

EL 1801

CR1982-0060

Marks Dam, NT, annual report

Adams, PJ / Lawrence, RW / CRA Exploration / Mistral Mines

EL 1801

Arunta Province

Harts Range Ruby Project

Alice Springs SF5314 / Illogwa Creek SF5315 / Riddoch 5851 / Quartz 5951

Report outlines a preliminary model for ruby formation within the leucogneiss (plagioclase rich gneiss) and exploration carried out on the basis of this model.

Report No:

Title:

Author:

Tenure:

Province:

Prospect/Deposit:

Map Sheet:

Abstract:

CR1980-0158

Annual report for EL 1801, EL 1802 and EL 1956

Hillrise Properties

EL 1801 / EL 1802 / EL 1956

Arunta Province

Mount Mary Prospect / Quartz Hill / Inkmulla Well / Harts Range

Illogwa Creek SF5315 / Alice Springs SF5314 / Quartz 5951 / Alcoota 5752 / Laughlen 5751 / Riddoch 5851 / Undoolya 5750

Results for exploration of rubies were good. Report provides a detailed account of exploration for, and occurrences of gemstones and metals.

Report No:

Title:

Author:

Tenure:

Province:

Prospect/Deposit:

Map Sheet:

Abstract:

CR1981-0064

Hillrise Properties Pty Ltd EL 1801 EL 1956, Harts Range, 1980 geochemical drainage survey

Fraser, WJ / Hillrise Properties / CRA Exploration

EL 1801 / EL 1956

Arunta Province

Base metal exploration Zinc Copper Silver Wolframite Uranium Nickel Chromium Cobalt Arsenic Gold Proterozoic Geochemical anomalies Geochemistry Rock chip sampling Stream sediment sampling Geophysics Aerial magnetic surveys Geological mapping Photogeology Regional geology

stream sediment samples and gravel samples (latter not assayed)

Report No:

Title:

Author:

Tenure:

Province:

Thesaurus:

Geochem:

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Quartz 5951 / Alcoota 5752 / Laughlen 5751 / Riddoch 5851

Abstract:

Analysis of the stream sediment surveys has allowed identification of first order zinc, copper silver, W and uranium anomalies. These require confirmation.

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Report No:

CR1983-0130

Title:

Annual Report, 1982-1983.

Author:

Lawrence, RW / Adams, PJ / Mistral Mines

Tenure:

EL 1801 / EL 1956

Province:

Arunta Region

Stratigraphy:

Harts Range Group / Riddoch Series

Thesaurus:

Ruby Corundum Garnet Gemstones Proterozoic Costeaning

Geochem:

Geochemical analysis of major oxides & trace elements.

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Quartz 5951 / Alcoota 5752 / Laughlen 5751 / Riddoch 5851

Abstract:

An intensive programme of field mapping, structural analysis, petrology and geochemistry has been carried out for Mistral Mines NL under the supervision of Drs Jazies, PR (Structural Geology) and Oliver, ILL (Metamorphic and Chemical Petrology). Mapping has been largely carried out by postgraduate students (Lawrence R,W., Bowyer, D., Ding, P). During the 1981 field season investigation was restricted to I801A. A large proportion of the licence was mapped at 1:25000 scale by the distribution of the anorthosite, which bounds the ruby deposits, was determined. The locations of a number of ultramafics were recorded, these being potential sites for further ruby discovery. Lawrence also mapped an area of 1:3000 scale surrounding the ruby mines and including most of the mineral leases. Following the mapping of the Lease areas a theodolite survey resulted in the production of a 1:500 topographic map. Lawrence selected part of the surveyed area for mapping. The remains and bulk of this mapping was carried out by Raffran, NCG (contract geologist for Neil Cole & Associates). Detailed mapping of the subsequent earthworks was carried out by Lawrence. A few costeans were also mapped by Raffran and Warne, ICR.

