GEMPART(NT)P/L

EL31147 ENTIA DOME NORTH

ANNUAL TECHNICAL REPORT 1

07 09 2016 - 06 09 2017

ILLOGWA CREEK SF53-15 QUARTZ 5951 Cu,Pb,Zn,Au,Ag,P,REE,U,Th, Fe,Mn,Ni,Co,Cr,PGEs

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1.SUMMARY

EL31147 Entia Dome Northl comprising 39 sub blocks(114.4sqkm)is located 150km north east of Alice Springs straddling the sheared regional unconformable contact between Palaeoproterozoic Aileron Province Ambulbinya Igneous Complex Bruna Gneiss (1750Ma) and onlapping/overlying Neoproterozoic Irindina Province metasediments/volcanics Irindina Gneiss (810Ma) assigned to Harts Range Metamorphic Complex an upper amphibolite-granulite facie equivalent of Neoproterozoic-Cambrian sedimentary successions to north(Georgina Basin) and south (Amadeus Basin).

EL31147 comprising 39 sub blocks was included in the Area 5 GEOSCIENCE AUSTRALIA Infill survey (part of the AusAEM Year 1 NT&QLD AEM survey) conducted by CGG Aviation (Australia)P/L on behalf of GA using TEMPEST Airborne Electromagnetic system. The Area 5 survey comprised 49 ,E-W flight lines 300m apart ,8km long for a total of 416 line km covering an area of 203 square kilometres of which 27 flight lines were flown over EL31147 for 90 line kms. During the forthcoming licence year those areas of slow decay sub surface conductivity, possibly indicative of massive sulphide –hosted basemetal-Au-Uranium mineralisation, delineated by above TEMPEST AEM geophysical survey will be ground checked, mapped, rockchip/soil sampled and if warranted drill tested by fences of RAB/RC drill holes consequently expenditure is set at \$19750.00.



Figure 1. LOCATION Sub Block Plan

2.INTRODUCTION

EL31147 Entia Dome North comprises the western most licence area of a contiguous group of 4 Titles straddling the regional unconformity for over 25km, between Palaeoproterozoic Ambulbinya Igneous Complex granitic gneisses and Neoproterozoic – Palaeozoic Harts Range Metamorphic Complex metasediments/volcanics, over north eastern boundary of Entia Dome deemed highly prospective for Alligator Rivers-style uranium +/- gold mineralisation.

3.LOCATION AND ACCESS Figure 1.

Access from Alice Springs is north via Stuart Highway for 70km then east for 190km along Plenty Highway until Indiana turnoff is reached. The eastern licence area commences about 20km south of turnoff where shortly afterwards Indiana road bifurcates to south south west for 25km before turning northwest passing Quartz Hill enroute to Huckitta Bore from where the south western part of licence area can be accessed.

4.TENURE

EL31147 comprising 39 sub blocks (114.4sqkm) was granted to Gempart(NT)P/L on 7th September,2016 for 6 years.

5.PREVIOUS EXPLORATION

1960s

Capricornia P/L investigated Holsteins chalcedonic - barite vein-hosted REE prospect (AP2042) located about 9 km north of licence area in 1968. Thirteen rockchip samples were collected and assayed for REOs averaging; cerium 0.56%, lanthanum 0.27%, Praseodymium 0.024%, yittrium 0.0.233%, neodymium 0.358%. The prospect is located 3200m from Indiana road within rocky foothills at base of main range. Seven lodes were examined. The two eastern lodes ie nearest Indiana road comprise barite + black unidentified mineral –allanite? The lodes appear to crop out at the intersection of two structural trends namely NNE and NW/NNW forming an assymetric ring – type distribution 500m across, individual lodes are 6-75m long ,1-4m wide (CR68/066).

1980s

Geopeko applied for EL3013 in 1982 located southeast of Mt Mary and south of Hammer Hill Ni-Cu prospect. They were primarily seeking Molyhil skarn-type scheelite/molybdenite mineralisation hosted within HRMC Irindina Gneiss calcsilicate and marble. No on-ground exploration was undertaken (CR82/382).

