

ANNUAL COMBINED REPORT (GR 202-11)

ON

EL 23506, EL 23516, EL23517, EL23532

EL 24403 and EL25119

PINE CREEK NT

FOR THE PERIOD

4 APRIL 2010 TO 3 APRIL 2011

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Element 92 Pty Ltd (Thundelarra Exploration Ltd)

SUMMARY

Thundelarra Exploration Limited/Element 92 Pty Ltd acquired a group of exploration licences (EL 23506, EL 23516, EL 23517, EL 23532, EL 24403 and EL25119) from Mike Teelow and consortium known as TOC (Teelow, Orridge and Clarke) and TOP (Teelow, Orridge and Pinniger) on 3 January 2010, which are located about 20 -50 km NNE of Pine Creek. In accordance with an agreement signed by the parties, Thundelarra Exploration Limited/Element 92 Pty Ltd earned to the rights to acquire 100% of this group of tenements and explore for minerals.

Geology setting of the project area shows that lithologies of Namoona Group (Masson Formation), Mount Partridge (Wildman Siltstone, Mundogie Sandstone), South Alligator Group (Koolpin Formation, Gerowie Tuff and Mt Bonnie Formation) and Finniss River Group (Burrell Creek Formation) are exposed. These meta-sedimentary sequences have been intruded by members of the Cullen Batholith and Zamu Dolerite at places (Bajwah, 1994). In addition, Neoproterozoic rocks of the Katherine Group are present in the project area, particularly towards north-east

During the reporting period, Thundelarra Exploration Limited/Element 92 Pty Ltd took over the control of the tenements from tenement holders, and commenced exploration activities in the project area. This involved retrieval and appraisal of previous exploration data, ground-truthing and detail geological/geomorphological mapping program by a consultant geologist, soil sampling and high resolution geophysical survey (magnetic and radiometric). It also involved entering previous exploration data into appropriate data bases for processing and interpretation.

In the next reporting period, further processing and interpretation of high resolution geophysical data will take place. Radiometric and magnetic anomalies identified from the geophysical and mapping data will be examined in the field. A soil/rock chip sampling program has been designed for the project for 2011-12 reporting year. If some encouraging results received, then RC drilling will be conducted to test new areas for mineralisation.

TABLE OF CONTENTS

	SUMMARY	2
1.0	INTRODUCTION	3
2.0	LOCATION AND ACCESS	3
3.0	TENEMENT DETAILS	3
4.0	GEOLOGICAL SETTING	6
5.0	PREVIOUS EXPLORATION ACTIVITY	9
6.0	EXPLORATION YEAR ENDING 3 APRIL 2011	13
7.0	PROPOSED EXPLORATION PROGRAM	20
8.0	REFERENCES	22

LIST OF TABLES

Table 1: Details of Tenements – TOC/TOP Group

LIST OF FIGURES

Figure 1: Location of the Project Area

Figure 2: Geological Setting of the Project Area

Figure 3a: Geological and Geomorphological Setting of the Project

Area

Figure 3b: Legend of Figure 3a

Figure 4: TMI Image of the project area

LIST OF APPENDICES

Appendix 1: Mineral exploration expenditure statement – TOC/TOP

Group

Appendix 2: GDF formatted Geophysical Data

1.1 INTRODUCTION

Thundelarra Exploration Limited acquired a group of exploration licences (EL 23506, EL 23516, EL 23517, EL 23532, EL 24403 and EL25119) from Mike Teelow and consortium known as TOC (Teelow, Orridge and Clarke) and TOP (Teelow, Orridge and Pinniger) on 3 January 2010, which are located about 20 -50 km NNE of Pine Creek (Figure 1). This is the first combine report on this group of tenements.

2.0 LOCATION AND ACCESS

TOC/TOP group of tenements is located about 150 km SSE of Darwin and approximately 20-50 km NNE of Pine Creek (Figure 1). These tenements can be approached either by roads/tracks leading of the Kakadu Highway or Stuart Highway. EL 23506 can be accessed from the Mary River Homestead Road which leads off from the Kakadu Highway. EL 23516 is located approximately 150 km SE of Darwin and about 40 km ENE of Adelaide River. Vehicle access for this can be achieved from the Stuart Highway past the Tortilla Flats - Ringwood station Road, and then south along the Ringwood – Ban Ban Springs Road.

3.0 TENEMENT DETAILS

The group of ELs was granted to a consortium of Teelow, Clarke, Orridge and Pinniger in 2003 for a period of 6 years. Details of these tenements are given in Table 1.

On 3 January 2010, Thundelarra Exploration Limited and Element 92 Pty Ltd entered into an optional agreement with the tenement holders. By the virtue of this agreement Thundelarra/Element 92 secured the rights to explore the tenements and also to purchase 100% interest in each tenement.