(geologist for Mistral Mines No Liability). Following the 1981 Field season, Lawrence compiled a 1:125000 map presenting a proposed exploration plan for working on a number of assessable ultramafics immediately to the south of Spriggs Creek. This area was then mapped at 1:6250 scale prior to further investigation in 1982 with the aid of a back-hoe. Lawrence supervised the digging of costeans and then mapped them; however most of the ultramafics were associated with siliceous biotite gneiss. Free quartz was taken as a negative indicator for corundum. No rubies or potential ruby bearing layers were discovered. Costeans were also made in the mineral lease area revealing further large thicknesses of ultramafic which could be mined easily. Further 1:25000 scale mapping was carried out by Lawrence and Ding P (visiting research fellow from China working in association with the University of Adelaide). Lawrence completed the mapping of I801A, while Ding mapped I956A and the area between the two leases. The anorthosite horizon of interest became thinner and more strongly boudinaged toward the south of I801A and was not recognised at all in I956A. Bowyer, D.G (Honors student, University of Adelaide) mapped an area at 1:6250 scale which included part of the northern margin of EL I801A. No further anorthosite was located. An ultramafic he located, which had been investigated using a bulldozer (presumably by Bruce, J working for Mistral Mines) contained corundum and kyanite; however, the colour of the crystals was quite pale. CONCLUSIONS - As no anorthosite has been located in EL I956A no further investigations need be carried out.

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CR1981-0060

Reports on EL 1801, EL 1802, EL 1956.

Hillrise Properties

EL 1801 / EL 1802 / EL 1956

Arunta Province

Geochemistry Fluvial sediments Photogeology Geology Stratigraphy Ruby Garnet Copper Uranium Silver Lead Tantalum Mineralization Amphibolite Molybdenum Allanite Carbonatite Geological surveys

Map Sheet:
Illogwa Creek SF5315 / Alice Springs SF5314 / Quartz 5951 / Alcoota 5752 / Laughlen 5751 / Riddoch 5851

Abstract:
The area was explored for industrial corundum and gem-quality garnets.

EL 1956

The same reports as for EL 1801

EL 1991

CR1984-0161

Annual report year ending 06-07-1984 Snake Creek NT.

Bubner, GJ / CRA Exploration

EL 1991

McArthur Basin

Thesaurus:
Geophysics Aerial magnetic surveys Aerial radioactivity surveys Photogeology Uranium Proterozoic

Map Sheet:
Calvert Hills SE5308 / Calvert Hills 6363 / Nicholson River 6362

Abstract:
Survey specifications only, no results. Airborne Survey carried out by Geolessex in May-June 1984.

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CR1985-0287

Annual report on Snake Creek year ending 06-07-1985.

Bubner, GJ / CRA Exploration

EL 1991

South Nicholson Basin

Seigal Volcanics / Westmoreland Formation

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Diamond exploration Indicator minerals Drainage sampling Geophysical interpretation
Aerial magnetic surveys Aerial radiometric survey Uranium exploration Magnetic
anomalies Remote sensing Diatremes Laboratory tests

30 drainage gravel samples

Geochem:

Map Sheet:

Calvert Hills SE5308 / Nicholson River 6362 / Calvert Hills 6363

Abstract:

Single microdiamonds were reported in four samples and a macrodiamond and
picroilmenite reported one sample. Seven magnetic anomalies. A multispectral scanner
survey was flown over the EL area. Numerous areas of anomalous response warrant field
follow up.

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Report No:

CR1987-0144

Title:

Annual report Snake Creek year ending 06-07-1987.

Author:

Bubner, GJ / Colliver, IC / CRA Exploration

Tenure:

EL 1991

Province:

McArthur Basin

Stratigraphy:

Peters Creek Volcanics / Seigal Volcanics / Tawallah Group

Prospect/Deposit:

Snake Creek

Thesaurus:

Diamond exploration Indicator minerals Volcanic rocks Drainage sampling Soil sampling
Ground magnetic surveys Geophysical anomalies Geophysical profiles Aerial magnetic
surveys Photogeology Geological data Auger drilling Laboratory tests

Drilling:

various auger drill holes

Geochem:

drainage sampling loam sampling drill core sampling

Map Sheet:

Calvert Hills SE5308 / Nicholson River 6362

Abstract:

Two microdiamonds were reported in a follow up drainage test from the Calvert River
readwater tributary. Two more microdiamonds were reported from Snake Creek and one
was reported from aeromagnetic anomaly SNC 1.

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Report No:

CR1988-0249

Title:

Final report EL 1991 Snake Creek period ending 10-06-1988.

