

HISTORIC GOLD GRADES UP TO 257G/T AU UNCOVERED AT NEW REGIONAL PROSPECT

HIGHLIGHTS

- Historical data compilation of Shoobridge licences has identified previously unreported High-Grade, **including Bonanza-grade**, gold assays at the Barrapool Regional Prospect, north of the Fenton Gold Project (Fig. 1).
- High grade coarse gold pan concentrate stream results include:
 - **257g/t Gold** (706015B)
 - **53 g/t Gold** (286511B) with repeat sample of **0.39g/t Gold** (700268B)
 - **3.3 g/t Gold** (706014B)
 - **2.33g/t Gold** (286510B) with repeat sample of **46g/t Gold** (700267B)
- These newly identified historical results occur 40km north of the best gold drill intercepts from the Fenton Gold Project and continue to build on the gold prospectivity of the western Pine Creek region along the Fenton Shear Zone trend.
- New results are in addition to the strong regional gold results already reported south of Pine Creek, including **4.1g/t gold and copper up to 6.5%** at the Copperfield Prospect¹.
- The Barrapool prospect has not been explored by modern day gold exploration techniques and will form part of the regional exploration focus for the 2023 field season which commenced this week.

Commenting on the results, Managing Director Chris Swallow:

"It's pleasing that as we continue to investigate the history and data for our tenements, that we are discovering new regional gold targets that have been overlooked in the past. The grades uncovered at Barrapool highlight the regional prospectivity for gold and highlight how underexplored the Fenton Shear Zone is."

Next Steps at Barrapool

- A field team of geologists have been deployed to the Shoobridge area for Lithium-focused exploration. Given Barrapool's proximity to key Shoobridge exploration targets, their scope of work has been extended to include mapping and sampling of the Barrapool area for the next phase of work.

¹DES ASX Announcement: Encouraging initial rock results from Fenix up to 4.1g/t Au & 6.5% Cu (31st January 2023)

DeSoto Resources Limited (ASX:DES or 'Company') is pleased to report newly uncovered historic regional results from the Company's 100%-owned Shoobridge and Fenton Project licences, located in the Northern Territory.

During the review of the historical open file data available for the Company's Shoobridge Lithium licences, high-grade coarse gold pan concentrate stream sediment results have been identified from work completed by Dominion Gold Operation Pty Ltd (Dominion) in the early 1990's.