Table 1: Details of Tenements - TOC/TOP Group

EL No	Date Granted	Expiry Date	Area	Covenant	Comments
EL 23506	8/5/2003	7/5/ 2011	52 blocks	\$31000.00	Renewal application lodged
EL 23516	4/4/2011	22/12/2010	34 blocks	\$20000.00	Renewal application lodged
EL 23517	4/4/2003	22/12/2010	10 blocks	\$10000.00	Renewal application lodged
EL 23532	13/2/2003	12/2/2010	25 blocks	\$15000.00	Renewal application lodged
EL 24403	9/9/2005	8/9/2011	171 blocks	\$3000.00	
EL 25119	4/10/2006	3/10/2012	21 blocks	\$13000.00	

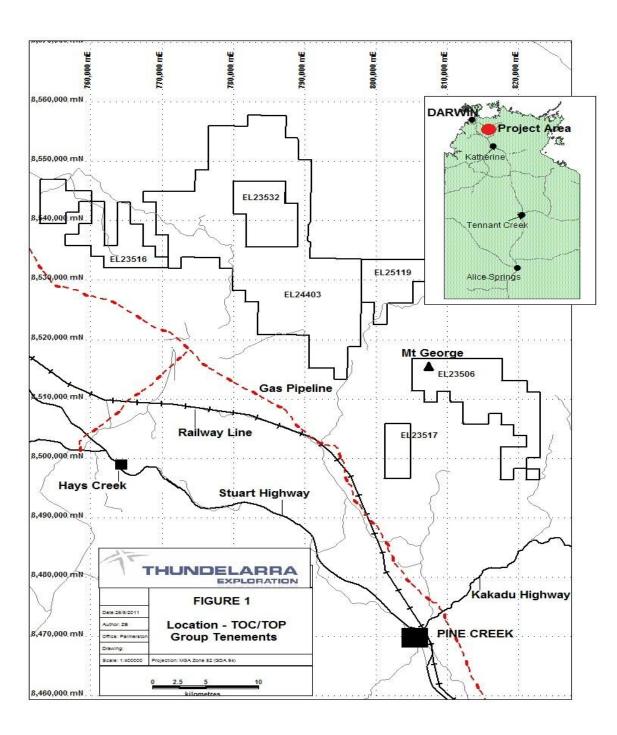


Figure 1: Location of the Project Area

4.0 GEOLOGICAL SETTING

The project area is located within the central part of the Pine Creek Orogen (PCO) which is a tightly folded sequence of Palaeoproterozoic rocks, 10km to 14km in thickness, laid down on a rifted granitic Archaean basement during the interval ~2.2-1.87Ga (Ahmad et al. 1993). The sequence is dominated by pelitic and psammitic (continental shelf shallow marine) sediments with minor inter-layered tuff units. Pre-orogenic mafic sills of the Zamu Dolerite intruded the sequence prior to regional metamorphism and deformation.

During the Top End Orogeny (1870 – 1780 Ma) the sequence was tightly folded and pervasively altered with metamorphic grade averaging greenschist facies to phyllite. The Cullen intrusive event introduced a suite of fractionated calc-alkaline granitic magma into the sequence in the period ~1.85-1.78Ma. These high temperature I-type intrusives induced strong contact metamorphic aureoles ranging up to (garnet) amphibolite facies to more extensive biotite and andalusite hornfels facies.

Geology of the project area is shown in Figure 2 which shows that lithologies of Namoona Group (Masson Formation), Mount Partridge (Wildman Siltstone, Mundogie Sandstone), South Alligator Group (Koolpin Formation, Gerowie Tuff and Mt Bonnie Formation) and Finniss River Group (Burrell Creek Formation) are exposed. These meta-sedimentary sequences have been intruded by members of the Cullen Batholith and Zamu Dolerite at places (Bajwah, 1994). In addition, Neoproterozoic rocks of the Katherine Group are present in the project area, particularly towards NE (Figure 2).

The Masson Formation is the oldest lithological unit which crops out within EL 23506 towards SE of the project area (Figure 2). It is a thick sequence of carbonaceous phyllite, slate, siltstone and dolomite. The dolomitic sediments are exposed towards the base of the formation. Some massive ironstone and muscovite-tremolite marble horizons are also present. It has been intruded by the Minglo and Frances Creek Granites towards east and Allamber Granite towards south. It has also been intersected by sills and dykes of the Zamu Dolerite. The Masson Formation hosts significant uranium mineralisation towards south at Cleo, twins and Mercedes. In addition, it also contains some occurrences of base metals mineralisation.

EL23506 also contains significant outcrops of the Mundogie Sandstone which contains a thick sequence of coarse clastic sediments deposited in shallow marine and fluvial

