



**Chilling Project
ELs 22738, 23682, 24557, 25076, 25077, 25078**

**Combined Annual Report
9 November 2009 to 8 November 2010**



**Authors: Melville P. Nicholson P. Buskas M. & Buskas A.
Tenure Holder: Crossland Mines Pty Ltd
Submitter of Report: Crossland Uranium Mines Limited
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Table of Contents

SUMMARY	1
1. Introduction.....	4
1.1 Background	4
1.2 The Target Area	4
1.3 Exploration Rationale	5
2 Location and General Description	5
3 Tenure	6
4 Previous Exploration Activities	9
4.1 Other Companies	9
4.2 Crossland Uranium Mines Limited.....	9
5 Geology.....	10
5.1 EL 22738.....	11
5.2 EL 23682.....	12
5.3 EL 24557.....	12
5.4 EL 25076.....	12
5.5 EL 25077.....	13
5.6 EL 25078.....	13
6.0 2010 WORK PROGRAM.....	13
6.1 EL 22738.....	15
6.2 EL 23682.....	17
6.3 EL 24557.....	17
6.3.1 Analytical.....	18
6.3.2 March Fly Assessment.....	18
6.5 EL 25076.....	21
6.6 EL 25077.....	22
6.7 EL 25078.....	24
6.0 EXPENDITURE.....	25
7.0 REFERENCES	26

List of Figures in Text

Figure 1	Location Map of Chilling Project	8
Figure 2	Regional Geology Project Area	14
Figure 3	March Fly Uranium Prospect – Plan	19
Figure 4	March Fly Uranium Prospect – Cross Section	20
Figure 5	March Fly Uranium Prospect – Long Section	21
Figure 6	Eccles-SH2 Uranium Prospect – Plan	23

List of Tables in Text

Table 1	2010 Exploration Activities	2
Table 2	Chilling Project Tenement Details	7

List of Appendices

Appendix 1	Data EL 22738
Appendix 2	Data EL 25077
Appendix 3	Data EL 25076

SUMMARY

This report covers exploration work carried out on the Chilling project for the 2010 field season by Crossland Uranium Mines Limited (Crossland). The project comprises six exploration licences, ELs 23682, 24557, 25076, 25077, 25078 and 22738, all of which form a north-south trending corridor stretching from Litchfield Park in the north to the Wingate Plateau in the south.

The presence of uranium in what is interpreted to be an unconformity-related environment has been investigated by Crossland at several locations within the project properties. Uranium also occurs in a structural setting in granite at the historical MEMA prospect in EL25076 and in pegmatitic vein swarms within the Soldiers Creek granite located in EL22738. The entire region covered by the tenements has high potential for uranium deposits due to the presence of favourable source and host rocks and the identification of suitable structural traps and depositional sites.

The main field exploration activities for the current year consisted of radiometric anomaly assessment, geological mapping, rock chip, soil and stream sediment sampling, and detailed and regional ground spectrometer surveys. The most intensive field work was restricted to ELs 25076 and 22738. Within the latter tenement, the 2009 discovery of interpreted lower Proterozoic stratigraphy with associated uranium and base metal anomalies led to the continuation of a very intensive mapping and sampling program. Drilling programmes for a proposed 1600-1800 metres for ELs 22738, 23682, 24557 and 25076 had to be postponed due to a combination of the inability of several drilling contractors to give a reliable commitment, the onset of early rains in the region. Additionally, in the case of 23682 and 25076, Crossland had applied to the AAPA for sacred site clearances in March 2010 – these were eventually completed in October. It has been proposed that the drilling programmes will now be commenced at the beginning of the 2011 dry season, and will incorporate holes already planned for the 2010 season as well as those resulting from the interpretation of the 2010 fieldwork results.

The total expenditure for all Chilling project licences was \$1,141,664.76. This figure represents all expenditure up to the anniversary dates of each EL.

All activities for 2010 are tabulated by tenement in Table 1 on the following page.

Table 1. 2010 Exploration Activities

EL	Exploration Activity	Amount
<p>EL 22738 'Buchanan'</p>	<ul style="list-style-type: none"> • Office Studies – compilation of data, Access database construction, interpretation, production of drill cross sections, planning of core drilling programme. Compilation of new mapping data. • Regional and prospect scale geological mapping • Radiometric traversing • Rock chip sampling • Soil sampling • Stream sediment sampling 	<p>559 observations within an area of 160 km² 2,500 line km 1 211 covering app 100 km² 165 covering approx 100 km²</p>
<p>EL 23682 'Chilling'</p>	<ul style="list-style-type: none"> • Brief access and reconnaissance. Planning of access track, drill site. • AAPA Clearances 	
<p>EL 24557 'Mount Thomas' March Fly U Prospect</p>	<ul style="list-style-type: none"> • Office studies – assess drilling results, update database, reinterpretation and calculate a resource, plan future core drilling programme. • Fieldwork – remap prospect and extensions, re-log/'map' drill core, structural interpretation. 	<p>Mapping over 2 x 1km area. 6 drill holes re-logged.</p>
<p>EL 25076 'Allia'</p>	<ul style="list-style-type: none"> • Office studies – compilation of historical Fletchers Gully data • Radiometric Traversing • Soil sampling • Stream Sediment sampling • Geological Mapping • Radiometric anomaly follow-up • AAPA Clearances 	<p>60 km² 1453 samples 618 samples 60 km²</p>

EL 25077 'Litchfield'	<ul style="list-style-type: none">• Office Studies – acquire DME reports, data collection, construction of Access database and transfer of all historical drill data for Eccles U prospect. Construction of drill hole cross sections and program planning for 2011.• Fieldwork – visit Eccles prospect. Reconnaissance radiometrics and mapping	
EL 25078 'Tipperary'	TEMPEST EM Final data received. Processing and preliminary interpretation.	

1. Introduction

1.1 Background

The Chilling area was initially selected because of the presence of a 'Primary Hub' within what is now EL 23682. The 'Hub' was identified using confidential technology supplied by Paradigm Geoscience, (now Global Geoscience Limited). The aim of the technology is to identify targets for mineral exploration with the same signatures as major mineral deposits. The method offers a means to identify important mineral resources without the need to acquire title to broader areas, with the resultant demanding access and land use challenges. Because of the restricted areas selected, more intensive exploration than would be normal in greenfields exploration can be focused on the limited area by even junior mineral explorers such as the holders. The Hubs have responded to the selection process in a similar fashion to major mineral deposits. It is to be expected that in most cases the target deposits do not outcrop, or they would already have been discovered, so it will be necessary to penetrate the overburden to make discoveries. The selection technique does not permit identification of target commodities, and these must be determined by consideration of regional metallogenic factors and field reconnaissance.

1.2 The Target Area

The original Chilling Target Area as identified by Paradigm Geoscience lies wholly within the confines of EL 23682, which is located in the Wingate Mountains, south of the Daly River community. The licence is situated at or close to a locus of important geological features in that it straddles the margins of the Litchfield Province, the Fitzmaurice Mobile Zone, the Pine Creek Geosyncline and the Daly Basin. Additionally some important bounding structural features intersect close by or are within the area. There is also an unusual diversity of intrusive rocks, as demonstrated by the airborne radiometrics and magnetics.

In the target area, lithologies mapped as Chilling Sandstone form the basement. While this is dominantly a quartzite unit, it does contain intercalated altered acid lava and pyroclastics, and is intruded by the Ti-Tree Granophyre. Based on the variety of geophysical patterns observed, there may be other non-outcropping intrusive bodies occurring in the region.

