

FIRST ANNUAL & FINAL REPORT

Ringwood Northwest EL 32943

Titleholder : Gempart (NT) Pty Ltd

EXPLORATION LICENCE EL32943

FOR THE PERIOD 27/06/2022 to 10/02/2023

by

[A. W. Mackie](#)

&

[G. J. Bubner, AsIs International](#)

Contact amackie_50@hotmail.com
Datum/Zone GDA 94 – Zone 53
1:250000 Alice Springs SF53-14 and Illogwa Creek SF53-15
1:100000 Fergusson Range 5850 and Limbla 5950

Target Base Metals, Battery metals, REE, phosphate
Keywords Amadeus Basin, base metals, historical drilling.

Copies to:
1. Gempart (NT) Pty Ltd
2. Northern Territory Geological Survey
3. Capricorn Mapping & Mining Title Services
4. A.W.Mackie

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ABSTRACT

EL32943 was granted in June 2022. Commodities sought are base metals, battery metals, REE's and phosphate. About one half of the area has outcrop/subcrop of Amadeus Basin sediments. Most of the Basin stratigraphies are represented within the tenement area, from Bitter Springs Group to Cambrian Pertaoorta Group. Aeromagnetics suggests the remainder of the area under cover has similar stratigraphies. There are no mines, deposits or mineral occurrences within the EL area, and the only drilling is two clusters of RAB holes. Previous explorers, notably Poseidon Exploration Ltd in the 1990's, targeted base metals in the late Neoproterozoic Bitter Springs Group, Areyonga Formation and Aralka Formation. CRA Exploration and Rio Tinto Exploration explored for diamonds and base metals in the 1990's without success.

Other than two regional AEM traverses flown in 2017 by GA, no new data has been collected in the tenement area for 25 years.

Gempart believed that re-assessment of past exploration data and acquisition of modern airborne geophysical data can vector new areas to investigate for conventional and new-age commodity targets.

A thorough assessment of previous exploration results was completed, including analysis of all Amadeus Basin drilling completed over a 6,000 square kilometre area in the past 50 years. In 2021 a VTEM survey was flown over a substantial part of adjoining tenement EL32244. Numerous anomalies were detected which might have bedrock conductor sources, and application was subsequently lodged for EL32943 to secure ground with similar geology and elevated assays from historical surface sampling programs. The best VTEM anomalies were investigated with ground EM surveys in 2022, which showed the anomalies are caused by shallow-dipping formational conductors or altitude effect rather than bedrock conductors. As a result, Gempart has decided to surrender EL32943. No new data were acquired.

1. INTRODUCTION

1.1 Location, Access and Physiography

EL32943 is located 100 km east-southeast of Alice Springs on Ringwood station. Access from Alice Springs is via the Ross Hwy for 33 km and then 90 km along the Ringwood-Numery Road to Ringwood station. Access within the tenement area is then on unformed roads and station tracks which mostly service bores.

Elevation varies from 360 metres in sandy plains in the south of the tenement area to 550 metres over low outcrop ridges of sediments in the central part of the EL. Physiographic relief principally comprises low dissected ridges in the central part of the EL area being Amadeus Basin sediments, mostly Arumbera Sandstone, rising up to 200 metres above the surrounding plain, and separated by broad flats. The major drainage is the Todd River on the western margin of the EL, and Gaylad Creek and Six Mile Creek in the northeast. Numerous tributaries drain off the ridges into these watercourses. There are no named topographic feature in the tenement area.

Ringwood homestead is located on Gaylad Creek in the central northeast of the tenement. area

The climate is semi-arid and is characterized by large diurnal and annual fluctuations in temperature. Rainfall is typically 125-200 millimetres per year; most of the rain falls during sporadic storms.

2. TENURE

2.1 Mineral Title

EL32943 was granted for a period of six years on 27th June 2022 to Gempart (NT) Pty Ltd. It was surrendered on 10th February 2023.

Table 1. Exploration tenure

Tenement	Name	Event	Area (Sq km)	Blocks	Date
EL32943	Ringwood Northwest	Application	589	188	11-Oct-21
EL32943	Ringwood Northwest	Grant	589	188	27-Jun-22
EL32943	Ringwood Northwest	Surrender	589	188	10-Feb-23

2.2 Land Title

The Ringwood Northwest tenement area is located entirely within Ringwood PPL and Todd River PPL.

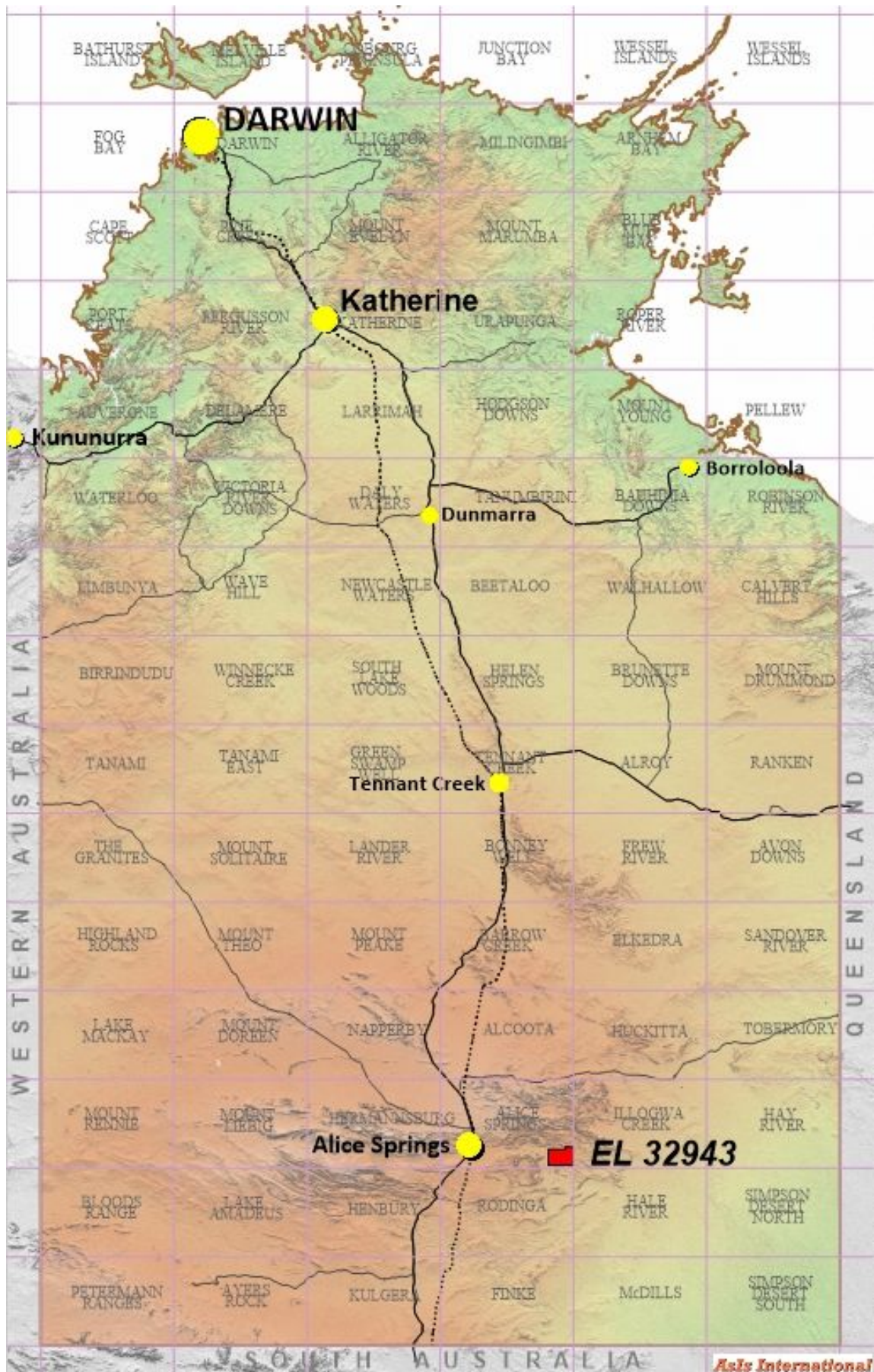


Figure 1. EL32943 Ringwood Northwest location map on NT base.

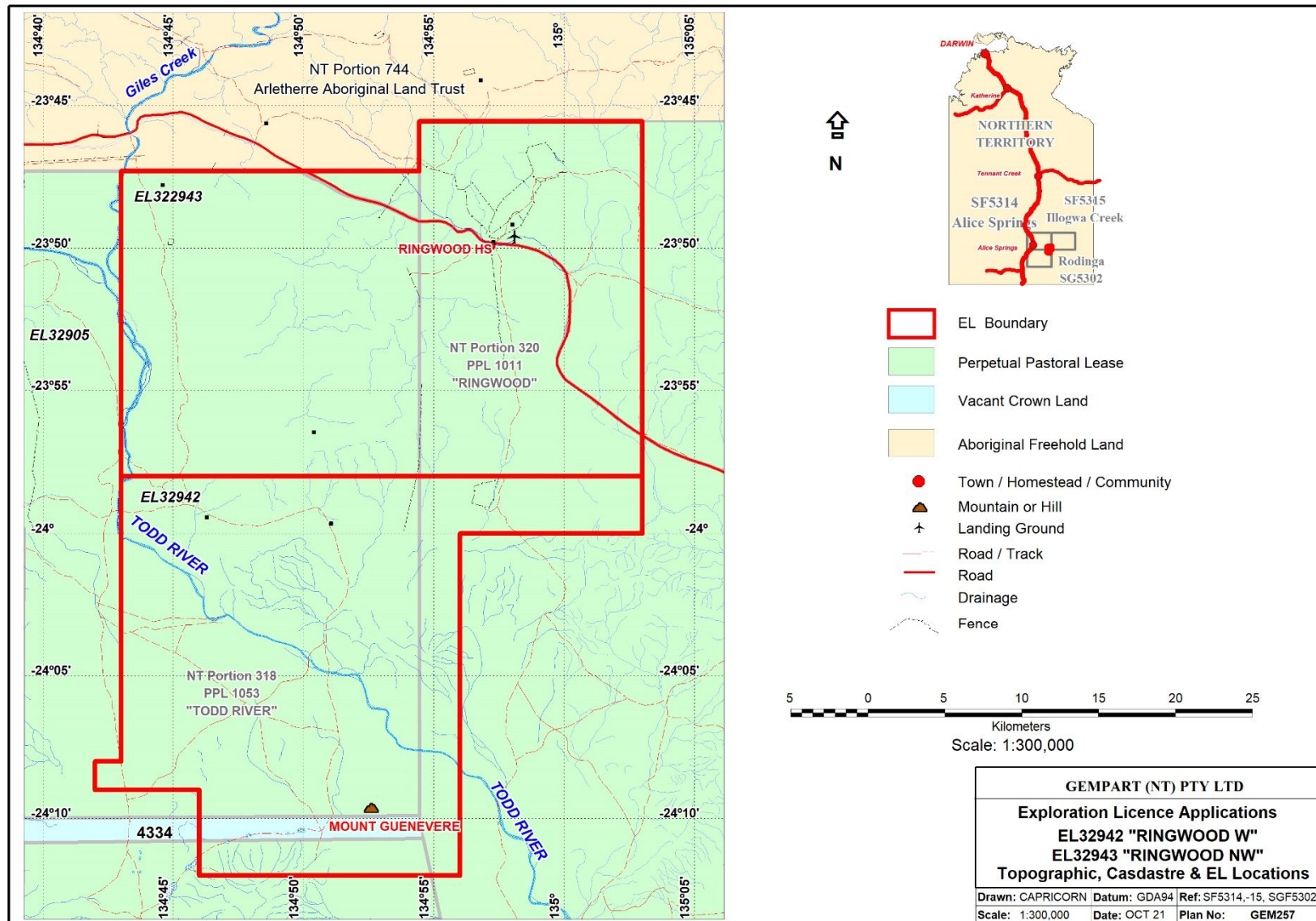


Figure 2. EL 32943 Ringwood Northwest location plan.

3. GEOLOGY

3.1 Regional geology

The project area is located on the interpreted southern edge of the North Australian Craton with outcrop of Amadeus Basin sediments. The Amadeus Basin is an intracratonic structural sedimentary basin. Sedimentation commenced in the late Proterozoic and continued until the late Palaeozoic. The maximum preserved thickness of sediments is estimated to be approximately 9 kilometres. The sedimentary sequence comprises sandstone, shale and carbonate deposited in a predominately shallow-marine environment. Subordinate depositional environments include fluvial, glacial, barred basin, supratidal, shallow restricted carbonate shelves and open shallow to deep marine.

An early tectonic event during the mid-Proterozoic metamorphosed and dislocated the rocks into many fault-bounded blocks. The Late Proterozoic Arltunga Orogeny produced overturned strata and isoclinal folding. A later tectonic event, the Devonian-Carboniferous (~400-350 Ma) Alice Springs Orogeny, reactivated faults and generated thrust nappes. The event was accompanied by greenschist facies metamorphism. Within the area of EL32943 the deformation seems to be mostly open folding.

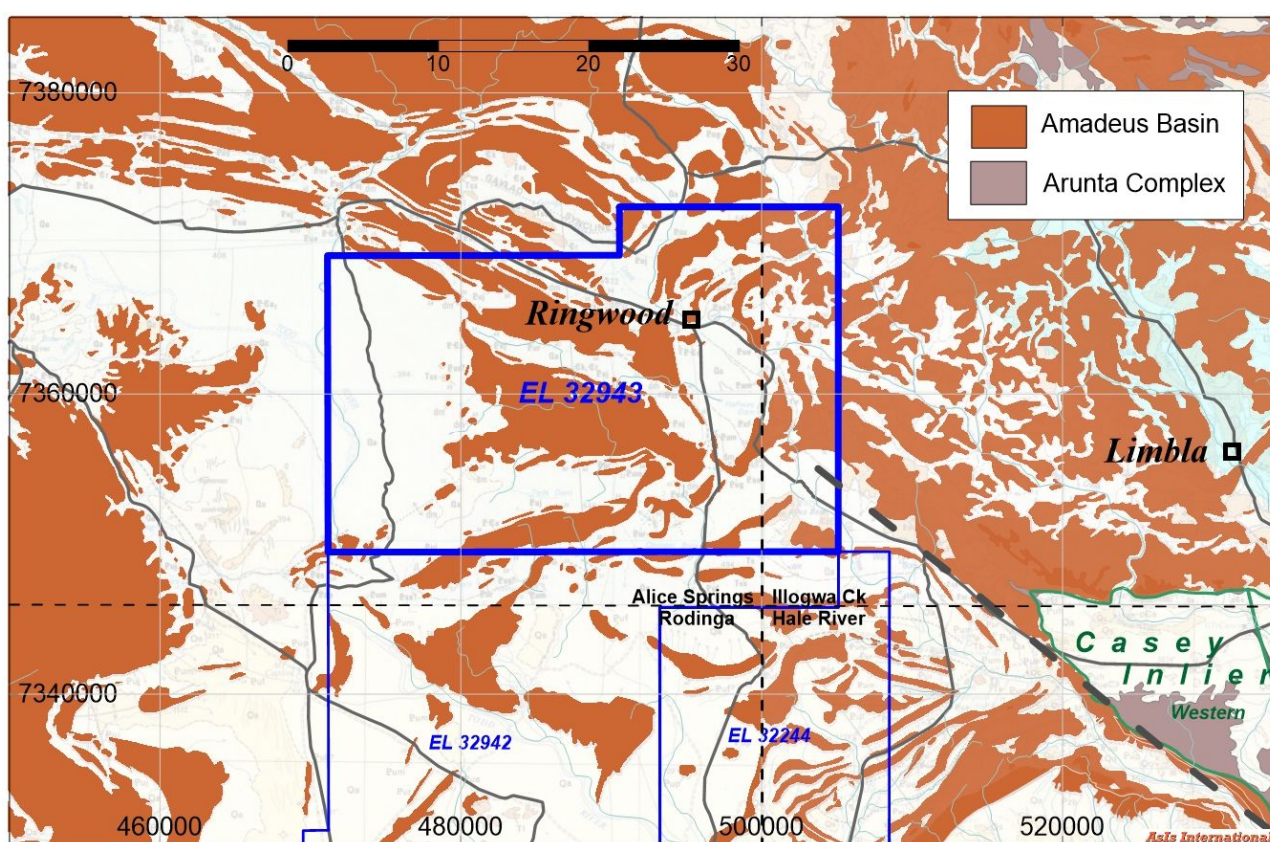


Figure 3. EL32943 Project area regional geology

3.2 Project Area Geology

This description of the geology within EL32943 is derived from public domain Government and academic literature, and open file reports. A stratigraphic column relevant to the EL area is included at Figure 4, and maps of published and simplified pre-Cenozoic geology included at Figures 5 and 6.

The oldest rocks within the tenement area outcrop along the northern boundary and belong to the Bitter Springs Group. This is divided into three formations namely Gillen, Loves Creek, and Johnnys Creek. The Gillen Formation consists of evaporites and inter-bedded shale, sandstone and carbonates. Evaporites have acted as glide planes and formed salt domes from early in the development of the Amadeus Basin. The contact between the Gillen Member and Loves Creek Member is a disconformity.

The Loves Creek Formation disconformably overlies the Gillen Formation and comprises predominantly dolostone, chert and limestone. The basal unit was deposited in a transgressive systems tract, with stromatolites forming as the water deepened. A gradual decline in the rate of sea-level rise and eventual sea-level still stand led to deposition of the upper unit in a prograding terrestrial and lacustrine environment.

The Johnnys Creek Formation is dominantly calcareous mudstones and dolostones deposited in shallow environments. At the top of the unit are basalts with amygdaloidal textures. These are the only observed volcanics in the Amadeus Basin sequence in the wider area. They have not been observed in the EL area.

The Bitter Springs Group is terminated by an angular unconformity and overlain by the Wallara Formation. These rocks were deposited in a shallow marine environment and comprise dolostones and sandstones, and mudstones, in part carbonaceous. They do not outcrop in the EL.

The Areyonga Formation unconformably cuts into different levels of the underlying strata including Bitter Springs Group and Wallara Formation. It consists of fluvial and glaciogene rocks, overlain by shallow marine and fluvial units. Silicified fragments of Heavitree Quartzite and Bitter Springs Formation have been noted in glaciogene sediments.

Overlying the Areyonga Formation is the Aralka Formation, which consists of shallow marine carbonates and clastic sediments with minor shale. Within the Aralka Formation are the Ringwood Member which consists of dolostone and calcarenite, and Limbla Member comprising pebbly and sandy calcarenite, and festoon cross-bedded sandstone.

Between the Aralka and Pertatataka Formations is the Olympic Formation, a red and green mudstone and siltstone with intercalated sandstone which contains conglomerate and dolomite marker units.

Subsequently, deep water deposition took place with the base of the overlying Pertatataka Formation being turbidites and deep water pelagic sediments, coarsening up to sandstones. Within the Pertatataka Formation are two sandy units, the lower, Waldo Pedlar Member and upper, Cyclops Member. The Julie Formation overlies the Pertatataka Formation with the boundary being transitional and represents shallow marine conditions with dolomite and limestone including thick bedded ooid grainstones.

In the north and central Amadeus Basin deposition recommenced with the Cambrian Pertaoorrtta Group. Initially, red bed sandstone, siltstone and conglomerate of the Arumbera Formation was deposited, followed by carbonates of the Todd River Dolomite, Chandler Formation, Giles Creek Dolomite, Jay Creek Limestone and Shannon Formation. A substantial thickness of the earlier Pertaoorrtta Group, and all of the Cambrian-Ordovician Larapinta Group sediments were either not deposited or have been eroded.

Deposition in the Amadeus Basin ceased with the onset of the 450-300 Ma Alice Springs Orogeny, when the Arunta Block was thrust to the south over the Amadeus Basin, accompanied by greenschist facies metamorphism.

Cenozoic sediments comprise mostly alluvium including sheetwash, scree, and aeolian sands.

3.3 Economic Mineral Potential

Within the tenement area there are no operating or historical mines, mineral deposits or recorded mineral occurrences.

In the broader context the area has potential for many commodities. Mineralisation styles targeted by previous explorers include:

- Stratabound or strataform copper mineralisation such as Zambian Copperbelt style in the Amadeus Basin sediments.
- Phosphate in Amadeus Basin sediments.
- Lead-zinc and copper-cobalt exhalative mineralisation in Amadeus Basin sediments.
- Carlin style, Witwatersrand or SEDEX gold in Amadeus Basin sediments.
- Diamondiferous kimberlites associated with major structures e.g. the Woolangi Lineament.

On a regional scale mineral deposits in the Arunta Block and Amadeus Basin lithologies include:

- Gold in Heavitree Quartzite at White Range.
- Gold in Bitter Springs Group sediments-volcanics at Golden Goose (Winnecke goldfields).

- Sandstone-hosted uranium in the Brewer Conglomerate at Angela and Pamela.

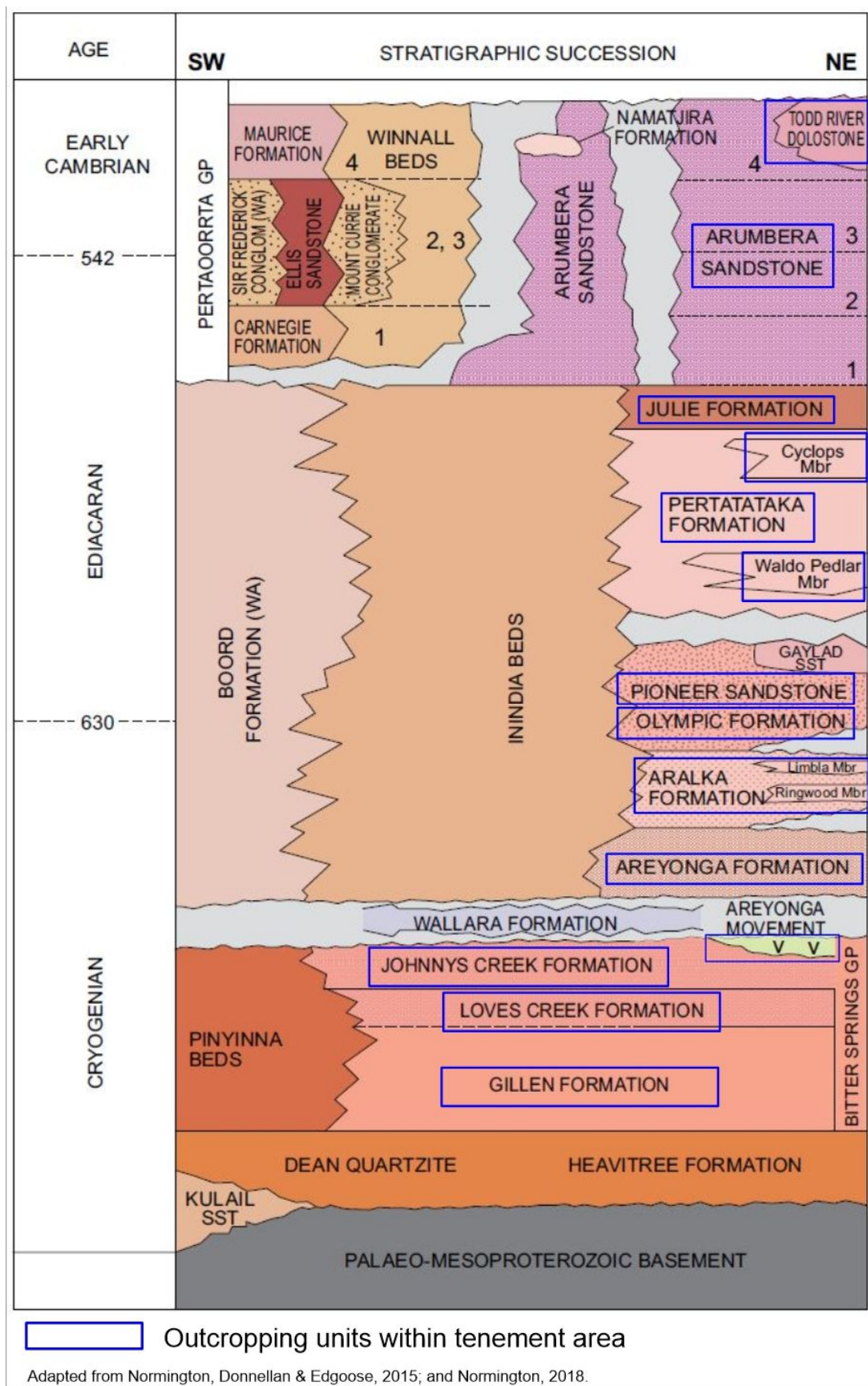


Figure 4. EL32943 Stratigraphy – Pre mid Cambrian.

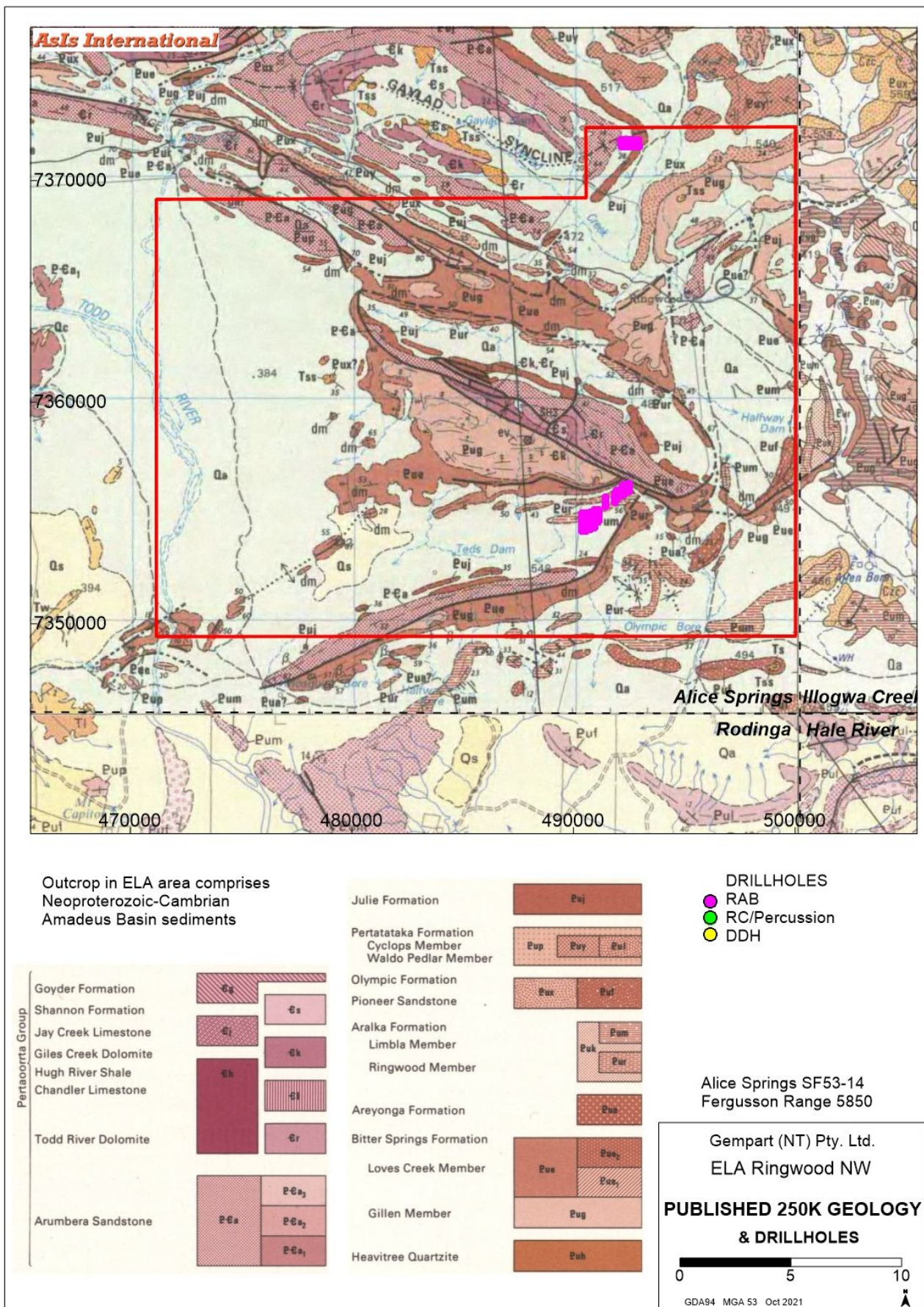


Figure 5. EL32943 1:250,000 scale published geology.

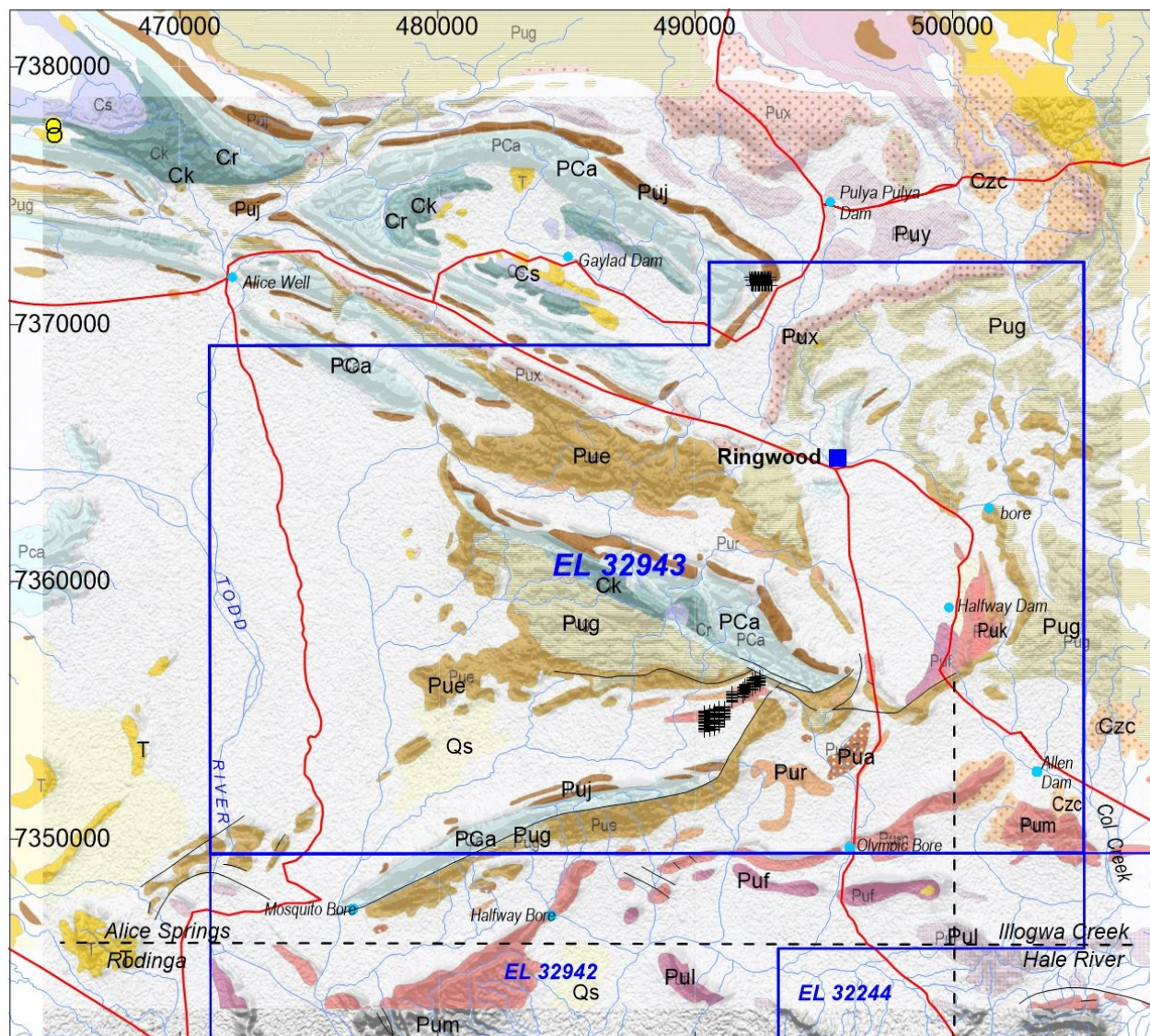
4. PREVIOUS EXPLORATION

NTGS databases “Historical Mineral Titles” and “GEMIS” were interrogated to capture past exploration titles overlapping EL32943, and all relevant reports were reviewed. Table 2 is a summary of historical titles and results reported. Previous exploration efforts relevant to the area of EL32943 and/or involving collection of new data are summarised thereafter. Plans of historical tenement, drilling and sampling are included at Figures 7 and 8.

There are no drillholes in the EL32943 area. The only work of any substance is surface sampling carried out by Poseidon and CRAE.

Table 2. Historical Mineral Titles Overlapping EL32943 & Exploration work summary

Title & Final Year	Titleholder, (Report reference) & exploration work
AP1584, AP1678, AP1716, AP1740. 1968	Australian geophysical P/L. (CR1967-0004) [14]. Mapping, rock chip sampling, IP, drilling on areas outside EL32943. Drilling hit weak copper, zinc, lead mineralisation.
AP1604 1967	Magellan Petroleum. (CR1966-0017) [11] Tested non-petroliferous mineral potential of well Orange #1 outside EL.
AP2122 1971	CRA Exploration (CR1971-0017) [15]. Stream sediment sampling for zinc in the Pertaootra Gp. Zn anomalies in laterites. No samples in EL area.
EL1064 1977	BHP Co Ltd. (CR1976-0073) [2]. Exploration for phosphate west of EL. Drilling Todd River Dolomite hit subeconomic P ₂ O ₅ ; references to good result on EL152.
EL2070, EL2071 1980	Stockdale Prospecting. (CR1980-0150) [19]. Substantial gravel sampling program produced no positive results for kimberlitic indicators
EL6997, EL7392 1995	Poseidon Exploration. (CR1993-0784) [6]. Intensive drainage, soil and rock chip sampling. RAB drilling failed to upgrade prospects.
EL7336 1992	CRA Exploration. (CR1992-0248) [9] Exploration for diamonds; negative results. Stream sediment samples returned low values.
EL9337 2002	CRA Exploration / Rio Tinto Exploration P/L. (CR1998-0565) [7]. Multi-commodity; drainage and soil sampling; RAB drilling. None on EL.
EL10267, EL10269 2003	Gutnick Resources N.L. (CR2004-0166) [20]. Stream sediment & rock chip sampling; No values near EL.
EL24249 2010	Imperial Granite & Minerals / Excelsior Gold. (CR2010-0978) [10]. Rock chip sampling. None on EL
EL24282, EL24283 2010	Raxile P/L. (CR2009-1126) [8] Two holes drilled outside EL to test Russian micro lepton concept. Fail.
EL27016, EL27017, EL28530 2013	Northern Minerals Ltd. (CR2013-0740) [12] Evaluated for phosphate. Rock chip sampling outside EL area. No encouragement.
EL29091, EL29094 2014	NT Minerals P/L (CR2014-0016) [18]. Targeting base metals, REE's, U, potash. Data review only; no field work done.



Normandy EL6997 1993-94 (CR1995-0067)
+ RAB holes Prefix AMARAB

EL152 1974 (reference in CR1976-0073)
● Rotary percussion holes RR1 & RR2

- Qa Alluvium
- Qs Sand
- Czc Fanglomerate
- T Tertiary

- Cp Pertaoorta Gp (undiff.)
- Cs Shannon Fm
- Ck Giles Creek Dolomite
- Cr Todd River Dolomite
- PCa Arumbera Sandstone
- Puj Julie Fm
- Pup Pertatataka Fm
- Puy Cyclops Member
- Pul Waldo Pedlar member

- Pux Pioneer Sandstone
- Puf Olympic Fm
- Puk Araka Fm
- Pum Limbla member
- Pur Ringwood member
- Pua Areyonga Fm
- Pue Loves Creek Fm
- Pug Gillen Fm
- Pub Undifferentiated

Gempart (NT) Pty. Ltd.
EL32943 Ringwood Northwest
**PREVIOUS EXPLORATION
DRILLHOLES**
On simplified geology
0 5 10
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Figure 7. EL32943 Previous exploration - drillholes.

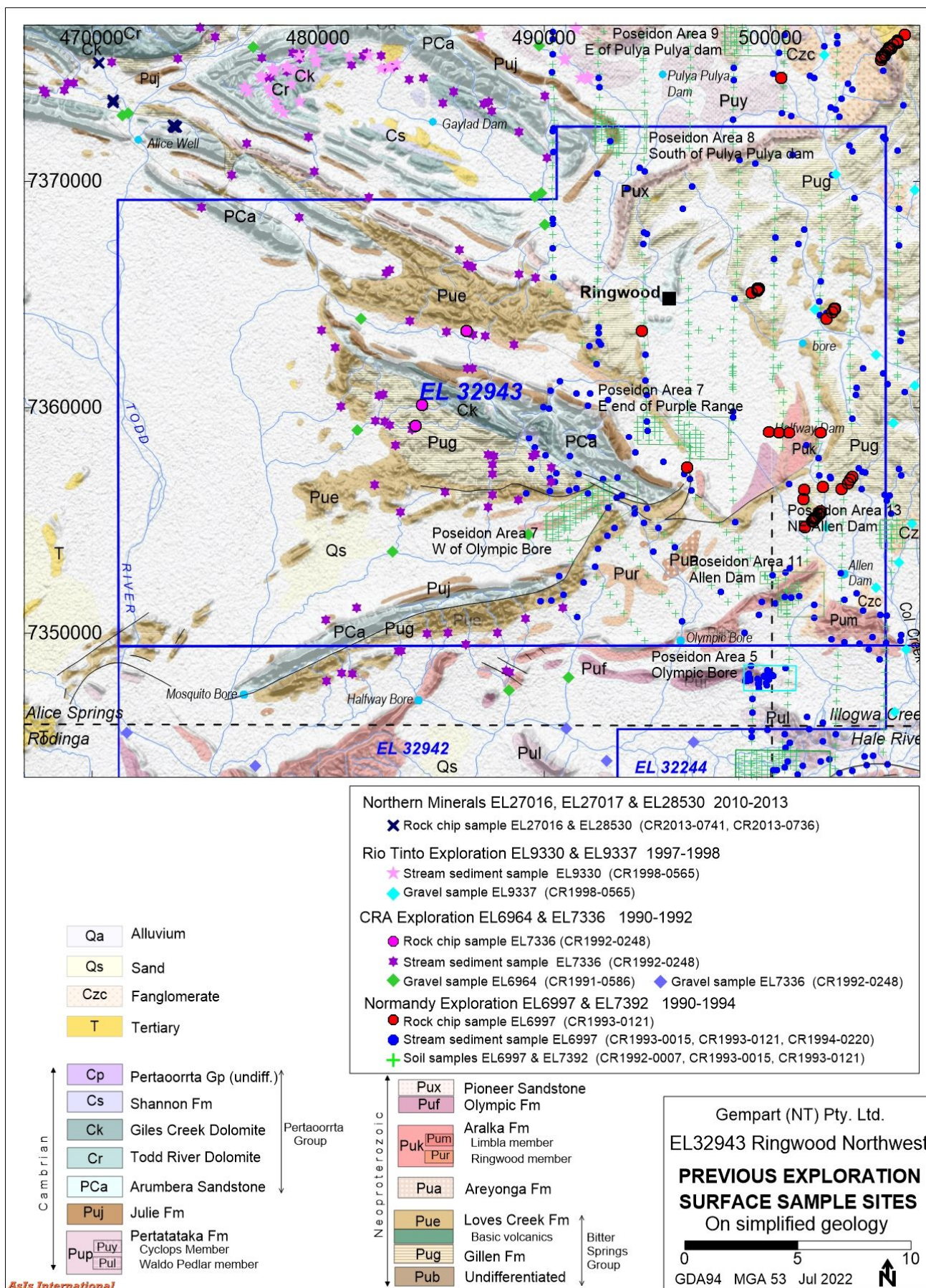


Figure 8. EL32943 Previous exploration - surface sampling.

4.1 AP1584, AP1678, AP1716, AP1740 – 1967. Australian Geophysical P/L

AP1584 overlaps the northern half of EL32943 [14]. In 1967 geological mapping, traverses of rock chip sampling, induced polarization surveys and a rotary percussion drilling programme were completed within the company's Authorities to Prospect No 1584, 1585, 1691, 1714 and 1716. In all 384 chip samples were collected, 48 km of IP acquired and eleven holes totalling 918 metres of percussion drilling completed on 14 traverses. Stream sediment geochemistry was also attempted but unsuccessful.

None of this work was carried out on the current EL32943. However, the drilling results are relevant to an understanding of the prospectivity of the EL area. Bedded base metal mineralization was discovered in various stratigraphic horizons from the top of the Bitter Springs Limestone to the Waldo Pedlar member of the Pertatataka Formation. Lithologies carrying mineralisation are mostly dolomites and dolomitic siltstone, and include basalt and black pyritic shales. Generally thin intervals of elevated to weakly anomalous base metal assays were intersected in most holes spread over a wide area.

It is significant that the mineralised stratigraphies and lithologies extend into EL32943. This is discussed further in section 5.1.

4.2 AP1604 - 1967. Magellan Petroleum.

This tenement is almost entirely outside EL32943 to the northwest [11]. AP 1604 was granted to test the non-petroliferous mineral potential of the Amadeus Basin stratigraphy intersected in petroleum exploration well Orange 1 at 375470E 7340450N. As a result of core studies and thin section descriptions that failed to identify anything of interest, it was requested that AP 1604 be surrendered.

4.3 AP2122 – 1971. CRA Exploration P/L.

This tenement overlaps the northern part of EL32943 [15]. CRAE collected 1,055 drainage samples and 48 rock samples in exploration for zinc silicate mineralisation within the Pertaoorta Group, and specifically the Todd River Dolomite. All samples were collected to the north and west of the current tenement area.

About a dozen weak to moderate zinc anomalies were followed up with more sampling. Most can be traced to manganoferous limonite development (laterite) over limestone. These laterites almost invariably occur overlying the Todd River Dolomite, mainly over the Giles Creek Dolomite and the Shannon Formation. This apparent stratigraphic control may be due to the fact that the Giles Creek Dolomite and the Shannon Formation are the most widely outcropping formations in the A. to P.

area, and that the Todd River Dolomite tends to be expressed by negative relief relative to the enclosing units.

High to very high arsenic values were obtained from two small laterite occurrences in the eastern part of the A. to P., which have yet to be explained.

The report concluded “some relatively high zinc and other metal values are associated with laterites, but it is considered that the area has been sufficiently investigated to demonstrate that no bodies of economic significance occur, and no further work is recommended.”

4.4 EL1064 - 1976. BHP Co. Ltd.

This tenement is entirely west of the current EL however results reported are relevant to exploration of dolomites for phosphate within EL32943. BHP drilled eleven percussion holes into Todd River Dolomite which revealed a consistent phosphate sequence of uneconomic grade [2]. Most of the holes are over 50 km to the west of EL32943. The best assay returned was 4.13% P₂O₅ over 2 metres of calcareous siltstone. In their report BHP refers to an intersection of 6 metres at 12.8 % P₂O₅ from drilling on EL152 during 1974. There is no record of EL152 or any associated Company Report, however drillholes RR1 and RR2 as plotted by BHP reveal they are about ten km outside the northwest corner of EL32943; refer Figure 7.

4.5 EL2070 & EL2071 - 1980. Stockdale Prospecting Ltd.

These two tenements collectively overlap most of EL32943 [19]. Stream sediment samples were collected at high density. Analysis for microdiamonds and kimberlitic indicator minerals produced negative results.

4.6 EL6997 & EL7392 - 1995. Poseidon Exploration / Normandy exploration

These tenements, plus EL6998, comprised Normandy Poseidon's Amadeus Project. The Primary target was Pb/Zn and Cu/Co exhalative (sedex) mineralisation. Poseidon Exploration carried out an intensive exploration program over a large area comprising of surface sampling, geophysics and drilling. Only a small part of the project area overlaps the current EL in the extreme northeast corner.

Initial field work included reconnaissance soil and rock chip sample traverses over known mineralisation or favourable stratigraphy [4]. Many of the traverses were over areas previously tested by Australian Geophysical PL in 1965. Traverses 3,4,9,10,11 and 12 were soil sampled at 100m intervals and sieved to -1mm in the field. Traverses 9 to 12 were aimed at testing the Gaylad Syncline.

On the other traverses, selected rock samples were collected, rather than systematic outcrop samples, thus many of the samples are highly ferruginous.

Several traverses contained anomalous rock chip results for Cu and Zn, which were followed up in subsequent field trips. Within the current tenement area these include:

Traverse 4: sample A27540 - 540ppm As

Traverse 18: sample A27552 - 450ppm Zn

Traverse 14: sample A27569 - 20ppb Au

An orientation soil, stream and lag sampling programme was undertaken in 1991 to determine the best sampling technique for the area [4]. Stream and lag sampling have been shown to be the most effective technique except in areas of thick sand cover. Assays of various size fractions established that the optimum fraction size for soil samples is lag (-6+1mm), and for stream sediments is panned concentrate or -6+1mm.

In 1992 exploration activities consisted of regional lag and stream sediment sampling followed by infill sampling, and an aeromagnetic survey [5]. Most of the activity occurred to the east and north of EL32943. Stream sediment samples were collected at a density of one per 1.3 square kilometres. Multi-element assays were determined, but no assays for gold. Several areas of interest were identified of which five, being areas 6, 7, 8, 11 and 13, occurs within the current EL. Refer Table 3 and Figure 9.

Table 3. Areas selected for follow-up after regional sampling (from Poseidon report).

Area	Sample Type	Element	Location 1	Aka Location 2
Kay Ck	Stream, Lag	Cu, Pb, Zn	Kay Creek	Outside EL32943
1	Stream	Zn	SE of Hi Jinks Bore	Outside EL32943
2	Lag	Cu	SE of Hi Jinks Bore	Outside EL32943
3	Lag	Zn, As, Pb, Cu	Hi Jinks west	Outside EL32943
4	Lag	Cu, Pb	Middle Bore	Outside EL32943
5	Stream	Cu, As	SE of Olympic Bore	Outside EL32943
6	Lag	Pb	West of Olympic Bore	Central EL32943.
7	Lag	Pb, Zn	E end of Purple Range	Central EL32943.
8	Lag	Zn, Mo	Sth of Pulya Pulya Dam	Nthn margin of EL32943.
9	Lag	Zn	E of Pulya Pulya Dam	Outside EL32943
10	Stream	Mo	Mulga Dam	Outside EL32943
11	Lag	Cu	Allen Dam	SE corner of EL32943.
12	Lag	Cu,As,Zn,Cd,Pb	Gypsum Creek	Outside EL32943
13	Lag	Cu	NE Allen Dam	Eastern margin of EL32943.
14	Stream	Pb	SE of Gypsum Creek	Outside EL32943

Results of follow-up lag sampling and RAB drilling of these areas are described hereunder, which is excerpted/adapted from the Annual Report to 08/11/93 [6].

AREA 6 SAMPLING - NW of Olympic Bore (Lag). The initial sampling produced anomalous Pb on Line T13 (Sample No. D6856 at 490860E 7354850N) and low order anomalous Cu on Line T14 (Sample No. D6847). The follow-up sampling enhanced both of the regional anomalies. Anomalous Pb was recorded on two lines at the western end of the area and anomalous Cu at the eastern end of the area. The eastern end of the area contained low ridges of dolomite and broad valleys of calcareous siltstone and shale of the Limbla Member of the Aralka Formation. The western end contained low rocky ridges of sandstone and dolomite on a broad flat alluvial plain with little or no lag.

AREA 8 SAMPLING - SW Pulya Pulya Dam (Lag). The initial result was an anomalous Zn/Fe value (soil sample number D4383 at 492950E 7371870N). The results in Area 8 were the best of all the follow-up areas. The area is located at the eastern end of the Gaylad Syncline, in the Julie Member and Arumbera Sandstone of the Pertatataka Formation. The lag samples contained the three highest Zn values with a maximum of 2450 ppm and Pb values up to 160 ppm. The area provided good lag material as it is steep ridges and Valleys.

The remaining areas 7, 11, 13 did not contain any anomalous results.

A detailed regolith interpretation was carried out on the follow-up sample areas to evaluate the effectiveness of the lag samples. It was found that parts of the follow-up lag areas contained transported soil and overburden which cannot be reliably sampled with detailed lag. This explains the poor results from areas 4, 7, 11 and 13 and suggests that the original results were spurious.

AREA 6 RAB - NW of Olympic Bore. RAB drilling was carried out to investigate anomalous Cu, Pb and Zn geochemistry. Holes on 50 or 100 metre centres were drilled on eleven lines. Best results are shown at Table 4.

Table 4. Area 6 anomalous RAB assay results Poseidon 1993

Hole No.	East_mga	North_mga	Cu (Threshold > 135 ppm)	Pb (Threshold > 95 ppm)
118	491143	7354639		195
137	490762	7354987		200
75	492214	7355985	145	
112	491142	7354939	135	
114	491142	7354939	135	

The RAB drilling did not confirm the follow-up lag sample values.

AREA 8 RAB - SW Pulya Pulya Dam. RAB follow-up of anomalous Zn and Pb geochemistry comprised three lines of holes at 50 metre spacing. Most holes generally ended in siltstone. Best results are shown at Table 5.

Table 5. Area 8 anomalous RAB assay results Poseidon 1993

Hole No.	East_mga	North_mga	Zn (Threshold > 560 ppm)	Pb (Threshold > 95 ppm)
4	492786	7371832	890	125
30	492751	7371726	1100	
38	492831	7371531	640	
37	492881	7371530	580, 610	180

The anomalous results occurred in siltstone. These results confirm the follow-up lag results, but do not enhance the prospectivity. Also, the zone of anomalism is very small, being one hole on 2 lines and two holes on the third line, the holes being 50m apart. Although the Zn values were high, no further work was recommended.

Subsequent exploration activities focussed on results from other areas outside EL32943 and no further work was done within the area of EL32943. Due to lack of encouragement from follow-up drilling and sampling, the tenements were surrendered.

Table 6. Assays of stream sediment samples collected by Poseidon 1992-1993.

All units in ppm except Fe which is in %. Null = no assay. <> = assay below detection limit.

Table lists all sample sites which plot within EL32943.

EAST	NORTH	SAMPLE	AG	AS	BA	CO	CR	CU	FE_%	MN	NI	P	PB	V	W	ZN
503930	7349543	8040	<>	3	280	14	8	16	1.35	800	15	140	6	19	10	46
505111	7349582	6447	<>	4	290	20	14	22	2.6	730	24	280	10	24	<>	72
503261	7349603	7985	<>	2	240	48	10	26	2.25	2000	58	185	6	22	<>	76
502681	7349742	8042	<>	3	460	52	14	32	2.45	2300	42	310	10	26	<>	80
504510	7349813	8039	0.1	5	560	44	16	17	3.3	2400	40	430	12	30	<>	115
498860	7350013	8046	<>	6	340	14	10	18	1.51	290	13	190	8	24	<>	42
496081	7350523	6882		13	370	18	16	26	2.55	360	24	270	16	50		54
501930	7350672	8047	<>	2	230	28	10	12	1.73	970	24	180	8	19	<>	46
491454	7350722	6861	<>	18	460	28	10	26	4.4	990	19	320	18	74	<>	82
499500	7350802	7989	<>	3	140	20	12	15	1.64	730	18	130	6	24	<>	30
504850	7350802	7983	<>	5	270	46	12	26	4.65	2250	48	420	8	34	<>	120
504100	7351003	8041	<>	20	250	32	12	20	3.1	1280	34	230	6	30	<>	72
501930	7351243	7990	<>	4	180	16	16	19	3.15	670	17	250	6	28	<>	62
500231	7351322	7992	<>	-1	115	4	8	9	0.96	200	4	80	<>	12	<>	12
499631	7351372	8050	<>	3	145	8	8	11	0.97	530	7	90	4	15	<>	16
489831	7351403	8077	<>	2	125	12	2	6	0.54	220	4	165	<>	11	<>	18
490310	7351452	7917	<>	2	210	20	6	8	1.59	490	10	220	<>	22	<>	20
503260	7351483	8048	<>	26	740	105	18	38	7.05	7000	92	490	26	54	<>	155
500921	7351563	8049	<>	1	175	14	8	11	0.99	330	9	120	4	16	<>	19
500627	7351612	6437	<>	4	170	22	14	36	1.86	850	22	135	6	24	<>	30
501280	7351622	7991	<>	3	145	12	10	16	1.4	280	12	150	4	18	10	28
490840	7351703	7916		10	300	24	4	9	2.1	1480	10	210	4	28		28

503800	7351753	7984	<>	7	280	18	16	18	2.35	380	19	280	6	28	<>	56
497810	7351833	6894		6	270	16	18	22	2.4	410	22	220	12	46		46
491730	7352222	8075		2	100	10	4	6	0.75	125	3	190	<>	13		7
490661	7352533	8076		4	160	24	6	10	1.64	460	13	270	4	24		34
500101	7352552	7993	<>	1	115	18	8	15	1.33	610	26	130	4	17	10	32
503121	7352663	6407	<>	4	150	10	16	10	1.72	280	12	90	6	28	<>	19
500653	7352672	6436	<>	3	220	18	12	22	1.94	700	24	165	8	24	<>	48
500861	7352862	8051	<>	6	390	36	18	32	3.5	1240	38	310	14	38	<>	78
492241	7352922	7914		2	280	12	4	6	0.62	120	4	210	<>	13		9
494830	7353592	6881		4	260	14	6	18	1.56	200	12	230	6	20		14
492381	7353743	8074		4	530	10	4	12	0.56	165	4	185	<>	20		12
495757	7353803	6885		38	270	22	14	46	4.5	310	28	310	32	80		72
492791	7354302	7915		2	210	18	14	20	1.53	330	13	230	4	36		24
493091	7354662	8073		4	280	12	4	10	0.6	200	4	250	<>	13		10
495051	7354663	8078		4	290	14	6	20	1.65	210	12	330	4	19		15
494400	7354863	7913		3	240	12	4	10	0.75	230	6	280	4	16		15
498451	7354903	7918	<>	2	250	12	4	11	0.94	195	7	310	4	15	<>	16
494000	7355302	7912		2	250	12	2	8	0.51	470	3	200	<>	11		14
494000	7355503	8071		3	380	38	6	15	1.6	2200	26	260	6	24		38
494530	7355513	8072		4	390	30	10	18	2.05	1080	20	300	6	24		30
492831	7355532	7911		12	280	14	6	11	1.43	250	10	105	12	62		38
493201	7355973	7910		6	520	28	14	22	2.15	1160	26	610	10	28		54
493421	7356073	8069		2	320	16	14	13	1.55	550	19	410	4	22		40
493421	7356073	8068		2	340	20	14	12	1.6	730	22	430	4	24		44
505033	7356122	8036	<>	4	290	20	8	18	2.15	390	15	300	4	24	<>	14
489211	7356172	7909	<>	2	80	12	4	6	0.73	140	4	170	<>	15	<>	7
491931	7356173	6851		3	430	20	4	13	1.46	1640	12	580	6	17		14
490231	7356272	8067		2	240	14	6	13	1.28	370	9	360	4	15		18
491101	7356293	8066		5	360	14	8	20	1.56	200	12	270	8	19		20
496490	7356293	7585	<>	7	360	12	8	14	1.31	440	10	340	8	28	<>	26
504031	7356383	7997	<>	2	230	18	12	16	1.65	240	15	300	4	24	<>	12
491410	7356403	8058		3	125	12	4	10	0.84	210	5	210	4	17		11
503260	7356562	7996	<>	4	210	14	4	11	0.95	180	7	260	4	18	<>	10
500810	7356582	7994	<>	4	400	14	8	13	1.55	360	12	340	6	20	<>	34
490460	7356672	7908		3	250	14	6	13	1.41	380	10	410	4	16		17
492601	7356803	8000		2	570	44	8	24	2.05	2400	30	560	8	24		48
496450	7356823	3821	<>	3	430	24	10	12	2.25	1540	16	320	8	28	<>	36
502680	7356842	8053	<>	2	220	12	4	11	1.05	185	7	210	4	17	<>	11
490251	7356843	7907		4	170	12	4	7	0.82	240	7	240	4	15		18
503530	7356852	8054	<>	2	145	12	4	9	0.78	175	5	220	<>	14	<>	7
493231	7356883	8057		1	450	34	12	10	1.72	1360	28	430	4	19		40
502630	7356912	8052	<>	3	190	12	4	10	0.82	175	6	220	4	16	<>	11
502160	7356983	7995	<>	12	240	20	10	20	2.65	520	20	340	10	44	10	50
496191	7357023	8056	0.1	2	500	42	10	11	1.94	1980	22	320	6	28	<>	32
491531	7357033	7901	<>	1	160	16	6	11	1.08	300	8	280	4	18	<>	13
490541	7357052	8065		3	330	14	8	17	1.87	175	13	260	6	19		12

504192	7357091	3898	<>	4	270	16	24	24	2.7	270	20	300	8	36	<>	20
504053	7357122	3897	<>	3	230	12	10	16	1.84	530	12	270	6	22	<>	13
489431	7357253	7906	<>	3	135	16	6	12	1.08	195	9	220	4	22	<>	13
503891	7357303	7998	<>	3	195	14	4	12	1.03	220	7	240	4	18	<>	8
495260	7357563	7999	<>	2	530	32	10	13	2.55	2450	24	180	16	24	20	84
502128	7357723	4412	<>	10	280	20	20	24	2.9	480	28	360	30	50	<>	60
491151	7357823	8064	<>	1	320	18	6	10	1.17	660	12	980	<>	15	10	22
490061	7357862	8063	<>	2	250	16	6	11	1.47	480	10	400	4	17	<>	18
494031	7357973	3847	<>	2	800	72	10	22	2.4	6300	56	220	16	28	<>	110
489590	7358223	7905	<>	-1	105	10	2	5	0.465	240	4	170	4	10	<>	28
501590	7358303	8055	<>	3	290	12	8	14	0.93	210	11	370	6	20	<>	32
489311	7358612	7904	<>	2	200	18	4	8	1	570	10	540	4	14	<>	30
493740	7358679	3896	<>	2	490	44	12	19	1.86	2750	36	200	24	26	<>	52
492031	7358683	8059	0.1	-1	720	46	10	32	1.78	3100	34	470	6	22	<>	38
492150	7358683	8060	<>	7	490	68	12	8	2.1	2700	66	330	8	24	<>	60
494566	7358963	3793	<>	1	600	52	10	19	2.3	4150	38	180	18	32	<>	58
494548	7359396	3794	<>	3	460	46	16	17	2.7	3750	40	175	30	42	<>	62
503630	7359522	4245	<>	4	180	26	38	32	3	550	34	210	8	68	<>	26
498329	7359563	3746	<>	3	420	10	24	14	2.55	450	13	310	10	42	<>	46
498336	7359815	3747	<>	4	330	8	22	10	2.75	260	11	180	10	44	<>	40
490201	7359943	8061	<>	1	310	30	6	19	1.35	1620	20	650	12	20	<>	72
489970	7360022	8062	<>	2	350	36	10	15	2.2	1660	28	440	8	26	10	64
491930	7360073	7902	<>	-1	460	44	10	12	1.64	1840	48	370	4	19	<>	42
492830	7360323	3846	<>	1	790	105	6	15	1.63	5500	88	330	6	22	<>	68
494548	7360549	3795	<>	8	310	26	8	10	1.42	1260	24	210	22	20	<>	46
503763	7360550	4242	<>	2	500	8	4	8	0.82	190	6	260	4	11	<>	13
491430	7360623	3845	<>	4	690	80	10	38	2.9	3850	44	230	16	32	<>	80
492009	7360629	3895	<>	1	380	36	16	15	1.98	1660	38	260	6	24	<>	42
490289	7360751	7903	<>	3	720	64	6	18	2.5	2950	36	490	12	28	<>	64
503820	7360873	4240	<>	6	200	10	14	20	1.78	150	14	185	10	15	<>	13
490680	7361173	3894	<>	2	390	38	10	14	2.55	2050	26	390	16	26	<>	64
494479	7361196	3788	<>	2	125	8	4	6	0.79	165	4	195	4	17	<>	16
504994	7361509	3903	<>	2	220	10	6	8	0.81	350	7	150	6	16	<>	12
504080	7361722	4003	<>	1	180	4	4	7	0.82	200	5	260	4	11	<>	12
492323	7361918	3775	<>	1	180	8	4	6	0.42	200	3	140	4	10	<>	28
494463	7362339	3784	<>	3	340	10	6	12	1.34	210	7	210	6	22	<>	13
492001	7362726	3776	<>	1	145	8	6	5	0.44	190	3	220	6	10	<>	36
492512	7362785	3772	<>	1	120	6	4	6	0.51	135	3	200	<>	10	<>	18
492408	7362902	3771	<>	1	120	6	6	7	0.61	120	4	200	4	12	<>	24
492392	7363280	3769	<>	1	105	8	6	6	0.58	125	4	210	<>	11	<>	19
492391	7363539	3768	<>	1	300	10	10	18	1.85	210	13	240	<>	20	<>	17
502173	7364073	4206	<>	3	180	10	14	14	2	260	14	115	6	24	<>	15
502173	7364073	4205	<>	3	180	10	14	14	2	260	14	115	6	24	<>	15
502487	7364170	4207	<>	5	240	14	18	13	2.8	195	13	210	6	36	<>	24
502170	7364676	4209	<>	7	195	12	16	15	2.9	200	12	175	10	36	<>	22
498413	7364827	3863	<>	5	250	10	12	9	2	370	11	260	10	26	<>	40

502220	7365579	4212	<>	6	230	12	12	18	2.75	410	16	130	8	30	<>	15
490407	7365776	3737	<>	2	115	6	4	7	0.61	115	3	290	4	13	<>	11
500164	7366566	3834	<>	4	240	12	12	16	2.45	160	17	125	12	26	<>	17
490373	7367037	3703	<>	4	210	6	18	8	1.88	140	7	230	6	30	<>	20
501231	7367223	4057	<>	3	220	10	6	13	2.4	170	13	190	8	34	<>	12
494376	7367230	3803	0.5	13	220	24	12	16	23.8	680	32	1360	26	120	<>	185
500215	7367525	3837	<>	2	190	8	6	7	1.55	200	6	220	6	18	<>	11
494531	7367672	3940	<>	1	210	4	6	6	0.75	95	3	95	4	8	<>	12
494410	7367728	3802	<>	1	210	6	6	5	0.96	100	3	85	4	8	<>	16
501480	7367873	4056	<>	4	250	12	6	19	1.87	310	13	270	8	22	<>	15
490382	7368116	3706	<>	3	190	8	10	8	1.6	260	9	210	6	32	<>	24
490377	7368335	3708	<>	-1	350	16	18	13	3.55	630	15	400	12	46	<>	50
496131	7368772	4035	<>	2	110	6	6	8	1.22	100	6	150	6	16	<>	38
503716	7369273	4230	<>	2	155	8	4	9	1	175	5	240	6	20	<>	10
493680	7369673	4381	<>	4	270	2	10	4	0.68	80	4	85	14	9	<>	9
496531	7369772	3939	<>	1	140	8	6	6	1.07	90	6	95	10	10	<>	66
502730	7370273	3962	<>	3	250	10	8	15	1.78	140	12	175	8	20	<>	13
492354	7370346	3761	0.5	6	350	28	16	30	3.5	1540	22	360	20	32	<>	46
494425	7370440	4287	<>	1	220	2	12	7	0.86	100	3	240	4	11	<>	9
494224	7370606	4288	<>	6	280	10	16	10	2.8	380	15	260	14	46	<>	52
499331	7370772	4055	<>	1	190	6	4	6	1.34	120	4	85	<>	6	<>	36
498629	7370937	3877	<>	-1	195	6	6	8	0.93	85	3	80	4	6	<>	36
500980	7371173	3961	<>	1	270	4	6	4	0.69	115	3	75	4	4	<>	22
490392	7371296	3715	<>	2	540	74	10	19	2.85	4500	36	330	6	34	<>	48
503630	7371322	3963	<>	2	220	8	4	8	0.98	165	5	180	4	17	<>	11
503481	7371572	3964	<>	4	240	18	8	10	1.44	1420	12	230	10	18	<>	48
492930	7371768	4384	<>	7	370	10	18	13	3.45	230	19	1060	22	22	<>	52
505081	7371873	4058	<>	3	270	20	8	18	2.15	520	22	260	10	20	<>	52
504981	7371973	4059	<>	2	250	44	8	18	1.83	1160	42	180	8	17	<>	58
490389	7372213	3718	<>	-1	290	14	14	34	2.55	710	16	370	<>	20	<>	38
490405	7372350	3720	<>	4	540	20	12	24	3.05	2050	14	310	12	26	<>	30

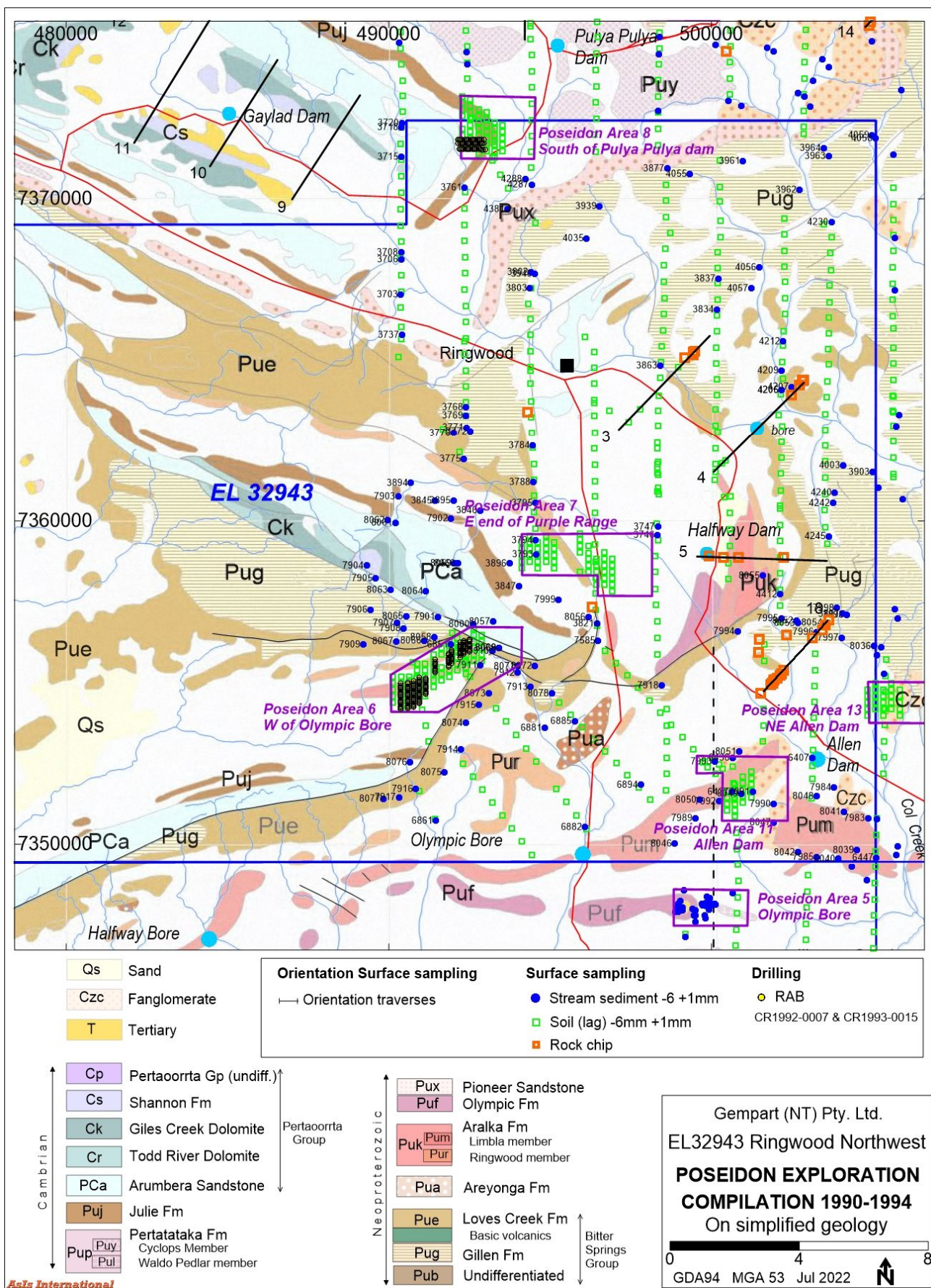


Figure 9. EL32943 Previous exploration – Poseidon summary.

4.7 EL7336 - 1992. CRAE / CRA Exploration.

Exploration was carried out primarily for diamonds on this tenement which overlaps the western half of EL32943 [9]. During the first year of tenure 19 gravel, 206 stream sediment and 7 rock chip samples were collected, of which five gravel, 53 stream sediment and all rock chip samples plot within EL32943. Gravel sampling returned negative results for kimberlitic indicator minerals. Stream sediment samples were assayed for the -2mm +40# fraction and returned maximum values (ppm) of 9 As, 50 Co, 32 Cu, 28 Pb and 64 Zn. All rock chip assay values were background. Sample sites are plotted in Figure 8.

4.8 EL9337 - 1998. CRAE / Rio Tinto Exploration

Rio Tinto explored for base metals, uranium, and diamondiferous intrusions within a series of ELs [7]. One of these, EL9337, overlaps the extreme eastern half of EL32943. [6]. Primary target was the Amadeus Basin sediments, particularly the contact between the Heavitree Quartzite and Gillen Member (Bitter Springs Formation) looking for stratabound, sediment-hosted copper (African Copper Belt, Kupferschiefer). Other targets were unconformity-related uranium mineralisation and kimberlites.

A substantial program was carried out including airborne magnetics/radiometrics, ground magnetics, stream sediment sampling, rock chip and soil sampling, RAB and RC drilling. None of this work was carried out within EL32943. A reconnaissance gravel sampling program included collection of 113 samples including five within the tenement area. A small number of chromites were recovered from six samples but no microdiamonds or kimberlitic indicators.

4.9 EL10267 & EL10269 - 2003. Gutnick Resources N.L.

The Rand Project of 22 EL's and was a joint venture between Gutnick Resources N.L. (manager) and Johnson's Well Mining N.L. Exploration for gold was conducted using a new genetic interpretation for the Witwatersrand mineralisation in South Africa. EL10267 and EL10269 substantially overlap the area of EL32943.

Work included orientation stream sediment and BLEG sampling, followed by reconnaissance stream sediment and rock chip sampling. No samples were collected within the area of EL32943.

Appendix 2 of the surrender report is a memo on Past Orientation Geochemistry by M. Hughes, consulting geologist. He concluded “-2 mm +40 mesh, and -6 mm +1 mm size fractions have been used effectively in base metal exploration in the Amadeus Basin (100 g to 2-3 kg pulverised samples). Sampling densities used have commonly been 1/km². -80 mesh sampling has been used effectively for gold at high sample density (up to 8-10/km²) in areas of good outcrop. However 3-10 kg BLEG

sampling (variously sampled using -4 mm, -2 mm, -1 mm fractions) appears to be most appropriate in the Amadeus Basin.”

4.10 EL24249 - 2010. Imperial Granite & Minerals P/L / Atom Energy- Excelsior Gold.

EL24249 was secured by Imperial Granite & Minerals P/L to explore for Ni, Cu, Au, U and Co [10]. It is located mostly to the east of EL32943 and EL32943. Atom Energy (renamed Excelsior Gold Ltd in June 2010) purchased the tenement in 2007 [13]. Work comprised collection of water bore samples, rock chip samples and acquisition/analysis of HyMap airborne hyperspectral scanner imagery. No work was carried out on EL32943.

4.11 EL24282 & EL24283 - 2010. Raxile Pty Ltd.

These tenements collectively overlap most of EL32943 [8].

Initial interest in the area arose through the evaluation of Russian remote sensing micro lepton technology. A gold anomaly map produced by the Russians was strongly suggestive of gold distribution diagrams for the Witwatersrand goldfields and as there are several other similarities between the Amadeus Basin and the Witwatersrand this added further weight to the concept. The distribution pattern of the micro lepton gold anomaly suggested a relationship to unconformities or disconformities within the Amadeus Basin sequence. Nowhere did the anomaly coincide with any outcrop of the unconformities so that a series of drill holes was the only way to test the veracity of the Russian technology. Initially five to seven 500 metre diamond drill holes were planned but after the first two holes, drilled into the strongest sections of the anomaly, proved unsuccessful the rest of the program was abandoned. The Russian micro lepton technology is believed to have no real basis in fact.

Both drillholes are located well to the west of EL32943.

4.12 EL27016, EL27017 & EL28530 - 2013. Northern Minerals Ltd.

Northern Minerals took out a group of tenements of which these three partly overlap the northwestern corner of EL32943 [13]. The primary target was Cambrian phosphorite deposits, base metal and rare earth mineralisation in Amadeus Basin sediments, particularly the Todd River Dolomite. Historical drilling by BHP intercepted 6m @ 22.8% P₂O₅ in the Todd River Dolomite. Field work included collection of 40 rock chip samples of which eleven are in the relevant tenements located just outside the northwest corner of EL32943. The maximum P₂O₅ assay was only 0.63%.

4.13 EL29091 & EL29094 – 2014. NT Minerals Aust Pty Ltd.

These are two of four tenements secured to explore for sedimentary hosted base metal and rare earth elements, uranium and evaporites including potash, halite and gypsum [18]. Previous exploration in the region has targeted uranium, diamonds, gold, mineral sands, evaporites, copper, lead and zinc. A review of the historical data available over the area and discouraging findings led to the decision to drop the ground.

5. EXPLORATION COMPLETED IN FIRST & FINAL YER

5.1 Summary assessment of previous exploration

A substantial number of surface and RAB samples of Amadeus Basin lithologies have been collected in the wider area, but little drilling completed. Analysis of all data from previous explorers combined with exploration results from airborne geophysical surveys conducted for Gempart on adjacent tenement suggests that the surface sampling can produce mis-leading anomalies. For example, no bedrock conductor anomalies whatsoever which might be indicative of massive sulphides were observed from detailed VTEM surveys over areas of significant and coherent base metal anomalies from surface sampling.

Within an area of about 6,000 square kilometres extending east of Alice Springs, 23 holes have been drilled into Amadeus Basin sediments, most of them over 50 years ago. Figure 10 shows the drillholes and summary geology edited to show only those lithologies which outcrop in EL32943.

Information from these drillholes has been compiled in two tables. Table 7 is drillhole collar information and Table 8 shows the better assay results. Points to emerge:

- Seven holes failed to intersect the target lithology, or have uncertain location, or no assays reported.
- Of the others about half have assays of Cu +/- Pb +/- Zn in the high hundreds or low thousands of ppm.
- Mineralised intervals are usually thin; outside of Pipeline prospect intervals are typically a few metres.
- The assays are commonly elevated but rarely anomalous.
- Mineralisation can occur in any lithology but is usually Areyonga with lesser Pertatataka.
- There is no obvious common denominator in structural setting.
- Depth of investigation is shallow; the average length of hole is only about 100 metres.
- Mineralisation occurs over a wide area.

The lower Amadeus Basin lithologies, considering the area of outcrop, have been barely tested by drilling. Most of the drilling has taken place at prospects defined by surficial enrichment namely Ringwood, Waldo Pedlar, Pipeline and Bronco Bore. Base metal mineralisation is weak but pervasive.

Some companies conducted IP surveys and drilled low-order anomalies. The source was typically fine-grained pyritic and/or carbonaceous sediments, usually in the Areyonga Formation.

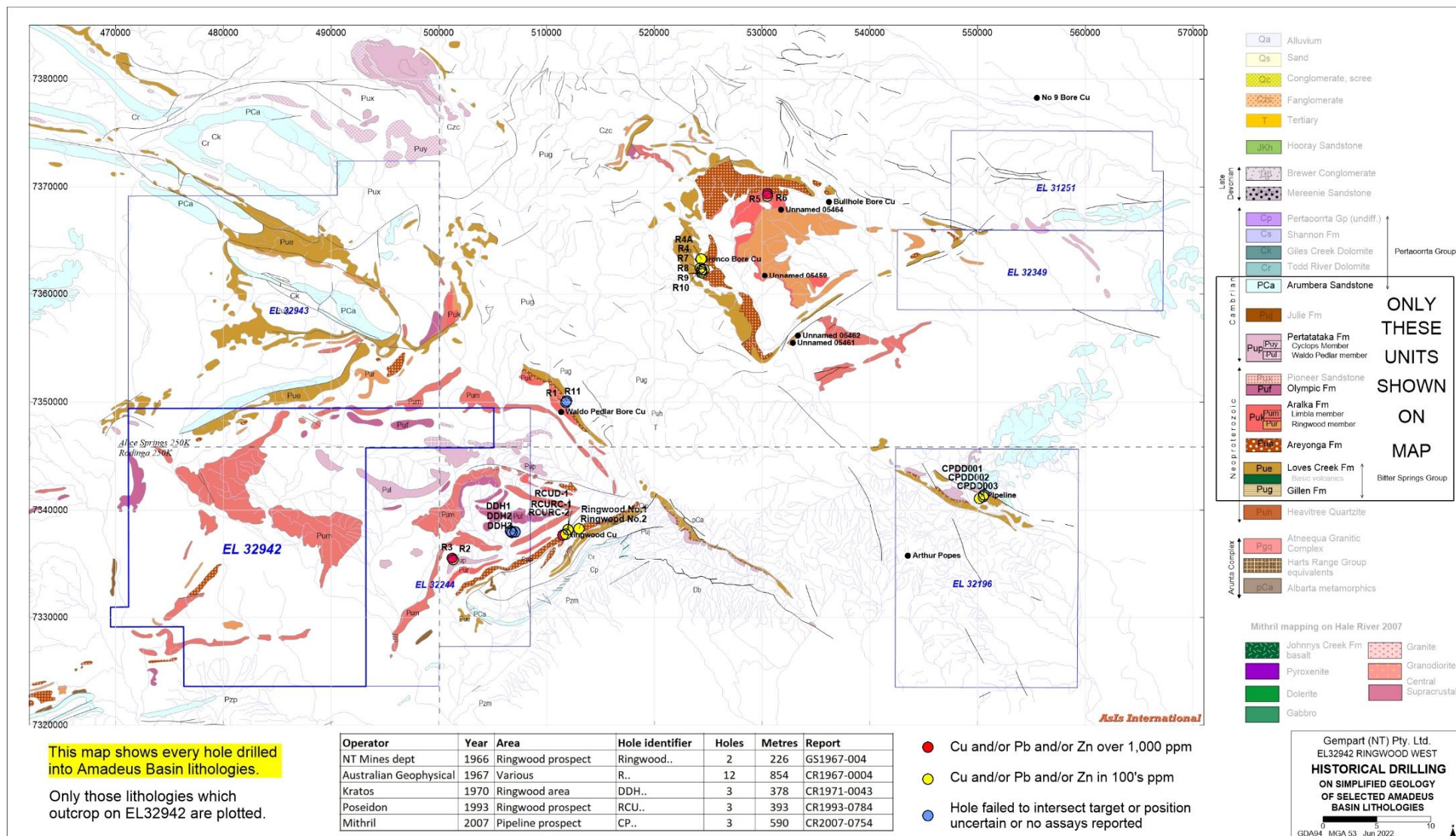


Figure 10. Historical drilling in the Eastern Amadeus Basin – summary.

Table 7. Historical drillholes in the Eastern Amadeus Basin – Collar information

East	North	Hole name	Length	Area	Lithology	Symbol	Comments	Reason for drilling
511775	7349970	R1	85.6	Waldo Pedlar Cu prospect	Areyonga	Pua	Failed to penetrate the zones of interest	Minor malachite & IP anomaly
501340	7335380	R2	118.9	Line E	Pertatataka/Aralka	Pup/Puk		Rock chips & IP anomaly
501230	7335530	R3	125	Line E	Pertatataka/Aralka	Pup/Puk		Rock chips & IP anomaly
524600	7362340	R4	102.4	Bronco Bore Cu prospect	Areyonga	Pua		Rock chip samples
524370	7363300	R4A	44.5	Bronco Bore Cu prospect	Areyonga	Pua		Rock chip samples
530510	7369170	R5	107.0	Line L	Areyonga	Puk		IP anomaly
530475	7369360	R6	103.3	Line L	Areyonga	Puk		IP anomaly
524380	7362300	R7	35.7	Bronco Bore Cu prospect	Areyonga	Pua		Rock chip samples
524380	7362120	R8	29.3	Bronco Bore Cu prospect	Areyonga	Pua		Rock chip samples
524420	7361960	R9	39.9	Bronco Bore Cu prospect	Bitter Springs Group	Pub		Rock chip samples
524290	7362470	R10	23.2	Bronco Bore Cu prospect	Areyonga	Pua		Rock chip samples
511875	7350090	R11	39.6	Waldo Pedlar Cu prospect	Areyonga	Pua	Failed to penetrate the zones of interest	Minor malachite & IP anomaly
511540	7337703	Ringwood No.1	109.8	Ringwood Cu prospect	Areyonga	Pua		Surface malachite
513022	7338293	Ringwood No.2	116.74	Ringwood Cu prospect	Areyonga	Pua		Surface malachite
506796	7337964	DDH1	71.78	West of Ringwood?	Pertatataka	Pup	Location uncertain; no assays reported	Best Cu/Pb/Zn from auger holes
507079	7338005	DDH3	129.69	West of Ringwood?	Pertatataka	Pup	Location uncertain; no assays reported	Best Cu/Pb/Zn from auger holes
506679	7338067	DDH2	176.78	West of Ringwood?	Pertatataka	Pup	Location uncertain; no assays reported	Best Cu/Pb/Zn from auger holes

East	North	Hole name	Length	Area	Lithology	Symbol	Comments	Reason for drilling
511980	7338212	RCUD-1	134.7	Ringwood Cu prospect	Areyonga	Pua	No assays due core handling mishap	IP anomaly
511771	7337783	RCURC-1	126	Ringwood Cu prospect	Areyonga	Pua		IP anomaly
512001	7338182	RCURC-2	132	Ringwood Cu prospect	Areyonga	Pua		IP anomaly
550592	7341428	CPDD001	116.4	Pipeline prospect	Aralka/Areyonga	Puk/Pua	Failed to intersect zone of interest	Cu gossan; IP anomaly
550198	7341075	CPDD002	255	Pipeline prospect	Areyonga	Pua		Cu gossan; IP anomaly
550515	7341263	CPDD003	219	Pipeline prospect	Johnny's Ck Fm	Pub		Cu gossan; IP anomaly

Table 8. Historical drilling in the Eastern Amadeus Basin – best assays.

Hole name	Lithology	Symbol	From	To	Interval	Cu	Ni	Co	Pb	Zn	Mineralised lithology
R1	Areyonga	Pua	26.2	29.3	3.0	28	15	15	275	180	Massive dolomite
R2	Pertatataka/Aralka	Pup/Puk	10.4	13.4	3.0	550	38	23	175	930	Shale and dolomite
R2			62.5	66.8	4.3	185	37	15	222	277	dolomite and dolomitic siltstone
R3	Pertatataka/Aralka	Pup/Puk	29.0	30.5	1.5	20	35	10	3450	850	Dolomite and dolomitic siltstone
R3			44.2	50.3	6.1	34	35	12	2440	925	Siltstone and shales
R3			67.1	71.6	4.6	55	44	21	240	1380	Shales
R4	Areyonga	Pua	88.7	91.7	3.0	133	32	173	28	95	Dolomitic silstone above basalt
R4A	Areyonga	Pua	32.3	35.4	3.0	194	35	12	42	55	Dolomite above basalt
R5	Areyonga	Puk	35.1	42.7	7.6	31	35	18	56	650	Carbonaceous pyritic shales
R6	Areyonga	Puk	29.0	35.1	6.1	28	17	14	10	1450	Weakly pyritic siltstone
R7	Areyonga	Pua	26.2	27.7	1.5	970	15	20	115	280	Massive dolomite above basalt
R8	Areyonga	Pua	20.1	21.6	1.5	340	22	13	27	55	Dolomite and siltstone above basalt
R9	Bitter Springs Group	Pub	36.9	39.9	3.0	160	55	35	45	290	Basalts
R10	Areyonga	Pua	13.7	18.6	4.9	265	45	35	45	55	Argillite, chert & dolomite above basalts
R11	Areyonga	Pua									No significant assays
Ringwood No.1	Areyonga	Pua	76.2	79.2	3.0	2500	30	50	20	220	Siltstone; intraformational breccia
Ringwood No.2	Areyonga	Pua	113.8	115.4	1.6	960	22	22	10	20	Black pyritic shales and dolomitic sandstone
DDH1	Pertatataka	Pup									
DDH3	Pertatataka	Pup									
DDH2	Pertatataka	Pup									
RCUD-1	Areyonga	Pua									
RCURC-1	Areyonga	Pua	8	12	4	31	26	26	29	1130	Calcareous siltstone
RCURC-2	Areyonga	Pua									No significant assays
CPDD001	Aralka/Areyonga	Puk/Pua									No significant assays
CPDD002	Areyonga	Pua	47.25	65.9	18.65	615	22	17	55	241	Diamictite in pyritic dolostone matrix
CPDD003	Johnny's Ck Fm	Pub	90	105	15	699	19	7	10	39	Brecciated mudstone; laminated dolostone

5.2 Review of Geophysical data – Airborne magnetics & radiometrics

Airborne magnetic and radiometric data is available in the public domain from the “Alcoota-Alice Springs” survey flown for the NTGS in 1997. In respect of the complex geology, potential size of a commercial deposit and the capabilities of modern survey equipment, the airborne data is very coarse and dated.

The RTP aeromagnetic data is shown in image format at Figure 11.

The relief is mostly very subdued; total dynamic range over the EL area is only 350 nT. Some linear anomalies of a few hundred nT amplitude occur on the eastern and southern margins of the EL. Analysis of published information on adjacent tenement to the east indicates these are caused by basic volcanics, where similar anomalies coincide with rare outcrop of Loves Creek Formation and Johnnys Creek Formation which includes basic volcanics within the Bitter Springs Group

The Amadeus Basin sediments are essentially non-magnetic. Analysis of the 1VD image reveals very subtle magnetic anomalies which simply reflect some of the outcrop patterns.

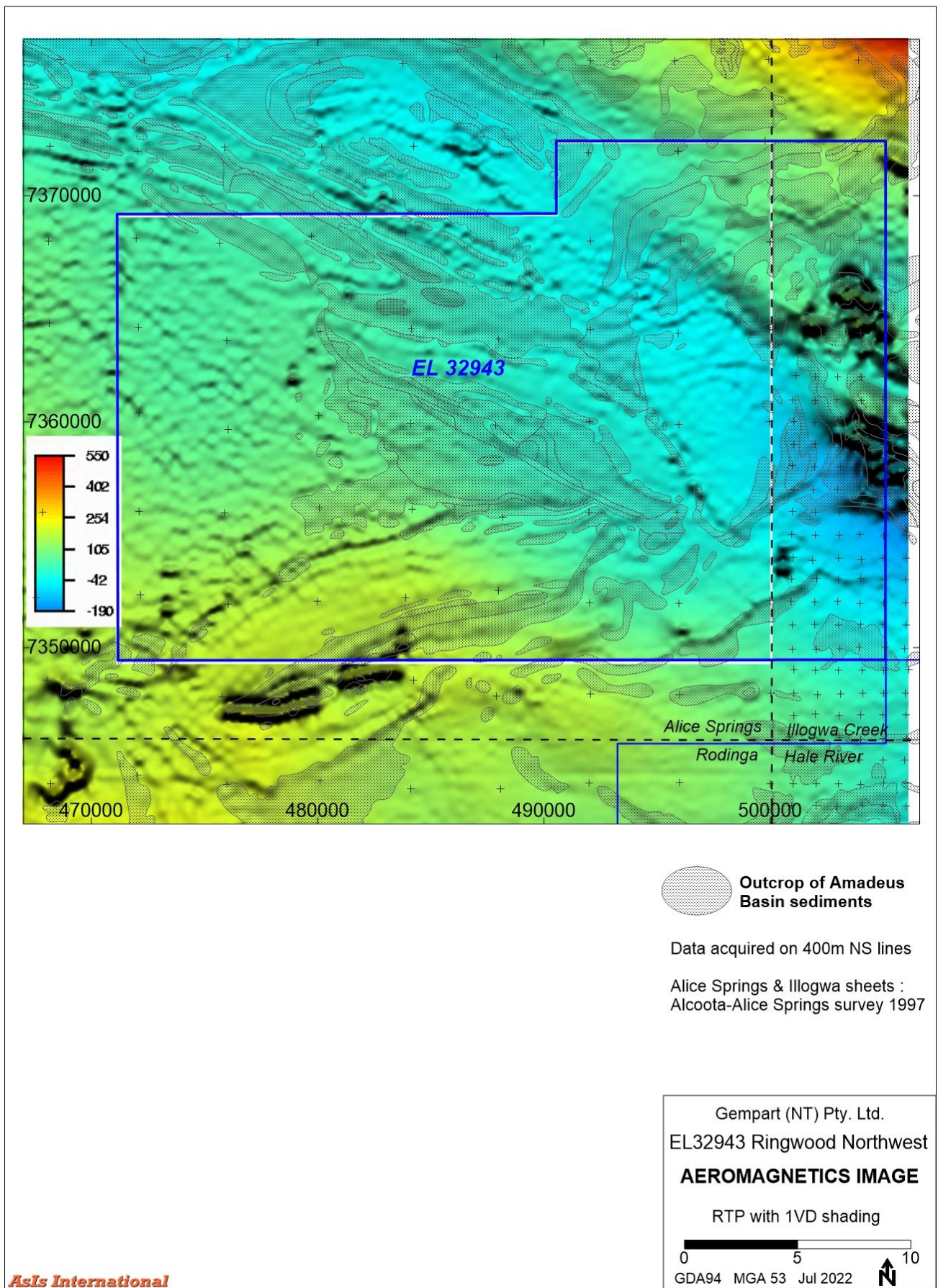


Figure 11. EL32943 Aeromagnetic RTP image.

The radiometric data, acquired at 400 metre line spacing, is not of adequate quality to accurately define prospect scale areas of interest. It is principally useful for mapping out regional variations in the distribution of potassium, uranium and thorium. As such the data generally reflects variations in outcrop patterns.

The potassium channel response is shown in contour and image format at Figures 12 and 13. The values throughout most of the EL area are in the range of 1-3 equivalent percent, which is very low. Most of the Amadeus Basin sediments show low background variation with the exception of Arumbera Sandstone, which has a distinct, albeit low, response of about 3 e%K.

The uranium channel response is shown in contour and image format at Figures 14 and 15. The values throughout most of the EL area are in the range of 1-3 eppm, which is very low. The maximum value of 7.7 eppmU occurs over Arumbera Sandstone on the extreme northern edge of the map area. In general the Amadeus Basin sediments are largely benign.

The thorium channel response is shown in contour and image format at Figures 16 and 17. The pattern is similar to that of the potassium response. The values throughout most of the EL area are in the range of 5-15 eppm, which is quite low. A weakly elevated response is observed over the Arumbera Sandstone. The Amadeus Basin sediments otherwise show background variation.

Previous exploration including surface sampling and drilling (refer section 4.12) has shown the Arumbera Sandstone in places has elevated content of phosphate minerals. The association of phosphate minerals and radiogenic minerals is not uncommon, hence the slightly elevated potassium and thorium response over this unit. The sequence may be prospective for rare earth elements.

Within the EL area there are no radiometric responses that could be called anomalous.

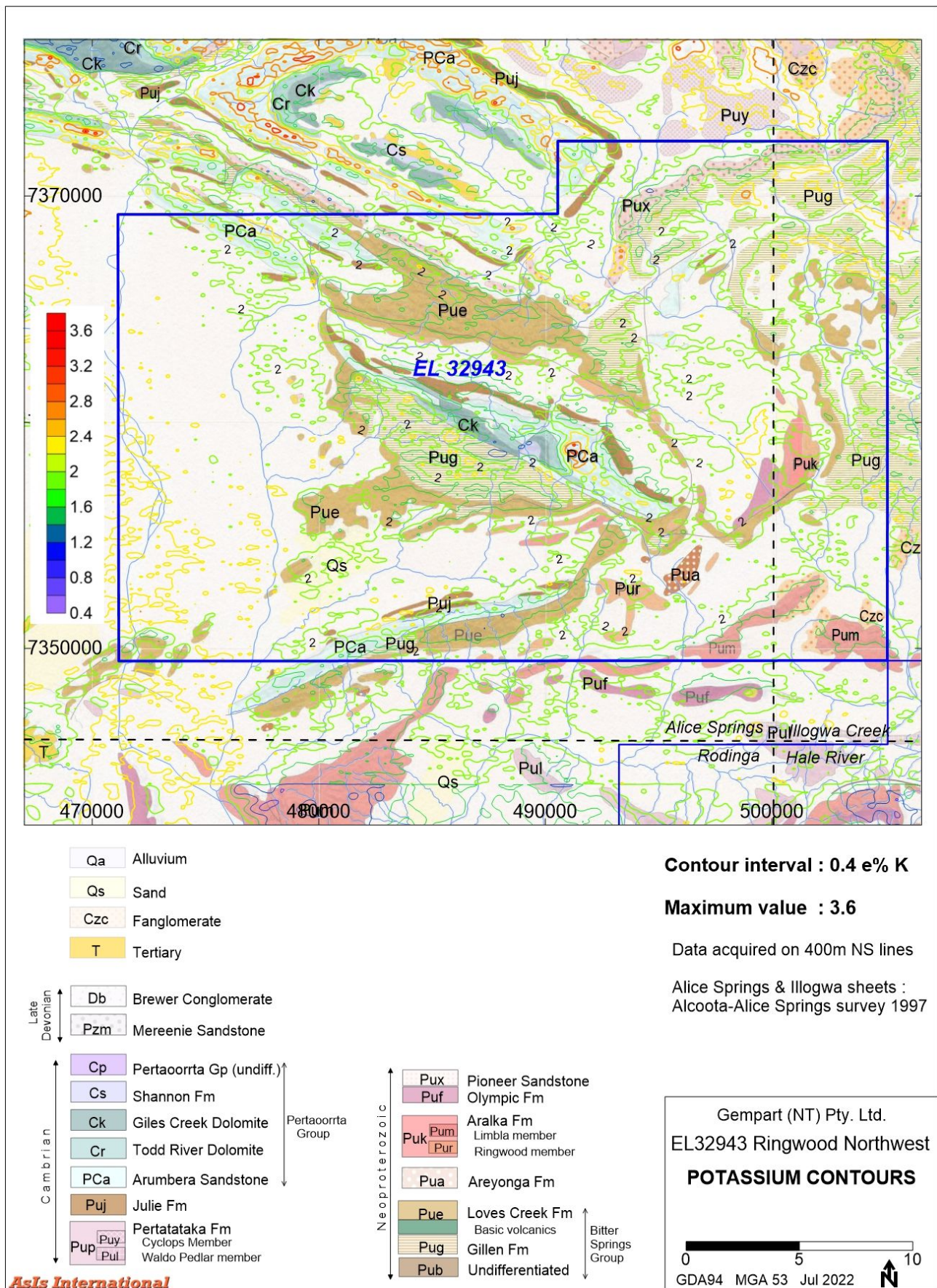
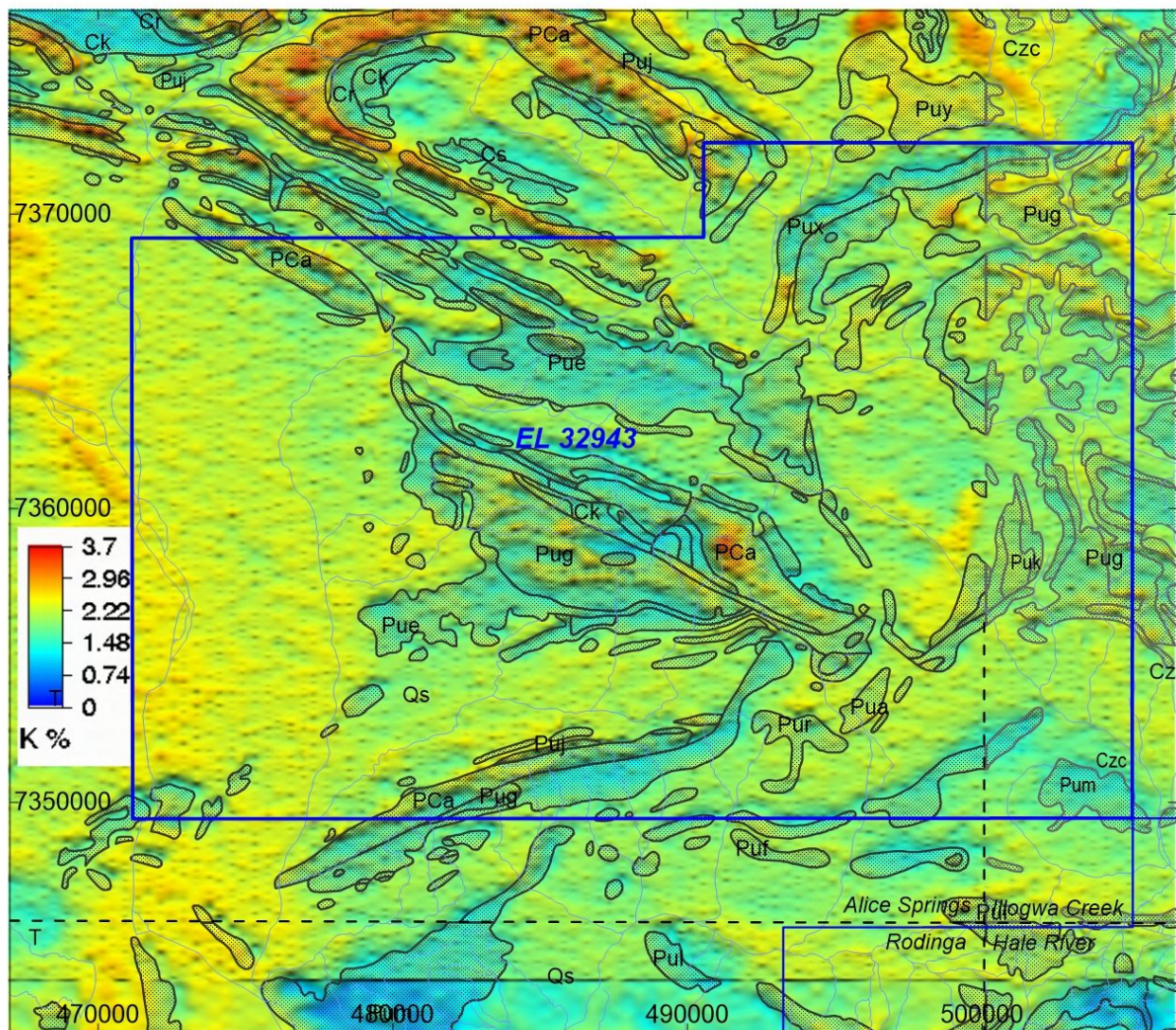



Figure 12. EL32943 Potassium contours




 **Outcrop of Amadeus Basin sediments**

Data acquired on 400m NS lines

Alice Springs & Illogwa sheets :
Alcoota-Alice Springs survey 1997

Gempart (NT) Pty. Ltd.
EL32943 Ringwood Northwest
POTASSIUM IMAGE

0 5 10
GDA94 MGA 53 Jul 2022 

AsIs International

Figure 13. EL32943 Potassium image.

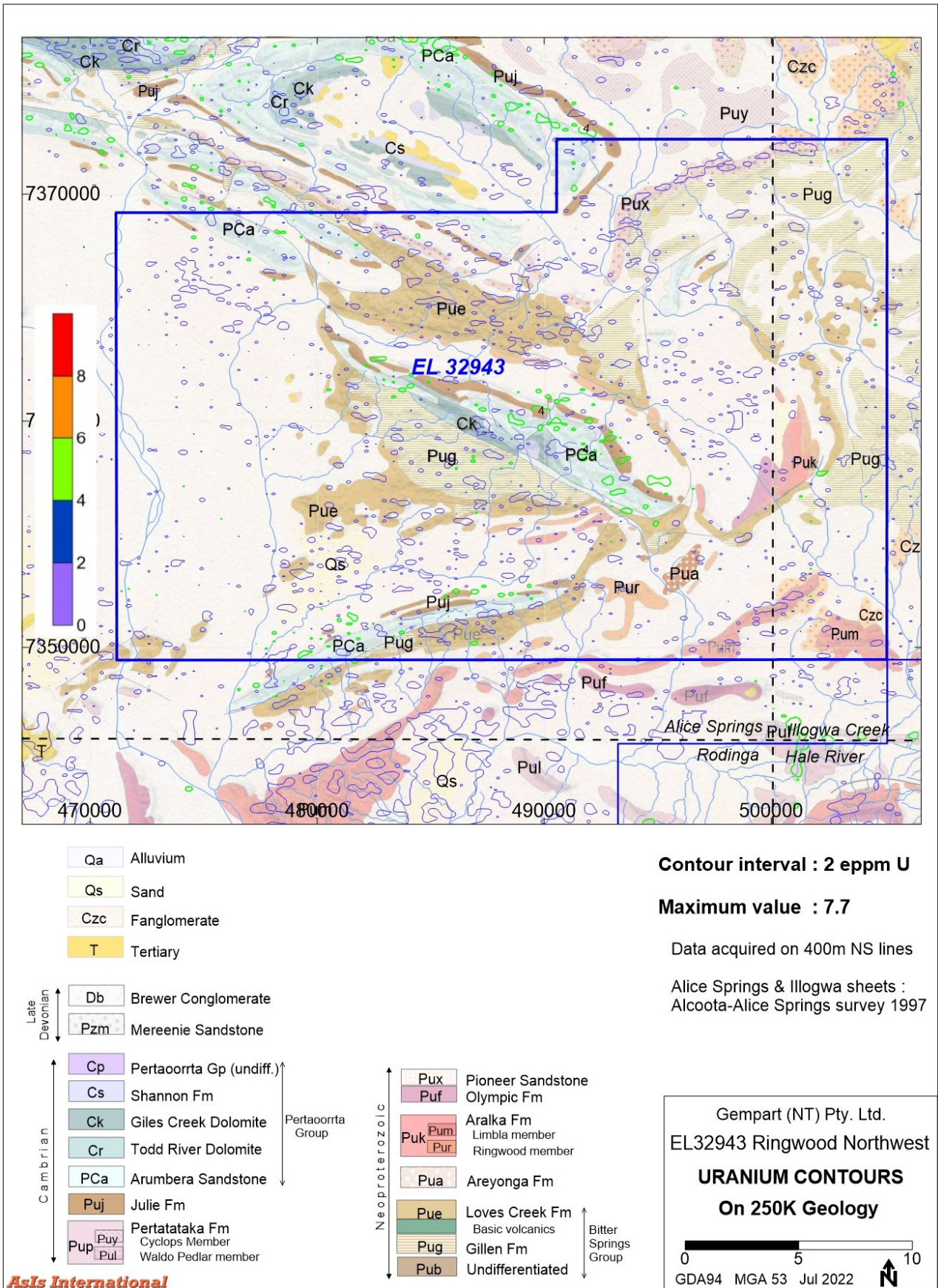
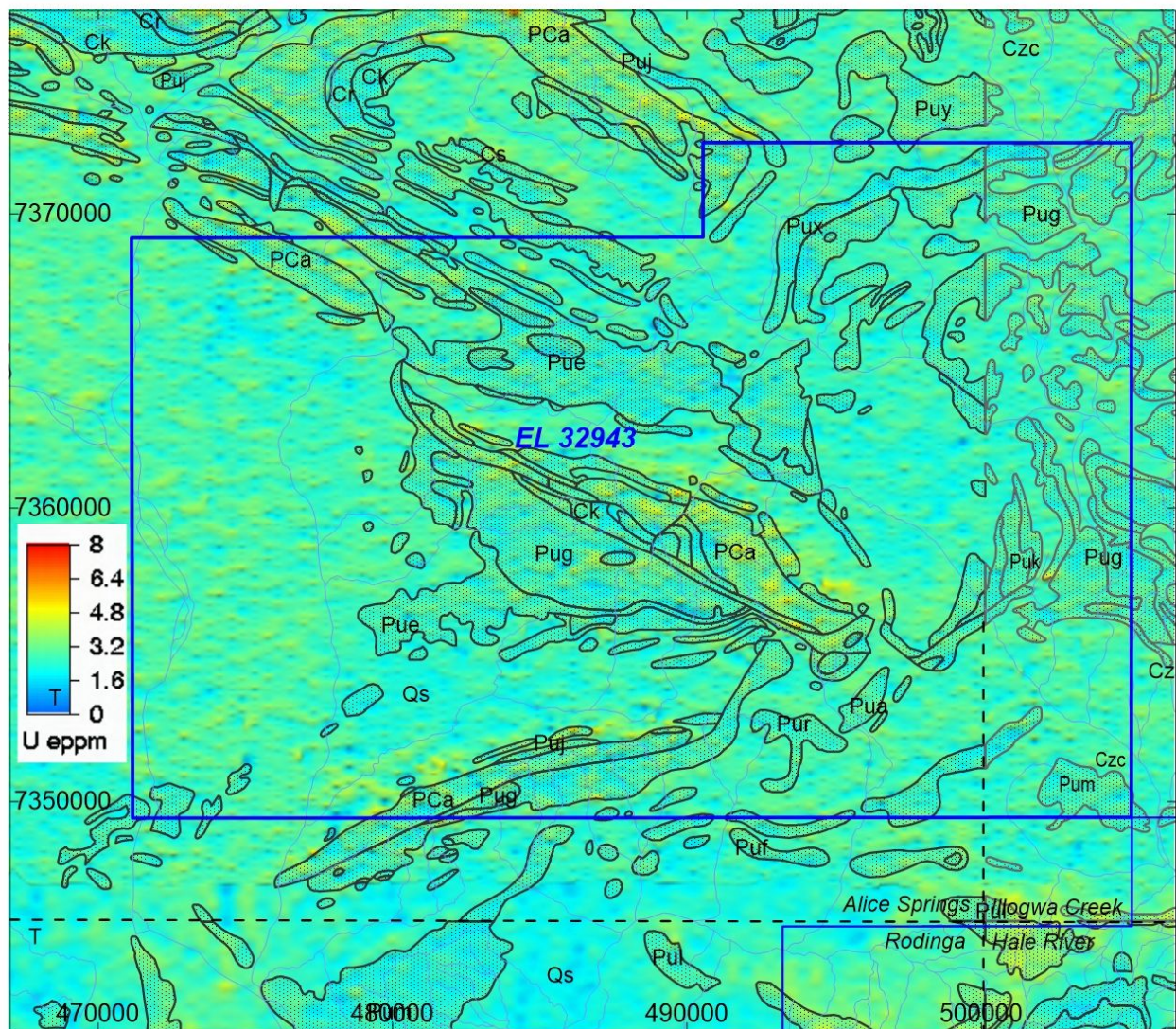
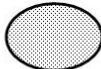


Figure 14. EL32943 Uranium contours.




 Outcrop of Amadeus Basin sediments

Data acquired on 400m NS lines

Alice Springs & Illogwa sheets :
Alcoota-Alice Springs survey 1997

Gempart (NT) Pty. Ltd.
EL32943 Ringwood Northwest
URANIUM IMAGE

0 5 10
GDA94 MGA 53 Jul 2022 

AsIs International

Figure 15. EL32943 Uranium image.

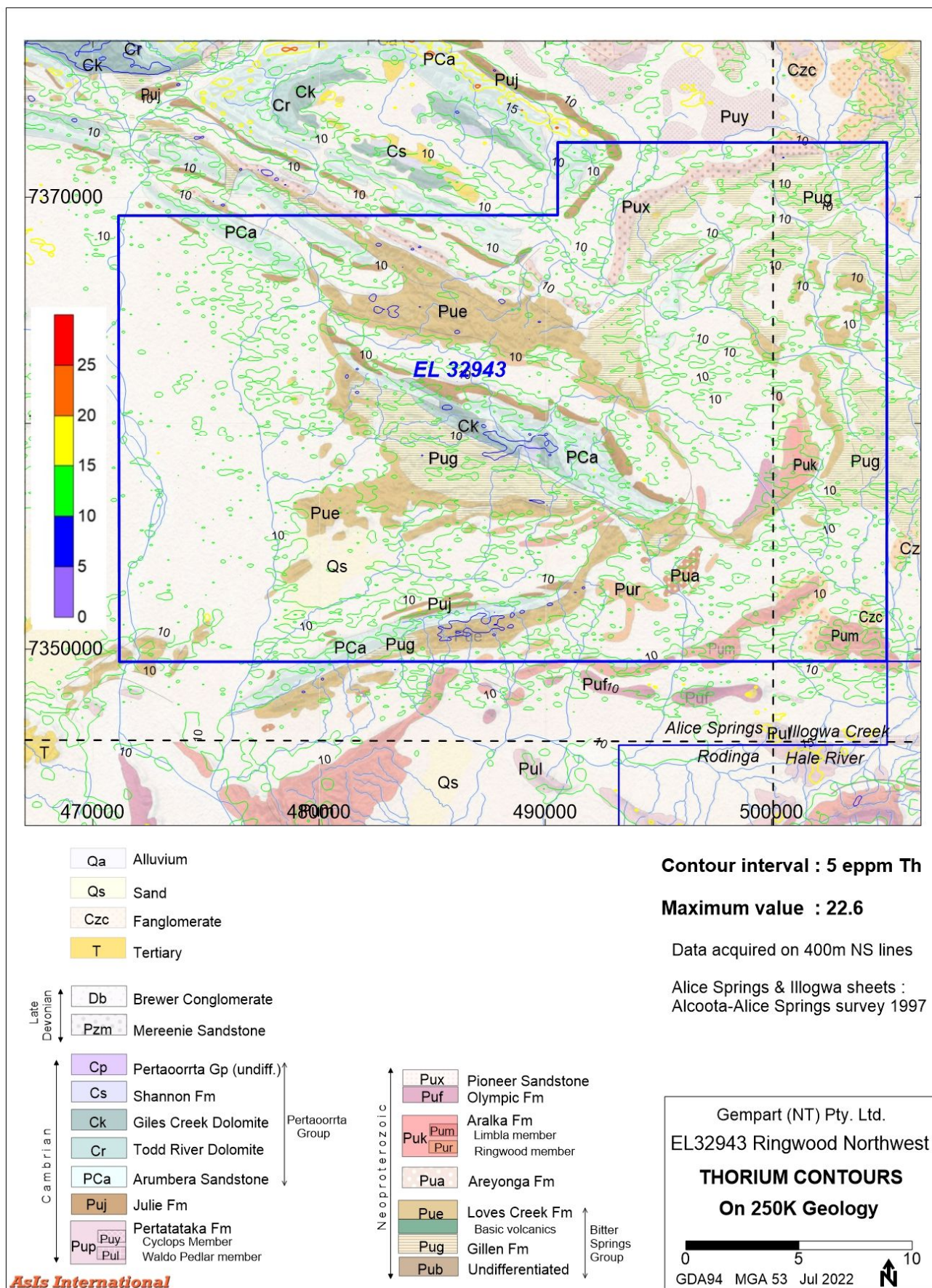


Figure 16. EL32943 Thorium contours.

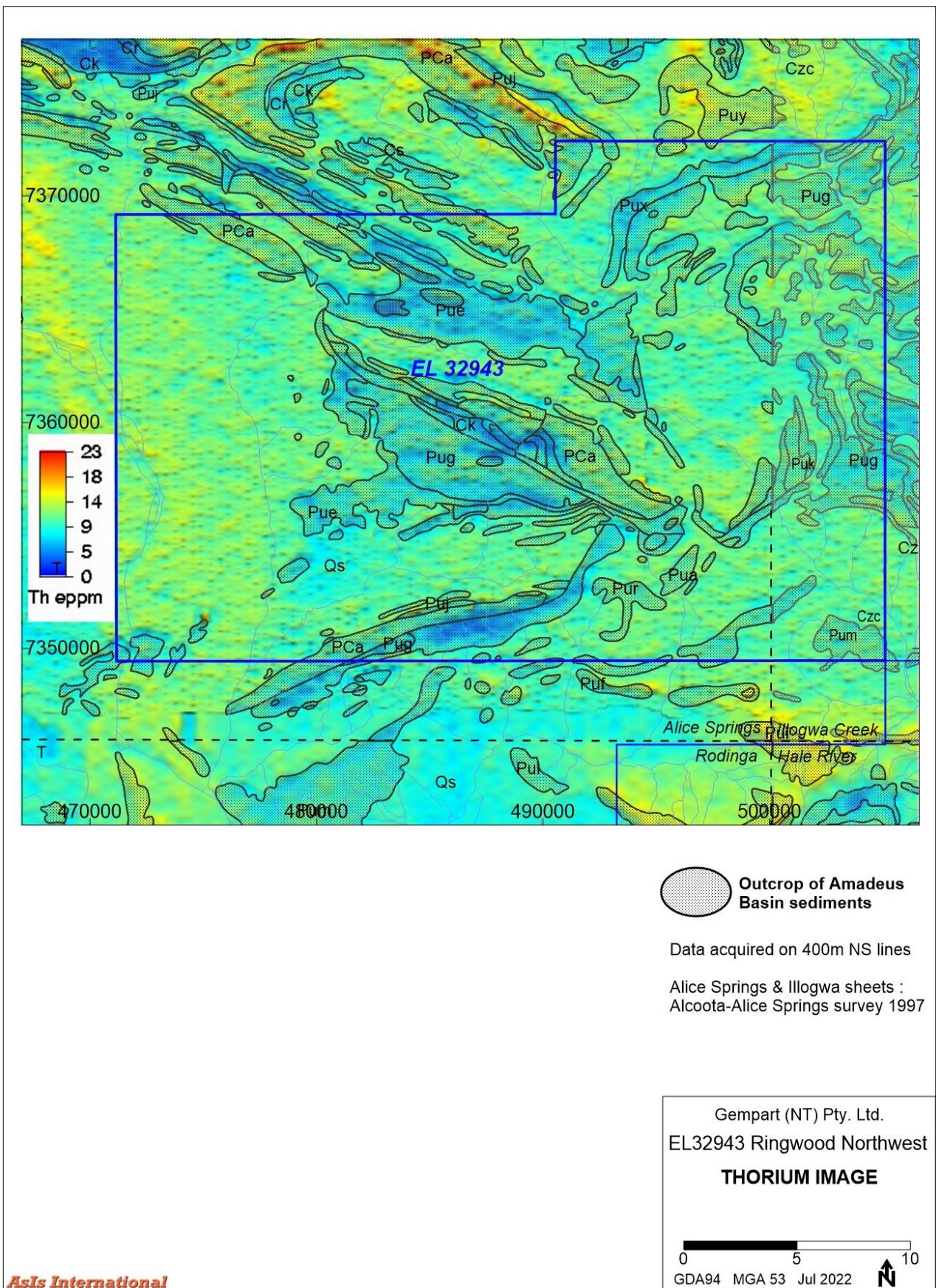


Figure 17. EL32943 Thorium image.

5.3 Review of Geophysical data – Gravity

Ground gravity data has been acquired on 4x4 km centres across the EL area. The eastern half is covered by the 2007 NTGS Central Arunta survey, and the western half is covered by the 2012 NTGS East Amadeus survey.

An image of the Bouguer gravity is included at Figure 18. There is a regional gradient increasing from west to east/northeast which probably reflects thinning of Amadeus Basin sediments approaching outcrop of more dense Arunta Complex rocks further to the east. A vague NW-SE trend transects the tenement which accords with the gross regional geological trend. There are no particular patterns or anomalies of interest, which is primarily a function of the relatively coarse reading interval.

5.4 Review of Geophysical data – Airborne EM

Geoscience Australia commissioned an airborne EM survey over a large part of western Queensland and eastern Northern Territory as part of the Exploring for the Future (EFTF) program. The EFTF program is led by Geoscience Australia (GA), in collaboration with the Geological Surveys of the Northern Territory, Queensland, South Australia and Western Australia, and is investigating the potential mineral, energy and groundwater resources in northern Australia and South Australia.

Tempest data at 25 Hz were acquired over a large part of western Queensland on EW lines and eastern Northern Territory on NS lines [3]. Carried out in 2017-2018, traverses were flown at a nominal line spacing of 20 km. Two of the traverses are located over or adjacent EL32943; refer Figure 19.

The Tempest system is a relatively low-power system mounted in a fixed wing platform, and depth of investigation is not as good as more powerful helicopter-borne systems. However, in this area the information is valuable in giving an indication of the extent of conductive overburden, and hence the potential efficacy of other AEM techniques such as VTEM to search for deeper conductive bodies.

CDI sections for the two traverses relevant to the tenement area are shown at Figures 20 and 21. Conductivities for most of Line 1150001 are calculated in the range 0.1 to 1 Siemens per metre (S/m) which is relatively high. The section of line within the tenement area is over Quaternary cover, and in fact aligns generally with the Todd River and presumably the river's flood plain. Using high-power systems, The AEM response from bedrock conductors in this area may well be masked by the conductive overburden. Conductivities for most of Line 1160001 which runs through the centre of the EL are calculated mostly about 0.01 to 0.05 S/m, with areas under Quaternary cover ranging up to 0.1 S/m. This is not uncommon for the region and based on results of VTEM surveys commissioned

by Gempart on adjacent tenement indicates that a high-power AEM system would be capable of detecting a bedrock conductor.

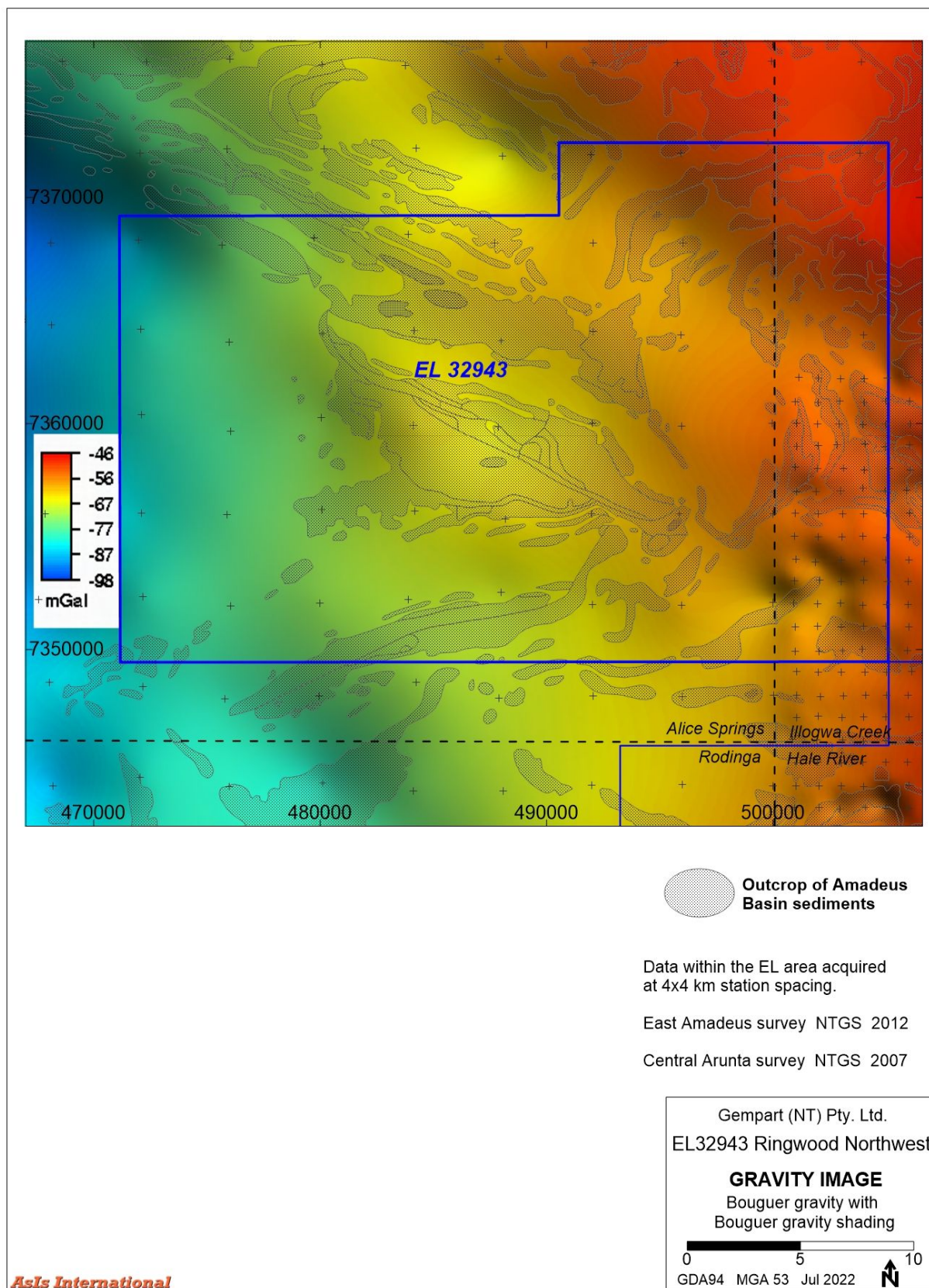


Figure 18. EL32943 Gravity image

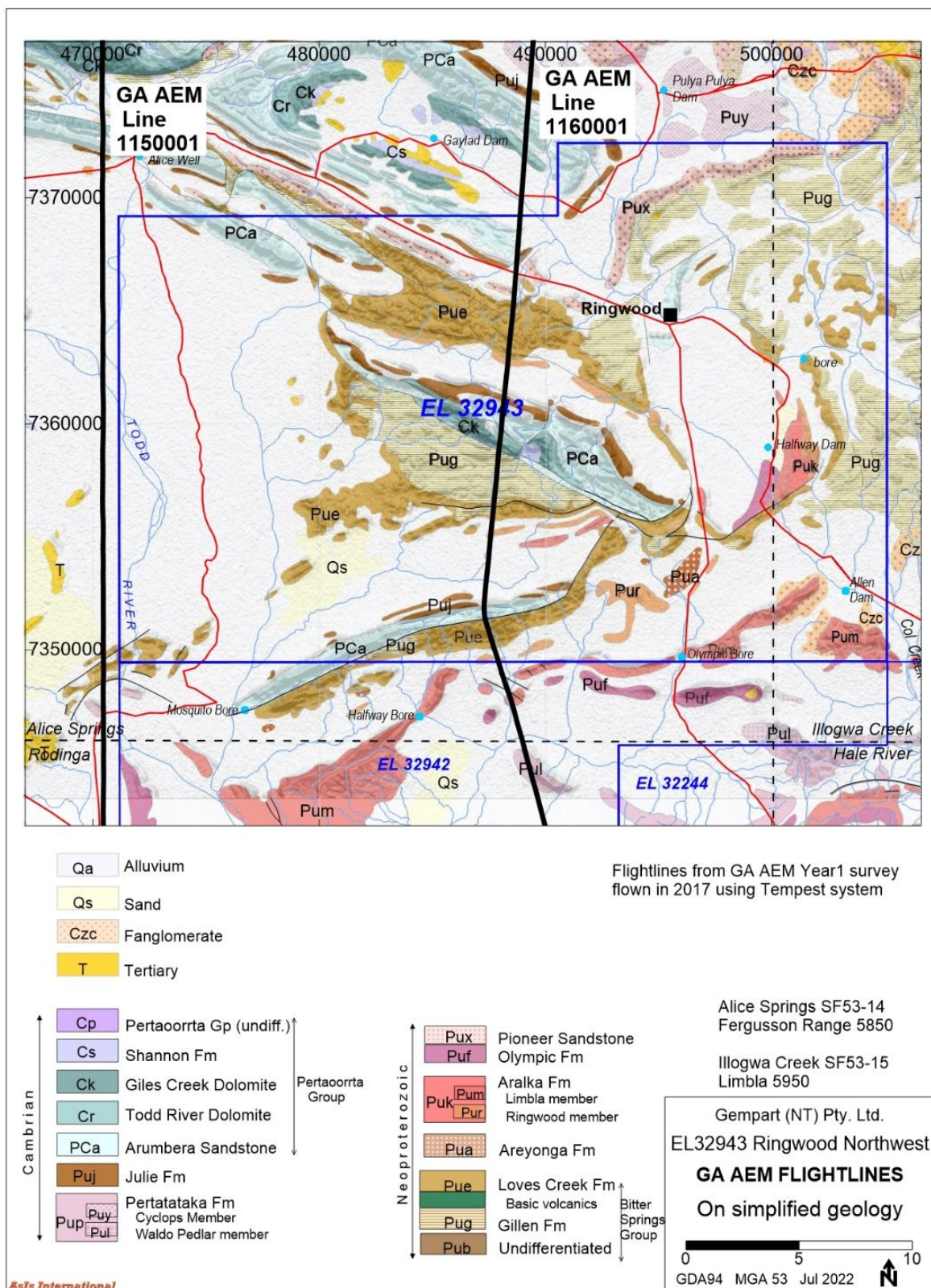


Figure 19. EL32943 Location of GA AEM Tempest traverses on geology.

TEMPEST CDI SECTION - LINE 1150001 - Approx 470500E

AusAEM Year1 NT/QLD Airborne Electromagnetic Survey 2017

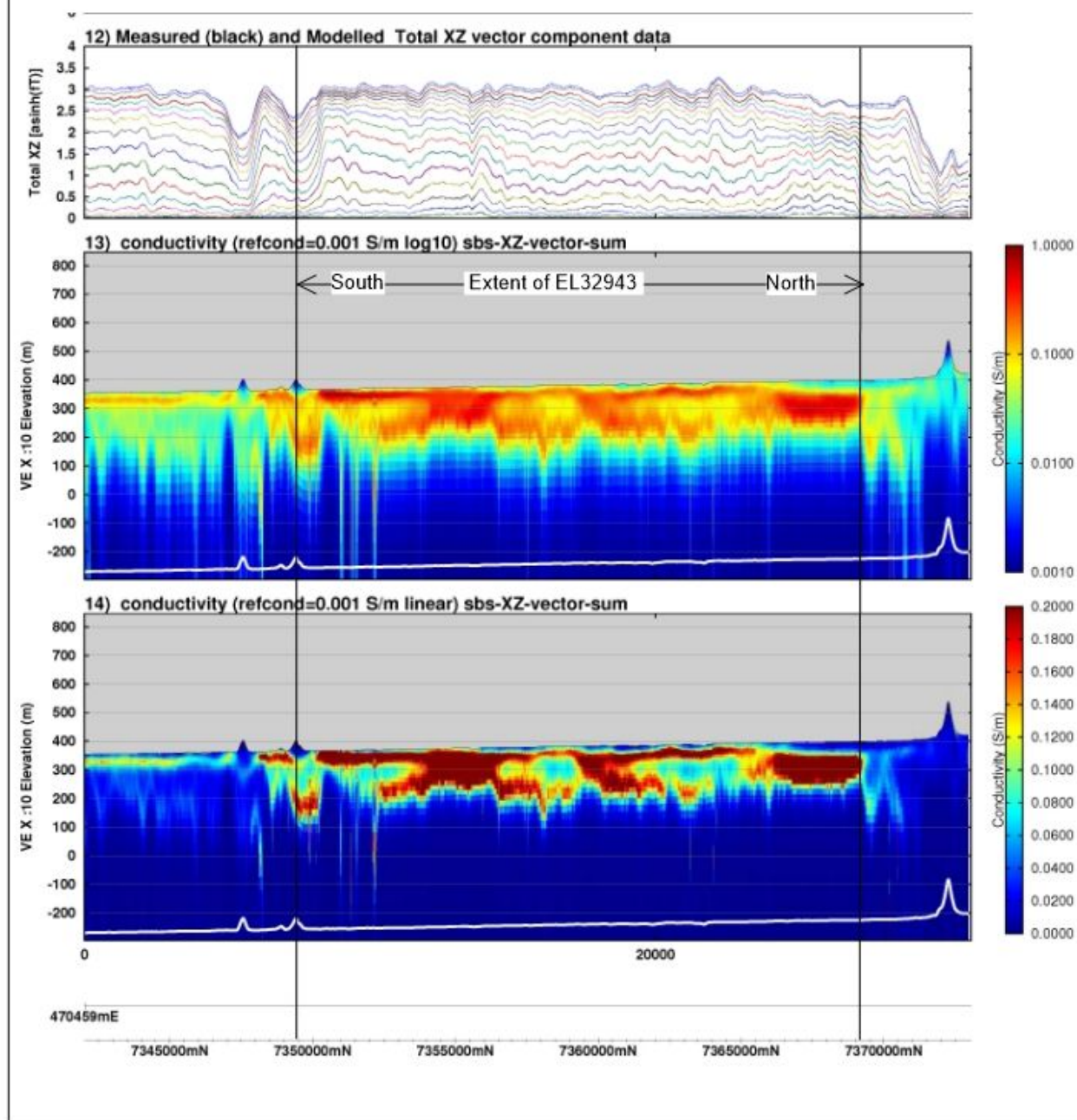


Figure 20. GA AEM Tempest CDI section on line 1150001.

TEMPEST CDI SECTION - LINE 1160001 - Approx 488000E
 AusAEM Year1 NT/QLD Airborne Electromagnetic Survey 2017

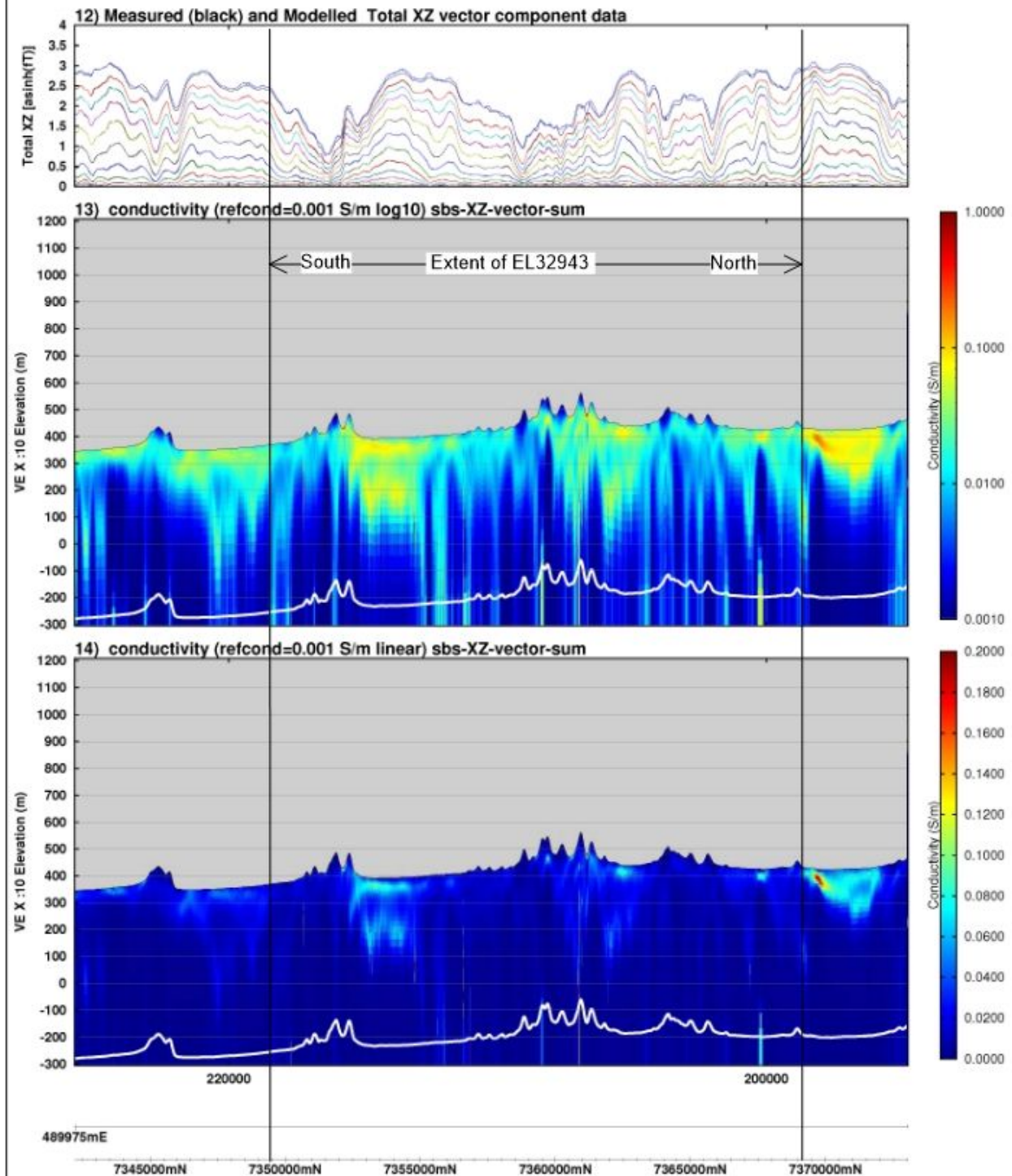


Figure 21. GA AEM Tempest CDI section on line 1160001.

6. CONCLUSIONS

A thorough assessment of public domain datasets and previous exploration results was completed. All historical drilling targeting Amadeus Basin sediments over a large region east of Alice Springs was compiled. Analysis of same to vector areas of interest revealed few common denominators and produced inconclusive results.

In the first half of 2021 a VTEM survey was flown over a substantial part of adjoining tenement EL32244. The survey revealed numerous anomalies which might have bedrock conductor sources, and application was subsequently lodged for EL32943 to secure ground with similar geology and elevated assays from historical surface sampling programs. The VTEM anomalies were investigated with ground EM surveys in 2022. However, the results failed to provide encouragement for further work. As a result Gempart decided to surrender EL32943 and focus efforts on other granted tenement in the Arunta Block and Amadeus Basin.

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