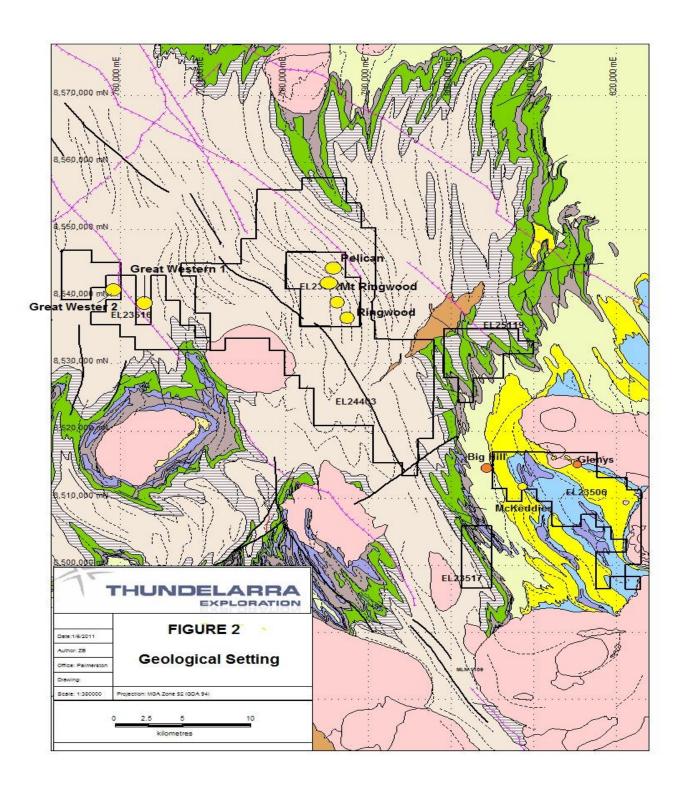


Figure 2: Geological Setting of the Project Area

environment. Pyritic lithologies are present at places and contain sedimentary structures such as graded bedding, cross-bedding and load clasts. In addition, thin hematitic interbeds of phyllite, carbonaceous phyllite and sandy siltstone probably comprise less than 50% of the formation. The Minglo and Allamber Springs Granites intrude the rocks towards NE and south. Minor occurrences of vein type base metals and Au mineralisation is hosted by the Mundogie Sandstone.

The Wildman Siltstone crops out within EL 23517, EL25119 and minor amount in EL 23506. It predominantly consists of pelitic sediments and some sandstone (~10%). Stuart-Smith et al., 1987 divided the Wildman siltstone into two units – lower sequence and upper sequence. The lower sequence comprises carbonaceous phyllite, ironstone, siltstone and phyllite. At depth most of the rocks are pyritic and carbonaceous. The lower sequence has produced significant tonnage of iron ore from several localities from Frances Creek iron field. The upper sequence contains silty phyllite siltstone and carbonaceous phyllite. In this sequence minor sandstone and rare dolarenite are also present. This formation has iron, gold, tin and base metal mineralisation.

Rocks of South Alligator Group such as the Koolpin Formation, Gerowie Tuff and Mt Bonnie are present within EL 23517, EL 25119, whereas Burrell Creek Formation (Finniss River Group) is only exposed in EL 23517 and EL 24403 (Figure 2). In EL 23517 and EL 25119 folded sequence of Koolpin Formation mudstones, siltstones and cherty ironstones; Gerowie Tuff comprising alternations of cherty tuff and silt-greywacke, and Mt Bonnie Formation siltstone, mudstone, greywacke and chert horizons. All three formations have been invaded by the Zamu Dolerite, usually as concordant sills of variable thickness and frequency. Minor rocks of the folded Koolpin Formation, Gerowie Tuff and Mt Bonnie Formation are also present in EL 23516 and EL 24403 (Figure 2).

The Burrell Creek Formation is the dominant lithology within EL 24403, EL 23532, EL 23616 and minor amounts in EL23517. Margret Granite intrudes the meta-sedimentary sequence in the south of EL 24403 and EL23516. Towards SW of EL 24403, much of the Palaeoproterozoic rocks are covered by thick cover of recent un-consolidated alluvium and black soil, which could be up to 90 m deep in places. TMI image (NTGS data) of EL 24403 reveals that under cover Burrell Creek Formation foliation is consistent with the general regional trend (Figure 2).

Katherine Group is represented by the Kombolgie Formation which is only exposed in the north-eastern corner of EL 24403. It mainly comprises white to buff coarse, pebbly quartz sandstone. The basal section is generally conglomeratic with well rounded pebbles and boulders up to 40 cm in size.

5.0 PREVIOUS EXPLORATION ACTIVITY

In the past all tenements part of TOC-TOP agreement have been explored considerably which have highlighted mineral potential of the project area.

EL 23506 has been subjected to considerable exploration and in 1980's the Woodcutters Group (Nicron Resources) conducted desktop study and found similarities to the Rum Jungle along the granite margin on the eastern side of EL23506. Drilling results identified Black Bream anomaly, with 7.4m @ 0.89% Cu from 74.6m in ASDDH1 in the primary zone, and ASRC1 intersected 42m @ 0.26%Cu from 8m in the oxide zone. Zn and Pb were sporadic, with maximum values of 3940ppm Zn and 940ppm Pb, with slightly elevated Co (to 240ppm) and Ni (to 250ppm).

Radiometric anomalies were noted by Total Mining Australia during exploration of EL4414. The anomalies are within the belt of carbonaceous shale and carbonates on the granite contact which correlate with the Rum Jungle sequence. Drilling only found narrow zones of U mineralisation. Orridge (2004) reported that gold exploration within EL23506 has been 'essentially of a reconnaissance nature and may not be conclusive given the extensive soil cover and poor exposure in the central Masson Formation belt'. Iron ore mineralisation was found by mapping, costeaning and percussion drilling at Frances Creek East, and an estimate of a possible 1.5Mt of 'low grade ore' was made.

During the first year of grant of the tenement, the work consisted of a preliminary review of previous work, which focussed on the base metal mineralisation and drill results. Fieldwork by the Titleholder consisted of prospecting for gold in the area NW of McKeddies workings using metal detectors. During the second year of tenure, the Titleholder carried out field inspection of the Dam Paddock ironstones (in the Frances Creek East area) with photogeological mapping. During the third year of tenure (2005-

2006) Terra Gold, a wholly owned subsidiary of GBS Gold Australia, expressed interest in exploring the tenement.