The more recent licence acquisitions, which make up the Chilling Project, are considered highly prospective for the classic unconformity-related uranium deposits and possibly also structurally controlled deposits within or adjacent to granites. The principal focus is on the paleoproterozoic basement and the unconformably overlying Mesoproterozoic platform cover, a combination which extends throughout much of the project licences and covers a considerable strike length. There is also the newly recognised sedimentary succession within EL 22738, which has stratigraphic, lithological and metallogenic similarities to the Rum Jungle Mineral Field. The direct proximity of the hydrothermally affected Soldiers Creek granite (and most likely the Allia Creek granite) to this succession is considered significant. In addition, structurally hosted uranium mineralisation at the March Fly and Eccles prospects, is present in two of the

northernmost tenements.

1.3 Exploration Rationale

The geological setting of the Chilling project suggests that a wide variety of deposit styles could be present. The greater region has produced both gold and tin, the latter intimately related to granites e.g. the Soldiers Creek granite and to associated pegmatite swarms, which invade the lower Proterozoic Burrell Creek formation. The best known example of gold mineralisation is the historical Fletcher's Gully Mine located on EL 25076 where incomplete records indicate that 70 kg or 2250 oz gold were produced. Tin, as alluvial concentrations and lode deposits is known from Buldiva, Muldiva and Collia in ELs 25076 and 22738. Base metals deposits have been prospected / mined in a structurally prepared meta-sediment-volcanic environment assigned to the basal Burrell Creek formation at Daly River and also in carbonate rocks of the Daly Basin. The district also has basic intrusives which could have a potential to host nickel-copper or platinoid mineralisation.

Within the project tenements, structurally controlled uranium mineralisation is present at the MEMA Prospect (EL 25076) - in a shear within the Allia Creek granite, and in the Soldiers Creek granite (EL 22738) associated with pegmatitic vein swarms. The paleoproterozoic Burrell Creek metasediments host vein-style mineralisation at the March Fly (EL 24557) and Eccles Prospects (EL 25077). Greisen / pegmatite 'dykes' and tourmaline alteration are a feature of these two occurrences. Within EL 22738 ('Buchanan') widespread uranium anomalism has recently been identified adjacent to hematitic-siliceous-carbonate breccia units in the newly identified lower Proterozoic meta-sedimentary package. This geological environment bears many similarities to known uranium deposits in the Northern Territory such as at Rum Jungle and those of the Alligator Rivers Uranium Field (ARUF). In addition, EL 22738 is also prospective for stratiform base metal deposits similar to Browns, Whites, Area 55 and Area 44 in the Rum Jungle district. The Soldier's Creek Granite is prospective for uranium mineralisation along cross faults and in veins, and for tin mineralisation in greisens, veins and associated alluvium. There is also the potential for the smaller but exceptionally high grade deposit-type such as those at McArthur River and Cigar Lake in the Athabasca Basin, Saskatchewan, Canada.

The variety of mineral occurrences spread throughout the Chilling project illustrates that both source rocks and suitable structurally prepared lithological hosts are present. Further encouragement for the uranium prospectivity of the region is provided by Territory Uranium's discoveries in "younger middle Proterozoic rocks" immediately east and to the northeast of EL 22738.

2 Location and General Description

The licences of the Chilling Project are located in the Daly River region, centred approximately 145 km south of Darwin. The group of tenements form an almost continuous north-northeast to south-southwest trending swath of variable width running from the southern part of Lichfield Park in the north to the Wingate Plateau in the south.

The nearest settlement is Daly River, which comprises an aboriginal community (Naiyu), police station and hotel. The region has several tourist facilities. Detailed geographical and landholding descriptions of the individual licences are compiled in the 2007 report and are for the most part still valid. The reader is referred to that report for the information. Since 2007 the Fish River pastoral lease has been sold by Tipperary Station and the Fish River block, on which ELs 22738 and 23682 are located, is now under the control of Parks and Wildlife Service of the Northern Territory. Wombungie Station has retained some concessions on the latter

3 Tenure

The four original licences ELs 23682, 25076, 25077 and 25078 were applied for by Crossland Mines Pty Ltd. EL 24557 was acquired from Aldershot Resources Limited in 2008; EL 22738 was originally applied for by Buchanan Exploration Pty Limited and was subsequently acquired by Crossland. Crossland Uranium Mines Limited is the current operator of the licence package. See Table 2 for a summary of tenement details and Figure 1 for the location of the project licences.

- EL23682 (Chilling) was granted for a six-year term on 18 September 2003 (expiring 17 September 2009). The title originally covered an area of 48 sub-blocks (159.8km².) On the 17 September 2008, the licence was compulsorily reduced by 50%. The existing title of 24 sub-blocks (79.6 km²) was reapplied for in 2009 for the 2 year period (Years 7 and 8) and was subsequently granted in entirety.
- EL 25076 (Allia) was granted for a six year term on 18 September 2006 (expiring 17 September 2012). The title covers an area of 189 sub-blocks (630 km²). A Waiver of Reduction was granted on 17 September 2009 allowing all sub-blocks to be retained.
- EL 25077 (Litchfield) was granted for a six year term on 9 November 2006 (expiring 8 November 2012). The title originally covered an area of 99 sub-blocks (278.5 km²). A Waiver of Reduction was granted on 23 December 2008 allowing all sub-blocks to be retained. On the 9th November 2009, 50 sub-blocks were dropped; on the 23rd December 2009 a partial waiver was granted by DR – ME to retain 49 sub-blocks.
- EL 25078 (Tipperary) was granted for a six year term on 18 September 2006 (expiring 17 September 2012). The title covers an area of about 64.5 sub-blocks (216.2 km²). A Waiver of Reduction was granted on 17 September 2009 allowing all sub-blocks to be retained. In 2010, 24 Sub-blocks were relinquished leaving a current total of 49 sub-blocks (145.12 km²).
- EL24557 (Mount Thomas). Acquired by Crossland from Aldershot Resources. Minerals and Energy confirmed transfer on April 1 2008. The licence was

originally granted on 7 December 2005 (expiring 6 December 2011) and covers 20 sub-blocks or 66.51 km². A Waiver of Reduction was granted on 23 December 2008 allowing all sub-blocks to be retained.

- EL22738 (Buchanan) was granted on January 15 2009 and will expire on January 14 2015. The licence was purchased by Crossland from Buchanan Exploration in 2006. The tenement consists of 162 sub-blocks, an area of 537.2 km².

Table 2. Chilling Project Licences

E.L. Number	Grant Date	Expiry Date	Year of Tenure
EL 23682	18/09/2003	17/09/2009	8
EL 24557	6/12/2005	6/12/2011	5
EL 25076	18/09/2006	17/09/2012	5
EL 25077	09/11/2006	08/11/2012	5
EL 25078	18/09/2006	17/09/2012	5
EL 22738	15/01/2009	14/01/2015	2

Permission was granted by NTDME to allow for a common reporting date on all six tenements.

