APPRAISAL OF OPEN FILE REPORTS RELATING TO EL29442

AS OF DECEMBER 2013

CR1978-0091 –EL1239 – BROWNS WEST; CRA EXPLORATION LTD

CRA Exploration Ltd was granted EL1239 in 1977 and the objective was to assess the area for potential extensions to the Browns Pb-Zn mine close by. During this year, CRA undertook a geochemical bedrock auger programme for EL1239 to test the western extremity of the Browns mineral deposit for Pb-Zn anomalies. Results from the programme outlined a geochemical anomaly with abundances up to 13,000 ppm Zn and 8,400 ppm Pb. Two diamond holes were drilled to test this anomaly, however, only narrow zones of sphalerite (PbS) were intersected.

CR1978-0093 – EL1295; JOINT VENTURE (URANERZ AUSTRALIA PTY LTD AND MINES ADMINISTRATION PTY LTD)

Uranerz Australia Pty Ltd and Mines Administration Pty Ltd (MINAD) were engaged in a joint venture to explore for vein-type uranium and base metals over EL1295 in the Rum Jungle area. EL1295 is located 2.5 km southwest of the Rum Jungle railway siding. Very little exploration work was done in the reporting period apart from a ground geophysical survey where ~3.5 km of ground was covered using a proton magnetometer in order to test the applicability of the method and to test the ground response. Although the final data for the survey were not included in the report, they reported that the results were insignificant.

CR1979-0096 – EL1239 – BROWNS WEST; CRA EXPLORATION LTD

CRA Exploration Ltd focused their exploration activities to test for blind mineralisation on the prospective shale/dolomite contact on the Browns West EL south of the Browns deposit. Their 1978 drill programme consisted of one diamond drill hole. The drill hole intersected amphibolite, graphitic shale and dolomite and was analysed for Pb, Zn, Cu, Mn, Ag and U. Assay results included 225 ppm Pb, 076 ppm Zn and 383 ppm Cu and were described as mildly anomalous and of no economic significance. They concluded that the area with greatest potential for base metals (Pb, Zn, Cu, U) was the dolomite/shale contact zone on the south-eastern flank of the embayment syncline.

CR1979-0099 – EL1295; JOINT VENTURE (URANERZ AUSTRALIA PTY LTD AND MINES ADMINISTRATION PTY LTD)

Consists of a joint venture between Uranerz Australia Pty Ltd and MINAD and target commodities are uranium and base metals. No exploration details to report.

CR1980-0135 – EL1295; JOINT VENTURE (URANERZ AUSTRALIA PTY LTD AND MINES ADMINISTRATION PTY LTD)

This report covers exploration activities for Uranerz Australia Pty Ltd and MINAD for 1979 and 1980. These include geological mapping, ground scintillometry, trenching, airblast drilling (443) and percussion drilling (4) and geochemical sampling from the base of the airblast and percussion drill holes. Target commodities are uranium and base metals. Results from the airblast and percussion drilling highlighted a number of anomalous areas, including 65 – 150 ppm of U_3O_8. Some of the areas anomalous in uranium (e.g. Anomaly 68), also showed elevated abundances of Cu (up to 2950 ppm), Zn (up to 790 ppm), Ni (up to 1370 ppm) and Co (up to 760 ppm). This report has good maps produced from the geological mapping. Drill hole 2029 intersected shallow manganiferous

ferruginous material, ochreous clay and dark-brown to purple manganiferous clay between 4-9 m (local grid 527N and 290E).

CR1980-0156 – EL1239 – BROWNS WEST; CRA EXPLORATION LTD

Exploration activities (CRA Exploration Ltd) again focused on the shale/dolomite contact. Ground geophysics included several lines of spectral IP extended south of the Browns deposit in order to test for the presence of sulphides, however preliminary results from the survey were reported as being inconclusive and the company were waiting on a more comprehensive report from the contractor. A ground magnetometry survey was conducted over the same survey lines as an earlier IP survey and delineated a magnetic horizon, which they presumed to be pyrrhotite. There are good maps in this report which warrant closer investigation.

CR1982-0237 – EL1295; JOINT VENTURE (URANERZ AUSTRALIA PTY LTD AND MINES ADMINISTRATION PTY LTD)

Report covers the 5th year of exploration for uranium for EL1295 (join venture between Uranerz Australia Pty Ltd and MINAD). Exploration activities for the tenement included magnetic and electromagnetic surveys and a RAB and diamond drilling programme focused over an area previously defined by RAB drilling as anomalous for uranium north of Castlemaine Hill. Diamond drilling logs document hematite, goethite and partially hematised dolostone, including zones of brecciation and cavities. **This report certainly warrants further investigation with regards to iron ore potential.**

CR1982-0368 – EL1239 – BROWNS WEST; CRA EXPLORATION LTD

This report gives a background appraisal of the exploration work done to date on EL1239 by CRA Exploration Ltd. Exploration continued to concentrate on locating potential "blind" mineralisation in the area south of Browns deposit and north of Area 55. An interpretation of earlier spectral IP, SIROTEM and ground magnetic surveys indicated possible targets, notably a conductor with a similar signature and in the same stratigraphic position to the Browns deposit. A magnetic unit was also detected. **Hand drawn maps delineate areas of hematite.**

CR1983-0187 – EL1295; JOINT VENTURE (URANERZ AUSTRALIA PTY LTD AND MINES ADMINISTRATION PTY LTD)

No work was carried out the previous reporting year.

CR1987-0108 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

This report documents a ground geophysical survey undertaken at Mt Fitch. The traverses were designed to provide ground control for an earlier airborne geophysical survey and to follow-up on airborne magnetic and radiometric anomalies from that survey. An evaluation of this survey indicated that the most pronounced magnetic anomalies are most likely related to dolerites and the magnetic units in the Koolpin Formation. Radiometric anomalies are most likely related to ferricrete/dolomite, the Koolpin and Burrell Creek Formations.

CR1987-0109 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

This report details an interpretation of the Rum Jungle area based on airborne geophysical survey data from the Northern Territory Geological Survey (NTGS) by Austirex Pty Ltd in 1982. A series of maps outlines the interpretations.

CR1987-0162 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

Earlier interpretations of the NTGS geophysical surveys are briefly referred to in open file report CR1097-0109 and are recorded as being "*documented in full"* in an unpublished internal report by Starkey (1987; CEGBEA Report 1987/12). On the basis of this information, CEGBEA undertook detailed geophysical (ground magnetic and radiometric) surveys over sixteen traverses in order to define the geophysical response of the Rum Jungle Complex during the 1986 field season. The results and interpretations are also "*documented in full"* in unpublished internal report by Starkey (1987; CEGBEA Report 1987/12).

CR1988-0165 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

This report documents exploration activities during the 1987 to 1988 reporting period. Work conducted included a regional INPUT survey (this acronym is not explained in the report) and reconnaissance ground geophysics survey involving detailed ground magnetics, radiometrics, Radon-On-Activated-Charcoal (ROAC) and soil sampling in the Mt Fitch – Mt Burton areas. Ten percussion-collared diamond drill holes totalled 2701.9 metres.

The INPUT survey (Airborne Electomagnetics) involved four lines being flown over 50 km in order to delineate the Coomalie Dolomite/Whites Formation contact adjacent to the Rum Jungle Complex and to identify carbonaceous horizons in the overlying units. A number of low-order conductors (potentially interpreted to be graphitic siltstone) were identified in the central portion of the tenement. Close to Mt Fitch, two low-order conductors were interpreted to represent the Coomalie Dolomite/Whites Formation contact.

Ground magnetic and scintillometer surveys included a more broadly-spaced traverse to complete earlier work and a more detailed survey in the Mt Fitch – Mt Burton area. The detailed survey showed that, on a broad scale, stratigraphic units can be identified under surficial cover.

A , Radon-On-Activated-Charcoal (ROAC) survey using 345 cups was conducted in the Mt Fitch – Mt Burton area. Overall, the results appeared inconclusive as local highs were associated with all stratigraphic units, however, the highest concentration appeared to be related to the contact between the Crater Formation and the Coomalie Dolomite.

A geochemical review of data from exploration companies TEP (?) And Uranerz indicated that Rb abundances revealed a clear distinction between the Coomalie Dolomite and surrounding strata. Anomalous base metals (Cu, Pb, Zn, Co, Cr) and U highlighted a zone along the basal portion of the Coomalie Dolomite and broadly corresponded to ironstone subcrop (the location of which was not identified).

Ten percussion-collared diamond holes were drilled in the Mt Fitch – Mt Burton area. Uranium was found to be associated with highly brecciated, chloritic and pyritic units within the Coomalie

Dolomite. Over 200 m of deep weathering (chlorite and limonite alteration and clay) was encountered. Magnesite was encountered in a number of drill holes.

CR1988-314 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

Report for relinquishment at the end of the second year of tenure. Regional studies over the relinquished ground included the reprocessing of NT Department of Mines & energy airborne magnetic and radiometric data. The relevant results of a regional INPUT (airborne EM) survey and ground geophysical traverses were also reported.

Contour plans of the reprocessed airborne magnetic data over the Bynoe, Noonamah, Batchelor and Reynolds River 1:100,000 sheets are included. To aid interpretation four ground geophysical traverses were completed over the reported area.

A set of 1:25,000 colour air photographs were commissioned over the Rum Jungle region.

Geoterrex was contracted to fly 127 line kilometres of INPUT, five lines totalling 39km were flown over the relinquished area.

Extracts of the geophysical and geochemical data are attached as appendices.

CR1989-390 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

Third annual report. Drilling was carried out at Mt. Fitch prospect, and a review of INPUT, radiometric and magnetic geophysical data from previous reports to identify similar sites in the structurally disturbed Proterozoic rocks flanking the Rum jungle complex. A drainage geochemistry survey was carried out during the west season months, with limited follow-up of geochemical anomalies.

Drainage sites were selected to provide a maximum sample density of 1 per $3km^2$, for a total of 23 sites, with two samples collected from the vicinity of each site, one pan concentrate and one bulk sample. The majority of samples were at or below detection for gold, pan concentrate sample 9462 assayed 170ppb Au.

The geophysical interpretation is attached as maps.

CR1989-565 – EL4879 – MT FITCH; CENTRAL ELECTRICITY GENERATING BOARD EXPLORATION (AUSTRALIA) PTY LTD (CEGBEA)

Report for relinquishment at the end of the third year of tenure.

A regional helicopter-assisted stream sediment survey included at least part of the relinquished ground, with samples collected in early 1989 while the creeks were still flowing. Active stream channels were sampled for BLEG analysis, and heavy mineral concentrates panned from trap-sites for gold analysis. Results plotted on 1:50,000 map.

CR1990-427 – EL4879 – MT FITCH; COMPASS RESOURCES NL

Fifth annual report. In 1989 Compass entered into a JV with Central Electricity generating Board (Australia) Pty Ltd (CEGB), where the emphasis of exploration at Rum Jungle moved from uranium to base metals.

During this year Compass attempted a compilation of all exploration data encompassed by the tenement area, but could not locate lithological and/or geochemical logs for most of the TEP (Territory Exploration Pty Ltd) drill holes. Existing sample points and drill holes were transferred to 1:5000 colour photo enlargements.

CR1992-137 – EL6988 – BATCHELOR; E. M. WELLS, A. M. WELLS & A. C. WELLS

First annual report prepared by J. Earthrowl. The 9 sub-block, 24 km^2 EL is located in the Rum jungle Mineral Field. A number of base metal prospects are nearby, Hoppy Anomaly (Cu-Co-Ni) is 1 km south of EL 6988, Area 5 is to the east and being investigated by Compass Resources, gold and arsenic are reported from EL 5429 south of EL 6988.

A compilation of historic data was carried out, and the 1978 Uranerz grid was re-established and used as the control for field reconnaissance and ground traversing SIROTEM survey.

The SIROTEM survey carried out over MCN 4173/4174 was extended into EL 6988 and consisted of Fixed Loop Channel 15 (2.425 m secs.) and Channel 19 (5.025 m secs.) probing. The results show a distinct subcircular anomaly, indicating an intrusion or faulted block.

Field work shows the stratigraphy of EL 5429 to the south extends northwards – and along with it potential for base mental and gold mineralisation. It warrants regional systematic prospecting or quartz vein gold mineralisation, as well as detailed investigations of the black shale/dolomite sequence in the southeastern corner.

CR1992-447 – EL4879 – MT FITCH; COMPASS RESOURCES NL

Sixth annual report., 5 target prospects defined from historic data were drilled:

Mt. Fitch – 36 RAB holes totalling 318.5 metres, planned to try and locate Co-Ni-Cu gossan, 7 holes (F11, F24, F25, F28, F29, F30, F31) all achieved this and follow-up was planned. Some areas were not drilled to depth due to unconsolidated sands (Cretaceous cover).

Brown West – 37 RAB holes totalling 292.5 metres, following up values of Co/Ni anomaly previously located by BMR. Drilling showed that the contact between the Whites Formation and Coomalie Dolomite had anomalous values. Results from hole BW 16 require follow-up as it returned anomalous Cu, Zn, Co and Ni values in black shale.

Area 55B – 19 RAB holes totalling 211 metres were drilled to obtain lithology and geochemical data on the northeastern trend of the Area 55 prospect. Drilling was difficult, on many occasions Cretacous sands prevented drilling to basement. Geochemical results were generally low.

Area 55 – 1 diamond hole of 201 metres, the top 30 metres of a second diamond drill hole, no significant mineralisation was located within EL 4879.

Area 55 West – 18 RAB holes totalling 87.5 metres was drilled to test previously located Co/Ni anomalies. This drilling showed that this anomalism was due to tremolitic Coomalie Dolomite.

CR1994-183 – EL6988 – BATCHELOR; J. A. EARTHROWL & P. M. MELVILLE

Third annual report. Field program consisted of detailed delineation and prospecting of a silicified carbonate horizon (Coomalie Dolomite), located during regional traversing in 1993, with visible secondary Pb, Zn and Cu mineralisation. In spite of obvious visible secondary Cu and Pb minerals those metals were not highly anomalous. The most significant result was the presence of gold to 0.6ppm in two samples 30 metres apart.

The dolomitic host rock was traced several kilometres southwards into EL 8020. The dolomite occurs regionally as a linear, probably continuous feature several kilometres in length and striking northeast. The geological setting is not fully understood due principally to lack of outcrop and therefore absence of contact relationships.

To date, two zones of mineralisation have been investigated: the original discovery and another about 100 metres south along strike. The latter occurrence has not been thoroughly prospected; it comprises patches of partially oxidised sulphide cores surrounded by rims of lead and copper carbonates. The host is a sandy, friable dolomitic rock; some silicified material is also present.

CR1995-159 – EL6988 – BATCHELOR; J. A. EARTHROWL & P. M. MELVILLE

Fourth annual report. The field program consisted of additional prospecting and sampling, culminating in the discovery of a new gold prospect near the boundary of the tenement.

In September 1994 an examination of Pb mineralisation reported in BMR 1960 documents in still open costeans at area 55W resulted in some significant assay results.

All significant outcrops were sampled and assayed for Au, Ag and some base metals.

During the year field and interpretive work was carried out on EL 6988 by three groups, prospective JV partner Playford Resources NL, then Compass Resources NL, and the tenement holders Earthrowl and Melville.

Playford was attracted to the El because of the possibility of the northern extension of the Hoppy Anomaly from EL 8020.

Compass were interested is base metal mineralisation in the Coomalie Dolomite/Whites Formation – mainly at Area 55 where good cobalt and copper intersections were discovered, and thought that similar potential exists in the east of the EL. Discovery of gold values to 3.17ppm (Sample 6419.2) from Area 55West was significant in that no gold had previously been known from the lower stratigraphy of the Rum Jungle Mineral Field, except perhaps that from the Sundance Mine of Giants reef Mining NL east of Batchelor.

Detailed prospecting (23 rock samples) and mapping were undertaken by the tenement holders at Area 55West. Traverses over the interpreted position of the Mt Fitch Fault were carried out to locate trends parallel to the Area 55West lineament. Although lacking outcrop some significant discoveries

of lithology and mineralisation were made. Gold mineralisation was identified in two locations both associated with transgressive quartz veining and Pb (Cu-Zn) mineralisation.

The Playford report is attached as appendix 1.

CR1995-628 – EL6988 – BATCHELOR; COMPASS RESOURCES

The second annual relinquishment report, the ground had been subjected to detailed mapping, prospecting and sampling, and a SIROTEM survey. The report details a summary of this work, found in detail in reports CR1992-137, CR1994-183, and CR1995-159.

Extracts of geophysical and geochemical data are attached as appendices.

CR1996-022 – EL8027 – BATCHELOR; COMPASS RESOURCES NL

First relinquishment report in the third year of tenure. The relinquished ground has not been subject to any previous exploration. Significant gold mineralisation had been located to the north and south of EL 8027 in quartz veins within the Burrell Creek Formation.

Following airphoto interpretation, foot and vehicle traverses were carried out to collect both stream sediment (BLEG) and outcrop samples. From 1994-1995 a total of 72 samples were collected, including 7 stream sediments.

Stream sediments returned a maximum assay of 1.1ppb Au, while ten rock samples returned greater than the detection limit, with two anomalous values of around 1ppm, obtained in 1994 (sample 64150, 1.01ppm Au) and 1995 (Sample 641994, 10.4ppm Au) came from the same location, a prominent ridge of Burrell Creek with numerous concordant slightly gossanous quartz veins up to 1 metre thick, resembling en echelon folded saddle reefs. The area was well resampled in 1995 without getting any values over 1.0 ppm Au.

The results are interpreted as indicating minor gold enrichment but not considered to be worthy of follow-up.

Extracts of geophysical and geochemical data are attached as appendices.

CR1996-264 – EL6988 – BATCHELOR; COMPASS RESOURCES NL

Fifth annual report. Limited work was performed, with emphasis being placed on contiguous ground subject to a joint venture. A new type of gold mineralisation identified within the area (quartz carbonate breccia) upgraded the potential of EL 6988.

Foot traversing totalling 16km E-W was done at approximately 200 metres spacing, carried out mainly in the northern half of the tenement between identified mineralisation in neighbouring ELs 9001 and 9344. Numerous outcrop and subcrop of highly altered gossanous brecciated quartz-calcareous lithologies were found. 25 rock samples were collected during this campaign.

A further 7 samples were collected from similar rocks to the south.

The assay results from the northern sampling are significant in their base metal values as the Pb-Zn-Cu assemblage is known to occur with the gold mineralisation found on neighbouring tenements.

These anomalous values are associated with altered dolomite/calcareous units which similarly correlate with nearby gold occurrences.

Extracts of geophysical and geochemical data are attached as appendices.

CR1996-528 – EL6988 – BATCHELOR; J. A. EARTHROWL & P. M. MELVILLE

Final report summarising exploration activities carried out over five ELs prior to 13/5/96 that were amalgamated as SEL 9437.

The conclusion of this work was that there was no potential for a low grade high tonnage deposit, but evidence from veins intersected suggest the potential for high grade, narrow vein mineralisation.

Extracts of geophysical and geochemical data are attached as appendices.

CR1997-439 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES NL

First annual report.

The area of known gold mineralisation was covered by a $1km^2$ grid and surveyed by ground magnetics and scintillometry. Along with some geology this has allowed interpretation of a SE trending gold structure. Costeaning and drilling was carried out to test the areas of gold mineralisation.

Geological mapping of the gridded area was attempted. Areas of remnant haematitic shale lag material have been mapped as 'outcropping' Whites Formation. Dolerite occurs in several localities as do outcrops of silicified dolomite. 80% of the grid and probably a large % of the tenement are completely devoid of outcrop. Base metal gossans were discovered in two areas during the year, with elevated lead and zinc.

Extracts of geophysical and geochemical data are attached as appendices.

CR1998-488 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES NL

Second annual report. An airborne geophysical survey (magnetic, radiometric) was carried out over the entire tenement.

The 1978 Uranerz baseline, approximately corresponding to the Mt. Fitch fault, was upgraded and extended. An orientation soil survey was done east of the baseline over the lower stratigraphy to determine optimum soil sampling and assaying methods in this environment of deep soils.

A soil survey by auger was carried out west of the baseline (50m centres at 400m line intervals) to test the gold prospectivity, and a second survey using conventional sampling methods tested east of the baseline where the Whites Formation/Coomalie Dolomite is present. 529 samples were collected.

The western survey showed no trends or anomalies in base metals, however, gold values show a series of linear anomalies trending 020^o. Seven individual trends are recognised, with a cluster of three crossing the 26000E baseline between 53600N and 55600N.

The results of the orientation soil survey east of the baseline: Cu, Pb, Zn, Co, Ni give coincident anomalism in the southeast of the grid with a possible source 500m long trending 315^{o}. Gold and arsenic values show less well defined highs and no obvious trends.

The airborne geophysical survey produced a number of radiometric and magnetic targets prospective for significant, subcropping, hydrothermal alteration systems, or structural/stratigraphic targets which were thought to warrant further investigation.

Extracts of geophysical and geochemical data are attached as appendices.

CR1998-594 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES NL

First relinquishment report. Soil geochemistry shows that some anomalism exists in gold, copper and lead. Zinc anomalies may be due to the galvanising on old grid pickets.

Extracts of geophysical and geochemical data are attached as appendices.

CR1999-306 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES

Third annual report. 385 soil samples were collected east of the Mt. Fitch fault baseline and analysed by partial digest methods. This produced gold and base metal anomalies requiring follow up. The pattern of Au, As, Pb and to a lesser extent Co and Ni anomalies seem to conform to known stratigraphy.

Four RC holes were drilled, totalling 418m, to test for magnesite in the Coomalie Dolomite with limited success. Only one hole (MRC 025) intersected quality magnesite and that was at a depth beyond 70m.

Extracts of geophysical and geochemical data are attached as appendices.

CR1999-357 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES

Second relinquishment report. Soil sampling at 400 x 50m grid over the relinquished area. Some narrow gold and weak base metal anomalies were defined in the areas dropped.

The airborne magnetics shows a featureless response of the Burrell Creek Formation with isolated bodies of the magnetic Zamu Dolerite.

Geochemical data is recorded as ratios and is plotted in AGD66.

CR2000-255 – SEL9437 – BATCHELOR; SAVANNA MINERAL RESOURCES

Fourth annual report. Several weak soil geochemical anomalies were located.

Five RC holes were drilled for a total of 412m (MRC-154 to 158). Holes MRC154 and 155 were drilled as stratigraphic holes to locate the Whites Formation/Commalie Dolomite contact. A gild in soil geochemical anomaly was tested by holes MRC-156 to 158. The anomaly is coincident with an elongate airborne magnetic anomaly. Best results came from the contact with the Coomalie Dolomite (400ppm Cu, 290 ppm Co, 2040 ppm Ni). Good quality magnesite was intersected at the base of MRC-156.

Infill soil sampling was carried out, with three areas of strong base metal and/or gold anomalism.

Data is recorded as ratios and is plotted in AGD66.