A Heads of Agreement signed between the Titleholders and Territory Iron Pty Ltd (TIPL) in January 2005 gave TIPL the right to explore for iron ore in 10 of the southern graticular blocks of EL23506. Territory Iron conducted drilling and assaying of samples retrieved.

Drill-holes were sited to test under the Northern Outcrop and the Central Outcrop. These two areas form part of a N-S striking line of ironstone mineralisation cropping out as a series of ridges over 2km. Assaying of drill intersections returned values of 4m @ 62.57%Fe from surface in FERC004.

During 2006-07 a reconnaissance visit and technical review of the EL 23505 was undertaken which highlighted multi-commodity potential of the project area. The main commodities of interest are gold, iron ore, tin, manganese and base metals. The main thrust of exploration was for the exploration and evaluation of iron mineralisation within the project area by Territory Iron Limited under an agreement with the tenement holders.

Five RC holes were drilled for 146 metre which is reported in 2007 (Bajwah, 2007). From this campaign, 18 samples (1 metre composite) were retrieved which were analysed for Fe%, P%, Al₂O₃, and SiO₂. In a number of samples, Fe content was above 60% but identified resource was too small for even selective mining.

During 2007-08 reporting period, 5 RC holes were drilled for 365 metres. A total of 12 composite samples ((RC chip) were assayed. These samples are generally characterised by high Fe_2O_3 , ranging from 6.33% to 78% with an average of 59.09%. Most of the samples are above 55% Fe_2O_3 .

On 3 January 2010, Thundelarra Exploration Limited/Element 92 Pty Ltd took over the took over the control of TOC-TOP Group of tenements and commenced review of the project area.

EL 23517

Orridge (2004) outlined work done by Dominion Mining on EL 4759 in 1986, and noted that RC drilling by Dominion within the tenement returned 'sporadic sub-economic gold mineralisation'. Although not recorded in MODAT, Compass named areas in the north/central part of the tenement 'Chinese Workings' and 'Northern Quartz' prospects.

More details of previous exploration were highlighted from a historic data review, which was carried out in Year 3 of the tenement, and is detailed in the next section During the first year of grant of the tenement, the work consisted of sourcing the drilling done by Dominion and Compass, and noting that the mineralisation is within a stock-work zone hosted by feldspathic quartz sandstone within the Wildman Siltstone, close to the contact with the overlying Koolpin Formation, in the vicinity of axial fold hinges. Fieldwork by the Titleholder consisted of general reconnaissance and assessing the access to the tenement.

During the second year of tenure, the Titleholder carried out prospecting work in the northwestern portion of the tenement to determine the extent of alluvial gold in the drainages. Coarse and nuggety gold was reported as found by metal detector. Iron and manganese float boulders were noted as shedding from ridges to the northeast.

During the third year of tenure (2005) Terra Gold expressed interest in exploring the tenement. Terra Gold spent 2005 concentrating on its newly acquired Maud Creek Project, carrying out due diligence and other test work. In July 2005, Terra Gold was subjected to a reverse takeover by Emerson Exploration Inc (now GBS Gold International Inc) which was completed by November 2005.

Changes in management and exploration staff during the year impacted on the exploration work done. Work consisted of reviewing the extent of geochemical digital data available, and conducting a full literature review of open file company reports from historic tenure. Results of the literature review are below.

The earliest known tenure over EL 23517 was **AP 2226** held by Australian Geophysical, who explored a large area for uranium, base metals and iron ore. Work done included auger drilling, percussion drilling and geophysical surveys. 'Rare' high lead and silver values were reported, and one U anomaly when the tenement expired.

A review of open file geochemical data from the NTGS Explorer 3 database shows that 66 soil samples were taken by CRA within EL 23517. Samples were assayed for Cu, Pb, Zn and Mn. No assays were done for Au or As. Maximum reported values within EL 23517 include 8310ppm Mn, 518ppm Zn, 269ppm Cu and 143ppm Pb. There are no reference reports or tenement details listed with the data set to check this data.

Dominion Mining explored the area under **EL 4759** (as previously outlined by Orridge 2004). Dominion and Geopeko were in JV (Golden Dyke JV) and had a farm-in

agreement with Mineral Resources Corporation, the titleholder. The 'Camp' area (also called Watts Creek North or Watts Creek old townsite) appears to be almost wholly in EL23517, and comprised the area of 5600N – 9000N on the local grid. Exploration in the Camp Area comprised 15 costeans (with best intercept of 1m @ 12.7g/t Au in Creek Costean (7450N). The remainder of reported costean samples assayed <0.6g/t Au. 8 RC holes totalling 582m were drilled in the Camp area. The holes were apparently poorly placed, either failing to hit the geological target (eg; WC5 missed the isoclinally folded Zamu Dolerite / ferruginous Koolpin Formation target), or away from anomalies defined from the costeans. Compass continued exploration through the 1990's after pegging most of EL 4759 under 86 mineral claims (MCN's 641-643; 2649-2669; 2764 – 2779; 2894-2907; 3505-3540).

