EL 28853 Anamarra Creek

Annual Technical Report

06/02/2012 to 05/02/2013

Laughlen 5751
ALICE SPRINGS SF53-14

Holder: Gempart (NT) Pty Ltd

Commodity: Copper, Gold

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March 2013
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SUMMARY

A first year program of regional reconnaissance along West Bore Shear zone to Camp Hill Cu workings was undertaken along with regional interpretation including TMI, Radiometrics, Gravity, Landsat datasets.

The licence area comprises a series of faulted blocks fragmented by merging West Bore Shear zone and Cadney Fault zone regional structural trends (deemed mantle tapping structures).

The potentially high fluid flow through the licence area combined with the presence of copper and uranium mineralisation nearby indicate good prospectivity for those metals plus gold mineralisation hosted within retrograde biotite/chlorite shear zones traversing Hillsoak Bore metamorphic gneisses.
1. INTRODUCTION

EL 28853 Anamara Creek straddles West Bore Schist Zone located on Laughlens 100k map sheet, ALICE SPRINGS SF53-14. An assessment of uranium and geothermal prospectivity of southern NT by GA has placed the area under licence within the deemed highest level of potential IOCGU deposit prospectivity namely A1 (GA Record 2012/051).

2. LOCATION AND ACCESS (Figure 1)

Access from Alice Springs is north via sealed Stuart Highway for 80km until Plenty Highway is reached then east for 70km along a single strip of bitumen to Anamara Creek crossing where a track commences on the eastern side leading into the licence area via West Bore.

3. TENURE

EL 28853 Anamara Creek comprising 13 graticular blocks was granted to Gempart (NT) P/L 6 February 2012 for 6 years. It is currently the subject of a joint venture agreement with Core Exploration Ltd.

4. PREVIOUS EXPLORATION (Figure 4a)

1969 - 79

Stockdale Prospecting (SPL) systematically drainage sampled central Australia from 1969 to 1973 collecting 11 active channel samples from EL 28854, 10 from EL 28852. No kimberlitic indicators or diamonds were recovered, however a geochemical split from BCO 1735 collected from a tributary of Oneva Creek draining EL 28852 assayed 4 ppb Au. The next immediate drainage to the east, Cadney Creek was also highly anomalous for gold 383, 57 and 25 ppb Au respectively, subsequently resampled by SPL in 1992.

EL 110 granted to Russgar Minerals in 1973 included the area of EL 28853. They mapped the area (1:26000 airphotos) and conducted an aerial "mercury sniffing" geochemical survey over a large area of Harts Range delineating 9 areas of elevated mercury readings?

1980 - 1988

Hillrise Minerals joint ventured EL 1802 to CRAE in 1981 who conducted a drainage sampling program over a 20km by 10km area commencing from Mt Campbell in the east to Blackfellow Bones Bore in the west. 35 active creek alluvium samples were collected, observed for KIs, assayed for 14 elements for a best result of 55ppm Cu, 60ppm U (822132) and 20ppm W (822080).

White Industries (WIL)/ BHP were granted EL 2648 in 1982 over an area including ELs 28852 and 28854 from which 10 drainage samples were collected namely RTO955 to 964, observed for KIs and assayed for As, Ce, La, Ba, Nb, Zr, Cu, Pb, Zn, Co, Ni, Cr. No anomalous results were reported.

Huntings carried out a photo-interpretation of EL 2648 identifying 5 circular features of possible kimbertitic origin? Heavy mineral sampling of EL 3498 (including lower reaches of Anamara Creek, draining catchment area of EL 28853) by Negri River Corporation (NRC)
from 1982 to 1985 positively identified several KIs from initial sampling downstream of EL 28853.

Unfortunately a 22 s ample followup program did not repeat the positive results of the initial program. Likewise minus 80 mesh geochemical splits returned highly anomalous gold values from two localities downstream of EL 28853 namely SNG 3. (0.216ppm Au) and ONG 5. (0.16ppm Au) which also proved unrepeatable?

1989 - 1998

EL 6013 was granted to G K Bogie in 1989 centered on Cattlewater Pass covering the western half of EL 28852. Bogie conducted a gyrocopter drainage sampling program over extremely rugged inaccessible terrain collecting 47 samples from 28852 licence area i.e. Ongeva and Oneva Creek drainages. The following field season Bogie contracted the late Dr Burton Murrell conducting an 'overbank' silt drainage sampling program a technique Dr Murrell was pioneering in the Alice Springs region. 11 overbank samples namely 648 - 658 were collected from drainages within 28852 licence area returning AAS Cu assays of 50 - 70 ppm?