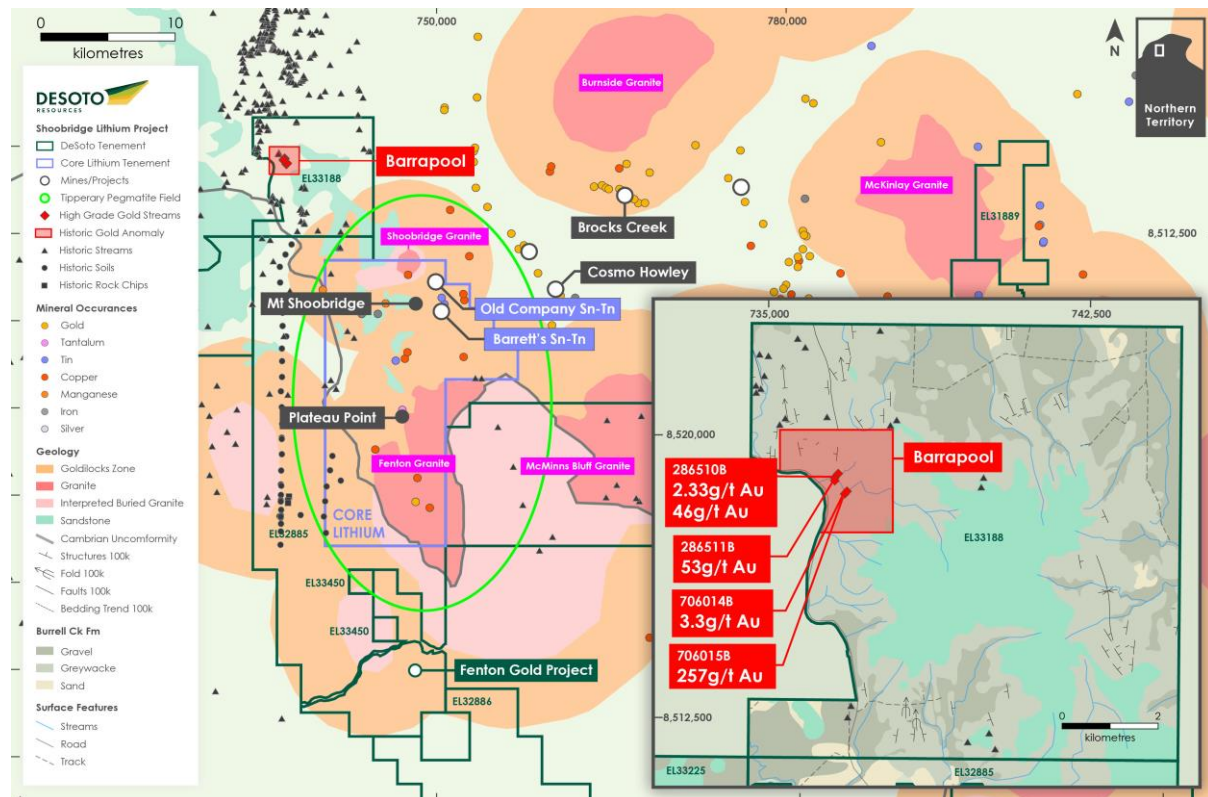


Figure 1 – Barrapool Prospect with historic gold pan concentrate stream sediment results found on EL33188, part of Shoobridge Lithium Project.

Dominion conducted mapping, rock, soil and stream sampling while exploring for gold and base metals over a large area that now includes DeSoto's EL33188 tenement. In conducting stream sampling Dominion collected two sample types; A – 20 mesh silt fraction (sieved to -200 micron in the laboratory), and B – heavy pan concentrates (100g). Drainage samples were collected at a sample density of 1 sample per 4km².

The stream pan concentrate sampling produced 4 high-grade gold assays, all within close proximity of each other in the current tenure, including best results of 257 g/t Au (706015B) and 53g/t Au (286511B; Table 1, Fig.1). This prospect was named Barrapool and is located in folded and faulted prospective Burrell Creek Formation sediments, a favourable location for Pine Creek style gold mineralisation.

Follow-up field pan concentrate resampling of 2 of the high-grade locations confirmed anomalous gold with 700267B reporting 0.39g/t Au (initial sample 53g/t Au), and 700268B reporting 46 g/t Au (initial 2.33g/t Au). These samples also demonstrated the expected variability of grade due to the coarse gold nugget effect of the sampling method.

A best result of 40ppb Au (286510A) was reported from the -200 micron silt fraction of the stream sediment samples showing some anomalism in the fine fraction, but in general most fine samples were not anomalous.

Further follow-up and infill exploration of the anomalous streams and secondary drainages was completed in 1993 with 28 low detection level BLEG samples collected, and 13 soil sampling traverses completed. No significant results were reported from these fine sediment sampling methods however a slightly elevated 2ppb Au anomaly does seem to occur proximal to interpreted anticlinal fold axes. Although further work was recommended, none was conducted.

Subsequent explorers in the area have noted Dominion's results in passing but as the high-grade pan concentrate results were not highlighted in reports and the data was not digital, the pan concentrates have largely been ignored until now.

The Barrapool prospect is a strong gold target in a highly prospective part of the Pine Creek Orogen that has not been explored by modern day gold exploration techniques. Barrapool represents a strong regional target to compliment the Fenton Gold Project and Lithium exploration in the Shoobridge area.

Table 1: Barrapool significant stream sample results (source report CR19930010)

Sample No.	Au g/t B (Pan Concentrate)	Au ppb A (-200 micron)	Easting (GDA94)	Northing (GDA94)	Company
706015	257	1	736554	8512127	Dominion Gold
286511	53	2	736348	8512411	Dominion Gold
700268 [#]	0.39	1			
286510	2.33	40	736346	8512474	Dominion Gold
700267 [*]	46	<1			
706014	3.3	1	736602	8512184	Dominion Gold

Notes: A samples are -200 micron silt fractions and B samples are the coarse pan concentrates from the same location. * is a field resample of 286510, # is a field resample of 286511 locations.

