soon as the wet season allows.

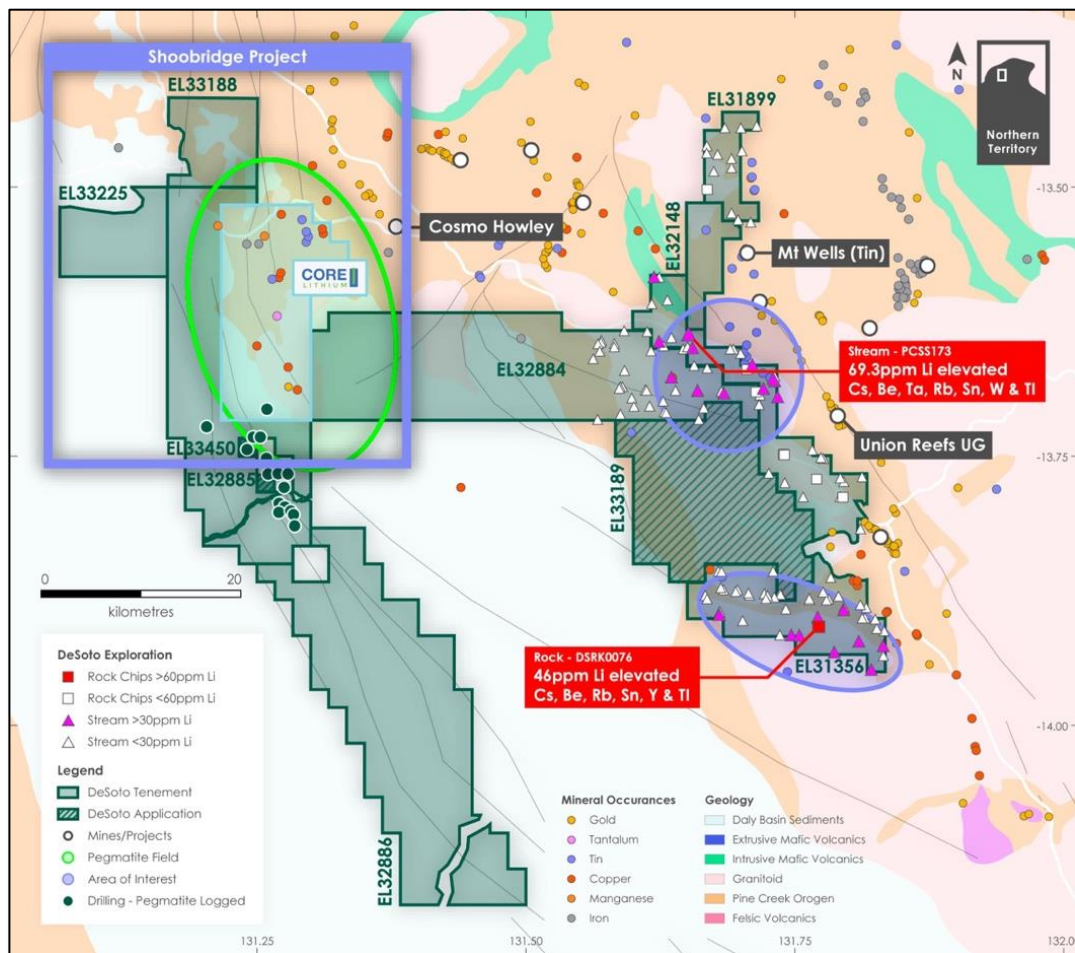


Figure 2 - Desoto's Fenton, Shooobridge and Fenix Project's, with new first-pass stream and rock chip results from the Fenix Project.

### Emerald Springs Gold Target

- A 1,500m Reverse Circulation (RC) drilling program is planned to test for prospective Pine Creek gold mineralised structures as part of the 2023 Northern Territory drill programs.

- At the Emerald Springs anticline gold target, a coherent >20ppb Au anomaly with associated As halo (>150ppm As) has been defined over a 900m strike length<sup>2</sup> and will be tested.

### Manganese Project Generation

- The Company has identified its highest priority manganese project and country target areas.
- Priority targets are focused on high-value battery metal focused manganese-rich opportunities with due diligence and groundwork underway.
- DeSoto will continue to pursue a range of manganese targets generated from its global review of manganese opportunities, as it believes manganese and specifically manganese sulphate to be a key material for the current global energy transition.

### Fenix Regional Lithium Sampling Program (Detailed)

Lithium exploration commenced at DeSoto's Pine Creek Conceptual Lithium project in late 2022 and included a regolith terrain analysis, rock chip sampling, and a subsequent stream sediment sampling programme.

This first pass lithium exploration program has identified areas of interest, and demonstrated evidence of granite fertility and fractionation, particularly in the south of the project. Follow-up lithium reconnaissance stream, soil and rock sampling programs testing areas of interest will recommence as soon as the wet season allows. In addition, these programs will be expanded to explore the recently granted Shoobridge West licences, and the Shoobridge East area.

An initial regolith assessment identified a well-developed stream network over the Proterozoic Birrindudu Basin and Pine Creek Orogen sediments and granites in the project area. The stream network incises outcropping granites and sediments, along with areas of shallow sand cover. The position of these sands in the landscape suggested that they are colluvial rather than alluvial and that they would be appropriate for first pass stream sediment sampling. Elevated remnants of an older lateritic land surface located in the SE and NW of the project were assessed to require rock and soil sampling including in the recently granted Shoobridge West licence areas.

Following the initial regolith assessment, stream sediment sampling was determined to be an appropriate sampling method for the granted eastern licences. The first pass stream sampling program was designed with a sample density of 1 sample per 2.8sqkm over catchments in EL31356, EL31899, EL32148 and EL32884 for a total of 129 samples. In addition to the streams a total of 8 rocks comprising 7 granite and 1 pegmatite, were also collected from the area. All samples were analysed for a 61 multi-element suite including rare earths in order to assess granite prospectivity and fertility for lithium mineralisation.

The stream geochemical results indicate that although absolute lithium concentrations are low (max 63.9ppm; PCSS173), two areas of elevated Li (>30ppm) were identified by the survey, one in the north and one in the south (Fig 1). The southern area has strongest pathfinder element

<sup>2</sup>Encouraging initial rock results from Fenix up to 4.1g/t Au & 6.5% Cu (31<sup>st</sup> January 2023)

support with Li associated with elevated Cs, Be, Ta, Rb, Sn, W and Tl (Table 1). Creek samples in this area drain the Umbrawarra granite.

For the rock samples absolute lithium values were again low, similar to the streams, with the most significant result of 46ppm Li (DSRK0076) returned from a single sample of Umbrawarra granite within the southern area of interest identified by the stream survey.

This encouraging result is supported with elevated Cs, Be, Rb, Sn, Y and Tl (Fig 1; Table 2). It also has a K/Rb ratio of 117.7 (<150 increasing fractionation), Nb/Ta ratio of 5.6 (<5 fractionated), and Mg/Li ratio of 21.7 (< 30 high degree of fractionation) which are favourable geochemical and metallogenic markers for prospective fractionated granites and LCT pegmatites.

Significant stream and rock results can be found in Table 1 and 2 respectively, with sampling details in Table 3.

This announcement is authorised by the Board of Directors of DeSoto Resources Limited.

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## **ABOUT DES AND PROJECTS**

DeSoto is a gold and battery-metal exploration Company with a 1,893km<sup>2</sup> landholding located in the Northern Territory's prolific Pine Creek gold and pegmatite province (Fig. 3). The Company's immediate focus is the ongoing exploration of these exciting assets with an experienced Board that uses a distinctive exploration method and capability which sets us apart from our peers.

With strong mineral-finding capability and a systematic geophysics and geochemical approach to gold exploration, DeSoto is well positioned to make new mineral discoveries. The Company has already identified important indicators of lithium potential in our Northern Territory projects, including pegmatites in some historical core and known tin occurrences.



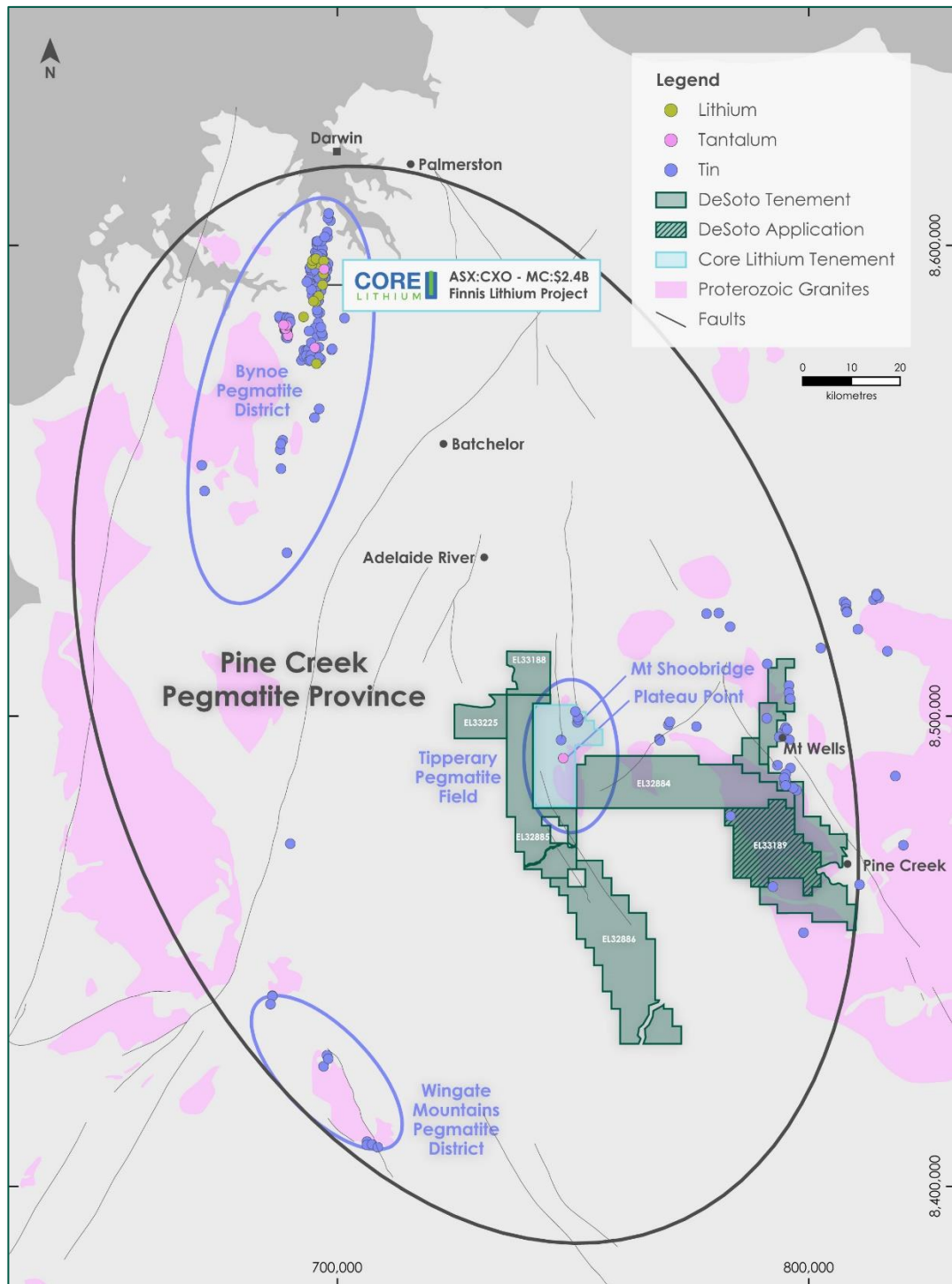


Figure 3 – DeSoto Resources Fenton and Fenix Lithium-Gold Projects, located in the Northern Territory close to new and existing lithium and gold projects.

## **COMPETENT PERSONS STATEMENT**

The information in this report that relates to exploration results is based on and fairly represents information and supporting documentation prepared by Ms Bianca Manzi. Ms Manzi is an employee of the company, is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Manzi consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

## **COMPLIANCE STATEMENT**

DeSoto advises that it is not aware of any new information or data that materially affects the previous exploration results or mineral resource estimate contained in this announcement and all material assumptions and technical parameters underpinning the mineral resource estimate continue to apply and have not materially changed.

**TABLE 1 – GEOCHEM STREAM RESULTS >30ppm Li - PINE CREEK LITHIUM PROJECT**

SampleID	East (MGA94z52)	North (MGA94z52)	Li ppm	Cs ppm	Be ppm	Rb ppm	Sn ppm	Ta ppm	Tl ppm	Y ppm	K %	Mg %	W ppm	Nb ppm	La ppm	Ce ppm	Mg/L i	Nb/T a	K/R b	Sample Medium	Ten
PCSS001-13, 16-54, 81-83, 85-97, 125-126, 134-150, and 163-204 - 129 samples	Refer to Figure 1 for most sample locations	Refer to Figure 1 for most sample locations																			As per figures
PCSS002	802170	8462427	30.6	10.3	5.6	308.0	4.2	2.02	1.70	68.8	3.48	0.26	5.2	14.9	94.6	223.0	85.0	7.4	<b>113.0</b>	-75µ	EL31356
PCSS031	789689	8462035	34.0	9.7	5.5	325.0	4.2	2.04	1.63	77.7	4.66	0.50	3.8	23.0	205.0	438.0	147.1	11.3	<b>143.4</b>	-75µ	EL31356
PCSS034	796894	8459872	33.3	11.5	6.1	361.0	4.9	2.88	2.06	202.0	4.01	0.21	9.2	18.9	369.0	890.0	63.1	6.6	<b>111.1</b>	-75µ	EL31356
PCSS035	797705	8459844	45.0	15.3	8.7	473.0	6.2	4.65	2.31	126.5	4.09	0.28	11.8	24.1	195.5	471.0	62.2	5.2	<b>86.5</b>	-75µ	EL31356
PCSS037	799547	8461685	37.8	11.9	6.4	330.0	4.9	2.60	1.61	75.0	3.51	0.28	8.0	16.6	125.5	274.0	74.1	6.4	<b>106.4</b>	-75µ	EL31356
PCSS039	801178	8458080	50.7	19.4	12.9	486.0	12.7	5.84	2.54	123.5	3.68	0.33	15.8	24.2	187.5	442.0	65.1	<b>4.1</b>	<b>75.7</b>	-75µ	EL31356
PCSS040	803662	8459181	39.0	13.2	8.4	397.0	7.8	3.39	2.01	101.0	3.62	0.30	13.5	19.1	149.0	338.0	76.9	5.6	<b>91.2</b>	-75µ	EL31356
PCSS041	804898	8456250	39.1	12.3	9.7	423.0	8.1	2.38	2.31	74.6	3.98	0.16	11.0	18.2	111.0	245.0	40.9	7.7	<b>94.1</b>	-75µ	EL31356
PCSS043	806099	8458691	32.9	10.4	7.4	330.0	6.2	2.11	1.58	76.2	3.40	0.26	6.8	13.9	133.0	293.0	79.0	6.6	<b>103.0</b>	-75µ	EL31356
PCSS087	787706	8485100	45.8	5.8	4.4	112.5	2.4	0.97	0.81	17.1	1.79	0.13	1.1	16.3	50.0	103.5	<b>28.4</b>	16.8	159.1	-75µ	EL32884
PCSS089	790344	8484788	35.4	4.1	2.9	177.0	2.2	1.21	1.01	44.8	3.75	0.32	1.1	19.5	137.0	346.0	90.4	16.1	211.9	-75µ	EL32884
PCSS093	785089	8486481	32.6	2.6	1.9	150.0	2.0	1.22	0.75	47.4	3.71	0.58	0.8	19.6	79.8	181.5	177.9	16.1	247.3	-75µ	EL32884
PCSS168	783874	8490160	30.8	3.6	2.5	154.5	2.5	1.44	0.84	53.2	3.36	0.49	1.4	21.7	120.5	273.0	159.1	15.1	217.5	-75µ	EL31356
PCSS172	787251	8489474	35.3	4.1	2.0	97.2	3.6	0.92	0.54	26.2	1.60	0.26	1.8	11.8	44.9	102.0	73.7	12.8	164.6	-75µ	EL31356
PCSS173	786858	8490909	<b>69.3</b>	5.1	1.6	82.6	3.6	0.73	0.52	22.9	0.85	0.79	2.1	10.2	30.8	70.0	114.0	14.0	<b>102.9</b>	-75µ	EL31356
PCSS175	794312	8485230	32.3	4.1	3.1	228.0	2.2	1.24	1.14	50.4	4.85	0.48	0.9	17.7	117.0	256.0	148.6	14.3	212.7	-75µ	EL31356
PCSS178	795738	8484374	47.9	3.8	3.4	199.5	2.1	1.28	1.11	67.2	3.99	0.57	0.8	19.4	149.0	433.0	119.0	15.2	200.0	-75µ	EL31356
PCSS179	795432	8486001	59.9	5.0	3.9	193.5	4.4	1.76	1.02	87.6	3.18	0.90	1.1	25.4	176.5	379.0	150.3	14.4	164.3	-75µ	EL31356



PCSS180	795297	8486266	33.6	5.2	3.7	209.0	6.8	1.24	0.94	60.8	3.94	0.75	1.2	19.0	147.0	322.0	223.2	15.3	188.5	-75μ	EL31356
PCSS197	793226	8487707	47.7	6.1	2.8	200.0	3.1	1.18	0.93	45.6	3.56	0.63	1.8	14.9	94.0	191.0	132.1	12.6	178.0	-75μ	EL31356
PCSS203	783444	8496798	32.4	5.5	1.9	117.5	7.4	0.62	0.77	18.7	1.90	0.45	3.0	7.8	30.8	69.4	138.9	12.6	161.7	-75μ	EL31356

**TABLE 2 – GEOCHEM ROCK RESULTS – PINE CREEK LITHIUM PROJECT**

Sample D	East (MGA94z52 )	North (MGA94z52 )	Li ppm	Cs ppm	Be ppm	Rb ppm	Sn ppm	Ta ppm	Tl ppm	Y ppm	K %	Mg %	W ppm	Nb ppm	La ppm	Ce ppm	Mg/Li	Nb/Ta	K/Rb	Sample Type	Ten
DSRK0076	799656	8460697	46.0	13.95	10.05	372	2.9	1.87	2.02	39.7	4.38	0.1	2.5	10.5	34.3	73.6	21.7	5.6	117.7	Granite	EL31356
DSRK0078	793572	8484886	34.7	4.05	2.26	193	2.1	0.95	1.06	37.5	4.16	0.45	0.6	12.9	56.2	99.1	129.7	13.6	215.5	Granite	EL32884
DSRK0083	788849	8505732	36.8	4.50	2.60	269	1.8	1.35	1.53	16.7	4.31	0.19	0.6	12.3	64.4	114.5	51.6	9.1	160.2	Granite	EL31899
DSRK0084	796264	8478462	8.0	3.72	2.32	217	0.8	1.39	0.95	13.1	4.04	0.07	1.0	7.1	12.3	23.9	87.5	5.1	186.2	Pegmatite	EL31356
DSRK0085	796348	8478389	5.6	2.73	2.08	296	1.3	1.87	1.25	28.0	4.42	0.09	1.1	13.2	46.0	73.0	160.7	7.1	149.3	Granite	EL31356
DSRK0088	792679	8487204	35.0	3.63	2.13	191	2.1	0.99	1.00	24.3	4.39	0.58	0.5	14.4	59.9	109.0	165.7	14.5	229.8	Granite	EL31356
DSRK0090	799580	8475876	32.0	2.63	3.69	261	1.3	1.29	1.24	25.6	4.68	0.07	4.5	15.6	63.0	121.5	21.9	12.1	179.3	Granite	EL31356
DSRK0091	802190	8473983	28.6	3.74	3.79	243	1.1	1.54	1.04	30.4	4.18	0.25	3.0	12.9	46.1	93.6	87.4	8.4	172.0	Granite	EL31356

**TABLE 3 – JORC CODE – GEOCHEM RESULTS**

Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
<b>Sampling Technique</b>	<p>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</p>	<p>The new sampling described in this report refer to rock and auger soil samples.</p> <p>Rock -Individual reconnaissance rock chip samples (0.4-1.2kg) were collected from gold and lithium prospects using picks. All samples were submitted to ALS laboratory in Perth for analysis. Samples of granite and pegmatite were analysed by ME-MS61r for 61 multi-elements including rare earths.</p> <p>Stream - sediment samples were hand collected using picks and shovels from the low energy part of stream beds where possible. In general up to ~4kg of dry, minus 2mm field sieved samples were collected in order to maximise the amount of fine grained -75 micron material available for analysis. If wet a bulk unsieved sample was collected and later sieved to -2mm at the lab following drying.</p> <p>All samples were submitted to ALS laboratory in Perth, dried and sieved at the lab to -75 micron and then analysed for gold by fire assay (Au-ICP21), and for 61 multi-elements including rare earths (ME-MS61r).</p>
<b>Drilling</b>	<p>Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</p>	<p>No drilling activities are being reported.</p>
<b>Drill Sample Recovery</b>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>No drilling activities are being reported.</p>

<b>Logging</b>	<p>Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature.</p> <p>Core (or costean/Trench, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>None of these samples will be used in a Mineral Resource estimation. All rock samples have been geologically logged in a qualitative fashion. Streams samples have not been logged.</p>
<b>Sub-Sampling Technique and Sample Preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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. Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>All samples are considered sufficiently representative of the sampled material in a geochemical program.</p> <p>Streams – minus 2mm stream samples were sieved in the field if dry or at the lab if wet.</p> <p>Company standards and duplicates were included in the stream and rock sample batches at a ratio of 1:20</p>
<b>Quality of Assay Data and Laboratory Tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>All geochemical samples were submitted to ALS laboratory in Perth for analysis as indicated below.</p> <p>Rock - Samples of granite and pegmatite were analysed by ME-MS61r for 61 multi-elements including rare earths. Rare Earth Elements (REE's) may not be totally soluble in this method. For trace level Au was analysed for rocks using 25g aqua regia (Au-TL43) with a 0.001ppm Au detection limit which is appropriate for a geochemical program.</p> <p>Stream - sediment samples were sieved to -75 micron and then analysed for gold by 30g fire assay (Au-ICP21), and for 60 multi-elements including rare earths (ME-MS61r). Rare Earth Elements (REE's) may not be totally soluble in this method. Over range Zr was analysed by – lithium borate fusion with ICP-MS (ME-MS85).</p> <p>Company standards and blanks were inserted in batches at a ratio of 1:20. The results of these QC check as well as the laboratory standards, blanks, duplicates and checks indicate the analytical results are suitable for a geochemical program and indicate no bias.</p>

		<table><tr><th colspan="12">ME-MS61r Analytes and Reporting Ranges</th></tr><tr><th>Analyte</th><th>Units</th><th>Lower Limit</th><th>Upper Limit</th><th>Analyte</th><th>Units</th><th>Lower Limit</th><th>Upper Limit</th><th>Analyte</th><th>Units</th><th>Lower Limit</th><th>Upper Limit</th></tr><tr><td>Ag</td><td>ppm</td><td>0.01</td><td>100</td><td>Al</td><td>%</td><td>0.01</td><td>50</td><td>As</td><td>ppm</td><td>0.2</td><td>10000</td></tr><tr><td>Ba</td><td>ppm</td><td>10</td><td>10000</td><td>Be</td><td>ppm</td><td>0.05</td><td>1000</td><td>Bi</td><td>ppm</td><td>0.01</td><td>10000</td></tr><tr><td>Ca</td><td>%</td><td>0.01</td><td>50</td><td>Cd</td><td>ppm</td><td>0.02</td><td>1000</td><td>Ce</td><td>ppm</td><td>0.01</td><td>10000</td></tr><tr><td>Co</td><td>ppm</td><td>0.1</td><td>10000</td><td>Cr</td><td>ppm</td><td>1</td><td>10000</td><td>Cs</td><td>ppm</td><td>0.05</td><td>10000</td></tr><tr><td>Cu</td><td>ppm</td><td>0.2</td><td>10000</td><td>Dy</td><td>ppm</td><td>0.05</td><td>1000</td><td>Er</td><td>ppm</td><td>0.03</td><td>1000</td></tr><tr><td>Eu</td><td>ppm</td><td>0.03</td><td>1000</td><td>Fe</td><td>%</td><td>0.01</td><td>50</td><td>Ga</td><td>ppm</td><td>0.05</td><td>10000</td></tr><tr><td>Gd</td><td>ppm</td><td>0.05</td><td>1000</td><td>Ge</td><td>ppm</td><td>0.05</td><td>500</td><td>Hf</td><td>ppm</td><td>0.1</td><td>500</td></tr><tr><td>Ho</td><td>ppm</td><td>0.01</td><td>1000</td><td>In</td><td>ppm</td><td>0.005</td><td>500</td><td>K</td><td>%</td><td>0.01</td><td>10</td></tr><tr><td>La</td><td>ppm</td><td>0.5</td><td>10000</td><td>Li</td><td>ppm</td><td>0.2</td><td>10000</td><td>Lu</td><td>ppm</td><td>0.01</td><td>1000</td></tr><tr><td>Mg</td><td>%</td><td>0.01</td><td>50</td><td>Mn</td><td>ppm</td><td>5</td><td>100000</td><td>Mo</td><td>ppm</td><td>0.05</td><td>10000</td></tr><tr><td>Na</td><td>%</td><td>0.01</td><td>10</td><td>Nb</td><td>ppm</td><td>0.1</td><td>500</td><td>Nd</td><td>ppm</td><td>0.1</td><td>1000</td></tr><tr><td>Ni</td><td>ppm</td><td>0.2</td><td>10000</td><td>P</td><td>ppm</td><td>10</td><td>10000</td><td>Pb</td><td>ppm</td><td>0.5</td><td>10000</td></tr><tr><td>Pr</td><td>ppm</td><td>0.03</td><td>1000</td><td>Rb</td><td>ppm</td><td>0.1</td><td>10000</td><td>Re</td><td>ppm</td><td>0.002</td><td>50</td></tr><tr><td>S</td><td>%</td><td>0.01</td><td>10</td><td>Sb</td><td>ppm</td><td>0.05</td><td>10000</td><td>Sc</td><td>ppm</td><td>0.1</td><td>10000</td></tr><tr><td>Se</td><td>ppm</td><td>1</td><td>1000</td><td>Sm</td><td>ppm</td><td>0.03</td><td>1000</td><td>Sn</td><td>ppm</td><td>0.2</td><td>500</td></tr><tr><td>Sr</td><td>ppm</td><td>0.2</td><td>10000</td><td>Ta</td><td>ppm</td><td>0.05</td><td>500</td><td>Tb</td><td>ppm</td><td>0.01</td><td>1000</td></tr><tr><td>Te</td><td>ppm</td><td>0.05</td><td>500</td><td>Th</td><td>ppm</td><td>0.01</td><td>10000</td><td>Ti</td><td>%</td><td>0.005</td><td>10</td></tr><tr><td>Tl</td><td>ppm</td><td>0.02</td><td>10000</td><td>Tm</td><td>ppm</td><td>0.01</td><td>1000</td><td>U</td><td>ppm</td><td>0.1</td><td>10000</td></tr><tr><td>V</td><td>ppm</td><td>1</td><td>10000</td><td>W</td><td>ppm</td><td>0.1</td><td>10000</td><td>Y</td><td>ppm</td><td>0.1</td><td>500</td></tr><tr><td>Yb</td><td>ppm</td><td>0.03</td><td>1000</td><td>Zn</td><td>ppm</td><td>2</td><td>10000</td><td>Zr</td><td>ppm</td><td>0.5</td><td>500</td></tr></table>	ME-MS61r Analytes and Reporting Ranges												Analyte	Units	Lower Limit	Upper Limit	Analyte	Units	Lower Limit	Upper Limit	Analyte	Units	Lower Limit	Upper Limit	Ag	ppm	0.01	100	Al	%	0.01	50	As	ppm	0.2	10000	Ba	ppm	10	10000	Be	ppm	0.05	1000	Bi	ppm	0.01	10000	Ca	%	0.01	50	Cd	ppm	0.02	1000	Ce	ppm	0.01	10000	Co	ppm	0.1	10000	Cr	ppm	1	10000	Cs	ppm	0.05	10000	Cu	ppm	0.2	10000	Dy	ppm	0.05	1000	Er	ppm	0.03	1000	Eu	ppm	0.03	1000	Fe	%	0.01	50	Ga	ppm	0.05	10000	Gd	ppm	0.05	1000	Ge	ppm	0.05	500	Hf	ppm	0.1	500	Ho	ppm	0.01	1000	In	ppm	0.005	500	K	%	0.01	10	La	ppm	0.5	10000	Li	ppm	0.2	10000	Lu	ppm	0.01	1000	Mg	%	0.01	50	Mn	ppm	5	100000	Mo	ppm	0.05	10000	Na	%	0.01	10	Nb	ppm	0.1	500	Nd	ppm	0.1	1000	Ni	ppm	0.2	10000	P	ppm	10	10000	Pb	ppm	0.5	10000	Pr	ppm	0.03	1000	Rb	ppm	0.1	10000	Re	ppm	0.002	50	S	%	0.01	10	Sb	ppm	0.05	10000	Sc	ppm	0.1	10000	Se	ppm	1	1000	Sm	ppm	0.03	1000	Sn	ppm	0.2	500	Sr	ppm	0.2	10000	Ta	ppm	0.05	500	Tb	ppm	0.01	1000	Te	ppm	0.05	500	Th	ppm	0.01	10000	Ti	%	0.005	10	Tl	ppm	0.02	10000	Tm	ppm	0.01	1000	U	ppm	0.1	10000	V	ppm	1	10000	W	ppm	0.1	10000	Y	ppm	0.1	500	Yb	ppm	0.03	1000	Zn	ppm	2	10000	Zr	ppm	0.5	500
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<b>Verification of Sampling and Assaying</b>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data</p>	<p>No verification of sampling has been conducted. Over grade assay samples were re-analysed by appropriate methods as indicated in Quality of Assay Data and Laboratory Tests section above.</p>																																																																																																																																																																																																																																																																								
<b>Location of Data points</b>	<p>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.</p> <p>Specification of the grid system used Quality and adequacy of topographic control</p>	<p>Geochemical samples were located using a hand held GPS with a location error of +/-15m. All co-ordinates are recorded in Geocentric Datum of Australia 1994 (GDA94), MGA Zone 52 - Southern Hemisphere. Heights were not recorded by the field crew so a nominal Relative Level (RL) has been set at 150m until a detailed DEM is sourced.</p>																																																																																																																																																																																																																																																																								
<b>Data Spacing and Distribution</b>	<p>Data spacing for reporting of Exploration Results</p> <p>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.</p> <p>Whether sample compositing has been applied</p>	<p>Stream sediment sampling was based on catchment areas with a spacing of 1 sample per 2.8sq.km collected.</p> <p>Rock samples were collected at random intervals as deemed appropriate.</p> <p>This type of sampling is not appropriate for the calculation of any Mineral Resource estimate. No compositing has been applied.</p>																																																																																																																																																																																																																																																																								
<b>Orientation of Data in Relation to Geological Structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>If the relationship between the drilling orientation and the</p>	<p>Rocks were collected from outcrops as appropriate. Samples will be biased to outcrop rather than covered areas and known structures.</p> <p>The sampling of structures is considered unbiased.</p> <p>Stream sampling was based on catchment areas and is believed to be representative of those catchments.</p>																																																																																																																																																																																																																																																																								

	orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
<b>Sample Security</b>	The measures taken to ensure sample security	All samples were collected, bagged and transported by Desoto contract staff from Pine Creek to Swan Valley and thence to ALS labs in Perth.
<b>Section 2 Reporting of Exploration Results</b>		
<b>Mineral Tenement and Land Tenure Status</b>	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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<p>The Pine Creek Project comprises eight contiguous exploration licences (EL31356, EL32148, EL31899, EL32884-32886, EL33188 and EL33225) and two applications (EL33189 and EL33450) covering an area of 1,893 km<sup>2</sup>. These licences are held by or in the process of being transferred to, Mangusta Minerals Pty Ltd, a 100% owned Desoto Resources Ltd subsidiary.</p> <p>The Project is located approximately 150 km south of Darwin, and 8 km north of Pine Creek in the Northern Territory.</p>
<b>Exploration Done by Other Parties</b>	Acknowledgment and appraisal of exploration by other parties.	<p>The majority of past exploration work within the Project area (including drilling, surface sampling; geophysical surveys, geological mapping) has been largely completed by Homestake Gold of Australia, North Mining, Newmont Australia, St George Mining Pty Ltd, Aztec Mining Ltd, AngloGold Australia, Davos Resources and Thundelarra Exploration</p> <p>The relevant reports are available on the Northern Territory Geological Survey GEMIS open file database library. A summary of previous work completed can be found in the company prospectus at <a href="http://www.desotoresources.com">www.desotoresources.com</a></p>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<p>The Project is located in the western and central sections of the Central Domain of the Pine Creek Orogen and comprises units of the Cosmo Supergroup which include the South Alligator Group, and Finnis River Group. The stratigraphic sequences are dominated by mudstones, siltstones, greywackes, sandstones, tuffs, and limestones. These sedimentary units, as well as basic intrusions, were folded, metamorphosed, and then subsequently intruded by the Cullen Batholith. Pegmatites occur throughout the region in close proximity to the Cullen Granites.</p> <p>The Pine Creek Project is considered prospective for orogenic Pine Creek gold mineralisation and pegmatite hosted lithium (spodumene) mineralisation. The majority of known gold deposits are hosted by the South Alligator Group and the lower parts of the Finnis River Group along anticlines, strike-slip shear zones and thrusts proximal to the Cullen Granite.</p>
<b>Drill Hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> </ul>	<p>No drilling completed.</p> <p>Sample locations are provided in Table 1 and 2, and on report figures.</p>



	<ul style="list-style-type: none"> <li>• down hole length and interception depth</li> <li>• hole length</li> <li>• 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.</li> </ul>	
<b>Data Aggregation Methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>No weighted average or truncation methods were used for the assay results.</p> <p>No cut-off grade was applied grade calculation.</p>
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its 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 (eg 'down hole length, true width not known').</p>	<p>Not applicable to single point surface sampling.</p>
<b>Diagrams</b>	<p>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.</p>	<p>An appropriate map is provided in Figure 1.</p>
<b>Balanced Reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be</p>	<p>All significant results are reported in Table 1 and 2.</p>

	practiced to avoid misleading reporting of Exploration Results.	
<b>Other Substantive Exploration Data</b>	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.	Exploration work by previous explorer for lithium is minimal and has largely been of a preliminary or reconnaissance nature. The Company is aware of regional scale aeromagnetic surveys and geological mapping programmes undertaken by past explorers and has access to versions of the data that is available in reports. Surface soils, rock chip sampling and reconnaissance drilling programmes have been undertaken over many parts of the Project area but is not lithium specific. This has not been fully compiled by the Company as yet.
<b>Further Work</b>	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling. Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The stream, rock and soil sampling programme as well as mapping will be expanded to cover newly granted lithium exploration areas in the north west of the project and to followup areas of interest defined by the reported results.