Interestingly, Bogie drainage sampled Cadney Creek (20km east of EL 28852) deliniating a weak gold anomaly i.e WH608, 0.008, WHHA 0.006, WH11b 0.006, WHHC 0.006, WH11D 0.001 ppm Au , contrasting starkly with the bonanza values obtained by SPL 20 years previously?

In 1992 Clarence River Finance P/L prospected the area immediately east of EL 28853, rock chip sampling Camp Hill Cu deposit and three other copper shows trending southsoutheast away from Camp Hill (EL 6941). They also prospected Mt Johnstone aka Ciccones Find Samarskite bearing pegmatite (24m x 7m) anomalous in REEs, U, Nb, Th, Ta and Ba.

Also1992, the late Dr Burton Murrell of Saturn Resources was granted EL 6899 conducting an extensive overbank drainage sampling program including 34 samples from the southern drainages of EL 28854, i.e. samples 592, 617 - 619, 621 - 627, 701 - 717, 722 - 724. Gold assays ranged from 0.001 to 0.003 ppm while copper values varied from 30 to 90 ppm?

During 1993 Bogie/Murrell rock chip sampled a 'magnetite gossan' 6km south south east of western boundary of EL 28852 (EL 6013) which assayed 0.028ppm Au, sample (CP223A).

Normandy Exploration heavy mineral sampled Anamarra Creek from the headwaters within 28854 licence area (draining Mt Johnstone) to Plenty Highway a distance of 17km, traversing over EL 28853, collecting 53 samples in 1994. They were observed for KIs from disproportionally large highgrade metamorphic terrain concentrates for negative results (EL 7932).

Pasminco were granted EL 8787 in 1995 over Cadney Creek catchment including the western third of EL 28852. A 200 metre line space AMAG geophysical survey was flown over the licence area on north-south orientated flight lines at a nominal altitude of 80m. Late stage northeast - southwest trending cross faults are prominent magnetic linears within the overall dataset increasing in both intensity and frequency towards Copper Queen Cu workings located slightly north of 8787 licence area. A total of 22 minus 80 mesh drainage samples were collected 9 of which namely 133247 to 133250, 133358, 133059, 133060, 133083 and 133087 were located within EL 28852.

The following table of sample populations, anomalous geochemistry thresholds highlights the difficulty of interpreting geochemistry datasets from different sources in the eastern Arunta.
<table>
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<th>ppm</th>
<th>Pb</th>
<th>Zn</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
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<td>52</td>
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<td>0.006</td>
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<td>215</td>
<td>105</td>
<td>47</td>
<td>110</td>
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<td>250</td>
<td>79</td>
<td>110</td>
<td>0.015</td>
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<td>Pasminco Western data</td>
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<td>62</td>
<td>52</td>
<td>66</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1998 - 2007

EL 22292 was granted to Oneva Exploration P/L in 2001 who prospected the area between EL 28853 and EL 28852 along the east, southeast trending Cadney Fault zone for 16km discovering multiple occurrences of hitherto unknown malachite - dominated Cu mineralization (25 localities) all of which were rockchip sampled (158) and three namely Dianas Block 1, Rip Hill and Bikini Basin were soil sampled (73).

Interestingly Dianas Block 2 to 8 is a continuum of Cu (Au) mineralisation/alteration trending northeast for 2km hosted by quartz-magnetite iron formation within enveloping magnetite schists. Dianas Block 2 was tested by two RAB drillholes 43m and 42m respectively returning no elevated Cu values likewise Dianas Block 8, 27m and 35, RAB drill holes respectively also no elevated Cu geochemistry.

Corner Post Hill prospect was tested by a single RAB drill hole (34m) 27 samples assayed for Au, Cu, Pb, Fe, Bi, K, Mg, Na, Ti for no elevated values. The area is currently being worked by Genesis Resources (GES).

Tanami Gold (TGNL) moved into Harts Range area in 2002. EL 10078 was pegged over Copper Queen Cu workings 8km east of EL 28852. TGNL believed Harts Range was potentially prospective for Selwyn-type Cu-Au and/or Coronation Hill - type Au - PGE mineralisation primarily based on Au-Cu-PGE mineralised carbonate veins discovered at Kongo prospect, 12km west of Copper Queen by PNC in 1996. TGNL collected 53 rockchip, 14 lag, 1597 soil, 83 drainage samples and collared 230 RAB drillholes for 6843m. 2613 drill spoil samples were assayed. The net result of above geochemical sampling was the deliniation of a 20km x 15km area of geochemical anomalism structurally constrained by northwest - southeast trending Florence Creek Shear Zone and the east - west Copper Queen trend.

