

YEAR 6 ANNUAL REPORT

Unca Creek EL28082

Title Holder: Operator Tenement Manager: Titles / Tenements: Project Names: Report Title: Type of Report: Author(s): Company Ref: Target Commodity / Commodities: Date of Report: Contact Details:

NATURAL RESOURCES EXPLORATION PTY.LTD.

Operator: Natural Resources Exploration Pty. Ltd.

Natural Resources Exploration Pty. Ltd.

EL(s): EL 28082 Unca Creek.

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Year 6 Annual Report 30 December 2015 to 29 December 2016 Annual Report

K. Centkowski

NRE NT2015: UC - Year 6 Annual Report

Base Metals

March 2016

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Summary

Section 94 of the Mineral Titles Act requires the submission of an Annual Report prepared by the titleholder for each exploration licence. This Annual Report for the Unca Creek Project - EL28082, provides a summary of the activities carried out over the area in the past 12 months, from 30 Decemver 2015 to 29 December 2016, including any results produced by those activities.

NRE has conducted no field work during the term of this tenure period.

NRE believes that this tenement offers the opportunity to delineate significant base metal mineralisation, positioned in a location close to Alice Springs which offers excellent logistics and access to infrastructure.

NRE's activities during this term of grant have been very successful and encourage the need for further extensive exploration.

1. Introduction

Natural Resources Exploration ('NRE') has conducted extensive office-based studies during this reporting period. EL28082 is located in the Aileron Province along the Plenty Highway.

NRE's exploration rationale and objectives for its Unca Creek Project considered the evaluation of base metal mineralisation. The Project was also considered for other targets such as Uranium and Tungsten during the early phases of exploration. Investigations during this term were intended to explore areas of outcropping mineralisation and any indicators of any subsurface mineralisation across the tenements which were identified in the previous term.

2. Tenure

NRE's Unca Creek Project consists of one (1) granted exploration licences, EL28082. This tenement consists of 23 sub-blocks across Jervois making up an area of approximately 73 square kilometres.

EL28082 was granted on 30 December 2010. Table 1 lists the pertinent tenement details.

Table 1. Tenement Details

Tenement	Title No.	Sub-blocks	Sq. Km	Status	Grant Date	Term (Yrs)	Expiry Date
Name	(EL)						
Unca Creek	28082	23	73	Granted	30 Dec 10	6	29 Dec 18

Native Title

There are currently no Native Title Claims over the Project areas.

Recorded Sites

The Aboriginal Areas Protection Authority (AAPA) has identified three (3) Recorded Sacred Sites within the boundaries of the Unca Creek Project as well as two (2) Restricted Work Areas.

Pastoral Leases

The Unca Creek Project overlies one (1) Pastoral Lease, namely NT Por 366 PPL 962 ("Jervois"). The location of these leases in relation to the Jervois Project is shown below in Figure 1.



Figure 1. Cadastral Map

2.1 Location and Access

Location and Access

EL28082 - Unca Creek is located on the Aileron Region approximately 350 kilometres from Alice Springs along the Plenty Highway. The name of the EL derives from geographic features within the EL.

Access to the EL is by road is via the Plenty Highway and then by station roads (private use roads). The tenement is within 20 kilometres of the Plenty Highway and is easily accessible off the Plenty Highway.

The location of the Project and access is shown in Figure 2.



Figure 2. Location and Access Map

3. Geology

3.1 Regional Geology

The Unca Creek Project tenement is located entirely within the Palaeoproterozoic Aileron Province. There are two major geological provinces recognized in the area the Georgina Basin and the Arunta Block. The Georgina Basin is a mixture of sandstone and calcareous sedimentary rocks, which overlies granitic intrusions and metamorphics of the Arunta Block.

The Unca Creek Project area has fairly limited outcrop with the majority of the area covered by a mixture of Quaternary sand, sand dunes, sandy soil and Cenozoic regolith. The main outcrops found in this area are Paleoproterozoic Arunta Block migmatites and Proterozoic granitic intrusives of the Jervois Granite, Mount Teitkens and undifferentiated suites. Several units of these granites are commonly found intruding the Arunta Block migmatites. The region near the Jervois mines contains significantly more outcrops and these outcrops are of Proterozoic Arunta Block Bonya Schist intruded by early Proterozoic undifferentiated S-type granitoids and the Atturtra Metagabbro. To the north west of the Jervois Mine area is the Jervois Ranges contains sandstones and siltstones of the Paleozoic Mopunga Group.

The majority of mineralisation and prospects in this region are found in the Jervois Mine area. Some 12 strike kilometres of sporadic mineralisation occurs in this area which represents the north eastern margin of the lower Proterozoic Arunta Block. Mineralisation in this area can be grouped into three types of stratabound mineralisation.

1. Stratiform Cu (chalcopyrite) in a quartz-magnetite-garnet-chlorite rock which though highly variable resembles banded iron formation in places

- 2. Stratabound Cu-Pb-Zn-Ag in calc-silicate rocks
- 3. Stratabound scheelite in calc-silicate rocks.

The regional geology is shown in Figure 3 being the North Australia Proterozoic Units (after Rawlings et al 2008).



Figure 3. Regional Geology Map

The region also has potential for phosphates within the Georgina Basin sedimentary sequences but no phosphate prospects or deposits have been found in the parts of the Basin near the Jervois tenures. A general lithostratigraphic legend illustrating the rock relationships across part of the Huckitta 1:250,000 geological map is shown in Figure 4.

Figure 4. Lithostratigraphic legend for rock units on Hukitta 1:250K sheet.



3.2 Permit Geology

The surface sediments are Quaternary soils a mixture of alluvial and aeolian soils with lesser amounts of red earth soils, colluvium, scree and sand dunes. These cover approximately 50-60% of the tenure. The main outcrop in the tenure is the Proterozoic Arunta Block Bonya Schist. The Bonya Schist outcrops are found to the south east of the Jervois Range.

This area is intruded by mafic rocks and S-type granitoids of the Post-Division Three Intrusive Rocks. The areas basement is early Proterozoic schist's and gneisses of the Arunta Block; the oldest unit that outcrops in the area is the Bonya Schist. The north western part of the tenure overlaps the Jervois range and contains sandstones and siltstones of the Paleozoic Mopunga Group.

The geology is mapped over the Huckitta 1:250K geological map sheets. The permit geology is illustrated in Figure 5 below.



Figure 5. Permit Geology Map

3.3 Topography and Drainage

The Unca Creek Project ranges from a terrain of flat sandy area to undulating hilly ground with isolated rugged rocky outcrops. A small parallel channel to Fault Creek is within the south of the Project area as well as small tributary gullies and creeks flowing throughout. Figure 6 provides a topographic map of the area.



Figure 6. Topographic Map

4. NRE's Previous Exploration Activities

NRE conducted extensive office-based studies and field programs during the sixth term of the Exploration Licence. NRE previously conducted an initial site visit to identify viable locations for proposed drill collars, conducted a 2158m drilling program, soil sampling program and a resistivity/induced polarisation (RES/IP) survey.

The underlying aim of the field program was to achieve the following:

To further explore areas identified in the previous term as being potential for base metal mineralisation by visiting optimal and difficult to access targets and improving geological knowledge by conducting a drilling program over specific target areas. This will assist in further delineating zones of prospectivity for follow up exploration drilling.

To make contact with land holders in the areas of the Project to maintain a good working relationship and assist in identifying access routes and other important geographical features. This knowledge is vital for the development of efficient follow-up programs.

Summary of Exploration Activities for EL28082 – 'Unca Creek'

NRE completed twenty angled RC drillholes to a total depth of 2158 metres. All one metre intervals were sent for multi-element total digest assay including gold with the maximum assays (duplicates averaged) were 8.5% for Cu, 39.3g/t for Ag, 0.57g/t for Au 0.73% for Zn, 0.99% for Pb and 0.57% for W. The highest copper values tended to be associated with Ag but separate other base metals. All twenty drill holes intersected significant copper with thirteen holes having one metre intervals of 0.5% Cu of high. IP was also conducted and completed on many of the holes. It is concluded that the assay data is sufficiently reliable and of quality.

4.1 Exploration Studies

NRE is continually developing its geological knowledge database. NRE has conducted an extensive review of historic exploration over its Jervois Project. The Aileron Region has been explored for base metals, uranium, diamonds and rare-earths. There has been exploration for a variety of commodities across the Jervois region targeting mainly base metal mineralisation.

The more notable success in the region is the Jervois Copper-Lead-Silver deposit which is located within NRE's Unca Creek tenure (EL28082). Location of historic tenements is shown in Figure 7 and previous exploration has been summarised in Table 2 below.





Table 2. Historic Tenures

Tenement	Period	Company Report	Company
EL 6539	1989-1992	CR1991-0313 CR1992-0241 CR1993-0241	Plentry River Mining
EE 0555	1909 1992		Company
EL 7996	1993-1993	CR1993-0506	Poseidon Exploration
ERL 67	1988-1993	Not Listed	Not Listed
EL 10419	2002-2007	Not Listed	Not Listed
EL 3204	1982-1988	CR1983-0168,CR1984-0205,CR1987-0146	T Rogers

4.2 Reverse Circulation Drilling

Twenty angled drillholes were completed as part of the March 2013 RC Drill program. The drilling approach was to target outcropping mineralisation and soil geochemical anomalies on sections normal to strike. One hole, Portland, was designed to test a geophysical target beneath transported cover.

For each metre of hole the sample was inspected by geologist and representative washed +1mm material sieved from the large plastic bags plastic were collected in plastic chip trays. Magnetic susceptibility was recorded and representative smaller split of the drill spoil for each metre sent for multi-element whole rock analyses including gold.

The drilling plan was to confirm the high grade copper mineralisation seen on surface extended to depth was not a function of surface enrichment. The drilling commenced and was concentrated south of PA1 drillhole in the Pioneer A area as this area was shown to contain more massive copper mineralisation on surface compared to other geochemical anomalous areas which generally only exhibited thin copper coatings.

Table 3 and Figure 8. Indicate the locations of the drill collars.

		r	1			
Drillhole	Easting (GDA94)	Northing (GDA94)	Elevation (m)	Azimuth (True North)	Dip	Depth (m)
Lady Turquoise	630707	7497718	369.00	96.0	-60	140
Yo Ho Ho	630700	7497682	378.00	95.5	-60	100
Treasure Rock	630695	7497640	364.00	96.5	-60	100
Dead Mans Chest	630693	7497586	364.00	75.5	-60	60
Bootstrap Bill	630678	7497583	362.00	76.0	-60	100
Merchant	630833	7497563	356.00	70.0	-60	60
Wolverine	630718	7497342	369.00	85.5	-60	100
Gotham	630628	7497015	360.00	96.5	-65	180
Ashok	630728	7497020	348.00	275.5	-60	72
Emma Rocks	630705	7496827	350.00	275.5	-60	60
Becana	630661	7496827	350.00	96.5	-60	168
Amit	630704	7496589	348.00	90.0	-60	120
Munro	630765	7496627	350.00	264.5	-60	102
Portland	630332	7497006	354.00	96.0	-60	96
Flytrap	630674	7497684	361.00	96.5	-70	174
Black Widow	630728	7497430	365.00	95.0	-60	80
Kalyan	630577	7498150	373.00	94.0	-60	120
Ocean	630725	7496834	348.00	104.5	-70	168
Peters	630633	7496623	347.00	90.0	-60	80
Newton	632656	7490554	355.00	145.5	-60	78

Table 3. Drillhole collar details with holes listed in order of drilling.



Figure 8. Location of Drill Collars

Significant drill assays are as follows:

AMIT	1m at 0.30% Cu, 0.54% Zn, 0.16% Pb and 8.0 g/t Ag from 50m 1m at 0.45% Cu from 55m
	30m at 0.36% Cu, 0.11% Zn and 2.5g/t Ag from 60m
	including 2m at 1.4% Cu, 7.6g/t Ag, 0.04g/t Au from 63m
	and 2m at 0.68% Cu, 4.1g/t Ag, 0.03g/t Au from 74m
	and 4m at 0.54% Zn, 0.30% Cu, 6.4g/t Ag from 82m
ASHOK	1m at 0.73% Cu from 49m
BECANA	1m at 0.46% Cu from 120m
	9m at 2.3% Cu, 9.8g/t Ag, 0.03g/t Au from 144m
	including 2m at 8.1% Cu, 22.5g/t Ag, 0.11g/t Au from 148m
BLACK WIDOW	1m at 1.4% Cu, 4.0g/t Ag from 48m
BOOTSTRAP BILL	1m at 0.26% Cu from 86m

DEAD MANS CHEST	2m at 0.19% Cu from 32m
	1m at 0.65% Cu from 40m
EMMA ROCKS	2m at 0.33% Cu from 9m (within the oxide zone)
	1m at 0.12g/t Au from 43m
	1m at 0.57g/t Au from 46m
FLYTRAP	7m at 0.17% Cu from 83m
	including 1m at 0.46% Cu from 89m
	1m at 0.12g/t Au from 138m
	2m at 0.52% Cu, 3g/t Ag from 166m
GOTHAM	1m at 0.46% cu, 5.7g.t Ag from 78m
KALYAN	13m at 0.07g/t Au from 14m
	including 2m at 0.13g/t Au from 20m
	and 1m at 0.33g/t Au from 26m
	2m at 0.28g/t Au from 54m
	1m at 1.5% Cu from 99m
	1m at 0.06g/t Au, 0.28% Cu from 113m
LADY TURQUOISE	3m at 0.36% Cu from 40m
	2m at 0.31% Cu from 68m
	2m at 0.53% Cu from 74m
	1m at 0.79% Cu, 8.8g/t Ag from 80m
MERCHANT	1m at 0.54% Cu from 47m
MUNRO	9m at 0.62% Cu, 2.2g/t Ag from 29m
	includes 1m at 0.23% Zn from 30m
	and 2m at 1.2% Cu, 4.2g/t Ag, 0.02g/t Au from 36m
	5m at 0.37% Zn, 0.23% Cu, 0.13% Pb, 3.7g/t Ag from 54m
	1m at 0.5% Cu from 66m
NEWTON	1m at 0.12% Cu, 1.3g/t Ag from 46m
OCEAN	4m at 0.33% Cu from 14m (oxidised)
PETERS HOLE	9m at 5.1g/t Ag from 41m
	4m at 0.22% W from 41m
	including 1m at 0.57% W from 43m
	and 2m at 0.35% Zn, 0.88% Pb from 42m
PORTLAND	1m at 0.17% Cu from 8m

	1m at 0.15% Cu from 95m (to EOH)
TREASURE ROCK	4m at 1.1% Cu, 3.8g/t Ag from 40m
	including 2m at 1.7% Cu, 5.5g/t Ag, 0.03g/t Au from 40m
	1m at 2.3% Cu from 59m
	2m at 1.3% Cu, 2.3g/t Ag from 65m
	1m at 0.65% Cu from 79m
WOLVERINE	14m at 0.42% Cu, 1.2g/t Ag from 57m
	including 3m at 0.9% Cu, 3.2g/t Ag from 57m
	including 1m at 0.92% Cu, 5.4g/t Ag from 70m
ҮО НО НО	8m at 1.5% Cu, 4.4g/t Ag, 0.04g/t Au from 39m
	including 3m at 2.9% Cu, 7.4g/t Ag. 0.07g/t Au from 40m
	4m at 0.5% Cu from 91m
	including 1m at 1% Cu from 94m

Results based on 0.5% (or lower if stated) Cu or Zn external cut-off, no internal cut-off and subject to rounding.

The Munro-Amit area requires further drilling, including further to the east and along strike, to test initially for shallow open cut copper potential in this area. The current drilling information is sufficiently reliable but the drillholes are too widely spaced to interpret with confidence the boundaries of any mineralisation in most areas. No mineral resource estimation is possible till further drilling is completed. Attention to mapping and further surface soil sampling is need to optimise any further any drilling.

4.3 Soil Sampling Programs

During the drill program, NRE has carried out a separate in-fill soil sampling program to assist any on-the-fly decisions to amend the location of any of the proposed drill holes. Three Hundred and ten (310) soil samples have been collected within the Unca Creek Project. The location of these samples are shown in Figure 9 below.





The analysis results of the soil samples collected during this program were not closely examined as they were deemed not of sufficient value compared to the analysis results from the drill program.

4.4 Resistivity / Induced Polarisation (RES/IP) Survey

After consultation with NRE's contract Geophysicists and Geologist, NRE engaged ZZ Resistivity Imaging Pty Ltd to conduct a RES/IP survey where an inverted resitivity image was able to be produced in field within hours of completing field measurements. This system also provided for on-the-fly decisions regarding orientation and position of proposed drill collars.

The equipment utilised special cables with fixed electrode points evenly positioned along the cable similar to multiple geophones along seismic cables. This enabled one such cable to be lowered down a hole, and a second similar cable to be laid along the surface or even down an adjoining drillhole. Each electrode measures simultaneously the voltage relative to a origin reference point (usually near the collar) making the system extremely fast.

The down hole resistivity surveys at Jervois appears to map the mineralisation intersected in the drill holes quite well. There are also a number of off-hole low resistivity anomalies indicated which in general correlate with conductive features in the SAM survey.

4.5 Chip Sample Petrology

Eight initial samples have been examined by consulting petrologist Dr Alan Pervis at Pontfex & Associates Pty Ltd, Adelaide. The samples were small drill fragment chips and were collected from various intervals to confirm lithology;

In summary they were described as;

Amit 89-90m	Quartz-muscovite-chlorite schist
Ashok 49-50m	Quartz-biotite-rich schist
Becana149-150m	Schistose, abundant chalcopyrite and carbonate.
Flytrap 161-162m	Muscovite-rich schistose
Kalyan 31-32m	Quartz-muscovite-chlorite schist
Kalyan 99-100m	Quartz-biotite-chloire-magnetiteschist
Munro 57-58m	Quartz-muscovite schist
Newton 66-67m	Quartz-bearing dolerite now massive amphibolite (hornblende)

The drill chip samples from all drill holes described in the report consisted of heterogeneous metasediments except those from Newton. The Newton hole intersected a massive metadolerite with trace extremely fine pyrite and chalcopyrite. The samples from Munro and Amit however are characterised by abundant chlorite and pyrite, with marcasite in the Amit sample suggesting retrograde alteration that is more widespread than usual. Evidence of retrograde alteration is less common in the shallow Kalyan samples. The sulphide sample from Becana is somewhat exceptional with almost all sulphide being within separate chips with carbonate, but little or no sulphide in the metasediment chips. Further petrology may be completed as part of constant review of all results.

4.6 Magnetic Susceptibility

The magnetic susceptibility was measured on each one metre interval calico bagged samples. The calico split samples provided a smaller, more compact representative proportion of the entire metre for measurement. The instrument used was a Terraplus KT-10 Magnetic Susceptibility Metre owned by Orogenic Exploration Pty Ltd. Sensitivity of this instrument is 0.001x10-3 SI Units.

Two readings were recorded and the average determined on every one metre bag for Lady Turquoise, selected intervals from Merchant, and single reading from Gotham. The 140 paired readings for Lady Turquoise showed an excellent correlation coefficient of 0.969. The magnetic susceptibility can be useful for correlating units between drillhole as well as geophysical modelling of magnetic data.

5. NRE's Exploration Activities for the reporting period

No exploration activities were conducted during the 12 month reporting period. Geological mapping, interpretation and data review were undertaken during the sixth term to focus on delineating below surface targets.

6. NRE's Exploration Activities for next 12 month period

The assessment of the Unca Creek Project and the results of its drilling activities have provided NRE with more defined targets and allowed for the design of another more direct reverse circulation drilling program.

NRE's main objective in the seventh term will be to further define the significant sulphides that exist below surface, and establish systematic determination of grade and extent through conducting geological mapping and interpretation and reviewing, interpreting and modelling results obtained through its initial drilling program.

7. Reports lodged during the reporting period

NRE believes that no other reports were required to be lodged during this reporting period.

8. Conclusions

Natural Resources Exploration's ('NRE') exploration activities during the sixth term of its Unca Creek Project tenure have been focused on delineating below surface targets.

NRE has conducted an extensive review of all previous exploration within the Project area, completed a 20 hole 2158m drill program, further geological mapping of the area, soil sampling program and a resistivity/induced polarisation survey.

Several copper intercepts were identified which represent the on-strike continuation of lodes currently being drilled with great success in Kentor Gold's Jervois copper-lead-silver deposit which is located in close proximity to NRE's Jervois Project.

NRE believes that the Unca Creek Project offers the opportunity to delineate significant base metal mineralisation, positioned in a location close to Alice Springs which offers excellent logistics and access to infrastructure.

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Note these (and many more) references are also located in the References section of the Huckitta and Tobermorey 1:250,000 geological map series explanatory notes.