CRAE were granted EL2494 in 1981 which butts up to the southern two sub blocks on eastern boundary of EL29481(also overlaps the north east sub block of EL29851). 30 drainage samples were collected sieved to -80 and -40# fractions respectively then assayed for Pb, Zn, Cu, Ni , Co, Cr, Mo, As, Ag, Mn(AAS) and Sn, W, U(XRF). Four drainage samples were collected from east to south east flowing Epsom Creek (located within two south eastern sub blocks of EL29481) namely 821538 (U,18ppm), 821537 (Cu, 18,Pb 20,W 15,U 12 ppm), 821536 and 821535. Sieved to minus 80# sample 969124 and gravel sample 823764 were collected 500m downstream from sample sites 821537 and 821538. Interestingly a pan concentrate from the above site assayed 647ppm tungsten requiring further investigation. Sample 821534 was collected from a creek draining southeast corner 29481 and northern boundary area of adjoining 29851 assaying Cu18, Pb26, Zn35 ppm. It was repeated by minus 80# sample 969127 assaying U 45ppm and Th 452ppm (also requiring further investigation). The veracity of above anomalous Epsom Creek drainage geochemistry is somewhat enhanced by documented presence of east south east trending Torbernite Structural corridor a known potential source of Fe-U-Cu mineralisation located further upstream (CR82/052).

UOC applied for EL3466 in 1982 undertaking heavy mineral drainage sampling of Epsom and Huckitta Creeks delineating two areas of widespread low grade scheelite mineralisation (1) southwest of Brumby Bore and (2) west of Mirror Finish Dam (81 heavy mineral concentrates). Generally scheelite occurs as fine grains within, 20mm wide, green calcsilicate band –bearing quartzite assigned to Brady Gneiss of HRMC. North west of Mirror Finish Dam within most eastern sub block of EL29851 is a NNW-trending zone of cropping out pegmatite about 1-1.5km wide possibly continuing as far north as south east corner of EL29481? Extremely coarse scheelite nodules (50mm across) were found over a 400sq metre area of pegmatite. Two samples were collected from above zone namely S10 and S11 the latter assaying 3.11% tungsten. Strongly yellow fluorescence indicates a high molybdenum content. The very high grain count obtained from HMC 8358 and 8369 collected from nearby drainages is also explained by pegmatite - hosted scheelite mineralisation (CR83/242).

1993

The Japanese Government utility PNC Exploration lodged multiple applications over Entia Dome in 1992. They postulated Harts Range Metamorphic Complex metasediments formed a Kombolgie – like cover over older Palaeoproterozoic Ambulbinya Igneous Complex basement of Entia Dome an analogous regional setting to the Alligator Rivers Unconformity –type uranium deposits located within South Alligator River Group rocks of Top End Palaeoproterozoic PCO.

Regional AMAG/Radiometric data sets were non-existent over RIDDOCH/QUARTZ map sheets (apart from 1956 1mile l.s. survey data) hence PNC commissioned KEVRON to fly a 10300 line km, 200m l.s. (60-240 degrees flight lines, Altitude 60m) AMAG/Radiometric geophysical survey over project area in March 1993. The above survey only covered southern part of QUARTZ (including lower one third of EL29851) thereby omitting most of the highly prospective northern half (including most of Entia Dome).

Initially airborne data analogue charts provided by contractor were visually scanned for uranium 'highs' followed by preparation of corrected/filtered 1:25k scale stacked spectrometric profiles (9 map sheet areas) of the 4 radiometric channels. Ensuing anomalies were defined by comparing

elevated uranium channel readings against estimated local background/noise levels and peak shape along each flight line.

Anomalies were assigned a broad priority ranking of 1, 2 or 3 where Priority 1 comprises distinct U peak greater than 3xbg (background). 792 airborne(AB) uranium channel anomalies were delineated by stacked profile visual evaluation. 338 were initially ground checked+another 22 during follow up.