During 2003 detailed analysis of hyperspectral data over Riddoch Amphibolite (765Ma) within EL 10078 was completed using Hymap Thematic mapper airborne remote sensing system. Potentially the 'mineral mapping' was useful for deliniating

- ultramafic plugs ± PGE mineralisation
- carbonate/chlorite/muscovite alteration ± Au associated retrogressive shear zones common throughout Harts Range area
- anthophyllitic units which commonly host Cu - Zn - Pb - Ag- Au mineralisation
- gossanous zones ± Au and base metals.

EL 23184, straddling Cattewater Pass track butting up to northern boundary of EL 28852 was hyperspectrally surveyed, however no anomalous areas were deliniated.

5. GEOLOGY

5.1 Regional Geology (Figures 2 and 3)
The licence area is located within the southeast Arunter Inlier a major ensialic Palaeoproterozoic to Mesoproterozoic mobile belt of multiply deformed polymetamorphic basement terrain covering 200,000 square km of central Australia. It differs from other north Australian Proterozoic inliers by intensity and frequency of apparent deformation, high grade of metamorphism and abundance of granite thus more akin to mobile belts in southern Africa and the Baltic Shield.

A tectonic setting of older 2.5-2.0 Ma continental crust, nowhere exposed, beneath Palaeoproterozoic rocks (1850Ma) is the current model. The overall style of deformation and subsequent basin development across central Australia is similar to other continental settings where thick-skinned deformation and rifted or sag continental basin development are the norm. The mobile belt evolved over 1500Ma commencing with mafic and felsic volcanism, mafic intrusions within a latitudinal rift followed by marine deposition of shale and limestone, followed by subsequent deformation, metamorphism and emergence.

Flysch sedimentation accompanied by volcanism continued within geosynclinal troughs flanking the latitudinal ridge of meta-igneous rocks followed by shallow-marine platform deposition, more deformation/metamorphism plus granitic intrusion all of which point towards an extensional continental setting? Furthermore recent geochemical and isotopic data interpretation combined with remapping of mafic rock units indicate abundance of 1810 – 1800 Ma high level tholeiitic mafic intrusions with geochemical signatures of continental margin subduction or back-arc related magmatism.

The southeast Arunta region is assigned to Aileron province locally referred to as Ongeva package (1810 – 1790) of which the Strangways Metamorphic Complex (SMC) cropping out on ALICE SPRINGS is a major component (1810 – 1790Ma), bounded to the south by an apparently long lived zone of tectonism? trending east southeast for 140km hosting Winnecke goldfield and A rltunga Nappe Complex – hosted White Range goldfield (25,000ozs). It crops out northwards for 40km truncated by Florence Creek Shear Zone juxtaposing older SMC against 1765Ma Oonagalabi tongue rocks assigned to upper Bungitina metamorphics. The remaining northerly limit of cropping out SMC forms a sheared unconformable contact with 743Ma Irindina Province Harts range Group Riddoch Amphibolite trending west northwest for about 60km before disappearing beneath onlapping Tertiary sediments of the Waite Formation. The SMC of unknown thickness (estimates from mapping of 5 to 15km) is a package of complexly folded Palaeo/proterozoic mafic/felsic granulite and metasediments. B asement to SMC is nowhere exposed and is therefore unknown however age dating of intrusives show most of SMC is older than 1780Ma. Parts are deposited in a deeper water setting based on chrono-stratigraphic correlations with turbiditic Lander Rock beds in NAPPERBY i.e. Pelites of Erontonga and Yambah granulites are deep-water mudstones and greywackes.

The Utnalanama Zn-Cu prospect 30km west of EL28854, an interpreted volcanic hosted massive sulphide deposit (VHMS) also supports a mooted deep water setting, occurring at depths of at least 1000 metres. Recent convention suggests SMC changes from a bimodal volcanic sequence upward to a pelitic succession overlain by siliciclastics and carbonate however caution is warranted as many of felsic/mafic extrusives appear to be intrusive? The presence of extrusive/pyroclastic volcanic cannot be dismissed however locally intrusive units are more common within the SMC. Intense deformation, metamorphism and accompanying anatexis have largely obliterated all primary sedimentary/igneous rock features. Additionally wall rocks of mineral deposits such as Johnnies Cu-Au deposit were extensively altered prior to high grade metamorphism thus generally protolithic rock-type classifications are educated guesses?
5.2 Local Geology (Figure 2, 2d)

The northern area of licence is traversed by West Bore Shear zone from west to east before swinging abruptly south, eventually to be cutoff by south east trending Cadney Fault zone.

Interestingly, Camp Hill Cu workings about 2km east of licence area occur at the intersection of the bending West Bore Shear zone and several closely-spaced northeast trending parallel faults. West Bore Shear zone splays - out after bending from E-W to N-S, hosting several malachite dominated copper occurrences close to cropping out structurally fragmented mafic granulite.

Retrograded Hillsoak Bore metamorphics comprising biotite/quartzfeldspathic gneisses/schists and amphibolite dominate the licence area where Cadney Fault zone and West Bore Shear zone structural trends come together initiating extensive cross faulting to the northeast.

The U-Th-Nb-Ta-Sn-Be (Samarckite) bearing Mt Johnstone pegmatite is located one km southeast of the licence area within Cadney Fault Zone. Radioactive pegmatites are relatively common throughout Harts Ranges mainly due to Thorium, enriched in REEs of ASO age (450 - 30Ma).

6. 2012 EXPLORATION PROGRAM (Figures 2a, 2b, 2c, 3a, 3b, 3c, 3d, 3e, 5,6,7,8,9,10,11)

1. Regional reconnaissance from West Bore to Camp Hill Cu workings was undertaken.

2. Desktop studies included preparation of contours of eppm Uranium from NTGS 2004 compilation Image. Minimum contour = 4 eppm U. Mineral occurrences from MODA T are shown in blue. Likewise Gravity and TMI plans. Regional gravity, TMI, Ternary Radiometrics and Geology images were prepared from NTGS GIWS site.

3. Consultant geophysicist acquired relevant Alice Springs - Alcoota geophysical survey located digital data - modelled, imaged processed and interpreted i.e TMI, TMI R to P, Total Count, U, Th, K.

7. EXPENDITURE

Regional reconnaissance/map checking $2000.00

Consultant geophysicist - acquisition, image processing modelling, interpretation of relevant Alice Springs - Alcoota 500m l.s. geophysical survey located digital data i.e. TMI, Radiometrics $7000.00

Literature search previous explorers, desktop studies including plan/image preparation, reporting 7 days @ $1000 per day $7000.00

Administration $2700.00

Total $18400.00
8. CONCLUSIONS AND RECOMMENDATIONS

West Bore Shear zone trend requires prospecting for additional Cu mineralisation as defined by arcuate moderate to high magnetic intensity which wraps around the south eastern corner of the licence area eventually cutoff by Cadney Fault zone near Mt Johnstone pegmatite.

Known mineralisation i.e. Camp Hill Cu shows occur along the margin of the arcuate magnetic ridge.

An elevated eUranium 'spot high' hosted within West Bore Shear zone requires ground checking with hand held scintillometer.

Expenditure for forthcoming licence year is set at $13,800.00

9. REFERENCES


Pgm Annamara orthogneiss 1770 Ma
pCu unnamed unit
SMC – pCsl Inglia migmatite, pCsw Wuluma granite, pCsc 1 upper Cadneay metamorphics, pCsc 2 Cadneay metamorphics, pCso Ongeva granulite.

Rock Types
EL28852, 28853, 28854 – Ternary Radiometrics over Geology Figure 2c
EL28853 Simplified Geology (GA 84)-a; amphibolite
b; biotite gn f; quartzofeldspathic gn mn; mafic granulite mv; garnet mafic granulite fn; felsic granulite
s; schist

Figure 2d
EL 28852,28853,28854 Regional Geology + eUranium ppm contours + Mineral Occurrence Figure 3.
Figure 3a.
Figure 3d.
EL28852, 28853, 28854 – Structural Setting, high-density Cu mineralisation rockchip (158) sampling area. Cu Figure 4a

Pgm; Anamarrro orthogneiss 1770Ma
Figure 6  Total Magnetic Intensity
Figure 7  Total Magnetic Intensity (RTP)
Figure 8  Total Count
Figure 10  Thorium Count
Figure 11  Uranium Count