Author:

Colliver, IC / CRA Exploration

Tenure:

EL 1991

Province:

McArthur Basin

Thesaurus:

Auger drilling Geophysics Aerial magnetic surveys Geochemistry Fluvial sediments Soil
sampling Rock chip sampling Diamonds Laterites Volcanic rocks Diamonds Indicator
minerals Picroilmenite Microdiamonds Chromite

Map Sheet:

Calvert Hills SE5308 / Nicholson River 6362

Abstract:

Sampling programmes have confirmed significantly anomalous concentrations of kimberlitic indicator minerals, notably microdiamonds, in the Snake Creek catchment area. No primary source has been identified.

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CR1986-0223

Annual report on Snake Creek year ending 06-07-1986.

Bubner, GJ / Colliver, IC / CRA Exploration

EL 1991

South Nicholson Basin

Geophysics Geophysical surveys Geophysical anomalies Geochemistry Fluvial sediments Soil sampling Rock chip sampling Assaying Diamonds Photogeology Laterites Remote sensing

Calvert Hills SE5308 / Nicholson River 6362

Results are awaited of detailed follow up sampling. Additional data are required to evaluate the significance of discrete magnetic responses observed from reconnaissance surveys of Daedalus Features.

Report No:

Title:

Author:

Tenure:

Province:

Thesaurus:

Map Sheet:

Abstract:

EL 5180

CR1988-0326

End of year one (21-04-1987 to 21-07-1988) exploration report for the platinum group metal and gold prospect Illogwa Creek region.

Mason, H / Rowe, R / Prabhavalkar, A / James, J / Gredelle

EL 5180 / EL 5181 / EL 5182 / EL 5183 / EL 5184 / EL 5185

Illogwa Creek SF5315 / Quartz 5951

Report No:

Title:

Author:

Tenure:

Map Sheet:

EL 6133

CR1990-0281

Annual report on EL 6133

Hayward, M / Shandonna

EL 6133

Arunta Province

Gemstones Aquamarine Garnet Fossicking Marketing

Illogwa Creek SF5315 / Quartz 5951

Report No:

Title:

Author:

Tenure:

Province:

Thesaurus:

Map Sheet:

Abstract:

The area contains aquamarine and garnet, which is of sufficient quality and quantity to support a commercial enterprise. A marketing network for gemstones is being developed.

EL 6154

Report No:
CR1990-0005

Title:
Combined Annual Report 30 October 1988 to 29 October 1989 Arltunga Project.

Author:
Graham, JM / Edser, GA / Central Rare Earths Corporation / Mules, JHM / Bruce, JR / Pancontinental Resources (Exploration)

Tenure:
EL 4865 / EL 5156 / EL 5157 / EL 5681 / EL 6105 / EL 6153 / **EL 6154** / EL 6219 / EL 6604 / EL 6665

Province:
Arunta Province

Prospect/Deposit:
Blueys Folly Prospect

Thesaurus:
Gold exploration

Map Sheet:
Alice Springs SF5314 / Riddoch 5851 / Fergusson Range 5850 / Quartz 5951 / Laughlen 5751

Abstract:
Stage 1 of the Pancon exploration programme included the re-evaluation of Bruce and Mules geochemical data. This yielded 87 anomalous stream catchment areas. There were disclosed a significant number of La, gold and carbonate pathfinder anomalies which require follow up.

2

Report No:
CR1991-0400

Title:
Final report for period 30 October 1989 to 11 July 1990 Arltunga project

Author:
Edser, GA / Pancontinental Mining / Central Rare Earths Corporation

Tenure:
EL 4865 / EL 5156 / EL 5157 / EL 5681 / EL 6153 / **EL 6154** / EL 6604 / EL 6665 / EL 6105

Province:
Arunta Province

Stratigraphy:
Arunta Complex / Bruna Gneiss / Heavitree Quartzite

Thesaurus:
Gold exploration Base metals Rare earth minerals Gold

Map Sheet:
Alice Springs SF5314 / Illogwa Creek SF5315 / Laughlen 5751 / Riddoch 5851 / Quartz 5951 / Fergusson Range 5850

Abstract:
The report states that anomalous gold catchments were not confirmed on resampling.