GEOTERREX were contracted to fly 5000 line km of AMAG/Radiometrics (200m l.s.,0-180/60-240,Altitude 80m) over three areas of Entia Dome including EL29511, 29481 and northern two thirds of EL29851 during December 1993. Initial analysis of geophysical survey data ie scanning analog charts delineated 128 Priority uranium channel anomalies rated GA 1 - 3 according to peak height shape and Thorium contribution. Secondly the gridded data set was statistically reworked to seperate uranium dominant values from the rest of the data set thus creating a Uz score, which if greater than 5 defined an anomalous area ?76 Uz –score anomalies were delineated. Coincident Uz-score/analog anomalies were coded GAZ, awarded the highest ranking generally proving to be the most significant in the field. Thirdly corrected data stacked profiles were visually scanned over light table comparing uranium and thorium traces. Ensuing anomalies were notated and rated GC1 – 3 according to peak height, shape and overall radiometric noise. GC2 and GC3 anomalies were regarded as being of very low potential. In total 265 anomalies were ranked.

The GEOTERREX 1993 AB geophysical survey delineated 25 uranium channel anomalies within the licence area of EL29481 of which 6 were ground checked including four located on south easterly orientated Torbernite trend namely(from NW to SE) 14LG07(Kelly)-14LG20(Kelly)-14SC25-14ES19-14ES07(Mirror Finish).

The KELLY group of anomalies are located around Mt Long occurring on margin of large concordant mass of granitoid mapped by GA as HR pegmatite? Interestingly the 3km x 500m wide granite mass is wedged between Irindina/Brady Gneiss (810-500Ma) to the east and Entia Gneiss (1770Ma) to the west. The main anomalous zone is centred over AB anomalies 14LG07 (+2000cps) and 20 (5000cps) + three anomalies 1km north namely 14LG01 (650cps), 04 and 10 (950cps), correlating with cropping out variably textured felsic granitoid /pegmatite. The main anomalies 14LG01 and 20 correlate with garnet bearing pegmatoid i.e. feldspar pegmatite + coarse grain granitic material bordering biotite altered amphibolitic wall rock. Two radiometric anomalies i.e. 200-500cps occur over a 30 x 5m area with hotspots ranging from 500-10000cps. Two KELLY grab samples showed secondary uranium mineralisation namely autunite coating uraninite (HRO2029) + an unknown tetragonal mineral and associated U-Y-REE mineralisation (HRO2081) + accessory ilmenite-magnetite-uranothorite. Several anomalies north of Mt Mary were Thorium-based within granitoid/pegmatite(150-320cps). Petrology by Jiri Just describes HRO2079 as a biotitic granite-granodiorite containing yellow crystals pseudomorphs of Ca-U phosphate (autunite) after unknown long prismatic tetragonal mineral. Dull black mineral is uraninite with ilmenite, shiny black mineral is magnetite. Greenish black grains present are mixture uraninite/ilmenite/silicates. HRO2081 collected from GEOTERREX AB Anomaly 14LG01 is muscovite granite-granodiorite containing grains U-Y-Nb mineral also a Ca-REE mineral.

The anomaly cluster delineated by AB Radiometric anomalies 14LG03 through to 14LG25 are located on or near a prominent NW-trending ridge of cropping out indurated, silicified, kaolinitised, limonitised altered wallrock adjacent to sills of pegmatoid. The ridge shows consistently high radioactive bg of 75-150cps with regular hotspots ranging from 250-400cps. Three spot highs of 2000cps associated with secondary U-flecks on foliation surfaces adjacent to limonite veining were also located ie torbernite/autunite occur as disseminations along foliation planes in kaolinised rock. The anomalous ridge has strike length of at least two kilometres ie distance between AB anomalies 14LG14 and 14LG15. Torbernite prospect comprises kaolinised-silicified-limonitised brecciated pegmatoid/sheared granite returning significant uranium values ranging from 14-1580ppm (HRO1407-12,1458,2092-93). Three samples collected from brecciated pegmatite are Thorium – dominant ie 80-610ppm Th compared 14-100ppm U while samples of limonitic, kaolinised Brady Gneiss are uranium-dominant ie again flecks secondary uranium mineralisation on foliation surfaces. Interestingly elevated values (>0.2%) for Ti-Ba-P-Mn and Zr were also recorded. Air photo interpretation suggests Torbernite ridge is a steeply east dipping (>75 degrees) fault zone transgressing local gneissic sequence at low angle.