Compass undertook wildcat drilling at Northern Quartz Prospect (3 holes for 99m) and Chinese Workings Prospect (one hole). Drilling at Main Ridge showed the host sequence for stockwork and ladder vein mineralisation is a steeply eastward dipping arkosic sandstone horizon which crops out on the western side of the Main Ridge. Compass held the most prospective areas under mineral claims until 1998. Notable drill results reported in the final year of tenure included 2m @ 9.09g/t Au in CNQ-3.

Dominion also held **EL 5138**, a 3 block tenement, of which one block covered the NE block of EL 23517 from 1988-1989. Work consisted of geochemical sampling (stream sediment, soil and rock chip sampling), which did not define any 'significant anomalous zones'. The tenement was relinquished.

EL 6474 covered the same 3 blocks as EL5138 (above). The licence lasted one year, with only a literature/geological review, which concluded that the area was away from the main Watts Creek zone of mineralisation, so held little prospectivity.

EL 5064 (Western Gulf Oil and Mining) covered the 3 SW blocks of EL 23517 from 1987-1990. Rock chip samples within the area covered by EL 23517 produced sporadic anomalous results with a maximum of 0.94g/t Au and 4.35% As in a sample described as 'greywacke with scorodite' (at approximately 804300E / 8497200N). Further sampling around this site did not show any better or comparable values in either Au or As, and the ground was dropped.

EL 6653 covered the NW blocks of EL 23517, and was held for one year in 1990. Work concentrated on an exploration review, and concluded that the most prospective areas had been pegged under Compass' mineral claims, and the ground was dropped.

EL 7655 covered the 4 northern blocks of EL 23517, plus a larger area to the north of the tenement for one year (1992). No work was carried out, and it was concluded that no economic mineralisation was contained within the licence area(!)

Territory Goldfields / Northern Gold held **EL 8056** from 1993-1997, covering 5 of the SW blocks of EL 23517, plus areas further south. The most significant work done included soil sampling (65 samples along 4 x 400m spaced lines) within EL3517, with a max value of 3ppb Au (Sample 144287) using BLEG technique. Three stream sed samples were also collected and assayed using BLEG technique. Best result of 0.5ppb Au, 22ppm As, 37ppm Cu, 395ppm Zn and 203ppm Pb came from Sample 144319.

Territory Goldfields also held **EL 8228**, which covered the 3 NW blocks of EL 23517, plus an extensive area to the north and east of the tenement, from 1993 to 1998. Work done within the area covered by EL 23517 included 28 soil samples. Best result from this work of 3140ppm Zn, 900ppm Pb came from about 500m N of the northern edge of EL 23517.

In 2007-08 reporting period, GBS Gold Australia undertook a soil/rock chip sampling campaign which involved collection of 778 soil samples of -2 um along east west lines (0.5 km apart). These were assayed for gold and base metals. Within EL 23517, Au values are generally low and they range form -1 to 140 ppb. Higher than normal values form three clusters which generally correspond to anticlinal structure that contains the Koolpin Formation and the Zamu Dolerite. Base metals concentrations were also generally low, except some higher than normal values, which appears to be related to sporadic distribution of chalcopyrite, galena and sphalerite. Cu varies from 0 to 214 ppm with an average of 24 ppm. Pb ranges from 0 to 1110 ppm with an average of 37 ppm

Previous exploration history of other tenements in the TOC-TOP Group (EL 23516, EL 23532, EL 24403 and EL 25119) is given in Bajwah, 2009b, 2009c and 2009d. Readers are referred to these reports for more information.

6.0 EXPLORATION YEAR ENDING 3 APRIL 2011

During the reporting period, Thundelarra Exploration Limited/Element 92 Pty Ltd took over the control of the tenements from tenement holders, and commenced exploration activities in the project area. This involved retrieval and appraisal of previous exploration data, ground-truthing and detail geological/geomorphological mapping program by a consultant geologist, soil sampling and high resolution geophysical survey (magnetic and radiometric). It also involved entering previous exploration data into appropriate data bases for processing and interpretation.

Geological and Geomorphological Mapping

Thundelarra Exploration Limited commissioned geological mapping study (Cotton, 2011) in order to understand geological and geomorphological setting which is known for uranium and gold mineralisation together with many airborne radiometric anomalies. For this study, information obtained from air photos, remotely sensed data (Landsat, Quickbird and SPOT) and high resolution geophysical survey was also integrated. Thundelarra believes that the Hays Creek Fault (HCF) has an important role in localising uranium and gold (?) mineralisation. One of the main aims was therefore; to look for prospective splays from the HCF, map prospective anticlines and try to understand possible scenario when HCF intersects the major NNW trending gold influencing structures. Figure 3a shows the geological and geomorphological setting of the project area along with its legend (Figure 3a and 3b). Following discussion is based on geological and geomorphological investigation undertaken by Cotton (2011).

During this investigation, five separate geomorphic systems were defined as shown in Figure 4. These are, *undulating plains and low rises, low hills and ridges, rugged hills ridges and mountains and high plateaux*. The basement geology has strong control over each of these systems.