3

Report No:
CR1990-0711

Title:
Combined annual report for the Arltunga project area

Author:
Murrell, B / Central Rare Earths Corporation

Tenure:

EL 4865 / EL 5156 / EL 5157 / EL 5681 / EL 6105 / EL 6153 / **EL 6154** / EL 6219 / EL 6604 / EL 6665

Arunta Province

Base metals Rare earth minerals Gold

Steam sediment sampling program undertaken.

Alice Springs SF5314 / Illogwa Creek SF5315 / Riddoch 5851

Province:

Thesaurus:

Geochem:

Map Sheet:

Abstract:

The Arltunga Project Area is centred on the historic mining district of Arltunga which is located 110 km by road east—northeast of Alice Springs in the south central part of the Northern Territory. It covers an area approaching 2000 square kilometres. Pancontinental Resources (Exploration) Pty Ltd ("Pancon") entered into a Joint Venture Agreement with J.R. Bruce and J.H. Mules (later incorporated as Central Rare Earths Corporation NL ("CRECNL")) to explore the area. Under this agreement Pancon was the Operator and Manager of the joint venture and had undertaken to maintain all titles in good standing. To reduce administrative burdens, the Department of Mines & Energy granted single project status for the purpose of statutory annual technical and financial reporting (the Department of Mines & Energy's letter of 3 October, 1989 refers). Pancon withdrew suddenly from the joint venture in July 1990, the day before their field team was to start the 1990/91 field program. Pancon advised that they were cancelling all grass-roots exploration programs as a result of financial difficulties being experienced by their parent company. The work completed in the reporting interval consists of three separate parts:

(i) Acquisition and processing of location and geochemical data from the "new" EL's (EL's 6153, 6154, 6604 & 6665) and adjacent areas which made the data set contiguous (Pancon)

(ii) A test survey consisting of bulk leach (cyanide) extractable gold ("BLEG") and comparable parallel clay—fraction samples of catchments selected from gold anomalies generated by the Pancon data processing (North Flinders) -

(iii) Reprocessing of geochemical data for the whole project area and preparation of geochemical maps as overlays to the EMR geological compilation sheets at 1:25,000 scale (CRECNL)

EL 7914

CR1995-0537

EL 7914 first relinquishment report 1995

Dobos, SK / Corporate Developments / Bengner, JW / Chambigne Resources

EL 7914

Arunta Province

Irindina Gneiss / Bruna Gneiss / Stanovos Gneiss Member / Riddoch Amphibolite

Industrial minerals Rock chip sampling

Alice Springs SF5314 / Illogwa Creek SF5315 / Riddoch 5851 / Quartz 5951

Reconnaissance of the area failed to highlight any garnet sand potential in the relinquished blocks. No samples were collected. Rock chip samples collected with a view to determining the hard rock potential of the area were not processed.

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Map Sheet:

Abstract:

Annual report 1993 to 1994.

Dobos, SK / Bengener, JW / Corporate Developments / Chambigne Resources

EL 7914

Arunta Province

Irindina Gneiss / Riddock Amphibolite / Harts Range Group

Stream sediment sampling Bulk sampling Garnet sands Hardness Indicator minerals

15 alluvial samples

Alice Springs SF5314

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Geochem:

Map Sheet:

Abstract:

Analysis of random samples of Irindina Gneiss indicates that the garnets are relatively unzoned and primarily almandine and pyrope garnet in composition. 15 alluvial samples were collected. This preliminary sampling indicated that Lizzie Creek is rich in garnet and a significant portion of the material occurs in the coarser fraction.

3

CR1995-0438

EL 7914 Eastern Harts Range region NT annual report 1994-1995 for the period ending 05-02-1995

Dobos, SK / Corporate Developments / Bengener, JW / Chambigne Resources

EL 7914

Arunta Province

Irindina Gneiss / Riddock Amphibolite

Garnet sands Microprobe analysis

15 samples

Alice Springs SF5314

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Geochem:

Map Sheet:

Abstract:

15 samples were taken from the bed of Lizzie Creek returning a mean grade of 11.36% garnet by weight. There is some lateral variation which warrants follow up. The resource is inadequate for a stand alone resource.

