ANNUAL REPORT
EL 28207
PERIOD: 30/3/2013 TO 29/3/2014
PLENTY RIVER REGION, NORTHERN TERRITORY

FAR Resources Pty Ltd
PO Box 96
Palmerston
NT 0831

Plenty Rivers Project
1:100 000 Mapsheets: 5952 Dneiper, 6052 Jinka
1:250 000 Mapsheets: SF5311 Huckitta
Commodities: Cu, Pb, Zn, Mo, Au, Ag

WA Jettner B.Sc.
Minesite Services Australia
May 2014
Abstract:
EL 28207 forms part of FAR Resources Plenty Rivers Project which consists of 11 granted exploration licences covering 3,080km$^2$ in the Harts Range/ Plenty River area of the Northern Territory, (see figure 2). The area is considered to be prospective for base metals, precious metals and industrial minerals. Work conducted in the third year consisted of 136 surface geochemical (31 rock and 105 soil) analysed in the field using a Niton portable XRF. In addition 250 ground magnetic readings were also taken in a survey located to the west of ultramafic hill, a gabbroic outcrop site.

Contact Details:
Tenement Holder:
FAR Resources Pty Ltd
PO Box 96
Palmerston
NT 0831
Contact: Mr Andrew Jettner

Report Author:
Minesite Services Australia
19 Flametree Cct
Palmerston NT 0831
Contact: Mr Andrew Jettner
Tel: 0447 092 764
Email: andrew@minesiteservices.com.au
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1. LOCATION

EL 28207 is located some 150km to the northeast of Alice Springs in the Northern Territory. The licence has an irregular shape having a north-south length of 25km with an average east-west width of 30km and lies between 22° 30’S to 22° 43’S and 135° 20’E to 135° 38’E. The licence is located within the 1:250K Mapsheet SF5311 “Huckitta” and 1:100K Mapsheets 5952 “Dneiper” and 6052 “Jinka”. The licence is located upon the Huckitta and Dneiper pastoral leases to the northeast of the Harts Range Police Station and Atitjre Community. The Plenty Highway traverses to the south of the licence.
2. TITLE HISTORY

Mineral Tenure
EL 28207 was granted on 30/03/2011 and this report is the Third Annual Technical Report which covers activities in the period 30/03/2013 to 29/03/2014, being the third year of tenure. The licence currently has an area of 71 graticular blocks (223km²).

EL 28207 forms part of the Plenty Rivers Project which consists of 11 granted exploration licences covering a total area of 1,008 graticular blocks (3,080km²).

The regional area has a mineral exploration history going back to the 1880s when the Harts Range garnet and mica fields were found and exploited by small scale miners. This style of mining has continued on and off to the present day with the Mud Tank Mine still operating in the eastern Arunta Region today.
At the end of the second year of tenure a mandatory 50% reduction was due and in line with this Far Resources surrendered 77 graticular blocks.
Real Property
EL 28207 is located on the following real property parcels:
NT PPL 990 “Huckitta Station” which is owned by the Huckitta Aboriginal Corporation (c/ CLC 23 Stuart Highway Alice Springs) and NT PPL 1125 “Dneiper Station” which is owned by Dneiper Pastoral Pty Ltd (c/ Delmore Downs Station via Alice Springs NT).

Other Stakeholders
Other stakeholders in the area, (but not on the licence), are the Irriliree aboriginal community which is located to the southwest of this licence and the Dulcie Range National Park which is located northeast of the licence.
3. PHYSIOGRAPHY

The landforms and geology of the Plenty River Project Area of which EL 28207 forms an integral part consist of 3 geological domains, the northern Jinka Domain, the central Kanandra Domain and the southern Harts Range Domain. EL 28207 covers parts of the Jinka and Kanandra Domains and abuts the Harts Range Domain, so all three domains are described here.

i. Geomorphology

Jinka Domain
The geomorphology of the Jinka Domain consists of low rounded hills that are desiccated by drainage systems heading north into the Georgina Basin. The number and frequency of these hills are much less than that found in the Kanandra Domain to the south. This licence mainly is located on the fan-like anastomosing drainage systems due to its irregular shape.