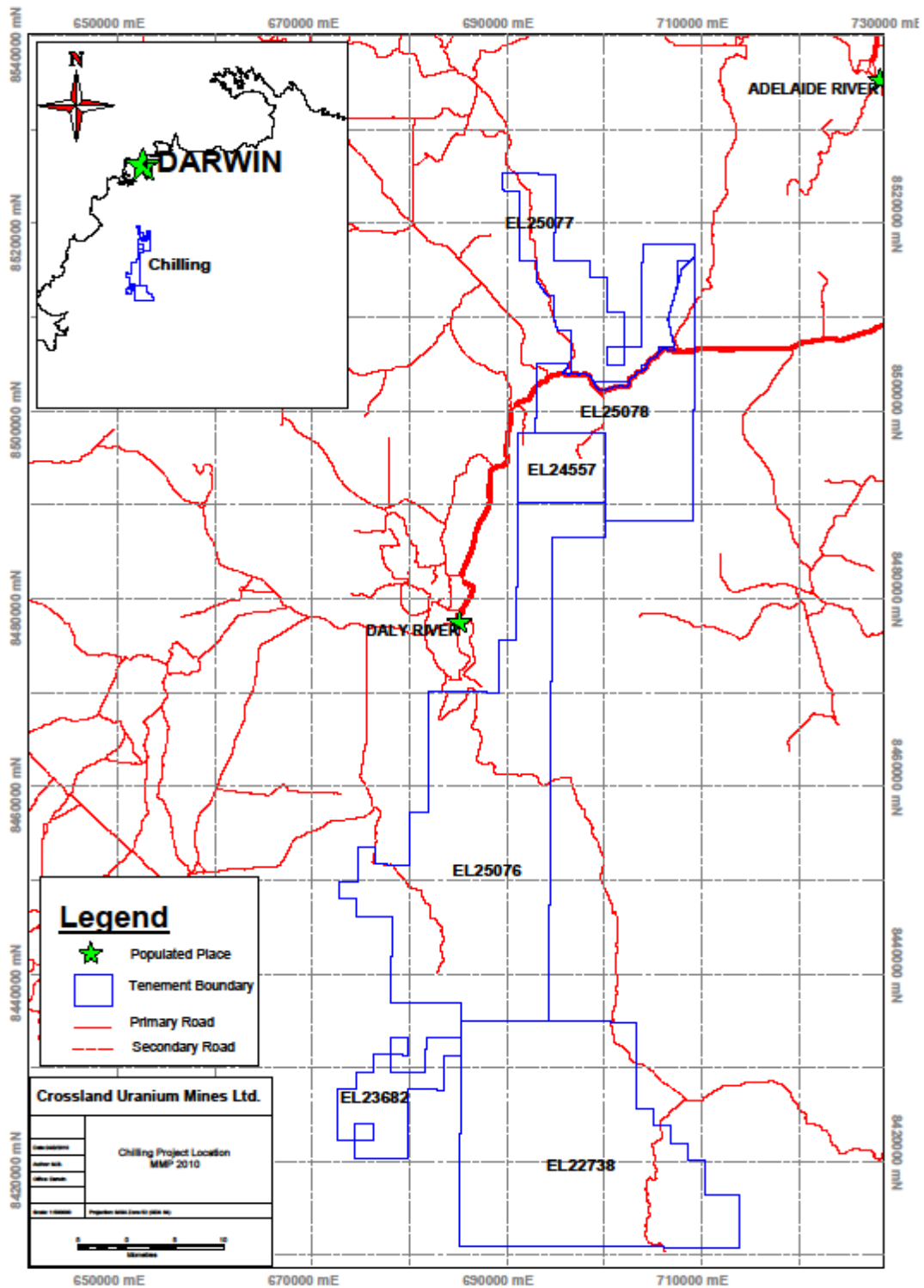


Figure 1 Location Map of Chilling Project

4 Previous Exploration Activities

4.1 Other Companies

The annual report for the Chilling project (Eupene and Buskas 2007) covers in detail all previous historical work carried out within or immediately adjacent to the project tenements since the early 1970s. This information is contained within Sections 2.6 and 2.7 of that report.

For EL 22738, the most recent exploration activities carried out within the confines of the current Crossland tenement involved PNC (Exploration) Australia Pty Ltd (1994-1996). Their EL covered the Soldiers Creek Granite (and country to the west) where exploration was targeting a modified IOCG model. The window of metasedimentary rocks was, at a later date, covered by a PNC licence application, but this was eventually cancelled. PNC geologists made mention of gossanous ironstone outcrops along the eastern boundary of their licence and these were sampled. The presence of anomalous uranium and base metals were reported but no further work was done.

The eastern edge of the current licence, which is covered by the Tolmer Group, was the focus of exploration for unconformity-style uranium deposits by the Total Mining Australia Pty Ltd / PNC 'Pine Creek West' joint venture (1986-1991).

4.2 Crossland Uranium Mines Limited

2004-2006

EL 23682 was the sole project licence until the latter part of 2006. Work conducted over this period by Crossland's predecessor included the following activities.

- Literature research of all previous exploration, NTGS mapping and geophysical surveys.
- Data compilation.
- Helicopter-supported geological reconnaissance and collection of stream sediment samples, and -1.2mm mesh samples for diamond exploration.
- Analysis by ICP and Fire Assay-ICP low level scans for 63 elements including precious metals and platinoids.
- Intensive helicopter-supported follow up stream sediment sampling on closer sample spacing.
- Reinterpretation of airborne geophysics.
- Helicopter reconnaissance inspection of tenement with Uranium Expert.
- Interpretation of results, future planning and budgeting.
- Preparation of the prospectus

2007

- Further literature research and data compilation.
- Reconnaissance traverses of existing roads to identify access to and around the project area.
- Grid based Total Count surveys with a scintillometer.
- Grid based geological mapping.
- Collection of rock samples.

- Analysis of rock samples using low level scans for 40 elements, 9 oxides and 4 lead isotopes.
- Detailed ground based radiometric surveys using a spectrometer mounted on an ATV and/or man ported.
- Airborne geophysical surveys including radiometrics and magnetics.
- Processing and interpretation of results.
- Interpretation and assessment of data.

2008

- Compilation and database construction for March Fly prospect, EL24557.
- Regional ground check of airborne radiometric anomalies.
- Detailed ground based radiometric surveys using a spectrometer mounted on an ATV and/or man ported.
- Prospect scale geological mapping and spectrometer surveys.
- Rock chip sampling and geological mapping at MEMA prospect, EL 25076.
- Diamond drilling on EL 25076 and at March Fly prospect, EL 24557.
- Interpretation and assessment of data.

2009

- Compiling and database for 2008 drilling programmes. Drill programme planning for 2009.
- Tenement-scale radiometric anomaly check – ELs 22738 and 25076. Also 25077.
- Detailed ground based radiometric spectrometer surveys on 22738.
- Tenement scale geological mapping; soil, stream sediment and rock chip sampling on ELs 22738 and 25076.
- Diamond drilling at March Fly prospect, EL 24557.
- RAB/Aircore/hammer drilling on EL 22738.
- Co-funding of government TEMPEST EM airborne survey over project area.
- Airborne Mag-Rad over portions of EL 22738.

5 Geology

The Chilling Project Area is covered by three separate 1:100,000 scale map sheets, which from north to south are Reynolds River, Daly River and Wingate Mountains. The most recent editions of these maps are:

- NTGS 1:100,000 Wingate Mountains Sheet, published along with explanatory notes, in 1989 (Edgoose *et al*, 1989).
- NTGS 1:100,000 Daly River Sheet, published along with explanatory notes in 1987 (Dundas *et al*, 1987).
- NTGS 1:100,000 Reynolds River Sheet, published along with explanatory notes in 1989 (Pietsch, 1989).

The geology of the project area is illustrated in Figure 2. The figure was constructed from the 1:250,000 scale geological map of the Northern Territory (Ahmad and Scrimgeour NTGS 2006).

In summary the rock units present within the company's licences range in age from paleoproterozoic to Cretaceous with development of Tertiary and Quaternary deposits in

places. The dominant mapped stratigraphic units are

- The lower proterozoic Finnis River Group metasediments, dominated regionally by greywacke (lithic quartz arenite), phyllite and conglomerate with locally developed andalusite schist and graphitic schist. The Chilling Sandstone is present in the southern part of the tenement package. The latter contains some interbedded volcanics.
- The middle proterozoic Tolmer Group, which extend throughout. Dominant lithologies are quartz arenite grading upwards into carbonate sequences. The basal unit, the Depot Creek sandstone is seen to be unconformably overlying the older basement rocks and granite.
- Cambrian volcanics, limestone and minor sandstone. Remnants are present within some tenements. Best exposures are to the north in ELs 25076 and 24557. The Daly Basin takes up much of the ground covered by EL 25078
- Cretaceous sediments. Mostly confined to the Wingate Mountains in the south, mostly overlying the Tolmer Group.
- Various intrusives. Soldiers Creek, Allia, Reynolds River Granite bodies, basic rocks etc

A brief outline of the geology of each tenement follows.