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CR1997-0013

EL 7914, Upper Lizzie Creek, final report 1995-1996, for relinquished and surrendered areas for period ending 05-02-1996

Jolly, RD / Dobos, SK / Corporate Developments / Chambigne Resources / Bengener, JW

EL 7914

Arunta Province

Irindina Gneiss / Riddoch Amphibolite / Bruna Gneiss / Stanovos Gneiss Member

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Reconnaissance Garnet sands

Map Sheet:

Alice Springs SF5314 / Illogwa Creek SF5315

Abstract:

Reconnaissance failed to identify adequate hard rock or alluvial garnet to warrant further investigation. No sampling completed.

EL 7967

Report No:

CR1995-0298

Title:

Harts Range project annual report, 1994

Author:

Drake-Brockman, J / PNC Exploration (Australia)

Tenure:

EL 7967 / EL 7990 / EL 7991 / EL 7992 / EL 7993 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 8901 / EL 8906

Province:

Arunta Province

Prospect/Deposit:

Solo Mica Mine

Thesaurus:

Geophysics Magnetic surveys Gravity surveys Radioactivity surveys Geochemistry Trenching Geochemical anomalies Geological mapping Petrology Age determination methods Rock chip sampling

Map Sheet:

Illogwa Creek SF5315

Abstract:

Work in the Harts Ranges has located 6 distinct styles of mineralization based on stratigraphic and mineralogical association. Work undertaken has included prospect and regional scale mapping, trenching, rock chip sampling, ground and airborne magnetic-scintillometer surveys.

2

Report No:

CR1997-0611

Title:

Annual report and relinquishment report exploration licences 7967 and 9149

Author:

Follington, D / PNC Exploration (Australia)

Tenure:

EL 7967 / EL 9149

Province:

Arunta Province

Stratigraphy:

Harts Range Group / Riddoch Amphibolite / Bruna Gneiss / Entia Gneiss

Prospect/Deposit:

Yambla / Tobernite / Pony / Haddock / Brumby Prospect

Thesaurus:

Diamond drilling Geophysical surveys Aerial magnetic surveys Aerial radioactivity surveys Radioactivity surveys Trenching Geological mapping Age determination methods

Map Sheet:

Alcoota SF5310 / Huckitta SF5311 / Alice Springs SF5314 / Illogwa Creek SF5315 / Quartz 5951 / Riddoch 5851 / Delny 5852 / Dneiper 5952

Abstract:

Initial follow up of airborne radiometric anomalies located the Yambla Uraninite vein mineralisation in 1993. This prospect was evaluated by 22 trenches and 13 core holes. The mineralisation occurs within uraninite enriched modules distributed at random within shear zones extending for approximately 1km. The age of the uraninite mineralisation was dated at 360 Ma. A number of other radiometric anomalies were located but not evaluated in detail. The above report briefly describes the work conducted. For additional

details the reader should refer to the annual reports. Other stratigraphic units mentioned include the Yambla Amphibolite, Mount Muriel Member and Entia Granite.

3

CR1996-0286

Report No:

Title:

Harts Range project, annual company report 1995 field season ELs 7967, 7990, 7991, 7992, 7994, 8036, 8148, 8220, 8675, 8906, 9031, 9032, 9149, 7993, 8901, and 8906

Author:

Drake-Brockman, J / Gee, C / Thevissen, J / PNC Exploration (Australia)

Tenure:

EL 7967 / EL 7990 / EL 7991 / EL 7992 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 8906 / EL 9031 / EL 9032 / EL 9149 / EL 8901

Province:

Arunta Province

Stratigraphy:

Harts Range Group / Riddock Amphibolite / Yambah Granulite / Muriel Range Sandstone / Bruna Gneiss / Entia Gneiss

Prospect/Deposit:

Janets / Garnet / Pony / Torbernite / Felspar / Quartz / Goanna / Kelly / Casper / Brumby / Yambla / Ryoma / Moondyne / Midori / Frenzy / Kiefer / Haddock / Swallow

Thesaurus:

Diamond drilling Geophysics Ground magnetic surveys Radioactivity surveys Geochemistry Trenching Sampling Geological mapping Stratigraphy Petrology Drill hole logs

Drilling:

13 diamond holes totalling 1028.3m

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311

Abstract:

Airborne Geophysics was acquired in 4 areas generating numerous anomalies of which 213 were ground checked. No major anomalies were outlined, though several anomalies related to Tobernite Prospect were located. 63 anomalies from previous surveys were also checked. No significant anomalies were generated. 17 prospects were subject to detailed work. The majority of this work was at Yambla (EL7967). This included 13 diamond drill holes and trenching. The detailed work failed to enhance previous results though further follow up warranted at Yambla, Tobernite Pony, Haddock and Brumby. Structural features reported include: Entia Dome.

