BANNERMAN RESOURCES LIMITED

ABN 34 113 017 128

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31 August 2009

Company Announcements Office
Australian Stock Exchange Limited
20 Bridge Street
SYDNEY NSW 2000

Dear Sir / Madam

Etango Project – NI 43-101 Technical Report

Please find attached the NI43-101 Technical Report on the recent resource upgrade to the Etango Project.

The Technical Report is a requirement for the Company's Toronto Stock Exchange Listing and relates to the resources upgrade to the Etango Project as previously released to the market on 20 July 2009.

A copy of this Technical Report has also been filed on SEDAR in Canada.

For further information please contact:

Len Jubber
Chief Executive Officer
Perth, Western Australia
Tel: +61 (0)8 9381 1436
admin@bannermanresources.com.au

Peter Kerr
Chief Financial Officer
Perth, Western Australia
Tel: +61 (0)8 9381 1436

Ann Gibbs
Investor Relations
Toronto, Ontario, Canada
Tel: +1 416 388 7247
ann@bannermanresources.com

Regulatory Disclosures:

Bannerman has not completed feasibility studies on its projects. Accordingly, there is no certainty that such projects will be economically successful. Mineral resources that are not ore reserves do not have demonstrated economic viability.

Certain disclosures in this report, including management's assessment of Bannerman's plans and projects, constitute forward-looking statements that are subject to numerous risks, uncertainties and other factors relating to Bannerman's operation as a mineral development company that may cause future results to differ materially from those expressed or implied in such forward-looking statements. The following are important factors that could cause Bannerman's actual results to differ materially from those expressed or implied by such forward looking statements: fluctuations in uranium prices and currency exchange rates; uncertainties relating to interpretation of drill results and the geology, continuity and grade of mineral deposits; uncertainty of estimates of capital and operating costs, recovery rates, production estimates and estimated economic return; general market conditions; the uncertainty of future profitability; and the uncertainty of access to additional capital. Full descriptions of these risks can be found in Bannerman's various statutory reports, including its Annual Information Form available on the SEDAR website, www.sedar.com. Readers are cautioned not to place undue reliance on forward-looking statements. Bannerman Resources Ltd expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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Etango Uranium Project, Namibia

National Instrument 43.101 Technical Document

Etango Project - July 2009 Resource Update

Bannerman Resources Limited

Effective Date: 31 August 2009

Qualified Person: Andrew Cunningham – MGSSA, BSc Hons (Geol.)
Neil Inwood – MAusIMM, BSc (Geol.), PGradDip (Geol), MSc (Geol)
Iain Macfarlane – MAusIMM, BSc Hons (App. Geol.)

Bannerman Resources Ltd ABN **34 113 017 128**
Suite 18, Level 1, 513 Hay Street, Subiaco WA 6008, Australia

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Author(s):	Andrew Cunningham	Superintendent Geology Projects	MGSSA, BSc Hons (Geol.)
	Neil Inwood	Specialist Resource Geologist Coffey Mining	MAusIMM, BSc (Geol.), PGradDip (Geol.), MSc (Geol.)
	Iain Macfarlane	Senior Consultant Resources Coffey Mining	MAusIMM, BSc Hons (App. Geol.)

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[signed]
Primary Author
Andrew Cunningham

[signed]
Supervising Principal
Neil Inwood

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1 SUMMARY

Bannerman Resources Limited (Bannerman) is exploring for uranium mineralisation at its Etango Project which lies within the Welwitschia tenement (EPL 3345) in the Erongo Province of Namibia. The main uranium enriched zones in the Etango Project are the Anomaly A, Oshiveli and Onkelo Prospects; which were previously referred to as the Goanikontes area. These three prospects form a five kilometre long contiguous zone of uranium mineralisation.

This report summarises the work undertaken as part of the mineral resource estimation studies, reported in July 2009, on Bannerman's Etango Uranium Project in Namibia. Bannerman currently has assets in Namibia (the Etango and Swakop River licences) and Botswana (the Dukwe, Serule North and Serule South licences). Based upon the demonstrated potential of the Etango Project in Namibia, the other projects at Swakop River and in Botswana are currently not material assets of Bannerman (the Company) and only brief comments are provided on these projects.

The Etango Project currently represents the most significant asset for Bannerman due to the advanced nature of exploration and the identified mineral resources at the Anomaly A, Oshiveli and Onkelo deposits therein. Bannerman is currently continuing with uranium exploration within this Project area and has commenced a preliminary feasibility study into the viability of a mining and processing operation at the Etango Project. References made to the mineral resource or the Etango mineral resource in this report include the Anomaly A, Oshiveli and Onkelo mineral resources.

In July 2009, Coffey Mining estimated an updated resource for the combined Anomaly A, Oshiveli and Onkelo deposits which included 3.8Mt at 240ppm U_3O_8 of Measured Mineral Resources, 231.2Mt at 207ppm U_3O_8 of Indicated Mineral Resources and 120.7Mt at 197ppm U_3O_8 of Inferred Mineral Resources, reported above a 100ppm U_3O_8 lower cutoff.

Other areas within the tenement (EPL 3345), in the vicinity of the Etango Project, also have the potential to host additional uranium resources; especially in the southern portions of the lease where there is soil and colluvium cover and where Bannerman is about to commence exploration drilling activities. The western flank of the Palmenhorst Dome, which incorporates the Anomaly A, Oshiveli and Onkelo deposits, constitutes a prospective strike length of over 10km.

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2 INTRODUCTION AND TERMS OF REFERENCE

2.1 Scope of Work

In June 2009, Coffey Mining Pty Ltd (Coffey Mining) was requested by Bannerman to update the resource estimate for the Etango Uranium Project which incorporates the Anomaly A, Oshiveli and Onkelo uranium deposits and prepare an Independent Resource Update.

Coffey Mining has previously prepared an Independent Technical Report (ITR) on Bannerman's Namibian operations in 2007 and prepared updated resource and ITRs in January and September 2008 and February 2009.

Bannerman currently has assets in Namibia (the Etango and Swakop River licences) and Botswana (the Dukwe, Serule North and Serule South licences).

Based upon the demonstrated potential of the Etango Uranium Project, located on the Etango (previously called Welwitschia) licence in Namibia, the other projects at Swakop River and in Botswana are currently not considered to be significant material assets of the Company and only brief comments are provided on these projects.

This report is intended to comply with disclosure and reporting requirements set forth in the Toronto Stock Exchange Manual, National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

This report complies with Canadian National Instrument 43-101, for the 'Standards of Disclosure for Mineral Projects' of December 2005 (the Instrument) and the resource and reserve classifications adopted by CIM Council in November 2004. The report is also consistent with the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' of December 2004 (the Code) as prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Furthermore, this report has been prepared in accordance with the 'Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports' of 2005 (the Valmin Code) as adopted by the Australasian Institute of Mining and Metallurgy (AusIMM). The satisfaction of requirements under both the JORC and Valmin Codes is binding on the authors as Members of the Australasian Institute of Mining and Metallurgy and the Geological Society of South Africa.

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2.2 Principal Sources of Information

Information used in this report has been gathered from a variety of sources including:

- Information from the Primary Author (Mr Andrew Cunningham) who is a full time employee of the Company, and his knowledge of internal procedures and processes obtained by working for the Company.
- Field observations, reports and data obtained during field trips in 2007 & 2008 by Mr Inwood and other Coffey Mining personnel.
- Information provided by Bannerman and extensive discussions with Bannerman's exploration crews.
- Various published historic, technical and scientific papers and reports.
- Digital exploration and resource modelling data.
- Published information relevant to the Project area and the region in general.

The various sections of the report have been internally reviewed to identify any material errors or omissions prior to lodgement.

A full listing of the principal sources of information is included in Section 21 of this document.

2.3 Participants

Bannerman Resources Ltd was responsible for preparation of all portions of this report apart from Sections 14.2, 14.3, 17 and 20.1 and the associated text in the summary, conclusions and discussion. Sections 14.2, 14.3, 17 and 20.1 were prepared by Coffey Mining.

The following personnel took part in the study:

- Mr Andrew Cunningham – Superintendent Geology Projects of Bannerman. Responsible for preparation of all portions of this report and responsible for all Sections apart from Sections 14.2, 14.3, 17, 20.1 and the associated text in the summary, conclusions and recommendations.
- Mr Neil Inwood – Specialist Resource Geologist of Coffey Mining. Responsible for Sections 14.3, 17, 20.1 and the associated text in the summary, conclusions and recommendations.
- Mr Iain Macfarlane – Senior Resource Geologist of Coffey Mining. Responsible for portions of Section 17 (dealing with Onkelo), 20.1 and the associated text in the summary, conclusions and recommendations

2.4 Site Visit

Mr Andrew Cunningham is a full time employee of Bannerman and has worked at the Etango Project property and surrounding areas since October 2007. During this period he has preformed various geological duties as required by his position including lengthy periods as acting project manager on site in Namibia.

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Site visits to the Etango and Swakop River Projects were undertaken by Mr Neil Inwood and other representatives of Coffey Mining, between 21st and 23rd August 2007, during which period they reviewed the data collection procedures and geology, mining, processing, environmental and waste disposal aspects of the Projects, and again by Mr Inwood between April 21st and 25th 2008.

2.5 Qualifications and Experience

The primary author of this report is Mr Andrew Cunningham, a professional geologist with 10 years' experience in exploration, mining and resource geology in Africa. Mr Andrew Cunningham is a member of the Geological Society of South Africa, and has the appropriate relevant qualifications, experience and independence to be generally considered a Qualified Person as defined in Canadian National Instrument 43-101. He has, however, less than five years direct experience in uranium geology and uranium exploration.

Coffey Mining is an integrated Australian-based consulting firm, which has been providing services and advice to the international mineral industry and financial institutions since 1987. In September 2006, Coffey International Limited acquired RSG Global. Coffey International Limited is a highly respected Australian-based international consulting firm specialising in the areas of geotechnical engineering, hydrogeology, hydrology, tailings disposal, environmental science and social and physical infrastructure.

The author of the resources section of this report (Section 17) is Mr Neil Inwood, a professional geologist with 15 years' experience in mining and resource geology in Australia, Canada, USA, Europe and Asia. Mr Inwood is a member of the Australasian Institute of Mining and Metallurgy (AusIMM), and has the appropriate relevant qualifications, experience and independence to be generally considered a Qualified Person as defined in Canadian National Instrument 43-101, however he has less than five years direct experience in uranium geology and uranium exploration.

Mr Iain Macfarlane, a professional geologist with more than 20 years experience in mining and resource geology in Australia, USA, Europe and Asia, contributed to the resource estimation process. Mr Macfarlane is a member of the AusIMM, and, with the appropriate relevant qualifications, experience and independence, is generally considered a Qualified Person as defined in Canadian National Instrument 43-101. Mr Macfarlane, has, however, less than five years direct experience in uranium geology and uranium exploration.

2.6 Independence

The updates to this report were co-ordinated and written by Mr Andrew Cunningham, an employee of Bannerman. Mr Cunningham is not considered independent as outlined under Section 1.4 of the Instrument.

Neither Coffey Mining nor Messrs Inwood and Macfarlane, have any material interest in Bannerman or related entities or interests. Their relationship with Bannerman is solely one of professional association between client and independent consultant. The sections of this report for which they are responsible was prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of the relevant sections.

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2.7 Abbreviations

All monetary amounts expressed in this report are in United States of America dollars (US$) unless otherwise stated. The current exchange rate from US$ to Namibian dollars (N$) is 7.96. Quantities are generally stated in SI (International System of Units) metric units, including metric tons (tonnes, t), kilograms (kg) or grams (g) for weight; kilometres (km), metres (m), centimetres (cm) and millimetres (mm) for distance; square kilometres (km²) or hectares (ha) for area; and parts per million (ppm) for uranium oxide grade (ppm U_3O_8).

A listing of abbreviations used in this report is provided in Table 2.7_1 below.

Table 2.7_1
Etango Project
List of Abbreviations

	Description		Description
$	United States of America dollars	Mg	Magnesium
“	inches	ml	millilitre
µ	microns	mm	millimetres
3D	three dimensional	Mtpa	million tonnes per annum
AAS	atomic absorption spectrometry	N (Y)	northing
bcm	bank cubic metres	Ni	nickel
CC	correlation coefficient	NPV	net present value
cm	centimetre	NQ_2	size of diamond drill rod/bit/core
cps	Counts per second	ºC	degrees centigrade
CV	coefficient of variation	OK	Ordinary Kriging
DDH	diamond drillhole	Pd	palladium
DTM	digital terrain model	ppb	parts per billion
EPL	Exclusive Prospecting Licence	ppm	parts per million
g	gram	psi	pounds per square inch
g/m³	grams per cubic metre	PVC	poly vinyl chloride
g/t	grams per tonne	QC	quality control
HARD	half the absolute relative difference	QQ	quantile-quantile
HDPE	high density poly ethylene	RAB	Rotary Air Blast
NQ	size of diamond drill rod/bit/core	RC	reverse circulation
hr	hours	RL (Z)	reduced level
HRD	half relative difference	RQD	rock quality designation
ISO	International Standards Organisation	SD	standard deviation
kg	kilogram	SG	Specific gravity
kg/t	kilogram per tonne	Si	silica
km	kilometres	SMU	selective mining unit
km²	square kilometres	t	tonnes
kW	kilowatts	t/m³	tonnes per cubic metre
kWhr/t	kilowatt hours per tonne	tpa	tonnes per annum
l/hr/m²	litres per hour per square metre	U	Uranium
M	million	U_3O_8	Uranium Oxide
m	metres	w:o	waste to ore ratio
Ma	million years		

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3 RELIANCE ON OTHER EXPERTS

The authors of this report are not qualified to provide extensive comment on legal issues associated with the Etango Uranium Project and other Projects discussed in this report.

Similarly, the authors of this report are not qualified to provide extensive comment on metallurgical, hydrological, environmental or financial issues associated with the Etango Uranium Project and other Projects referred to in this report. The assessment of these aspects has relied heavily on information provided and prepared by other independent consultants such as Independent Metallurgical Operations (IMO), Coffey Mining and A. Speiser Environmental Consultants and copies of government approval documents (Lindeque, 2006 and Permanent Secretary, 2006).

The responsible Qualified Persons for the estimation of Mineral Resources are Neil Inwood and Iain Macfarlane of Coffey Mining. Mr Inwood's and Iain Macfarlane's Certificates for the Estimation of Mineral Resources is included in this report (Appendix 3).

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4 PROPERTY DESCRIPTION AND LOCATION

4.1 Introduction

4.1.1 Namibian Projects

Bannerman, through a Namibian-registered subsidiary company, holds 80% of two exclusive prospecting licences within the central Swakopmund district of Namibia, which hosts the world's largest open cut uranium mine at Rössing (majority owned by Rio Tinto), and Paladin Resources Limited's Langer Heinrich uranium project.

The Etango Uranium Project contains a number of identified uranium prospects and uranium anomalies. The Anomaly A, Oshiveli, Onkelo (historically referred to as Rabbit Valley) and Rössingberg Anomalies are identified in historic reports and papers, dating from the 1970's. The Etango Project is based around the main three of the identified prospects (Anomaly A, Oshiveli and Onkelo). The Etango Project contains alaskite hosted mineralisation similar to the significant Rössing open cut uranium mine, located 20km to the northeast, and is the subject of the current report.

The Swakop River Exclusive Prospecting Licence surrounds Paladin Resources Ltd's Langer Heinrich uranium mine, which contains an extensive palaeochannel with carnotite mineralisation in calcrete and channel sediments. Limited exploration drilling has been completed, targeting similar uranium mineralisation, within the Swakop River lease. Swakop River is not currently considered to be a material asset of Bannerman and will be commented on only briefly.

4.1.2 Botswana Projects

Bannerman also holds three Prospecting Licences for uranium, precious metals, base metals and platinum group minerals in Botswana. These licences are referred to as the Serule South, Serule North and Dukwe Licences and are located in the Foley and Sua Pan regions in Botswana. These tenements total 1,153.9km² in area. Bannerman's Botswana licences are not currently considered to be material assets of Bannerman and will not be commented on further.

4.2 Background Information on Namibia

Namibia is a stable, independent republic with a total surface area of 825,418km², situated north of South Africa, west of Botswana and south of Angola. It is bordered to the west by the Atlantic Ocean (Figure 4.2_1). Namibia forms part of the Southern African Region. The following description is based largely upon information from the World Fact Book (The World Fact Book, 2007).

Figure 4.2_1
Etango Uranium Project
Geography of Namibia

Namibia gained independence from South African mandate on 21 March 1990 following multi-party elections and the establishment of a constitution. This independence was the outcome of a war fought by the South West Africa People's Organisation ('SWAPO'), against South African rule, that commenced in 1966 and a United Nations peace plan for the region that was agreed in 1988. The inaugural President Sam Nujoma served for the first three terms (14 years) and was then succeeded by the current President Hifikepunye Pohamba, in March 2005 following a peaceful election. Namibia was the first country in the world to incorporate the protection of the environment into its constitution.

The capital city of Windhoek has a population of 230,000 and is located in the Khomas Region in the centre of the country. The largest harbour is located at Walvis Bay, on the central west coast, south of Swakopmund. The country is mostly arid or semi-arid, comprising a high inland plateau bordered by the Namib Desert along the coast and the Kalahari Desert to the east.

The population comprises approximately 87.5% indigenous people, 6% people of European descent and 6.5% of mixed origin. About 50% of the population belong to the Ovambo tribe and 9% to the Kavangos tribe. Other ethnic groups include the Herero (7%), Damara (7%), Nama (5%), Caprivian (4%), Bushmen (3%), Baster (2%) and Tswana (0.5%).

The official language is English; however Afrikaans is the common language for most of the population and German is spoken by one-third of the population. Various indigenous languages are also spoken, including Oshivambo, Herero and Nama. According to World Bank standards, 84% of the population is literate.

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The economy is heavily dependent on the extraction and processing of minerals for export. Mining accounts for approximately 25% of GDP. Major operating metalliferous mines are present at Rössing (uranium), Skorpion (zinc), and Navachab (gold). Namibia also has an important traditional subsistence agricultural sector.

Namibia is serviced by a network of sealed highways connecting Windhoek in the central plateau region of Namibia with the coast at Walvis Bay, and with Botswana, Angola and South Africa. Generally unsealed but well-maintained access roads provide regional access throughout Namibia and power is available via an extensive regional electricity grid originating in South Africa. A railway line also extends from the port of Walvis Bay to Tsumeb, where a copper smelter is in operation. Mobile phone communication is well established near most population centres.

Water is potentially available to the various projects via underground resources within the major river systems, or can be supplied by pipeline from the coast. The Government water authority, NamWater, provides assistance in the development of water resources for existing and potential new users.

Areas within the Namib-Naukluft National Park, which includes the Etango and Swakop River Projects are granted for exploration, subject to appropriate environmental commitments.

4.3 Mineral Tenure

In Namibia, all mineral rights are vested in the State. The Minerals (Prospecting and Mining) Act of 1992 regulates the mining industry in the country. The Act has been designed to facilitate and encourage the private sector to evaluate and develop mineral resources. The Mining Rights and Mineral Resources Division in the Directorate of Mining is usually the first contact for investors, as it handles all applications for and allocation of mineral rights in Namibia.

An individual Exclusive Prospecting Licence (EPL) can cover an area of up to 1,000km² and the specific mineral group being explored for must be stated. According to Section 140 of the Minerals (Prospecting and Mining) Act, 1992A, Part 5, uranium mineralisation is classified under the nuclear fuel minerals group. This is defined as any 'source material containing - (a) uranium, expressed as uranium oxide (U_3O_8), of more than 0.006 per cent; (b) thorium, expressed as thorium oxide (ThO_2), of more than 0.5 per cent, and of which the mass is more than a half kilogram'.

An EPL is valid for an initial term of three years, with two renewals of two years each. The size of the EPL should be reduced after three years and the size of the reduction is at the discretion of the Mining Commissioner. There may be scope, if the Commissioner sees reason, to waive the reduction of the size of the EPL's after the initial three year period of the licences. There is currently no set reduction size and an approved Mining Licence may count as a reduction in size of the EPL.

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Section 67 of the Minerals (Prospecting and Mining) Act, 1992A details the rights of the holder of an EPL. These include entitlement to carry out prospecting (in respect of the mineral group specified in the licence) and to remove mineral samples (except for sale or disposal and other than controlled minerals).

Other licence types include:

- Non-Exclusive Prospecting Licence ('NEPL') – Which are valid for 12 months and permit non-exclusive prospecting on any open ground which is not restricted by other mineral groups.
- Reconnaissance Licences ('RL') – Which allow remote sensing techniques and are valid for 6 months.
- Mineral Deposit Retention Licences ('MDRL') – Which allow the prospector to retain rights to mineral deposits that are uneconomic to exploit immediately, for future mining operations. These are valid for up to 5 years and can be renewed subject to work and expenditure obligations for up to two years at a time.
- Mining Licences ('ML') – Which allow the applicant to carry on mining operations. These can be awarded to accredited agents, companies registered in Namibia or any Namibian citizen. These are valid for life of the mine, or an initial period of up to 25 years, and are renewable for successive periods of up to 15 years.

Granting of licences is determined by a committee and granting is based on the committee's perception as to the ability and intention of the applicant to complete exploration as outlined in the application and the validity of the proposed programme to determine resources. Each licence must outline commodities of interest (in this case "Nuclear Fuels" covers uranium) and the licence granted only pertains to these commodities. Therefore, overlapping licences for differing commodities may coexist. Licences may list multiple commodity categories. Grant determination takes between three to six months from the time of application.

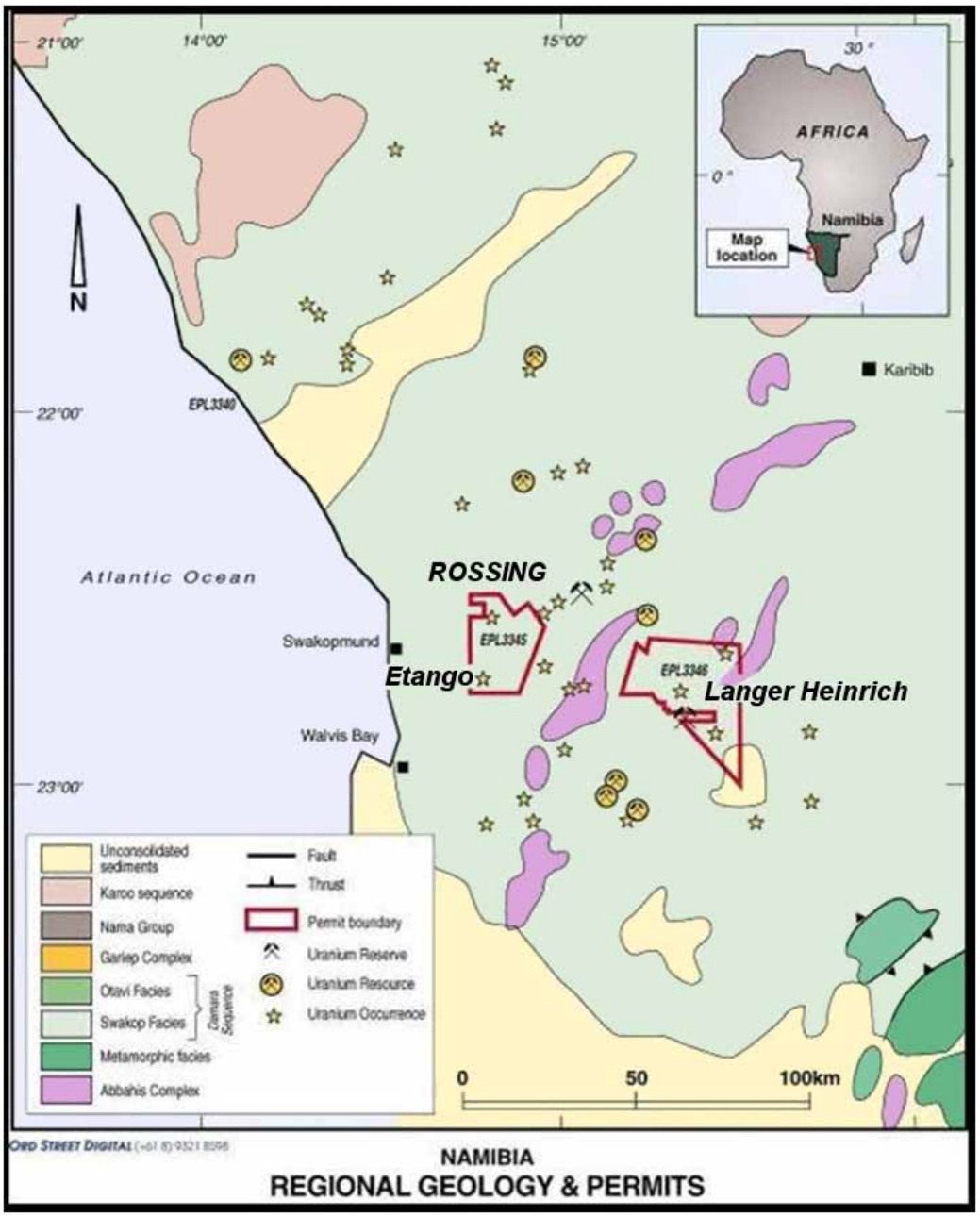
An environmental contract must be completed with the Department of Environment and Tourism by applicants for EPL's, MDRL's and ML's. Environmental impact assessments (where relevant) must be made with respect to land disturbance, protection of flora and fauna, water supply, drainage and waste water disposal, air pollution and dust generation.

4.4 Project Location

4.4.1 The Etango Project Area (EPL 3345)

The main focus of the Etango Uranium Project (formerly named Goanikontes) comprises the Anomaly A, Oshiveli and Onkelo Prospects, located approximately 41km (by road) east of the major town of Swakopmund and 47km northeast of the port town of Walvis Bay (Figure 4.4.1_1).

Figure 4.4.1_1
Etango Project
Namibian Project Locations and Regional Geology



The sealed C14 highway connects Swakopmund to the port at Walvis Bay and the sealed B2 highway connects Swakopmund to the Capital at Windhoek. Access to the Etango Project, from Swakopmund, is gained via the B2 highway and then the partially sealed/unsealed C28 road, then by well maintained unsealed road on the D1991 into the Namib-Naukluft National Park area. The unsealed Welwitschia Drive then provides access to the project area.

The Etango Uranium Project is situated on the flat Namib Desert sands of the Namib peneplain and approximately 5km south of the Swakop River. To the north of the peneplain, erosion associated with the Swakop River has resulted in deeply incised gullies.

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4.4.2 Swakop River Project Area (EPL 3346)

The Swakop River project area (Figure 4.4.1_1) is located approximately 67km east of Swakopmund. Access is gained by the sealed and unsealed C28 road, then by unsealed road into the Namib-Naukluft National Park area.

The Swakop River project area is not currently considered to be a material asset of Bannerman and will not be discussed in any detail in the remainder of this document.

4.5 Tenement Status

4.5.1 Licences

The Etango Project EPL 3345 and Swakop River EPL 3346 (Figure 4.4.1_1) are owned by the Namibian company Bannerman Mining Resources (Namibia) (Pty) Ltd, previously called Turgi Investments (Pty) Ltd, which manages these Projects. Bannerman owns 80% of Bannerman Mining Resources (Namibia) (Pty) Ltd, while the remaining 20% is held in the name of Mr C. Jones of Perth, Australia.

EPL 3345 was granted to Turgi Investments (Pty) Ltd, now Bannerman Mining Resources (Namibia) (Pty) Ltd, on 27 April 2006 for an initial three year period to explore for Nuclear Fuels. The renewal licence for EPL 3345 was granted on 26 April 2009 for an additional two years without any reduction in area. The Licence is 50,027.40ha in size and has an annual expenditure commitment of N$40,052,471 in the first year and N$37,683,021 for the second year.

EPL 3346 was also granted to Turgi Investments (Pty) Ltd on 27 April 2006 for an initial three year period to explore for Nuclear Fuels. The renewal application for EPL 3346 was submitted to the Ministry of Mines and Energy on 23 January 2009 and at the time of writing is still pending. The Licence is 81,281.50ha in size and has an annual expenditure commitment of N$5,691,008 for the first year and N$5,274,500 thereafter.

The tenement schedule is included as Table 4.5.1_1 and tenement co-ordinates as Table 4.5.1_2.

Table 4.5.1_1
Etango Project
Tenement Schedule

Tenement Type	Tenement No.	Grant Date	Holder	Area (ha)	Minimum Expenditure First Year (N$)	Minimum Expenditure Subsequent Years (N$)
EPL	3345	27.04.2006	Bannerman Mining Resources (Namibia) (Pty) Ltd	50,027.40	40,052,471	37,683,021
EPL	3346	27.04.2006	Bannerman Mining Resources (Namibia) (Pty) Ltd	81,281.50	5,691,008	5,274,500

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Table 4.5.1_2
Etango Project
Tenement Coordinate Summary

	Point	Latitude^	Longitude^
EPL 3345 (Etango) Licence Area - 50,027.40ha	1	-22.48348544	14.74460833
	2	-22.48456065	14.82168535
	3	-22.53843224	14.86469125
	4	-22.5082062	14.90590749
	5	-22.57367929	14.94763811
	6	-22.74980552	14.87922843
	7	-22.74935394	14.73545392
EPL 3346 (Swakop River) Licence Area - 81,281.50ha	1	-22.61710054	15.21121351
	2	-22.64138218	15.24063254
	3	-22.6077662	15.24682426
	4	-22.61745087	15.50036088
	5	-22.99988448	15.50006678
	6	-22.93333082	15.4499958
	7	-22.8252111	15.32554331
	8	-22.82496517	15.41903374
	9	-22.80253449	15.41892416
	10	-22.80248000	15.29736824
	11	-22.79460073	15.29709610
	12	-22.79453151	15.28736164
	13	-22.77647406	15.28736508
	14	-22.77660623	15.25061415
	15	-22.75034518	15.16668166

^ Latitude and Longitude are in Bessel 1841 Spheroid

On 17 December 2008, Bannerman announced that its Namibian subsidiary, Bannerman Mining Resources (Namibia) (Pty) Ltd (Bannerman Namibia), had entered into an agreement to settle the litigation previously brought by Savanna Marble CC (Savanna) and certain associated parties. Under the terms of the settlement agreement, Savanna agreed to discontinue its review application in the High Court of Namibia by which Savanna had sought a declaration that the grant by the Minister of Mines and Energy of Namibia of EPL 3345, on which the Etango Project is situated, was void. This settlement involves payments and the issue of shares to Savanna (as Bannerman has previously disclosed in public documents) and has removed the threat to Bannerman's title to the Etango Project.

4.6 Royalties and Agreements

4.6.1 Third Parties

Bannerman owns 80% of Bannerman Namibia, which in turn holds EPL 3345 and EPL 3346. The remaining 20% is owned by another party (see Section 4.5.1).

There are no other land holders over the area of the Anomaly A, Oshiveli and Onkelo Prospects (which contains Measured, Indicated and Inferred Mineral Resources), and as such no royalties or agreements are required. However, there are privately owned farms elsewhere within the area of EPL 3345.

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4.6.2 Government Royalties

According to Section 114, Part 1(c) of the Minerals (Prospecting and Mining) Act, 1992A, a royalty rate of 'not exceeding five per cent, as may be determined by the Minister from time to time by notice in the Gazette, of the market value, determined as provided in subsection (3), of such mineral or group of minerals' will be payable. Section 114, Part 3, defines the market value as:

a) determined in accordance with any term and condition, if any, of the licence of the holder concerned; or

b) if no such term and condition exists, determined in writing by the Minister, having regard to the value agreed between the holder in question and the person to whom such mineral or group of minerals was sold or disposed of in an at arm's length sale and prices which were in the opinion of the Minister at the time paid on international markets for such mineral or group of minerals, less any amounts deducted in respect of fees, charges or levies which are in the opinion of the Minister charged on international markets.

The mining royalty is currently stipulated by the Namibian Government to be 3% of revenue.

4.7 Environmental Liabilities

The southern portion of the Etango Project Area (EPL 3345) falls within the Namib-Naukluft National Park and the northern portion of the tenement falls within the West Coast Recreational Area.

According to Speiser (2006), activities in the licence area are covered by a number of acts, policies and bills. These include (amongst others):

- The Namibian Constitution – Article 95.
- The Minerals (Prospecting and Mining) Act, No 33 of 1992.
- The Environmental Assessment Policy, 1994.
- The Environmental Management Bill, 2004
- South African Legislation still in force since Namibian independence in 1990 – Specifically the Nature and Conservation Ordinance, No. 4 of 1975.
- The Policy for Prospecting and Mining in Protected Areas and National Monuments.

A detailed Environment Clearance and Environmental Management Plan ('EMP') was required to be submitted to the Ministry of Environment and Tourism ('MET') to meet the environmental licensing of the Project. The EMP was prepared by independent consultancy A. Speiser Environmental Consultants (ASEC) in July 2006 (Speiser, 2006). The plan included a detailed summary of potential environmental impacts and a list of the mitigation measures that would be taken for access and works on the licence area. A bi-annual environmental audit report is also required for the Project. The EMP was approved on 28th July 2006.

Bannerman understands that the relevant Ministries allow mining and exploration in the park areas and is unaware of any current regulations that may significantly restrict access to the Projects areas for exploration. It is important to note that other exploration and mining activities are currently underway within the Namib-Naukluft National Park by companies such as Extract Resources Limited (exploration activities) and Langer Heinrich Uranium Pty Ltd (uranium mining).

4.8 Permitting Status

The status of the EPLs is discussed in Section 4.5.1 and the EMP is discussed in Section 4.7. Other permits which are current include:

- Park Entry Permits – Ministry of Environment and Tourism (Etango and Swakop River Areas). Visitors to the Namib-Naukluft National Park are required to obtain a park entry permit. Bannerman has ongoing Park Entry Permits (one for each employee) which are updated on an annual basis.
- Water Abstraction Permit – Ministry of Agriculture, Water and Forestry (Swakop River Area). Allows for the extraction of water from an existing borehole for mineral exploration on EPL 3346. This permit is valid until 15th September 2011 (Permanent Secretary, 2006).

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5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Project Access

The Etango Project is located approximately 31 kilometres east of the major town of Swakopmund and 47 kilometres northeast of the port town of Walvis Bay (Figure 4.2_1). Year round access to the Project area is gained by the sealed and unsealed C28 road from Swakopmund, then by well maintained unsealed road on the D1991 into the Namib-Naukluft National Park area.

5.2 Physiography and Climate

The Project area is located in the western region of the Namib Desert. The bulk of the project area lies on the Namib Peneplain where there is poor soil development over eluvial, colluvial and alluvial material, and bedrock. Due to the very low rainfall, these soils have gypsum crusts over large areas and vegetation in the area is very sparse, often consisting of lichen, low bushes or shrubs.

The area of the Etango deposit is generally flat (Figure 5.2_1) with occasional low undulating hills with sparse sub-crop of bedrock. Remnant shallow drainage channels in the desert can also be seen around the Project area. The region around the Swakop River is characterised by deep gully erosion and exposure of outcrops of the underlying rock sequences. There is good access to the areas of the desert plains and the Etango deposit, whilst access to areas of the river valleys can be difficult.

Figure 5.2_1
Etango Uranium Project
Drilling in The Namib Desert at Anomaly A

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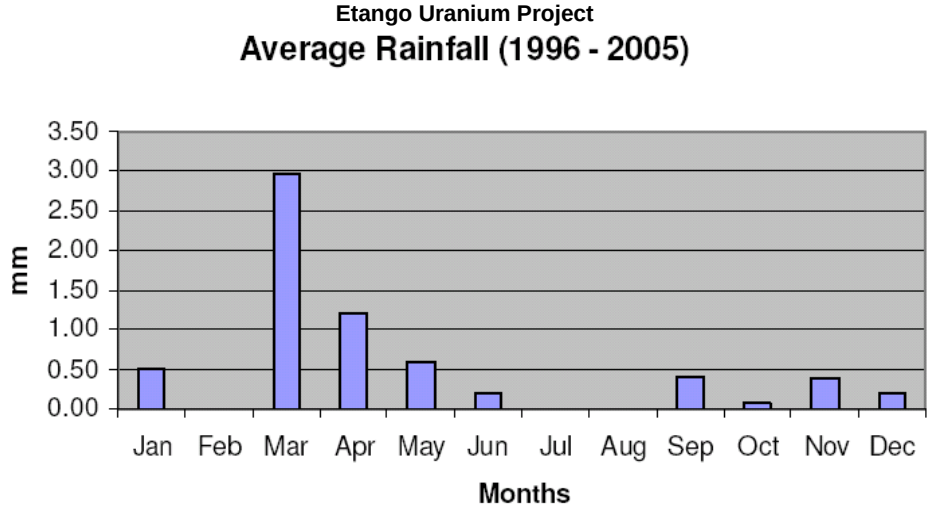
Rainfall in the area is very sporadic. The highest annual rainfall in the last ten years occurred in March 2000 with 21.8mm of rainfall. Figure 5.2_2 summarises the average monthly rainfall for the years 1996 to 2005. The Project area also receives moisture from fogs which are caused when moist air which has been cooled by the Benguela oceanic current is blown on-shore. As a result of the moist air feeding off the Atlantic, the air along the coast line remains humid throughout the year (between 60% and >80% relative humidity). The nearby town of Walvis Bay experiences more than 125 fog days per year (Speiser, 2006).

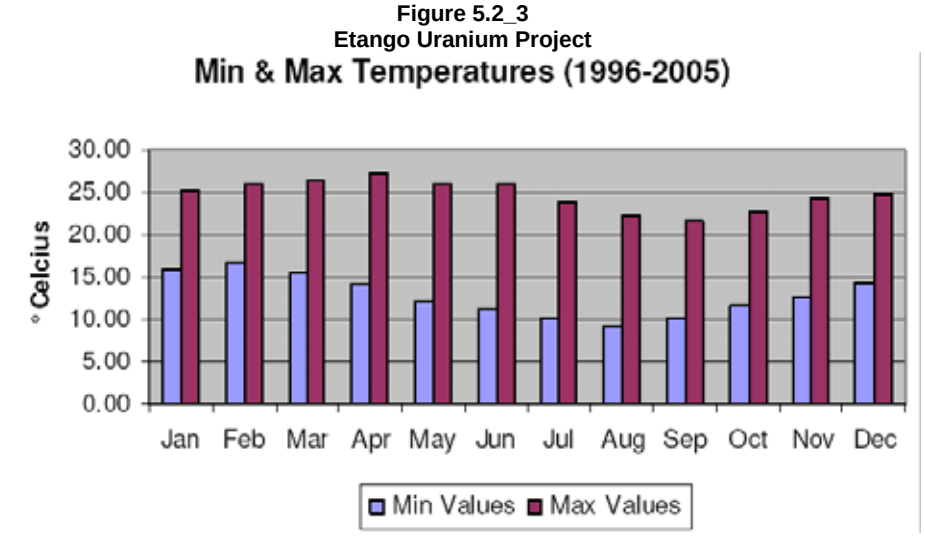
Figure 5.2_2
Etango Uranium Project



(Speiser, 2006)

The Namib Desert region does not experience the extremes of temperatures that are typical to most other deserts, due to the presence of the cold current offshore. However, the temperature can peak at over 40ºC in the summer months, while in the coldest month of August, the minimum can fall to 9ºC (Figure 5.2_3). The hottest month on average is April with an average maximum temperature of 27ºC (Speiser, 2006).

Figure 5.2_3
Etango Uranium Project



(Speiser, 2006)

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5.3 Local Infrastructure and Services

The town of Swakopmund (31km west of the Project area) has excellent services and infrastructure, with a population of approximately 28,000 people. Services include financial, shopping, construction, trades and medical support. The port city of Walvis Bay is located 30km south of Swakopmund along the sealed C14 highway. Locally trained technical and non-technical personnel are employed from Windhoek and Swakopmund, while expatriate workers in the area typically reside in Swakopmund. Bannerman has an office and storage complex in Swakopmund which it uses as a base for the Etango Uranium Project. Most other mining and exploration companies in the area also utilise Swakopmund as the base for their operations.

Drilling services and water for the drilling are supplied by a local drilling contractor (Metzger Drilling) which owns the nearby Weitzenberg and Goanikonties Farms on the Swakop River. The national water utility, NamWater, has discussed plans with several mining companies to install a desalination plant to supply water for industrial purposes.

Power lines are located near the Project area and the national power utility, NamPower, has plans to increase power supplies to the region to cope with expected future demand. These plans include installation of the Caprivi Link Interconnector which will allow access to the electricity networks of Zambia, Zimbabwe, the Democratic Republic of the Congo and Mozambique.

Figure 5.3_1
Etango Project
Municipality Building In Swakopmund

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6 PROJECT HISTORY

The area of EPL 3345 has been the target of significant previous exploration which included both ground work (traverses and drilling) and aerial and ground based geophysical investigations.

While uranium mineralisation was first discovered in the Central Zone of the Damara Orogen in the early 1900s, there was no further exploration in the area until the 1950s. In the 1960s, Rio Tinto South Africa commenced an extensive exploration programme in the area; and a regional airborne radiometric survey and subsequent detailed spectrometer-magnetometer survey were conducted by the South West African Geological Survey in the 1970s.

A broad uranium anomaly along the western flank of the Palmenhorst Dome was identified and this was followed up by an initial exploration programme in 1975. From 1976 to 1978, Omitara Mines (a joint venture between Elf Aquitaine SWA and B & O Minerals) (Omitara) completed extensive reconnaissance drilling along the western Palmenhorst Dome position, with much of the work in the Anomaly A area.

A dramatic decrease in the price of uranium in the 1980s resulted in exploration for uranium all but ceasing in the area (Mouillac et al, 1986) until 2005.

In 2005 Turgi Investments (Pty) Ltd (Turgi) applied for and was granted the titles for uranium minerals over Licences 3345 and 3346. The area around the Anomaly A, Oshiveli and Onkelo deposits was identified as being prospective, due to the earlier work completed, including a non-JORC resource reported for the area by Mouillac et al (1986). Turgi later became Bannerman Mining Resources (Namibia) (Pty) Ltd which is 80% owned by Bannerman Resources Ltd.

After acquiring its interest in the Welwitschia lease (EPL 3345) in 2006, Bannerman undertook a process of capturing and digitising the historic drillhole, geological mapping and ground geophysical data that was obtained from the Namibian Geological Survey and the Geological Survey of South Africa. Airborne radiometric and geophysical data was purchased from the government and reprocessed for uranium, identifying anomalous trends along the western flank of the Palmenhorst Dome. This dataset was part of the Erongo survey derived from an airborne survey conducted by World Geoscience in 1994/1995.

Bannerman also sourced a high resolution Quickbird LandSat image that covers the region of EPL 3345. A detailed mapping programme was then completed along the western and eastern flanks of the Palmenhorst Dome. An extensive programme of reverse circulation (RC) and diamond drilling has since been completed at the Etango Uranium Project. The main focus for this exploration has been to drill out and develop the Anomaly A, Oshiveli and Onkelo uranium prospects (in the previously explored Goanikontes area) and to determine continuity of mineralisation along strike, at depth and to the west of the Palmenhorst Dome. The drilling completed is discussed in more detail in Section 11.2.

In April 2007, Bannerman estimated a maiden Inferred Resource of 56Mt at 219ppm U_3O_8 above a 100ppm U_3O_8 lower cutoff (Inwood, 2007). Subsequent resource estimation studies were completed in January and September 2008 and February 2009 (Inwood, 2009). These estimates have now been superseded by the current resource estimation study.

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7 GEOLOGICAL SETTING

7.1 Introduction

Primary uranium mineralisation in the Etango Project area is related to uraniferous leucogranites, locally referred to as alaskites. The alaskites are often sheet-like, and occur both as cross-cutting dykes and as bedding and/or foliation-parallel sills. The sheet-like alaskites often amalgamate to form larger, composite granite plutons or granite stockworks, made up of closely-spaced dykes and sills. These alaskite intrusions can be in the form of thin cm-wide stringers or thick bodies up to 200m in width.

The alaskite bodies have intruded into the metasediments of the Nosib and Swakop Groups of the Damara Supergroup. These metasediments and alaskite intrusions flank the Mesoproterozoic (1.7 - 2.0Ga) Palmenhorst Dome which is cored by partial melts of the Abbabis Metamorphic Complex.

Six episodes or stages of Alaskite intrusions, from A (earliest) to F (last), have been recognised and classified by Nex, et al. (2001) of which the D and E types are significantly uranium mineralised, and form the bulk of the intrusions in the Project area.

7.2 Regional Geology

The Neoproterozoic (pre-550Ma) to early Palaeozoic (post 550Ma) Damara Orogen consists of a north-trending coastal branch, and a northeast-trending intracontinental branch which runs from Walvis Bay, through Namibia towards Botswana and Zimbabwe (Figure 7.2_1). In Namibia the Damara Orogen has been interpreted as a result of the collision between the Congo, Kalahari and Rio de la Plata Cratons around 550-500Ma.

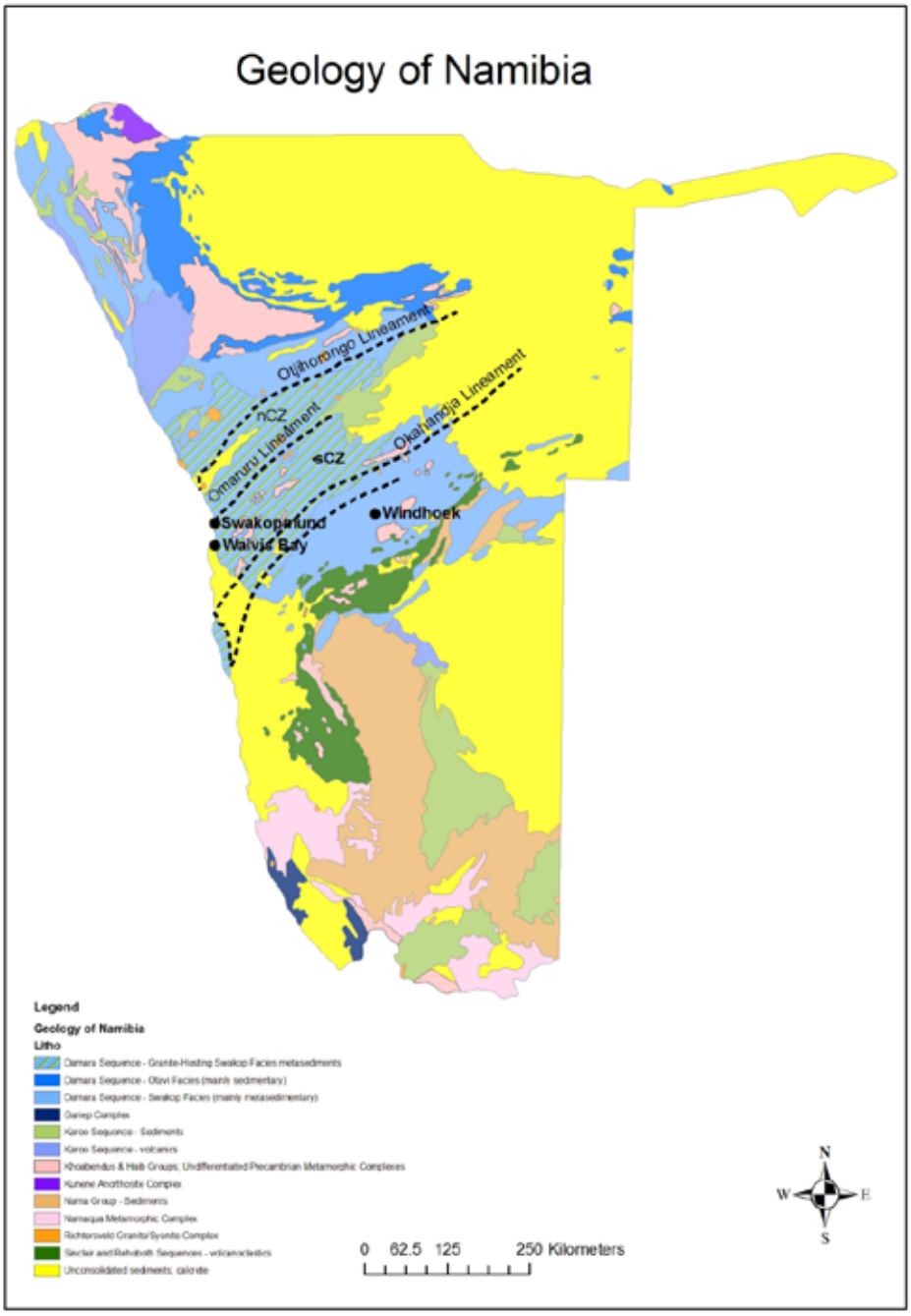
Nex, 1997, suggests that events that led to the formation of the Damara Orogenic Belt can be summarised as follows:

The pre-Gondwanaland continent rifted and the segments parted, accompanied by minor volcanic activity. Fluvial material was deposited within the rift valley and, as the basin deepened, sedimentation evolved to include marine and carbonaceous sediments, marine or terrestrial glacial deposits, and argillaceous marine sedimentation.

The tectonic regime then changed from divergence to convergence, including subduction, with the onset of a major orogenic event, including polyphase deformation and associated metamorphism and igneous activity.

The 400km-wide inland branch of the Damara Orogenic Belt, between the Congo and Kalahari Cratons, is divided into a number of zones (Miller, 1983) based on lithostratigraphic, structural and metamorphic criteria.

Figure 7.2_1
Etango Project
Simplified Geology of Namibia



The Central Zone (indicated in Figure 7.2_1 as the North Central zone (nCZ) and the South Central Zone (sCZ)) contains voluminous granites and gneisses, including basement Abbabis augen gneiss, synmetamorphic red granite, the Salem granite suites and late to post-kinematic intrusions such as the Donkerhuk Granite (Basson & Greenway, 2004). Domal structures are relatively widespread within the southern Central Zone (sCZ) and the Rössing, Palmenhorst and Ida Domes host notable uranium-enriched, sheeted leucogranites known as alaskites. This zone is characterized by elongate basement-cored domes, abundant granitoid

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intrusions and a metasedimentary cover sequence which has been metamorphosed at high temperature and low pressure to upper amphibolite–granulite facies (Miller, 1983 & Nex, et al., 2002).

During the Damara Orogenic event, the metasedimentary cover was subjected to numerous phases of deformation, commencing with an early folding (F_1) which produced overturned and recumbent structures that were accompanied by thrusting and shearing. The second major deformation event (D_2) resulted in a prominent gneissosity (S_2) and lineation (L_2) which is close to parallel to the earlier S_1 and S_0 (bedding) layering. This gneissosity was then further deformed by a later D_3 deformation event which resulted in the elongate basement-cored domes which are characterized by constrictional fabrics. Uraniferous alaskite sills and bodies that wrap around the Palmenhorst Dome are confined to dilational sites in the D_2 high-strain zones, with the alaskite sills generally trending from north-northwest to north-northeast in strike and dipping to the west.

The stratigraphy of the Damara Sequence is divided into two major groups: the basal Nossib Group (comprising the Etusis and Khan Formations) and the upper Swakop Group (comprising the Rössing, Chuos, Karibib and Kuiseb Formations). The stratigraphy is summarised in Table 7.2_1 and for the Khan Formation is after Nex (1997); while the Rössing Formation is after Nash (1971). The Damara Orogen is underlain by the gneissic and migmatitic lithologies of the Abbabis Metamorphic Complex. A map of the region within and around EPL 3345 is shown in Figure 7.2_2.

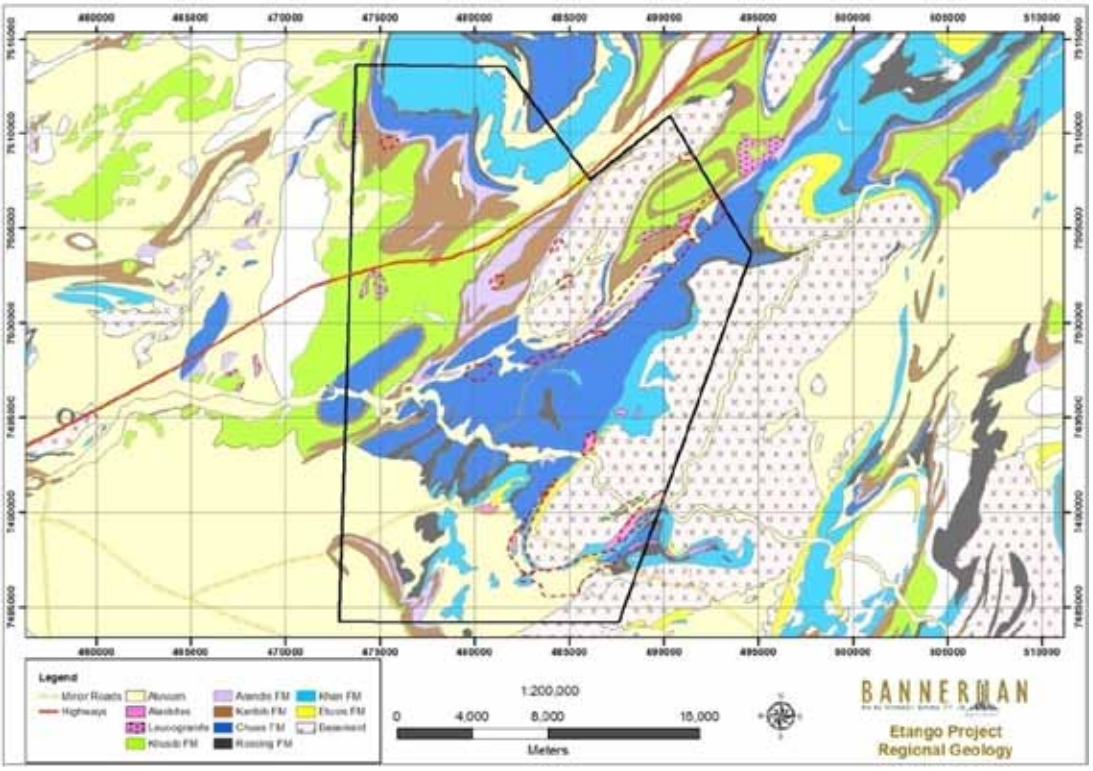
Table 7.2_1

Etango Project

Stratigraphic Column of the Damara Orogen (Roesener and Schreuder, 1997)

Group	Subgroup	Formation	Maximum Thickness	Lithology
Swakop	Khomas	Kuiseb	>3000	Pelitic and semi-pelitic schist and gneiss, migmatite, calc-silicate rock, quartzite. Tinkas member: Pelitic and semi-pelitic schist, calc-silicate rock, marble, para-amphibolite.
		Karibib	1000	Marble, calc-silicate rock, pelitic and semi-pelitic schist and gneiss, biotite amphibolite schist, quartz schist, migmatite.
		Chuos	700	Diamictite, calc-silicate rock, pebbly schist, quartzite, ferruginous quartzite, migmatite.
	Discordance			
	Ugab	Rössing	200	Marble, pelitic schist and gneiss, biotite-hornblende schist, migmatite, calc-silicate rock, quartzite, metaconglomerate.
	Discordance			
Nosib		Khan	1100	Migmatite, banded and mottled quartzo-feldspathic clinopyroxene-amphibolite gneiss, hornblende-biotite schist, biotite schist and gneiss, migmatite, pyroxene-garnet gneiss, amphibolite, quartzite, metaconglomerate.
		Etusis	3000	Quartzite, metaconglomerate, pelitic and semi-pelitic schist and gneiss, migmatite, quartzo-feldspathic clinopyroxene-amphibolite gneiss, calc-silicate rock, metaphyllite.
	Major unconformity			
	Abbabis Complex			Gneissic granite, augen gneiss, quartzo-feldspathic gneiss, pelitic schist and gneiss, migmatite, quartzite, marble, calc-silicate rock, amphibolite.

Figure 7.2_2
Etango Project
Geological Plan of the Etango Project Area



7.3 Project Geology

In the Etango Project, uranium occurrences are located along the western and eastern flanks of the Palmenhorst Dome (Figure 7.3_1). The Palmenhorst Dome consists of pre-Damara basement, with a core of reddish leucocratic gneiss (quartz, microcline and accessory plagioclase biotite) that is commonly referred to as the 'red granite gneiss'. The central gneiss is surrounded by migmatites and other basement rock types (Mouillac, et al., 1986).

Sedimentary rocks of the Etusis Formation occur on the edges of the dome and comprise of arkosic quartzite. The contact with the underlying units is transitional and migmatitic in nature. The upper boundary of the Etusis Formation is arbitrarily defined by the presence of dark biotite gneiss indicating the presence of the more pelitic Khan Formation (Mouillac, et al., 1986).

The Khan Formation can be subdivided into two units: the lower unit is characterised by dark grey biotite-amphibole-pyroxene schist and gneiss (with amphibolite and calc-silicate beds); while the upper unit is characterised by scattered quartz pebbles and is lighter in colour due to a higher quartz and feldspar content and a lower proportion of biotite, amphibole and pyroxene (Mouillac, et al., 1986).

The Rössing Formation is not prominent in the immediate Anomaly A/Oshiveli/Onkelo area. Where present, it has a restricted lateral extent and consists of alternating sequences of diopside marble, quartzite and biotite-garnet schist (Mouillac, et al., 1986).

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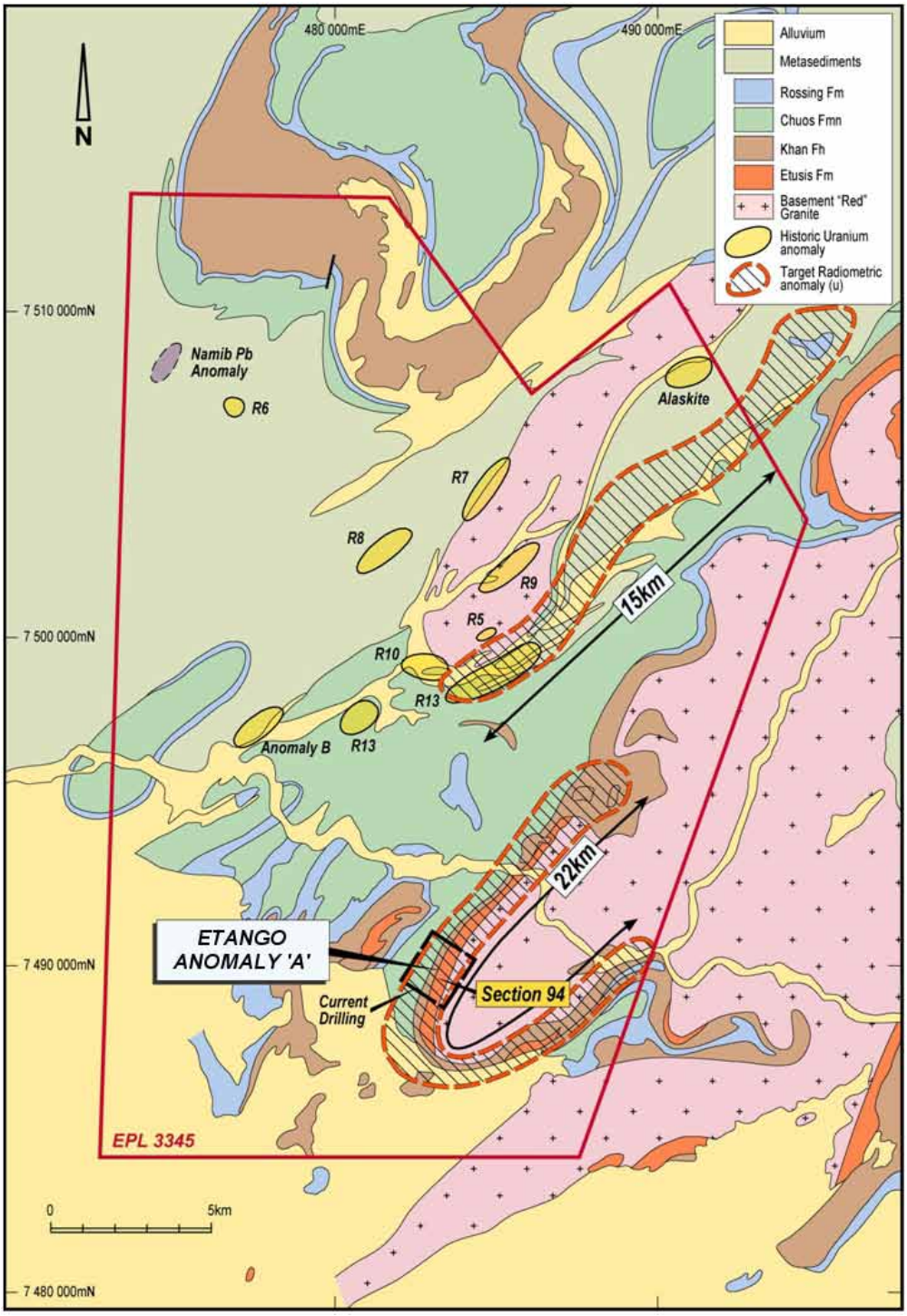
Figure 7.3_1
Etango Project
Local Geology of the Etango Project



The Chuos Formation is traditionally described as a tillite and consists of pebbles and boulders of variable size and composition in a brown pelitic matrix. The rocks have an aluminosilicate character and contain abundant biotite, sparse diopside and brownish green amphibole. The Karibib and Kuiseb Formations are not found near the Anomaly A/Oshiveli deposit (Mouillac, et al., 1986).

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A high-potassium, reddish granite referred to as the 'Red Granite' occurs between the migmatites and the Etusis Formation and as dykes and plugs in the Lower Khan Formation. This granite is a separate unit to the red granite gneiss found in the core of the dome (Mouillac, et al., 1986). Figure 7.3_2 shows the mapped distribution of alaskites along the western flank of the Red Granite gneiss.

The uraniferous sheeted leucogranite (SLG) bodies intrude a high strain zone between pre-Damaran basement and the Damara metasedimentary sequence. These bodies are generally referred to as alaskite, which is defined petrologically as a granitic rock that contains less than 5% mafic minerals (Mouillac, et al., 1986). Local variations in texture and mineral composition do occur and the composition can vary from alkali-feldspar granite to tonalite.

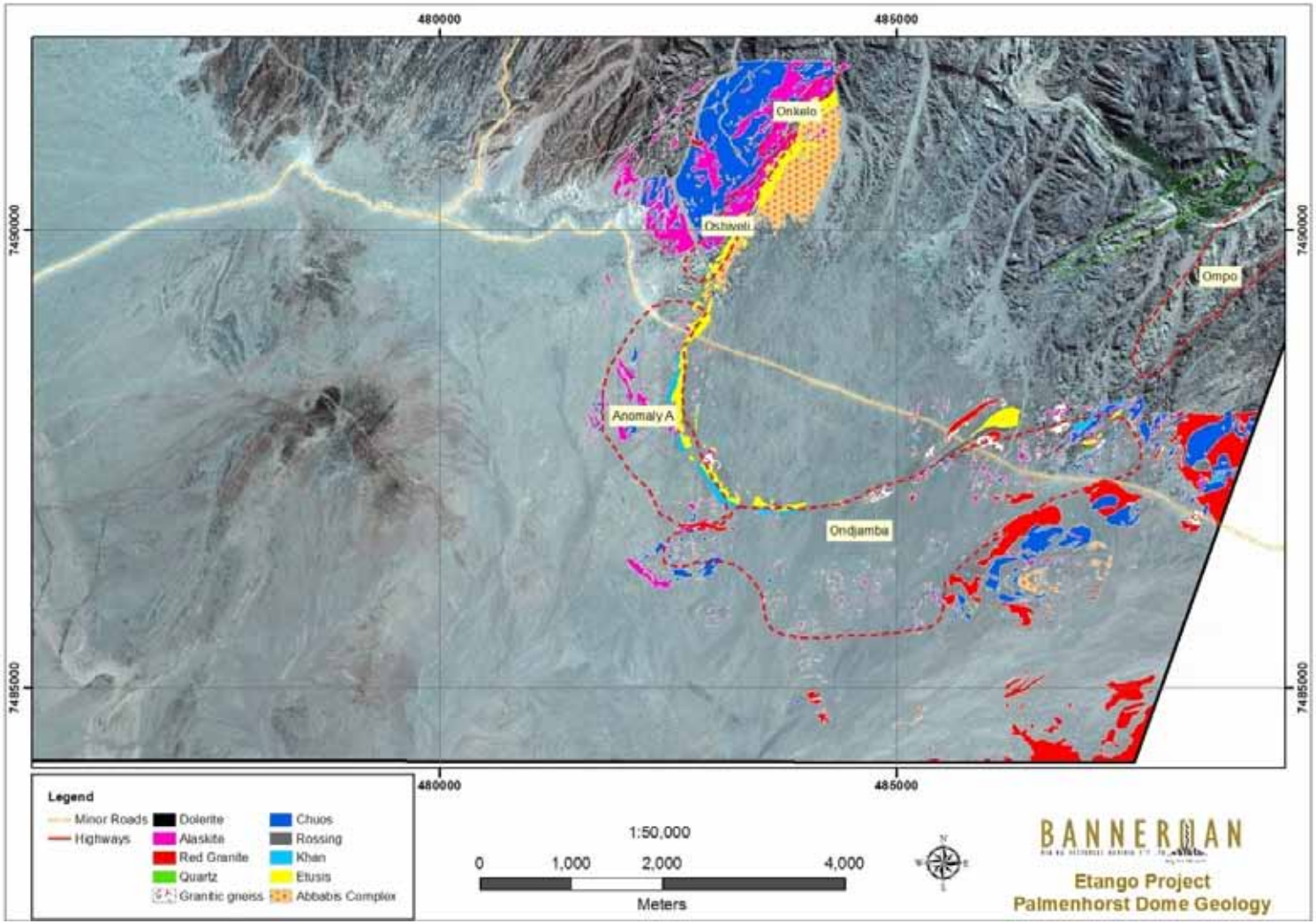
Nex, et al. (2001) classified the alaskite into six different types, based on field characteristics of colour, grain-size, structural setting and mineralogy, to which he also assigned a chronological order (from A to F). This type and chronological sequence is shown in Table 7.3_1.

Table 7.3_1
Etango Project
Field Classification of Sheeted Leucogranites
(Nex et al. 2001)

Type	Width (m)	Diagnostic Structural Features	Diagnostic Mineralogical Features
A, <20 cps	<0.75	Infrequent occurrence, irregular form, weak foliation, boundinaged and folded by D_3, only occurs within the high strain zone.	Pale pink, fine-medium grain size, homogeneous saccharoidal texture, weak foliation.
B, <20 cps	1-4	Common outside the high strain zone, fine grain size sheets and weakly foliated, frequently boundinaged and occasionally folded by D_3.	White, fine-pegmatitic grain size, typically garnetiferous, infrequent abundant biotite and tourmaline.
C, 10-20 (200) cps	0.5-10	Most frequent type of sheeted leucogranite within the typical cover sequence, occasionally boundinaged occurs in F_3 fold flexures.	Pale pink-cream, medium-pegmatitic grain size, hypersolvus with interstitial clear quartz, magnetite?, ilmenite and tourmaline.
D, 100 (400) cps	1-7	Irregular and anastomosing, restricted to the high strain zone and the Khan-Rössing boundary.	White, medium-coarse grain size, granular texture, white feldspar with characteristic smoky quartz frequently visible.
E, 30 (300) cps	1-10	The dominant type of SLG within the high strain zone. Generally tabular, occasionally bifurcating generally emplaced parallel to the prominent gneissosity.	Extremely variable colour and grain size, contains "oxidation haloes" (Corner and Henthorn, 1978).
F, <20 cps	0.5-3	Tabular with straight parallel sides, occurring throughout the area, cross-cuts all structured features.	Distinctive red colour, coarse-pegmatitic grain size, pink perthitic feldspar and milky coloured quartz.

Uraniferous alaskite bodies on the northwest limb of the Palmenhorst Dome are thought to be confined to D_2 high-strain fabrics with the alaskites generally trending to the north-northeast. Figure 7.3_2 illustrates the outcropping surface geology around the Palmenhorst Dome.

Figure 7.3_2
Etango Project
Project Geology around the Palmenhorst Dome



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The uraniferous intrusive alaskites are late-stage leucocratic granites that often have a pegmatitic texture. Petrographically, an alaskite is granitic rock that contains less than 5% mafic minerals (Mouillac, et al., 1986). However, in the field local variations in texture and mineralogical composition are common and the composition can vary from alkali-feldspar granite to tonalite (Nex et al., 2001). Mineralogically, the alaskites consist mainly of quartz and feldspar with minor, but variable accessory minerals. Accessory minerals include ilmenite, biotite, apatite, topaz, garnet, tourmaline, uraninite, betafite, zircon, and monazite. Quartz varies in colour from colourless through smoky to almost black (indicating the presence of higher grade uranium mineralisation) (Batten, et al., 2007).

Nex, et al. (2001) proposed a 6 stage classification scheme for the sheeted leucogranites (commonly referred to as alaskites) in the Anomaly A/Oshiveli/Onkelo area based upon field characteristics (Table 7.3_1). The Type D and E alaskites are the principal host for uranium mineralisation within EPL 3345.

The alaskites are associated with the regional F_4 tectonic event and have intruded the Nosib and Swakop Group metasedimentary sequences. They generally occur as bodies parallel to the main S_3 foliation (but can sometimes be transgressive to the foliation) and can vary in thickness from a few centimetres to 100m. The alaskite bodies can have a strike continuity of up to several hundred metres, although along the down-dip direction, they can exhibit bifurcation and can truncate after several tens of metres. Crystallisation of the alaskites is interpreted to have occurred pre-, syn- and post- the regional F_4 deformation (Mouillac, et al., 1986).

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8 DEPOSIT TYPES

Uranium mineralisation at the Anomaly A, Oshiveli and Onkelo deposits occurs within a stacked sequence of leucogranite (alaskite) dykes, of varying thickness, that have intruded into the host Damara Sequence of metasedimentary rocks. This style of primary uranium mineralisation is commonly referred to as 'Rössing type' mineralisation. Other nearby examples of this style of mineralisation include the Rössing uranium mine, the Valencia deposit, which is currently under development, and the Rössing South deposit which is under exploration.

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9 MINERALISATION

Uranium mineralisation in the Etango Project area is mainly located in the post-F_3 alaskite granites. Minor uranium mineralisation is also found in the metasedimentary sequences close to the alaskite contacts. The major mineralised alaskite bodies are associated with the lower part of the Khan formation and occur within 400m of the contact between the Etusis and Khan Formations (Mouillac, et al., 1986).

The sheeted alaskites have been classified into six types (A to F) by Nex, et al. (2001). Types A to C pre-date the D_3 deformation event and are barren, while types D to F post-date the D_3 deformation and contain elevated uranium levels. Types D and E are considered to host the bulk of the uranium mineralisation at Anomaly A/Oshiveli/Onkelo. Type D alaskites have a generally irregular and anatomising geometry, are white in colour, equigranular and contain smoky quartz, with accessory topaz. Type E alaskites are recognised by a reddish colouration and the presence of ubiquitous 'oxidation haloes' (or 'alteration rings') which are irregular sub-circular features with a red rim and a grey core (Batten, et al., 2007). These 'alteration rings' are interpreted to have formed as oxidation fronts which have affected the distribution of uranium within the alaskite dykes (Mouillac, et al., 1986). Smoky quartz is common and the reddened parts of the oxidation haloes may contain more biotite and Fe-Ti oxides than the rest of the alaskite (Batten, et al., 2007).

Figure 9_1 shows the contact of an E-Type alaskite with the Khan Formation at the Onkelo deposit (historically referred to as Rabbit Valley) which is located at the northern end of the Anomaly A/Oshiveli/Onkelo deposit. Note the banded biotite layers associated with elevated uranium grades along the alaskite contact in the inset photograph.

The dominant primary uranium mineral is uraninite (UO_2) but minor betafite $(Ca,U)_2(Ti,Nb,Ta)_2O_6(OH)$ is also present. The primary uranium mineralisation occurs as disseminations within rock fractures, at crystal interfaces, and as inclusion within other minerals. Secondary uranium minerals such as autunite ($Ca(UO_2)_2(PO_4)_2{\cdot}10\text{-}12H_2O$) and uranophane (Figure 9_2) ($Ca(UO_2)_2(SiO_3OH)_2{\cdot}5H_2O$) occur as replacements to the primary minerals or as coatings along fractures. The uraninite is commonly associated with chloritised biotite in the alaskites within the lower Khan Formation and with ilmenite and magnetite within foliated alaskites. At higher uranium levels (e.g. 400ppm U_3O_8) the Th/U ratios have been found to be between 0.05 and 0.3. Nuclides of the uranium decay series have been found to be in equilibrium or near-equilibrium (Mouillac, et al., 1986).

Recent Scanning Electron Microscopy studies by Townend (2008) on the mineralised alaskites have also identified other uraniferous minerals such as:

- Brannerite ($(U,Ca,Ce)(Ti,Fe)_2O_6$) occurring within the basal cleavage planes of biotite and chlorite; and
- Thorium-uranium minerals such as uranothorite ($(Th,U)SiO_4$) in apatite and plagioclase, polycrase ($(Y,Ca,Ce,U,Th)(Ti,Nb,Ta)_2O_6$) in plagioclase and thorium uranium bearing monazite ($(Ce, La, Nd, Th, U, Y)PO_4$).

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Figure 9_1
Etango Project
Contact of E-Type Alaskite and Khan Formation at Onkelo

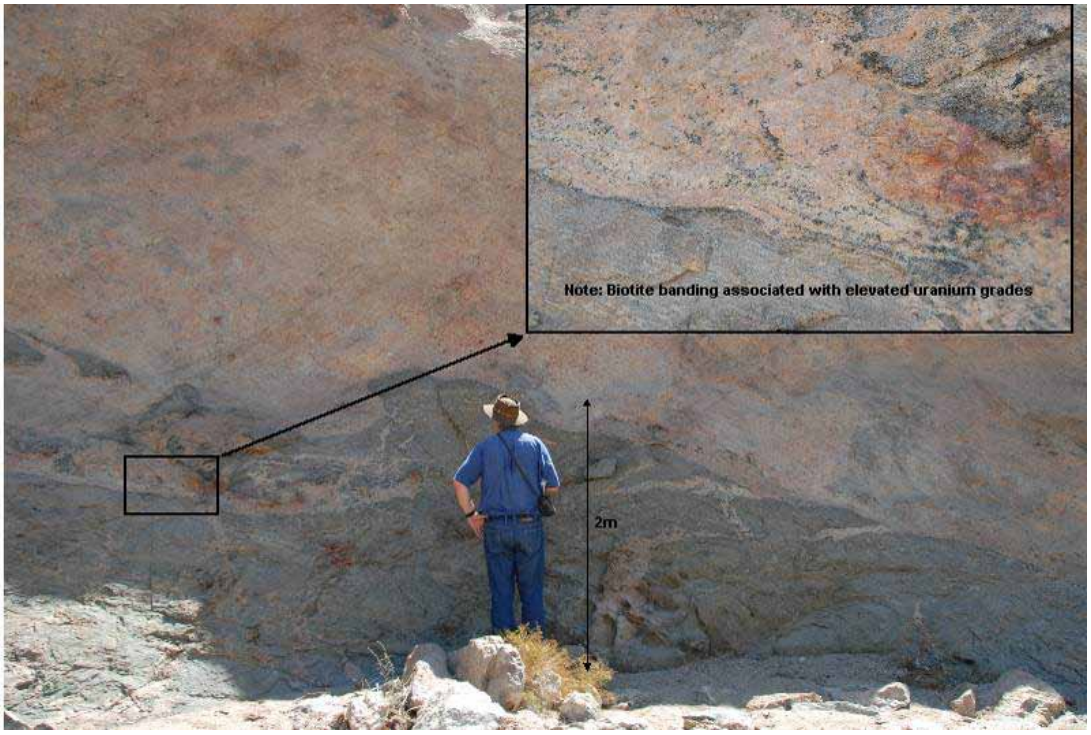

Figure 9_2
Etango Project
Secondary Uranium Mineralisation on Outcrop at Rabbit Valley

The southern part of the deposit has been affected by the Namib peneplanation which has resulted in the leaching of uranium from generally a few metres up to ten metres from surface (Mouillac, et al., 1986). Further details of the mineralisation are discussed in Section 17.

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10 EXPLORATION

10.1 Previous Exploration

The following section is based upon information from Speiser (2006), Batten, et al. (2007), Mouillac, et al. (1986) and Roesener and Schreuder (1997). Exact details on some of the historic exploration programmes were not available at the time of this report.

Regionally, uranium mineralisation was first discovered in the Central Zone in the 1900s when uranium-bearing beryl (heliodor) was discovered near Rössing Mountain. Exploration in the area lapsed until the 1950s and in the 1960s Rio Tinto South Africa commenced intensive exploration in the area.

In the 1970s the then South West African Geological Survey conducted a regional reconnaissance airborne radiometric survey that was followed by a further detailed spectrometer-magnetometer survey in 1974 over an area exceeding 100,000ha. Analysis of the airborne survey identified a broad thorium and uranium/thorium anomaly along the western flank of the Palmenhorst Dome. Prospect scale exploration within the Etango project area commenced in 1975 with 134 percussion holes being drilled in the Anomaly A area. The exploration by previous owners was not conducted on behalf of or by Bannerman and little information remains available on this work.

10.1.1 Omitara Mines

From 1976 to 1978, Omitara Mines (a joint venture between Elf Aquitaine SWA and B & O Minerals) (Omitara) drilled 224 mostly vertical percussion drillholes on a reconnaissance grid of 400m north by 75m to 100m east along the western Palmenhorst Dome position and a reduced grid in some areas of 200m to 100m by 75m near the Anomaly A area. The percussion drillholes totalled 13,383m with depths ranging from 50 to 100m. An additional 9 diamond drillholes were drilled for a total of 2,100m.

Holes drilled during this period were analysed variably by chemical assaying (X-ray fluorescence) and downhole gamma-ray spectrometry (calibrated at Pelindaba). Chemical assay results in the region of Anomaly A ranged up to the low thousands of ppm U_3O_8.

A total of 6,800m of trenching was completed using a Poclain Excavator to obtain exposure of the alaskites which were under the superficial cover of the Namib plain in the southwest of the Project area. The remnants of the trenching can still be seen today. Omitara also performed airborne radiometric surveys.

Mouillac, et al. (1986) mentions that by the beginning of 1978 “potential reserves are estimated to be several tens of millions of tons with a low average ore-grade”.

The leases were relinquished in 1981.

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10.1.2 Western Mining Group (Pty) Ltd

From 1982 to 1986 Western Mining Group (Pty) Ltd conducted regional mapping and drilled 22 percussion drillholes for 1,017m and conducted surface scintillometer surveys.

A resource was estimated in 1986, but no historic figures are available. As a result of a dramatic decrease in the price of uranium in the 1980s exploration for this commodity all but ceased until 2005.

10.1.3 Others

According to verbal reports, Anglo American performed some exploration work in the northern portion of the area in the 1970s and Rio Tinto South Africa drilled three anomalies south of the Rössingberg Dome in the 1970's.

10.2 Exploration by Bannerman Resources

After acquiring the lease in 2005, Bannerman undertook a process of capturing and digitising the historic drillhole and mapping data for the area. This data was mainly obtained from the Namibian Geological Survey and the Geological Survey of South Africa.

10.2.1 Airborne and Ground Geophysics

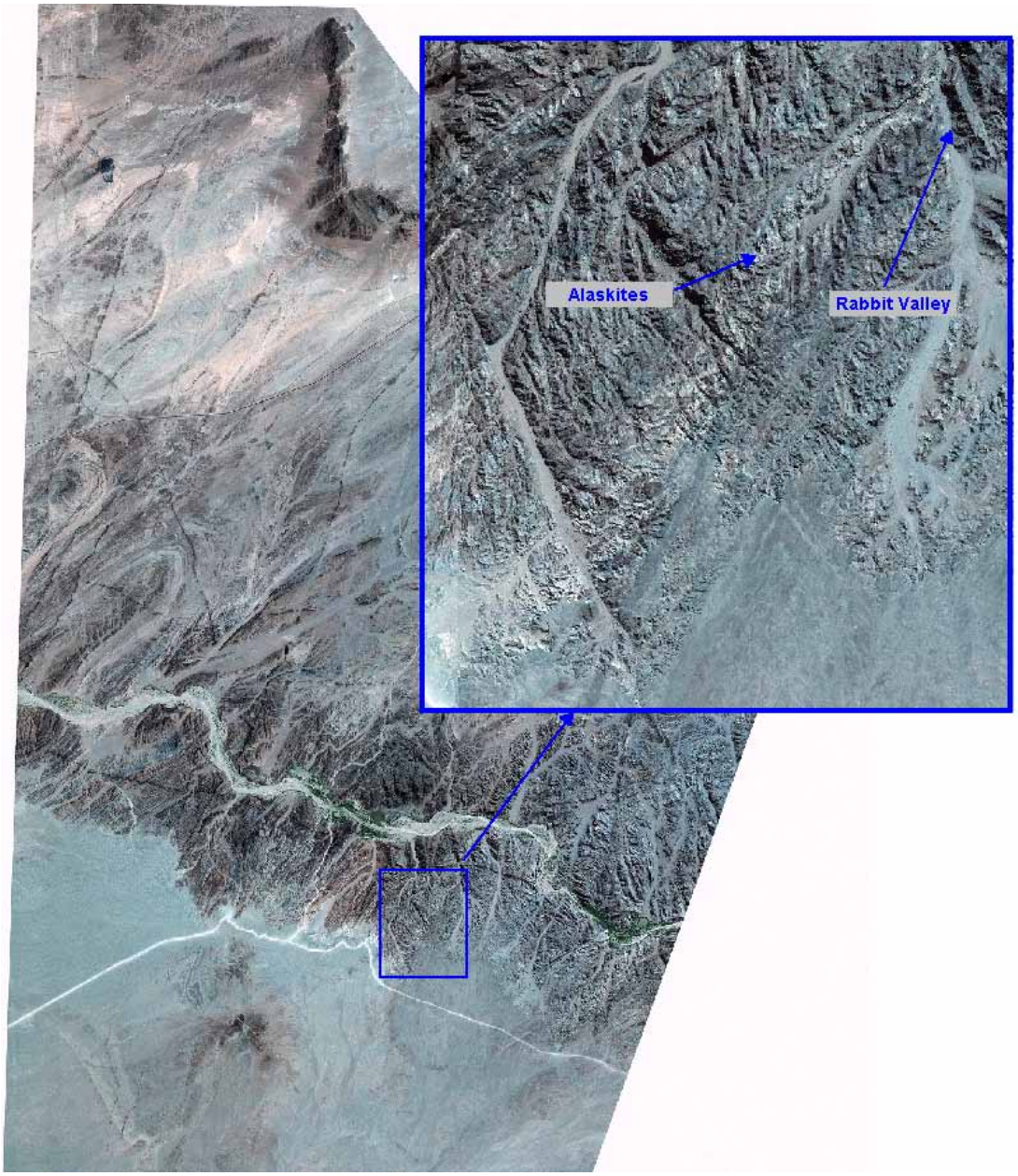
In 2006, airborne radiometric and geophysical data was purchased from the government and reprocessed for uranium, identifying anomalous trends along the western flank of the Palmenhorst Dome and the eastern flank of the Rössingberg Dome. The dataset was part of the Erongo survey that was flown by World Geoscience in 1994/1995. The survey recorded 256 channel radiometric data with a sodium iodide (NaI) crystal detector and was flown north-south on 200m line spacing, with a nominal terrain clearance of 80m.

The results from the historic surface-scintillometer survey were digitised by Bannerman and imported into geographic information system (GIS) software for interpretation.

Bannerman has also sourced a high resolution Quickbird LandSat image that covers the region of EPL 3345. Re-processing of the image in the areas near the Swakop River has enabled exposure of the alaskites to be made readily identifiable as an aid for further mapping and target generation (Figure 10.2.1_1). A lease-scale, 5m contour, surface digital terrain model ('DTM') has been created which covers the area of the lease.

Ground radiometric surveys have been completed by G Symons Geophysics over certain target areas on the eastern side of the Rössing Dome and to the south and east of the Palmenhorst Dome. The ground radiometric surveys were conducted on a 40m to 80m line spacing.

Figure 10.2.1_1
Etango Project
Quickbird Image over EPL 3345



An Aerial LIDAR Survey was completed south of the Swakop River in EPL 3345 during September 2008. The survey was done by Southern Mapping Company from South Africa using an aircraft mounted LIDAR system that scanned the surface with a 70kHz laser resulting in a dense Digital Terrain Model (DTM) of the area. Digital colour images were also taken from the aircraft to produce accurate orthophoto's of the area.

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A Horizontal loop EM (HLEM) survey was conducted over certain areas of EPL 3346 to investigate ground radiometric targets, and to confirm the presence of any associated palaeochannels. Equipment used for the survey was a Max Min II Horizontal loop EM using 100m coil spacing and 4 frequencies, namely 888Hz, 3.5kHz, 7.5kHz and 14 kHz. Readings were collected at 25 and 50m station spacings at the abovementioned frequencies on selected lines.

10.2.2 Re-logging of Historic Diamond Holes

The core from nine historic diamond drillholes was located and re-logged (GOADH001 – GOADH009). Unfortunately government restrictions meant that the core could not be re-assayed chemically.

10.2.3 Mapping

Regional mapping over the Project area is ongoing and detailed mapping over the Anomaly A/Oshiveli/Onkelo deposit has been completed. Certain areas of interest throughout the EPL have also been mapped in fine detail in zones of some 100m by 200m.

10.2.4 Verification Drilling and Re-Surveying

In 2006/2007, Bannerman drilled 43 RC drillholes (GARC001-GARC043) and 13 diamond core drillholes (GOADH0010 – GOADH0022) over the area of the Etango deposit. Using the results from the verification drilling, in April 2007, Bannerman conducted a study to confirm the veracity of the historic drillhole data along the 1.7km strike of the Anomaly A/Oshiveli resource area. This study included comparing the results from the 13 diamond holes drilled by Bannerman to 40 nearby historic drillholes, and the re-probing of 19 historic drillholes using an ElectroMind optical / scintillometer / deflection probe and a spectrometer probe (operated by G Symons Geophysics) (see Section 14.1).

The ElectroMind probe has a ½ inch by 1¾ inch NaI crystal. It operates using two systems; one is a scintillometer measuring total count and the second system is a 3 channel spectrometer measuring total count K, U and Th channels. Bannerman also uses an Auslog scintillometer (27mm diameter, ½ inch by 1¾ inch NaI crystal) which measures total count only.

Bannerman concluded that the historic assaying data was accurate and suitable for use in estimation studies. However, none of the historic drilling data or geological data has been used in the current resource estimate.

10.2.5 Resource Estimation and Drilling by Bannerman Resources

An initial Inferred Mineral Resource was estimated by Bannerman for the Anomaly A deposit, based on the historic and recent drilling, in May 2007. Bannerman has since continued an aggressive drilling programme over the resource area from April 2007 up to the present time, with this work remaining underway. All of these drilling and exploration works are supervised by Bannerman staff geologists.

In January and August 2008, Coffey Mining independently estimated Mineral Resources for the Anomaly A/Oshiveli area based only on the recent Bannerman drilling. A further Coffey Mining Mineral Resource estimate was then completed in February 2009 and this is now again updated by the current Coffey Mining Mineral Resource estimate in July 2009 (see Section 17).

Exploration on EPL 3345 is focussed on the expansion of the existing mineral resource along strike to the north of Anomaly A, at Oshiveli and Onkelo, and to the south at Ondjamba. The Oshiveli and Onkelo anomalies have been the target of previous exploration which included drilling as well as aerial and ground geophysical investigations.

10.3 Exploration Data Collection

Little information is available regarding data collection from previous owners. The data collection practices employed by Bannerman are outlined in Sections 11 and 12.

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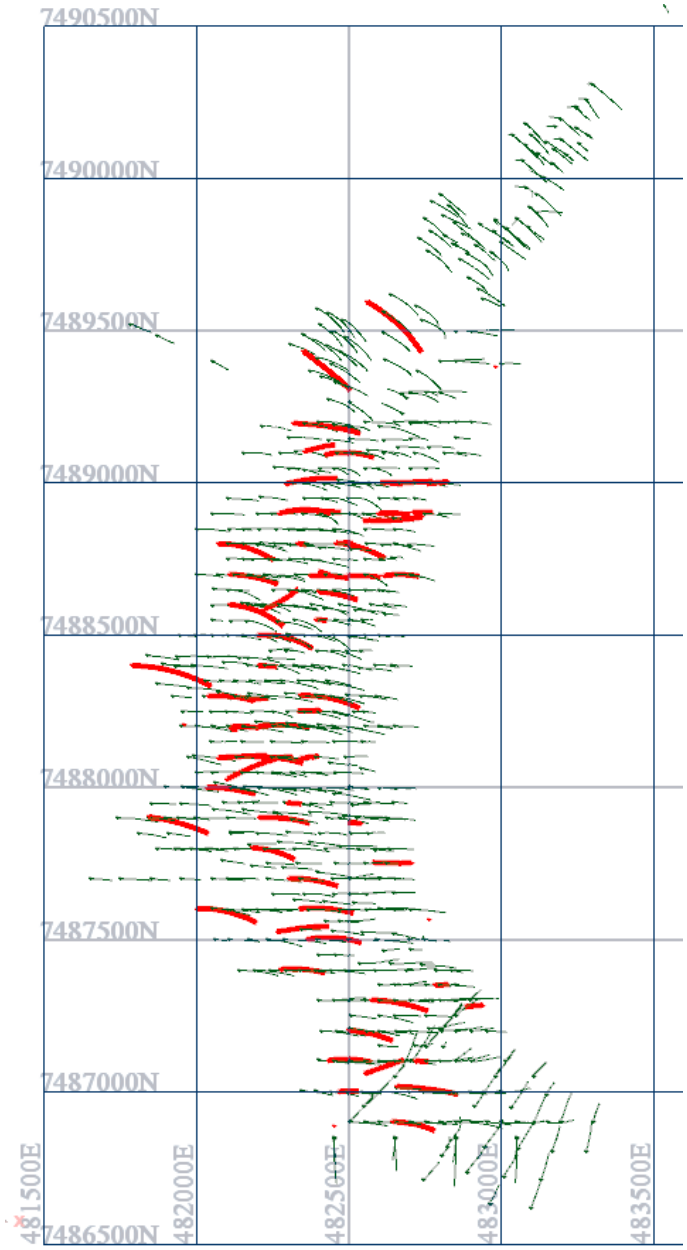
11 DRILLING

11.1 Drilling by Previous Owners

The drilling by previous owners has been outlined in Section 10.1. Historic drilling in the region of the Etango deposit was typically performed on a 400m north by 75m to 100m east grid with further infill drilling completed to a nominal 100m north by 75m to 100m east spacing, and some to 100m by 25m. Figure 11.1_1 shows the location of drilling completed by Bannerman for the current resource estimate.

Figure 11.1_1
Etango Project
Bannerman's Drilling Programmes in the Etango Deposit Area as of July 2009



2006-July 2009 – RC Drilling 2006-July 2009 – Diamond Drilling

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11.2 Drilling by Current Owners

As of mid-July 2009, Bannerman had drilled a total of 628 RC and 72 diamond drillholes for a total of 187,635m over the area of the Anomaly A/Oshiveli resource. The RC drillholes range from 23m to 480m in depth and the diamond drillholes range from 84m to 528m in depth. A total of eleven diamond holes were drilled for metallurgical testing purposes, nine for geotechnical testing purposes and four for hydrogeological purposes. Lithological contacts were considered whilst modelling for these holes which were not assayed. The drillhole database for Onkelo consists of 57 RC holes for 11,913m. The RC drillholes were drilled by Metzger Drilling using a bit diameter of 4.72” to 5.5”. The bulk of the RC drilling has been designed on a nominal 50m by 50m, to 50m by 100m drill spacing. The bulk of the 50m by 50m drilling has targeted the area of the likely open-mineable resource. Drilling along strike and down-dip of the main mineralisation has targeted extensions to the mineralised zones and has been drilled on a nominal 100m by 50m spacing.

The majority of the diamond drilling for resource delineation and grade estimation purposes was drilled using NQ diameter core barrels (47.6mm core). Nine holes were drilled using a NQ3 core barrel (45.1mm core) for purely geotechnical purposes. All geotechnical samples were sent to Rocklab in Johannesburg for testwork. The majority of the core is orientated by spearing each run

Ten drillholes were also completed in HQ core diameter (63.5mm core) for metallurgical testwork; and the whole HQ core was sent to Ammtec Laboratories in Perth.

Selected significant drill intercepts for the Bannerman RC and diamond drilling are presented in Tables 11.2_1 and 11.2_2 for diamond and RC drilling respectively. Further statistics regarding the Anomaly A/Oshiveli samples are discussed in Section 17.3.2. Due to the shallow dip (approximately -30° to -44º to the west) of the mineralised alaskites and the angle of intercept of the RC and diamond drillholes, the true thickness of the significant intercepts is close to the stated mineralised interval.

Drilling of other target areas within EPL 3345 is in progress and to date 159 RC drillholes have been completed at the Rössingberg, Ombuga, Gohare, Ondjamba, and Ombepo prospect areas (Figure 11.2_1) including 87 sterilisation drillholes in the proposed Plant and TSF areas.

Figure 11.2_1
Etango Project
Etango Project Drilling Locations

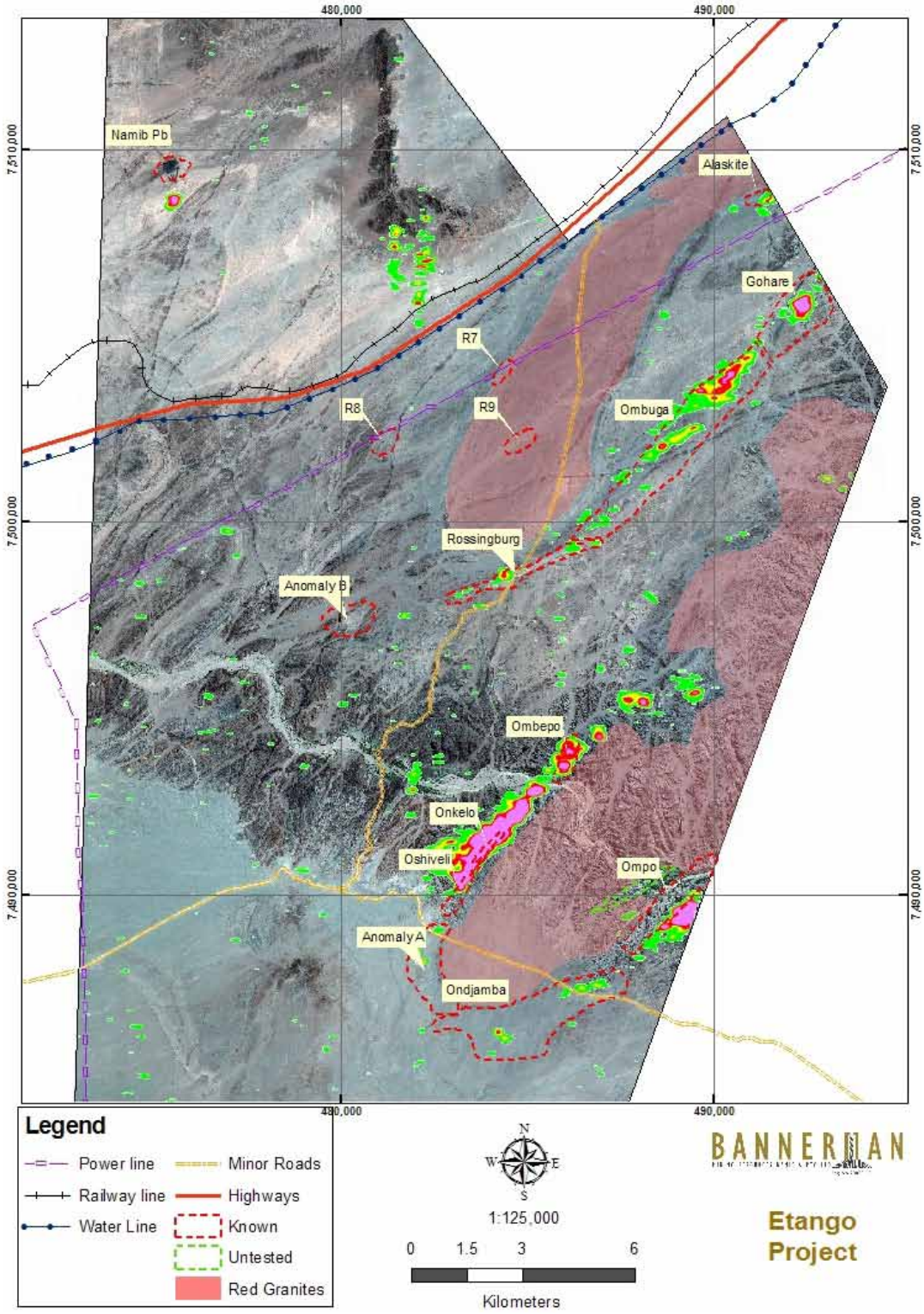

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Table 11.2_1
Etango Project
Selected Significant Intercepts from Bannerman RC Drilling

Hole ID	Collar Position (m)		Downhole Depth (m)		Interval (m)	Grade U_3O_8 (ppm)
	North	East	From	To		
GARC0034	7488391	482534	22	62	40	585
GARC0047	7487926	482152	56	152	96	232
GARC0048	7487919	482369	236	305	69	293
GARC0051	7487905	482484	26	118	92	270
GARC0054	7487807	482470	90	179	89	252
" "			191	268	77	261
GARC0127	7488884	482646	17	70	53	329
GARC0128	7488650	482399	115	161	46	406
GARC0160	7488200	482447	82	129	47	393
GARC0184	7488900	482445	51	62	11	443
" "			318	420	102	301
GARC0202	7488000	482402	217	291	74	413
GARC0206	7487900	482427	59	207	148	269
" "			241	262	21	440
" "			322	335	13	536
GARC0214	7487900	482469	47	118	71	269
GARC0217	7487800	482527	38	75	37	366
" "			117	174	57	303
GARC0222	7487800	482420	71	183	112	267
GARC0248	7487500	482495	226	257	31	757
GARC0255	7487300	482700	84	144	60	417
GARC0258	7487400	482390	262	395	133	286
GARC0282	7487100	482500	237	305	68	256
" "			329	383	54	277
GARC0295	7486900	482500	177	224	47	375
GARC0332	7489200	482551	203	230	27	824
GARC0337	7488550	482320	73	110	37	540
GARC0340	7488550	482400	95	162	67	339
GARC0341	7488250	482450	63	141	78	409
GARC0349	7487941	482510	15	129	114	307
GARC0359	7488150	482449	103	124	21	1105
GARC0375	7488250	482397	153	207	54	342
GARC0383	7488350	482175	173	243	70	248
GARC0384	7488550	482452	37	91	54	356
GARC0395	7488750	482236	309	370	61	297
GARC0410	7488950	482412	294	366	72	506
GARC0421	7487850	482403	71	182	111	265
" "			192	206	14	671
GARC0425	7487350	482794	69	142	73	359
GARC0432	7489049	482592	165	202	37	622
GARC0435	7488050	482312	192	254	62	435
GARC0445	7489144	482501	219	271	52	359
GARC0453	7488846	482401	356	438	82	492
GSHRC0029	7489406	482615	154	235	81	309
GSHRC0045	7489230	482673	182	296	114	229
GSHRC0082	7489827	482973	91	101	10	723
GSHRC0083	7490130	483194	12	115	103	237
GSHRC0084	7490168	483242	1	29	28	201
GSHRC0086	7490196	483195	105	136	31	270
GSHRC0088	7490312	483295	53	65	12	276
GSHRC0089	7490313	483294	32	45	13	279
GSHRC0090	7490261	483277	11	31	20	348
GSHRC0091	7490262	483276	170	182	12	453
GSHRC0092	7490235	483244	15	26	11	320
GSHRC0093	7490236	483243	15	27	12	286
GNKRC0045	7490813	483618	0	23	23	220
GNKRC0046	7490815	483617	30	42	12	303
GNKRC0047	7490814	483464	223	245	22	302
GNKRC0049	7490768	483488	120	177	57	325
GNKRC0050	7490735	483553	30	43	13	247
GNKRC0051	7490650	483531	66	108	42	451
GNKRC0052	7490708	483482	60	71	11	259
GNKRC0053	7490613	483495	93	104	11	413
GNKRC0054	7490657	483477	149	162	13	376
GNKRC0055	7490657	483477	47	62	15	343

Table 11.2_2
Etango Project
Selected Significant Intercepts from Bannerman Diamond Drilling

Hole ID	Collar Position (m)		Downhole Depth (m)		Interval (m)	Grade U_3O_8 (ppm)
	North	East	From	To		
GOADH0021	7488091	482220	186.5	208.1	21.6	402
GOADH0023	7488600	482106	439	468	29	267
GOADH0028	7487801	482179	381	418.75	37.75	286
" "			478.5	493.88	15.38	562
GOADH0029	7488700	482105	369.65	397	27.35	352
" "			433.61	490.71	57.1	262
GOADH0030	7488200	482114	40.51	94.06	53.55	224
GOADH0033	7487017	482655	101.95	131.41	29.46	213
" "			376	460	84	220
GOADH0037	7488500	482200	290.35	356.59	66.24	290
GOADH0039	7488803	482456	105.18	146.46	41.28	230
" "			326.98	340.98	14	759
GOADH0040	7488642	482400	61.14	160.25	99.11	247
" "			348.43	377.14	28.71	301
GOADH0041	7488302	482338	313.78	355.51	41.73	214
GOADH0042	7487903	481840	209.8	240.75	30.95	273
GOADH0044	7487700	482302	390.78	507	116.22	265
GOADH0045	7487500	482360	191.28	215.57	24.29	293
" "			269.53	284.53	15	355
" "			322.73	352	29.27	272
" "			411.78	431.71	19.93	352
GOADH0046	7487301	482573	94.13	120.76	26.63	274
" "			396.22	431.8	35.58	459
" "			440	467.94	27.94	604
GOADH0049	7487202	482495	358.6	392.63	34.03	323
GOADH0055	7489094	482420	203.02	225.02	22	388

11.3 Surveying

All drillhole collars are surveyed by licensed surveyors after drilling.

For diamond drillholes, downhole surveys were taken using an Eastman single shot camera at nominal 30m intervals up to drillhole GOADH0022. The practice is now for all drillholes to be surveyed by a Verticality magnetic survey tool performed by G Symons Geophysics/terratec (G Symons).

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12 SAMPLING METHOD AND APPROACH

The exact sampling methods used for the historic drilling are not available and are not considered relevant to this report, as this drilling has not been included. For the Omitara drilling, the percussion holes were typically sampled on 1m intervals. When taken, chip samples were assayed by X-ray fluorescence. Downhole gamma ray spectrometry was also taken for selected intervals from most of the drillholes.

The following discussion details the sampling methods used by Bannerman. Bannerman routinely sample all intersected alaskite intervals. The location of the sampling for the resource studies is shown in Figure 11.1_1.

12.1 RC Drilling

The following methodology is applied to the RC drillhole sampling:

§ Drill samples are collected off the rig cyclone in large plastic bags at 1m intervals. The sample bags are pre-marked and tags are also prepared for the laboratory sample which identifies the sample number (Figure 12.1_1A).

§ The 1m sample is split in the field by Bannerman staff using a 75/25 riffle splitter (Figure 12.1_1B) and the 75% sample is placed into a bulk sample bag from which rock chip samples are taken and placed into a chip tray for logging by the geologist.

Figure 12.1_1
Etango Project
RC Sampling at Anomaly A

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Sampling details are sent to the assaying laboratories electronically as well as a paper copy which is sent with the samples. A sample submission sheet is sent with each sample dispatch:

- The primary sample sent to the laboratory is obtained by splitting the 25% sample until a sample of approximately 500g to 1kg is obtained. A count per minute (CPM) reading is taken from this sample using a handheld scintillometer and recorded along with the sample condition (wet, dry, and moist). If the bulk sample is wet, a spear sample is taken.
- The sample that is to be sent to the laboratory for analysis is placed into a clear plastic bag that is labelled with the drillhole identification and sample depth. A collection of the samples are placed into larger plastic bags for transport to the secure sample storage facility in Swakopmund (Figure 12.1_1).
- A library reference sample is obtained by again splitting the reject of the 25% split until another 500g to 1kg sample is obtained. The reference sample is stored in Bannerman's warehouse in Swakopmund.
- Sample sheets are drawn up by the responsible geologist and given to the Senior Field Technician. He assigns the sample string numbers to the relevant samples. The primary sample is transferred into a new clear plastic bag which has the reference sample number written on the bag and a sample stream ticket is placed within the bag.
- Samples are sent from the secure sample storage facility in Swakopmund (Figure 12.1_2) to SGS Lakefield in Johannesburg (SGS Johannesburg') and Genalysis Laboratory Services in Johannesburg (Genalysis Johannesburg') three time a week via Coastal Couriers. Field duplicate samples sourced from the 75% reject are taken at the rate of 1 in every 20 primary samples. The sampling method is the same as used for the primary sample. Field duplicate samples are sent to Genalysis Johannesburg and since 12/01/2009 to SGS Johannesburg for assaying.
- Since December 2008, samples are sent from the secure sample storage facility in Swakopmund to the SGS Sample Preparation Facility in Swakopmund. The sample is prepared by SGS and sent to their relevant facilities in Johannesburg for assaying.
- The RC chips trays are stored in a separate secure facility in Swakopmund (Figure 12.1_3). Since December 2007, standards and blanks have been routinely inserted into the sampling stream at a nominal rate of 1:20.

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Figure 12.1_2
Etango Project
The Bannerman Sampling and Logging Facility at Swakopmund

Figure 12.1_3
Etango Project
Chip Tray Storage Facility at Swakopmund

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12.2 Diamond Drilling

The following methodology is applied to the diamond drillhole samples:

- After drilling, the diamond core is placed into core trays by the drilling contractor.
- The core is then taken to the Bannerman core logging and storage facility in Swakopmund (Figure 12.1_2) where it is orientated, measured, marked for sampling and logged by the staff geologists.
- Sample intervals are determined by the geologist after logging. The sample lengths are nominally 1m; however shorter intervals are sampled where a lithological boundary is intersected. No sampling is undertaken across lithological boundaries.
- Up to drillhole GOADH0022, the core was cut in half using a diamond saw, with the primary sample sent to SGS Johannesburg for crushing and analysis. Subsequent to GOADH0022, only quarter core is used for primary analysis. The core depths (in metres), sample intervals and sample numbers are marked on the core for later identification (Figure 12.2_1).
- Field duplicates are taken for every 20th sample. Where a field duplicate is taken, ¼ core is submitted to the laboratory. One ¼ sample is sent to SGS Johannesburg for primary analysis, whilst the other ¼ sample is sent to Genalysis Johannesburg for preparation. Since January 2009 all field duplicates are sent to SGS Johannesburg for assaying. As with the RC samples, the diamond samples are placed in numbered bags for dispatch.

Figure 12.2_1
Etango Project
Sampled Core from Anomaly A

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12.3 Adequacy of Procedures

The drilling, sampling and storage procedures used by Bannerman meet industry acceptable standards. The samples are considered to be of good quality and representatively for the purposes of mineral resource estimation.

RC samples observed in the field were of suitable size and generally of consistent high recovery. Coffey Mining previously recommended that the RC sample recovery be routinely recorded and entered into the drillhole database. Based on this recommendation, Bannerman field staff undertook an analysis the RC sample recovery in 2008. The samples were weighed before they were split and all samples returned a weight ±20kg. The rocks in the mineral resource area are competent with very little cavities. Based on the results of the investigation Bannerman determined that a routine recording of this data was superfluous.

It is worth noting that recovery is recorded and entered into the drillhole database from all the diamond holes. From this data it is clear that the rock is very competent with very little risk of sample loss.

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13 SAMPLE PREPARATION, ANALYSIS AND SECURITY

13.1 Sample Preparation and Analysis

13.1.1 SGS

All primary RC and diamond core samples are sent to SGS Johannesburg for crushing, pulverisation and chemical analysis. Since December 2008, all field duplicate samples are sent to the SGS sample preparation facility in Swakopmund. Pulverised samples are then couriered to SGS in Johannesburg for analysis. SGS Johannesburg is a SANAA accredited laboratory (T0169). Samples are analysed by pressed pallet X-ray fluorescence (XRF) for U (U_3O_8 is then calculated from the U analysis), Nb, Th and borate fusion with XRF for Ca and K. Analysis for Ca and K was discontinued in March 2009. Upon arrival at SGS Johannesburg, a barcode is attached to the sample to enable tracking during the preparation and analysis process. The primary sample is dried in an electric oven at ~105° then crushed to -2mm, then pulverised using a Labtech LM2 pulveriser to 95% passing 75µm.

Barren rock is run through the crushing and pulverisation circuit after every sample. The last barren rock sample from each batch is analysed using XRF and reported to the client.

After pulverisation, a 200g sub-sample is taken. From this sub-sample approximately 20g is taken for XRF analysis and 0.5g to 2g for inductively coupled plasma (ICP) mass spectrometry analysis. Typically SGS Johannesburg will conduct ICP analysis in conjunction with XRF analysis on every fifth submitted sample.

SGS Johannesburg introduces standards and blanks at the rate of 1:22 into the sample stream. Replicate samples from the 200g pulverised sub-samples are taken at the rate of 2:20.

A pulp duplicate sample is sent to Genalysis Johannesburg at the rate of 1 sample in every 20.

For U_3O_8 (actually U), Nb and Th XRF analysis, a 17g (approximately) sample is combined with approximately 3g of wax binder then pressed for 2 minutes to produce a compact pellet. The pellet press is cleaned using a vacuum blow after each press. Bannerman samples are analysed using a Panalytical Axios XRF machine.

For Ca and K between 0.2g to 0.7g of sample is mixed with a borate flux and cast followed by analysis by XRF (discontinued in April 2009). During periods of high demand, some 200g sachets may be sent to SGS Perth for XRF analysis. The procedures used in the SGS Perth laboratory are similar to those used in the SGS Johannesburg laboratory.

13.1.2 Genalysis

Sample preparation at Genalysis Johannesburg consists of drying the sample at ~105° C then milling the entire sample in a LM2 mill. Barren silica flush is put through the mill after each sample. Every 20th pulverised sample is screen checked to determine the percentage passing -75µm.

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U_3O_8 (actually U), Th and Nb are determined by pressed pallet XRF using a Philips PW1480, PW1400 and PW2400 Axios machine. Samples are prepared using 20g of sample with 3g of binder which are mixed in a grinding vessel for 4 minutes and pressed in a 20 tonnes hydraulic press.

One duplicate is re-analysed for every 20 samples and one reference standard is inserted for every 20 samples. One reagent blank is inserted per shift.

13.1.3 Density

Bulk density determinations are taken by Bannerman staff using either the water immersion or calliper method on diamond core billets. Density estimates have also been made on selected pulp samples from the RC drilling programmes using the gas pycnometer method by Genalysis Perth.

13.1.4 Security

The diamond core and RC samples that are to be sent for assaying are stored in Bannerman's secure storage facility in Swakopmund prior to pick up via courier. All crushing, pulverising and splitting of the samples subsequent to the generating of the field splitting is performed by a reputable assaying laboratory. RC samples are taken daily from the field to the storage facility after the initial field splitting.

13.1.5 Adequacy of Procedures

Drilling and sampling operations are supervised by Bannerman geologists and samples are promptly bagged and taken to the storage facility in Swakopmund prior to shipment to the assay laboratory. It is considered that Bannerman currently has appropriate provisions in place to safeguard the sample security.

Coffey Mining have visited the SGS Johannesburg facility and considers it to be well run and that the preparation and analytical methods used by SGS Johannesburg are appropriate.

13.2 Quality Control Procedures

13.2.1 Umpire Pulp Checks

Umpire pulp check samples are taken at the rate of 1 in every 20 from primary samples at SGS Johannesburg. The umpire pulp samples are analysed at Genalysis in Perth by XRF. The check sample intervals are determined by the logging geologist and the identification details are emailed to both laboratories in question.

13.2.2 Field Re-Splits

Field re-split samples are sent to Genalysis Johannesburg for preparation, and then a sub-sample of pulverised material is sent to Genalysis Perth for assaying by XRF. Since January 2009 field duplicates are analysed at SGS in Johannesburg.

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13.2.3 Standards and Blanks

Bannerman has obtained and uses standard samples from the following sources:

- Two certified uranium standards made from Bannerman pulp reject samples sent to SGS.
- Two commercial standards sourced from Witwatersrand material.

These standards are currently inserted at a rate of 1:20 samples.

SGS Johannesburg inserts certified standards as part of the laboratory based QAQC system. The barren crush at the end of each batch is also analysed and the results reported.

Genalysis Perth inserts certified standards as part of its internal QAQC procedures.

13.2.4 Adequacy of Procedures

After the initial submitting of the sample to the laboratories, all sample preparation is undertaken by independent laboratory staff. Bannerman currently employ appropriate protocols with the routine collection and submission of standards, field duplicates, pulp duplicates and the analysis of these samples by an umpire assay laboratory (Genalysis Perth). Laboratory replicate data is also captured in the current database system.

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14 DATA VERIFICATION

The quality control analysis of the Bannerman assaying information has relied upon field duplicates, pulp duplicates, blanks and standards submitted by Bannerman to an umpire laboratory and internal laboratory replicates, blanks and duplicate samples.

14.1 Collar and DTM Survey

A topographic survey has been conducted over the project area. The survey was performed by licensed surveyors using the following main instruments:

- Six Ashtech dual frequency GPS receivers.
- Leica RTK 1200 GPS System (two receivers)
- Leica TC1000 single second Total Station with 3" accuracy.
- Leica TC600 single second Total Station with 5" accuracy.

All survey controls were surveyed and calibrated using the Post Processing method employing the Ashtech GPS receivers and the “Ashtech Solutions” proprietary software.

Most of the drillhole collars were surveyed prior to the resource estimate using the Leica RTK GPS or the Leica Total Stations.

14.2 Assessment of Quality Control Data

The quality control data related to RC and diamond core drilling has been assessed statistically using a number of comparative analyses for each dataset. The objectives of these analyses were to determine relative precision and accuracy levels between various sets of assay pairs and the quantum of relative error. The results of the statistical analyses are presented as summary statistics and plots, which include the following:

- *Thompson and Howarth Plot*, showing the mean relative percentage error of grouped assay pairs across the entire grade range, used to visualise precision levels by comparing against given control lines.
- *Rank % HARD Plot*, which ranks all assay pairs in terms of precision levels measured as half of the absolute relative difference from the mean of the assay pairs (% HARD), used to visualise relative precision levels and to determine the percentage of the assay pairs population occurring at a certain precision level. For pulp-based duplicate samples, a limit of 10% HARD is a useful limit to compare and analyse precision from different datasets. For field duplicates, a limit of 20% HARD is a useful limit to compare and analyse precision from different datasets.
- *Mean vs. % HARD Plot*, used as another way of illustrating relative precision levels by showing the range of % HARD over the grade range.

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- *Mean vs. %HRD Plot* is similar to the above, but the sign is retained, thus allowing negative or positive differences to be computed. This plot gives an overall impression of precision and also shows whether or not there is significant bias between the assay pairs by illustrating the mean percent half relative difference between the assay pairs (mean % HRD).
- *Correlation Plot* is a simple plot of the value of assay 1 against assay 2. This plot allows an overall visualisation of precision and bias over selected grade ranges. Correlation coefficients are also used.
- *Quantile-Quantile (Q-Q) Plot* is a means where the marginal distributions of two datasets can be compared. Similar distributions should be noted if the data is unbiased.
- For standards and blanks, the *Standard Control Plot* shows the assay results of a particular reference standard over time. The results can be compared to the expected value, and the ±10% precision lines are also plotted, providing a good indication of both precision and accuracy over time.

14.2.1 Standards Analysis

This section will discuss the analysis of both the Bannerman and laboratory inserted standards.

<u>Bannerman Submitted Standards</u>

Bannerman has routinely inserted blanks and certified standards into their sampling stream since December 2007. The standards include two certified commercial standards by African Mineral Standards (AMIS) (AMIS0029 and AMIS0045) sourced from the Dominion Reef and Witwatersrand area; and two AMIS certified standards sourced from Anomaly A mineralised material (ANMIS0085 and AMIS0086). The standards ANMIS0085 and AMIS0086 were prepared by AMIS for commercial use and have been subject to an international round robin test regime.

All of the datasets analysed exhibited multiple instances (quantum in the 10's) of outlying data. The bulk of these outliers matched values for existing standards and are assumed to be present due to the mixing of standards during the submission/sample recording process and were trimmed from the analysis for each population. The summary statistics for these standards are presented in Table 14.2.1_1. Summary control plots are in Appendix 1.

It is noted that standard AMIS0029, which is sourced from the Dominion Reef, has a known complex mineralogy and metallurgy which may be affecting the EV of the batches analysed. Both Genalysis Perth and SGS Perth exhibit similar positive biases up to June 2008 where after no more of these standards were submitted to SGS Johannesburg (See Appendix 1).

The AMIS standards submitted by Bannerman to SGS Johannesburg (the primary laboratory) exhibit a positive bias ranging from 3% to 8%, whereas the same standards submitted to the Umpire laboratory (Genalysis) exhibit 0 to 1% bias. With the exception of AMIS0029 (which has known issues) the SGS standards report >90% within the tolerance limits.

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Table 14.2.1_1
Etango Project
Statistics for Bannerman Submitted Standards (U ppm)

Standard	XRF – U ppm						
	AMIS0029		AMIS0045		AMIS0085	AMIS0086	Blank
	SGS_J	GEN_P	SGS_J	GEN_P	SGS_J	SGS_J	SGS_J
Expected Value (EV)	890	890	87	87	266	128	1
EV Range	862-918	862-918	75-99	75-99	250.6-284	115-148	0.9 – 1.1
Count	237	69	181	47	519	532	2,320
Minimum	795	840	82	85	240	95	1
Maximum	962	924	104	94	340	151	188
Mean	**927**	**898**	**94**	**88**	**275**	**137**	**1.35**
Std Deviation	16	27	3.0	1.4	8.3	6	5.7
% in Tolerance	19	58	92	100	91	96.8	99
% Bias	4	1	8	1	3	4	35

The bulk of the blanks reported less than 5ppm U. However, even with trimming of obvious outliers (e.g. results close to values of known standards), some 13 assays reported greater than 10ppm U and up to 108ppm U. It is suspected that some of the higher grade results may reflect the mixing of blanks with actual samples during the sampling process; and that some of the elevated grades may be due to sample contamination.

SGS Internal Standards

Two separate blank standards (Waste Rock and Lab Blank) and three internal certified standards (UREM2, UREM4 and UREM9) were identified in the database for SGS Johannesburg. One blank standard (Waste Rock) and one certified standard (SY3) were identified for SGS Perth. The summary statistics for these standards are shown below in Table 14.2.1_2. Summary control plots are in Appendix 1.

Table 14.2.1_2
Etango Project
Statistics for SGS Submitted Standards (U ppm)

Standard	SGS Johannesburg - XRF					SGS Perth - XRF	
	UREM2	UREM4	UREM9	Waste Rock	Lab Blank	SY3	Waste Rock
Expected Value (EV)	428	84	219	1	1	645	1.64
Expected Value Range	364-492	72-98	186-252	0-2	0.9-1	580 to 709	0 to 5
Count	742	1262	671	1,363	5,786	148	191
Minimum	418	69	238	0.01	1	634	0.1
Maximum	460	99	223	13	1	656	13
Mean	**438**	**89**	**224**	**1**	**1**	**641**	**2.1**
Std Deviation	6.8	3.3	6.1	0.4	0	4.2	1.8
% in Tolerance	100	100	100	100	100	100	95
% Bias	2.4	4	2.1	1.25	0	-0.6	112

For SGS Perth, the certified standards display acceptable accuracy, with the bulk of the assays within the expected value range and no significant bias indicated. The three internal standards for SGS Johannesburg all report within tolerance limits, but all three standards exhibit a slight positive bias of 2% to 4%. This trend is in line with that seen for the Bannerman submitted standards.

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The blank standard Waste-Rock (n=1,336) from SGS Johannesburg exhibits some minor contamination throughout the sample runs, with seven samples reporting above 5ppm U. The laboratory blank (n=5,786) reports consistently at 0ppm U. The blank samples do not indicate any significant contamination during the assaying process.

The blank standard Waste Rock from SGS Perth (n=196) has 9 samples over 5ppm U_3O_8, indicating minor contamination. The results are considered acceptable.

Genalysis Perth Internal Standards

Five internal standards (BL-1, SARM1, UREM2, 4 and 9) and one laboratory blank were identified in the database.

Table 14.2.1_3
Etango Project
Statistics for Genalysis Perth submitted Standards (U ppm)

Standard	XRF – Genalysis Perth					
	BL-1	SARM1	UREM 2	UREM 4	UREM 9	Control Blank
Expected Value (EV)	220	15	428	84.8	218.8	1
Expected Value Range	187 to 253	13 to 17	3648-492	72-98	186-252	0.9/1.1
Count	55	79	48	15	15	187
Minimum	214	12	410	81	204	1
Maximum	229	23	463	84	223	1
Mean	**223**	**15**	**421**	**83**	**215**	**1**
Std Deviation	4	2	10.14	1.03	5.56	0%
% in Tolerance	100%	89%	100%	100%	100%	100%
% Bias	1.3%	1.8%	-2%	-2%	-1.8%	0%

All of the standards except SARM1 report good accuracy with the bulk of the samples returning assays within the set precision limits. Bias in the laboratory standards ranged from -2% to 1.8%. Control blank standards (n=187) were identified for analysis (see Appendix 1). None of the results for these exhibited significant contamination.

14.2.2 Duplicates and Umpire Assaying Analysis - Precision

The database for the Etango deposit contains duplicate sample information for field re-splits (RC and ¼ core diamond), umpire pulp re-assays and laboratory pulp replicate assays. No intra-laboratory pulp re-splits were identified.

For the SGS assays, the original sample was crushed and pulverised at SGS Johannesburg and analysed at either SGS Johannesburg or SGS Perth. The field duplicate samples were crushed and pulverised at Genalysis Johannesburg. All primary field duplicate and umpire pulp samples were analysed at Genalysis Perth.

The summary statistics for the duplicate analyses are shown in Table 14.2.2_1 and summary charts are presented in Appendix 1. For the purposes of the precision analysis, a lower limit of 10ppm U was applied to the data prior to analysis.

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Table 14.2.2_1

Etango Project

Summary of Data Precision for SGS and Genalysis Laboratories for XRF Analysis of Uranium U (ppm)

Sample Type	Number of Data Pairs		Mean % HARD		Median % HARD		% Within RANK HARD Limits (10%/20%)		Comparative Means (ppm) (Original Lab./Duplicate Lab.)	
	SGS - JB	SGS - Perth	SGS - JB	SGS - Perth	SGS - JB	SGS - Perth	SGS - JB	SGS - Perth	SGS - JB	SGS - Perth
Umpire RC Field Duplicates [1]	1,817	272	11.5	8.3	7.1	5.7	63/85	73/90	151/147	143/160
Umpire Diamond Field Duplicates [1]	222	-	13.8	-	8.6	-	53/80	-	188/188	-
Umpire RC Pulp Duplicates [2]	2,178	149	7.8	7.4	5.2	4.8	75/	75/	130/122	125/133
Umpire Diamond Pulp Duplicates [2]	173	-	7.0	-	3.9	-	81/	-	145/138	-
Internal RC Field Duplicates	785	-	5.7	-	4	-	84/97	-	107/106	-
Internal Diamond Field Duplicates	10	-	13.5	-	14.8	-	40/90	-	86/109	-
Internal RC Pulp Duplicates	-	-	-	-	-	-	-	-	-	-
Internal Diamond Pulp Duplicates	-	-	-	-	-	-	-	-	-	-
Internal RC Laboratory Pulp Repeats [3]	2,930	435	2.3	3.7	1.2	2.2	96/	90	121/121	120/121
Internal Diamond Laboratory Pulp Repeats [3]	290	21	1.6	6.4	0.7	4.0	99/	85	165/165	96/94

[1] Duplicate samples crushed at Genalysis Johannesburg and analysed at Genalysis Perth.
[2] Pulp duplicates analysed at Genalysis Perth.
[3] Pulp repeats analysed at SGS

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Table 14.2.2_2 summarises the results of a series of separate campaigns (undertaken in September 2008) of check duplicate analysis to gauge the relative precision and accuracy of Setpoint laboratories in Johannesburg and ALS Chemex in Johannesburg as well of comparing the difference between XRF and ICPMS analysis at SGS Perth.

Table 14.2.2_2
Etango Project
Inter Laboratory Pulp Comparisons U (ppm)

Sample Type	Number of Data Pairs	Mean % HARD	Median % HARD	% Within RANK HARD Limits (10%/20%)	Comparative Means (ppm) (Original Lab./Duplicate Lab.)
ALS JB versus Setpoint JB – XRF	920	12.4	10.1	49/87	197/230
SGS JB versus Setpoint JB – XRF	488	15.3	8.3	58/80	202/203
SGS JB vs ALS JB?? – XRF	459	14.8	9.2	50/75	214/188
SGS Perth - XRF versus ICPMS	406	10.8	6.1	67/86	174/184

Umpire Field Duplicates

The umpire laboratory field duplicates overall exhibit good precision. The samples assayed at SGS Johannesburg show moderate to good precision with the Genalysis duplicates with 85% of RC field (n=1,817) duplicates and 90% of the diamond duplicates (n=222) within a 20% Rank HARD limit. Both laboratories also reported similar means for each dataset (151ppm versus 147ppm U for the RC and 188ppm versus 188ppm U for the diamond duplicates).

SGS Perth (n=272) exhibits a good precision when compared to Genalysis with 90% of the RC duplicates within a 20% Rank HARD limit. However Genalysis reports a significantly higher mean (11%) of 160ppm U versus 143ppm U. The bias is most pronounced for original samples having greater than 500ppm U.

Umpire Pulp Duplicates

The RC pulp duplicates for SGS Johannesburg (n=2,178) exhibit moderate precision, with 75% of the data within a generally acceptable limit of 10% RANK HARD, a correlation coefficient of 0.99. Comparative means between the two laboratories of 130ppm versus 122ppm U indicate a 6% overall relative positive bias in the results from SGS Johannesburg.

The diamond core pulp duplicates for SGS P (n=173) exhibit good precision, with 81% of the data within a generally acceptable limit of 10% RANK HARD and a correlation coefficient of 0.99. Comparative means between the two laboratories of 145ppm versus 138ppm indicate a 5% overall positive bias in the results from SGS Johannesburg.

The RC pulp duplicates for SGS Perth (n=149) exhibit moderate to good precision, with 75% of the data within a generally acceptable limit of 10% RANK HARD, a correlation coefficient of 0.98 and comparative means between the two laboratories of 125ppm versus 133ppm U for SGS Johannesburg and Genalysis Perth respectively, indicating an 6% relative bias between the two laboratories. The relative bias is most pronounced for samples above 200ppm U.

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Internal Field Duplicates

The RC field duplicate assayed at SGS Johannesburg (n=785) show moderate to high precision with 97% of the duplicates within a 20% Rank HARD limit. Both campaigns also reported similar means for each dataset (107ppm versus 106ppm U).

The diamond core field duplicate assayed at SGS Johannesburg (n=10) show low to moderate precision with 90% of the duplicates within a 20% Rank HARD limit and means of 86ppm versus 109ppm U. The low number of samples in this dataset precludes meaningful extrapolation of the results.

Laboratory Pulp Repeats (Replicates)

The internal laboratory RC and diamond core pulp replicates for SGS Johannesburg and Perth exhibit a general high precision with between 85% and 99% of the data within a 10% Rank HARD limit. The means for all of the pulp repeats are very similar.

Inter-Laboratory and XRF versus ICPMS Comparisons

The results from the inter-laboratory comparison conducted in September 2008 indicate that for all laboratories, relatively low to moderate precision (47% to 55% of the data within a 10% Rank HARD precision limit) is achieved when comparing the pulp samples.

The results indicate that Setpoint and SGS report similar means (203ppm versus 202ppm U, n=488) and that both Setpoint and SGS report higher than ALS-Chemex (ALS): with the comparison of Setpoint versus ALS (n=920) reporting means of 230ppm U versus 197ppm U (a 16% relative global bias); and the comparison of SGS versus ALS (n=459) reporting means of 214ppm U versus 188ppm U (a 14% relative global bias).

The comparison of XRF to ICPMS analysis conducted at SGS Perth indicates that for the 406 samples analysed, the ICPMS method results in a slightly higher global mean for 184ppm versus 174ppm U (or 5.7%).

Discussion

Analyses of the Bannerman inserted standards indicate that the SGS Johannesburg laboratories are reporting a relative bias of between 3% and 8% higher than the expected values for these standards. It is also noted that the SGS internal standards exhibit a bias of 2% to 4% whereas Genalysis reports a negative bias of ~-2% for the same standards (UREM 2, 4 and 9).

The duplicates data for SGS Johannesburg indicates that whilst the internal repeatability is good, there is a bias in the order of 3% to 6% compared with pulp duplicates sent to Genalysis in Perth. This bias is not however seen with the field duplicates sent to Genalysis (particularly when outliers are removed). It is interesting to note that the Inter-Laboratory comparison conducted in September 2008 shows that ALS and Setpoint in Johannesburg report similar means overall and both laboratories report 14% to 16% higher than ALS (Table 14.2.2_2).

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The trend of the bias seen at SGS Johannesburg is of minor concern; however this is tempered with the relatively good correlation seen with the field duplicates and the overall similar correlation seen between the SGS and Setpoint assays.

The results of the pulp duplicates for SGS Perth indicate a general negative bias with respect to Genalysis in the order of 6% to 11%. This potential bias should be tested with the insertion of industry standards to the SGS Perth laboratory for any future samples sent and further action taken as necessary.

The following recommendations are made in relation to the QAQC protocols for the Etango Project:

- Follow up investigations should be undertaken with SGS Johannesburg regarding the cause of the potential bias seen in the internal laboratory standards and Umpire assaying.
- Standards AMIS85 and AMIS86 (and any other Bannerman standards) be regularly sent to Genalysis along with the regular Umpire duplicate samples.
- Intra-Laboratory (i.e. same laboratory) blind pulp replicates should be undertaken at a nominal rate of 1:20.
- A further high grade standard should be sourced to supplement AMIS0029.

14.3 Independent Sampling

Coffey Mining visited the Anomaly A/Oshiveli site during April 2008 and collected samples for the purposes of independent sampling (Figure 14.3_1). A total of 40 RC samples from GARC0362 were placed into plastic bags with numbered security tags attached by the author directly after drilling and splitting in the field. Once tagged, the bags were sent to Bannerman's sample storage yard for processing.

Ten diamond samples were also collected from GOADH042. These were collected from the core tray located at Bannerman's core shed, then placed in plastic bags with numbered security tags attached. The tagged samples were then sent to the SGS Johannesburg laboratories where the security tags were inspected by Coffey Mining personnel, prior to sample preparation.

The assay results from the samples are shown in Table 14.3_1. The results illustrate typical examples of mineralisation from the property, with a maximum value of 1,392ppm U_3O_8 from sample A26295. The average of the 40 RC samples collected from hole GARC0361 was 235ppm U_3O_8. The average of the 10 diamond samples collected was 13ppm U_3O_8.

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Figure 14.3_1
Etango Project
Samples Tagged for Independent Sampling

Table 14.3_1
Etango Project
Independent Sampling Results

Hole ID	From	To	Sample ID	U_3O_8 (ppm)	Hole ID	From	To	Sample ID	U_3O_8 (ppm)
RC Samples									
GARC0362	0	1	A26281	4.99	GARC0362	20	21	A26302	24
GARC0362	1	2	A26282	4.99	GARC0362	21	22	A26303	76
GARC0362	2	3	A26283	16	GARC0362	22	23	A26304	232
GARC0362	3	4	A26284	30	GARC0362	23	24	A26305	137
GARC0362	4	5	A26285	15	GARC0362	24	25	A26306	127
GARC0362	5	6	A26286	14	GARC0362	25	26	A26307	194
GARC0362	6	7	A26287	14	GARC0362	26	27	A26308	610
GARC0362	7	8	A26288	173	GARC0362	27	28	A26309	584
GARC0362	8	9	A26289	176	GARC0362	28	29	A26310	62
GARC0362	9	10	A26290	156	GARC0362	29	30	A26311	135
GARC0362	10	11	A26291	162	GARC0362	30	31	A26312	178
GARC0362	11	12	A26292	217	GARC0362	31	32	A26313	35
GARC0362	12	13	A26293	557	GARC0362	32	33	A26314	141
GARC0362	13	14	A26294	1008	GARC0362	33	34	A26315	292
GARC0362	14	15	A26295	1392	GARC0362	34	35	A26316	377
GARC0362	15	16	A26296	453	GARC0362	35	36	A26317	211
GARC0362	16	17	A26297	446	GARC0362	36	37	A26318	200
GARC0362	17	18	A26298	151	GARC0362	37	38	A26319	410
GARC0362	18	19	A26299	299	GARC0362	38	39	A26321	4.99
GARC0362	19	20	A26301	87	GARC0362	39	40	A26322	12
Diamond Samples									
GOADH0042	6.79	7.79	J2436	4.99	GOADH0042	11.79	12.79	J2441	4.99
GOADH0042	7.79	8.79	J2437	4.99	GOADH0042	12.79	13.79	J2442	20
GOADH0042	8.79	9.79	J2438	4.99	GOADH0042	13.79	14.79	J2443	62
GOADH0042	9.79	10.79	J2439	4.99	GOADH0042	14.79	15.79	J2444	13
GOADH0042	10.79	11.79	J2440	4.99	GOADH0042	15.79	16.79	J2445	4.99

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14.4 Assessment of Project Database

Based upon Coffey Mining's analysis of the duplicates data and the laboratory based standards data, the Bannerman assaying is considered to meet industry acceptable standards for sample accuracy and precision and is acceptable for use in resource estimation studies.

From November 2007, Bannerman has used the Acquire commercial database software system to manage their drillhole data. The use of such database management software is considered to be of high industry standard as it enables the incorporation of large datasets into an organised, auditable structure. Checks by Coffey Mining have identified no material issues with the database and it is considered acceptable for use in resource estimations.

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15 ADJACENT PROPERTIES

The Bannerman EPLs are situated within the highly prospective Central Zone of the Damara Orogenic Belt, which is currently subject to intensive exploration and development by a number of international mining and exploration companies. Significant nearby uranium projects include the Rössing Mine, the Langer Heinrich Mine, and the nearby Husab project (Figure 4.4.1_1 in Section 4).

15.1 Rössing Mine

The Rössing Mine is controlled by Rössing Uranium Limited which in turn is owned by Rio Tinto (69%), the Government of Iran (15%), the Industrial Development Corporation of South Africa (10%), the Namibian Government (3%), and private ownership (3%). The mine is located approximately 6.25km from the north-eastern boundary of EPL 3345 and is the largest granite-hosted uranium mine in the world. Production commenced in 1976.

Uranium mineralisation is associated with post-D_3 Type D and E alaskites (Basson and Greenaway, 2004) which have preferentially intruded into pyroxene-hornblende gneiss and biotite-amphibole schist units of the Khan Formation in the northern ore zone, and into biotite-amphibole schist/lower marble/lower biotite-cordierite gneiss of the Rössing Formation in the central ore zone (Roesener and Schreuder, 1997). The main, primary uranium mineral is magmatic uraninite (Basson and Greenaway, 2004).

The alaskites range in size from small quartzo-feldspathic lenses to large intrusive bodies, with the bulk of the economic mineralisation being contained in alaskite on the northern limb of the 'mine' synclinorium (Roesener and Schreuder, 1997).

The stratigraphic trend which hosts the Rössing Mine is interpreted to extend into the centre of EPL 3345, highlighting the highly prospective nature of this tenement.

15.2 Langer Heinrich Mine

The Langer Heinrich uranium mine, which is owned by Paladin Resources Ltd, is located directly within the excised portion of EPL 3346 (Figure 4.4.1_1 of Section 4). The mine came into production in December 2006.

The Langer Heinrich deposit is a calcrete related uranium deposit that is associated with valley fill sediments in a Tertiary palaeodrainage system. The uranium occurs as carnotite. The deposit occurs over a 15km strike length and has up to 8m of river sand and scree cover (Paladin, 2007b).

Due to the proximity of such a large, proven calcrete-hosted system, this type of mineralisation will be prospective within Bannerman's EPL's.

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15.3 Husab JV Project

The Husab Joint Venture project is controlled by Extract Resources Ltd (Extract). It consists of two EPL's with a total area of 637km² and is located directly between Bannerman's tenements (EPL 3345 and EPL 3346). In July 2009, Extract publically reported a mineral resource upgrade for this project comprising an Indicated Resource of 21Mt at 527ppm U_3O_8 and Inferred Resource of 126Mt at 436ppm U_3O_8 at Zone 1, and an Inferred Resource of 102Mt at 543ppm U_3O_8 at Zone 2, both above a 100ppm U_3O_8 lower cutoff, at its Rössing South prospect.

The tenements contain primary alaskite hosted mineralisation (the main exploration focus) and secondary carnotite and calcrete hosted mineralisation. Mineralised alaskites occur along the contact between the Khan Formation and marbles of the Husab Formation (Morel, 2007).

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16 MINERAL PROCESSING AND METALLURGICAL TESTING

No further work has been completed since the September 2008 Technical Report (Inwood, 2008) on mineral processing and metallurgical testing. Various metallurgical methods are currently being trialled and tested, but this work all remains at a preliminary stage.

Bannerman is undertaking an extensive and systematic metallurgical testwork programme. Drilling is currently underway to obtain a 15-20 tonne bulk metallurgical sample of drill core, for further larger scale heap leach column testwork for use in confirming the design layout and costs of the modelled heap leach operation to a greater confidence level.

Initial laboratory testwork has also been commenced on beneficiation through flotation methods and this has returned encouraging results. Further beneficiation testwork is now continuing in an attempt to confirm the technical and commercial viability of these preliminary results.

For information on the completed metallurgical work please refer to the technical report from August 2008 (Inwood, N. A. 2008b, Etango Project, Namibia, Technical Report by Coffey Mining Pty Ltd for Bannerman Resources Limited).

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17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

In July 2009, Coffey Mining completed resource estimate for the Anomaly A/Oshiveli uranium deposit and Onkelo uranium deposit. The Anomaly A/Oshiveli uranium deposit has had resource estimates completed in 2008 and also in January 2009 and has again been updated. A maiden resource estimate was carried out for the Onkelo deposit.

The Qualified Person responsible for the Anomaly A/Oshiveli resource estimate was Mr Neil Inwood, who is a Specialist Resource Geologist with the consultancy Coffey Mining Pty Ltd. The Qualified Persons responsible for the Onkelo resource estimate were Mr Neil Inwood and Mr Iain Macfarlane. Mr Iain Macfarlane is a Senior Consultant Resources with the consultancy Coffey Mining Pty Ltd. The Qualified Persons' certificates for Mr Inwood and Mr Iain Macfarlane are included in Appendix 3. The details of the resource estimations are summarised later in this section.

No formal Reserve estimate has been completed for the Anomaly A/Oshiveli or Onkelo deposit. Bannerman is currently conducting a feasibility study for the project.

17.1 Resource Database and Validation

17.1.1 Database

For the July 2009 resource update, only holes drilled by Bannerman were used.

At Anomaly A/Oshiveli, the drillhole database in the vicinity of the estimation consists of 628 RC and 72 diamond drillholes totalling 187,635m. A total of 24 holes were drilled for non-estimation purposes (eleven for metallurgical testing, nine for geotechnical testing and four for hydrogeological testwork). The lithological contacts were considered whilst modelling for these holes which had not been assayed for testing purposes.

The drillhole database for Onkelo consists of 57 RC holes for 11,913m.

At Anomaly A/Oshiveli, the drillholes were oriented typically at 60º dip to the east (UTM grid) with a drill spacing ranging from 50m by 50m to 50m by 100m and 100m by 100m. At Onkelo, the drillholes were drilled in three orientations to allow for the topography, these orientations typically being vertical, at 60º to the southeast (UTM grid) or at 60º to the northwest. Many of the inclined holes were paired, sharing collar positions but drilled in directions 180º from each other. This resulted in a nominal drill spacing of 50m along section, sections being 100m apart.

A combination of chemical assaying (XRF and ICP- 39,843 samples or 96% of the total and 3,821 data or 98% of the total) and factored radiometric data (1,599 and 92 1m composites) was used for the estimation of the mineralised zones at Anomaly A/Oshiveli and Onkelo Deposits respectively.

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Where the chemical assays were returned below detection limit, half the detection limit was assigned to the intervals. Intervals which were not sampled internal to mineralised zones were normally given a grade of 0.001ppm U_3O_8. On a case by case basis, some intervals were treated as null (i.e. no samples) for drillholes which contained mineralised intervals and had not received any assaying results yet.

17.1.2 Validation

The 2009 drillhole database was checked by a variety of methods including:

- Checks of the top 200 assays against original laboratory certificates.
- Database and visual comparison of assay, collar and survey data against the 2008 validated database.
- 3D analysis of collar positions and downhole survey traces.

No significant data related issues were identified and the resulting database was considered to be robust and appropriate for use in resource estimation.

17.2 Geological Interpretation and Modelling

17.2.1 Geological and Mineralisation Model

Separate three dimensional (3D) models were created for both the alaskite bodies and the mineralised zones. The majority of the uranium mineralisation is associated with the alaskite bodies and follows the trends of the alaskite contacts, with typically little significant mineralisation occurring in the surrounding sediments. The alaskite contacts were therefore considered at the time of modelling and used to guide 3D modelling of the mineralisation shapes.

To establish appropriate grade continuity, the mineralisation model for the Anomaly A/Oshiveli deposit was based upon a nominal 75ppm U_3O_8 mineralisation halo. This nominal mineralisation outline typically also represented the natural cutoff of U_3O_8 mineralisation exhibited in the drillholes, with grades typically falling below 30ppm to 20ppm U_3O_8 away from the logged alaskite contacts.

The mineralisation boundaries within the alaskites bodies were often extended to the alaskite contacts for up to 3m, even if these intervals were not mineralised above the nominal 75ppm U_3O_8 cutoff.

The mineralisation constraints were generated based upon sectional interpretation and three dimensional analyses of the available drilling data. At Anomaly A/Oshiveli, the mineralised zones (Figure 17.2.1_1) were modelled as 56 distinct zones (3m to 168m thick) with a northerly trend. The zones dip from -30° to -40° to the west. Individual zones were modelled from 150m to 1,400m long. At Onkelo, the mineralised zones (Figure 17.2.1_2) were modelled as ten distinct zones (3m to 35m thick) with a north easterly trend. The zones dip at about -25° to the northwest. Individual zones modelled were from 300m to 1,100m long.

Figure 17.2.1_1
Etango Uranium Project : Anomaly A/Oshiveli Deposit
Modelled Mineralised Zones

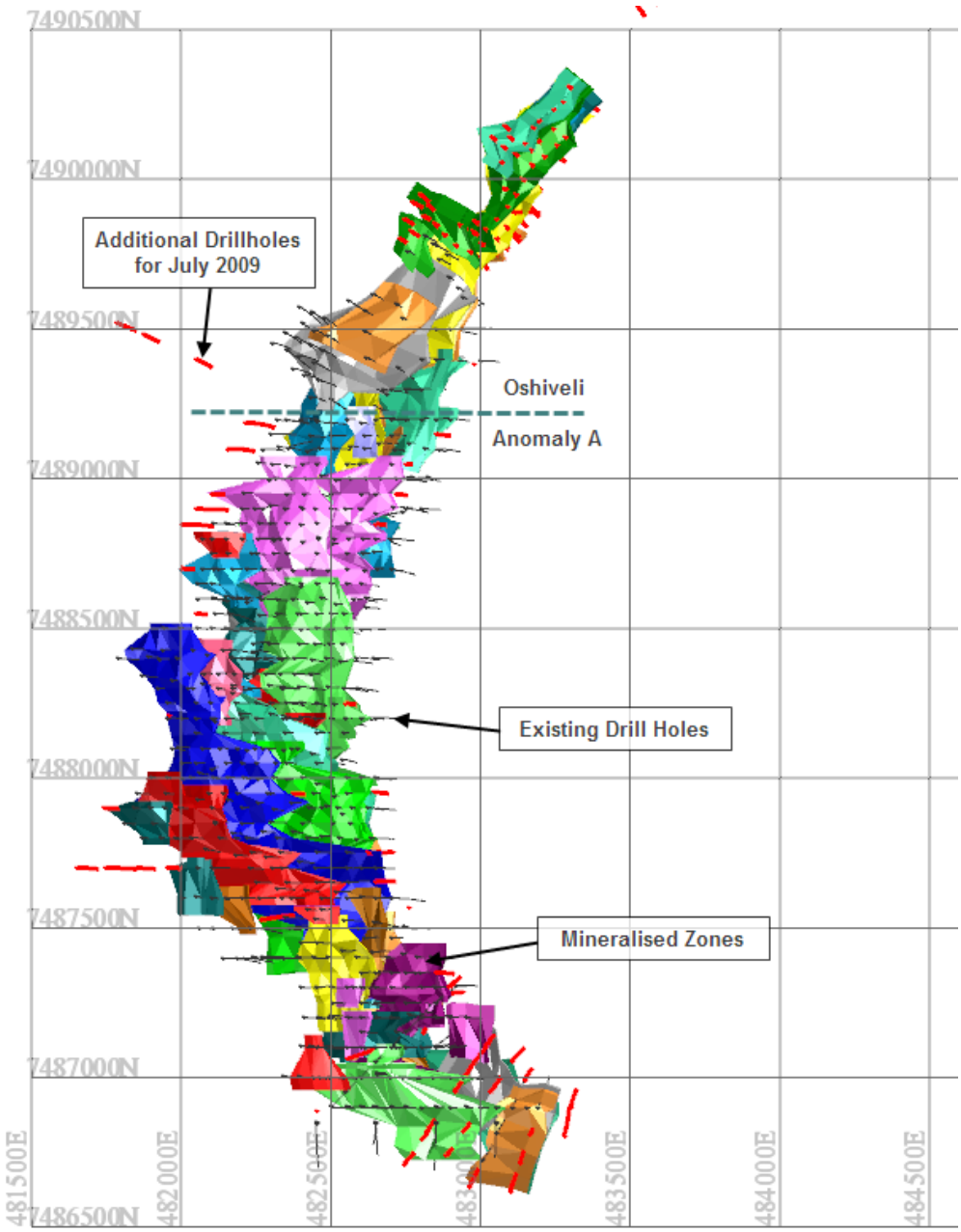

Figure 17.2.1_3 shows a typical sectional interpretation at Anomaly A with the mineralised zones, alaskite interpretation and the contact zone between the Chuos, Khan and Etusis meta-sediments. Figure 17.2.1_4 displays the equivalent at Onkelo (without the metasediment contact zones which were absent). Individual mineralised zones which did not have more than two drillhole intersections on two consecutive 50m or 100m spaced sections were typically not estimated.

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Figure 17.2.1_2
Etango Uranium Project : Onkelo Deposit
Oblique Section displaying Modelled Mineralised Zones

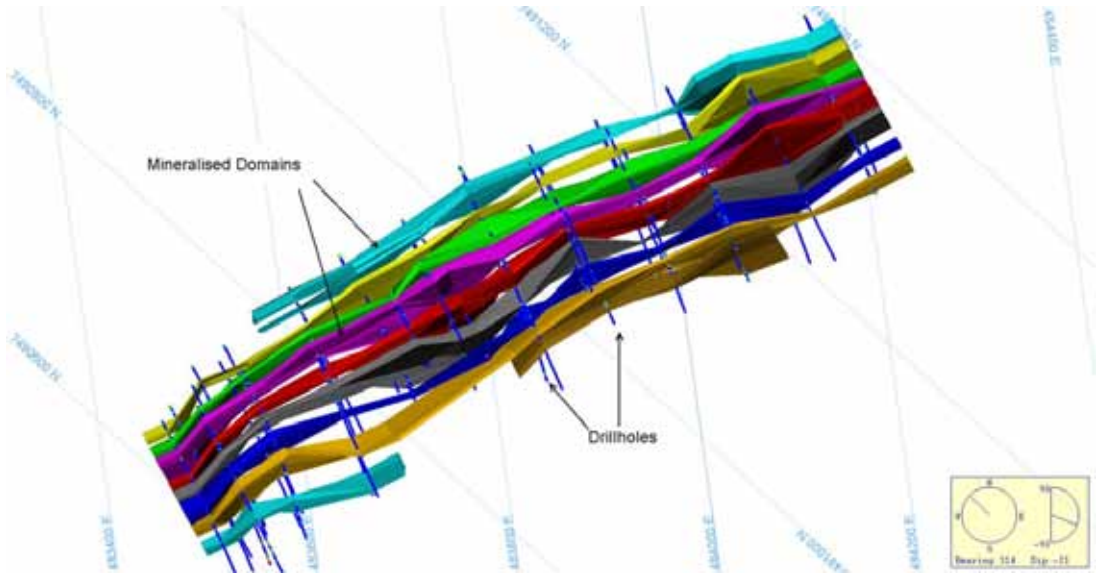

Figure 17.2.1_3
Etango Uranium Project : Anomaly A Deposit
Section 7,488,800mN with Drilling, Lithology and U_3O_8 Values

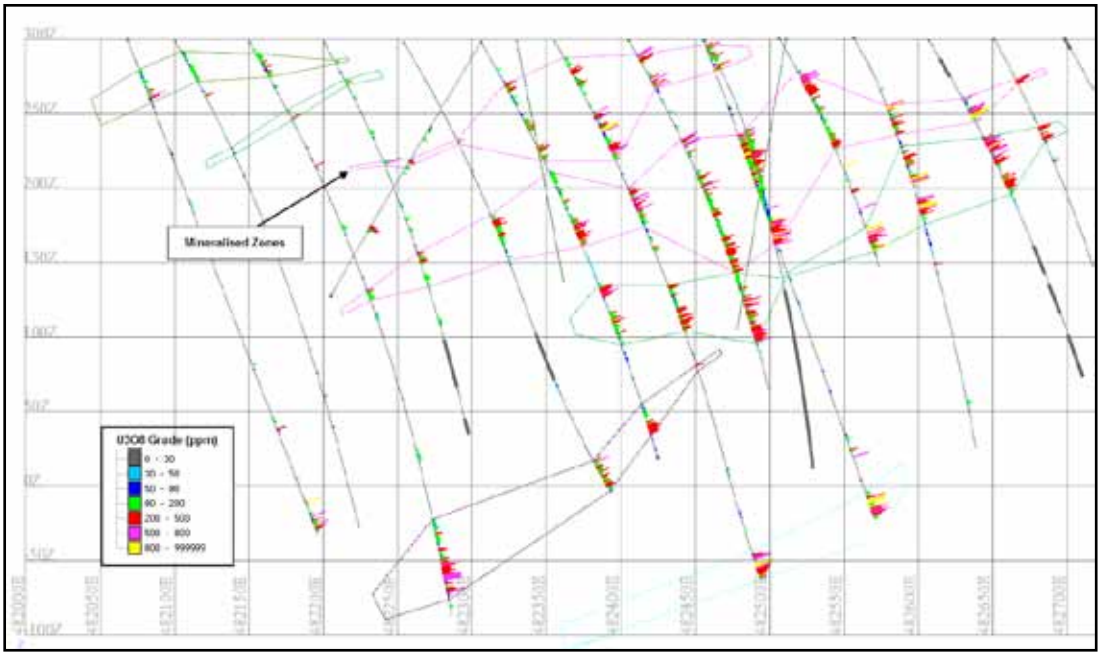

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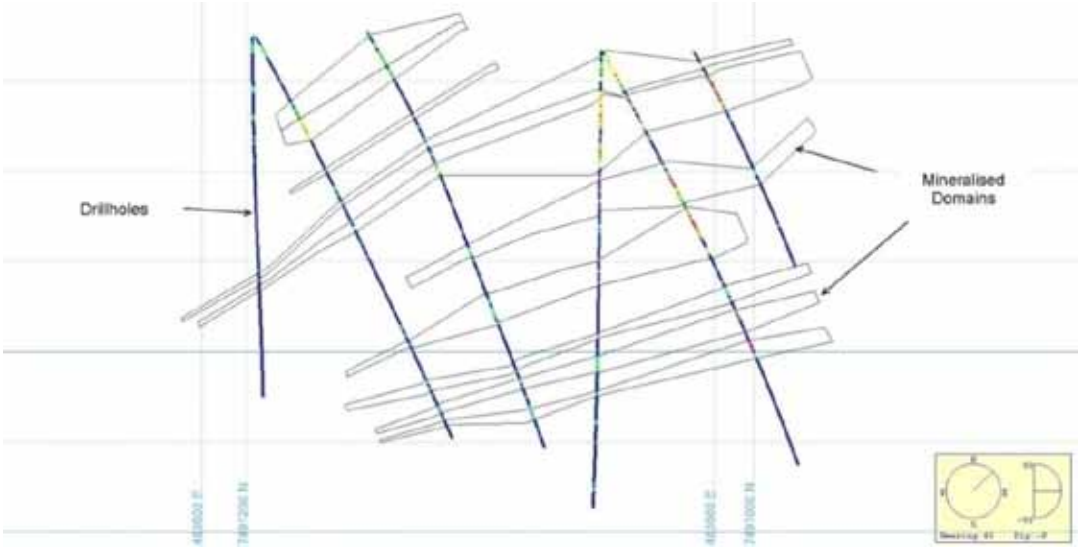
Figure 17.2.1_4
Etango Uranium Project : Onkelo Deposit
Oblique Sectional Interpretation (looking from SW to NE)



17.2.2 Weathering Profile

The pedolith mainly consists of <1m of transported sands. In places minor calcrete or gypcrete is encountered within the transported sand and where present it often binds the sand grains together to form a surface cap. At Anomaly A/Oshiveli, the base of the weathering profile in the alaskites and surrounding meta-sediments was logged to extend typically less than 50m from the surface. At Onkelo, the base of weathering where recorded was typically at 3m or less. Consequently, the weathering profile was modelled for the resource estimate at Anomaly A/Oshiveli only. A brief analysis was conducted to determine the effect of density and U_3O_8 grades within the profile.

Some leaching of uranium from the alaskites near surface was evident. This is thought to be associated with oxidation observed in the upper parts of the deposit. Based upon the available core density measurements, the effect of weathering on density within the profile is considered to be negligible.

17.3 Statistical Analysis

For the Anomaly A/Oshiveli estimate, the vast bulk of the assays (96%) used in the resource estimates were analysed by XRF, with the remainder being predominantly factored gamma log eU_3O_8 analysis sourced from the Auslog tool.

In 2008, a comparative analysis was conducted between the radiometric and XRF data to determine the robustness of the radiometric datasets for Anomaly A (Inwood, 2008). The analysis indicated that the radiometric datasets were positively biased with respect to the XRF assaying. As the radiometric data constituted such a small portion of the resource dataset, the factors obtained from the 2008 study were applied to the radiometric data for 2009 for Anomaly A/Oshiveli. Factoring of the radiometric datasets for Onkelo is discussed in Section 17.3.1.

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The linear regressions used for the factoring of the Auslog eU_3O_8 data to minimise any relative bias are shown below:

§ Bin 1 – 0ppm to 1,100ppm eU_3O_8

ú Factored Auslog = Auslog eU_3O_8ppm * 0.86 - 26

§ Bin 2 - 1,100ppm to 1,700ppm eU_3O_8

ú Factored Auslog = Auslog eU_3O_8ppm * 1.03 - 67

§ Bin 3 - > 1,700ppm

ú Factored Auslog = Auslog eU_3O_8ppm * 0.96 + 79

17.3.1 Onkelo Radiometric Data and Factoring

At Onkelo, statistical analysis was undertaken for 9,070 matching pairs of chemical (XRF) U_3O_8 1m data and the Auslog eU_3O_8 1m composite data. Figure 17.3.1_1 presents summary statistics and charts for the Auslog and XRF data pairs.

Scatter plots of both datasets indicate a broad scatter with correlation coefficients of 0.6. Q-Q plots for both datasets illustrate that the bias is most pronounced for the grade population above 1,600ppm U_3O_8. For the grade population above 1,600ppm U_3O_8, the Auslog grades are generally higher than those of the chemical data.

Analysis of the matching data pairs indicated that the Auslog radiometric data exhibited a positive bias relative to the XRF data. From the raw statistics, the Auslog had a higher mean (125ppm eU_3O_8 versus 101ppm U_3O_8) although a lower standard deviation (174 versus 188) compared to the XRF data.

The linear regression used for the factoring of the Auslog eU_3O_8 data is shown below:

§ $y = 1.06x - 31.62$

The results of the factoring of the radiometric datasets can be seen in Figure 17.3.1_2.

After factoring, the Auslog data had a mean of 107ppm eU_3O_8 versus a mean grade of 101ppm U_3O_8 for the XRF data with matching data pairs. The standard deviations of the two datasets were similar (188 for the XRF data versus 181 for the factored Auslog data). The Q-Q plot on Figure 17.3.1_2 indicates a good correlation between the data populations up to about 1,000ppm U_3O_8 and then a relative negative effect is introduced into the Auslog data population. The maximum factored value used in the resource estimation was 722ppm U_3O_8.

The results of the factoring of the radiometric datasets were inspected visually against the XRF data using Vulcan mining software over the mineralised zones of interest. The results of the radiometric factoring were considered appropriate for use in resource estimations.