5.1 EL 22738

Previous government mapping programmes failed to accurately identify the geology of the 'window' of sedimentary rocks wedged between the Soldiers Creek granite and the Tolmer Group. The NTGS mapping included the sedimentary package within the Cambrian Daly River group. Detailed mapping by Crossland geologists have interpreted this sequence as being folded and deformed and therefore concluded that it is much older than previously thought, i.e. most likely early proterozoic in age.

The newly mapped window comprises dolomite, mudstone, chlorite schist and widespread conformable breccias of probable carbonate origin. The latter are mostly cherty with drusy silicification and hematite staining. In places they are gossanous. In some outcrops comparison has been made with the once-named HQB unit mapped in the Batchelor-Rum Jungle area. It is tentatively proposed that these rocks are equivalent in age to the sequence that host uranium and base metal mineralisation at Rum Jungle. There are no visible contacts with the granite but it would be assumed that there is an intrusive relationship.

The Burrell Creek Formation crops out in the northwestern corner of the licence, in contact with the Soldiers Creek granite. Contacts have been mapped as both faulted and intrusive (NTGS mapping). Rafts of altered Burrell Creek rocks have been identified within the granite in the southeastern corner near the 'Escarpment Prospect'.

Both the Depot Creek and Stray Creek sandstone units are represented, forming a northwest trending 'plateau' along the eastern boundary of the licence.

There are several major structures mapped within the licence. These trend mostly to the northwest e.g. the Fish River fault.

5.2 EL 23682

This EL is mapped as predominantly Lower Proterozoic Chilling Sandstone, with up to 400 m of intercalated altered rhyodacite, rhyolite and banded tuff in its northern sector. These rocks are intruded by the Ti-Tree Granophyre within the tenement and, outside of it, by basic sills assigned to the Wangi Basics. From Crosslands observations, the sandstone is frequently silicified, and in places heavily quartz veined. The Lower Proterozoic are overlain directly by Cretaceous sediments, which are probably no more than 50 m thick. South of Muldiva Creek and within the EL, the Angalarri Siltstone of the Auvergne Group (810-750 Ma) is exposed in stream valleys beneath the Cretaceous. The contact where exposed has been mapped as faulted; however this represents the northernmost exposure of the Auvergne Group, and may in part be a depositional surface.

5.3 EL 24557

The licence is dominated by a NNE striking belt of early to middle Proterozoic rocks confined by the Giants Reef fault on the western side and the Daly Basin to the east. The oldest rocks present belong to the Burrell Creek Formation. The middle Proterozoic Tolmer Group lies unconformably on the Burrell Creek and is represented predominantly by the basal Depot Creek Sandstone. Stray Creek Sandstone outcrops in the vicinity of the Hayward Creek prospect. Both units are composed predominantly of quartz arenite. The March Fly prospect uranium mineralisation, hosted by the Burrell Creek, has locally abundant graphite schist and pegmatite veins containing abundant tourmaline.

5.4 EL 25076

The dominant geological feature is the Giant's Reef Fault which trends north northeast, running along and occasionally cutting across the tenement's western boundary. The oldest rocks present are the Hermit Creek Metamorphics, which occur as a few scattered outcrops on the westernmost part. The next oldest is the Finnis River Group, which is represented by the Burrell Creek Formation and the overlying Chilling Sandstone. The Finnis River Group forms an arc shaped swath which covers the southwest corner and much of the western margin of the tenement. Two major structures present in the southwest corner are the Muldiva Anticline (Burrell Creek Formation) and the Chilling Syncline (Chilling Sandstone), which form a sub-parallel trending anticline-syncline pair. Three intrusive units, the Murra-Kamangee Granodiorite, the Allia Creek Granite and the Jamine Granite are present. The Murra -Kamangee Granodiorite is represented as a few scattered outcrops on the western side near outcropping Hermit Creek Metamorphics. The largest and most significant intrusive, the Allia Creek Granite is located in the south central part where it intrudes into the crook of the arcing swath of the Finnis River Group. Exposures of the Jamine Granite occur on the western side of the property, to the northeast of the exposures of Murra-Kamangee Granodiorite. The most widespread units are two members of the Tolmer Group, the Depot Creek Sandstone and the Stray Creek Sandstone. These rocks cover well over 60% of the tenement. The youngest rocks

are the Antrim Plateau Volcanics, present along the southern boundary, near the contact between the Finnis River and Tolmer Groups.

5.5 EL 25077

The dominant geological structure in the vicinity is the Giant's Reef Fault, which strikes north-northeast just to the west of the southern part of the licence. The oldest rocks present are the Finnis River Group, represented by the Burrell Creek Formation, which is exposed along the western side and northeast part of the EL. The dominant geological unit on the property is the Tolmer group represented predominantly by the Depot Creek Sandstone member, with minor Stray Creek Sandstone. These rocks form a wide north-south trending incised plateau area between the two mapped exposures of the Finnis River Group. The Reynolds River Granite, which can be found intruding the Finnis River Group, is located in the northeast corner of the property and is known to underlie the Tolmer sandstone near Alligator Creek, just north of the Daly River road.

5.6 EL 25078

From oldest to youngest and from west to east, the dominant geological features are the lower proterozoic Burrell Creek Formation, Tolmer Group arenites, Uniya Tillite and the lower to middle Cambrian rocks comprising the Antrim Plateau volcanics and the Daly River Group sediments. The Burrell Creek metasediments are tightly folded and have a regional strike to the north-northeast. They are partially covered by the unconformably overlying, shallow dipping Depot Creek Sandstone. To the east the sandstone is progressively obscured by Uniya Tillite and younger volcanics. Tertiary palaeosoils cover much of the Daly River Group, however occasional exposures of the Tindal Limestone member have been mapped in this part of the tenement.

6.0 2010 WORK PROGRAM

Field exploration activities for the reporting period concentrated on following up the detailed mapping, sampling and radiometric surveying programmes, which covered the prospective sections of ELs 22738 and 25076, in anticipation of diamond core and aircore drilling programmes. Other field activities included re-mapping of the March Fly uranium prospect in EL 24557 and an inspection of the Eccles uranium prospect and immediate environment in EL 25077.

The proposed diamond drilling and air core programmes planned for the 2010 season failed to go ahead due initially to difficulties in acquiring a contractor and followed by adverse weather conditions in late September / early October. In addition, an AAPA sacred site survey, applied for early in the year for ELs 23682 and 25076 was delayed until October. All programmes, with some slight modifications, are planned to go ahead at the commencement of the 2011 dry season.

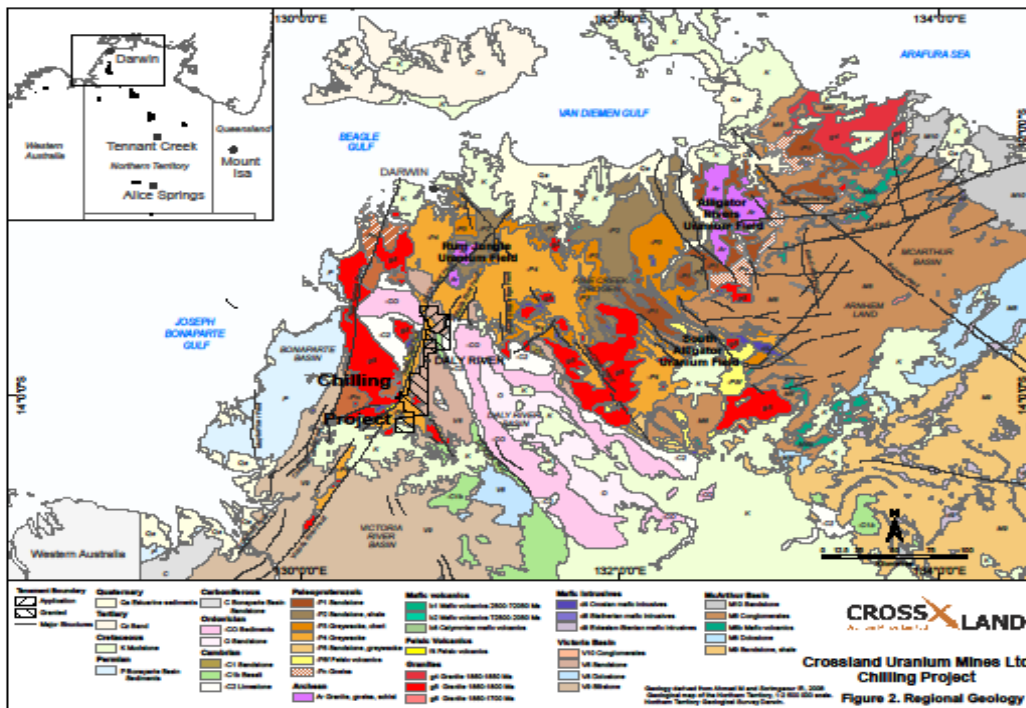


Figure 2 Project Area Regional Geology

Office work directly connected with the proposed drilling programmes included a reconstruction of the March Fly Access drillhole database and data collection for the Eccles-SH2 Prospects drilled areas (Total Mining 1987-1991) located in EL 25077. Other works involved ongoing compilation and interpretation of ground spectrometer survey data.

The methodology and results of this fieldwork are described in the following sections.

6.1 EL 22738

In EL 22738, last years work was expanded upon with more detailed geological mapping and soil and stream sediment sampling along the southwestern margin of the interpreted lower proterozoic stratigraphy. Attention was also given to the southeastern corner ('Escarpment' prospect) where Soldiers Creek granite forms a window surrounded by Tolmer Group arenites ((Edgoose *et al* 1987 NTGS). This area was also mapped in conjunction with detailed ground spectrometer surveys.

The field season start-up was delayed due to the prolonged wet season. A camp was established and work commenced in early July, initially with a mapping programme concentrating on the Escarpment area.

Crossland maintained contact with all stakeholders during the season, namely NT Parks and Wildlife, Wombungie Station and the NLC.

Escarpment Whites

The Escarpment prospect comprises an embayment of Soldiers Creek granite surrounded to the north, east and south by Tolmer Group sandstone. Work in 2009 consisted of reconnaissance mapping and geochemical sampling. Results from that sampling programme indicated anomalous Bi, Cu, Co and Pb in the stream sediments and Au and Cu in soils. The location of the anomalies would suggest they are derived from the sedimentary units, perhaps the ferruginised sediments, which 'cap' the Tolmer Group. It was also suggested, based on in-house interpretation of the government airborne magnetics (Nicholson 2009), that lower proterozoic rocks underlying the Tolmer Group in the vicinity could be a 'leakage source' producing these anomalies.

Mapping in the current year concentrated on defining the various contacts and investigating the anomalous environment to search for alteration and/or indications of mineralisation. There were some suggestions for reinterpreting the stratigraphy, for example the position of the mudstone unit relative to the middle proterozoic contact. Other observations, which may need to be clarified in the future is the presence of a cobble (or breccia) layer at the base of the mudstone and scree boulders of a laminated mudstone that suggest brecciation may occur up to 40 to 50 metres above the Tolmer unconformity.

Rafts of lower proterozoic Burrell Creek Formation were mapped within the granite. These outcrops have an approximate NW/SE alignment and exhibit some degree of contact metamorphism in the form of andalusite development. The granite encloses a

major northeast trending pegmatitic body can be traced for several kilometres. Older vein systems crosscut this pegmatite. Progressing westwards, the strike of the pegmatite appears to be deflected around to the south, possibly interfered with by the NW set of faults collectively grouped as the Fish River fault zone. A localised uranium anomaly was investigated and found to be related to patches of a fine grained green mineral, presumably a uranium secondary. A rock sample assay returned 303 ppm U and 12.4 ppm Th; other significant elements were Ag 1.7 ppm, As 587 ppm, Bi 1245 ppm and Mo 16.

In conjunction with the mapping, detailed close-spaced radiometric traversing and several soil sampling lines were run. Five soil sampling lines were completed over the granite and two to the west within lower proterozoic sediments adjacent to the granite contact. The latter were spaced 400 metres apart and followed two 2009 air core drill traverses, which produced anomalous results for several elements – up to 2000 ppm Pb, 350 ppm Cu and 6.4 ppm Ag. Similar values were represented in soil and rock chip samples.

Southwest and East Limb

An emphasis was also placed on more detailed mapping of the lower proterozoic rock units in the southern section of the window, to the west and southwest of the Escarpment prospect. In the initial mapping in 2009, this area was indicated as being more structurally complex and therefore required closer scrutiny. It is also more geochemically ‘active’ with widespread surficial base metal and uranium anomalism in rock, soil and stream sediments in combination with encouraging sub-surface results from the drilling.

For the most part, the lower proterozoic lithologies (mudstone, chert, dolomite, sandstone etc) are either recessive or are obscured by recent soils and alluvium within the inlier, therefore there is very little outcrop. The regionally extensive but partially discontinuous chert horizon is comparatively resistant, making it a perfect marker bed to trace the stratigraphy. Elsewhere a few outcrops of carbonate and the pink-red mudstone were located; their position in the stratigraphy has been more or less established by the 2009 drilling programme.

The chert has been subdivided according to its composition i.e. whether it is hematite-rich or siliceous, and its degree of alteration and brecciation. When these variations are correlated with the radiometrics there appears to be a relationship between the higher radiometrics and certain features of the cherts composition and its outcrop characteristics. In general, areas where there is anomalous spectrometer results and therefore possible targets for drilling are:

- Where there is successively more evidence of brecciation and alteration in the continuous chert -
 - from weakly brecciated sugary to strongly brecciated sugary textured with abundant fine grained drusy silica and some secondary iron
 - to strongly brecciated rock with milky quartz and secondary iron (‘HQB’ term proposed).

- The zones of brecciation become wider in outcrop.
- The usual stratigraphic markers of sugary chert and gossan disappear.

A folder containing photos of the chert breccia and other geological features are contained in Appendix *****.

Northern Whites

The chert marker maintains its discontinuous outcrop pattern along the western side of the lower proterozoic inlier abutting the main mass of Soldiers Creek granite. Further mapping along this trend in 2010 has extended the strike a further two kilometres, almost to the traceable northern limits of the inlier. Siliceous-hematitic cherty breccias in this area have been compared to the 'HQB', which is present in the Rum Jungle environs. Beyond this point younger rocks dominate – the Burrell Creek Formation, Tolmer Group and Cambrian Volcanics are recorded on the government mapping. With the exception of the Tolmer Group to the east and the granite to the west, there is sparse outcrop within the inlier.

Close spaced continuous radiometrics were extended in 2010 to cover the remaining ground in this sections of the inlier.

As stated earlier a diamond drilling programme was planned for EL 22738 but due to various circumstances had to be postponed until 2011. The main aims of the programme are to acquire geological and geochemical data, specifically an oriented section through the stratigraphy to at least 200 metres. A maximum of 10 holes are planned with each of the important areas discussed above receiving some drilling.

All available data for this licence has been placed in Appendix 1

6.2 EL 23682

A planned hole to test a magnetic anomaly has been postponed until 2011. An AAPA sacred site site suvey commissioned in March by Crossland was finally undertaken in October – too late for access track and site construction. In any case the aforementioned difficulties in acquiring a contractor would have been the deciding factor.

A helicopter reconnaissance was undertaken at the beginning of the field season, primarily for the purpose of mapping a track into the area and to check out the proposed site environs.

6.3 EL 24557

A two to three hole drilling programme was planned for the March Fly uranium prospect following some mixed but encouraging results from the previous year. Despite the difficulties in locating a drill contractor, it was decided to delay the programme until 2011 pending a more detailed assessment of the project data. This assessment included a database update and construction of an updated set of cross sections. A consultant to Crossland inspected the site and conducted two days of geological/structural mapping, followed by re-logging of several drill holes. The accumulated data was utilised to re-

interpret the mineralised zone with the aim of formulating a 'back of envelope' resource calculation for internal company purposes.

6.3.1 Analytical

The analytical results for the 2009 drilling, which were not available at the time of writing that years report are included here in Appendix 2. The assays confirmed the mineralised intersections gained in three of the four holes but tended to downgrade the interval in hole CHDD010 due to the sampling interval chosen.

- CHDD010 – 100.09 to 101.22 m, 1.1 m at 0.134 % U_3O_8 ; 106.29 to 106.78 m, 0.49 m at 0.049% U_3O_8 . Compared with down hole radiometrics, the upper intersection reached a maximum of 4212 cps and the lower around 8,000 cps.
- CHDD012 – 83 to 88 m, a 5 metre wide anomalous zone enclosing one high grade intersection between 85.75 to 86.25 m, giving 0.5 m @ 0.816% U_3O_8 . Down hole radiometrics indicated the high grade intersection to occur between 85.456 to 85.939 m. Another, deeper intersection from 170 to 171 m gave 1 m at 0.0409% U_3O_8 .
- CHDD013 – 0 to 10 m anomalous zone enclosing a 3 m wide intersection between 3 and 6 m of 0.0139%.
- Holes 12 and 13 exhibit good along strike correlation of their respective mineralised intervals, the holes being 58 m apart north-south, ; similarly hole 12 and two mineralised holes drilled in 2008, CHDD003 and 004, a distance of 96 m and 122 m respectively to the north. The weakly mineralised intersections in CHDD010 also correlate. CHDD11 was barren although there was alteration noted over wide intervals.

Detailed descriptions of these holes are recorded in the 2009 Annual Report for Chilling.

6.3.2 March Fly Assessment

A summary report prepared by Crossland's consultant is given below.

Host Rock Geology

The March Fly prospect is hosted by the Burrell Creek Formation. In the prospect area, the detailed stratigraphy, from the oldest to youngest, is as follows;

- Lower Coarse Greywacke. This unit is at least 50m thick and is composed of over 70 percent coarse greywacke beds 0.5 to 2 m thick. The beds are invariably graded with the bases of beds containing grains from 2 to 10mm in diameter. The unit contains lesser fine greywacke and phyllite interbeds.
- Lower Phyllite. This is about 30 m in true thickness, contains phyllite (over 60%), carbonaceous phyllite/schist and fine grained greywacke, and hosts most of the known uranium mineralisation.

- Middle Coarse Greywacke. This unit is 5 to 8 m in thickness and is predominantly composed of coarse greywacke.
- Upper Phyllite. Phyllite and fine grained greywacke make up this unit, which is 25 to 35 m thick.
- Upper Coarse Greywacke. This is similar to the other coarse greywacke units, and is at least 20 m thick.

The host sequence in the March Fly prospect area consistently strikes north south and with grading indicating younging towards the east. The rocks dip from 85 to the west (that is they are overturned) to 60 to the east.

A slaty cleavage strikes north south and dips sub vertically. Cleavage/bedding vergence also invariably indicates younging towards the east. The cleavage occurs parallel to the axial planes of some centimetre- to metre-scale folds.

A northwest-southeast trending fault truncates the host sequence in the north of the prospect area. North of this fault, completely different, thicker units of coarse greywacke and phyllite occur.

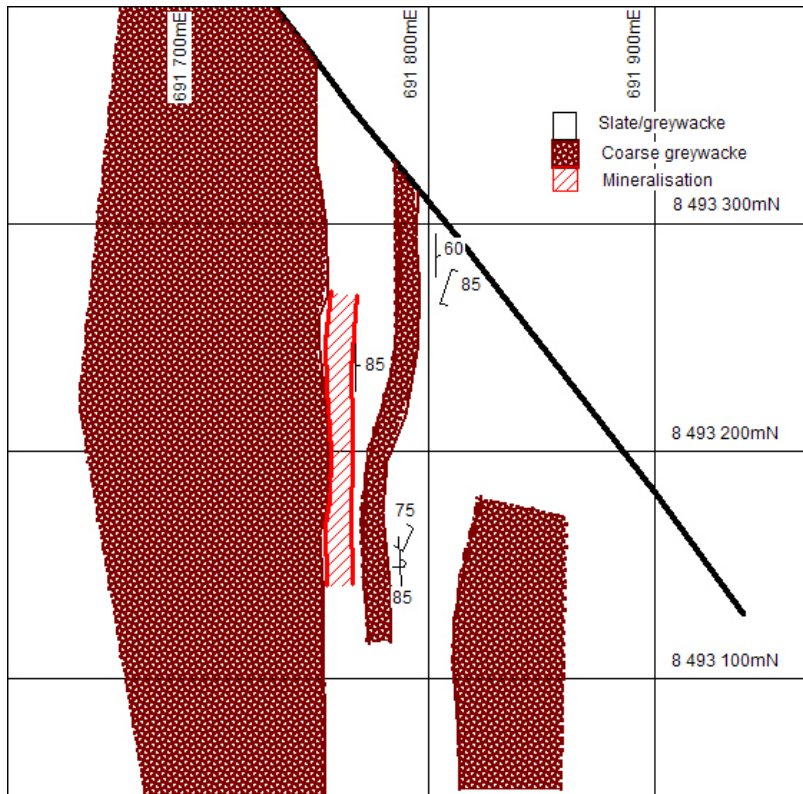


Figure 3. March Fly Uranium Prospect – Plan

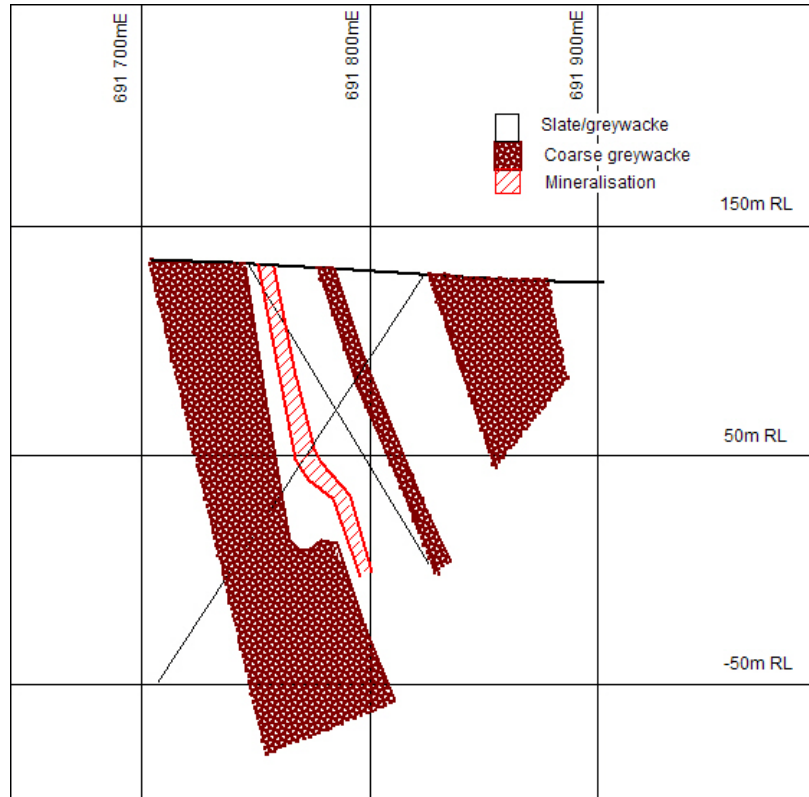


Figure 4 March Fly Prospect – Cross Section 8 493 200N

Mineralisation

Uranium mineralisation is stratabound and largely confined to the Lower Phyllite, although higher grades appear more common near the contact with the Lower Coarse Greywacke. Alteration occurs throughout the Lower Phyllite. This alteration consists of disseminated tourmaline, fine grained sulphide minerals, muscovite, carbonaceous material, hematite, ?chlorite and ?siderite. Irregular quartz-tourmaline-sulphide veins also occur.

Economic Potential

The weighted average grade and horizontal width of the 11 drill holes which cut the mineralisation is about 5 metres at 2,200ppm U. However, two or three high grade

intersections heavily influence this average. A potential resource has been calculated based on the available intersection data.

The mineralisation is open to the north and south, and down dip. Alteration around known mineralisation occurs over 20 to 30 m widths. This indicates that mineralised extensions could potentially occur over these increased widths.

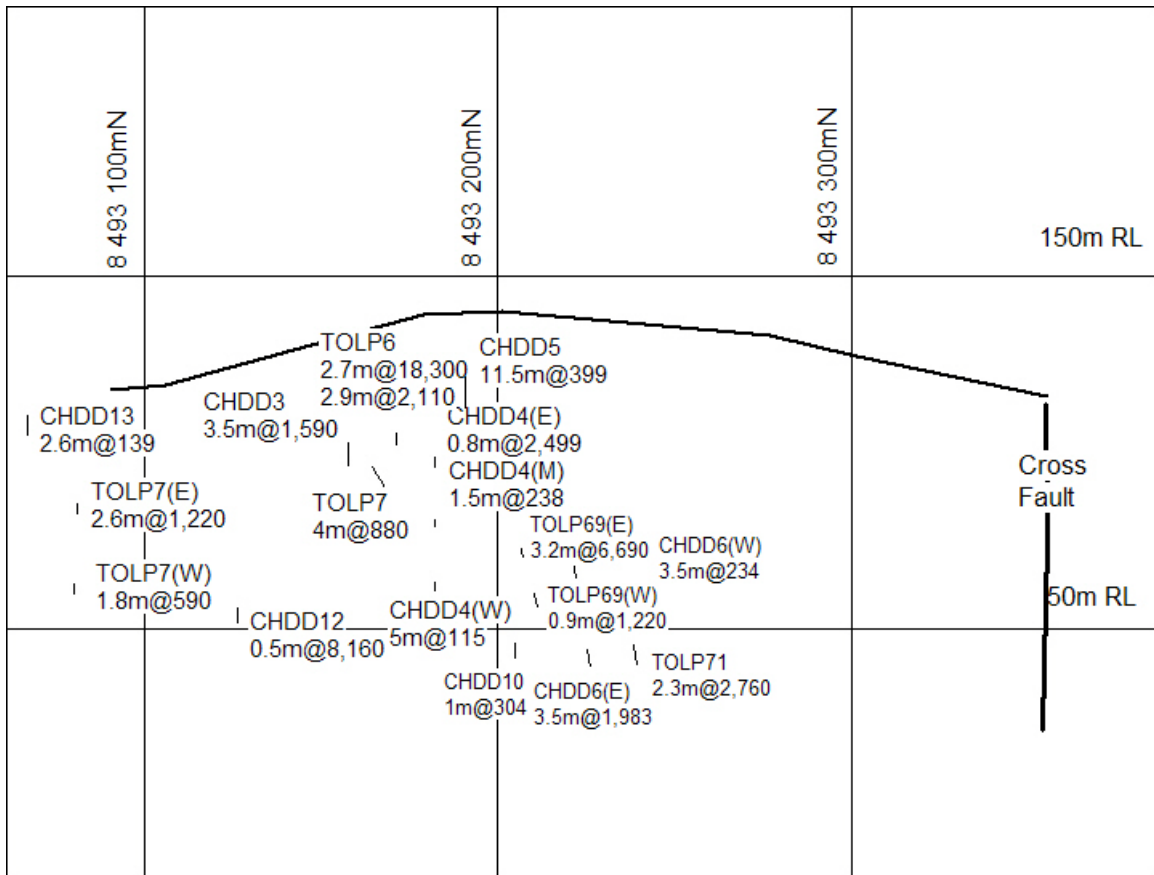


Figure 5 March Fly Long Section. View West. Horizontal width with U ppm.

- Some petrology should be completed to better understand alteration and mineralisation mineralogy.

6.5 EL 25076

For the period 2009-2010 i.e. two field seasons, an extensive program of soil sampling and geological reconnaissance (November-December 2009) and stream sediment sampling in conjunction with ground based spectrometer radiometric surveys and geological mapping (October-November 2010) was carried out. All work activities for

both years were concentrated within the Allia Creek Granite 'window' and immediately adjacent Burrell Creek metasediments. The spectrometer work, mapping and rock / soil follow-up sampling are ongoing into the next reporting period (November 2010-2011). Diamond drilling was planned for 2010 but this was postponed due to delays by AAPA in completing a sacred site survey in combination with drilling contractor difficulties.

In 2009, an extensive area of the Allia Granite was traversed with soil sampling lines covering the trace of a regional northeast trending structure. Sampling lines were also carried out over selected airborne radiometric anomalies. A total of 23 lines were run and 7 anomalies traversed for 1,453 samples. Stream sediment sampling was commenced in 2009 and was continued in the 2010 season. A total of 627 samples have been collected. Radiometric traversing has covered the entire window and the Burrell Creek outcrops to the west. Traversing to the north, south and east is limited by the sheer sandstone cliffs of the Tolmer Group. An area of approximately 60 km² has been covered at nominal 25 m spaced traverses

All data for the current year are included in Appendix 3.

6.6 EL 25077

Work for 2010 concentrated on a data compilation project for the Eccles uranium prospect. The prospect is located several kilometres south of Surprise Creek and approximately 1.7 km east of where the park access track crosses the Reynolds River. Uranium mineralisation was discovered here in 1986 during radiometric traversing by Total Mining geologists. The mineralisation is hosted by rocks of the Burrell Creek formation, specifically altered phyllite and carbonaceous/graphitic schist. The main controlling factor is a fault controlled pegmatite /greisen system, which parallels the axial plane trend. The middle proterozoic unconformity is located laterally within 100-200 m of the prospect and approximately 40 m vertically. The presence of graphitic rocks and pegmatites exhibits similarities to March Fly.

Total Mining (Total PNC JV) first drilled the prospect in 1988 then followed up with expanded programmes over the following three years. The area drilled was extended northwards towards Surprise Creek, following geological and geophysical trends. This northern area was collectively called SH2 by Total. A total of 75 holes were drilled by the JV, mostly open hole-down hole hammer; several core holes were also drilled.

Crossland commenced a data compilation exercise transferring all the historical drillhole log information into an Access database. All lithological and radiometric (scintillometer) data was transcribed from the scanned logs. A drillhole plan was registered and a mapinfo file generated which has all the drill holes plotted as accurately as possible. Cross sections of the drilling can now be generated from the database. A regenerated plan of the geological and drill hole locations of the Eccles Prospect is on the following page (*after Total Mining 1991*)

Crossland maintained liaison with the Batchelor-based Park authorities throughout the year.

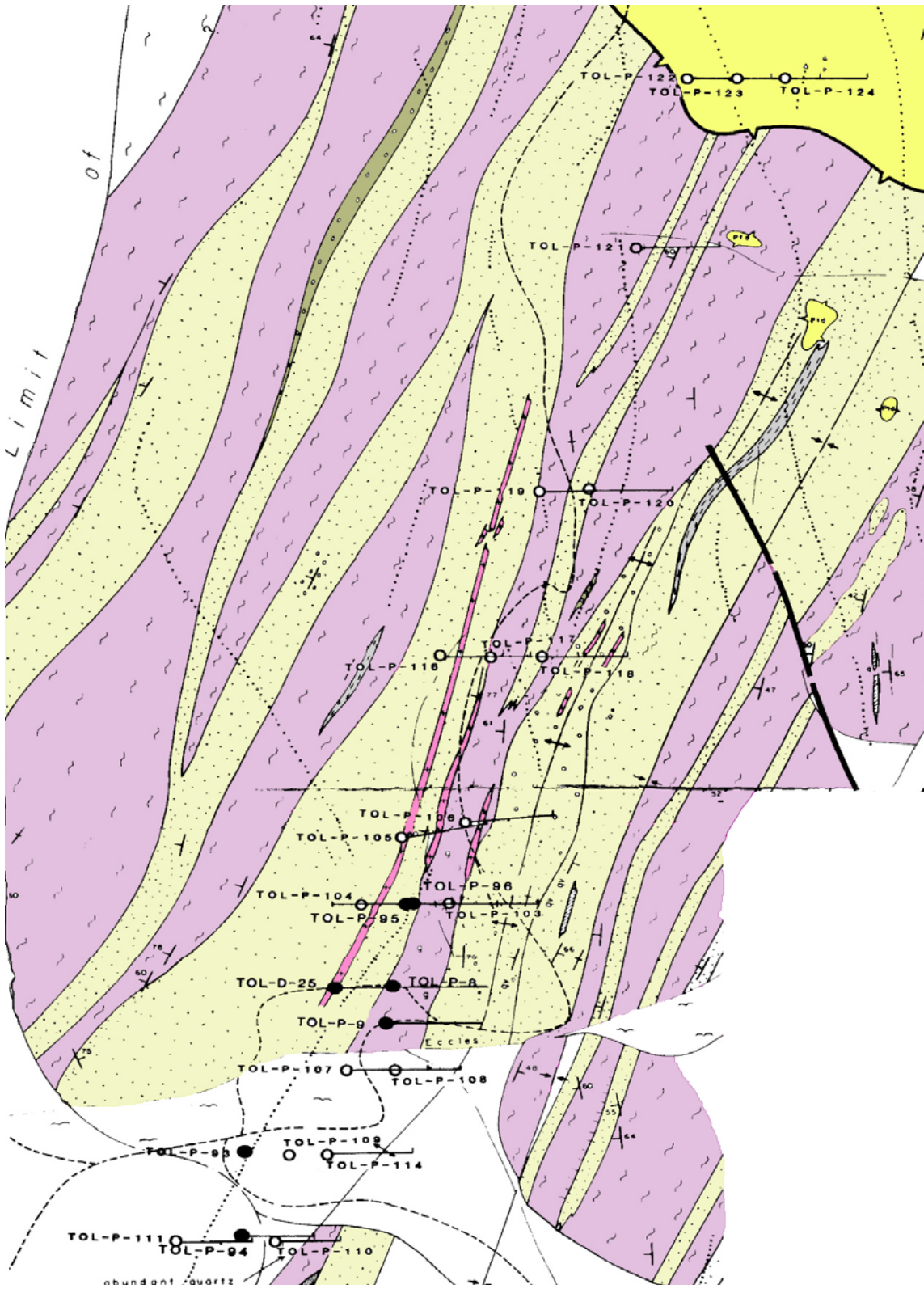


Figure 6 Plan of Historical Drilling – Eccles and SH2 prospects EL 25077

6.7 EL 25078

The final TEMPEST EM data was received from Geoscience Australia in the latter half of the reporting period for the subject EL. Preliminary in-house processing was carried out and some interpretation finalised. Several days of follow up reconnaissance were completed, mainly confined to outcropping areas of Tolmer Group sandstones north of the Hayward Creek prospect, and in the northeast corner of the licence, to investigate the surface environment of interpreted EM features of interest. Nothing was found during the ground investigations.

5.0 CONCLUSIONS AND RECOMMENDATIONS

EL 22738

On-going radiometric and geochemical surveys are planned for the licence area following the significant results gained from these techniques in 2010. Further geological mapping has also identified areas of interest, which will be followed up. Due to the weather and other logistical problems, the planned diamond drilling programme did not proceed.

The following are recommended for the 2011 season,

- Significant results of the spectrometer survey will be followed up. Zones of elevated U should be compared to the stream and soil results to better determine their geological setting, potential size and significance.
- Newly discovered carbonate rock outcrops will be covered with close spaced ground radiometric traverses. Approximately 200 line kilometres is required.
- Reconnaissance stream sediment sampling should be completed over the Fish River Fault zone at a density of about 4 to 6 samples/square kilometre. About 500 samples will be required to cover the area of interest. Infill stream sediment sampling and ground follow up is required over prospective zones recognised after analysis of the spectrometer survey in conjunction with the stream sediment results.
- RAB drilling is planned for zones with favorable geology and spectrometer results. This work is designed to focus targeting for later diamond drilling. About 100 holes totaling 3,000 metres should be considered.
- Diamond drilling is planned to follow-up the best targets. About 2,000 metres is proposed.

EL 23682

Drilling of a magnetic anomaly was planned for the current year. The location of the site is fairly remote and some considerable roadworks will be necessary to gain access. For reasons explained elsewhere, the planned drilling did not take place and the work will be carried over to 2011.

EL 24557

Drilling had been planned at the March Fly uranium prospect for the 2010 season however, as explained above, logistical problems were encountered. In the meantime, Crossland's consulting geologist completed a reassessment of the March Fly drillhole database and made some recommendations, which differed slightly from the work already planned. These recommendations will be instigated in 2011 and include :

- If the indicated potential tonnage and grade is of interest to Crossland then there would be justification to carry out extension drilling (with some infill) at about 50 m spacings.
- Wider spaced testing down dip and along strike in both directions (particularly to the north, adjacent to the cross fault) should be completed in conjunction with the above.
- Mapping along strike of the mineralised zone to the south, in conjunction with radiometric traversing is recommended. Both recent and historical drill hole intercepts of uranium mineralisation indicate that there is potential in this area.

EL 25076

Compilation, integration and interpretation is required of all spectrometer, geochemical and geological mapping data. This will be ongoing leading up to the 2011 field season. The compilation of historical data for the region, including the extensive work carried out around the old Fletchers Gully minesite has been commenced. The Fletchers Gully area has undergone considerable exploration activity in past years including mapping, soil and rock sampling and drilling. Future work can be planned once this is completed.

EL 25077

The Access Database compilation of the historical drilling will aid in future planning, Re-mapping of the geology and interpretation of the structural setting is required prior to making a decision as to whether additional drilling is required.

EL 25078

Further assessment of the airborne EM and ground follow-up is anticipated.

6.0 EXPENDITURE

During the reporting period, there has been a combined eligible expenditure of \$1,141,664.76 covering the six tenements, which make up the Chilling project.

7.0 REFERENCES

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