The pre-Cainozoic bed rocks include five Palaeoproterozoic rock groups which are the Namoona Group, Mount Partridge, South Alligator, Finniss River Group and Katherine River Group. The lithological characters of each group and their formations have been discussed earlier in section 5 and abridged version is given in Legend (Figure 3b). The Masson Formation represents the Namoona Group which is generally recessive and crops out in broad anticlinorium in the undulating plains SE of the mapped area (EL 23506). The Zamu

dolerite intrudes the formation. It is not radioactive by any element but Cleo group of uranium mineralisation present further south appears to be related to the intrusion of Allamber or Francis Creek/Minglo granites. McKeddies gold prospect (figure 2) occurs as quartz veins close to the dolerite contact.

The Mundogie Sandstone (Mount Partridge Group) unconformably overlies the Masson Formation and has been divided into four units based on magnetic, radiometric and photo expression and are given in the Legend (Figure 3b). Similarly, the Wildman siltstone can also be divided into upper and lower units and has strong contrast between the lower recessive, U-anomalous unit to the upper boldly outcropping poorly radioactive unit. The radiometric response of the Mundogie Sandstone is dominated by the U-anomalism within the contact zones of the members of the Cullen Batholith.

Unconformably above the Mount Partridge Group are the Koolpin Formation, the Gerowie Tuff and the Mount Bonnie Formations (South Alligator Group) which are present within EL 23517, EL 24403 and EL 25119.. These are easily differentiated on all data sets (geophysical, air photos and imagery). The Koolpin and Gerowie form hilly terrain while the Mount Bonnie is largely recessive. There is a strong radiometric contrast between the Kanomalous Gerowie and the U-anomalous, low K & Th upper part of the Koolpin Formation. Also, the Koolpin Formation is intruded by at least three Zamu Dolerite sills which are poorly radioactive.

The Burrell Creek Formation (Finniss River Group) is extensively exposed in the western part of the mapped area (EL 24403, EL 23532), although, it is generally recessive and only locally forms low hilly terrain. It is substantially covered by the alluvials of the McKinlay River flood plain. It has low air photo or radiometric contrast, however, aeromagnetic pattern allows detailed mapping of the folding. There are at least eight distinct anticline/syncline pairs and the sequence (Figure 3) can be subdivided into three main units. Ringwood, Pelican and other gold prospects are confined to anticlinal axis (Figure 2).

Several sills of dolerite have been photo-mapped within the Masson Formation and the Koolpin Formation. Low outcrops are surrounded by deep red soils. Radiometrically, the sills and their colluvial soils are locally anomalous in U but no Th or K.

The Neoproterozoic Kombolgie Subgroup part of the Katherine River Group crop outs in several outliers. The Kombolgie sandstones and their outwash sands can be reliably mapped based on their flat dipping aspect and distinctively low radiometric potassium, uranium or thorium response in the project area.

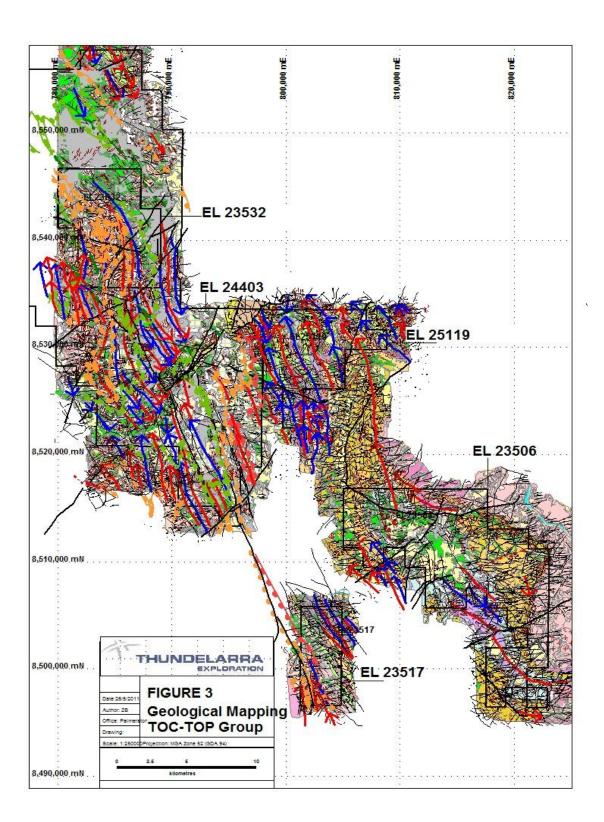
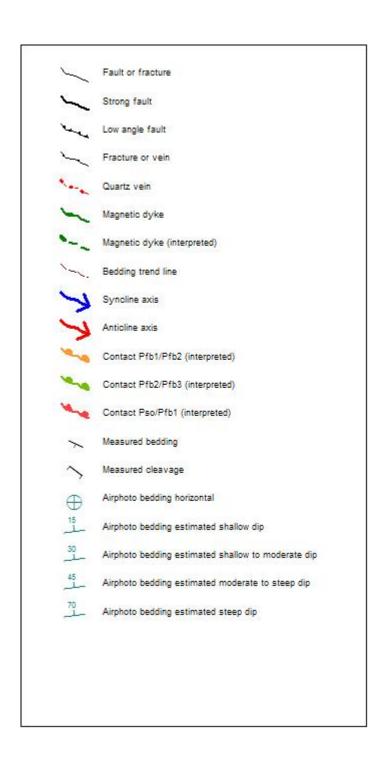