The Torbernite trend disappears (under Recent cover)after briefly passing over north-north east boundary of 29851 licence area.

Snaf prospect is located both stratigraphically and topographically below the Torbernite trend perhaps representing a distal phase of same mineralising event?

The Torbernite prospect indurated shear zone forms a prominent ridge on or near an unconformable contact between 1770Ma Entia Gneiss and overlying 810Ma Irindina Gneiss in north east Entia Dome area. PNC erected a 200m x 450m grid mapping the prospect (1:1000 scale). They also completed GMAG and Ground radiometric surveys. 10 rockchip grab samples were collected. As noted previously surface radiometric anomalism is confined to a narrow ridge of (1) brittley deformed megacrystic pegmatite comprising 340 degree trending sub-vertical breccia zones of silica-limonite cemented fragments (2) ductiley deformed (mylonitic) felsic/amphibolitic gneissic sequence trending 310 degrees dipping 35-60degrees NE overprinted by a quartz-kaolinite - limonite alteration assemblage .Pegmatite forms semi-concordant layers within or voluminous enclosing slabs around gneissic remnants. Radiometric anomalism occurs over pegmatite, breccia zones and adjacent wallrock ie 24 hotspots located ranging from 200-6500 cps EDA. Radiometric anomalism is controlled by linear zones of tectonised pegmatite/breccia veining and adjacent altered gneissic wallrock. Silica-limonite cemented breccia veins 300mm wide up to 10m long delineate a prominent NNW-trending zone of tectonism about 20m wide cross-cutting pegmatite and layered gneiss geochemically anomalous in; U 100-240ppm, Mo 55-95ppm, Cu 150-250ppm, Pb 160-240ppm, Ba 390-2450ppm, Mn 250-9600 ppm. The highest uranium values were from samples of altered gneissic wallrock ie 290-2300ppm U.

S.E.M.studies of HRO1408 identified U-Ca phosphate while XRD of nearby HRO6865 sample identified green surface coating as meta-uranocircite.

The Torbernite shear zone continues beyond prospect grid for over 7 km. Five other uranium anomalies occur within/adjacent to the shear zone. The linear array of AB radiometric anomalies is broadly coincident with the topographically high Torbernite ridge. Numerous radiometric anomalies ranging fron 200-7000cps were measured while mapping Torbernite. Significantly 300cps anomalies returned assays of 300ppmU indicating erratic radiometric disequilibrium. Ground spectrometric data clearly defines highly elevated NW-SE uranium channel trend across Torbernite grid.

Similarily, elevated thorium channel contours are configured in a series of ENE-WSW trends coincident with cropping out conformable pegmatite/adjacent altered wall rock lithological layering. HRO1408 collected from GEOTERREX AB Anomaly 14LG25 (= Torbernite) is described by Jiri Just Petrology; kaolinised brecciated granitoid. The yellow mineral is uranium-calcium phosphate, probably autunite.

Holsteins prospect comprises swarming late-stage-gossanous radioactive chaledonic/barite breccia veins cutting Brady Gneiss located about 9 km north of EL29851. Rockchip/grab sampling of old prospecting pits by PNC indicated following geochemistry; Fe-Ba-REEs-Th/minor U-S.