4

CR1994-0325

Report No:

Title:

The Harts Range project 1993 annual report on ELs 7697 7990-7994, 8036 8148

Author:

PNC Exploration (Australia)

Tenure:

EL 7967 / EL 7990 / EL 7991 / EL 7992 / EL 7993 / EL 7994 / EL 8036 / EL 8148

Province:

Arunta Province

Prospect/Deposit:

Leprechaun / Virginia / Copper Queen / Delma / Mirror Finish / Ryoma / Casper / Frank James / Jessie James / Eastern Belle / Discovery / Garnet / Swallow / Moondyne / Quartz / Felspar / Desperate / Blizzard 1 / Blizzard 2 / Zephyr1 / Zephyr 2 / Horse 3 / White Mountain / Starlite / Horse 1 / Horse 2

Thesaurus:

Drilling Geophysics Aerial magnetic surveys Aerial radioactivity surveys Ground magnetic surveys Radioactivity surveys Geochemistry Soil sampling Rock chip sampling Trenching Sampling

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311

Abstract:

For the reporting year some 15000km of airborne geophysics were flown outlining numerous radiometric anomalies. In general work concentrated within EL7967 were gridding, trenching, mapping, rock chip sampling, soil sampling, ground radioactivity and magnetics and petrological studies were completed. Work located at the Discovery prospect located "eggs" of yellow secondary uranium mineralization coating uraninite, or brannerite. Mineralization hosted within amphibolite in zones of quartz-feldspar-apalite or scapolite alteration along zones of EW fracturing. At the Garnet prospect, uranium mineralization is proportional to the amount of garnet. Other prospects were located within EL7991 and EL8220. Reconnaissance work in EL7992 and EL7993 has downgraded their prospectivity.

5**Report No:**

CR1996-0285

Title:

Harts Range project, final surrender report for Els 7990, 7991, 7992, 7994, 8036, 8148, 8220, 8675, 9031, 9032, and 50% surrender of EL 7967

Author:

Drake-Brockman, J / Gee, C / Thevissen, J / Vieru, C / PNC Exploration (Australia)

Tenure:

EL 7990 / EL 7991 / EL 7992 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 9031 / EL 9032 / **EL 7967**

Province:

Arunta Province

Prospect/Deposit:

Frank & Jessy James / Delma / Mirror Finish / Desperate / Verdant / Vimy Ridge / Huck Finn / Pacer / Kelly / Alma / Keifer / Floater / Torbernite / Ryoma / Casper / Quartz / Felspar / Bronze / Kongo / Ono / Brumby / Leprechaun / Horse 1 / Horse 2 / Mica Mine / Virginia / Cusp / Copper Queen

Thesaurus:

Uranium

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311 / Quartz 5951 / Riddoch 5851 / Delny 5852 / Dneiper 5952

Abstract:

3 airborne surveys were completed at various times. Numerous radiometric anomalies were identified. These anomalies in the main part were associated with pegmatoid intrusions.

EL 7991

(the same open file summaries as EL 7967)

Report No:

CR1995-0298

Title:

Harts Range project annual report, 1994

Author:

Drake-Brockman, J / PNC Exploration (Australia)

Tenure:

EL 7967 / EL 7990 / **EL 7991** / EL 7992 / EL 7993 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 8901 / EL 8906

Province:

Arunta Province

Prospect/Deposit:

Solo Mica Mine

Thesaurus:

Geophysics Magnetic surveys Gravity surveys Radioactivity surveys Geochemistry Trenching Geochemical anomalies Geological mapping Petrology Age determination methods Rock chip sampling

Map Sheet:

Illogwa Creek SF5315

Abstract:

Work in the Harts Ranges has located 6 district styles of mineralization based on stratigraphic and mineralogical association. Work undertaken has included prospect and regional scale mapping, trenching, rock chip sampling, ground and airborne magnetic-scintillometer surveys.