Figure 3a: Geological and Geomorphological Setting of the Project Area

Figure 3b: Legend of Figure 3a

	LEGEND
	A Geomorphic unit of complex erosion and deposition in Present drainage channels; Qbs, Czs silt, sand, clay and gravel deposits being eroded to expose bed
	Flood channel of the Mary River; sand bars and Islands being incised during floods to expose bedrock; abundant Present river gravels.
2 5	Scree Deposits: Sandstone, and metasediment fragments, sand: talus and scree deposits derived from Komboligie Subgroup.
Q.	Complex areas of Qbs with thin remnants of Czs being eroded by the present drainage: radiometric responses rarely in situ.
	Colluvial rock scree, sands, slit and clay skeletal soils after P_granite; some bedrock exposed but also remnants of a sandy sheetwash; radiometric responses
	Colluvial rock scree, sands, silt and clay skeletal soils after pre-granite bedrock; some bedrock exposed but also remnants of a sandy sheetwash; radiometric
	Muddy dark soils and cracking clays; flood plain deposits; prone to inundation during the wet season: ephemeral lakes: being incised by the present drainage s
	Complex areas of Qbs with thin remnants of Czs. transported radiometric responses.
<u> </u>	Slit, sand and gravel outwash fans and thin sheets, being eroded by present regime to form inverted topography, thin lateritic podsols; masks bedrock radioacti
	Petrel Formation: mesas of unmetamorphosed sandstone and conglomerate.
	Kombolgie Subgroup: Coarse to pebbly quartz sandstone; purple clayey coarse to pebbly quartz sandstone, quartz pebble conglomerate, boulder conglomerate
+,	Bludellis Mongonite: mongonite, syenite, dolerite; dykes and stocks; weakly K, Tn, U radioactive, generally moderately magnetic.
	Minglo Granite: porphyritic, hombiende-blotite granite; strongly K, Th, U radioactive.
+ :	Francis Creek Leucogranite: leucogranite, alkali feldspar granite: forms rugged, tory outcrops; ; strongly K, Th, U radioactive.
19 6	Allamber Springs Granite: porphyritic, homblende-blottle granite; strongly K, Th, U radioactive.
	McKinley Granite: pink-green, coarse porphyritic granite.
9=0	Margaret Granite: coarse porphyritic granite.
	Zamu Dolerite: Massive quartz dolerite, amphibolite.
	Burrelli Creek Formation: Brown, grey and red sandy silitatione, silitatione, phyllite, slate and quartz-andalusite-muscovite-biotite-cordierite hornfels. Fine to coarse
	Mount Sonnie Formation: Siltstone and slate with minor laminated black chert bands, lenses and nodules, massive medium to coarse feldspathic greywacks;
	Gerowle Tuff. Grey and brown silistone and phyllite, and alustic-gamet-blotthe-muscovite-quartz homfels; pink, green, grey and brown argillite; glassy black spot
	Koolpin Formation: Brown furuginous siltstone, shale and phylite commonly carbonaceous and containing chert bands, lenses and nodules, massive ironsto
	Wildman Siltstone upper unit: Brown sandy siltstone, phyllite, slate and shale; fine to coarse felispathic sandstone and quartzite; very fine brown quartz sandstone
0	Wildman Siltstone lower unit: hematitic red, brown and grey siltstone; red and cream banded siltstone, siliceous phyllite; white claystone, ironstone and very manual control of the contr
3.4	Mundogle Sandstone upper unit: psammite (pebbly), psammopelite and pelite.
(3)	Mundogle Sandstone: pelite; weakly magnetic beds and elevated K response, strong U radioactivity.
	Mundogle Sandstone lower unit: psammite (pebbly), psammopelite and pelite: distinctly magnetic unit.
	Masson Formation: carbonaceous phyllite to sandy slitistone, laminated quartite, thin magnetic ironstone, dolomitic slate.



Structure

Structure of the project area is dominated by granite intrusions, open folding and a number of major fault structures. Granites intruded the strata with approximate concordant contact. Each forms a topographic rim which may be discontinuous, marked by contact aureoles.

D3 folding is prominent in all data sets and is responsible for the present disposition of strata. The folds have shallow to flat plunges and overall change in plunge from north to north-easterly may be observed. There are a large number of axial plane faults some of which can be accurately traced for tens of kilometres. They are more often than not dislocating synclinal axes. The strongest of these, which is confined to the Burrell Creek Formation, has a sinistral shift of around three kilometres (Cotton, 2011).

Other General Observations

The current photo mapping has shown the following significant features:

- The strongest U anomalies occur along the contact of the Allamber Springs and Minglo Granites in the south and include the Cleo prospects. The whole of this contact is highly prospective for more uranium mineralisation.
- the most consistently uranium anomalous units are the upper Koolpin Formation and the lower half of the Wildman Siltstone.
- The most significant Au mineralisation in the mapped area, the Ringwood trend, is along the main anticlinorial axis within the Burrell Creek Group. Where this intersects the strong NE faults that define the Kombolgie outliers is a prospective location for Au mineralisation.

Geochemical Survey

From the project area 100 soil samples were collected during the reporting period, and have been submitted for gold, uranium and base metals analyses. These results will be lodged in the next reporting period. In addition, 5 rock chip samples were also collected (EL 244) from the quartz veins located along the shear zone/demagnetised lineament or magnetic fold closures. One sample returned gold values up to 12.1 ppm and 3.28% arsenic. All assay data will be reported in the next reporting period.

High Resolution Geophysical Survey

During the year under review, a high resolution geophysical survey (magnetic and radiometric) was flown over the project area.

Figure 4 shows TMI image of the project area which reveals Palaeoproterozoic geology under cover rock, particularly in EL 24403. It may be noted that general trend of foliation and folding in under cover rock is similar to that which crops out in the project area. Further processing and interpretation is underway.

GDF formatted geophysical data for EL 23506, EL 24403 and EL 25119 are given in Appendix 1.

7.0 PROPOSED EXPLORATION PROGRAM

In the next reporting period, further processing and interpretation of high resolution geophysical data will take place. Radiometric and magnetic anomalies identified from the geophysical and mapping data will be examined in the field. A soil/rock chip sampling program has been designed for the project for 2011-12 reporting year. If some encouraging results received, then RC drilling will be conducted to test new areas for mineralisation.

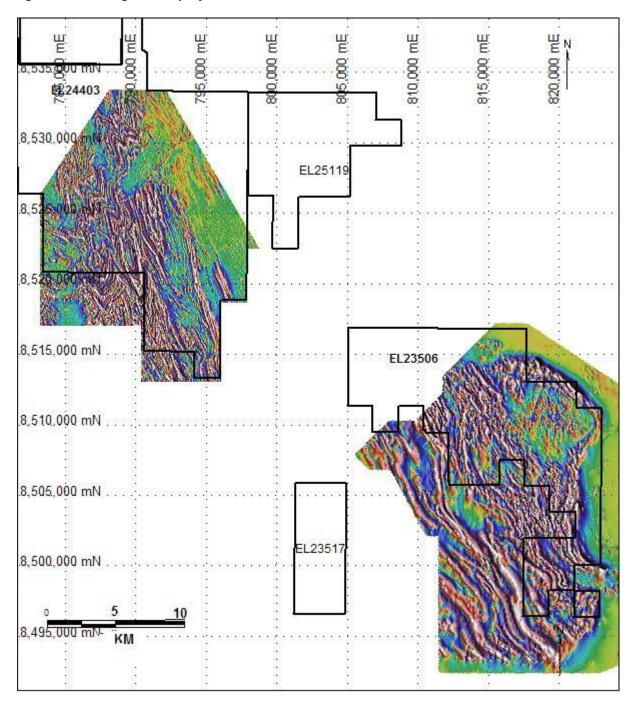


Figure 4: TMI Image of the project area

8.0 REFERENCES

- Adamson, S., 2010, Annual Report for Great Northern Exploration License 23516 for the year ending 03/04/2010. Thundelarra Annual Report to NT Dept of Resources.
- Ahmad, M., Wygralak, A.S., Ferenczi, P.A., and Bajwah, Z.U. 1993. Explanatory Notes and Mineral Deposit Data Sheets. 1:250,000 Metallogenic Map Series, Department of Mines and Energy, Northern Territory Geological Survey.
- Bajwah, Z.U. 1994. A contribution of geology, petrology and geochemistry to the Cullen Batholith and related hydrothermal activity responsible for mineralisation, Pine Creek Geosyncline, Northern Territory. Northern Territory Geological Survey Report 8.
- Bajwah, Z.U. 2009a. Annual exploration report, EL 23516 for period ending 2 April 2009, Great Northern, Northern Territory. GBS Gold Australia annual Report to Dept of Primary Industry, Fisheries and Mines.
- Bajwah, Z.U. 2009b. Annual exploration report, EL 23532 for period ending 12 February 2009, Mt Ringwood, Northern Territory. *GBS Gold Australia Annual Report to Dept of Primary Industry, Fisheries and Mines*.
- Bajwah, Z.U. 2009c. Annual Exploration Report El24403 for Period Ending 8 September 2009 'Mt Douglas' Burnside Project NT. GBS Gold Australia Annual Report to Dept of Primary Industry, Fisheries and Mines.
- Bajwah, Z.U. 2009c. Annual Report Exploration on Licence 25119 'Douglas Creek' for the Year Ending 3 October 2009, Northern Territory. *GBS Gold Australia Annual Report to Dept of Primary Industry, Fisheries and Mines.*
- Cotton, B., 2011, Photogeological Mapping at 1:40 000 Scale of the Pine Creek Regional Area 2, Northern Territory. Consultant Report for Element 92 Pty Ltd.
- Needham, R.S and Stuart-Smith, P.G., 1984. Geology of the Pine Creek Geosyncline, Northern Territory 1:500,000 scale map. *Bureau of Mineral Resources, Australia*.
- Needham, R.S., Stuart-Smith, P.G., and Page, R.W., 1988. Tectonic evolution of the Pine Creek Inlier, Northern Territory. *Precambrian Research 40/41, pp 543-564*.
- Orridge, G.R., 1988, Report on Mt Osborne year ending 06-01-1988. *Oceania Exploration and Mining Limited Annual Report to Dept of Mines and Energy, CR1988-0024*
- Stuart-Smith, PG., Needham, RS., and Wallace, DA., 1987, Pine Creek, Northern Territory, 1:100 000 geological map and explanatory notes. *Bureau of Mineral Resources, Australia and Northern Territory Geological Survey*.