Rockchips HRO1406, HRO1453-57 ranged from 50-230ppmU, 0.03-3.3%Th, 0.1-10%REEs, 0.2-5%P and 1-24%Ba. Numerous additional veins/massive breccias comprising barite-carbonate-hematite hosting Th-U-REE mineralisation were discovered prospecting, all of which were highly elevated in Thorium and REEs ie 0.07-3.9%Th, 0.3-3%P, 3-17%Fe ,0.5-15%Ba, 0.05-7%La, 0.07-12%Ce, 12-540ppm U and 40-600ppm Y. Jiri Just Petrology showed abundant barite-monazite-xenotine mineralogy in HRO2167-2172 while HRO2168 was mainly monazitic ie Th>U. PNC speculated the alkaline breccia veins at Holsteins may have been deposited by late-stage mineralising fluids driven – off during intrusion of nearby Mt Long pegmatoid (also Ba/Th enriched)?

Barite-limonite-epidote (allanite)-REE mineralised veins were also located at GEOTERREX AB Anomalies 14GC56/14NL01 (=Jersey) 2km northwest of Holsteins ie HRO2096 0.7%Ba, HRO2147-2149 and HRO2373 370-1480ppm Th, 13-440ppm U, 35-4100 Y, 1-5% REEs. Jersey is a complexly veined area of Brady Gneiss punctuated by numerous crosscutting pegmatites epidotised in places with brown radioactive veins trending ENE-SSW. Jiri Just Petrology HRO2148 identified allanite(Th>U) cerianite sourced AB anomalies.

500m north east of Holsteins two more quartz-chalcedony-limonite veins were sampled namely HRO1451-1452 for similar results except for one assay showing U>Th ie 270/170ppm.

1995 - 2007

PNC contracted WGC to fly an AMAG/Radiometric survey over 4 separate areas of Entia Dome in December 1994 including EL8675 (omitted from GEOTERREX survey March 1993). 2600 line km were flown, Altitude 80m, 200m l.s. orientated 0-180 degrees? It is possible flight line orientation may have been NW-SE (315-135) as north east survey boundary tracks diagonally across three sub blocks of EL29511@315-135 degrees, excluding north eastern third of licence area? Hence, ELS 29511 and 29481 licence areas were flown twice @200ml.s. within 12 months either (1) both surveys were N-S flight line orientated or (2) N-S and NW-SE flight line orientations?

Initially, analysis of AB data comprised visual scanning of 1:25k analog charts provided by contractor. 40 Priority Uranium anomalies were delineated/rated according to peak height, peak slope and thorium contribution ranked WA1-5.

638 additional AB uranium channel anomalies were delineated by visual evaluation of stacked profile spectrometric data ie 5 x 1:25k sheets, of which 213 were ground checked. These anomalies were ranked WC1-4 or WX1 again based on peak height ,peak shape ,thorium influence and overall radiometric noise signature.WC2 ,3, 4 Anomalies were deemed of low potential and subsequently disregarded.

60 WGC AB Radiometric anomalies were ground checked in Mt Long area including 13 within EL29481 licence area namely from north to south; 22ML54 (500cps), 22ML47 (150cps), 22ML38 (150cps), 22ML58 (150cps), 22ML48 (150cps), 22ML01(500cps), 22ML31 (500cps), 22ML09-PU1(6800cps,HR05549), 22ML63(500cps), 22ML57-PU1(18000cps,HR05813), 22ML51 (150cps), 22ML55(150cps), 22ML04(1000cps), 22ML03-PU2 (1000cps).Anomaly 22ML01 is coincident with Kelly prospect 14LG07 while 22ML03&04 are located about 200m east/southeast of Kelly anomaly 14LG20?Nine westerly uranium channel anomalies were ground checked namely,from north to south;22IN92(150cps),22IN99(500cps),22ML92(500cps),22IN13(500cps),22IS04,22ML95(500cps),22 ML88(1000cps),22ML83,22ML97(1000cps).11 uranium channel anomalies were ground checked within 3 southwestern sub blocks namely ;22ML24(150cps),22ML32(150cps),22ML45(500cps),22ML49(500cps),22ML43(500cps),22ML33(500cps),22ML39(500cps),22ML39(500cps),22ML44(500cps),22ML49(500cps),22ML45(500cps),22ML53(150cps),22ML60(150cps) and 22ML67(500cps).