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CR1995-0525

Report No:**Title:**

Harts Range project, partial surrender on EL 7990 EL 7991 EL 7992 and EL 7994 26-03-1993 to 25-03-1995

Author:

PNC Exploration (Australia)

Tenure:

EL 7990 / **EL 7991** / EL 7992 / EL 7994

Province:

Arunta Province

Thesaurus:

Uranium Rock chip sampling

Geochem:

17 rock chip samples

Map Sheet:

Alice Springs SF5314 / Riddoch 5851

Abstract:

3130 line kms of airborne magnetics-radiometrics were acquired. Various anomalies were followed up by helicopter-vehicular surveys and the collection of rock chip samples (17 in total) for geochemical analysis and 2 samples were subject to petrological studies. No significant anomalies were defined.

3

CR1996-0286

Report No:**Title:**

Harts Range project, annual company report 1995 field season ELs 7967, 7990, 7991, 7992, 7994, 8036, 8148, 8220, 8675, 8906, 9031, 9032, 9149, 7993, 8901, and 8906

Author:

Drake-Brockman, J / Gee, C / Thevissen, J / PNC Exploration (Australia)

Tenure:

EL 7967 / EL 7990 / **EL 7991** / EL 7992 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 8906 / EL 9031 / EL 9032 / EL 9149 / EL 8901

Province:

Arunta Province

Stratigraphy:

Harts Range Group / Riddoch Amphibolite / Yambah Granulite / Muriel Range Sandstone / Bruna Gneiss / Entia Gneiss

Prospect/Deposit:

Janets / Garnet / Pony / Torbernite / Felspar / Quartz / Goanna / Kelly / Casper / Brumby / Yambla / Ryoma / Moondyne / Midori / Frenzy / Kiefer / Haddock / Swallow

Thesaurus:

Diamond drilling Geophysics Ground magnetic surveys Radioactivity surveys Geochemistry Trenching Sampling Geological mapping Stratigraphy Petrology Drill hole logs

Drilling:

13 diamond holes totalling 1028.3m

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311

Abstract:

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detailed work. The majority of this work was at Yambla (EL7967). This included 13 diamond drill holes and trenching. The detailed work failed to enhance previous results though further follow up warranted at Yambla, Tobernite Pony, Haddock and Brumby. Structural features reported include: Entia Dome.

4

CR1994-0325

Report No:

The Harts Range project 1993 annual report on ELs 7697 7990-7994, 8036 8148

Title:

PNC Exploration (Australia)

Author:

EL 7967 / EL 7990 / **EL 7991** / EL 7992 / EL 7993 / EL 7994 / EL 8036 / EL 8148

Tenure:

Arunta Province

Province:

Prospect/Deposit:

Leprechaun / Virginia / Copper Queen / Delma / Mirror Finish / Ryoma / Casper / Frank James / Jessie James / Eastern Belle / Discovery / Garnet / Swallow / Moondyne / Quartz / Felspar / Desperate / Blizzard 1 / Blizzard 2 / Zephyr1 / Zephyr 2 / Horse 3 / White Mountain / Starlite / Horse 1 / Horse 2

Thesaurus:

Drilling Geophysics Aerial magnetic surveys Aerial radioactivity surveys Ground magnetic surveys Radioactivity surveys Geochemistry Soil sampling Rock chip sampling Trenching Sampling

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311

Abstract:

For the reporting year some 15000km of airborne geophysics were flown outlining numerous radiometric anomalies. In general work concentrated within EL7967 were gridding, trenching, mapping, rock chip sampling, soil sampling, ground radioactivity and magnetics and petrological studies were completed. Work located at the Discovery prospect located "eggs" of yellow secondary uranium mineralization coating urananite, or brannerite. Mineralization hosted within amphibolite in zones of quartz-feldspar-apalite or scapolite alteration along zones of EW fracturing. At the Garnet prospect, uranium mineralization is proportional to the amount of garnet. Other prospects were located within EL7991 and EL8220. Reconnaissance work in EL7992 and EL7993 has downgraded their prospectivity.