Kanandra Domain
The Kanandra Domain primarily consists of low angular and rounded hills that are incised by numerous drainage lines forming a fenestral pattern. Erosion along these drainage lines can give rise to quite steep slopes on occasion.

Harts Range Domain
The Harts Range Domain contains wide open sandy plains in the areas on the southern edge of the licence along the Plenty Highway. To the north of this area east-west trending rocky hills consisting of Harts Range Group rocks occur. Areas of low ridges with incised drainage lines are formed upon rocks of the Tertiary Waite Formation.

ii. Biogeography

Jinka Domain
In this domain three vegetation types occur in the licence area, they are: low open woodlands consisting of Coolibah low-open woodland with an open-grassland understorey in the main drainage systems, a mixed species low-open woodland consisting of Ironwood and Whitewood low open woodland with a open grassland understorey, and thirdly a tall open scrubland containing a Mulga tall open scrubland with a Woolybutt open grassland understorey.

Kanandra Domain
The vegetation in this domain may be classified as a mixed species low open woodlands containing Ironwood and Whitewood with a low open grassland understorey in areas on soils derived from the Tertiary Waite Formation. In other areas along drainage lines the Melaleuca and Eucalypt species increase in numbers to a woodland regime.
Harts Range Domain
The vegetation in this domain may be classified as a mixed species low open woodland containing Ironwood and Whitewood with a low open grassland understorey in areas on soils derived from the Tertiary Waite Formation. In other more sandy areas an Acacia dominated very open woodland with an open grass understorey is present.

iii. Hydrology
The surface hydrology is very limited in this arid area of central Australia. Seasonal rains fall during the northern wet season, (depending on the year), and quickly runoff. The licence area is held under real property tenure as cattle stations whose main pursuit is open range cattle grazing. For the majority of the year water is supplied by bores, either to earth dams (turkeys nests) or to sealed tanks and dispensed to the cattle via regulated cattle troughs. The groundwater regimes of the three domains are described here:

Jinka Domain
The groundwater of the Jinka Domain consists of locally fractured rocks based around the known shear zones. Bores drilled in this area generally give the best flows of the three domains. Flow rates are greater than 0.5 l/s.

Kanandra Domain
The groundwater of the Kanandra Domain consists of locally fractured rocks based around shear zones and faults. They have flow rates of between 0.05 and 0.5 l/s and generally higher salinities.

Harts Range Domain
The groundwater of the Harts Range Domain is again based on localised fracturing associated with structural elements and have low flowrates (0.05-0.5 l/s) and high salinities (>1500mg/l).
4. ACCESS

Access to the exploration licence from Alice Springs is northwards along the Stuart Highway for 68km to the intersection of the Plenty Highway then 166 km along the Plenty Highway to the Harts Range Police Station, then another 22km to the Derry Downs turnoff. Then 30km northwards along the Derry Downs road to the Dneiper Station homestead. This is located to the west of the licence area. Access throughout the remainder of the licence is via the Dneiper Station and Huckitta Station roads and fence lines. Access is generally fair to good depending on vegetation density.
5. GEOLOGICAL SETTING

The Plenty River Project is located in a north-south traverse across the Aileron Province from the Georgina Basin in the north to the Irindina Province in the south.

Georgina Basin

The Georgina Basin is a Paleoproterozoic sedimentary basin that contains dolostone, limestone, sandstone, siltstone and shale. It is a widespread intracratonic basin that was initiated as part of the Centralian Superbasin and extends east into Queensland. It unconformably overlies the Aileron Province, Tennant Region, Murphy Inlier, McArthur and south Nicholson Basins and Lawn Hill Platforms. It is interpreted to be contiguous at depth with the Wiso and Daly Basins and conformably overlies the Kalkarinji Province.

Aileron Province

The Aileron Province is a Palaeoproterozoic metamorphic and igneous terrain containing variably metamorphosed sediments, meta-volcanic rock, calc-silicate rocks, dolerite, mafic rocks and granites. It forms part of the Arunta Region and is a poly-deformed and metamorphosed basement terrain along the southern margin of the North Australian Craton. It is unconformably overlain by the Ngalia, Amadeus, Murraba, Georgina and Eromanga Basins and has largely faulted relationships with the Wurumpi and Irindina Provinces.