This historical data reported here was compiled from open file reports available from the Northern Territory Geological Survey (NTGS) and through the Geoscience Exploration and Mining Information System (GEMIS) online database. These reports did not contain digital

data so sample locations were obtained by digitising historical maps using the old tenement boundaries.

Scan copies of lab assay report files were included in the report lending confidence to the accuracy of the data.

Fenton Gold Project Background

For over a century the Pine Creek Orogen (PCO) has produced gold, beginning in the 1870s through to the early 1900s, about 2.3 tonne of gold extracted. Since the 1980's, systematic geological mapping, geochemical surveys and drilling, were conducted around previously known occurrences such as Enterprise, Cosmo Howley and Golden Dyke. These deposits have been mined.

The Pine Creek gold field contains approximately 17 Moz of recorded gold deposits hosted in a 60km-long and 1km-wide, NW-SE trending belt along the Pine Creek Shear Zone (PCSZ), the dominant gold hosting structure in the region (Fig. 2).

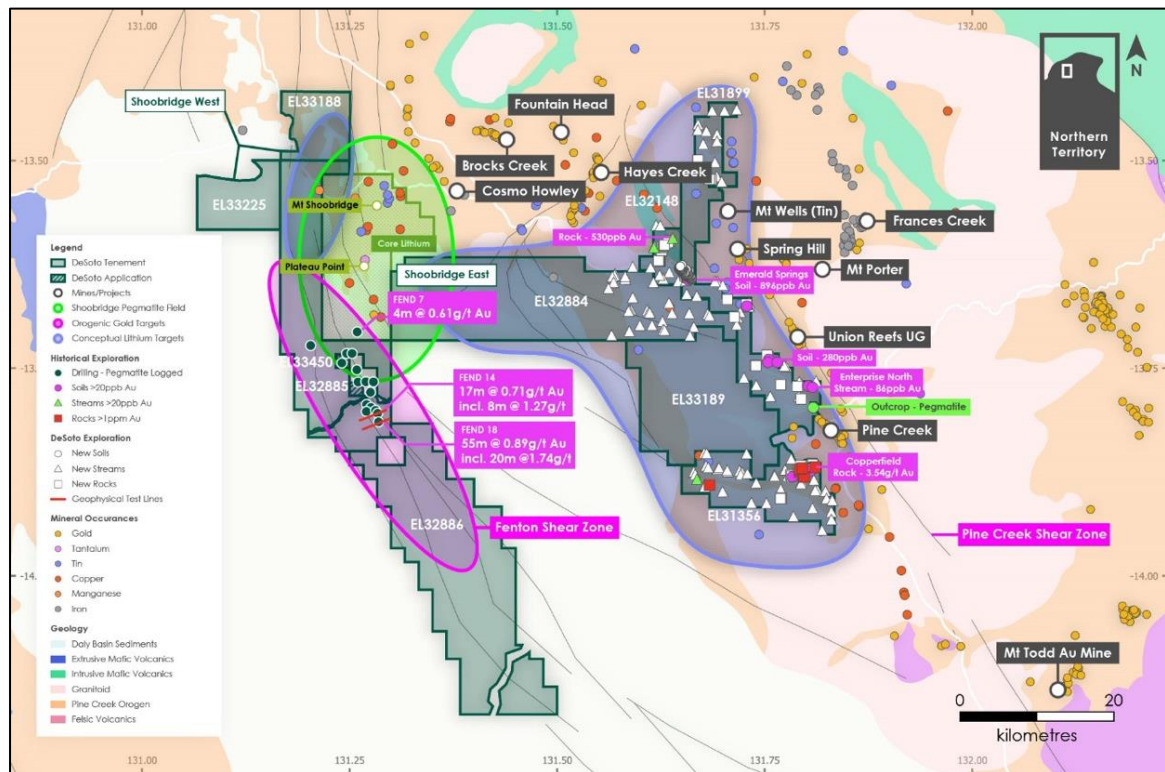


Figure 2 - Fenton and Fenix gold-lithium projects located in the Northern Territory, overlain historic drilling and sampling.