5

CR1996-0285

Report No:

Harts Range project, final surrender report for ELs 7990, 7991, 7992, 7994, 8036, 8148, 8220, 8675, 9031, 9032, and 50% surrender of EL 7967

Title:

Drake-Brockman, J / Gee, C / Thevissen, J / Vieru, C / PNC Exploration (Australia)

Author:

EL 7990 / **EL 7991** / EL 7992 / EL 7994 / EL 8036 / EL 8148 / EL 8220 / EL 8675 / EL 9031 / EL 9032 / EL 7967

Tenure:

Arunta Province

Province:

Prospect/Deposit:

Frank & Jessy James / Delma / Mirror Finish / Desperate / Verdant / Vimy Ridge / Huck Finn / Pacer / Kelly / Alma / Keifer / Floater / Torbernite / Ryoma / Casper / Quartz / Felspar / Bronze / Kongo / Ono / Brumby / Leprechaun / Horse 1 / Horse 2 / Mica Mine / Virginia / Cusp / Copper Queen

Thesaurus:

Uranium

Map Sheet:

Illogwa Creek SF5315 / Alice Springs SF5314 / Alcoota SF5310 / Huckitta SF5311 / Quartz 5951 / Riddoch 5851 / Delny 5852 / Dneiper 5952

Abstract:
3 airborne surveys were completed at various times. Numerous radiometric anomalies were identified. These anomalies in the main part were associated with pegmatoid intrusions.

EL9558

CR1999-0023

Exploration licence 9558, report for year ending 04-12-1998.

Benger, JW / Not Given

EL 9558

Arunta Province

Illogwa Creek SF5315 / Quartz 5951

No work completed

Report No:

Title:

Author:

Tenure:

Province:

Map Sheet:

Abstract:

2

CR1999-0027

Relinquishment report for EL 9558, January 1999

Benger, JW / Not Given

EL 9558

Arunta Province

Riddoch Amphibolite

General geology Reconnaissance

Illogwa Creek SF5315 / Quartz 5951

Reconnaissance was conducted within water courses in the area for its garnet potential, however its potential was considered low, hence no samples were collected.

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Map Sheet:

Abstract:

EL 22919

CR2004-0556

EL 22919 Indiana - Harts Range Project, 1 October 2003 - 30 September 2004

Tanami Gold

EL 22919

Arunta Region - Irindina Province / Arunta Region

Harts Range Meta-igneous Complex

Platinum group elements Copper exploration Gold exploration Epithermal deposits Shear zone

Illogwa Creek SF5315 / Quartz 5951 / Brahma 6051 / Limbla 5950 / Illogwa 6050

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Map Sheet:

Abstract:

A regional geological assessment of the Harts Range Group identified a number of ultramafic bodies in EL 22919 but they were considered too small to host economic PGE deposits. The possible extension of the Illogwa retrograde shear zone into the SW corner of the lease is prospective for epithermal Arltunga-Winnecke style copper-gold mineralisation. The prospectivity will be need to re-evaluated if the Harts Range Group are metamorphosed Centralian Superbasin sediments.

2

CR2004-0667

EL 22919 - Indiana Harts Range Project, relinquishment report

McBain, G / Not Given

EL 22919

Arunta Region - Irindina Province

Harts Range Meta-igneous Complex

Gold exploration Platinum group elements Copper exploration

Illogwa Creek SF5315 / Quartz 5951 / Brahma 6051 / Limbla 5950 / Illogwa 6050

No work was undertaken in the relinquished portion.

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Map Sheet:

Abstract:

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CR2005-0484

Final report for EL 22919 "Indiana" from 1 October 2002 to 30 August 2005

Rohde, C / Tanami Exploration

EL 22919

Arunta Region - Irindina Province

Harts Range Meta-igneous Complex

Platinum group elements Copper exploration Gold exploration Epithermal deposits Shear zone Rock chip sampling

15 rock chips

Illogwa Creek SF5315 / Quartz 5951 / Brahma 6051 / Limbla 5950 / Illogwa 6050

EL 22919 'Indiana' is located approximately 150 km ENE of Alice Springs. The tenement was granted on 1 October 2002 to Tanami Exploration NL (TENL) and surrendered on 30 August 2005. EL 22919 was explored as part of TENL's Hart Range Project and as such was included in regional prospectivity studies, including assessment of geophysical data. During a regional geological mapping program 15 rockchip samples were taken from the tenement. No elevated gold values were returned. Based on a revised understanding of the tenement's geology and the lack of encouraging geochemical results, the tenement was recommended for relinquishment.

Report No:

Title:

Author:

Tenure:

Province:

Stratigraphy:

Thesaurus:

Geochem:

Map Sheet:

Abstract: