### **United Uranium Limited**

## **Annual Report on Exploration Activities**

### **McArthur River Project**

## For Period 21 September 2009 to 20 September 2010

Title Holder: United Uranium Limited

Tenements: Exploration Licence 25839

Project Name: McArthur River Project

Mineral Field: McArthur Mineral Field

Location: Urapunga SD5310 1:250 000

Datum / Zone GDA 94 / Zone 52

Commodities: Uranium and Base Metals

Date of report: 14 October 2010

Author: I. Prentice

Contact Details: Ian Prentice – Consultant Geologist

**Zephyr Consulting Group** 

**PO Box 1424** 

West Perth, WA, 6872 Ph – (08) 9200 4474 Fax – (08) 9200 4475

Email (technical) – <u>ian.prentice@zephyrgroup.com.au</u> Email (expenditure) – <u>glazarou@citadelcapital.com.au</u>

### **Distribution:**

- 1 Northern Territory Department of Minerals & Energy
- 2 United Uranium Limited

### **ABSTRACT**

**Location:** The McArthur River Project is located approximately 200

kilometres east north east of Katherine in the Northern

Territory.

Geology: The project is located in the central portion of the

McArthur Basin, which consists of platform cover sediments bounded by and unconformably overlying the Pine Creek, Arnhem and Murphy Inliers. The south eastern half of the tenement is dominated by the Roper Group and Collara Subgroups comprising largely thick interbedded fine grained glauconitic sandstones. Quaternary and recent alluvial sediments dominate the

north western half of the tenement area.

**Work done:** Exploration activities during the reporting period consisted

of a first pass reconnaissance / prospecting program, incorporating soil sampling, scintillometer and XRF surveys, across the VTEM targets identified from the previous years exploration and a combination of ground EM and a Gradient Array IP / Dipole – Dipole IP survey across the T1 target, a well defined EM conductor

coincident with a magnetic anomaly.

**Results:** The first pass reconnaissance / prospecting program

failed to identify any significant mineralisation, however the ground geophysics at the T1 target defined a strongly chargeable and moderately conductive flat lying semicircular body at approximately 100 metres depth with a thickness of approximately 30 metres and an areal extent of at least 300m x 300m. The response suggests a

disseminated metallic sulphide or graphitic body.

**Conclusion:** Exploration on the McArthur River Project during the

reporting period was dominated by the initial testing of the higher priority T1 target, which returned a response

prospective for base metal mineralisation.

First pass drill testing of the geophysical response at T1 will be key to determining if further ground geophysics will be completed at the other VTEM targets identified at the

McArthur River Project.

## **INDEX**

1	SUMMARY	4
2	INTRODUCTION	6
3	TENEMENT STATUS	8
4	GEOLOGY	8
5	PREVIOUS EXPLORATION	12
5.1	UNITED URANIUM LIMITED – 2008	14
5.2	UNITED URANIUM LIMITED – 2009	15
6	EXPLORATION ACTIVITIES	16
6.1	Reconnaissance / prospecting program	16
6.2	Ground Geophysics	18
7	EXPLORATION POTENTIAL	21
8	PROPOSED EXPLORATION	21
9	PROPOSED EXPENDITURE FOR 2011	22
10	REFERENCES	23
APP	ENDIX 1 - Sample Location Data	24
APP	ENDIX 2 – Selected XRF (ppm) and Scintillometer (cps) Results	27
APP	ENDIX 3 – Soil Sample Results	32
Tabl	le of Figures	
Figu	re 1 - Location Plan and Regional Geology	7
Figu	re 2 - Local Geology	11
Figu	re 3 - XRF and Scintillometer Data Points – Total CPS	17
Figu	re 4 - Gradient Array Chargeable Response	19
Figu	re 5 - Merged Dipole - Dipole Data (conductive response on left,	
char	geable response on right)	20
List	of Tables	
Tabl	e 1: Tenement Schedule	8
Tabl	e 2: Exploration Budget over EL25839	22

### 1 SUMMARY

This report covers exploration work completed by United Uranium on the McArthur River Project between 21 September 2009 and 20 September 2010.

The tenement, EL25839, is located approximately 200 kilometres east north east of the township of Katherine in the Northern Territory. Access from Katherine is 50km south east on the Stuart Highway, then east on the Central Arnhem Road to the Mainoru Homestead. Access within the tenement is on secondary roads and station tracks.

The project is in the central portion of the McArthur Basin, which comprises 1700 to 1300Ma platform cover sediments bounded by and unconformably overlying the Pine Creek, Arnhem and Murphy Inliers. The south eastern half of the tenement is dominated by the Roper Group and Collara Subgroups comprising thick interbedded fine grained sandstones. Quaternary and alluvial sediments dominate the north western half of the tenement.

Previous exploration by United Uranium defined a number of regionally extensive radiometric anomalies and two aeromagnetic anomalies from the reprocessing of Northern Territory Geological Survey (NTGS) airborne geophysics. An airborne electromagnetic (VTEM) survey flown in conjunction with Geoscience Australia generated two broad conductive zone uranium targets and a number of coincident EM conductor and magnetic anomalies (base metals target).

During the reporting period United Uranium's exploration work consisted of a first pass reconnaissance / prospecting program across the targets identified from the VTEM survey and a combination of ground EM and a Gradient Array IP / Dipole – Dipole IP survey across the T1 target, a well defined EM conductor coincident with a magnetic anomaly. Consultant geophysicist Graham J Elliott compiled and interpreted the data from the ground geophysics programs.

There were no significant readings from the XRF or scintillometer surveys completed in the first pass reconnaissance / prospecting program, or the soil sampling completed at the T1 target and there were no visible signs of mineralization or alteration at the T1 target.

The ground geophysics at the T1 target defined a strongly chargeable and moderately conductive flat lying semi-circular body approximately 100 metres deep with a thickness of approximately 30 metres, with an areal extent of at least 300m x 300m. The response suggests a disseminated metallic sulphide or graphitic body.

The definition of the strongly chargeable and moderately conductive target zone at T1 combined with the presence of other as yet untested coincident EM conductor and magnetic anomalies justify ongoing exploration work, particularly for base metal mineralisation associated with disseminated to semi massive sulphides.

EL25839 was subject to a compulsory 50% reduction at the end of the reporting period.

### 2 INTRODUCTION

This report details exploration carried out on the McArthur River Project, EL25839, during the reporting period 21/9/2009 to 20/9/2010. United Uranium Limited is the operator and holds an 80% interest in the tenement.

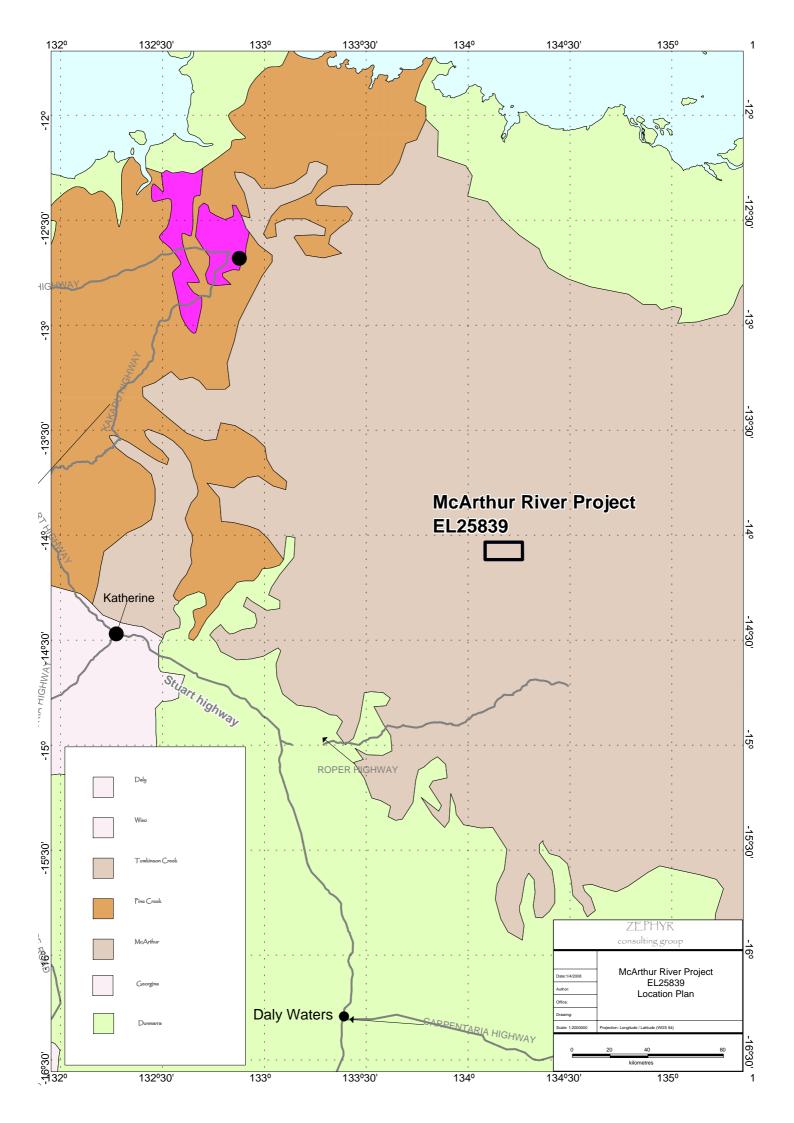
The project area is located approximately 200 kilometres east north east of Katherine in the Northern Territory (Figure 1). Access from Katherine is 50km south east on the Stuart Highway, then east on the Central Arnhem Road to the Mainoru Homestead, in the north west corner of the project area. Access within the tenement is on secondary roads and station tracks.

The project is in the central portion of the McArthur Basin, which comprises 1700 to 1300Ma platform cover sediments bounded by and unconformably overlying the Pine Creek, Arnhem and Murphy Inliers. The south eastern half of the tenement is dominated by the Roper Group and Collara Subgroups comprising thick interbedded fine grained sandstones. Quaternary and alluvial sediments dominate the north western half of the tenement.

United Uranium has targeted the region for the discovery of unconformity-related and vein hosted uranium deposits and base metal mineralisation. The South Alligator Uranium fields, located 180km to the west north west, are the closest uranium occurrences. The Bulman Zn-Pb deposits, a cluster of 10 deposits, are located from 10 – 50km north north east of the tenement.

Reprocessing of NTGS airborne geophysics within the project area identified a number of regionally extensive radiometric anomalies and two aeromagnetic anomalies. United Uranium, in conjunction with Geoscience Australia, flew an airborne electromagnetic (VTEM) survey over the area in the previous period, defining two broad conductive zone uranium targets and a number of coincident EM conductor and magnetic anomalies (base metals target).

Exploration activities during the reporting period consisted of a first pass reconnaissance / prospecting program across the targets identified from the VTEM survey and a combination of ground EM and a Gradient Array IP / Dipole – Dipole IP survey across the T1 target, a well defined EM conductor coincident with a magnetic anomaly. Consultant geophysicist Graham J Elliott compiled and interpreted the data from the ground geophysics programs.



### 3 TENEMENT STATUS

The McArthur River Project consists of a single granted exploration licence, EL25839, in which United Uranium holds an 80% interest and is the operator. The balance of the tenement is held by United Mining Resources Pty Ltd.

EL25839, which was granted on 21 September 2007, was subject to a compulsory 50% reduction at the end of the reporting period and subsequently covers an area of 28 sub-blocks (approximately 182 sq km). Tenement details are listed in Table 1.

Tenement	Grant	Expiry	Area
	Date	Date	Sub - Blocks
EL25839	21/09/07	20/09/13	28

Table 1: Tenement Schedule

### 4 GEOLOGY

The project is located in the central part of the McArthur Basin. The McArthur Basin is a large complex depositional basin covering an area of about 200,000km² extending from Arnhem Land in the north west and to the south west beyond the Queensland border. The Basin largely comprises 1700Ma to 1300Ma (Middle Proterozoic or Carpentarian) platform cover sediments which are the principal element of the North Australian Platform Cover (Plumb et al 1981). The Basin is bounded by and unconformably overlies the Early Proterozoic Pine Creek, Arnhem and Murphy Inliers.

Within the western part of the McArthur Basin the Lower Proterozoic sediments of the Katherine River Group form the oldest of the basin stratigraphies. Unconformably overlying the Katherine River Group are the middle Proterozoic lithologies of the McArthur River Group which comprises cherts, dolomites, sandstones and volcanics.

The tenement area is dominated by the Roper Group and Collara Subgroups comprising largely thick interbedded fine grained glauconitic sandstones. These are younger than the McArthur River Group, which is host to the world famous McArthur River base metals deposit. Minor amounts of laminated mudstones are also found within this group. The sediments cover the south eastern half of the tenement and dip gently to the south. The Jalboi Formation and Hodgson Sandstone Formation, comprising fine grained sandstones outcrop to the south east of the tenement area.

Several major north east trending structures cross cut the stratigraphy, some of these being suitable targets for follow up exploration.

Quaternary and recent alluvial sediments within the Mainoru drainage system dominate the north western half of the tenement area. Tertiary deposits of laterite and lateritic rubble generally overlie the much of the Proterozoic sedimentary units.

There are no gazetted uranium occurrences proximal to the tenement area. The South Alligator Uranium fields are located 180km to the west north west of the tenement.

The McArthur Basin as a whole has an excellent potential for discovery of large base metal deposits. The style of base metal mineralisation in the Basin is typically SEDEX, vein-type and palaeokarst related. Other types of mineralisation include vein-type and breccia pipe copper deposits at Redbank; smaller-sized iron ore deposits within McArthur sediments at Roper Bar; and manganese deposits.

Lead-zinc mineralization is widespread throughout the McArthur River region. The McArthur River (HYC) zinc-lead deposit, located 200km east of EL25839 is one of the largest in the world. Mineral resources as at 2006 (Xstrata Annual Report 2006) were 157 Mt @ 11.3% Zn, 4.9% Pb and 49 g/t Ag. It is an example of a sediment hosted (SEDEX) zinc-lead deposit, which are known from around the world. Sedex deposits are widely distributed in Northern Australia in the Mount Isa – McArthur River region, such as Mount Isa, Hilton, George Fisher, Lady Loretta, Dugald River, Century and McArthur River.

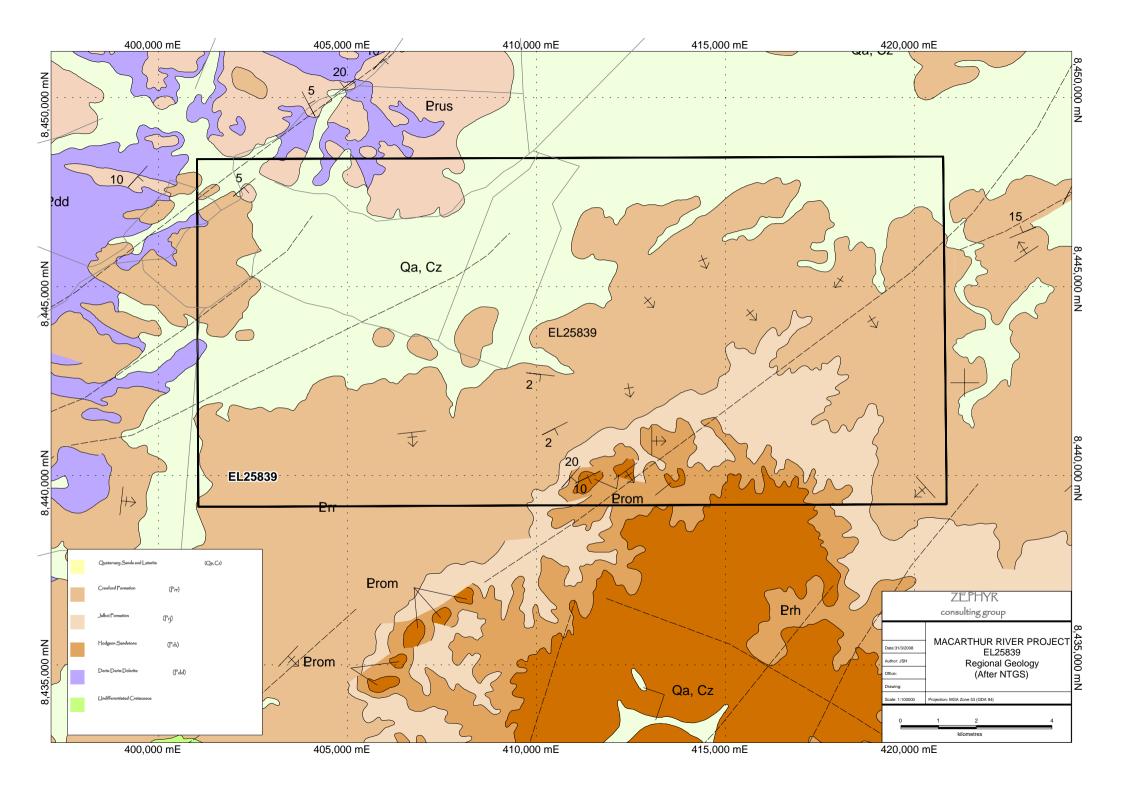
### Deposit features include:

- Fine-grained galena and sphalerite, with pyrite and pyrrhotite
- Good geophysical targets (eg. EM, IP, gravity, conductivity).
- Generally there is either an iron-manganese or a silicate alteration halo.
- Syn-sedimentary and replacement ore textures.
- The major sulphides are pyrite, sphalerite and galena, with lesser chalcopyrite, arsenopyrite and marcasite.
- The mineralisation covers an area of 2 sq km and averages 55 m in thickness.

The project area lies proximal to the Bulman base metal deposits. Outcropping Zn-Pb-Ag mineralisation at the Bulman Deposit was discovered and briefly worked by prospectors in 1910. The deposit is hosted within gently dipping, laminated stromatolitic dolostone and chert of the Mesoproterozoic Dook Creek Formation which lies south of EL25839. The mineralisation at Bulman is found in ten separate deposits scattered over a 40km radius in close proximity to a dolerite intrusive. A combined resource of 1.2Mt @ 6.5% Pb and 0.93Mt @ 11%Zn was estimated for seven of these deposits.

The Swamp prospect, which is anomalous in lead and zinc, is the closest known mineral occurrence to the tenement area. The prospect, also known as "Anomaly 12 extended", comprises a small open pit and is located 5km to the west of the tenement.

Reprocessing of the NTGS radiometric data draped over the DEM has highlighted a number of radiometric anomalies. The most prominent of these is coincident with the Crawford Formation (Roper Group) which extends in a south westerly direction for over 20km in the central part of the tenement area. The anomalous zone is apparent when looking at both the total count radiometric data and also the uranium data. These sediments are conceptually favourable sedimentary lithologies for sandstone hosted uranium deposits. It is probable that the apparent radiometric anomalies are associated with the lateritic cover overlying the sub cropping sandstone lithologies.



### 5 PREVIOUS EXPLORATION

All historical exploration undertaken within the tenement area has been reviewed. Based on the open file reporting from the Northern Territory Geological Survey, there were a limited number of historical tenements that either partially or fully covered EL25839.

Exploration carried out within the area covered by EL25839 has been carried out since 1970 largely for diamonds and with very limited reconnaissance sampling for base metals. The potential for the tenement area to host base metal mineralisation remains largely untested. Although some very early work has been undertaken over the targeted radiometric anomalies within the tenement area, the work failed to adequately explain these anomalies.

Previous exploration conducted both within EL25839 and proximal to the tenement area (*EL Number, Year, Report Number, Company*) follows;

# EL23499 2004 Exploration and Resource Development (CR2004-023499)

The area held by Exploration and Resource Development Pty Ltd (ERD) covered the north eastern portion of EL25839 extending to the southeast. ERD were specifically targeting the area for diamonds. ERD completed open file reviews of the tenement area and concluded that sufficient work had been undertaken within the tenement area to downgrade the potential for base metals and diamonds. No field work was undertaken by ERD.

# EL23499 2004 Exploration and Resource Development Pty Ltd (CR2004-0346)

The area held by Exploration and Resource Development Pty Ltd (ERD) covered the central portion of EL25839 and extended to the south. ERD completed open file reviews of the area and concluded that sufficient work had been undertaken within the tenement area to downgrade the potential for base metals and diamonds. No field work was undertaken by ERD.

# **EL 3351** 1983 Ashton Mining Limited (CR1983-085)

Ashton Mining Limited conducted exploration for diamonds over EL3351 which covers the eastern half of EL25839. Ashton undertook stream

sediment sampling to assess the area for diamond indicator minerals. Due to extremely difficult access, a helicopter was utilised to undertake the program. There were no significant results.

EL 4486 1990 Stockdale Prospecting Limited (CR1985-0149)

EL4486 covered the same area now held by United Uranium as EL25839. Stockdale undertook reconnaissance stream sampling for diamond and kimberlitic indicator minerals at a density of 1:200km². Sample results were all negative and the ground was subsequently relinquished.

**EL 6287, 6289** 1994 Stockdale Prospecting Limited (CR1990-0060)

EL6287 covered the north western half of EL25839 and EL6289 covered the south eastern half of EL25839. Stockdale undertook reconnaissance and infill stream and loam sampling for diamond and kimberlitic indicator minerals at a density of 1:5.8km² over 15,714km². There were no significant results.

**EL 8938** 1995 CRA Exploration (CR1996-0241)

CRA undertook exploration for illmenite and kimberlitic diatremes in the Urapunga Project area in the Western McArthur River Basin in 1996. The area included the western third of the EL25839. Landsat TM data, aeromagnetic and radiometric data was purchased and reprocessed for the region of which 25 aeromagnetic targets were selected for follow up work.

Heliborne aeromagnetics was conducted over 12 of these anomalies. Loam samples collected from a number of these anomalies all returned negative results. The potential for illmenite and diamonds in the region was downgraded following the exploration program.

AP 2332 1971 Australian Aquitaine Petroleum (CR1971-0074)

In 1970, Australian Aquitaine Petroleum together with Canadian Aero Service Ltd undertook an airborne radiometric survey on half mile line spacing's over an area which included the north western half of the tenement now held by United Uranium. The open file report is an operational report and does not provide any conclusions or results from the survey.

AP 3133 1971 Stockdale Prospecting

(CR1971-0112)

Exploration by Stockdale was primarily for diamonds and kimberlitic indicator minerals. Reconnaissance sampling and stream sediment sampling was carried out.

In addition, an airborne spectrometer traverse was undertaken over part of the tenement area now held by United Uranium with the target being for uranium. The instrument employed was a TV-3A Radiation Spectrometer with readings being taken at 100m above ground level. Results showed that the radiometric anomalies were related to either monazite in the drainage channels or laterites on top of the Proterozoic sediments.

#### 5.1 UNITED URANIUM LIMITED – 2008

Exploration completed by United Uranium in the period between 21 September 2007 and 20 September 2008 consisted of compilation and review of all open file exploration data, compilation of public domain geological, geophysical and other digital data into MapInfo format, high level targeting utilising reinterpreted regional geophysical data and analysis of the effectiveness of previous exploration. This work, particularly the reinterpretation of geophysical data, identified a number of regionally extensive radiometric anomalies and two aeromagnetic anomalies that warranted follow up exploration.

In August 2008 a reconnaissance rock chip sampling program was completed in the north west of the tenement, with 6 rock chip samples collected, and scintillometer (total count) readings were collected at each sample point as well as on a number of traverses over second tier radiometric anomalies.

Weakly elevated uranium assays were returned from the some of the rock chip samples, with a maximum assay of 4.3ppm uranium, however base metal results were all low order.

#### 5.2 UNITED URANIUM LIMITED – 2009

Exploration activities by United Uranium in the period between 21 September 2008 and 20 September 2009 consisted of desktop review and assessment of the results of the previous year's exploration activities, the flying of an airborne electromagnetic (VTEM) survey in conjunction with Geoscience Australia, review of the preliminary data from the airborne electromagnetic survey and the implementation of an exploration program designed to assess the prospectivity of anomalies defined.

The VTEM survey consisted of east west flight lines on 250m spacing for a total of 981 flight line kilometres. The survey was designed to assist in the identification of unconformity and vein style uranium mineralisation targets as well as potential massive sulphide targets. The flying of the survey was initially completed in late 2008, however data issues resulted in the survey being re flown in April 2009.

Mapitt Geosolutions was engaged to review the data from the VTEM survey to generate potential targets for follow up exploration. This review generated two broad conductive zone uranium targets (T2 and T3), a well defined EM conductor (T1) coincident with a magnetic anomaly (a potential massive sulphide/base metals target) and a number of smaller lower order sulphide targets.

An exploration program was designed to provide an initial assessment of potential surface expression of these targets. The program commenced prior to the completion of the period, however the majority of the work was completed in the current reporting period.

### **6 EXPLORATION ACTIVITIES**

Exploration activities by United Uranium in the reporting period between 21 September 2009 and 20 September 2010 consisted of a first pass reconnaissance / prospecting program across the targets identified from the VTEM survey and a combination of ground EM and a Gradient Array IP / Dipole – Dipole IP survey across the T1 target, a well defined EM conductor coincident with a magnetic anomaly. Consultant geophysicist Graham J Elliott compiled and interpreted the data from the ground geophysics programs.

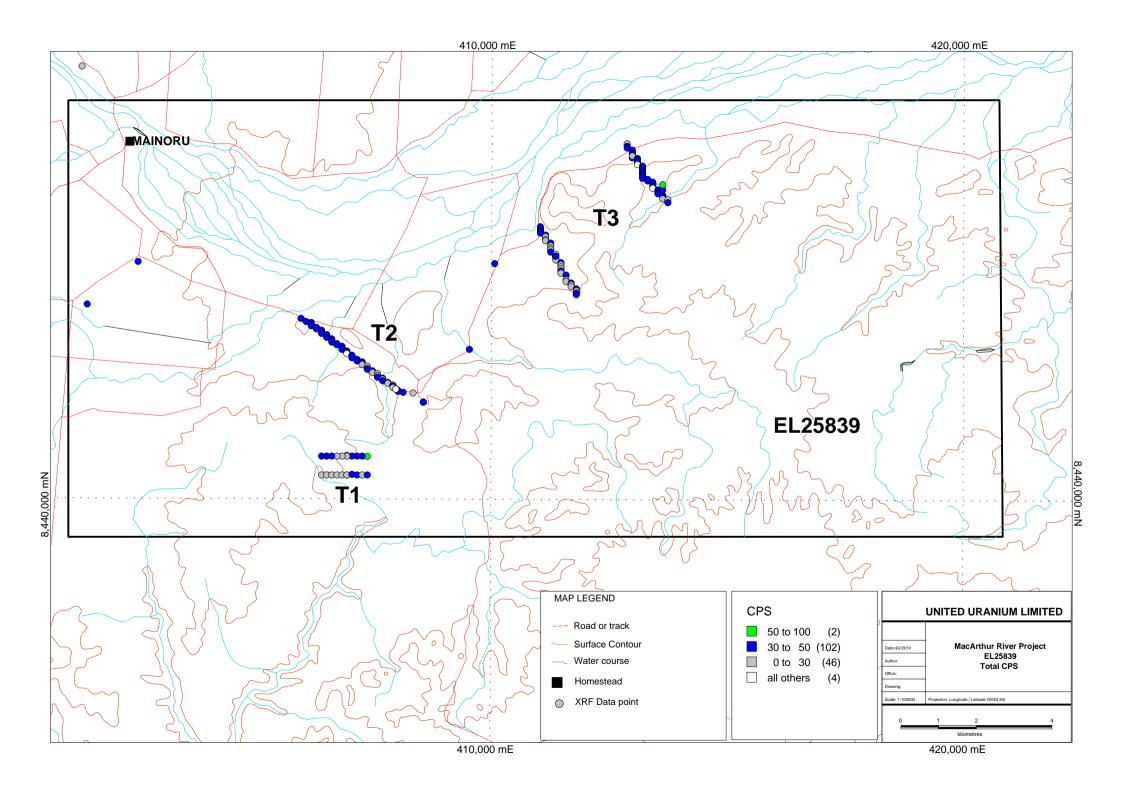
### 6.1 Reconnaissance / prospecting program

The reconnaissance / prospecting program was completed in October 2009, focusing on the T1 base metals target and the two broad conductive zones (T2 and T3). Work undertaken consisted of scintillometer and XRF surveys, soil sampling and rock chip sampling, with a total of 154 scintillometer and XRF points, 22 soil samples and 2 rock chip samples (MCR001 – 002) collected.

XRF data consisted of readings for Mo, Zr, Sr, U, Rb, Th, Pb, Se, As, Hg, Zn, W, Cu, Ni, Co, Fe, Mn, Ba, Cs, Te, Sb, Sn, Cd, Ag and Pd. Soil and rock chip samples were sent to Ultratrace Laboratories in Canning Vale for multi-element analysis consisting of Au, Pt, Pd, U, As, Th, Mo, Se, Sb, Sr, Pb, Ag, Cu, Mn, Ni, Co, Zn, Ba, and P. XRF and scintillometer data points with scintillometer cps readings are presented in Figure 3.

The T1 target is located in the south west of the project on a dissected plateau. Two east – west traverses, 400m apart with sample points every 100m, were completed with scintollometer, XRF readings and soil samples collected at each point (22 samples; MC3007 – 3010, MCS3011 – 3028).

The observed geology in the area of the T1 target consisted of flat lying fine grained sandstone beds with remnant laterite cover. There were no visible signs of mineralization or alteration at surface. Peak assays received from the soil sampling were 4 ppb Au (MCS3017) and 2.5 ppm U (MCS3018). There were no significant readings from the XRF and the highest scintillometer reading was 54 cps from MCS3018 (range from 23 to 54 cps).



The T2 target is in the central west of the project on a flat wash area adjacent to the Mainoru River flats. A single north west – south east trending traverse (broadly along the Mainoru River Road) was completed, with scintillometer and XRF readings collected every 50m along the traverse (56 points; MCT2.01 – 2.56). The observed geology in the area consisted of unconsolidated sand and silt, with two outcrops of fine grained sandstone.

There were no significant readings from the XRF or scintillometer surveys on this traverse, with scintillometer readings ranging from 26 to 42 cps.

The T3 target is in the central north of the project area on a flat wash area adjacent to the Mainoru River flats. Two broadly north west – south east trending traverses approximately 2.0 kilometres apart were completed, with scintillometer and XRF readings collected every 50m along the traverses (71 points; MCT2.59 – 2.100, MCT300 – 328).

The observed geology consisted of an area of flat wash made up of unconsolidated sand and silt, with the north eastern traverse passing through low ridges of outcropping fine grained sandstone.

Scintillometer readings ranged from 26 to 50 cps, with the higher readings occurring on the north eastern traverse in the areas of outcropping sandstone. The XRF survey delivered a single anomalous reading in the same area, with elevated zinc (1480ppm), uranium (16ppm) and lead (115ppm). There were no significant scintillometer or XRF readings on the south eastern traverse.

#### 6.2 Ground Geophysics

A program of ground electromagnetics, consisting of a moving loop time domain electromagnetic (TDEM) survey commenced across the T1 target in June 2010, however only two lines of the planned program could be completed due to problems with ground conditions. The data from the work completed showed a weak mid – time response, however the limited data made it inconclusive.

The geophysical crew were remobilised in late July 2010 to complete a Gradient Array IP survey across the T1 target, with eight 800m long lines completed on 100m line spacing and 25m station spacing's. This survey defined a broad heart-shaped chargeable response (peak of 15mV/V in a 2mV/V background) (see Figure 4) and coincident moderate conductive / resistivity low response (50 ohm-metres in a background of 100 ohm-metres).

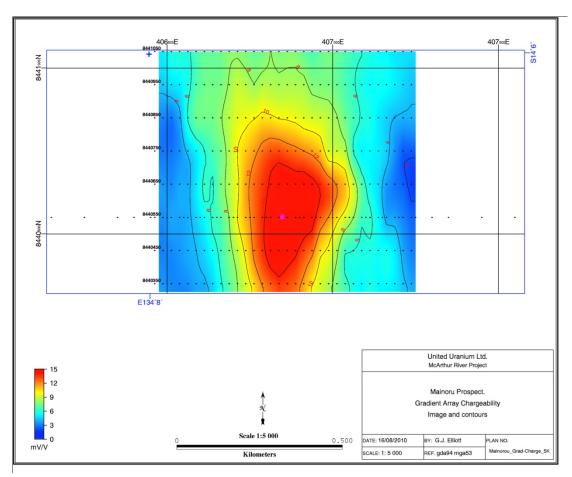


Figure 4 - Gradient Array Chargeable Response

Based on the results of the Gradient Array IP survey it was decided to complete a Dipole – Dipole IP survey on line 8440550N using a combination of 50m and 100m dipoles. Data from the merged 50m and 100m dipole – dipole traverses clearly defined the top, approximate thickness and bottom of the chargeable and conductive / resistivity low responses.

The target zone is a flat lying semi-circular body approximately 100 metres deep with a thickness of approximately 30 metres. The areal extent is at least 300m x 300m. The strongly chargeable and moderately conductive response suggests a disseminated metallic sulphide or graphitic body (see Figure 5).

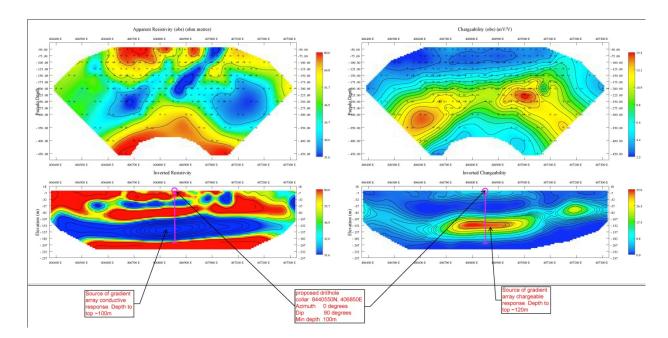


Figure 5 - Merged Dipole - Dipole Data (conductive response on left, chargeable response on right)

The coincident magnetic response at the T1 target is slightly offset to the north west of the chargeable/conductive response, however it has a similar shape and has a magnetic susceptibility equivalent to about 1% magnitude.

Exploration expenditure for the period consisted of \$133,121.37.

### **7 EXPLORATION POTENTIAL**

The ground geophysics, in particular the Gradient Array IP / Dipole – Dipole IP surveys, across T1 has generated a strongly chargeable and moderately conductive response, suggesting a possible disseminated metallic sulphide or graphitic body source. This work has elevated the prospectivity of a number of other coincident EM conductor and magnetic anomalies as defined from the VTEM survey.

The scintillometer and XRF readings collected over the two broad conductive zone uranium targets (T2 and T3) returned generally low to background values, with only one weakly anomalous XRF reading received on the eastern end of T3, returning elevated zinc (1480ppm), uranium (16ppm) and lead (115ppm). As such it has been recommended to relinquish the portion of the exploration license covering these target areas as part of the compulsory 50% reduction.

The definition of the strongly chargeable and moderately conductive target zone at T1 combined with the presence of other as yet untested coincident EM conductor and magnetic anomalies justify ongoing exploration work, particularly for base metal mineralisation associated with disseminated to semi massive sulphides.

### 8 PROPOSED EXPLORATION

It is proposed to conduct a first pass RC drilling program to test the coincident strongly chargeable and moderately conductive zone plus the slightly offset magnetic response at the T1 target.

Ongoing exploration work will be defined based on the outcome of this program, with a positive result from this drilling likely to lead to the completion of further ground geophysics at the other VTEM targets identified at the McArthur River Project, followed by additional drilling as required.

## 9 PROPOSED EXPENDITURE FOR 2011

Table 2: Exploration Budget over EL25839

McArthur River Project Exploration Program		
First pass RC drilling	\$100,000	
Sub - total	ψ100,000	\$100,000
Follow up ground EM and IP	\$50,000	
Sub - total	400,000	\$50,00
TOTAL		\$150,00

### **10 REFERENCES**

Ashton Mining Limited, Final Report EL3351 22 April 1982 to 24<sup>th</sup> January 1983. Open File Report CR1983-0085

Australian Aquitaine Petroleum Pty Ltd., Airborne Spectrometric Survey, Arnhem Land, Northern Territory. Open File Report CR1971-0074

CRA Exploration., Urapunga Project. Exploration Licenses EL8938, 8940, 8942, 8943, 8944., First and Final Report. Open File Report CR1996-0241

ERD., EL23499 Urapunga North. Final & Relinquishment Report for Period Ending 12-05-2004. HJ Roiko. Open File Report CR2004-346

ERD., EL23046 Urapunga North. Second & Final Report for Period Ending 09-06-2004. HJ Roiko. Open File Report CR2004-422

Holmes J.S., McArthur River Project EL25839. Project Assessment and Data Compilation. March 2008. Internal United Uranium Report

Holmes J.S., McArthur River Project EL25839. Field Reconnaissance Program, August 2008, Summary Report. Internal United Uranium Report

Kastellorizos P., First Annual report on McArthur Basin Project, Northern Territory, McArthur Uranium Project, Exploration Licence: 25839, October 2008. United Uranium Limited.

Prentice I., Annual Report on Exploration Activities, McArthur River Project, for Period 21 September 2008 to 20 September 2009, Northern Territory, Exploration Licence: 25839, October 2009. United Uranium Limited.

Stockdale Exploration Limited., Exploration Licences 4475-4477, 4480, 4482,4484-4489, Roper River Area, Northern Territory, Final Report to 31<sup>st</sup> May 1995. Open File Report CR1985-0149.

Stockdale Exploration Limited., Exploration Licences 6286-6301. Roper River Area. Northern Territory, Common Report to 31<sup>st</sup> January 1990. Open File Report CR1990-060.

Stockdale Exploration Limited., Prospecting Authorities 2612 & 3133, Final Report for the Period 22.12.70 – 21.12.71Arnhem Land Northern Territory, Open File Report CR1971-0112.

# **APPENDIX 1 - Sample Location Data**

Sample ID	Latitude	Longitude	Altitude	Comments
MC3007	-14.1049	134.133	n/a	XRF, Scintillometer, Soils
MC3008	-14.1049	134.134	n/a	XRF, Scintillometer, Soils
MC3009	-14.1049	134.135	n/a	XRF, Scintillometer, Soils
MC3010	-14.1049	134.136	n/a	XRF, Scintillometer, Soils
MCS3011	-14.1049	134.137	n/a	XRF, Scintillometer, Soils
MCS3012	-14.1049	134.138	n/a	XRF, Scintillometer, Soils
MCS3013	-14.1049	134.138	n/a	XRF, Scintillometer, Soils
MCS3014	-14.1048	134.139	n/a	XRF, Scintillometer, Soils
MCS3015	-14.1049	134.14	n/a	XRF, Scintillometer, Soils
MCS3016	-14.1049	134.141	n/a	XRF, Scintillometer, Soils
MCS3017	-14.1049	134.142	n/a	XRF, Scintillometer, Soils
MCS3018	-14.1014	134.142	142	XRF, Scintillometer, Soils
MCS3019	-14.1013	134.141	n/a	XRF, Scintillometer, Soils
MCS3020	-14.1013	134.14	n/a	XRF, Scintillometer, Soils
MCS3021	-14.1013	134.139	n/a	XRF, Scintillometer, Soils
MCS3022	-14.1012	134.138	n/a	XRF, Scintillometer, Soils
MCS3023	-14.1013	134.138	n/a	XRF, Scintillometer, Soils
MCS3024	-14.1013	134.137	n/a	XRF, Scintillometer, Soils
MCS3025	-14.1013	134.136	n/a	XRF, Scintillometer, Soils
MCS3026	-14.1013	134.135	n/a	XRF, Scintillometer, Soils
MCS3027	-14.1013	134.134	n/a	XRF, Scintillometer, Soils
MCS3028	-14.1013	134.133	n/a	XRF, Scintillometer, Soils
MCT2.01	-14.0751	134.129	103	XRF, Scintillometer
MCT2.02	-14.0757	134.13	n/a	XRF, Scintillometer
MCT2.03	-14.0759	134.131	n/a	XRF, Scintillometer
MCT2.04	-14.0762	134.131	n/a	XRF, Scintillometer
MCT2.05	-14.0765	134.131	n/a	XRF, Scintillometer
MCT2.06	-14.0768	134.132	n/a	XRF, Scintillometer
MCT2.07	-14.0771	134.132	n/a	XRF, Scintillometer
MCT2.08	-14.0774	134.133	n/a	XRF, Scintillometer
MCT2.09	-14.0776	134.133	n/a	XRF, Scintillometer
MCT2.10	-14.078	134.133	n/a	XRF, Scintillometer
MCT2.100	-14.0446	134.194	93	XRF, Scintillometer
MCT2.11	-14.0782	134.134	n/a	XRF, Scintillometer
MCT2.12	-14.0784	134.134	n/a	XRF, Scintillometer
MCT2.13	-14.0787	134.134	n/a	XRF, Scintillometer
MCT2.14	-14.079	134.135	n/a	XRF, Scintillometer
MCT2.15	-14.0793	134.135	n/a	XRF, Scintillometer
MCT2.16	-14.0796	134.135	n/a	XRF, Scintillometer
MCT2.17	-14.0799	134.136	n/a	XRF, Scintillometer
MCT2.18	-14.0801	134.136	n/a	XRF, Scintillometer
MCT2.19	-14.0804	134.137	101	XRF, Scintillometer
MCT2.20	-14.0807	134.137	103	XRF, Scintillometer
MCT2.21	-14.081	134.137	99	XRF, Scintillometer
MCT2.22	-14.0813	134.138	112	XRF, Scintillometer
MCT2.23	-14.0816	134.138	103	XRF, Scintillometer
MCT2.24	-14.0818	134.138	107	XRF, Scintillometer
MCT2.25	-14.0821	134.139	102	XRF, Scintillometer
MCT2.26	-14.0823	134.139	104	XRF, Scintillometer
MCT2.27	-14.0826	134.139	102	XRF, Scintillometer
MCT2.28	-14.0829	134.14	97	XRF, Scintillometer

Sample ID	Latitude	Longitude	Altitude	Comments
MCT2.29	-14.0832	134.14	101	XRF, Scintillometer
MCT2.30	-14.0834	134.141	101	XRF, Scintillometer
MCT2.31	-14.0836	134.141	97	XRF, Scintillometer
MCT2.32	-14.0839	134.141	99	XRF, Scintillometer
MCT2.33	-14.0842	134.142	98	XRF, Scintillometer
MCT2.34	-14.0846	134.142	109	XRF, Scintillometer
MCT2.35	-14.0848	134.142	105	XRF, Scintillometer
MCT2.36	-14.0851	134.143	105	XRF, Scintillometer
MCT2.37	-14.0854	134.143	112	XRF, Scintillometer
MCT2.38	-14.0856	134.144	103	XRF, Scintillometer
MCT2.39	-14.086	134.144	110	XRF, Scintillometer
MCT2.40	-14.0863	134.144	117	XRF, Scintillometer
MCT2.41	-14.0865	134.145	101	XRF, Scintillometer
MCT2.42	-14.0867	134.145	97	XRF, Scintillometer
MCT2.43	-14.087	134.145	104	XRF, Scintillometer
MCT2.44	-14.0873	134.146	102	XRF, Scintillometer
MCT2.45	-14.0875	134.146	103	XRF, Scintillometer
MCT2.46	-14.0878	134.147	112	XRF, Scintillometer
MCT2.47	-14.088	134.147	99	XRF, Scintillometer
MCT2.48	-14.0883	134.147	98	XRF, Scintillometer
MCT2.49	-14.0886	134.1476	110	XRF, Scintillometer
MCT2.50	-14.0888	134.148	106	XRF, Scintillometer
MCT2.51	-14.089	134.148	106	XRF, Scintillometer
MCT2.52	-14.0892	134.149	106	XRF, Scintillometer
MCT2.53	-14.0886	134.1476	106	XRF, Scintillometer
MCT2.54	-14.0893	134.151	100	XRF, Scintillometer
MCT2.55	-14.091	134.153	118	XRF, Scintillometer
MCT2.56	-14.0911	134.153	128	XRF, Scintillometer
MCT2.57	-14.081	134.162	99	XRF, Scintillometer
MCT2.58	-14.0647	134.167	103	XRF, Scintillometer
MCT2.59	-14.0577	134.176	99	XRF, Scintillometer
MCT2.60	-14.0582	134.176	99	XRF, Scintillometer
MCT2.61	-14.0586	134.176	96	XRF, Scintillometer
MCT2.62	-14.0589	134.176	93	XRF, Scintillometer
MCT2.63	-14.0593	134.177	109	XRF, Scintillometer
MCT2.64	-14.0596	134.177	103	XRF, Scintillometer
MCT2.65	-14.0601	134.177	101	XRF, Scintillometer
MCT2.66	-14.0604	134.177	113	XRF, Scintillometer
MCT2.67	-14.0608	134.178	93	XRF, Scintillometer
MCT2.68	-14.0613	134.178	112	XRF, Scintillometer
MCT2.69	-14.0617	134.178	106	XRF, Scintillometer
MCT2.70	-14.0621	134.178	91	XRF, Scintillometer
MCT2.71	-14.0625	134.178	83	XRF, Scintillometer
MCT2.71	-14.0629	134.179	92	XRF, Scintillometer
MCT2.72	-14.0623	134.179	108	XRF, Scintillometer
MCT2.73	-14.0633	134.179	108	XRF, Scintillometer
MCT2.74	-14.0637	134.179	108	XRF, Scintillometer
MCT2.76	-14.0645	134.179	108	XRF, Scintillometer
MCT2.76	-14.0649	134.18	108	XRF, Scintillometer
MCT2.77	-14.0649	134.18	108	XRF, Scintillometer
MCT2.79	-14.0653	134.18	108	XRF, Scintillometer
MCT2.79	-14.0657	134.18	108	XRF, Scintillometer
MCT2.80				XRF, Scintillometer
IVICIZ.01	-14.0665	134.18	108	ANE, SUITHIUTTIERE

Sample ID	Latitude	Longitude	Altitude	Comments
MCT2.82	-14.0669	134.181	108	XRF, Scintillometer
MCT2.83	-14.0633	134.1789	108	XRF, Scintillometer
MCT2.84	-14.0678	134.181	108	XRF, Scintillometer
MCT2.85	-14.0681	134.181	108	XRF, Scintillometer
MCT2.86	-14.0684	134.182	108	XRF, Scintillometer
MCT2.87	-14.0687	134.182	108	XRF, Scintillometer
MCT2.88	-14.0691	134.182	108	XRF, Scintillometer
MCT2.89	-14.0695	134.183	108	XRF, Scintillometer
MCT2.90	-14.0699	134.183	108	XRF, Scintillometer
MCT2.90 MCT2.91	-14.0099	134.183	108	XRF, Scintillometer
MCT2.91	-14.0703	134.183	108	XRF, Scintillometer
	-14.0700	134.103	92	
MCT2.93				XRF, Scintillometer
MCT2.94	-14.0424	134.193	86	XRF, Scintillometer
MCT2.95	-14.0427	134.193	80	XRF, Scintillometer
MCT2.96	-14.0431	134.194	93	XRF, Scintillometer
MCT2.97	-14.0435	134.194	86	XRF, Scintillometer
MCT2.98	-14.0439	134.194	98	XRF, Scintillometer
MCT2.99	-14.0442	134.194	87	XRF, Scintillometer
MCT300	-14.0447	134.195	94	XRF, Scintillometer
MCT301	-14.045	134.195	94	XRF, Scintillometer
MCT302	-14.0454	134.195	93	XRF, Scintillometer
MCT303	-14.0459	134.195	94	XRF, Scintillometer
MCT304	-14.0462	134.196	105	XRF, Scintillometer
MCT305	-14.0465	134.196	91	XRF, Scintillometer
MCT306	-14.0468	134.196	94	XRF, Scintillometer
MCT307	-14.0472	134.196	104	XRF, Scintillometer
MCT308	-14.0475	134.196	107	XRF, Scintillometer
MCT309	-14.0478	134.196	107	XRF, Scintillometer
MCT310	-14.0482	134.196	110	XRF, Scintillometer
MCT311	-14.0485	134.196	118	XRF, Scintillometer
MCT312	-14.0488	134.197	116	XRF, Scintillometer
MCT313	-14.049	134.197	112	XRF, Scintillometer
MCT314	-14.0492	134.198	114	XRF, Scintillometer
MCT315	-14.0496	134.198	106	XRF, Scintillometer
MCT316	-14.05	134.198	103	XRF, Scintillometer
MCT317	-14.0504	134.198	102	XRF, Scintillometer
MCT318	-14.0507	134.199	94	XRF, Scintillometer
MCT319	-14.051	134.199	102	XRF, Scintillometer
MCT320	-14.0514	134.199	98	XRF, Scintillometer
MCT321	-14.0517	134.2	98	XRF, Scintillometer
MCT322	-14.052	134.2	90	XRF, Scintillometer
MCT323	-14.0524	134.2	98	XRF, Scintillometer
MCT324	-14.0526	134.201	104	XRF, Scintillometer
MCT325	-14.0531	134.201	98	XRF, Scintillometer
MCT326	-14.0507	134.2	96	XRF, Scintillometer
MCT327	-14.0497	134.2	105	XRF, Scintillometer
MCT328	-14.0487	134.197	109	XRF, Scintillometer
MCT329	-14.0271	134.086	109	XRF, Scintillometer
MCT330	-14.0643	134.097	113	XRF, Scintillometer
MCT331	-14.0724	134.087	109	XRF, Scintillometer

# APPENDIX 2 – Selected XRF (ppm) and Scintillometer (cps) Results

Sample ID	U	Rb	Th	Pb	Zn	Cu	Со	Fe	Mn	Sn	Zr	Hg	Ag	Pd	Count_cps
MC3007	-999	51.9	6.64	-999	11.44	-999	89.85	4455	691.79	-999	325.09	10.57	-999	-999	23.2
MC3008	-999	97.03	-999	-999	-999	-999	-999	18139	285.98	61.49	420.91	-999	-999	-999	24.4
MC3009	-999	63.47	-999	-999	-999	-999	-999	7662	141.84	44.76	487.5	-999	-999	-999	25.35
MC3010	-999	60.44	-999	-999	-999	-999	-999	6619	395.27	36.67	634.12	-999	-999	-999	26.35
MCS3011	-999	82.65	15.35	-999	-999	-999	-999	10173	579.81	69.61	508	-999	-999	-999	28.75
MCS3012	-999	75.06	-999	-999	-999	-999	-999	6393	263.53	33.13	567.92	-999	-999	-999	27
MCS3013	-999	83.43	-999	14.37	-999	-999	-999	7228	210.61	40.1	424.41	-999	-999	-999	25
MCS3014	-999	85.65	16.54	-999	-999	-999	-999	10014	614.66	-999	633.59	-999	-999	-999	32.1
MCS3015	-999	72.71	-999	-999	-999	-999	101.04	4599	158.69	52.72	644.63	-999	-999	-999	30.1
MCS3016	-999	69.36	-999	-999	-999	-999	-999	4301	127.18	54.96	477.35	-999	-999	-999	27
MCS3017	-999	83.34	-999	-999	-999	-999	-999	7399	286.06	37.78	508.37	-999	-999	-999	33.8
MCS3018	-999	90.23	17.87	50.85	-999	-999	-999	5108	202.69	43.71	684.75	-999	-999	-999	53.95
MCS3019	-999	87.55	25.68	-999	-999	-999	1565.03	84116	618.85	-999	660.66	-999	-999	-999	37.65
MCS3020	-999	107.88	-999	-999	-999	-999	-999	8184	-999	25.15	570.25	-999	-999	-999	32.7
MCS3021	-999	70.45	-999	12.74	-999	-999	-999	7719	442.56	-999	703.64	-999	-999	-999	34.85
MCS3022	-999	74.25	15.55	-999	-999	-999	-999	7539	371.55	33.99	621.9	-999	-999	-999	34.6
MCS3023	-999	62.52	12.85	-999	-999	-999	-999	8232	454.9	19.34	618.76	-999	-999	-999	29.05
MCS3024	-999	60.54	-999	-999	-999	-999	-999	3325	140.34	64.79	490.37	-999	-999	-999	25.05
MCS3025	-999	75.25	-999	-999	-999	-999	-999	3807	243.16	25.94	577.7	-999	-999	-999	28.85
MCS3026	-999	119.78	17.15	18	-999	-999	-999	44979	521.75	36.92	658.05	-999	-999	-999	35.15
MCS3027	-999	68.03	39.55	52.29	-999	-999	2806.29	299571	493.91	127.8	561.09	-999	-999	-999	37.25
MCS3028	-999	69.39	23.35	24.69	-999	-999	1006.19	103430	-999	98.23	446.68	-999	25.82	-999	30.1
MCT2.01	-999	169.93	16.89	27.26	27.77	-999	415.24	36597	425.86	73.68	365.83	15.31	-999	-999	39.45
MCT2.02	-999	174.29	24.56	43.25	34.08	-999	-999	27606	254.96	82.26	269.76	-999	15.31	-999	39.55
MCT2.03	-999	134.33	14.18	28.91	28.79	-999	-999	19393	722.86	55.45	382.26	-999	-999	-999	33.6
MCT2.04	-999	159.34	16.87	20.36	-999	-999	-999	30167	196.83	75.39	351.2	-999	-999	-999	36.15
MCT2.05	-999	172.65	22.11	54.01	27.82	-999	-999	38195	634.18	89.48	248.24	-999	-999	-999	42
MCT2.06	-999	136.07	13.08	29.23	24.72	-999	-999	19839	365	38.97	282.2	-999	-999	-999	37.7
MCT2.07	-999	138.86	21.77	20.05	28.97	-999	-999	18134	535.2	38.45	318	-999	-999	-999	34.05
MCT2.08	-999	108.73	18.73	-999	-999	-999	-999	14518	208.72	58.83	420.74	-999	-999	19.76	31.5

Sample ID	U	Rb	Th	Pb	Zn	Cu	Со	Fe	Mn	Sn	Zr	Hg	Ag	Pd	Count_cps
MCT2.09	-999	141.6	22.94	18.53	-999	-999	-999	17431	234.03	38.18	271.64	-999	-999	-999	36.6
MCT2.10	-999	208.79	15.56	38.99	39.96	-999	-999	31450	593.53	37.59	206.56	-999	-999	-999	40.35
MCT2.100	-999	107.3	11.6	14.83	24.04	-999	-999	10175	269.39	39.08	357.93	16.26	-999	-999	34.5
MCT2.11	-999	120.07	17.01	19.1	32.65	-999	-999	32434	1218.04	50.05	353.63	-999	-999	-999	30.15
MCT2.12	-999	106.3	19.6	25.36	23.4	42.61	-999	28206	629.69	61.73	450.72	-999	-999	-999	33.95
MCT2.13	-999	108.33	15.93	-999	-999	-999	-999	24836	323.89	49.17	525.64	-999	-999	-999	30.2
MCT2.14	-999	168.1	19.12	17.62	-999	-999	252.03	32325	175.5	50.15	373.94	-999	-999	-999	34
MCT2.15	-999	126.6	13.91	21.36	-999	-999	-999	16030	329.74	38.29	282.77	-999	-999	20.05	32.4
MCT2.16	-999	178.44	18.79	26.61	-999	-999	-999	19943	236.35	62.83	324.31	-999	15.54	-999	33.4
MCT2.17	-999	123.5	12.44	-999	23.02	-999	-999	13901	178.84	56.58	339.04	15.84	-999	-999	32.4
MCT2.18	-999	140.46	14.09	-999	-999	-999	-999	14736	167.74	73.72	427.47	-999	-999	-999	33.9
MCT2.19	-999	112.33	-999	-999	20.46	-999	-999	13600	136.01	43.96	261.44	13.47	13.57	-999	32
MCT2.20	-999	135.05	-999	22.91	25.32	-999	-999	14179	191.12	49.48	273.47	-999	-999	-999	34.1
MCT2.21	-999	136.08	21.01	22.98	-999	-999	-999	16814	144.85	51.33	435.23	-999	-999	-999	35.5
MCT2.22	-999	91.87	11.88	-999	21.53	-999	-999	8657	-999	61.23	518.27	-999	-999	-999	34.8
MCT2.23	-999	96.48	13.95	-999	-999	-999	-999	9151	174.12	56.42	419.44	-999	-999	-999	36.4
MCT2.24	-999	90.49	27.43	-999	-999	-999	-999	9361	-999	45.44	1038.82	-999	14.34	-999	-999
MCT2.25	-999	154.11	29.96	67.07	34.4	-999	449.11	67441	477.19	121.52	222.83	-999	15.06	-999	37.7
MCT2.26	-999	167.02	16.3	41.62	-999	-999	-999	28939	222.94	46.83	251.78	-999	14.09	-999	37.05
MCT2.27	-999	149.05	22.13	-999	-999	-999	-999	27266	1092.15	45.18	311.5	-999	-999	-999	32.25
MCT2.28	-999	135.31	23.78	20.28	41.68	-999	-999	19917	306.81	64.43	285.18	-999	21.68	-999	35.35
MCT2.29	-999	100.94	23.72	-999	-999	-999	-999	17766	170.66	44.84	385.07	-999	-999	19	31.2
MCT2.30	-999	129.75	19.19	20.93	25.47	-999	-999	21018	-999	41.6	406.21	-999	-999	-999	34.75
MCT2.31	-999	135.24	14.14	-999	22.79	-999	-999	19293	133.69	63.54	419.42	-999	-999	-999	31.65
MCT2.32	-999	137.61	12.74	16.68	-999	-999	-999	20709	160.11	33.27	412.26	-999	-999	-999	29.05
MCT2.33	-999	126.2	17.53	16.54	-999	-999	-999	19315	107.5	68.55	425.74	-999	-999	-999	27.5
MCT2.34	-999	102.77	9.82	10.94	18.26	-999	-999	10608	433.77	36.77	397.19	-999	-999	-999	29.5
MCT2.35	-999	112.85	13.86	-999	-999	-999	-999	10998	249.99	65.06	497.09	-999	-999	-999	31.3
MCT2.36	-999	81.4	12.11	-999	-999	-999	-999	8768	211.08	35.37	478.87	-999	-999	-999	31.15
MCT2.37	-999	99.14	15.44	13.81	23.72	-999	-999	11451	607.96	29.76	351.36	-999	-999	-999	27.75
MCT2.38	-999	83.38	13.21	-999	-999	-999	-999	7288	431.17	41.42	454.17	-999	-999	-999	26

Sample ID	U	Rb	Th	Pb	Zn	Cu	Со	Fe	Mn	Sn	Zr	Hg	Ag	Pd	Count_cps
MCT2.39	-999	95.02	-999	-999	-999	-999	-999	8426	196.11	36.24	479.34	-999	-999	-999	26.85
MCT2.40	-999	92.13	20.93	-999	-999	-999	-999	9343	325.09	54.56	490.34	-999	-999	-999	31.35
MCT2.41	-999	126.9	16.5	17.57	-999	-999	-999	11707	458.8	32.56	433.61	-999	-999	-999	34.45
MCT2.42	-999	93.46	-999	-999	-999	-999	-999	7699	483.6	27.82	429.94	-999	-999	-999	27.85
MCT2.43	-999	107.17	12.93	-999	-999	-999	-999	8055	452.48	46.79	425.14	-999	-999	-999	31.85
MCT2.44	-999	98.01	-999	-999	-999	-999	-999	8585	415.51	32.08	531.53	-999	-999	-999	31.5
MCT2.45	-999	107.9	16.65	15.27	-999	-999	-999	11161	801.41	-999	445.45	-999	-999	-999	27.6
MCT2.46	-999	92.86	12.55	-999	-999	-999	-999	8813	606.37	21.27	439.34	12.24	-999	-999	28.25
MCT2.47	-999	94.3	13.17	-999	-999	-999	-999	8624	286.22	51.94	482.45	-999	-999	-999	34.4
MCT2.48	-999	106.66	18.42	-999	-999	-999	-999	10111	425.94	43.12	458.83	-999	-999	-999	29.35
MCT2.49	-999	92.33	12.97	-999	-999	-999	-999	8632	331.68	38.77	483.36	-999	-999	-999	28.95
MCT2.50	-999	96.45	12.21	-999	21.68	-999	-999	8197	314.4	27.97	388.8	-999	-999	-999	30.6
MCT2.51	-999	111.66	19.41	13.5	-999	-999	-999	10894	235.35	22.98	510.88	-999	-999	-999	32.75
MCT2.52	-999	96.08	22.06	14.71	-999	-999	-999	7539	-999	31.34	427.39	-999	-999	-999	36.45
MCT2.53	-999	102.77	15.82	-999	-999	-999	-999	10830	395.35	22.29	472.36	-999	-999	-999	-999
MCT2.54	-999	104.26	11.83	13.78	-999	-999	-999	11281	192.71	45.72	513.93	-999	-999	-999	27.2
MCT2.55	-999	202.51	31.69	20.33	-999	-999	-999	38843	385.29	41.13	748.1	-999	-999	-999	34
MCT2.56	-999	188.87	28.59	17.67	-999	-999	-999	30685	255.35	103.53	362.74	-999	18.23	24.06	40.95
MCT2.57	-999	109.92	16.01	17.91	-999	-999	-999	20594	-999	63.13	368.25	-999	-999	-999	30.9
MCT2.58	-999	135.05	17.58	17.48	-999	-999	-999	19966	336.34	64.39	410.06	-999	-999	-999	34.25
MCT2.59	-999	116.23	20.27	23.75	65.33	-999	-999	28003	348.11	79.66	281.31	-999	17.31	19.24	30.6
MCT2.60	-999	119.41	-999	20.17	41.15	-999	-999	14899	173.13	69.8	336.47	-999	-999	-999	32.1
MCT2.61	-999	105.73	-999	19.33	27.96	-999	-999	22985	297.95	90.13	355.88	-999	17.77	-999	31.55
MCT2.62	-999	126.44	23.1	-999	26.6	-999	-999	22211	977.21	40.67	325.58	-999	-999	-999	30.65
MCT2.63	-999	98.14	-999	21.28	38.84	-999	-999	18441	278.44	65.4	411.79	-999	-999	-999	32.15
MCT2.64	-999	120.81	18.76	16.69	23.33	-999	-999	9421	155.33	51.22	413.42	-999	-999	-999	29.5
MCT2.65	-999	101.3	-999	14.25	-999	-999	-999	10172	130.19	54.45	393.92	-999	11.45	-999	28.35
MCT2.66	-999	159.07	20.24	18.67	-999	-999	-999	18007	144.76	58.72	388.32	-999	18.14	-999	28.5
MCT2.67	-999	110.29	14.7	12.96	21.31	-999	-999	10439	396.06	57.62	697.18	-999	-999	-999	31.55
MCT2.68	-999	97.35	12.21	-999	-999	-999	-999	15607	452.52	52.84	399.4	-999	-999	-999	28
MCT2.69	-999	76.89	12.63	20.21	18.85	-999	-999	8578	206.99	45.2	382.87	14.4	-999	-999	25.8

Sample ID	U	Rb	Th	Pb	Zn	Cu	Со	Fe	Mn	Sn	Zr	Hg	Ag	Pd	Count_cps
MCT2.70	-999	102.88	-999	26.75	-999	-999	-999	13585	321.02	48.23	305.94	-999	-999	19.92	29.2
MCT2.71	-999	185.17	13.81	33.39	52.22	-999	-999	31585	355.55	59.35	312.09	-999	-999	-999	31
MCT2.72	-999	126.2	13.99	30.36	33.94	-999	-999	13439	682.64	52.87	332.74	-999	-999	-999	27.65
MCT2.73	-999	170.33	23.27	19.4	41.55	-999	-999	19935	319.18	62.92	269.44	-999	16.29	25.29	34.4
MCT2.74	-999	89.32	17.75	-999	-999	-999	-999	6430	189.66	29.62	341.61	-999	15.02	-999	27.8
MCT2.75	-999	90.21	-999	-999	-999	-999	-999	7243	493.13	-999	440.16	-999	-999	-999	28.05
MCT2.76	-999	94.68	11.76	18.65	-999	-999	-999	7579	236.92	38.03	377.98	-999	11.66	-999	30.7
MCT2.77	-999	93.98	17.16	20.41	-999	-999	-999	6907	268.06	57.93	391.43	-999	-999	-999	28.95
MCT2.78	-999	99.48	-999	-999	27.86	-999	-999	7142	353.85	59.43	400.13	-999	13.56	-999	29.1
MCT2.79	-999	97.33	12.44	-999	-999	-999	-999	8563	733.68	57.74	432.5	-999	-999	-999	28.6
MCT2.80	-999	87.91	13.33	-999	32.87	-999	-999	6348	437.42	-999	295.95	-999	-999	-999	31.25
MCT2.81	-999	102.39	-999	24.58	-999	-999	-999	7166	498.83	38.93	399.03	-999	13.81	-999	28.75
MCT2.82	-999	106.66	12.12	16.92	22.18	-999	-999	8923	402.72	40.97	465.56	-999	-999	-999	30.7
MCT2.83	-999	102.04	16.27	20.53	31.98	-999	-999	8729	489.81	45.41	439.21	-999	-999	-999	31.85
MCT2.84	-999	90.36	-999	-999	-999	-999	-999	8848	577.35	-999	328.73	18.78	-999	-999	29.45
MCT2.85	-999	110.09	14.38	18.03	40.4	-999	-999	10781	485.51	-999	365.19	16.13	-999	-999	29.05
MCT2.86	-999	98.49	-999	-999	-999	-999	-999	9400	348.53	41.26	414.97	-999	-999	-999	31.4
MCT2.87	-999	99.88	-999	16.96	23.5	-999	-999	8792	640.85	25.22	441.28	-999	-999	-999	29.5
MCT2.88	-999	96.49	-999	-999	21.14	-999	-999	7783	332.82	-999	349.16	-999	-999	-999	29.8
MCT2.89	-999	92.78	14.33	-999	19.42	-999	-999	5998	286.83	-999	457.67	-999	-999	-999	30.75
MCT2.90	-999	88.31	12.18	-999	-999	-999	-999	5960	245.14	21.65	582.75	-999	-999	-999	26.55
MCT2.91	-999	129.86	13.74	21.99	28.66	-999	-999	10902	509.08	30.65	352.94	-999	11.67	-999	33.55
MCT2.92	-999	124.67	17.9	-999	60.13	-999	-999	22741	172.98	58.89	399.62	-999	-999	-999	31.6
MCT2.93	-999	135.8	25.36	19.98	49.01	-999	-999	23750	468.62	36.88	337.66	-999	-999	-999	27.8
MCT2.94	-999	195.14	25.54	19.38	31.68	-999	-999	25123	470.38	43.47	261.34	-999	-999	-999	36.6
MCT2.95	-999	157.68	25.4	27.93	30.06	-999	-999	18124	230.47	28.31	251.49	-999	-999	-999	37
MCT2.96	-999	114.04	15.46	-999	-999	-999	-999	11652	271.03	61.38	358.07	-999	12.62	-999	37.7
MCT2.97	-999	160.83	15.72	-999	-999	-999	-999	16264	119.81	65.59	261.48	-999	-999	-999	40.1
MCT2.98	-999	136.21	14.41	16.61	43.75	-999	-999	14936	457.7	43.64	283.24	-999	-999	-999	35.9
MCT2.99	-999	114.46	14.63	21.6	32.67	-999	-999	14177	659.11	-999	281.2	-999	-999	-999	29.7
MCT300	-999	115.01	11.52	16.14	19.37	-999	-999	11444	230.87	38.7	361.62	-999	-999	-999	32.9

Sample ID	U	Rb	Th	Pb	Zn	Cu	Со	Fe	Mn	Sn	Zr	Hg	Ag	Pd	Count_cps
MCT301	-999	123.42	13.08	14.11	23.92	-999	-999	12917	361.63	57.42	360.87	-999	-999	-999	36
MCT302	-999	147.17	21.52	17.72	28.98	-999	-999	16367	541.37	30.52	331.72	-999	-999	-999	36.05
MCT303	-999	135.45	15.28	-999	29.1	-999	-999	18336	268.7	60.7	328.72	-999	18.64	-999	-999
MCT304	-999	125.68	-999	25.39	60.69	-999	-999	18923	225.03	77.35	246.21	-999	12.05	18.49	33.25
MCT305	-999	120.39	-999	28.08	-999	-999	-999	29987	433.58	107.17	320.77	-999	19.06	-999	33.3
MCT306	-999	151.84	20.82	27.64	44.35	-999	-999	24934	-999	82.44	294.58	-999	16.26	-999	39.15
MCT307	-999	120.68	-999	-999	31.13	-999	-999	27690	365.4	85.95	267.4	-999	13.74	-999	42.8
MCT308	-999	164.46	13.92	20.75	65.92	-999	-999	33665	316.37	92.86	233.48	-999	-999	-999	47.5
MCT309	-999	137.82	13.09	24.76	53.42	-999	-999	27959	161.17	58.95	358.99	-999	17.47	-999	41.05
MCT310	-999	162.59	16.22	23.27	26	-999	-999	17445	370.1	68.21	326.29	-999	-999	-999	43.05
MCT311	-999	130.32	-999	35.07	68.92	-999	-999	52369	601.14	69.67	350.51	-999	15.22	-999	38.3
MCT312	-999	169.49	18.15	25.44	-999	-999	-999	28816	266.39	68.38	346.99	-999	-999	-999	36.15
MCT313	-999	145.24	16.76	26.99	39.11	-999	-999	32880	368.4	84.04	320.66	-999	-999	-999	37.6
MCT314	-999	122.29	-999	31.43	43.93	-999	-999	48982	734.57	83.78	378.24	-999	-999	-999	36.05
MCT315	-999	123.78	16.42	18.2	27.89	-999	-999	12428	382.2	36.67	335.72	-999	-999	-999	36.05
MCT316	-999	130.23	35.88	-999	-999	-999	-999	12535	160.06	62.75	1006.52	-999	-999	-999	39.8
MCT317	-999	145.08	13.81	23.25	30.99	-999	-999	27670	148.52	102.95	267.58	-999	16.3	-999	-999
MCT318	-999	94.11	-999	-999	34.09	-999	-999	10950	336.2	69.17	520.14	-999	-999	-999	31.35
MCT319	-999	138.98	14.73	-999	36.04	-999	-999	20380	268.8	91.07	361.49	-999	-999	-999	33.25
MCT320	-999	119.33	-999	-999	28.14	-999	-999	11803	200.75	-999	279.46	-999	-999	-999	33.45
MCT321	-999	150.98	19.04	-999	-999	-999	-999	22266	713.89	55.4	354.89	-999	27.03	27.12	31.95
MCT322	-999	161.53	17.29	18.69	37.88	-999	-999	19293	134.4	41.84	376.88	-999	-999	-999	32.6
MCT323	-999	89.63	9.6	12.39	18.3	-999	102.37	5453	259.51	-999	297.31	-999	-999	-999	28.2
MCT324	-999	135.71	-999	21.75	49.53	-999	-999	14367	365.27	-999	294.33	-999	-999	-999	29.2
MCT325	-999	134.75	-999	30.95	51.81	-999	352.17	29996	583.14	95.56	281.56	-999	-999	-999	33.1
MCT326	-999	170.54	19.32	23.72	60.82	-999	-999	28632	344.86	82.05	446.24	-999	15.16	-999	46.75
MCT327	-999	220.71	18.35	36.18	-999	-999	-999	38013	-999	77.89	191.87	-999	-999	-999	50.4
MCT328	16.07	21.24	-999	114.62	1480.43	-999	-999	6353	-999	-999	51.3	-999	-999	-999	49.5
MCT329	-999	61.29	-999	-999	185.23	-999	-999	195177	3111.05	131.66	377.13	27.22	18.54	-999	15.7
MCT330	-999	65.11	13.03	-999	-999	-999	-999	15562	560.24	38.17	449.28	-999	-999	-999	32.25
MCT331	-999	68.06	13.11	67.19	161.47	-999	-999	25377	828.94	37.44	480.36	-999	-999	-999	34.95

# **APPENDIX 3 – Soil Sample Results**

Au, Pt, Pd ppb, all others ppm

Sample ID	Au	Pt	Pd	U	As	Th	Мо	Sb	Sr	Pb	Ag	Cu	Mn	Ni	Со	Zn	Ва	Р
MC3007	2	5	-5	1.3	-1	5.3	0.5	0.4	28	7	-0.5	6	222	14	-5	10	220	100
MC3008	-1	5	-5	1.7	2	8	1	0.4	29	6	-0.5	4	212	6	-5	8	195	100
MC3009	-1	-5	-5	1.8	1	7.6	0.5	0.4	32	6	-0.5	6	320	2	-5	12	215	200
MC3010	-1	5	-5	2	1	9.3	2	0.4	28	6	-0.5	4	442	6	-5	8	200	150
MCS3011	-1	-5	5	2.2	1	10.3	1	0.4	26	11	-0.5	6	534	8	-5	14	190	100
MCS3012	-1	-5	5	1.9	-1	8.4	-0.5	0.4	29	7	-0.5	4	254	4	-5	8	205	100
MCS3013	1	5	-5	1.4	-1	5.8	-0.5	0.4	26	8	-0.5	4	210	4	-5	8	270	100
MCS3014	1	5	-5	2.2	-1	10.6	0.5	0.4	33	8	-0.5	4	278	4	10	12	295	100
MCS3015	-1	-5	-5	1.8	-1	7.8	-0.5	0.4	28	6	-0.5	6	254	2	-5	4	225	100
MCS3016	2	5	5	1.6	-1	6.6	-0.5	0.4	29	6	-0.5	4	232	2	-5	12	235	100
MCS3017	4	-5	5	2	-1	8.7	-0.5	0.4	32	8	-0.5	6	238	4	-5	12	270	100
MCS3018	-1	5	5	2.5	-1	12.3	0.5	0.4	37	11	-0.5	6	278	6	-5	10	345	100
MCS3019	-1	5	-5	2.4	-1	12.2	-0.5	0.4	34	10	-0.5	6	298	6	-5	14	310	100
MCS3020	1	-5	-5	2.2	1	10.3	0.5	0.4	32	11	-0.5	4	80	6	-5	12	375	100
MCS3021	2	5	-5	2.1	-1	10.8	-0.5	0.4	26	8	-0.5	8	336	10	-5	14	195	150
MCS3022	2	5	-5	2	-1	9.1	0.5	0.4	23	8	-0.5	6	384	8	10	12	185	150
MCS3023	2	-5	-5	1.8	1	8.7	-0.5	0.4	22	11	-0.5	6	546	2	10	10	165	150
MCS3024	1	5	-5	1.7	-1	7.1	-0.5	0.4	25	5	-0.5	4	176	2	-5	10	215	100
MCS3025	1	-5	-5	1.6	-1	7.3	-0.5	0.4	25	7	-0.5	4	246	6	-5	8	235	50
MCS3026	3	5	-5	2.4	-1	11.2	-0.5	0.4	35	9	-0.5	4	374	2	10	10	335	150
MCS3027	-1	-5	-5	2.1	-1	10.5	-0.5	0.4	28	8	-0.5	6	406	6	-5	6	215	100
MCS3028	2	-5	5	2.3	-1	11	-0.5	0.2	29	9	-0.5	6	160	6	-5	6	255	100