13 WGC AB Radiometric anomalies were delineated over three northern sublocks of EL29851 most of which could not be found on the ground where numerous north west trending pegmatitic dykes were observed cutting 'layered paragneiss'.

AB anomalies associated with ridge-forming shear zone passing through/ hosting Torbernite prospect were deemed highly significant ie 22IS06 located 4km northwest of Torbenite where altered ferruginous felsic gneiss assayed 340ppm U (HRO5542), 22ML10 one km northwest of Torbernite (HRO5550, 700ppm U from limonitic vein) while south east 3.8km (within EL29511) a ferruginous vein sampled from AB anomaly 22ML26 assayed 380ppm U (HRO5538). Interestingly a highly radioactive massive pegmatite (22ML21) crops out 2km east south east of 22ML26.

PNC concluded (after mapping/prospecting Torbernite, locating numerous showings of secondary uranium mineralisation over strike length of 450m within clay altered, sheared, brecciated rock) that the prospect represented a substantial drill target (CRs94/325,95/298,96/285,96/286).

Hale Energy P/L a subsidiary of Thor Mining PLC (THR) acquired EL24734 in 2005 covering the same area as what is currently ELs 29511 and 29481. Prospecting northeast of Mt Mary discovered a uraniferous meandering gully called Indiana prospect where 'hot'granite forms a sheared contact with HRMC biotite gneiss+pegmatite veining. The contact zone was mapped and three composite rockchip samples were collected in 2006 namely HR23 532703E 7452531N 1500cps, HR24 532488E 7452386N 2500cps and HR25 532194E 7452330N 2500cps, 1075ppm U. Another 10 composite rockchip samples were collected over Indiana during 2007 (MM001-010, best result of 781.3ppm U).Two composite rockchip samples were also collected from Snaf prospect (biotite-garnet pegmatite/well banded gneiss contact zone 300-500cps (CR06/197,CR07/048).

MTH/ARU JV flew 5000 line km of VTEM/AMAG over 9725/10136(NE flt lines 300m apart) slightly north of 29851 licence area, November 2007.They also conducted ground EM/GMAG geophysical surveying over two Ni-Cu mineralised mafic intrusives namely Baldrick and Blackadder Prospects located 12km south east of 29851 licence area (Figure 2p).

6.GEOLOGY Figure 3

A contiguous Gempart (NT) P/L Tenement block including the north western-most EL31147 straddles 25km of cropping out Entia Dome Palaeoproterozoic Ambulbinya Igneous Complex sheared unconformable contact with overlying Neoproterozoic – Cambrian Harts Range Metamorphic Complex, Irindina Province biotite- garnet/quartzofeldspathic gneiss.

Ambulbinya Igneous Complex tonalitic/granitic gneisses (Entia Dome basement 1770Ma) are assigned to South East Arunta Region, Aileron Province ensialic mobile belt covering 200,000sqkm of central Australia a major component of North Australian Craton enveloping on three sides (north, west and south) fault-bounded 1000Ma – 460Ma SE Arunta Region, Irindina Province HRMC, a thick metasedimentary succession including subordinate igneous component of metabasalt (Riddoch Amphibolite), mafic/ultramafic intrusives (Hammer Hill serpentinite,Baldrick/Blackadder Ni-Cu mineralised mafic/basic intrusives) granite and pegmatite cropping out extensively in Harts Range commencing eastward from Mt Riddoch, for 80km to Plenty Highway – Indiana turnoff. Until 2000 Irindina Province metasediments were deemed Palaeoproterozoic however recent detrital zircon geochronology determined protoliths of these high grade metamorphic rocks were deposited during Neoproterozoic – Cambrian era. Thus now deemed high grade time equivalents of (1) Georgina Basin (2) Amadeus Basin sedimentary basin successions located north and south respectively. Peak metamorphism, upper amphibolite to granulite facies occurred during 460Ma Larapinta Event closely followed by 450Ma-300Ma ASO, the waning stages of which saw pegmatite sweats characteristic of Harts Range intruded (330Ma) many of which were mined last century.

EL31147 is overlain 90% by extensively exposed 1774Ma Entia Gneiss(pChe)amphibolite,biotite gneiss,biotite-garnet gneiss,kyanite-cordierite gneiss,quartzofeldspathic gneiss minor marblecalcsilicate assemblage metamorphosed to granulite facies during 1730-1690Ma Strangways Event unconformably overlain by,sometimes structurally juxtaposed Neoproterozoic to Cambrian ,Irindina Province metasediments namely pChi,pChb1&2 cropping out north east of regional unconformity intruded by numerous uraniferous/micaceous/spodumene?bearing Carboniferous-age pegmatite and granitoid.Interestingly,a structural jog filled with voluminous radiogenic pegmatite 3.5km long x 1km at its widest extent occurs within unconformity adjacent to central east boundary of 31147 licence area(vectored by ENE structural trend intersecting NNW-trending sheared unconformity).The central southern boundary of EL31147 licence area is intruded by radiogenic 1762Ma Huckitta Granodiorite(Pgh) likewise a radiogenic granitic gneiss crops out over central west licence area butting up to western boundary of EL29481.Cropping out within the 3 north eastern sub blocks are numerous alkaline apatite vein swarms enriched in Th-REE-U-Fe-P-carbonate.Several localities have been historically worked namely Holsteins and Jersey prospects.

PNC believed all uraniferous pegmatites were restricted to those intruding 1770Ma Entia Gneiss (pChe) and/or Palaeoproterozoic granites namely Pg, Pgh, Pgi. Pegmatites are megacrystic, K-feldspar rich either concordant ie as occurs within northeast sub block of licence area or cross-cutting, accessory minerals include beryl-tourmaline-apatite-monazite –high thorium allanite and oxides of Y-Nb-REEs-U-Ta-Ti.

PNCs 'torbernite trend ' of linear highly elevated uranium (thorium) channel readings closely correlates with (1) westerly pegmatoid and (2) northwest trending unconformity surface forming

part of the north eastern margin of postulated AMAG-interpreted regional zone of intense tectonism ie 'Torbernite Corridor' which generally trends NW-SE steepening when passing through the southern two sub blocks of EL29511 creating a 'dog leg' effect (dilational jog)infilled by voluminous pegmatoid +late-stage uranium-silica-kaolinite-Fe alteration/mineralising fluids. 'Torbernite trend' comprises the following cps uranium hotspots/secondary uranium mineral showings commencing from northwest trending southeast across southwest sub block of EL29511 and north-northeast sub blocks of EL29481 licence areas ie 22ML10 = Torbernite NW, 14LG25 = Torbernite gridded prospect, 14LG14 = Snaf, 22ML26, 22ML05 = Kelly Nth, 22ML21=Mt Mary, 14LG01, 14LG04, 14LG07, 14LG20 = Kelly,22ML24&32 & 14ES07 PNC Mirror Finish.Perusal of regional eUppm>4ppm contour image shows a possible southeasterly extension beyond PNC Mirror Finish uraniferous/micaceous pegmatoid to GA Mirror Finish(2) uraniferous pegmatoid a distance of some 8km (within 29851 licence area).



7.EXPLORATION PROGRAM Figures 5a,5b,5c,5d

During the 2017 licence year 17 of 39 sub blocks of EL31147 were included in the Area 5 Infill Data licence Agreement between GEOSCIENCE AUSTRALIA and GEMPART(NT)P/L whereby CGG Aviation (Australia) P/L were contracted to fly 49 E-W flight lines 300m apart by 8km long over the GEMPART Entia Dome contiguous Tenements namely from north to south ELs31147,29511,29481 and 29851 using the TEMPEST Airborne Electromagnetic system .The above geophysical survey comprised 416 line kilometres covering 203 square kilometres of the eastern Entia Dome during early May 2017.

At time of writing GEMPART has not received above located TEMPEST AEM digital data from GA therefore we are unable to comment on any perceived subsurface conductivity however as soon as its received Consultant Geophysicist will commence image processing ,3D sub surface conductivity inversion modelling/interpretation with a view to delineating areas of slow decay conductivity possibly indicative of massive sulphide-hosted base metal-gold-uranium mineralisation particulary in vicinity of regional unconformity over which TEMPEST AEM geophysical survey area is centred on,unless we hear to contrary results shall be reported on 2018 reporting period?

8.EXPENDITURE

1. Prospecting pegmatites for spodumene/amblygonite lithium mineralisation	\$1500.00
2. Consultant Geophysicist planning, liasing, coordinating Area 5 TEMPEST AEM Geophysical	
Survey inconjunction with GEOSCIENCE AUSTRALIA	\$6500.00
3.Data licence Agreement executed with GA to conduct TEMPEST AEM Geophysical survey	
Over 27 East-West Flightlines 300m apart = 90 line km @\$56	\$5000.00
4.Review results/Reporting	\$2000.00
5.Administration	\$850.00
6.TOTAL EXPENDITURE\$	15850.00

9.CONCLUSIONS and RECOMMENDATIONS

Several of the larger cropping out pegmatites were prospected for obvious signs of lithium-bearing spodumene and amblygonite mineralisation for inconclusive results.

The Area 5 TEMPEST AEM Geophysical survey is centred over the regional unconformity which neatly bisects EL29851 from north to south with a view to defining near surface areas of slow decay subsurface conductivity possibly indicative of massive sulphide hosted - basemetal +U-Au mineralisation analogous to Alligator Rivers Unconformity-type uranium-gold deposits within the Palaeoproterozoic Pinecreek Geosyncline of the Top End?

Thus all sub surface areas meeting above AEM geophysical criteria will undergo follow up ground checking rockchip/soil sampling, mapping and if warranted RAB-RC drill testing .Expenditure for the forthcoming licence year is set at \$19750.00

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EL31147 over GA Area 5 TEMPEST AEM Geophysical survey outline.



49 E-W flight lines x 8km long ,300m apart = 416 line km covering 203 sqkm

Figure 5a

EL31147 over GA Area 5 TEMPEST AEM Geophysical survey Flight Lines (49 x 8km = 392 line km,300m l. s.)



Figure 5b







Schedule 1 - Licence details

1. Survey

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The AusAEM Year 1 2017 NT and QLD Airborne Electromagnetic Survey to be conducted by CGG Aviation (Australia) Pty Ltd using the TEMPEST system.

2. GA Regional Line Data

Consists of lines flown east-west (QLD) and north-south (NT) and spaced 20,000 metres apart.

3. Infill Line Data

Consists of lines flown east-west and spaced 300metres apart in one area defined in Tables 1A and 1B below.

Map Points	Easting	Northing	Longitude	Latitude
1	526,136.95	7,456,457.51	135.25504	-23.0000
2	534,157.25	7,456,452.49	135.3333	-22.9999
3	540,958.75	7,443,582.84	135.40001	-23.116
4	540,979.99	7,445,354.05	135.40017	-23.1
5	539,205.29	7,432,517.09	135.38317	-23.216
6	531,159.88	7,432,502.92	135.30454	-23.2163
7	526,125.13	7,449,084.82	135.25505	-23.0666

Table 1A GDA94 (MGA Zone 53) co-ordinates for area A5.

Table 1B Coverage specifications for area A5.

Line spacing	300m
Tie line spacing	N/A
Line direction	East-West
Tie line direction	N/A
Approximate line kilometres	416
GA Project Number	TBA
Approx. Total Survey Area Km Sq.	203SqKm

4. GA Derivative Products

Consist of the derived earth conductivity estimates generated from a conductivity-depth imaging program or a similar program.

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