Irindina Province

The Irindina Province is characterised by a Neoproterozoic metamorphic terrain that contains metasedimentary gneiss, quartzite, mafic amphibolite and felsic migmatites. It forms part of the Arunta Region and is a fault bounded metasedimentary and igneous province that formed a deep depocentre within the Centralian Superbasin and was metamorphosed in the Ordovician. It is fault contacted with the Aileron Province to the north and unconformably overlain by the Eromanga Basin to the south.

Figure 6. Geological Setting Plenty Rivers Project

i. Regional Geology

The regional geology can be divided into 3 main tectonic elements, separated by west trending shear systems. The southernmost of these elements, the Harts Range Domain, comprises upper amphibolite to granulite facies metasediments belonging to the Harts Range Group. Dominant lithologies include migmatite, metapelite, metabasite, garnet-biotite gneiss and subordinate calc-silicate rock marble and quartzite. The Harts Range Group underwent peak metamorphism during the Larapinta Event at 480-460 Ma.

To the north of the Harts Range Domain is the Kanandra Domain, this contains the Kanandra Granulite which belongs to the palaeoproterozoic Strangways Metamorphic Complex. The Kanandra Granulite forms part of a 150-200km long, west trending belt of intermittently outcropping belt of pelitic and mafic granulites that includes the Bleechmore Granulite to the west. This domain comprises felsic and mafic granulites with garnet-bearing pelitic and semi-pelitic migmatite and rare calc-silicate rock, intruded by deformed granite.

The third major geological element in the licence area is located to the north of the Kanandra Granulite, and is termed the Jinka Domain.

This comprises a narrow (5-25km wide) belt of low-pressure amphibolite to granulite facies metasediments intruded by extensive granites. It extends from the Perenti Metamorphics in the west to the Jervois Range in the east, a total distance of more than 100km.

Two major shear zones separate the three tectonic elements in this region: the Entire Point Shear Zone which separates the Harts Range Domain from the Kanandra Domain and the Delny Shear Zone which separates the Kanandra Domain from the Jinka Domain.

The Entire Point Shear Zone trends east-northeast, dips steeply south and merges with the east-southeast striking Delny Shear Zone in the Plenty Rivers Project area.

The Delny Shear Zone is a major east-southeast striking structure more than 150km in length and is locally up to 3km wide. A substantial gravity gradient is evident across the shear zone, implying it is a major crustal feature.
ii. Licence Geology

Locally the basement rocks of interest are covered by a thin veneer of Tertiary to recent sediments. The Tertiary Waite Formation forms a significant impediment to exploration of underlying bedrock.

EL 28207 occurs within the Jinka Domain and a small portion of the Kanandra Domain and comprises metasedimentary rocks intruded by granites. Metamorphism occurred at amphibolite to granulite facies and low pressures during the Strangways Event.

The rocks of the Jinka Domain in the licence area include the following:

- Elyuah Formation, (Pae); shale with silty horizons and a basal pebble conglomerate.
- Grants Bluff Formation, (Pag); fine-grained fissile quartz arenite to quartz-wacke, cross bedded and ripple marked grey quartz arenite.
- Ledan Schist, (Pln); two-mica schist with minor metaconglomerate.
- Dneiper Granite, (Pgd); Grey biotite granite, grading into orthogneiss locally hornblende bearing or quartz deficient.
- Mt Swan Granite, (Pgs); Pink porphyritic hornblende biotite granite.

The Jinka Domain is separated from the Kanandra Domain by the Delny Shear zone.

The Delny Shear Zone is a steeply south-dipping shear zone locally up to 3km wide.

The central tectonic element is the Kanandra Domain, and consists of:

- Kanandra Granulite, (Pck); quartzo-feldspathic schist containing local retrograde shear zones.
- Attuttra Metamorphics, (Pd); comprising gabbro, dolerite and rare norite.
- A highly deformed rock consisting of biotite schist, amphibolite, mylonite and garnet-chlorite schist.

The Kanandra Domain is separated from the Harts Range Domain by the Entire Point Shear Zone.

The Entire Point Shear Zone is a steeply south dipping upper amphibolite shear zone.

The southern tectonic element in the licence is the Harts Range Domain which consists of the following:

- pCh; Pelitic, calcareous and psammitic and felsic gneisses, leucocratic gneiss, quartzites and amphibolites.
- pCh5; quartz and garnet bearing amphibolite, minor plagioclase-hornblende gneiss.
- pCh4; meta-calc silicate rock, flaggy quartzite, biotite quartzite, rare calcite-bearing gneiss.
- pCh3; leucocratic biotite-quartz-feldspar gneiss.
6. EXPLORATION AND MINING HISTORY

Exploration

Table 1. Historical Exploration Licences and Open File Reports

<table>
<thead>
<tr>
<th>Licence No</th>
<th>Licence Holder</th>
<th>Tenure Period</th>
<th>Open File Company Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP 2190</td>
<td>VAM Ltd</td>
<td>05/03/1969</td>
<td>CR1971/0068</td>
</tr>
<tr>
<td>AP 3156</td>
<td>Central Pacific Minerals</td>
<td>30/03/1971</td>
<td>CR1972/0013</td>
</tr>
<tr>
<td>EL 377</td>
<td>Asarco Australia</td>
<td>23/08/1972</td>
<td>CR1972/0083</td>
</tr>
<tr>
<td>EL 470</td>
<td>Central Pacific Minerals</td>
<td>26/06/1972</td>
<td>CR1973/0216</td>
</tr>
<tr>
<td>EL 980</td>
<td>Uranerz Australia</td>
<td>11/06/1974</td>
<td>CR1975/0113</td>
</tr>
<tr>
<td>EL 1250</td>
<td>Carpentaria Gold</td>
<td>17/09/1976</td>
<td>CR1977/0106</td>
</tr>
<tr>
<td>EL 1581</td>
<td>Otter Exploration</td>
<td>10/08/1977</td>
<td>CR1978/0114</td>
</tr>
<tr>
<td>EL 3257</td>
<td>Nicron Resources</td>
<td>03/03/1982</td>
<td>CR1983/0140</td>
</tr>
<tr>
<td>EL 3308</td>
<td>Uranerz Australia</td>
<td>25/06/1982</td>
<td>CR1983/0175</td>
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<td>EL 5147</td>
<td>Saracen Minerals</td>
<td>29/01/1987</td>
<td>CR1988/0094</td>
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<td>EL 5802</td>
<td>CRA Exploration</td>
<td>21/01/1988</td>
<td>CR1989/0123</td>
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<td>EL 5803</td>
<td>CRA Exploration</td>
<td>21/01/1988</td>
<td>CR1989/0123</td>
</tr>
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<td>EL 8088</td>
<td>Roebuck Resources</td>
<td>15/12/1993</td>
<td>CR1995/0010</td>
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<td>EL 8127</td>
<td>Roebuck Resources</td>
<td>29/01/1996</td>
<td>CR1997/0066</td>
</tr>
</tbody>
</table>

Exploration activities have been conducted in the licence area for a number of years by a number of exploration companies, a brief summary of each is presented here:
AP 2190
This Authority to Prospect was explored by VAM in 1971 for base metals, little field work was done and the licence was not renewed after 1 year.

AP 3156
In 1971 Central Pacific Minerals explored Authority to Prospect (AP) No. 3152 covering the eastern part of the Plenty River project area following up reports of previous prospecting and uranium mineralisation. The Oorabra fluorite veins were examined and a resource calculated, this area is to the east of EL 28207.

EL 377
EL 377 was explored by Asarco Australia in 1971 for hydrothermally altered granite and/or skarn mineralisation. Field exploration proved unsuccessful. The licence was relinquished after 1 year.

EL 470
Central Pacific Minerals had EL 470 as part of their exploration effort in the Jinka locality to explore for base metal and fluorite mineralisation. Geochemical and geophysical (magnetic) surveys were undertaken with no anomalous base metal mineralisation located, the licence was surrendered.

EL 980
Uranerz Australia explored EL 980 for uranium using geophysical methods (radiometrics), they concluded that the responses are thorium based and did not renew the licence.

EL 1250
Carpentaria Gold explored EL 1250 in 1976 for base metals, hey concluded that the rock chip anomalies were due to accumulation by iron and manganese oxides and relinquished the licence.

EL 1581
Otter Exploration in joint venture with CEGB Exploration undertook exploration on EL 1581 between 1977 and 1981 for primarily uranium mineralisation. They found no anomalies worth field checking. GEGG also explored the EL with Otter for base metals during the same period.

EL 3257
Nicron Resources in joint venture with Petrocarb and Geopeko explored this licence for magnetite hosted skarn deposits. At this time they held both the Molyhill deposit and the Jervois deposit and this exploration was part of their greenfields exploration strategy in the area. Their main area of interest occurs to the west of the Plenty River Project.
EL 3308
Uranerz in joint venture with Peko Wallsend and Petrocarb explored this licence for skarn orebodies similar to the nearby Molyhill schelite, molybdenum deposit.

EL 5147
Saracen Minerals held EL 5147 for 18 months, no field work was completed on the licence.

EL 5803
CRA Exploration explored EL 5803 in the Dulcie Range area for diamonds. They took 28 drainage gravel samples and 2 loam samples. A geochemical survey for base metals was also conducted with negative results. During diamond sampling 4 chromites and 1 microdiamond were recorded from widely spaced localities, the licence was subsequently relinquished.

EL 8088
Roebuck Resources explored EL8088 and 8165 (Molyhill West Project) in 1992-1995 which covers part of the central and eastern Plenty Rivers Project area. The area was considered prospective for volcanogenic base metal-gold deposits, gold-molybdenum-tungsten skarns, replacement and vein style base metal and gold deposits. The Molyhill West Project is part of the Box Hill-Molyhill group of tenements that includes the Bruce’s Copper Prospect and Molyhill Mine to the east of the Plenty River project area.

On EL 8088 they completed magnetic and non-magnetic lag geochemical sampling over magnetic anomalies and stream sediment sampling over the Delny Lineament in the east. Roebuck interpreted the area of high magnetic susceptibility (Figure 30) to be the Strangways Metamorphic Complex, a bimodal volcanic and volcaniclastic sequence. In the NE of the EL, the Delny Fault Zone follows a series of granites intruded in a WNW trending deep crustal fracture, which have updomed the Arunta sequence to expose felsic volcanics and thermally metamorphosed volcaniclastic and carbonate sediments.

EL 8127
This licence was oriented on the Molyhill Project and just touched the eastern extent of EL 28207. Roebuck Resources pursued exploration for skarn deposits using surface geochemistry and geophysics (magnetics and radiometrics). Joint venturers admitted during the period of tenure included BHP and Olympia Resources.
There are no known mining fields in the area of EL 28207, although several mineral occurrences are listed (above) in the DME MODAT Database.

### 7. EXPLORATION RATIONALE

EL 28207 forms an integral part of the Plenty Rivers Project which consists of 11 exploration licences having an aggregate area of 3,480km². This licence traverses the entire project area from north to south in an irregular shape.

The northern part of the Plenty River Project area comprising the Metamorphic-Granite Complex (Jinka Belt) is prospective for volcanic hosted Cu-Pb-Zn-Ag-Au deposits and Cu-W-Au-Mo skarns and other replacement deposits, stockwork vein gold occurrences, and granite hosted Sn-Ta-W deposits. The southern and western areas of the tenements cover an uplifted block of Strangways Metamorphics (the Kanandra Granulite), which contains rocks that elsewhere are known to consist of acid and basic volcanogenic rocks and immature sediments which host iron formations, Cu-Pb-Zn-Au mineralization, and are usually metamorphosed to granulite facies. Basement rocks exposed are quartz-feldspar granulites, basic granulites, magnetite bearing amphibolites and other calc-silicates. Float shows massive magnetite and hematite and suggests iron formation occurs beneath cover. Basement is also intruded by ultramafic dunite-serpentine and granite bosses which are fracture related. Fracturing, volcanism and igneous intrusion began in Lower Proterozoic time and extended to the Carboniferous (Alice Springs Orogeny). Isolated patches of Ledan Schist are present northeast of Mount Swan. The Ledan Schist is considered to be prospective for quartz-vein-hosted Au-only mineralisation, as it has a low metamorphic grade and is situated close to the NW-SE trending Delny Shear Zone structure.
Specific mineralisation models are:

1. **Nickel-copper-cobalt in serpentinitised ultramafics** interpreted to be intrusive gabbro-peridotite-dunite bodies. Maximum nickel value is 1.2% Ni, 240ppm Cu and 300ppm Co in a lateritised serpentinite dunite south of No. 4 Dam. Another serpentinitised ultrabasic body is at the Hammer Prospect near No. 1 Dam (also called Middle Dam) with 4700ppm Ni and 750ppm Cu. Several other ultrabasic bodies have been reported (Figure 16). The ultramafic bodies occur both in the central Kanandra Granulite and the Metamorphic-Granite Complex to the north. Those within the Kanandra Granite have been compared with Alpine-type (ophiolitic) serpentinites. However, the No. 4 Dam occurrence is in the Metamorphic-Granite Complex Belt. This sequence is located to the north of the major east-west orientated retrograde shear zone, the Delny-Mt Sainthill Fault Zone. This shear transects the tenement, separating granites to the north from (previously Irindina Metamorphics) to the south. It flanks the southern margin of a west-northwest trending deep crustal fracture which has been the locus for series of granite intrusions. Rocks within the fault zone appear to be lower units of the Strangways Metamorphic Complex and/or younger felsic volcanics updomed by granitic intrusion. Deep crustal fracturing is supported by extensive barite-fluorite veining in the vicinity of the fault and deep sourced ultramafic intrusions.

2. **Orogenic shear zone hosted gold mineralisation.** Gold has been discovered in gossanous sulphidic quartz vein breccias along the DMSFZ 4km east of the tenement at Bruces Copper Prospect with maximum values up to 53g/t Au. The breccias are either copper-rich or copper-poor:
   - Gossanous sulphidic copper poor breccia veins associated with Type 2 quartz veins, possibly focused on straights rather than jogs.
   - Gossanous copper rich veins in Type 2 shears. Pyritic veins that may be related to reverse movement on the Type 3 faults.

Geochemical sampling along the DMSFZ in the eastern part of the Plenty River project area in the Halfway Dam area has reported some anomalous gold in stream sediments and silicified ridges and quartz veins that require systematic sampling.

3. **Base metal mineralisation.** Within the Arunta Province, significant Zn-Cu-Pb (Ag-Au) mineralisation is restricted to the SE Aileron Province (1810-1800 Ma and 1765 Ma) and the Warumpi Province (1620-1610Ma) (Hussey, Huston and Claoué-Long, 2005; Huston, Hussey and Frater, 2006). The Perenti Copper Prospect is the most advanced copper prospect in the Plenty River project area. Copper mineralisation occurs in a quartz-filled shears which cut across the Mount Swan Granite. Chalcopyrite varies from 2 to 4% in the host rock, but one hole drilled by Central Pacific in 1970 intersected 11.9m at 0.6% Cu (with Pb and Zn >50ppm, and Au and Ag <0.5 dwt/ton). The target was 18km shear zone along which quartz
veins with disseminated boxworks and weak copper had been recorded.

4. **Tungsten-molybdenum mineralisation.** At the Delmore Downs wolfram prospect (Delny 1 and 2), wolframite occurs in pegmatite veins close to a granite contact. Eluvial wolframite occurs in this area (1.32t WO3 concentrate, 0.6t WO3 concentrate). Small quantities of tantalite have been produced from the Bundey River prospect and from the Utopia prospect; in both situations, the tantalite occurs within pegmatite. Scheelite has been discovered at Anomaly C38 and a location 3.5km to the north; Anomaly C38 assayed 2.65% W in calc-silicate rock near a pegmatite dyke.

5. **Fluorite-barite mineralisation** is recorded to the east of the Plenty River project area along major crustal fractures mentioned above within the northern Metamorphic-Granite Complex. Examples of fluorite/barite occurrences within the easternmost Plenty River EL include:
1. NTGS Site 1531 - fluorite/barite, breccia fill
2. NTGS Site 1532 - fluorite/barite, breccia fill
3. NTGS Site 2003 - barite
4. NTGS Site 2004 – barite/fluorite
5. NTGS Site 2005 - barite

6. **Plenty River Mica Field.** Multiple mica workings in pegmatite occur throughout the southern part of the tenement within the Harts Range Group. Most of these were exploited in the 1950s.
8. EXPLORATION INDEX MAP

There has been no exploration index map constructed at this time.

9. GEOLOGICAL ACTIVITIES

Office Studies.

During the year data collected was incorporated in the database for the project.

Field Studies

Field work on the licence during the year consisted of 2 site visits by Mr A Jettner of Minesite Services and Mr P Harris of Stratus Resources and field assistants for a geological reconnaissance. A second site visit was conducted in the year to further examine these localities. 31 rock samples were analysed with a Niton Portable XRF, these results are included in this report. A soil survey of 105 sample sites was undertaken to the west of ultramafic hill in which no anomalous results were obtained. A number of other prospective areas were visited with the view to planning exploration for the forthcoming year.
10. REMOTE SENSING

There were no remote sensing surveys done during the year.
Included below is an image taken from the DME Strike dataset, LANDSAT 7.
The tiles are: Landsat 7 Run W2, Path 101, Row 76, Acquisition date 1999.
11. GEOPHYSICAL ACTIVITIES

Radiometrics
There have been no radiometric surveys conducted during the year. As can be seen from the following image obtained from the DME STRIKE dataset, the radiometrics closely follow the modern drainage systems and the underlying geology. The Kanadra Granulite has elevated levels of thorium, whilst the Jinka domain has elevated levels of potassium. Minor uranium is shown as the blue areas.

(After DME Strike dataset)
Magnetics
As can be seen from the image below (taken from the DME STRIKE dataset) the area encompassed by the Kanandra Granulite exhibits a generally higher magnetic signature than the two surrounding terrains to the north and south of this region. The bounding shear zones (Delny Shear Zone to the north and Entire Point Shear Zone to the south) can also be picked quite clearly along with a number of other shear zones that can be inferred by the disruption to the overall magnetic signature.
A ground magnetometer orientation survey was undertaken during the year, the data collected is presented below.

The locations and results of this survey are included in the attached ground magnetics dataset.
12. SURFACE GEOCHEMISTRY

Rock
There were 31 surface rock geochemical samples taken during the year. Their locations are shown below.

The locations and results of this work are included in the attached surface geochemistry datasets.
Soil
There was 1 soil grid sampled during the year, this consisted on 105 samples taken on a 25m x 25m grid and was located to the west of the Ultramafic Hill prospect. The location of this grid is shown below and the results are to be found in the Appendices to this report.
_28207_2014_Soil_Survey by Pb

- 100 to 7,550 (35)
- 80 to 100 (12)
- 70 to 80 (5)
- 40 to 70 (24)
- 0 to 40 (29)

Minesite Services Australia

Pb Soil Samples
EL 28207

2014

Minesite Services

Date: 28/4/14
Author: K.A. Adler
Others: Canva
Drawing
Scale: 1:500
Projection: MGA94
13. DRILLING
There were no drilling activities undertaken during the year.

14. GEOTECHNICAL STUDIES
There were no geotechnical studies on rock mechanics conducted during the year.

15. RESOURCES AND RESERVE ESTIMATION
There were no resource or reserve estimations done during the year.
16. CONCLUSIONS AND RECOMMENDATIONS

From the field exploration conducted during the third licence year the author feels that further exploration is definitely warranted with base metal commodities and IOCG models being targeted.

Initial exploration has indicated the problem relying on the stream sediment sampling and soil sampling of past workers. With the streams being flooded with sands derived from the abundant granites in the area the reliability of using this method must be questioned. The same goes for soil sampling when done in areas that are not residual soils as the wind transported sands and soils render this exploration method ineffective where it is tried without understanding the nature of the regolith.

Further exploration is recommended; concentrating on geological mapping, rock chip sampling of available outcrop and soil sampling in areas of residual soils.
17. REFERENCES

OPEN FILE COMPANY REPORTS


PUBLISHED REPORTS


Whelan et al, (2009), Magmatism in the eastern Arunta Region, Implications for Ni, Cu and Au mineralisation, AGES 2009, NTGS Record 2009-002.