In the mid-1990's, Homestake Gold (now Barrick Gold), undertook a global search for deposits analogous to the +40Moz Lead Gold deposit in South Dakota. Fenton was identified due to its resemblance to the host rocks and structure found at Lead, particularly within the South Alligator Group.

Subsequent drilling by Homestake Gold at Fenton returned good grades 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). The applicability of the Homestake model remains to be determined. However, the regional scale shear zone (historically termed the Fenton or Blue Ant Suture) represents an under-explored region in the PCO. The first phase of exploration is to develop an integrated geological and structural model for the Project to generate drill targets. This will be based on results from the ground geophysics program that is about to commence in June.

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 1,893km² landholding located in the Northern Territory's prolific Pine Creek gold and pegmatite province. 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.

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 2: JORC Table 1

Section 1: Sampling techniques and data

Drilling and sampling results reported refer to historical results taken from exploration reports lodged by previous explorers over the prospects which are available on the Northern Territory Geological Survey (NTGS) online database Geoscience Exploration and Mining Information System (GEMIS). For full details refer to the specific NTGS open file reports.

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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	Reported assay results have been compiled from open file exploration reports of work submitted to the Northern Territory Geological Survey (NTGS) and available through the Geoscience Exploration and Mining Information System (GEMIS) online database. Surface sampling – Dominion Gold Operations (CR19930010) conducted stream sediment sampling, soil sampling and rock chip sampling. Regional stream sediment sampling was conducted over the Shooobridge-Fenton tenements. Stream sediments were collected from selected sites within drainages averaging 4 km². Two sample sizes were collected: -20# silt fraction, 2-3kg, sieved to -200 micron in the laboratory and Pan concentrate (approx., 100g). Soil sampling program over highly anomalous Au drainages at 10m spacing. The samples were 1kg and sieved to -2mm. Soil sampling in other areas at 25m to 50m spacing. Approximately 2kg of soil sieved to -2mm for each of the 99 samples. Rock samples were collected as grab samples from in-situ outcrop. 28 BLEG stream sediment samples of previously defined anomalous drainages were 2kg and sieved to -2mm. Australian Coal and Gold (CR19860138), Coronation Hill Gold Mines (CR19880383), Nullarbor Holdings (CR19930394) and Tipperary Mining (CR19910438) also completed small stream sediment sample programs within the area. Newmont (CR19900378) completed soils and rock chips in the area. All sample locations have been included in the diagram but not emphasized in the report.

	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	The same weights of the stream and soil sample programs were kept consistent for each program. Sieving mesh sizes were kept consistent for each program (see above).
	<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>	For the stream sediment samples – 2 sample sizes were collected. A -20# silt fraction (sieved to -200# in the laboratory) of 2-3kg was used to report fine grain concentrates (sample A's). Pan concentrates (100g) were also taken at the same location, to assay more coarser style mineralisation (Sample B's). Solvent extraction, graphite furnace AAS method was used for Au (AAS9)
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>	No drilling activities being reported
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No drilling activities being reported
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No drilling activities being reported
	<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>	No drilling activities being reported
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>	No drilling activities being reported
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	No drilling activities being reported
	<i>The total length and percentage of the relevant intersections logged.</i>	No drilling activities being reported
Subsampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No drilling activities being reported
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	No drilling activities being reported

	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Stream sediment samples were sieved to -200 micron in the laboratory. Samples were despatched to either Classics Laboratories LTD in Darwin, where they underwent Solvent Extraction, graphite furnace AAS for Gold; or Analabs in Darwin where they were analysed using aqua regia digest, carbon rod finish (GG336). Detection limits were 1 ppb and 0.001 ppm. Two field resamples were collected and reported for anomalous drainage samples as a validation by Dominion. It was not recorded whether any field duplicates/standards were used.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Assay data is considered good quality for the time period, and methods appropriate where available in reports. Stream sediment Sampling: Au (1 ppb) – Solvent extraction, graphite furnace AAS9, Cu (2 ppm), Pb (2 ppm), Ag (2 ppm), Mn (5 ppm), Fe (5 ppm), Mo (1 ppm), Zn (2 ppm), Ni (2 ppm), As (5 ppm) – Low detection flame AAS9. + U (0.1 ppm), Th (0.1 ppm) – ICP-MS
	<i>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.</i>	No geophysical activities being reported
	<i>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.</i>	Quality control procedures are not reported in historical reports
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Original reports and assay reports have been visually reviewed.
	<i>The use of twinned holes.</i>	No drilling activities being reported
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data has been sourced from open file reports from GEMIS PDFs (CR19920078, CR19930010, CR19930737). The sample location data on old maps was georeferenced using old tenement boundaries and co-ordinates digitised.
	<i>Discuss any adjustment to assay data.</i>	No adjustments made.
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Sample coordinates have been deemed accurate. After georeferencing the maps, it is made clear the stream sediment samples plot onto the corresponding streams within the background satellite image.

	<i>Specification of the grid system used.</i>	Sample locations were georeferenced and plotted to GDA 94 MGA zone 52.
	<i>Quality and adequacy of topographic control.</i>	Not reported in the historic reports.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	The stream sample spacing and soil sampling lines are suitable for reconnaissance programmes.
	<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>	Surface Sampling results are an exploration reconnaissance tool is not adequate to provide geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation. No estimations have been made.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied.
Orientation of data in relation to geological structure	<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>	The sampling is believed to be unbiased in regard to orientation of the geology.
	<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 drilling activities being reported
Sample security	<i>The measures taken to ensure sample security.</i>	Historical information - there are no records of sample security measures.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews of sampling techniques and data have been documented.

Section 2: Reporting of exploration results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<i>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.</i>	The Pine Creek Project comprises nine contiguous exploration licences (EL31356, EL32148, EL31899, EL32884-32886, EL33188-33189, and EL33225) and one application ELA33450 covering an area of 1,893 km ² . The licences are held by Mangusta Minerals Pty Ltd, a 100% owned Desoto subsidiary. The Project is located approximately 150 km south of Darwin, and 8 km north of Pine Creek in the Northern Territory. Access to the Pine Creek Project is from the sealed Stuart Highway Hayes Creek via the sealed Dorat Road and Ooloo Roads and then via well maintained gravel roads.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	The majority of past exploration work within tenement EL33188, EL33225 and northern ELA33450 include, stream sampling, soil sampling, rock sampling, reconnaissance mapping and geophysical surveys. These have largely been completed by Australian Coal and Gold Holdings, Coronation Hill Gold Mines, Newmont Australia, Tipperary Mining, Dominion Gold, and Nullabor Holdings. The relevant reports (CR19920078, CR19930010, CR19930737) are available on the Northern Territory Geological Survey GEMIS open file database library.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	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. 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.
Drillhole information	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> • easting and northing of the drillhole collar • elevation or RL (elevation above sea level in metres) of the drillhole collar • dip and azimuth of the hole • downhole length and interception depth hole length.	Information on past sampling is available in exploration reports mentioned in Section 1 and the main report. The document is only intended to provide a summary of past exploration activity and principal targets identified. The Project is at an exploration stage of assessment and only significant results have been tabulated for practical reasons. The location of these sample locations and the relationship to other sample locations (without significant) results are shown in the various diagrams.
Data aggregation methods	<i>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.</i>	The targets are preliminary in nature and results may be reported at low detection levels. No metal equivalent values have been reported. No high-grade cut-offs have been used. No drilling intercepts are recorded.
Relationship between mineralisation widths and intercept lengths	<i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> <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. 'downhole length, true width not known').</i>	No drilling activities being reported
Diagrams	<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 drillhole collar locations and appropriate sectional views.</i>	Diagrams are supplied in the main report.
Balanced reporting	<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>	The report has been prepared to highlight the main targets and sample results based on past exploration within the Project area. Not all exploration results are shown for practical purposes.

Other substantive exploration data	<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>	DeSoto is relying on exploration data completed by previous tenement holders within the Project area. Exploration work to date has largely been of a preliminary or reconnaissance nature. The Company is aware of regional scale aeromagnetic surveys and geological mapping programme 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. This has not been fully compiled by the Company as yet.
Further work	<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>	DeSoto plans to develop several exploration targets with geochemical sampling and mapping, and also geophysics to target future drilling programs. Geophysical surveys as well as 2&3D modelling are planned for drill targeting at Fenton Gold project to enable deep diamond drilling.