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Figure 17.3.1_1
Etango Project
Summary Statistics and Charts for XRF and Auslog Data Pairs - Onkelo

	eu3o8	U3O8_N	Units		Result
No. Pairs:	9,070	9,070		Pearson CC:	0.55
Minimum:	0.00	5.00	ppm	Spearman CC:	0.64
Maximum:	2,231.00	3,494.00	ppm	Mean HARD:	46.68
Mean:	125.45	101.33	ppm	Median HARD:	45.18
Median	57.00	30.00	ppm		
Std. Deviation:	173.76	187.57	ppm	Mean HRD:	21.70
Coefficient of Variation:	1.39	1.85		Median HRD	30.54

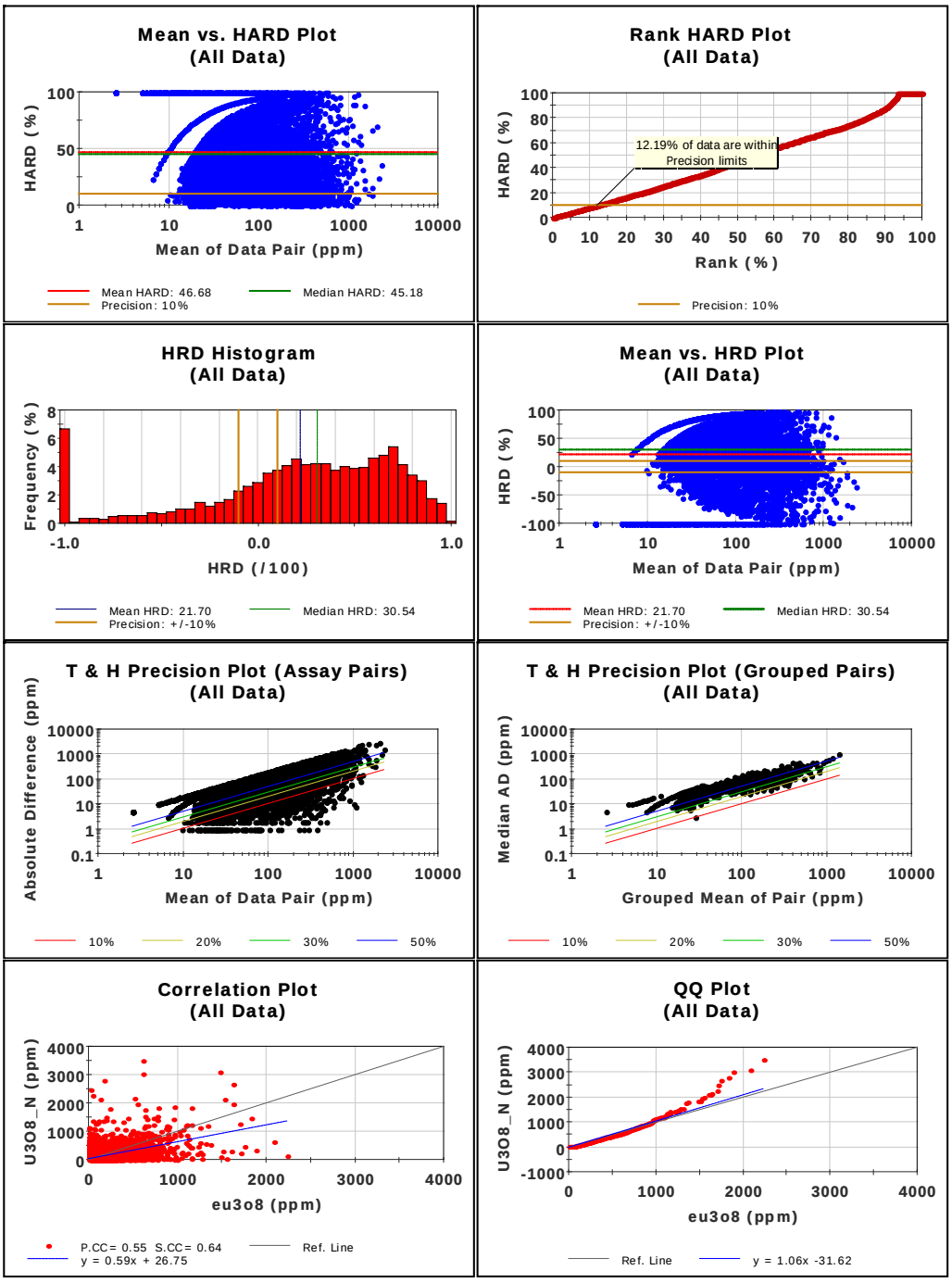

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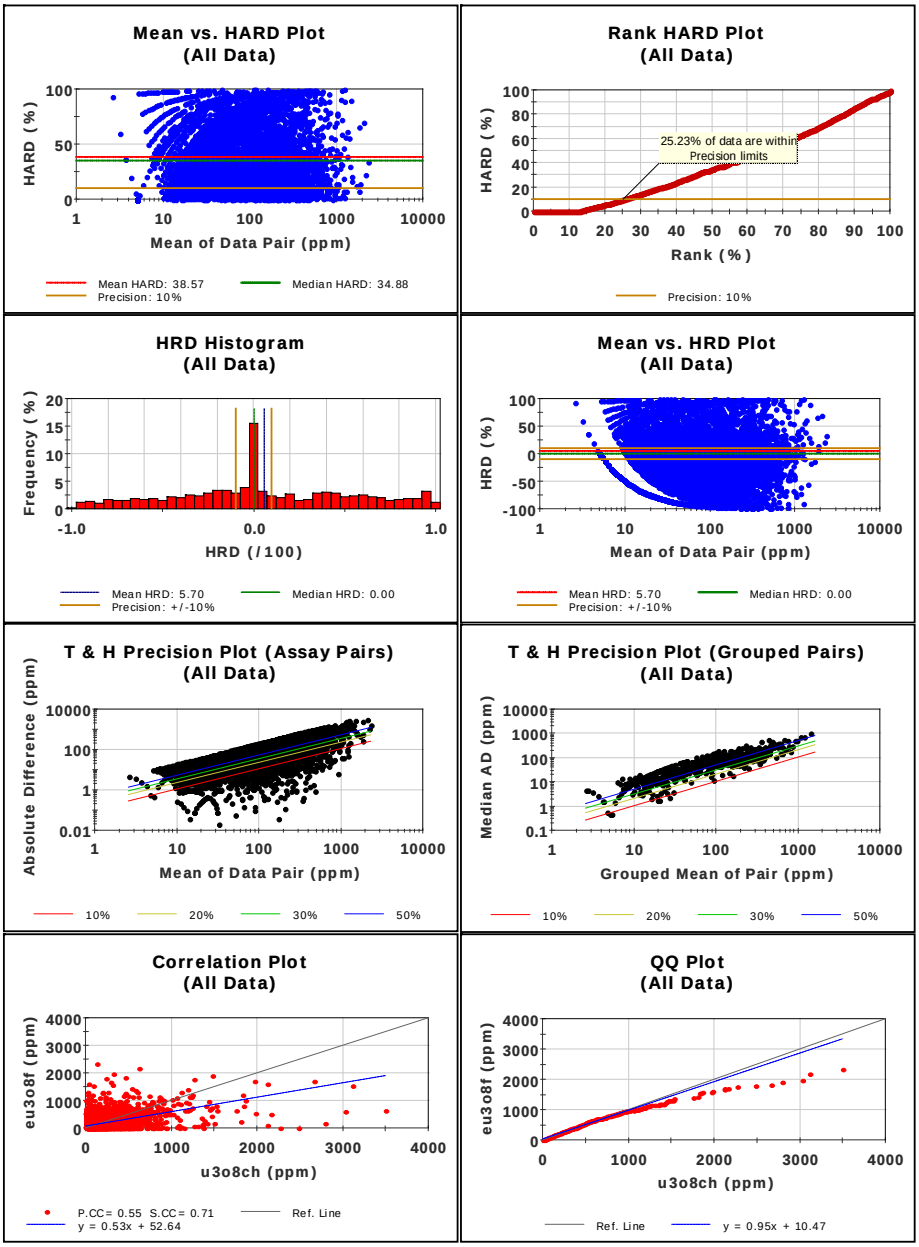
Figure 17.3.1_2
Etango Project
Summary Statistics and Charts for XRF and Factored Auslog Data - Onkelo

Onkelo
(All Data)

	u3o8ch	eu3o8f	Units		Result
No. Pairs:	9,070	9,070		Pearson CC:	0.55
Minimum:	5.00	0.18	ppm	Spearman CC:	0.71
Maximum:	3,494.00	2,333.24	ppm	Mean HARD:	38.57
Mean:	101.33	106.69	ppm	Median HARD:	34.88
Median	30.00	28.80	ppm		
Std. Deviation:	187.57	180.93	ppm	Mean HRD:	5.70
Coefficient of Variation:	1.85	1.70		Median HRD	0.00



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17.3.2 Statistical Analysis of Composites and Top Cuts

The bulk of the sampled intervals were 1m in length. To emulate any potential mining sub-bench size (i.e. 2.5m) it was decided to use 3m U_3O_8 composites at Anomaly A/Oshiveli, for the estimation with a minimum allowable length of 1.2m. Any residuals (composites <1.2m) were not used in the estimates. Further statistical investigations were performed upon the 3m U_3O_8 composites from within each of the mineralised zones.

At Onkelo, 2m U_3O_8 composites were used for the estimation with a minimum allowable length of 1.0m. Any residuals (composites <1.0m) were not used in the estimates. Further statistical investigations were performed upon the 2m U_3O_8 composites from within each of the mineralised zones.

Summary statistics of the U_3O_8 composites are presented in Tables 17.3.2_1 and 17.3.2_2 for Anomaly A/Oshiveli and Onkelo respectively.

Full statistical plots from all of the mineralised zones are shown in Appendix 2.

Figures 17.3.2_1 and 17.3.2_2 show typical histogram and log-probability plots of the 3m U_3O_8 composite data from within Zones 2 and 14 respectively at Anomaly A. Both plots demonstrate the strong positive tail typical of the deposit; however both datasets also have a relatively low coefficient of variations (standard deviation/mean) of 0.76 for Zone 2 and 1.04 for Zone 14, indicating that positive outliers do not necessarily heavily impact upon the mean of the data population

Figures 17.3.2_3 and 17.3.2_4 show typical histogram and log-probability plots of the 2m U_3O_8 composite data from within Zones 10 and 40 at Onkelo. Both plots demonstrate the strong positive tail typical of the deposit; however both datasets also have a relatively low coefficient of variations (standard deviation/mean 0.63 for Zone 10 and 0.84 for Zone 40) indicating that positive outliers do not necessarily heavily impact upon the mean of the data population.

Assessment of the high grade U_3O_8 composites was completed to determine the requirement for high-grade cutting to be used for resource estimation. The approach taken included:

- Detailed review of histogram and probability plots, with significant breaks in populations used to interpret possible outliers;
- Detailed review of spatial distribution plots; and
- Ranking of the composite data and the investigation of the influence of individual composites on the mean and standard deviation.

The top cuts used and their effect on the mean of the mineralised zones average grade are shown in Tables 17.3.2_1 and 17.3.2_2 for Anomaly A/Oshiveli and Onkelo respectively. The effect of applying top cuts to the bulk of the zones was to reduce the naïve mean by between 1 to 7%. However some zones were highly sensitive to the cutting of a relatively few high grade samples (e.g. Zone 35, where the cutting of 5 samples resulted in a 15% decrease in the mean) due to extreme high-grade outliers.

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Table 17.3.2_1

Etango Uranium Project

Summary Statistics for 3m U_3O_8 Composites (ppm) – Anomaly A/Oshiveli A

Uncut 3m Composites									Cut 3m Composites				
Zone	Number	Min.	Max.	Mean	Median	Std Dev	Variance	C.V.	Mean	C.V.	Cut	Decrease	# Cut
1	249	5	1,364	211	159	189	35,730	0.89	208	0.84	800	1%	3
2	1,365	4	1,104	173	140	131	17,214	0.76	172	0.73	800	1%	8
3	1,352	5	1,632	215	174	166	27,666	0.77	214	0.74	900	1%	6
4	243	5	541	139	117	88	7,666	0.63	139	0.63	500	0%	2
5	582	5	1,944	219	165	214	45,830	0.98	213	0.85	900	3%	7
6	83	5	607	194	169	137	18,664	0.70	194	0.70	None	0%	0
7	42	23	1,142	291	189	266	70,693	0.92	278	0.84	800	4%	3
8	10	88	255	146	136	45	2,045	0.31	146	0.31	None	0%	0
9	328	10	1,695	224	153	215	46,069	0.96	219	0.87	1000	2%	3
10	212	3	485	158	151	101	10,300	0.64	158	0.64	None	0%	0
11	67	5	496	151	137	96	9,247	0.64	151	0.64	None	0%	0
12	174	5	468	115	105	81	6,557	0.70	115	0.70	None	0%	0
13	486	5	2,495	179	135	171	29,372	0.96	173	0.71	650	3%	5
14	776	4	2,842	256	181	257	66,277	1.01	249	0.87	1200	2%	7
15	127	33	749	216	184	120	14,434	0.56	215	0.54	600	1%	2
16	149	5	1,340	275	230	192	36,794	0.70	271	0.65	800	1%	1
17	76	8	1,055	291	212	231	53,453	0.80	284	0.75	800	2%	2
18	1,586	2	1,908	210	167	185	34,182	0.88	208	0.83	1050	1%	10
19	14	25	339	158	139	105	10,932	0.66	158	0.66	None	0%	0
20	444	5	2,132	254	208	230	52,837	0.91	251	0.85	1100	1%	4
21	118	5	1,105	168	129	159	25,256	0.95	160	0.79	550	4%	2
22	285	5	1,852	226	161	215	46,162	0.95	220	0.85	850	2%	6
23	822	5	2,282	231	175	221	49,001	0.96	229	0.90	1150	1%	6
24	155	5	855	208	182	156	24,337	0.75	204	0.70	600	2%	4
25	594	5	1,689	213	167	199	39,414	0.93	208	0.83	900	2%	7
26	309	5	1,989	233	186	211	44,480	0.91	227	0.78	900	3%	3
27	192	5	1,492	214	148	196	38,327	0.92	206	0.77	700	4%	4
28	21	5	412	164	159	108	11,660	0.66	164	0.66	None	0%	0
29	146	5	998	166	117	164	26,987	0.99	159	0.86	600	4%	3
30	232	5	1,127	182	168	109	11,789	0.60	179	0.51	600	1%	2
31	148	5	1,478	218	160	219	48,042	1.00	207	0.84	700	5%	6
32	141	5	279	103	99	54	2,908	0.52	103	0.52	None	0%	0
33	176	5	1,188	189	143	160	25,698	0.85	185	0.76	600	2%	5
34	404	5	2,165	171	126	187	35,007	1.09	164	0.86	750	4%	7
35	135	3	3,132	194	101	330	108,589	1.70	165	1.02	700	15%	5
36	70	5	640	178	139	141	19,986	0.80	178	0.80	None	0%	0
37	28	56	404	134	106	81	6,562	0.61	134	0.61	None	0%	0
38	51	5	1,417	247	197	234	54,967	0.95	233	0.76	700	6%	1
39	178	5	1,169	182	137	179	32,076	0.98	176	0.87	700	3%	5
40	33	5	396	149	129	100	10,064	0.67	149	0.67	None	0%	0
41	95	5	719	147	118	123	15,061	0.84	143	0.75	500	3%	4
42	43	2	1,574	200	137	254	64,393	1.27	182	0.92	800	9%	1
43	47	9	415	115	108	71	5,023	0.62	115	0.62	None	0%	0
44	70	70	489	222	203	92	8,552	0.42	222	0.42	None	0%	0
45	41	5	370	153	130	110	12,157	0.72	153	0.72	None	0%	0
46	63	5	520	100	63	104	10,754	1.03	100	1.03	None	0%	0
47	16	66	317	145	127	65	4,198	0.45	145	0.45	None	0%	0
48	15	36	323	135	124	84	7,020	0.62	135	0.62	None	0%	0
49	17	5	922	178	124	213	45,287	1.20	153	0.84	500	14%	1
50	391	5	999	194	153	147	21,728	0.76	193	0.73	750	1%	5
51	131	7	2,033	245	166	285	81,509	1.17	226	0.90	850	8%	6
52	27	10	373	127	113	95	9,064	0.75	127	0.75	None	0%	0
53	48	5	877	193	182	156	24,303	0.81	187	0.71	600	3%	2
54	25	16	812	238	199	203	41,053	0.85	233	0.82	700	2%	1
55	113	5	1,457	179	95	211	44,611	1.18	168	0.97	700	6%	3
56	74	10	986	204	138	190	35,918	0.93	197	0.85	700	3%	4

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Table 17.3.2_2
Etango Uranium Project
Summary Statistics for 2m U_3O_8 Composites (ppm) - Onkelo

Uncut 2m Composites								Cut 2m Composites			
Zone	Number	Min.	Max.	Mean	Median	Std Dev	Variance	Cut Mean	Decrease	Cut	# Cut
10	203	4.95	554	136.987	118.75	88.337	7803.4	136.987	0%	None	0
20	207	5	911.5	173.137	127.75	142.937	20431.1	171.92	0.7%	660	1
30	303	3.36	1276	193.717	172.25	162.674	26462.9	191.78	1.0%	900	2
40	333	5	1131	211.122	162.75	186.326	34717.2	210.44	0.3%	1,000	2
50	338	5	1083	181.02	138	171.077	29267.3	181.02	0.0%	None	0
60	297	4.42	1715	202.037	133.25	225.122	50679.6	200.47	0.8%	1,250	1
70-100	444	5	3,068.5	238.48	139.75	311.270	96,879.	222.56	6.7%	1,100	12

Figure 17.3.2_1
Etango Uranium Project
Histogram of 3m U_3O_8 Composites for Zones 2 and 14 - Anomaly A

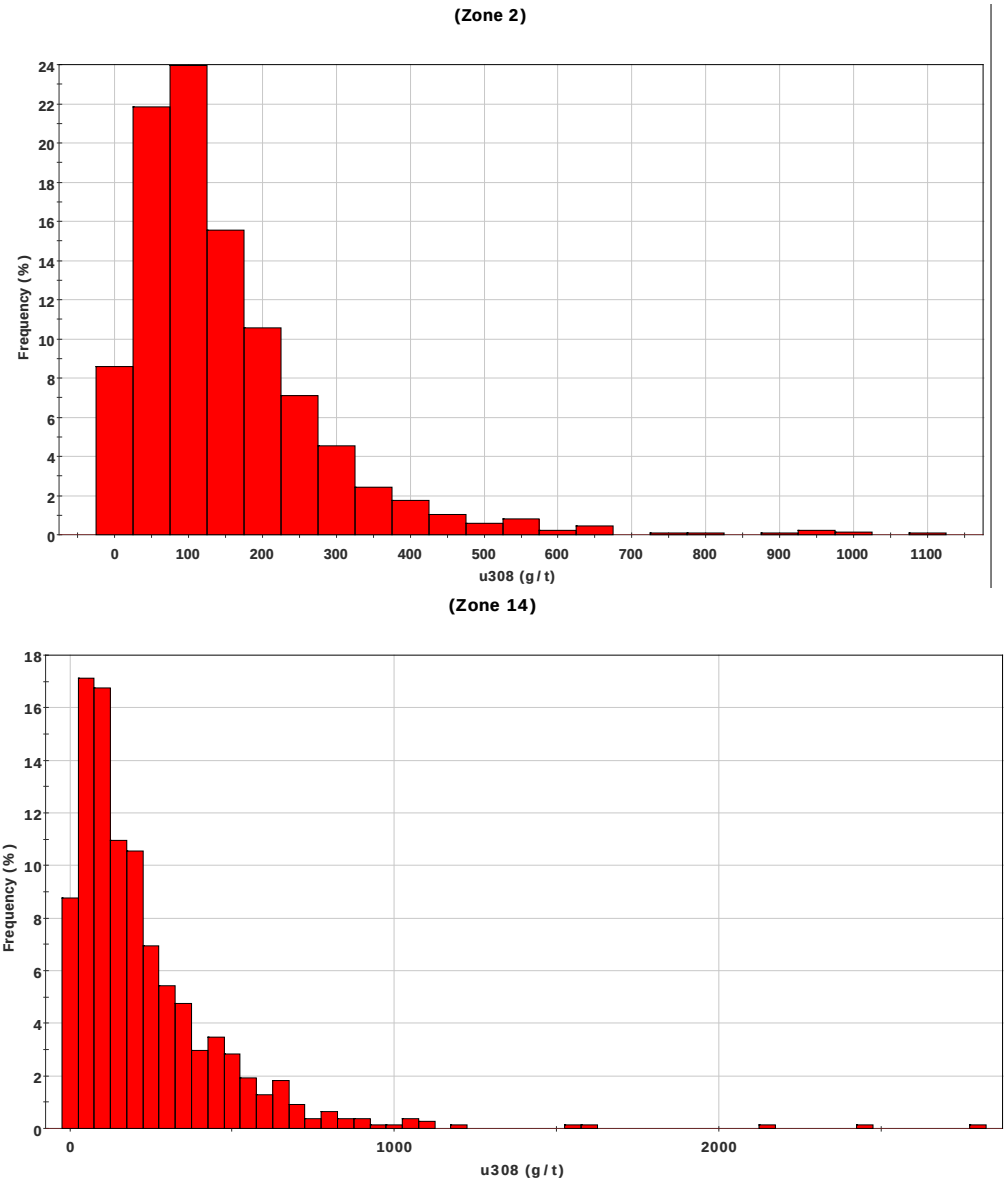
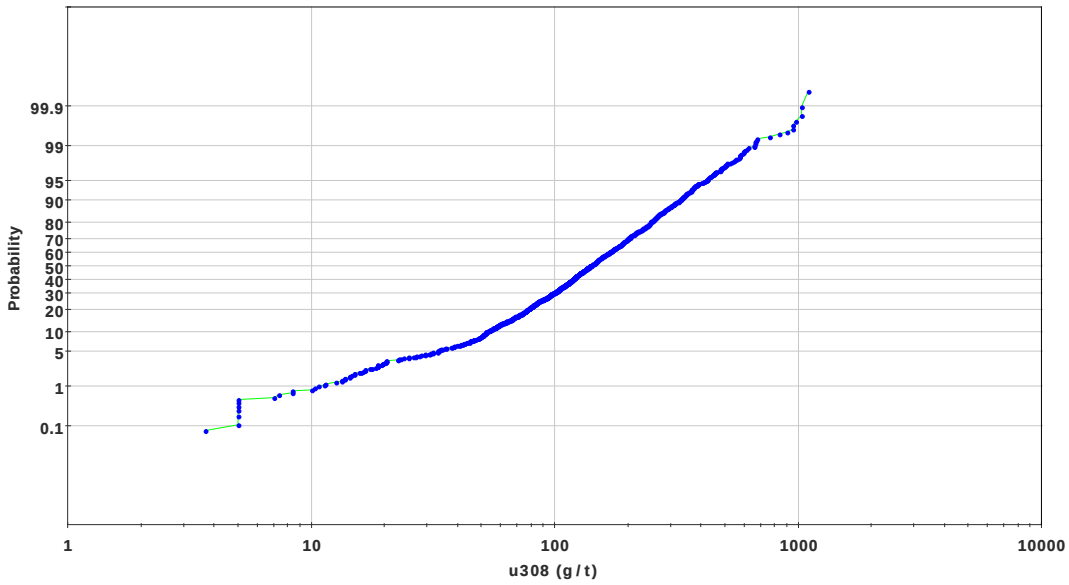


Figure 17.3.2_2
Etango Uranium Project
Log- Probability Plot of 3m U_3O_8 Composites for Zones 2 and 14 - Anomaly A

(Zone 2)



(Zone 14)

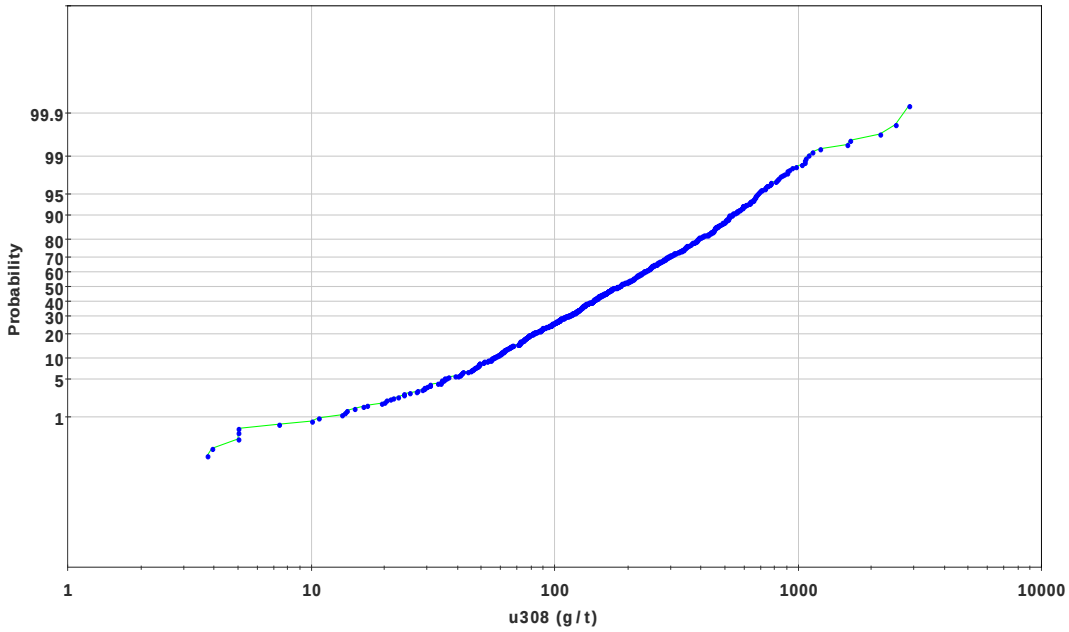


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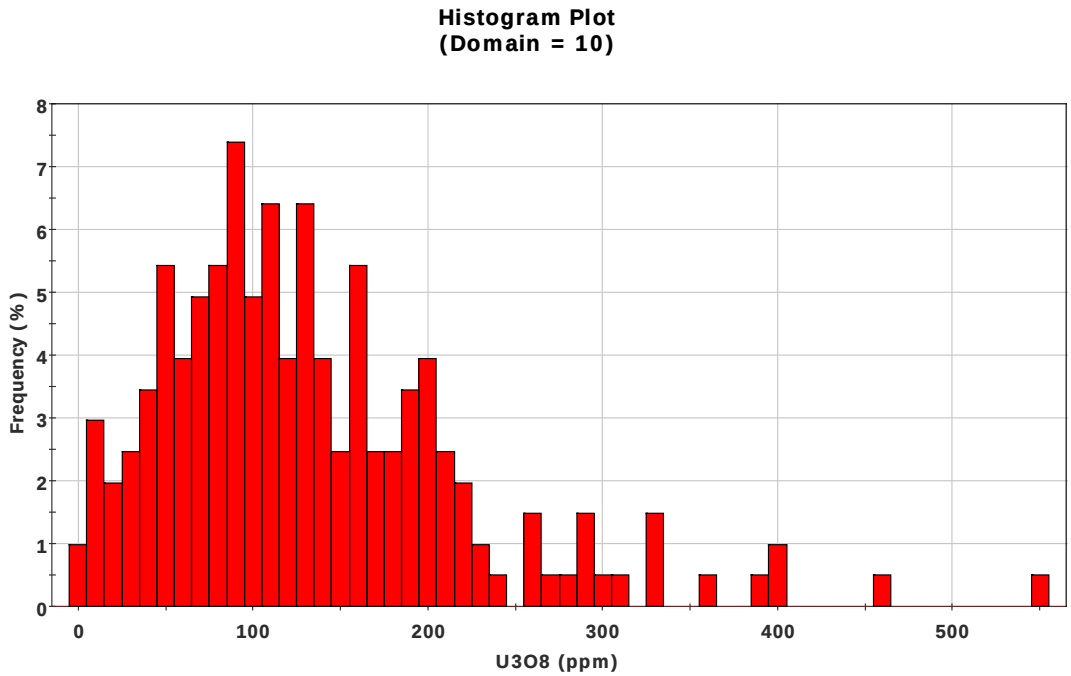
Figure 17.3.2_3
Etango Uranium Project
Histogram of 2m U_3O_8 Composites for Zones 10 and 40 - Onkelo



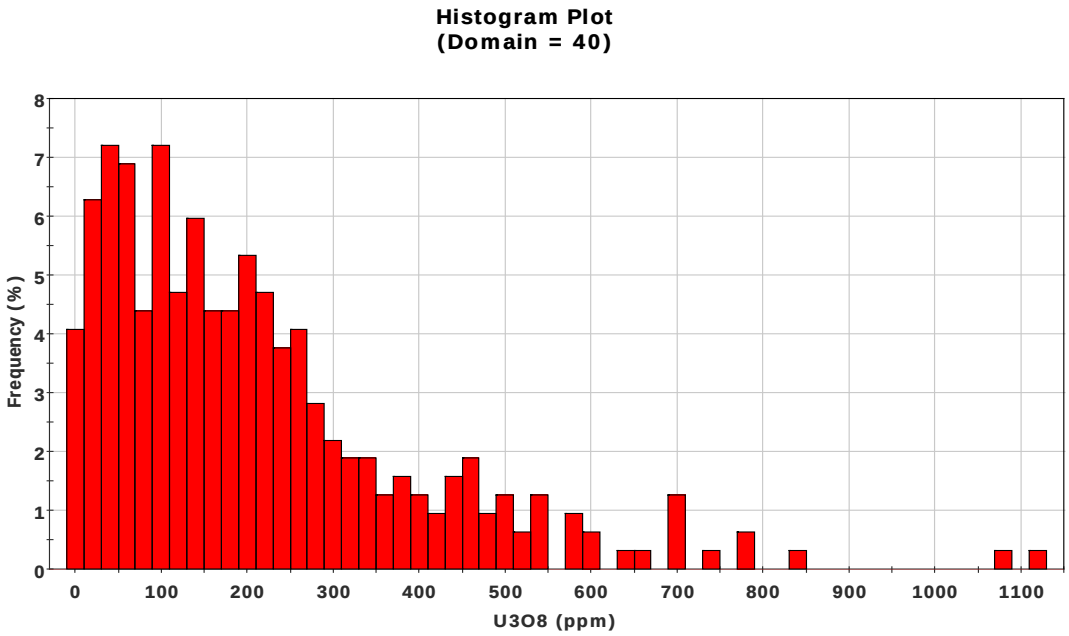


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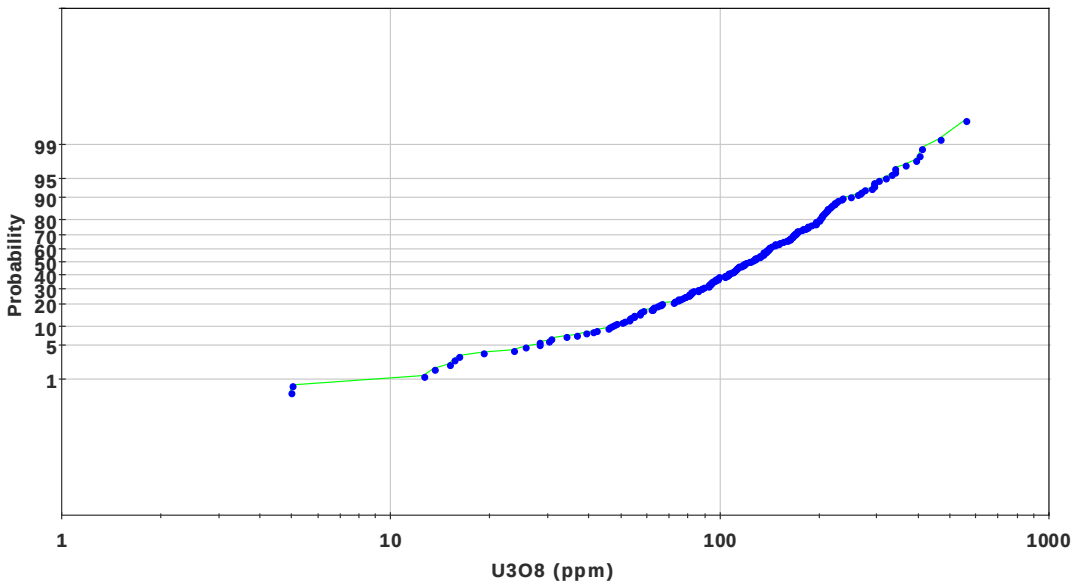
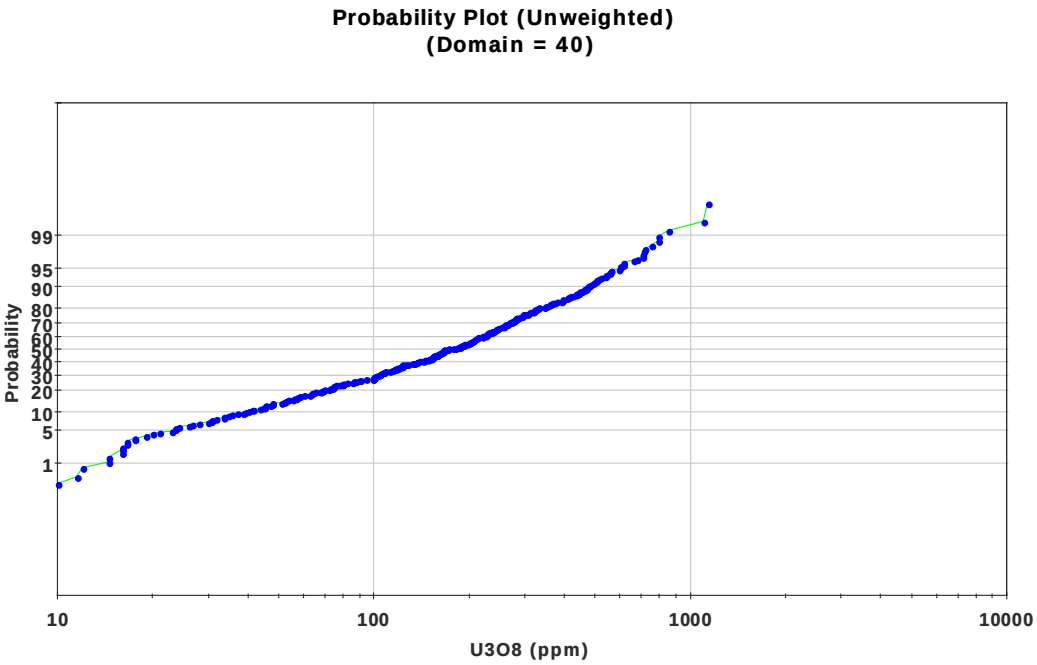
Figure 17.3.2_4
Etango Uranium Project
Log-Probability Plot of 2m U_3O_8 Composites for Zones 10 and 40 - Onkelo





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17.3.3 Bulk Density Data

The density readings were taken from 42 diamond drillholes located along the trend of the deposit (Figure 17.3.3_1) with 127 water immersion measurements and 5,105 calliper measurements available. Summary statistics for the mineralised zone and sediment density measurements are shown in Table 17.3.3_1. The location of the density readings are shown in Figure 17.3.3_1.

Figure 17.3.3_1
Etango Project
Location of Density Readings

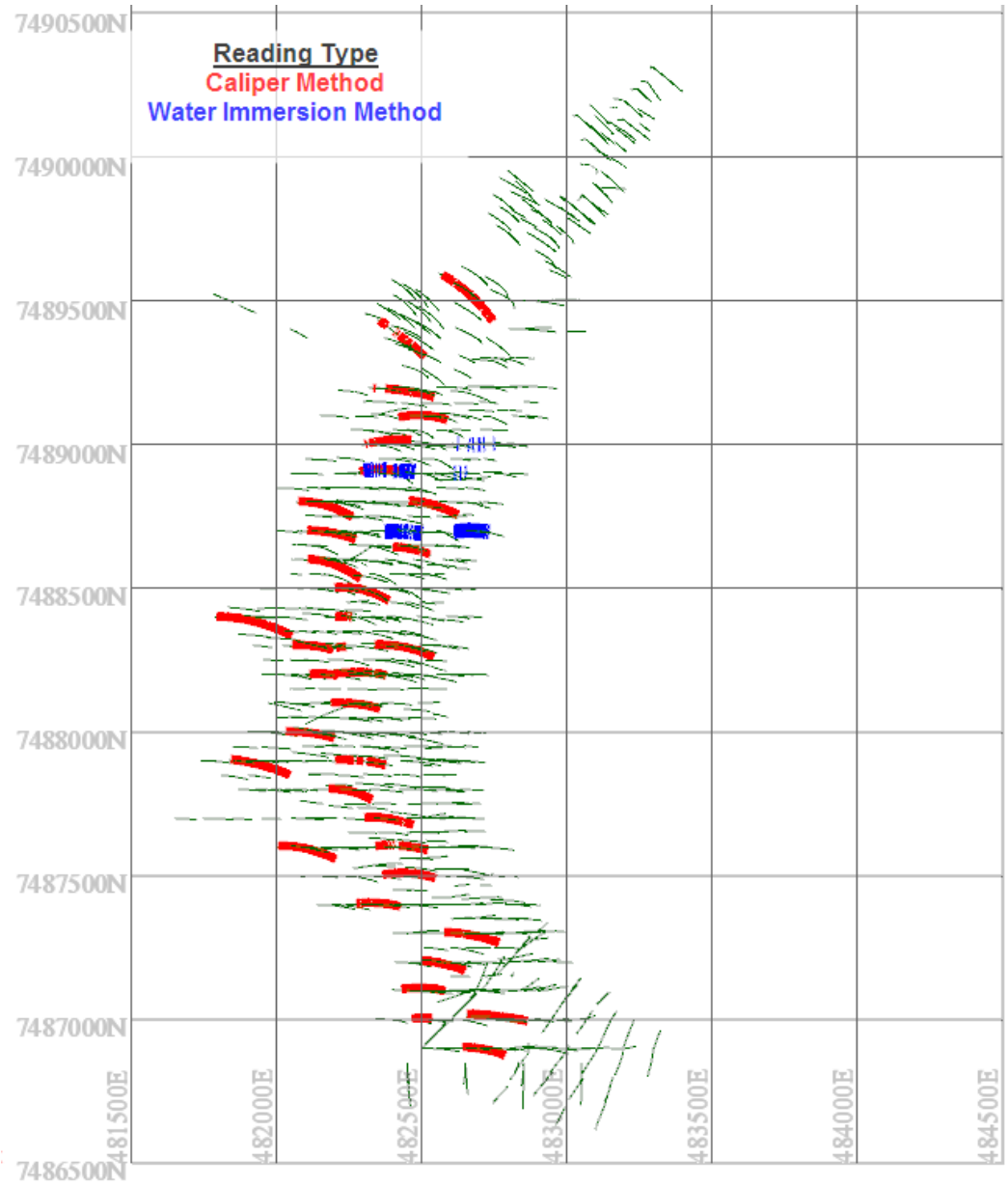

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Table 17.3.3_1
Anomaly A/Oshiveli - Uranium Project
Summary Statistics for Density Data(Calliper and Water Immersion) (t/m³)

Item	All Mineralised Zones	Alaskites	Chuos (CGN)	Khan (KGN)	Etusis (EGN)
Count	2,410	3,560	1,274	36	25
Minimum	1.92	1.92	1.58	2.05	2.35
Maximum	5.45	3.78	3.83	3	3.14
Mean	**2.63**	**2.62**	**2.69**	**2.76**	**2.77**
Median	2.62	2.62	2.69	2.79	2.74
Standard Deviation	0.12	0.06	0.09	0.15	0.15
Variance	0.01	0.003	0.01	0.02	0.02
Coefficient of Variation	0.04	0.02	0.03	0.05	0.05

The mineralised zones consist predominantly of alaskite lithologies with minor meta-sedimentary units. For the mineralised zones, the density measurements averaged 2.63t/m³. Based upon the water immersion and calliper readings, the Chuos, Khan and Etusis units had average density values of 2.69t/m³, 2.76t/m³ and 2.77t/m³ respectively.

Figure 17.3.3_2 shows histogram plots of the mineralised zone density data. Figure 17.3.3_3 shows histogram plots of the meta-sedimentary units density data.

Figure 17.3.3_2
Anomaly A/Oshiveli - Uranium Project
Histogram Plot of the Mineralised Zones Density Measurements

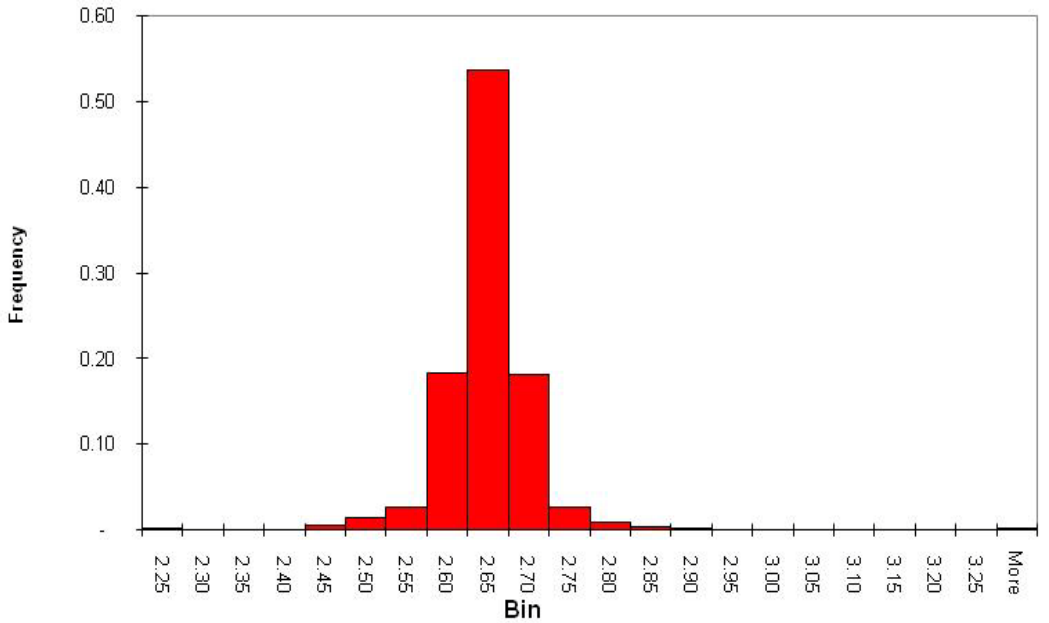
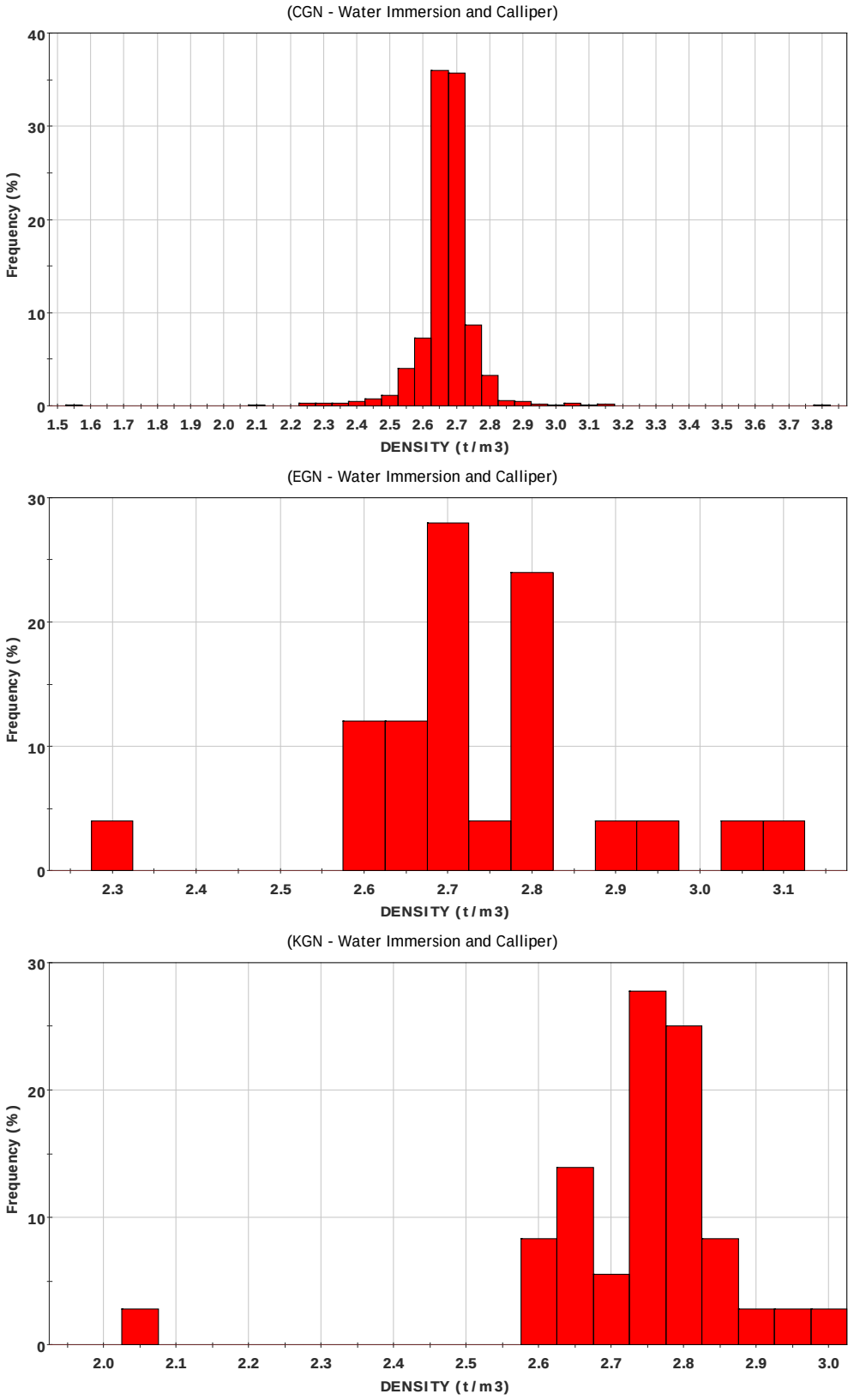


Figure 17.3.3_3
Anomaly A/Oshiveli - Uranium Project
Histogram Plot of Density Readings from the Meta-Sediments



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17.3.4 Variography

As the 2009 resource update for Anomaly A/Oshiveli predominantly consisted of infill drilling, the variography used for the 2009 resource update was predominantly based upon on the analysis conducted for the 2008 resource, which is described below. The additional zones in the north of the deposit (Zones 51-56) were checked separately and were ultimately based upon the variography derived from Zone 2.

In this document, the term 'variogram' is used as a generic word to designate the function characterising the variability of variables versus the distance between two samples. The Isatis geostatistical software was used to analyse the Anomaly A/Oshiveli variography. Both traditional semi-variograms and correlograms were used to analyse the spatial variability of the U_3O_8 3m composites for four of the major mineralised zones. Downhole variography was calculated and used to determine the nugget for each of the zones.

Table 17.3.4_1 summarises the resulting variogram models used in the resource estimate for Anomaly A/Oshiveli. All zones exhibited a well structured downhole variogram with a relative nugget between 27% and 43% and a total range of between 18m and 30m. The variography in the major and semi-major axis were generally poorly defined having a spherical structure with a relative sill of between 35% and 50% at ranges of between 35 to 50m in the major axis. This has typically resulted in most of the zones having 68% to 75% of the total variance modelled within the range of the first structure. The total range of the major axis varies from 90m to 150m.

Figure 17.3.4_1 shows an example of the obtained variography from Zone 3. Summary plots of the variography for the main zones are included in Appendix 2.

After investigation of the variography of the remaining zones, it was decided to base the variogram parameters of these zones upon those of either Zones 2, 3, 13, 14, 18 or 23 (see Table 17.3.4_1) based upon similarities in grade and geometry. The variogram orientations for these zones were changed as required to follow the orientation trend of the zones, as indicated in Table 17.5.1_1.

Table 17.3.4_2 summarises the resulting variogram model used in the resource estimate for Onkelo. By zone, the variography in all axes was poorly defined. Consequently, samples from all zones were combined for modelling. The nugget was obtained from modelling the downhole variogram which had a relative nugget of 30% and a total range of 30m. The resultant directional model (Figure 17.3.4_2) had a spherical structure with a relative sill of 30% having a range of 80m in the major axis. This has typically resulted in 73% of the total variance modelled within the range of the first structure. The total range of the major axis was 230m. This model was subsequently used for all zones in the estimation process.

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Table 17.3.4_1
Etango Uranium Project
Relative Variogram Parameters for the Anomaly A/Oshiveli Mineralised Zones

Zone	Orientation			Co	C1	Range 1 (m)			C2	Range 2 (m)		
	Bearing	Plunge	Dip			X	Y	Z		X	Y	Z
1	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
2	320	0	24	0.31	0.40	35	35	8	0.29	100	110	28
3	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
4	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
5	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
6	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
7	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
8	0	0	24	0.39	0.35	50	50	13	0.26	144	135	31
9	0	0	24	0.39	0.35	50	50	13	0.26	144	135	31
10	0	0	30	0.39	0.35	50	50	13	0.26	144	135	31
11	0	0	24	0.39	0.35	50	50	13	0.26	144	135	31
12	0	-15	45	0.24	0.50	40	40	13	0.26	150	150	25
13	310	0	30	0.32	0.45	50	50	11	0.23	150	150	25
14	320	0	24	0.27	0.41	40	40	15	0.32	150	90	30
15	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
16	0	0	24	0.39	0.35	50	50	13	0.26	144	135	31
17	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
18	0	20	24	0.40	0.35	40	40	12	0.25	130	100	32
19	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
20	0	15	24	0.24	0.50	40	40	13	0.26	150	150	25
21	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
22	0	0	24	0.24	0.50	40	40	13	0.26	150	150	25
23	25	0	45	0.24	0.50	40	40	13	0.26	150	150	25
24	0	15	24	0.24	0.50	40	40	13	0.26	150	150	25
25	25	0	24	0.24	0.50	40	40	13	0.26	150	150	25
26	40	10	30	0.24	0.50	40	40	13	0.26	150	150	25
27	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
28	40	10	30	0.24	0.50	40	40	13	0.26	150	150	25
29	40	10	30	0.24	0.50	40	40	13	0.26	150	150	25
30	320	0	24	0.34	0.43	20	20	10	0.23	130	130	27
31	0	15	24	0.31	0.40	35	35	8	0.29	100	110	28
32	0	0	24	0.24	0.50	40	40	13	0.26	150	150	25
33	320	0	45	0.31	0.40	35	35	8	0.29	100	110	28
34	320	0	24	0.34	0.43	20	20	10	0.23	130	130	27
35	0	0	24	0.31	0.40	35	35	8	0.29	100	110	28
36	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
37	0	20	24	0.24	0.50	40	40	13	0.26	150	150	25
38	0	20	24	0.39	0.35	50	50	13	0.26	144	135	31
39	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
40	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
41	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
42	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
43	320	0	24	0.39	0.35	50	50	13	0.26	144	135	31
44	0	0	24	0.24	0.50	40	40	13	0.26	150	150	25
45	0	0	24	0.39	0.35	50	50	13	0.26	144	135	31
46	40	10	30	0.24	0.50	40	40	13	0.26	150	150	25
47	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
48	0	20	24	0.31	0.40	35	35	8	0.29	100	110	28
49	0	20	24	0.31	0.40	35	35	8	0.29	100	100	28
50	30	0	30	0.31	0.40	35	35	8	0.29	100	52	28
51	48	-15	30	0.31	0.40	35	35	8	0.29	100	110	28
52	30	0	30	0.31	0.40	35	35	8	0.29	100	100	28
53	40	5	30	0.31	0.40	35	35	8	0.29	100	100	28
54	30	0	30	0.31	0.40	35	35	8	0.29	100	100	28
55	40	-5	30	0.31	0.40	35	35	8	0.29	100	100	28
56	40	10	30	0.31	0.40	35	35	8	0.29	100	100	28

Figure 17.3.4_1
Etango Uranium Project
Zone 3 Correlogram Plot – Anomaly A

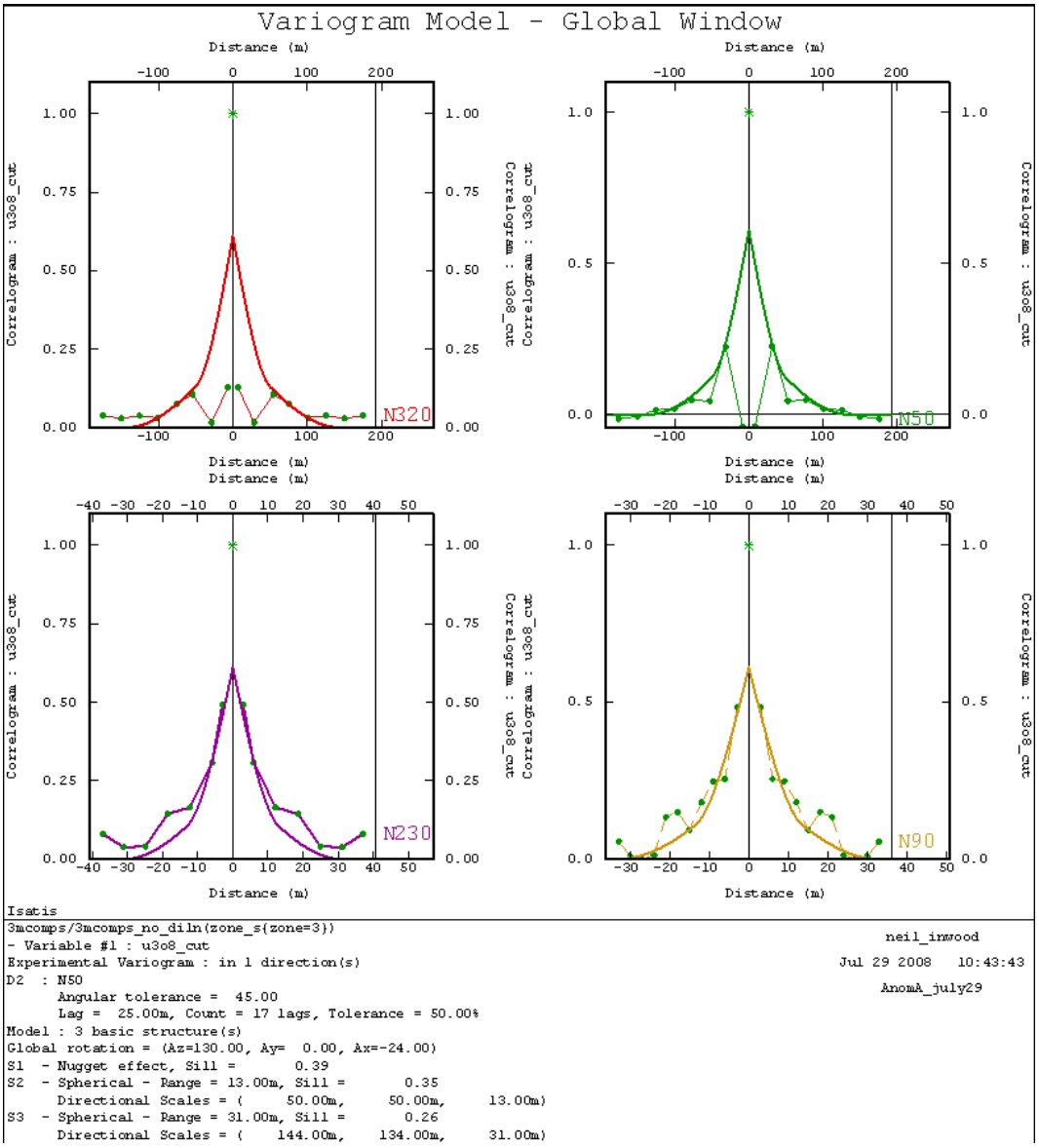

Table 17.3.4_2
Etango Uranium Project
Relative Variogram Parameters for Onkelo

Zone	Orientation			Co	C_1	Range 1 (m)			C_2	Range 2 (m)		
	Bearing	Plunge	Dip			X	Y	Z		X	Y	Z
10 - 100	042	0	-25	**30%**	**43%**	**80**	25	8	**27%**	**230**	100	42

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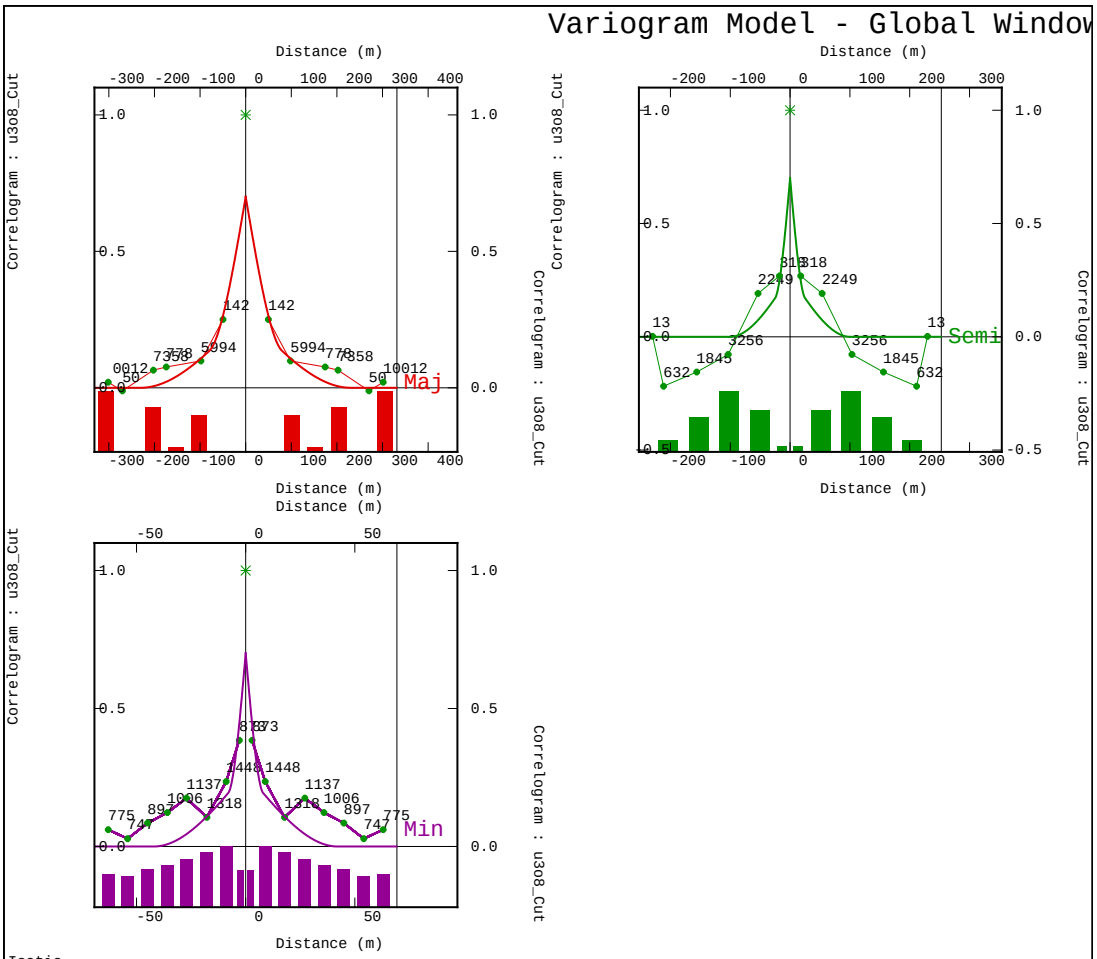
Figure 7.3.4_2
Etango Project
Correlogram Plot – Onkelo
(All Mineralised Zones)




```
Isatis
comps/lines                                                          Iain_Macfarl
- Variable #1 : u3o8_Cut                                             Jul 19 2009
Experimental Variogram : in 1 direction(s)                           Onkelo
D2  : Semi
      Angular tolerance =  10.00
      Lag =  51.00m, Count = 15 lags, Tolerance = 50.00%
      Horizontal Slicing =  10.00m
Model : 3 basic structure(s)
Global rotation = Azimuth=N222.00 Dip=25.00 Pitch=-180.00 (Geologist)
S1  - Nugget effect, Sill =        0.3
S2  - Spherical - Range = 8.00m, Sill =       0.43
      Directional Scales = (     80.00m,      25.00m,       8.00m)
S3  - Spherical - Range = 42.00m, Sill =       0.27
      Directional Scales = (    230.00m,     100.00m,      42.00m)
```

17.4 Block Model Construction

For Anomaly A/Oshiveli, a block model was created using Surpac mining software with a parent cell size of 25m (Easting) by 25m (Northing) by 10m (RL) which was sub-blocked down to 12.5m (Easting) by 12.5m (Northing) by 1.25m (RL). No rotation was applied to the block model. The block model parameters are summarised below in Table 17.4_1. The variables coded into the block model are presented in Table 17.4_2.

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Table 17.4_1
Etango Uranium Project
Block Model Parameters – Anomaly A/Oshiveli

	Easting (X)	Northing (Y)	RL (Z)
Minimum Coordinates	481,500	7,486,500	-300
Maximum Coordinates	483,500	7,490,600	350
Block size (m)	25	25	10
Sub Block size (m)	12.5	12.5	1.25

Table 17.4_2
Etango Uranium Project
Block Model Variables – Anomaly A/Oshiveli

Variables	Type	Default	Description
ave_dist	Real	0	Average distance to Informing Samples
category	Integer	0	Classification category: 1 = Measured, 2 = Indicated, 3 - Inferred
U_3O_8_cut	Real	-99	OK estimate for cut U_3O_8
U_3O_8_uncut	Real	-99	OK estimate for uncut U_3O_8
lith	Integer	0	1 = Alaskite, 2 = Chuos, 3 = Khan, 4 = Etusis
density	Real	2.63	Insitu Dry Bulk Density
estflag	Integer	0	Estimation pass
krig_var	Real	-99	Kriging variance
near_samp	Real	0	Distance to nearest sample
nholes	Integer	0	Number of Informing drillholes
nsamps	Integer	0	Number of informing samples
zone	Integer	99	Mineralised Zone : 0=air, 99 = waste, 1-49= mineralised zones

For Onkelo, a block model was created using Vulcan mining software with a parent cell size of 50m (X) by 30m (Y) by 10m (RL) which was sub-blocked down to 5m (X) by 5m (Y) by 2.5m (RL). A rotation of 45º from north was applied to the block model. The block model parameters are summarised below in Table 17.4_3. The variables coded into the block model are shown below in Table 17.4_4.

Table 17.4_3
Etango Project
Block Model Parameters (Rotated about 45º from Origin from the North) - Onkelo

	Easting (X)	Northing (Y)	RL (Z)
Coordinates of Origin	483,600	7,490,200	-200
Model Extents	1,500m	900m	600m
Block size (m)	50	30	10
Sub Block size (m)	5	5	2.5

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Table 17.4_4
Etango Project
Block Model Variables - Onkelo

Variables	Type	Default	Description
u3o8_ad	Real	-99	Average distance to Informing Samples
resclass	Integer	-99	Classification category: 3 - Inferred
U_3O_8_ok	Real	-99	OK estimate for cut U_3O_8
lith	Integer	-99	1 = Alaskite, 0 = Other
density	Real	-99	Insitu Dry Bulk Density
estflag	Integer	-99	Estimation pass
u3o8_kv	Real	-99	Kriging variance
u308_ns	Real	-99	Distance to nearest sample
u3o8_nh	Integer	-99	Number of Informing drillholes
u3o8_ns	Integer	-99	Number of informing samples
domain	Integer	-99	Mineralised Zone : 0=air, -99 = waste, 10-110= mineralised zones

17.5 Grade Estimation

17.5.1 OK Estimate

Grade was estimated into the block models using Ordinary Block Kriging (OK) for U_3O_8 related variables. At Anomaly A/Oshiveli, no mathematical change of support was applied to emulate selective mining scenarios as it was considered that the parent cell block size of 25m by 25m by 10m would be similar in size to likely selective mining blocks for a bulk-mining scenario. Coffey Mining recommends that emulation of potential smaller selective mining units be considered for future estimates.

Sample neighbourhood testing was conducted using Isatis geostatistical software to determine an appropriate search strategy for the OK estimation. The neighbourhood testing included investigations into the minimum and maximum number of samples used for estimation, block discrimination, negative kriging weights, the slope of regression and the resulting kriging variance.

As the Bannerman drilling had been completed on a regular grid pattern, drillhole data clustering was not significant and the same sample selection criteria were used for all mineralised zones. The resulting staged sample search strategy is summarised in Table 17.5.1_1 for Anomaly A/Oshiveli, the sample search was orientated the same as for the variogram orientations in Table 17.3.4_1.

Table 17.5.1_1
Etango Uranium Project
Sample Search Parameters – Ordinary Kriging – Anomaly A/Oshiveli

Zones	Pass	Search Radii			Number of Samples		
		Major Axis (m)	Semi-Major Axis (m)	Minor Axis (m)	Min	Max	Max / Hole
All	1	65	65	32.5	12	30	5
	2	130	130	65	12	30	5
	3	260	260	130	6	24	5

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The sample selection criteria for Onkelo are presented in Table 17.5.1_2. The variogram parameters used for the estimation were based upon the variography discussed in Section 17.3.4 and summarised in Table 17.3.4_2. Domain control was used for the OK estimate using whole block discretisation of 5 points in the x-dimension, 5 points in the y-direction and 3 points in the z-dimension for a total of 75 points for Anomaly A/Oshiveli and 6 points in the x-dimension, 4 points in the y-direction and 2 points in the z-dimension for a total of 48 points for Onkelo per whole block estimate. Any sub-blocks within the 3D limit of each whole block were assigned the whole block OK estimate.

Table 17.5.1_2
Etango Uranium Project
Sample Search Parameters – Ordinary Kriging – Onkelo

Zones	Pass	Search Orientation			Search Radii			Number of Samples		
		Bearing	Plunge	Dip	Major Axis (m)	Semi-Major Axis (m)	Minor Axis (m)	Min	Max	Max / Hole
10 to 100	1	42	0	-25	200	100	10	12	24	4
	2				400	200	20	6	24	6

17.5.2 Validation

A detailed visual and statistical review of the OK estimate was conducted including:

- For Anomaly A/Oshiveli, a comparison of the block model whole block estimate versus the mean of the composited dataset, including weighting where appropriate to account for data clustering (see Table 17.5.2_1); and
- Visual and graphical comparison of the input composites data with the block grade estimates in various cross section views and in plan. Figure 17.5.2_1 and 17.5.2_2 show examples of the validation plots from Anomaly A/Oshiveli and Onkelo respectively.

Zones which exhibited large grade differences to the input composites were checked in 3D (e.g. Zone 35) for potential errors, these differences typically being found to result from the proportional effect of a low number of composites in smaller zones of irregular geometries.

Overall, the grade estimates showed a good reproduction of the composite datasets with internal grade zonation within larger blocks being appropriately delineated.

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Table 17.5.2_1
Etango Project
OK Block Estimates Versus 3m Composite Data Comparison - Anomaly A/Oshiveli

Zone	Block Model Grade (ppm)	Cut Composite Mean Grade (ppm)		% Difference	
		Naïve	Declustered (150X x 150Y x12)	BM to Naive	BM to Decl.
1	204	208	211	-2%	-3%
2	169	172	169	-2%	0%
3	209	214	203	-2%	3%
4	140	139	140	1%	0%
5	211	213	216	-1%	-2%
6	202	194	204	4%	-1%
7	293	278	304	5%	-4%
8	148	146	151	1%	-2%
9	216	219	197	-2%	9%
10	157	158	150	-1%	4%
11	134	151	148	-13%	-10%
12	113	115	119	-2%	-5%
13	175	173	168	1%	4%
14	249	249	236	0%	5%
15	221	215	216	3%	2%
16	276	271	266	2%	4%
17	287	284	272	1%	5%
18	210	208	203	1%	4%
19	160	158	156	1%	3%
20	248	251	256	-1%	-3%
21	139	160	161	-15%	-16%
22	234	220	223	6%	5%
23	231	229	241	1%	-5%
24	200	204	201	-2%	0%
25	205	208	209	-1%	-2%
26	223	227	231	-2%	-4%
27	210	206	216	2%	-3%
28	164	164	168	0%	-3%
29	155	159	173	-2%	-12%
30	177	179	183	-1%	-4%
31	203	207	216	-2%	-6%
32	108	103	106	4%	2%
33	181	185	191	-2%	-5%
34	165	164	164	1%	1%
35	194	165	183	15%	6%
36	180	178	177	1%	1%
37	135	134	132	1%	2%
38	239	233	242	3%	-2%
39	181	176	177	3%	3%
40	155	149	151	4%	2%
41	130	143	149	-10%	-15%
42	166	182	181	-9%	-9%
43	123	115	110	6%	10%
44	221	222	222	-1%	-1%
45	157	153	160	2%	-2%
46	90	100	105	-11%	-16%
47	146	145	147	1%	-1%
48	143	135	126	6%	12%
49	153	153	150	0%	2%
50	189	193	185	-2%	2%
51	235	226	236	4%	0%
52	126	127	131	-1%	-4%
53	184	187	202	-1%	-10%
54	235	233	262	1%	-11%
55	159	168	176	-6%	-11%
56	229	197	188	14%	18%
All	200	203	201	-1%	0%

Figure 17.5.2_1
Etango Project
Comparative Plot of Informing Composites and Block Model Grade – Anomaly A Zone 2

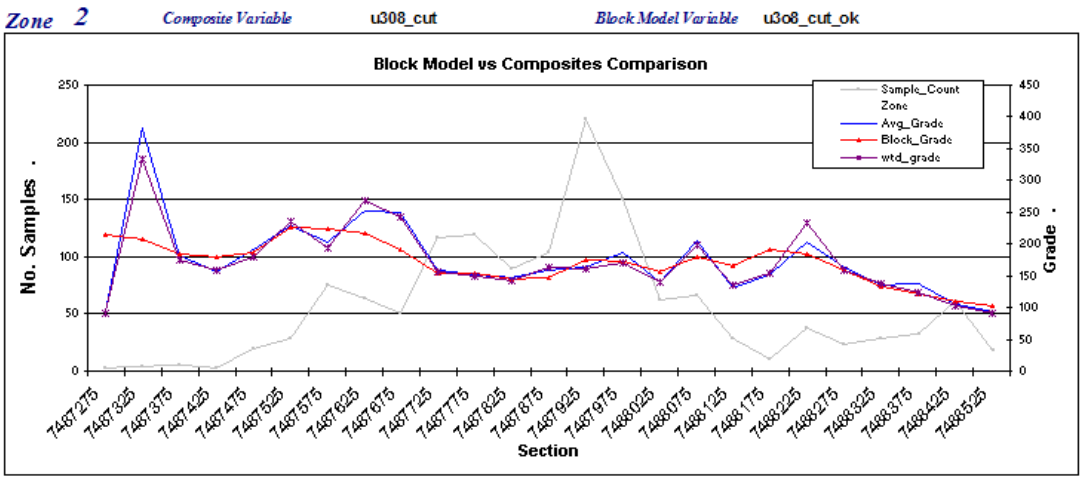
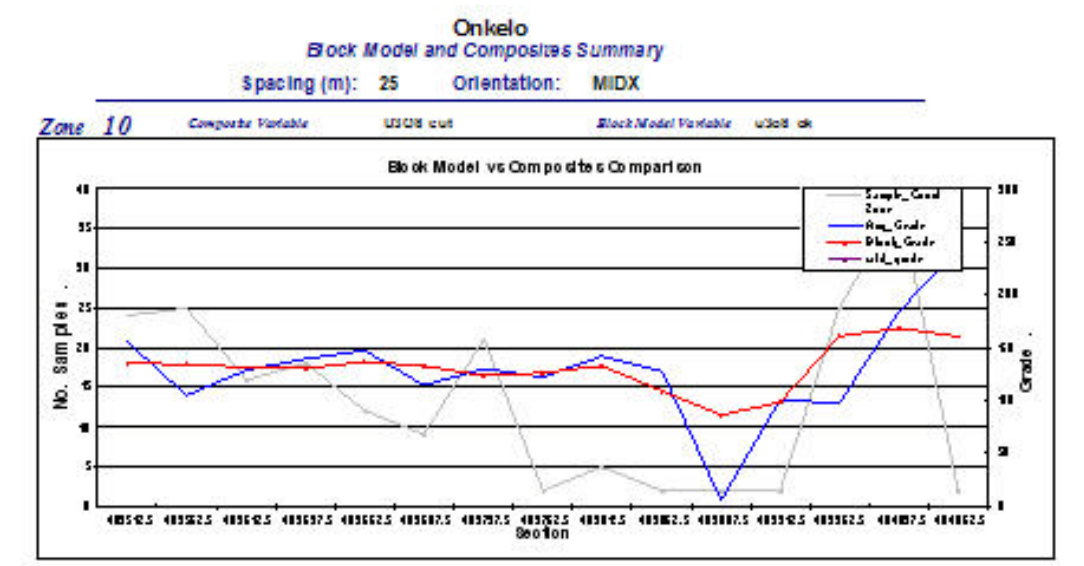


Figure 17.5.2_2
Etango Project
Comparative Plot of Informing Composites and Block Model Grade – Onkelo Zone 10



17.6 Density

The density values used for the resource model were based upon the data analysed in Section 17.3.3. A value of 2.63t/m³ was used for all material within the modelled alaskite bodies. The same value was coded into all modelled mineralised zones.

Densities of 2.69t/m³, 2.76t/m³ and 2.77t/m³ were coded for the Chuos, Khan and Etusis lithologies respectively.

Based upon the available core density measurements, the effect of weathering on the density of the profile is considered to be minor and no change was applied to the density of the different lithologies based upon the weathering profile.

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17.7 Resource Reporting and Classification

17.7.1 Introduction

The resource estimate for the Anomaly A/Oshiveli and Onkelo uranium deposits have been categorised in accordance with the criteria laid out in the Canadian National Instrument 43-101 ("CNI43") and the JORC Code. For Anomaly A/Oshiveli, a combination of Measured, Indicated and Inferred Resources have been defined using definitive criteria determined during the validation of the grade estimates, with detailed consideration of the CNI43 categorisation guidelines. For Onkelo, an Inferred Resource only has been defined.

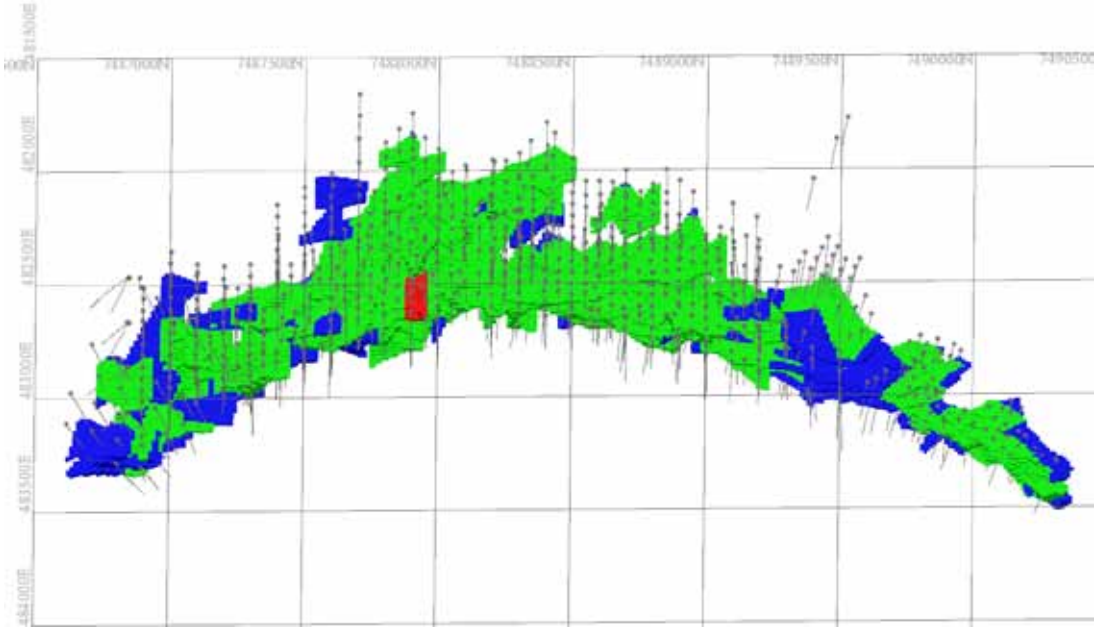
17.7.2 Criteria for Resource Categorisation

The resource has been classified as a combination of Measured, Indicated and Inferred Mineral Resources based on the confidence level of the key criteria that were considered during resource classification as presented in Table 17.7.2_1. Figures 17.7.2_1 and 17.7.2_2 illustrate the classification applied to the Anomaly A/Oshiveli and Onkelo resources respectively.

Table 17.7.2_1
Etango Project
Confidence Levels of Key Categorisation Criteria

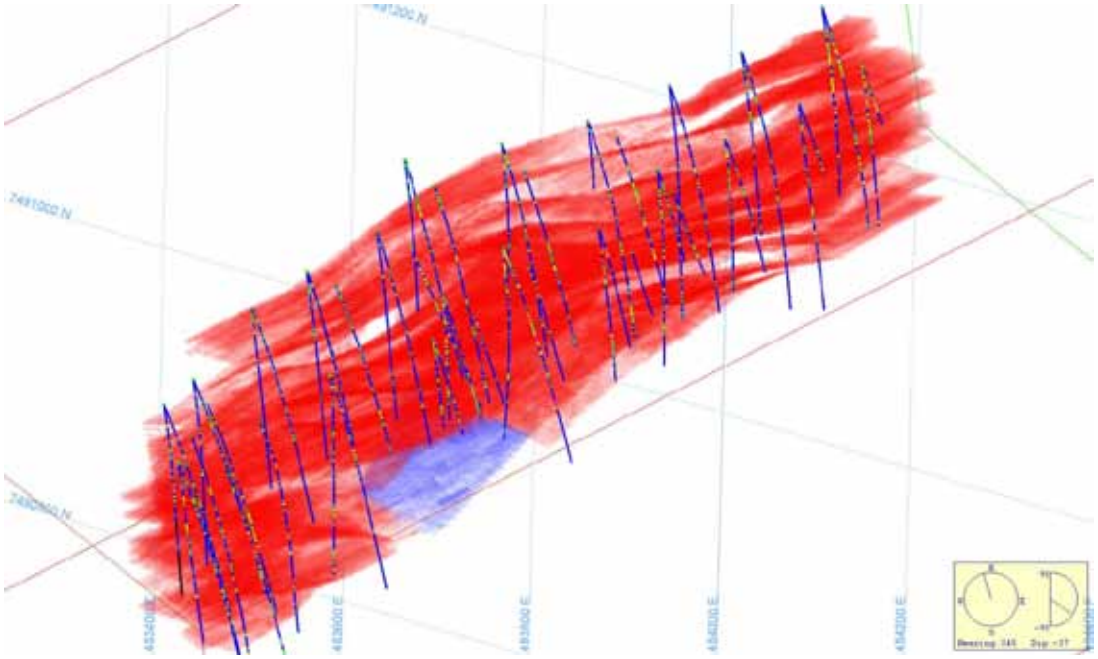
Items	Discussion	Confidence
Drilling Techniques	RC/Diamond - industry standard approach.	High
Logging	Standard nomenclature applied with recording and apparent high quality.	High
Drill Sample Recovery	Acceptable recoveries determined for the majority of the drilling.	High
Sub-sampling Techniques and Sample Preparation	Industry standard for both RC and diamond drilling	High
Quality of Assay Data	Good internal laboratory and external quality control data available for the majority of the chemical assaying. Factored radiometric data is considered to be globally equivalent to chemical assaying, but can show local differences.	Moderate
Verification of Sampling and Assaying	Twinning of selected RC and diamond holes indicates diamond drilling results are similar to RC results.	High
Location of Sampling Points	Most drillhole collars surveyed by DGPS surveyed and most drillholes have been downhole surveyed.	High
Data Density and Distribution	The deposit defined on a notional 50mE x 50mN to 50mE x 100mN drillhole spacing with most holes drilled through the mineralised zones.	Moderate - High
Audits or Reviews	Coffey Mining has reviewed the site drilling and sampling procedures.	High
Database Integrity	No material errors identified.	High
Geological Interpretation	The interpreted lithological and mineralisation boundaries are considered robust and of good confidence.	Moderate - High
Estimation and Modelling Techniques	Estimates based on detailed statistical and geostatistical analysis.	Moderate to High
Cutoff Grades	Range of cutoff grades reported.	NA
Mining Factors or Assumptions	Whole block estimates for all mineralised regions completed for 25mE by 25mN by 10mRL size blocks. The effect of emulating smaller mining blocks has not been investigated.	Moderate

Figure 17.7.2_1
Etango Uranium Project
Oblique View of the Classified Block Model – Anomaly A/Oshiveli



(Red - Measured, Green – Indicated, Blue - Inferred)

Figure 17.7.2_2
Etango Uranium Project
Oblique View of the Classified Block Model - Onkelo



(Red- Inferred, Blue - Unclassified)

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Measured Resources

A Measured category was assigned based on blocks estimated in pass one or two of the estimate, for mineralised zones with a strong geological understanding, consistent mineralisation shape, and a nominal 25m by 25m drillhole coverage.

Indicated Resources

An Indicated category was assigned based on blocks estimated in pass one or two of the estimate, for mineralised zones with a strong geological understanding, consistent mineralisation shape, and a nominal 50m by 50m to 50m by 100m drillhole coverage.

Inferred Resources

An Inferred category was applied to all mineralisation zones (apart from Zone 44) which were not classified as Indicated.

17.7.3 Grade Tonnage Reporting

The reported resources for the Anomaly A/Oshiveli and Onkelo deposits reported above various cutoffs are summarised in Tables 17.7.3_1 and 17.7.3_2 respectively.

Coffey Mining is unaware of any mining, metallurgical, infrastructure or other relevant factors which may materially affect the resources. The availability of suitable water and power supplies may be key factors in any future mining studies.

Bannerman had previously estimated a resource for the Anomaly A deposit in January 2008, August 2008 and February 2009 based upon a combination of chemical assaying and factored radiometric data. The previous, now superseded, resources are tabulated below (Tables 17.7.3_3 to 17.7.3.5) for reference.

Table 17.7.3_1

Etango Uranium Project
July 2009 Resource Estimate
Anomaly A/Oshiveli Deposit

Reported at various cutoffs using a bulk density of 2.63t/m³
Ordinary Kriged estimate based upon 3m cut U_3O_8 composites
Block dimensions of 25mNS by 25mEW by 10mRL

	Lower Cut (ppm)	Tonnes Above Cutoff (Mt)	U_3O_8 (ppm)	Contained U_3O_8 (M lb)
Inferred	50	77.5	193	33.0
	100	73.7	198	32.2
	150	56.3	220	27.3
	200	31.9	254	17.9
Indicated	50	242.4	202	107.8
	100	231.2	207	105.7
	150	173.3	234	89.4
	200	103.0	275	62.4
Measured	50	3.8	239	2.0
	100	3.8	240	2.0
	150	3.5	249	1.9
	200	2.7	269	1.6

Note: Figures have been rounded.

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Table 17.7.3_2

Etango Uranium Project
July 2009 Resource Estimate
Onkelo Deposit

Reported at various cutoffs using a bulk density of 2.63t/m³
Ordinary Kriged estimate based upon 2m cut U_3O_8 composites
Model Rotated 45º from North
Block dimensions of 50m (x) by 30m (y) by 10mRL

	Lower Cut (ppm)	Tonnes Above Cutoff (Mt)	U_3O_8 (ppm)	Contained U_3O_8 (M lb)
Inferred	50	49.0	190	20.6
	100	47.0	195	20.2
	150	33.4	222	16.3
	200	18.3	261	10.5

Note: Figures have been rounded.

Table 17.7.3_3

Etango Uranium Project
Superseded February 2009 Resource Estimate
Anomaly A/Oshiveli Deposit

Reported at various cutoffs using a bulk density of 2.62t/m³
Ordinary Kriged estimate based upon 3m cut U_3O_8 composites
Block dimensions of 25mNS by 25mEW by 10mRL

	Lower Cut (ppm)	Tonnes Above Cutoff (Mt)	U_3O_8 (ppm)	Contained U_3O_8 (M lb)
Inferred	50	92.5	189	38.5
	100	87.0	195	37.4
	150	63.2	221	30.7
	200	34.5	259	19.7
Indicated	50	204.8	202	91.1
	100	195.5	207	89.2
	150	146.2	234	75.4
	200	86.7	275	52.6

Note: Figures have been rounded.

Table 17.7.3_4

Etango Uranium Project
Superseded August 2008 Resource Estimate
Anomaly A/Oshiveli Deposit

Reported at various cutoffs using a bulk density of 2.62t/m³
Ordinary Kriged estimate based upon 3m cut U_3O_8 composites
Block dimensions of 25mNS by 25mEW by 10mRL

	Lower Cut (ppm)	Tonnes Above Cutoff (Mt)	U_3O_8 (ppm)	Contained U_3O_8 (M lb)
Inferred	50	95.9	192	40.5
	100	91.6	197	39.7
	150	65.5	224	32.3
	200	34.5	268	20.4
Indicated	50	150.9	205	68.0
	100	145.0	209	66.9
	150	112.3	233	57.7
	200	69.4	269	41.2

Note: Figures have been rounded.

Table 17.7.3_5

Etango Uranium Project
Superseded January 2008 Resource Estimate
Anomaly A

Reported at Various Cutoffs using a Bulk Density of 2.65t/m³
Ordinary Kriged Block Estimate Based Upon 3m Cut U_3O_8 Composites
Parent Block Dimensions of 50mNS by 25mEW by 10mRL

	Lower Cut	Tonnes Above Cutoff (Mt)	U_3O_8 (ppm)	Contained U_3O_8 (M lb)
Inferred	50	151.0	186	62.0
	100	136.4	197	59.3
	150	95.9	227	48.0
	200	52.3	271	31.3
Indicated	50	26.3	227	13.2
	100	25.0	234	12.9
	150	20.3	260	11.6
	200	13.9	298	9.2

Note: Figures have been rounded.

17.8 Comments and Recommendations

The July 2009 resource update for the Anomaly A/Oshiveli deposit and the new resource for Onkelo have resulted in an incremental increase in the resource endowment when compared to the January 2009 estimate. The 50m by 50m infill drilling at Anomaly A/Oshiveli has both firmed up the geological control of many of the mineralised zones and demonstrated that the continuity of uranium mineralisation which can be variable throughout the alaskites.

Coffey Mining has the following recommendations for the ongoing resource estimation studies:

§ The sample collection and assaying schemes used by Bannerman are considered industry acceptable practice and should be maintained and monitored.

§ Though not analysed in detail, the initial results of the comparison of the RC and Diamond twin drilling programmes indicate that no bias between the two drilling methods is present. The close spaced twin drilling does indicate that, in some instances, alaskite contacts and mineralisation can be highly variable over short distances.

§ Based upon the density data available there is no significant difference between the densities of the weathered and unweathered alaskite and meta-sedimentary lithologies.

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18 OTHER RELEVANT DATA AND INFORMATION

18.1 PFS Study

Bannerman announced, on 27 July 2009, that the preliminary feasibility study (PFS) on the Etango Uranium Project had been extended to enable consideration of the impact of additional metallurgical and processing testwork and an increase in the mineral resource estimate. No further work has been completed, although these works remain in progress. Please refer to the previous technical report from August 2008 (Inwood) for associated text.

18.1.1 Mining

The PFS has at this stage has identified a conventional open pit mining operation as the preferred option, although no further work has been completed on this section. Please refer to the previous technical report from August 2008 (Inwood) for associated text.

18.1.2 Geotechnical and Hydrogeology Input

Nine geotechnical holes have been drilled and logged as at mid March 2009. Samples are sent to Rocklab in South Africa for Direct Shear, Uniaxial Compressive Strength, Elastic Modulus & Poisson's Ratio Stress (UCM) and Triaxial Compressive Strength, Elastic Modulus & Poisson's Ratio Stress (TCM) tests. Testwork results for the last four holes are pending.

Eight hydrological holes were drilled around the proposed pit, plant and TSF areas. Holes were drilled vertically to a depth of 100m. Water samples were analysed for major anions and cations, pH, acidity, alkalinity, total salts and electric conductivity. Further tests will be completed during the March 2009 quarter.

18.1.3 Operating Costs

No further work has been completed in this section. Please refer to the previous technical report from August 2008 (Inwood) for associated text.

18.2 Mineral Processing

A Preliminary Feasibility Study (PFS) is under preparation and Bannerman has engaged Coffey Mining and GRD Minproc, two specialist Australian consultancies to prepare the Study volumes with input from Bannerman and other consultancies as appropriate. This PFS involves additional metallurgical testwork. It is expected that the PFS will be lodged at the end of 2009. Subject to this PFS reaching required technical and economic hurdles, a Definitive Feasibility Study (DFS) would then be undertaken in 2010.

Please refer to the previous technical report from August 2008 (Inwood) for associated text.

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19 INTERPRETATION AND CONCLUSIONS

19.1 Geology and Resources

The region of EPL 3345 currently represents the most significant asset for Bannerman due to the advanced nature of exploration and the identified Measured, Indicated and Inferred Mineral Resources at Anomaly A, Oshiveli and Onkelo. Bannerman's other assets include projects in the region of EPL 3346 and in Botswana, although these are not currently considered to be material assets of the Company.

The Etango Project hosts a significant uranium resource and represents an advanced exploration project which is now undergoing feasibility studies. The western flank of the Palmenhorst Dome represents a prospective strike length of over 15km which incorporates the Anomaly A, Oshiveli and Onkelo deposits. The eastern flank of the Palmenhorst Dome is also highly prospective, as are other soil and sand covered areas in the south portion of EPL 3345, in the vicinity of Anomaly A.

EPL 3345 is located within the highly prospective Central Zone of the Damara Orogenic Belt. Currently 12 historic uranium anomalies have been identified over the EPL 3345 area, some of which correspond to radiometric anomalies associated with the Rössingberg Dome and the Palmenhorst Dome. EPL 3346 is considered prospective for primary and calcrete hosted uranium mineralisation, although most of the current work is focussed upon the Etango Uranium Project within EPL 3345.

Coffey Mining has reviewed the drilling, sampling and assaying procedures used by Bannerman and finds them to be acceptable by industry standards. Follow up investigations should be undertaken with SGS Johannesburg regarding the cause of the potential bias seen in the internal laboratory standards and Umpire assaying.

19.2 Mining

Preliminary mining studies based upon the current resource indicate that there is potential for a 15Mtpa conventional open pit mining operation that could be economically viable.

19.3 Metallurgical

Additional metallurgical testwork has been completed on drill core samples to further define the comminution, leaching and other characteristics of the Anomaly A deposit alaskite mineralisation. To date, the testing indicates ore properties suitable for standard comminution and acid leach metal recovery. Chemical analysis indicates that the supplied composite sample is characterised by low levels of impurity elements.

Further metallurgical testwork is proposed and underway to provide detailed ore performance parameters for ongoing process and general engineering studies.

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19.4 Geotechnical and Hydrology

The establishment of geotechnical parameters for both the mine and plant site areas that was recommended in the previous report is underway. Similarly, the recommendations regarding the hydrological drilling to establish the groundwater conditions of the Anomaly A, Oshiveli and Onkelo area are being carried out.

19.5 Project Development

Bannerman is continuing with the PFS activities currently underway at Coffey Mining, GRD Minproc and others to establish the economic potential of the Etango Project. Related activities include environmental assessment and permitting, human resourcing and economic modelling.

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20 RECOMMENDATIONS

Bannerman has commissioned both PFS and BFS level reports to demonstrate the economic potential of the Etango Project. The studies are multi-discipline and interdependent and include the following activities:

20.1 Resource Definition

Bannerman is continuing its exploration efforts on defining the full extents of the mineralisation around the Anomaly A, Oshiveli and Onkelo deposits. Several drilling rigs are currently in operation in the project area and these are engaged in resource definition, infill, metallurgical bulk sample and geotechnical drilling programmes. The current QAQC regime should be expanded to ensure that Bannerman supplied standards are sent to the SGS Perth laboratories. Also, in addition to a standard 1:20 Umpire analysis ratio, it is recommended that a suite of pulp duplicates be analysed by the umpire laboratory in Perth to supplement the QA process of the SGS Johannesburg laboratory.

20.2 Mining Studies

Pending the outcomes of the resource upgrade activities described above, further pit optimisation and design activities are planned. The culmination of this work will be the development of the final feasibility study mine plan and associated capital and operating cost estimates.

20.3 Geotechnical and Hydrology

The establishment of geotechnical parameters for both the mine and plant site areas has commenced as part of the PFS and, similarly, work has also commenced on establishing the groundwater conditions of the project area via a definitive hydrological study.

20.4 Metallurgical Testwork

The additional metallurgical testwork described in Section 19.3 is underway in order to provide improved confidence in the ore characteristics determined to date and to provide information required for continued process and general engineering development.

20.5 Project Development

On the basis of the information presented in this report, it is recommended that Bannerman continue with the PFS activities currently underway by GRD Minproc and others to establish the economic potential of the Etango Uranium Project. Related activities include environmental assessment and permitting, human resourcing and economic modelling.

The estimated budget to achieve the above recommendations is summarised in Table 20_1 below.

Table 20_1
Etango Project
Estimated Budget Recommendations for 2009/2010

Item/Activity	Cost (US$)
Consultants & Resource Estimation	$1.4M
Additional Drilling Studies	$13.6M
Metallurgical Testwork	$0.6M
Feasibility Study	$4.0M
Miscellaneous (includes contingency)	$0.6M
Total	**$20.2M**

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Appendix 1

QAQC Plots

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Appendix 1
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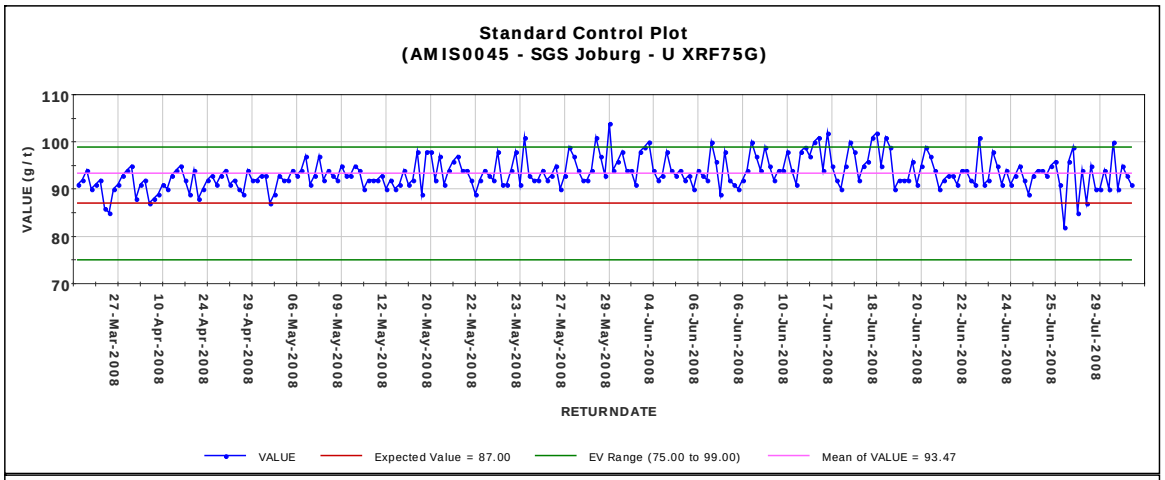
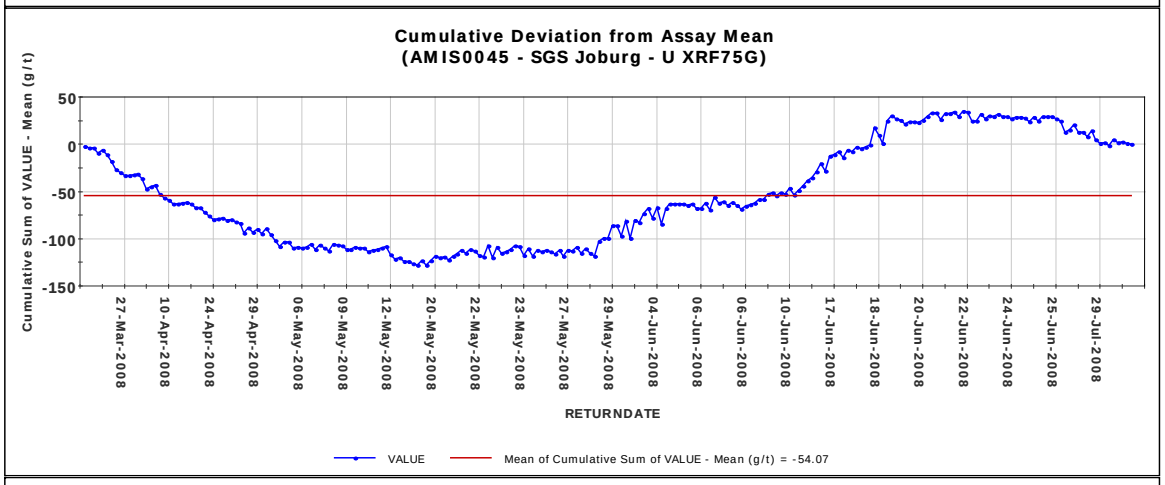
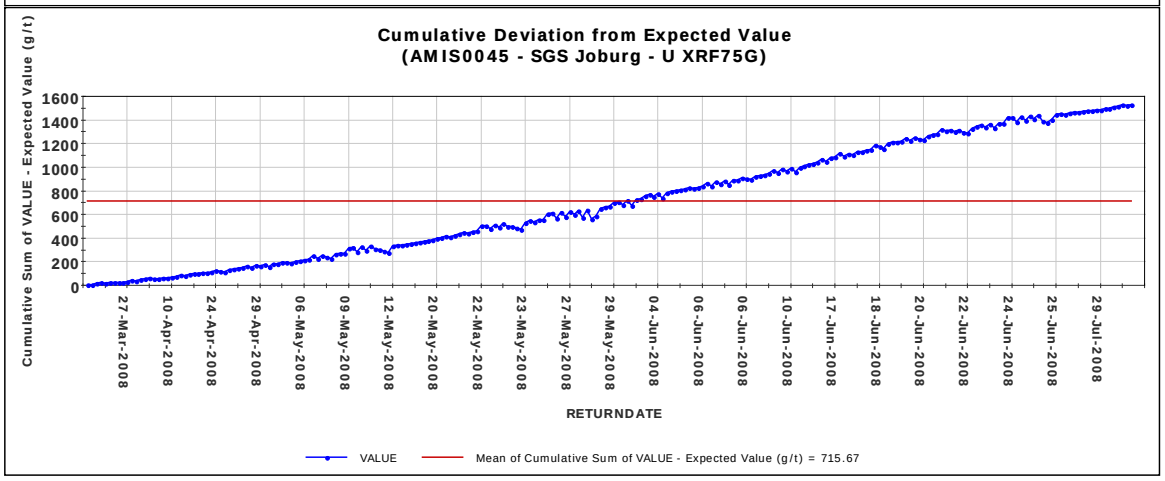
STANDARDS
(AMIS0045 - SGS Joburg - U XRF75G)

Standard:	AMIS0045	No of Analyses:	237
Element:	U XRF75G	Minimum:	82.00
Units:	ppm	Maximum:	104.00
Detection Limit:	-	Mean:	93.47
Expected Value (EV):	87.00	Std Deviation:	3.38
E.V. Range:	75.00 to 99.00	% in Tolerance	93.67 %
		% Bias	7.43 %
		% RSD	3.62 %







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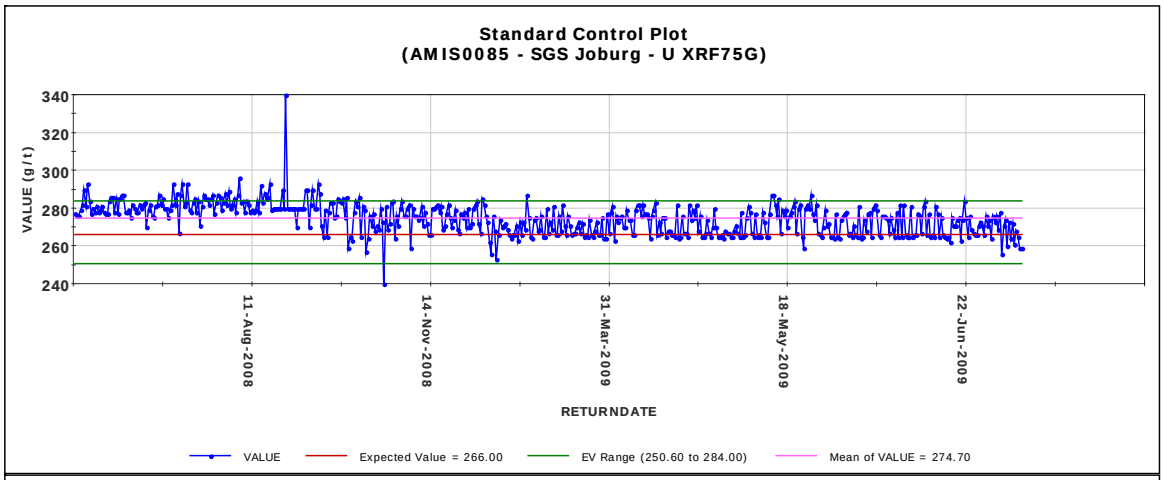
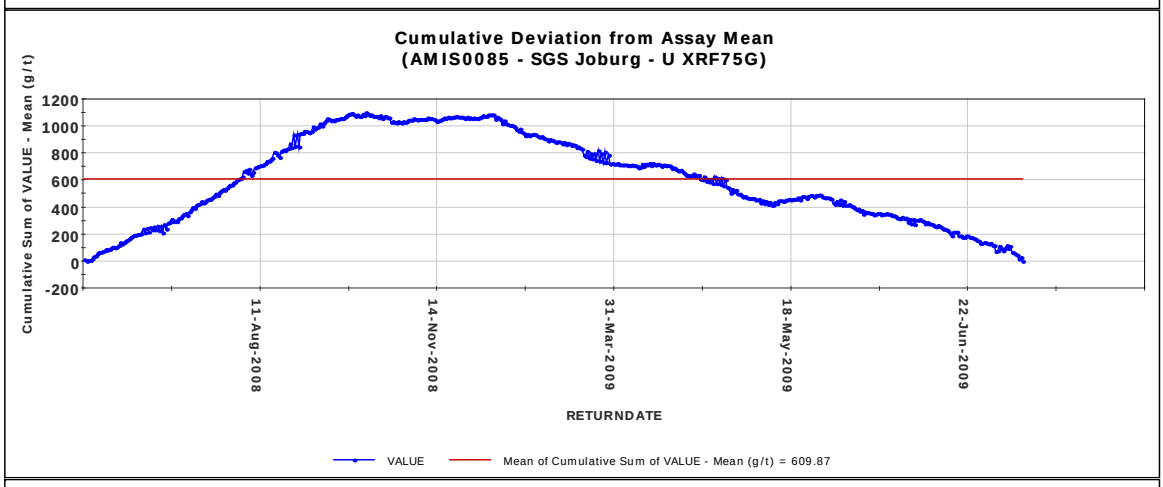
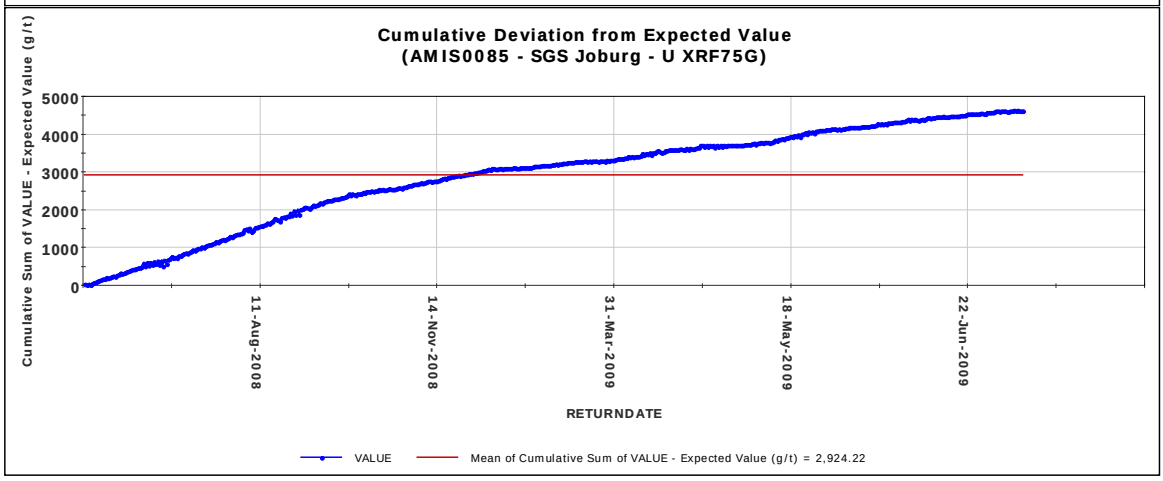
Appendix 1
QAQC Plots

STANDARDS
(AMIS0085 - SGS Joburg - U XRF75G)

Standard:	AMIS0085	No of Analyses:	531
Element:	U	Minimum:	240.00
Units:	ppm	Maximum:	340.00
Detection Limit:	-	Mean:	274.70
Expected Value (EV):	266.00	Std Deviation:	8.35
E.V. Range:	250.60 to 284.00	% in Tolerance	90.40 %
		% Bias	3.27 %
		% RSD	3.04 %







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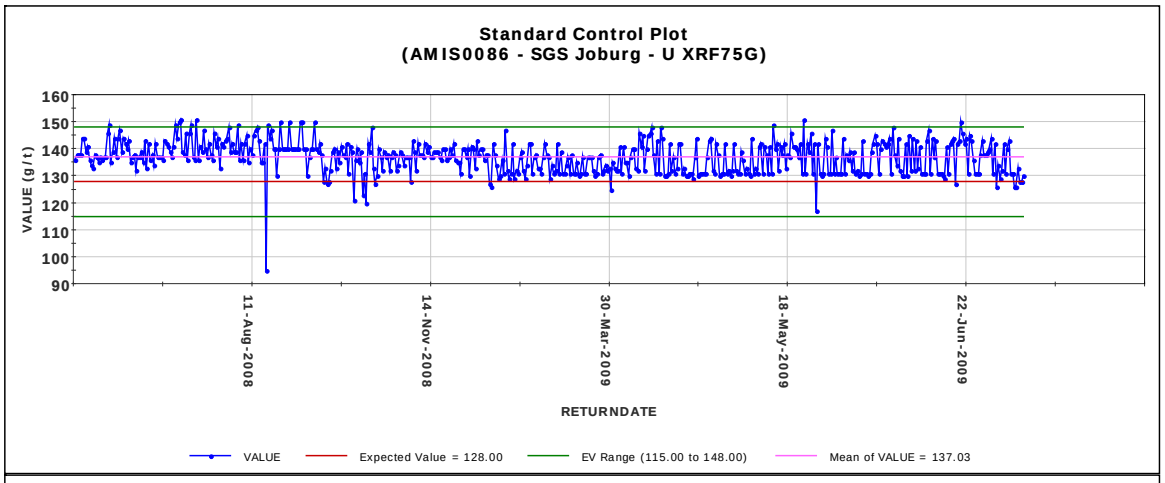
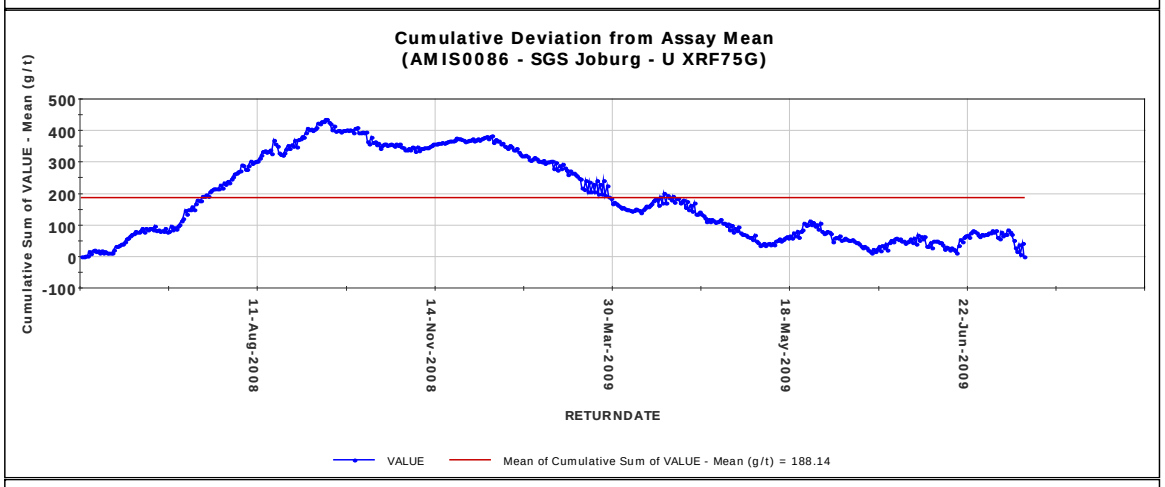
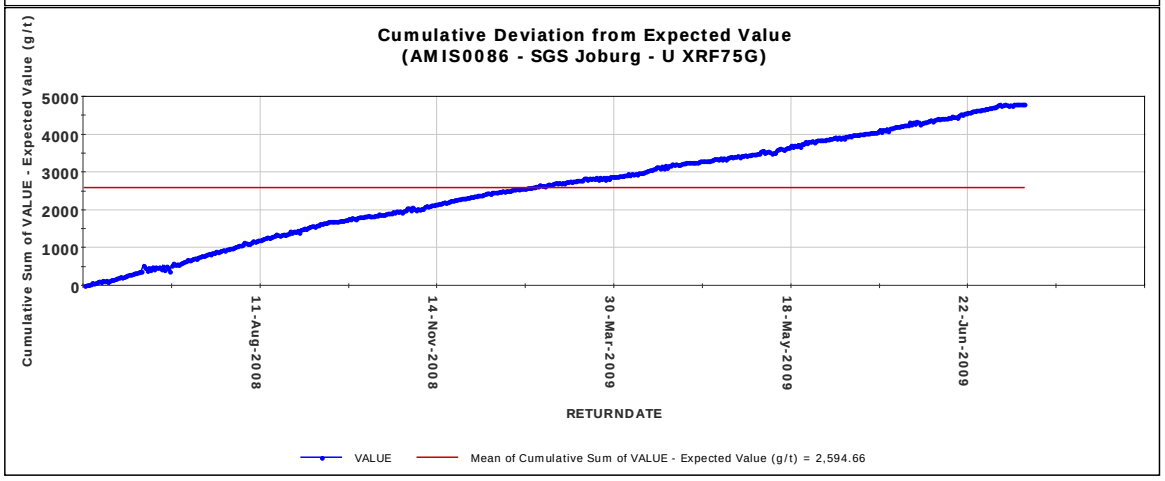
Appendix 1
QAQC Plots

STANDARDS
(AMIS0086 - SGS Joburg - U XRF75G)

Standard:	AMIS0086	No of Analyses:	532
Element:	U	Minimum:	95.00
Units:	ppm	Maximum:	151.00
Detection Limit:	-	Mean:	137.03
Expected Value (EV):	128.00	Std Deviation:	6.00
E.V. Range:	115.00 to 148.00	% in Tolerance	96.80 %
		% Bias	7.05 %
		% RSD	4.38 %







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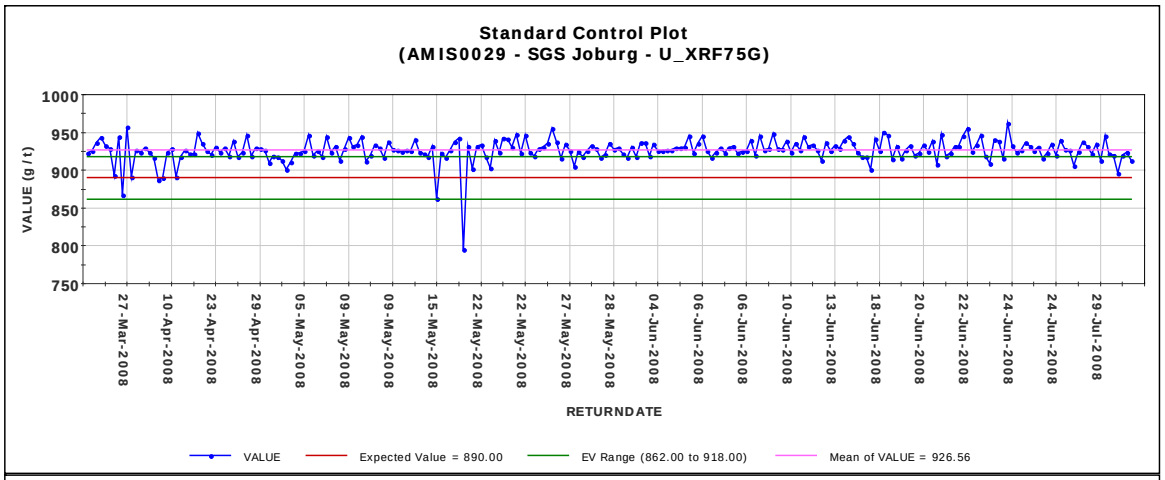
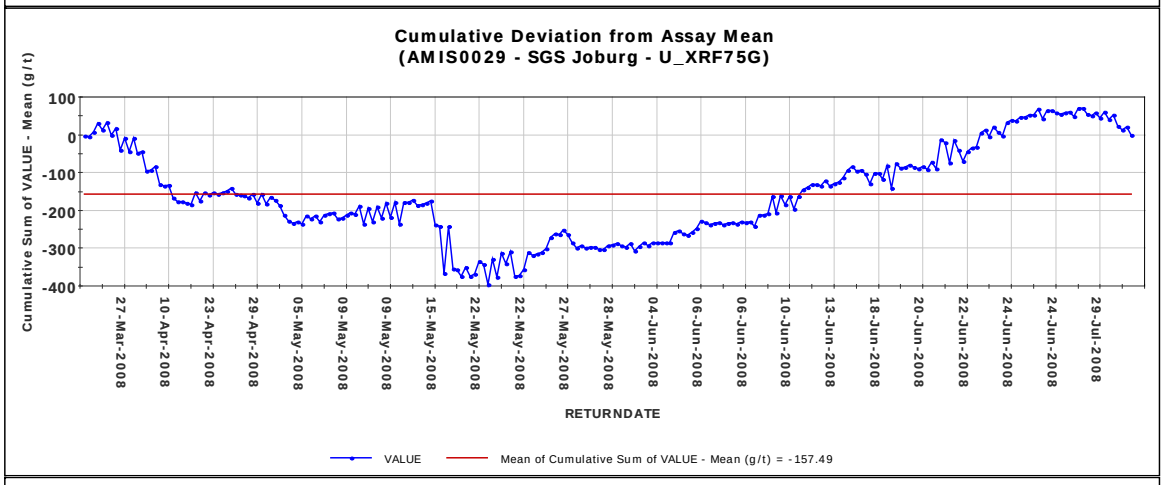
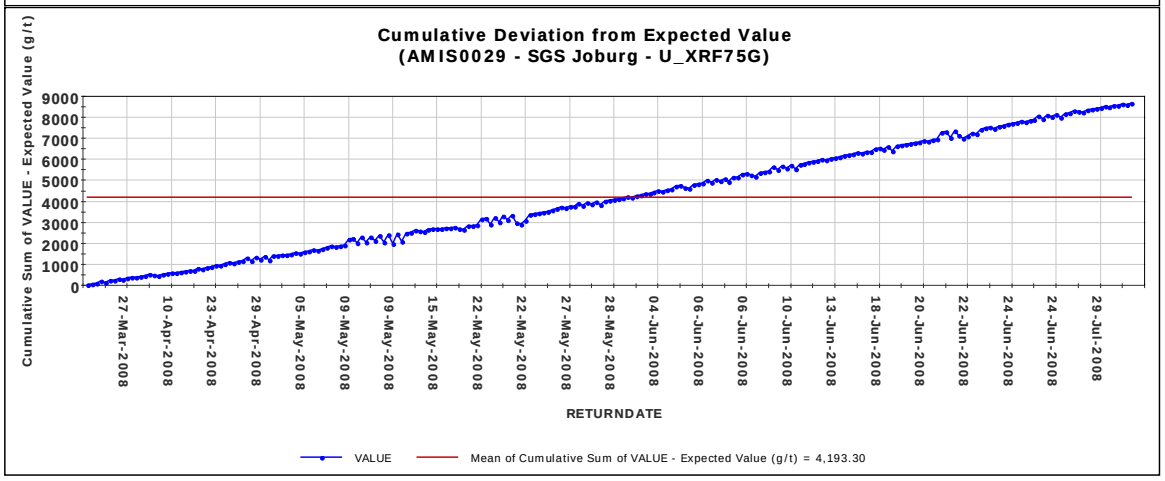
Appendix 1
QAQC Plots

STANDARDS
(AMIS0029 - SGS Joburg - U_XRF75G)

Standard:	AMIS0029	No of Analyses:	237
Element:	U_XRF75G	Minimum:	795.00
Units:	ppm	Maximum:	962.00
Detection Limit:	-	Mean:	926.56
Expected Value (EV):	890.00	Std Deviation:	15.86
E.V. Range:	862.00 to 918.00	% in Tolerance	18.99 %
		% Bias	4.11 %
		% RSD	1.71 %







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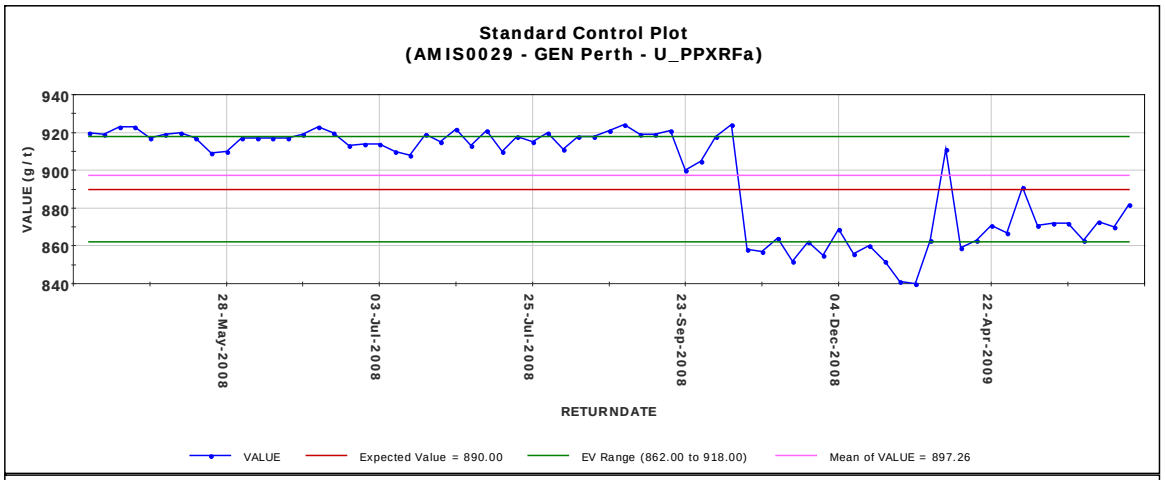
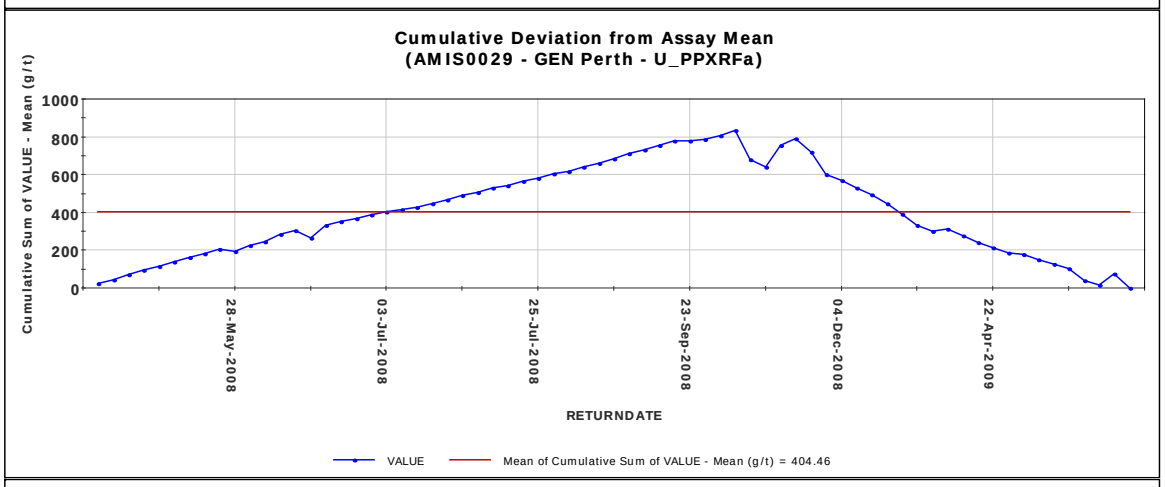
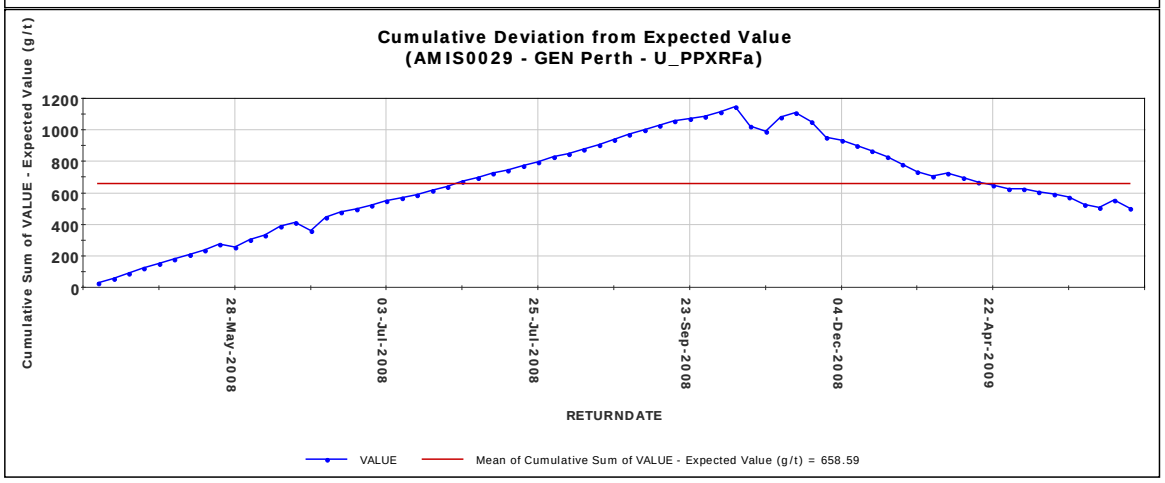
Appendix 1
QAQC Plots

STANDARDS
(AMIS0029 - GEN Perth - U_PPXRFa)

Standard:	AMIS0029	No of Analyses:	69
Element:	U_XRF75G	Minimum:	840.00
Units:	ppm	Maximum:	924.00
Detection Limit:	-	Mean:	897.26
Expected Value (EV):	890.00	Std Deviation:	26.77
E.V. Range:	862.00 to 918.00	% in Tolerance	57.97 %
		% Bias	0.82 %
		% RSD	2.98 %







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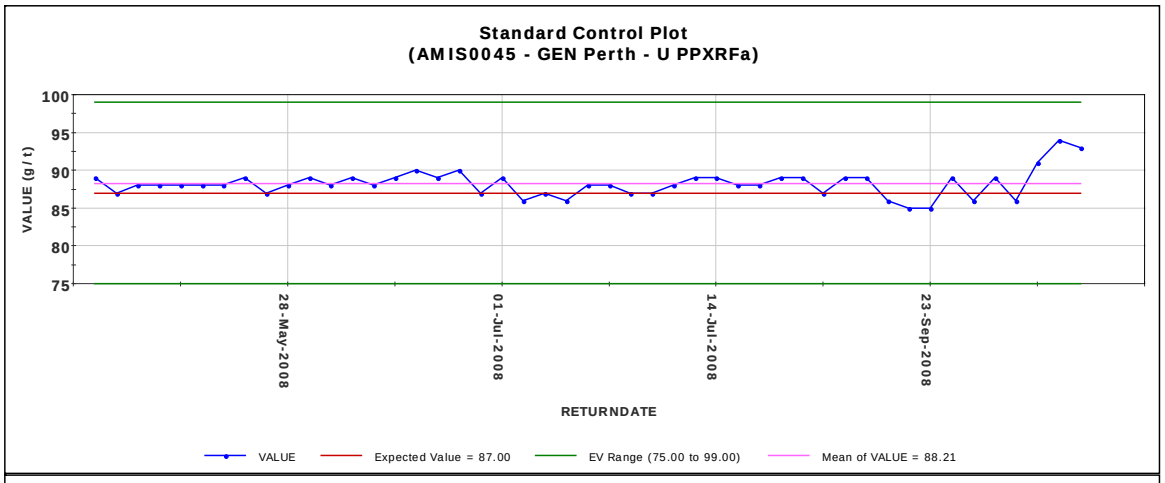
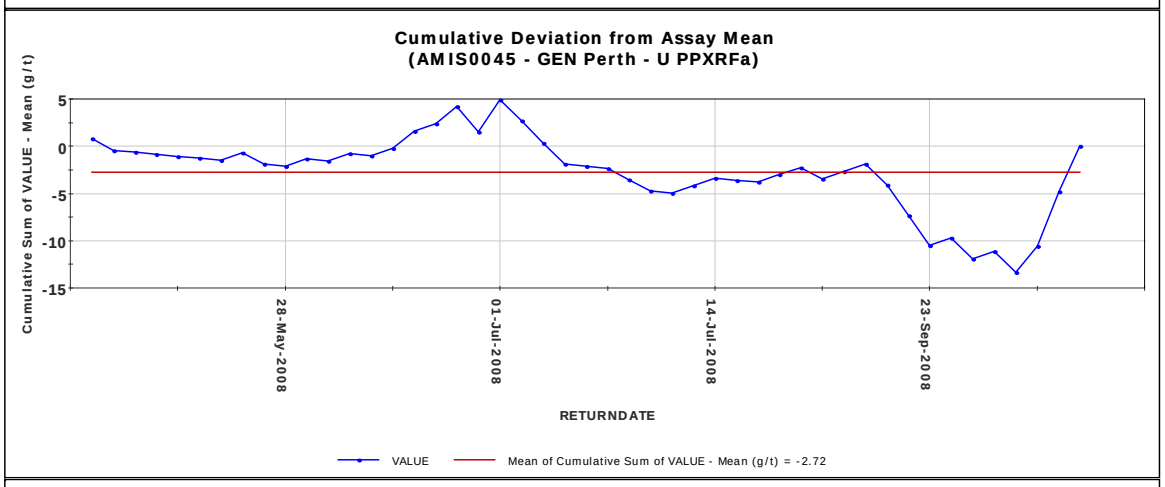
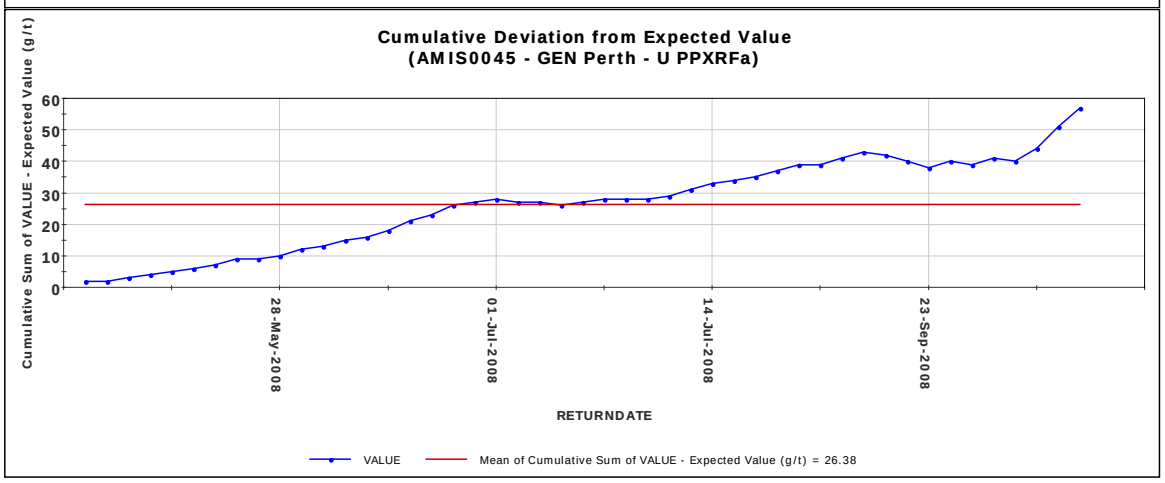
Appendix 1
QAQC Plots

STANDARDS
(AMIS0045 - GEN Perth - U PPXRFa)

Standard:	AMIS0045	No of Analyses:	47
Element:	U PPXRFa	Minimum:	85.00
Units:	ppm	Maximum:	94.00
Detection Limit:	-	Mean:	88.21
Expected Value (EV):	87.00	Std Deviation:	1.70
E.V. Range:	75.00 to 99.00	% in Tolerance	100.00 %
		% Bias	1.39 %
		% RSD	1.93 %







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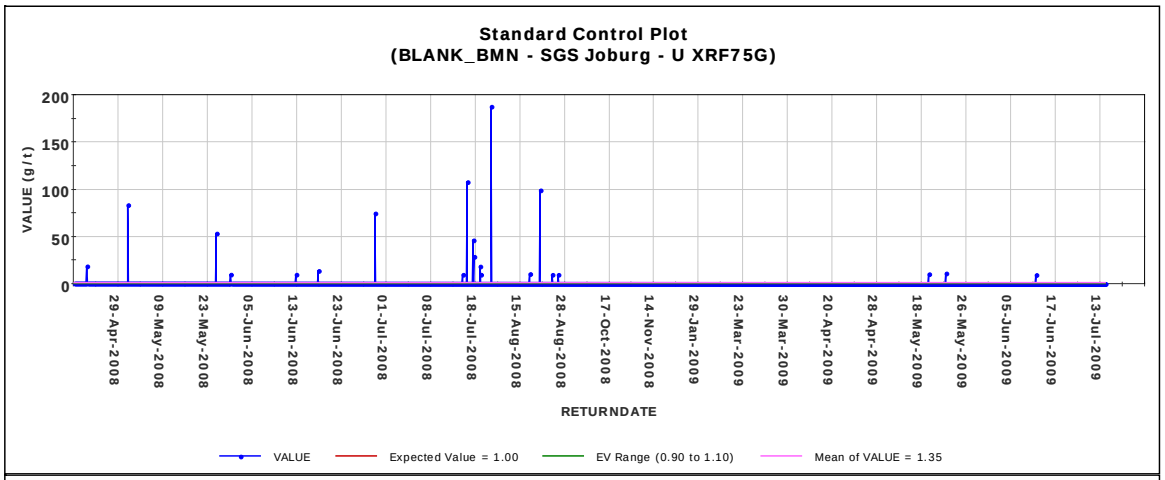
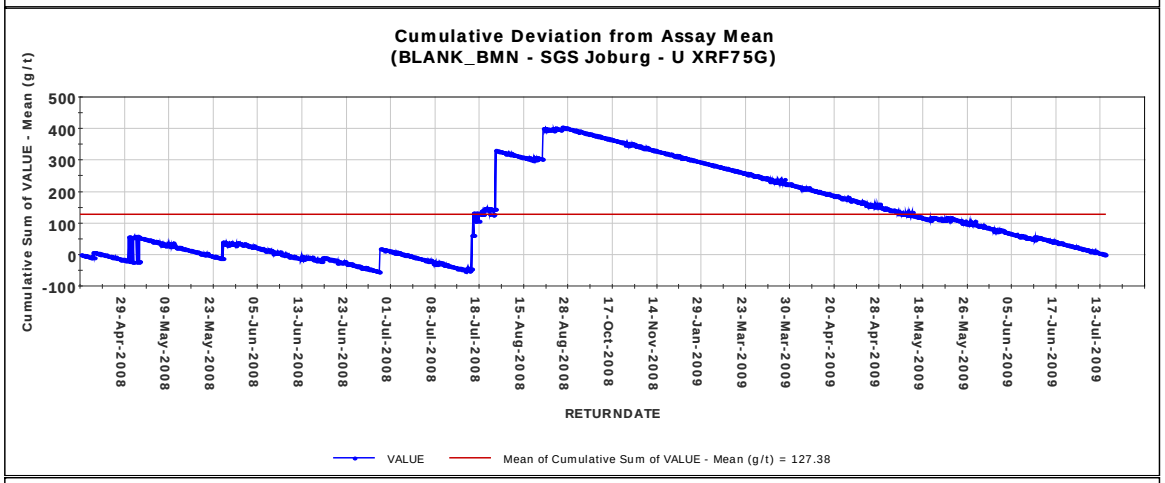
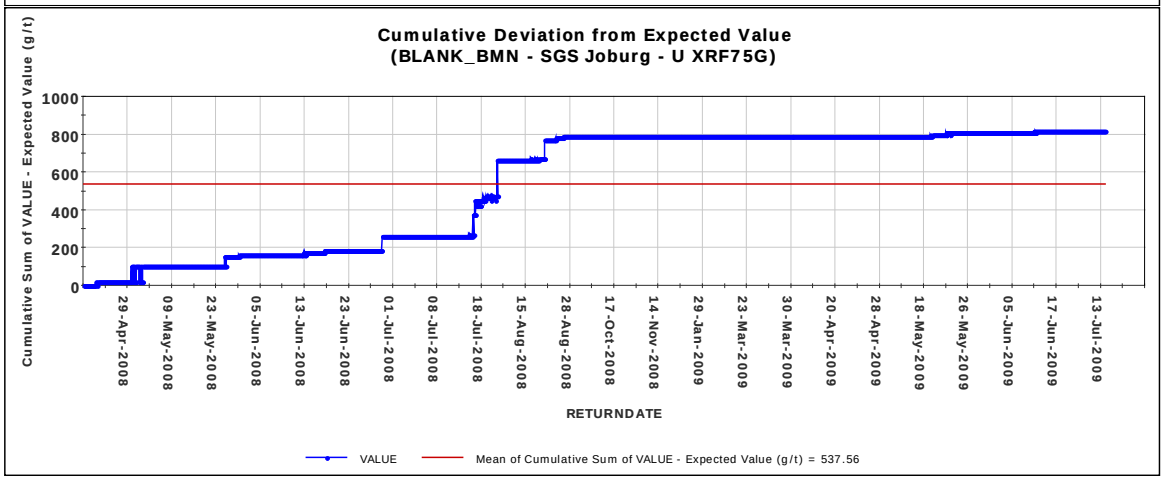
Appendix 1
QAQC Plots

BLANKS
(BLANK_BMN - SGS Joburg - U XRF75G)

Standard:	BLANK_BMN	No of Analyses:	2311
Element:	U	Minimum:	1.00
Units:	ppm	Maximum:	188.00
Detection Limit:	-	Mean:	1.35
Expected Value (EV):	1.00	Std Deviation:	5.72
E.V. Range:	0.90 to 1.10	% in Tolerance	99.09 %
		% Bias	35.48 %
		% RSD	422.46 %







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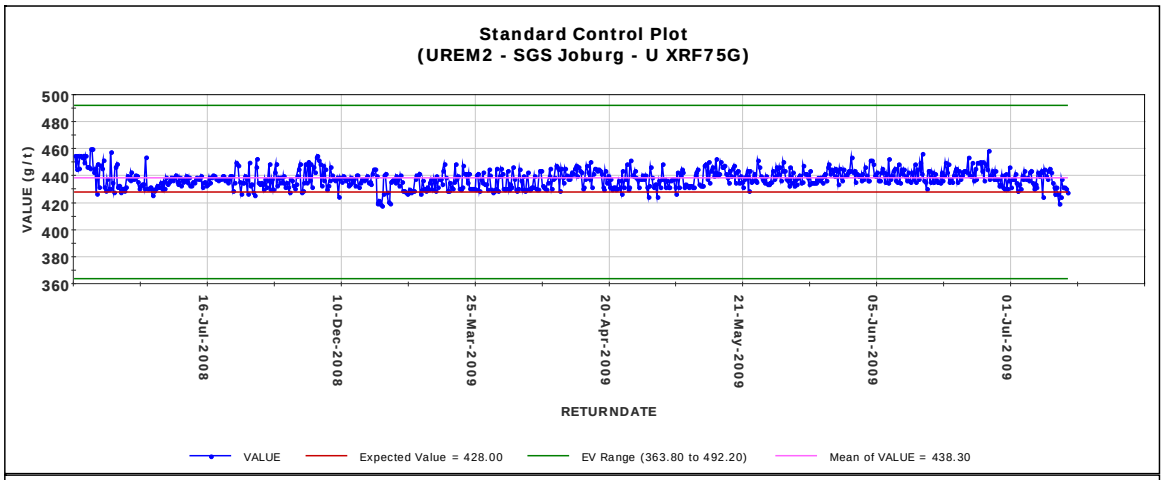
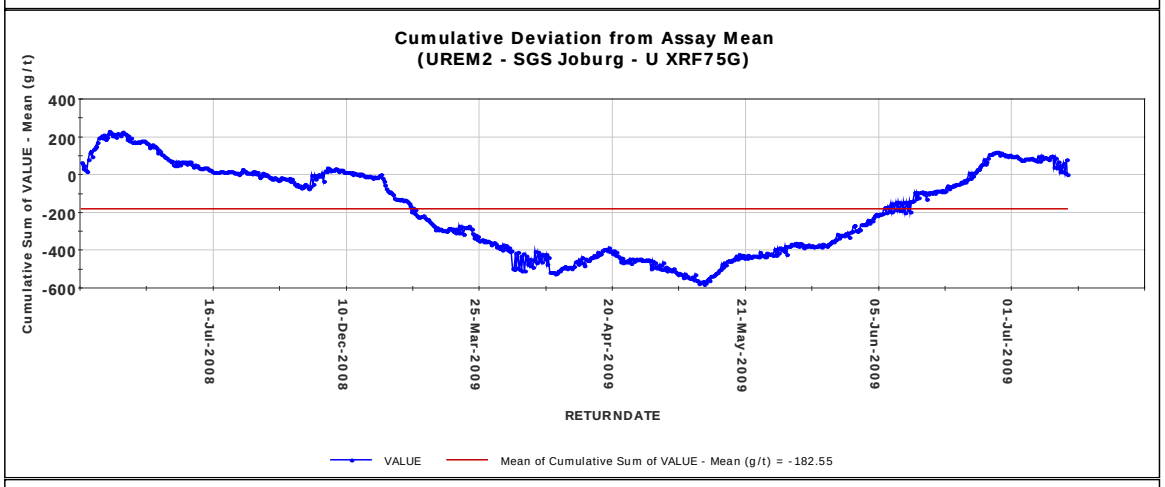
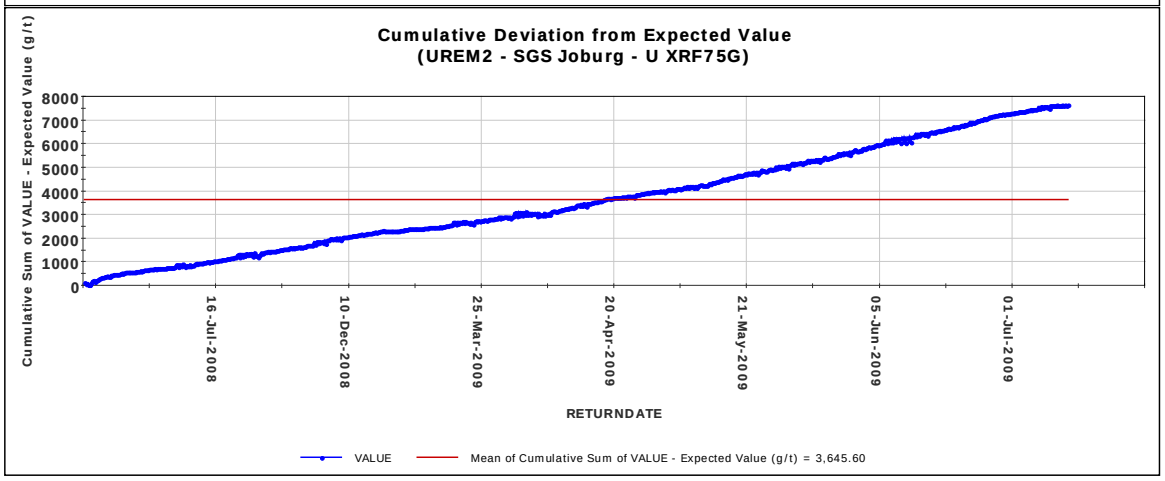
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM2 - SGS Joburg - U XRF75G)

Standard:	UREM2	No of Analyses:	742
Element:	U	Minimum:	418.00
Units:	ppm	Maximum:	460.00
Detection Limit:		Mean:	438.30
Expected Value (EV):	428.00	Std Deviation:	6.77
E.V. Range:	363.80 to 492.20	% in Tolerance	100.00 %
		% Bias	2.41 %
		% RSD	1.54 %







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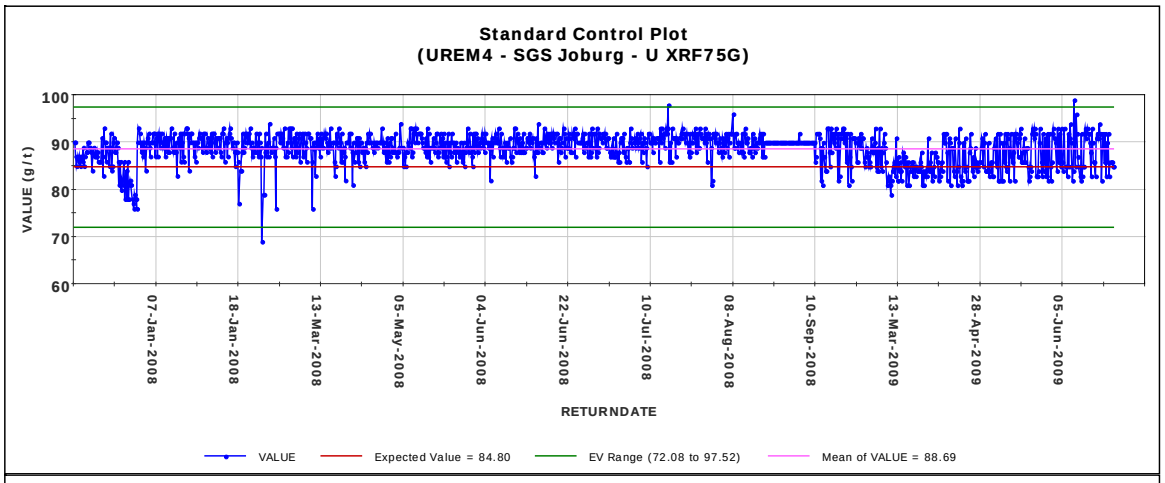
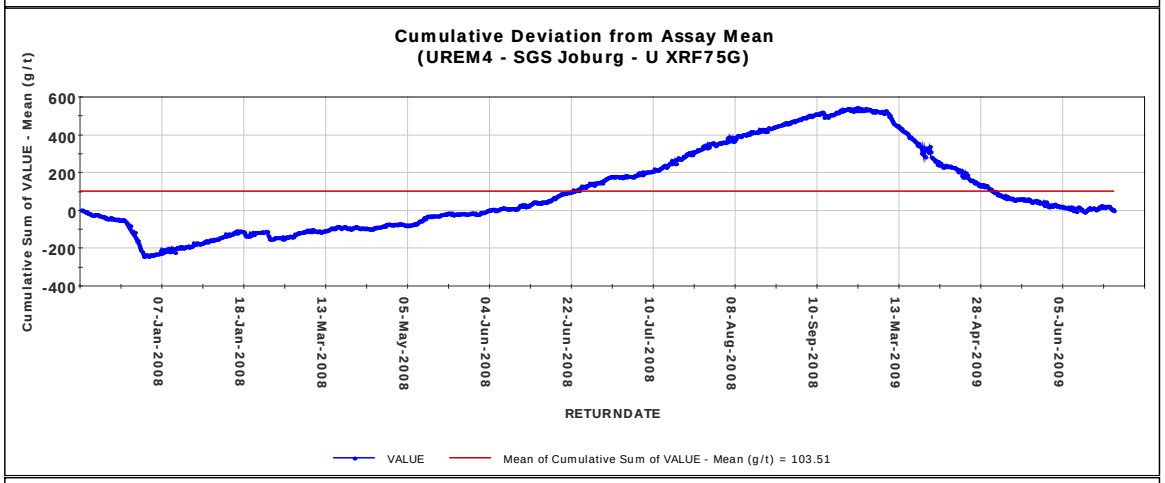
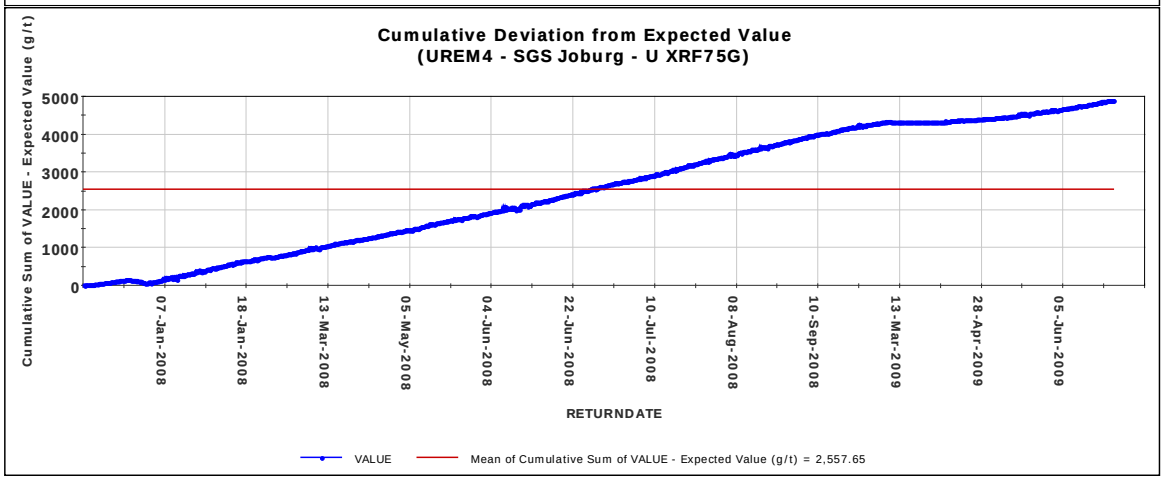
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM4 - SGS Joburg - U XRF75G)

Standard:	UREM4	No of Analyses:	1262
Element:	U	Minimum:	69.00
Units:	ppm	Maximum:	99.00
Detection Limit:		Mean:	88.69
Expected Value (EV):	84.80	Std Deviation:	3.26
E.V. Range:	72.08 to 97.52	% in Tolerance	99.76 %
		% Bias	4.58 %
		% RSD	3.68 %







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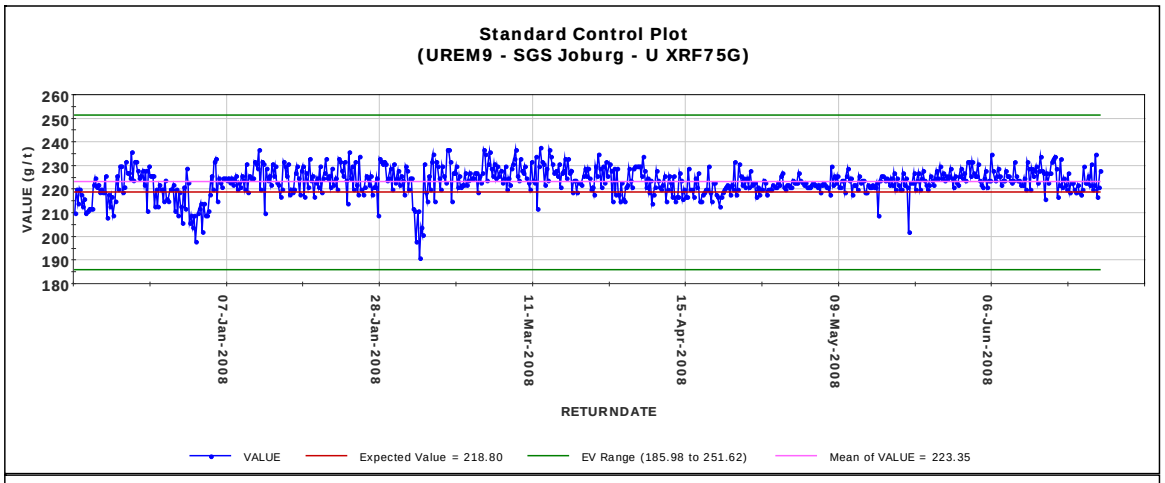
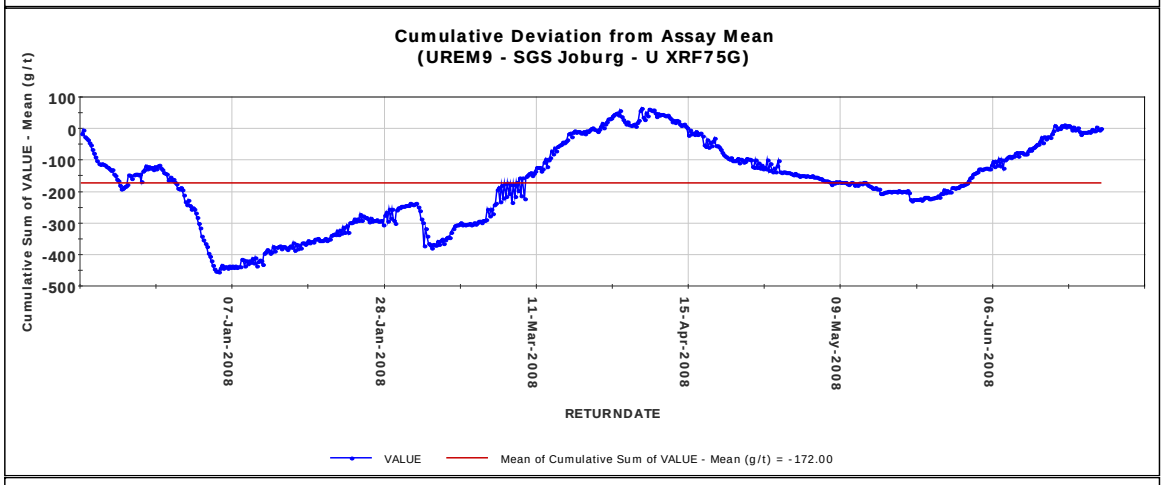
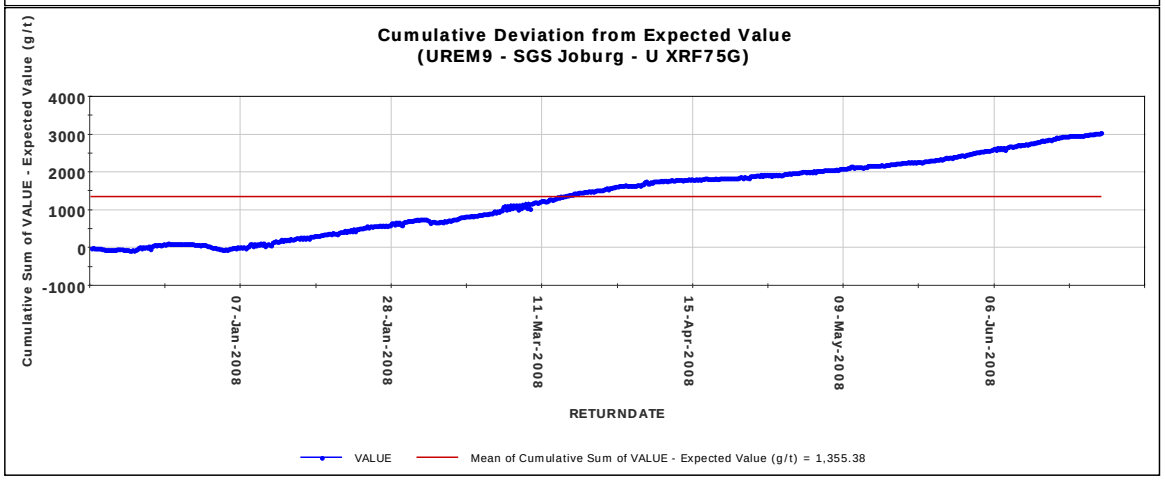
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM9 - SGS Joburg - U XRF75G)

Standard:	UREM9	No of Analyses:	671
Element:	U	Minimum:	191.00
Units:	ppm	Maximum:	238.00
Detection Limit:		Mean:	223.35
Expected Value (EV):	218.80	Std Deviation:	6.13
E.V. Range:	185.98 to 251.62	% in Tolerance	100.00 %
		% Bias	2.08 %
		% RSD	2.75 %







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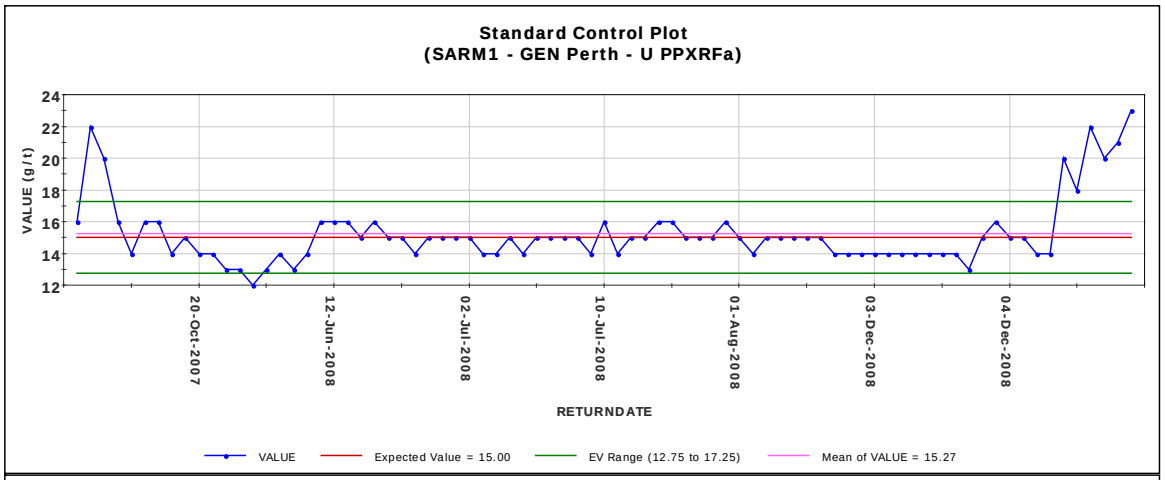
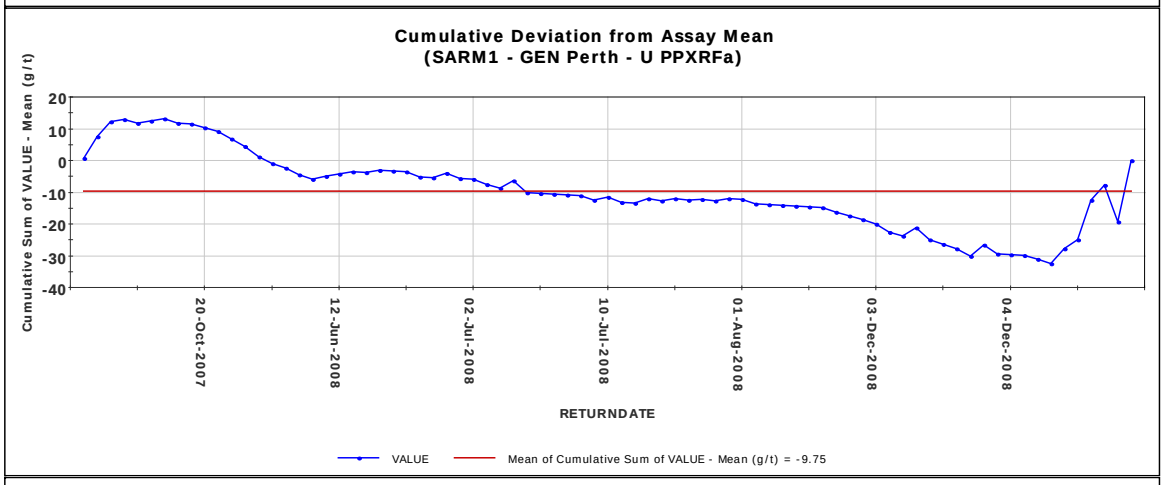
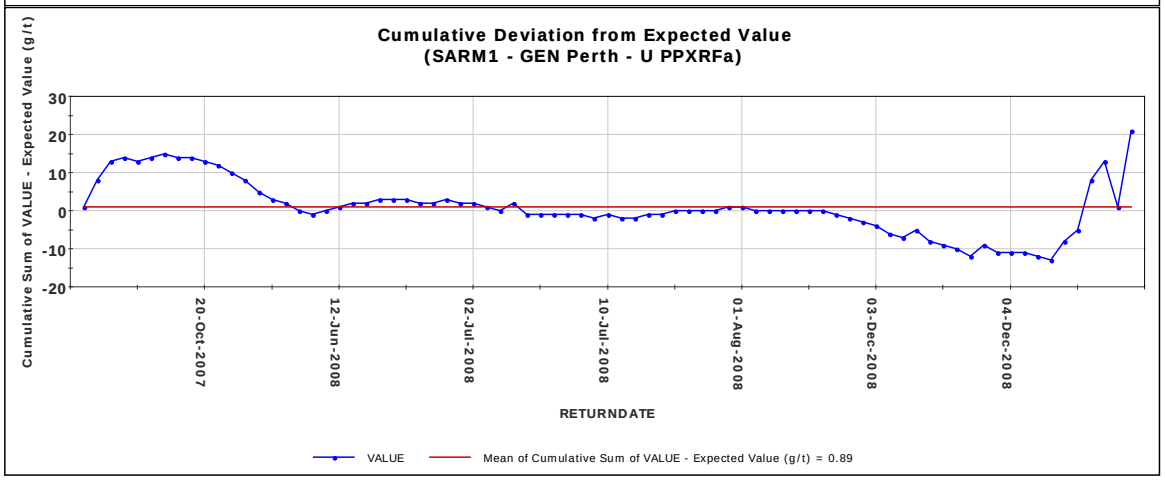
QAQC Plots

LAB STANDARDS
(SARM1 - GEN Perth - U PPXRFa)

Standard:	SARM1	No of Analyses:	79
Element:	U	Minimum:	12.00
Units:	ppm	Maximum:	23.00
Detection Limit:	-	Mean:	15.27
Expected Value (EV):	15.00	Std Deviation:	2.08
E.V. Range:	12.75 to 17.25	% in Tolerance	88.61 %
		% Bias	1.77 %
		% RSD	13.66 %







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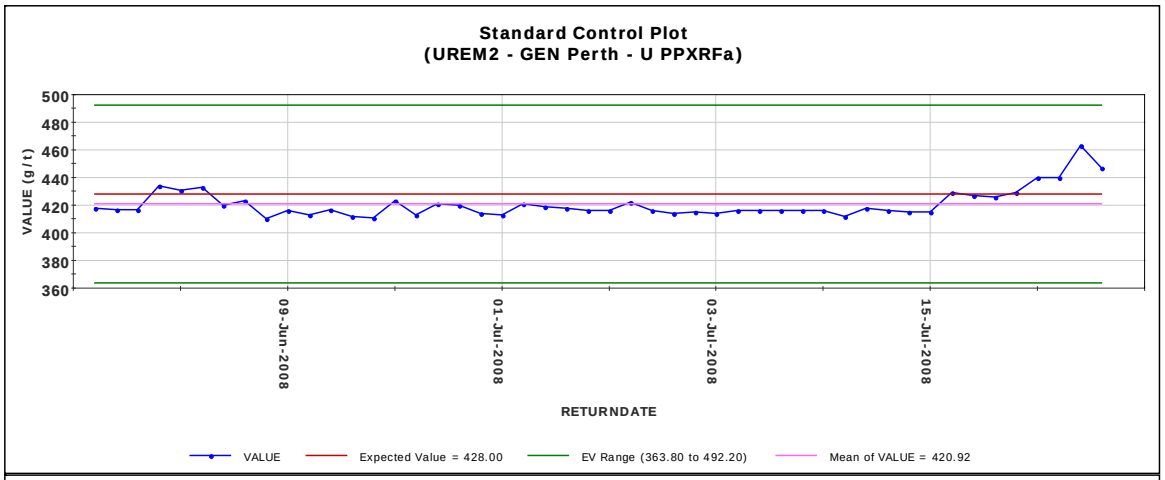
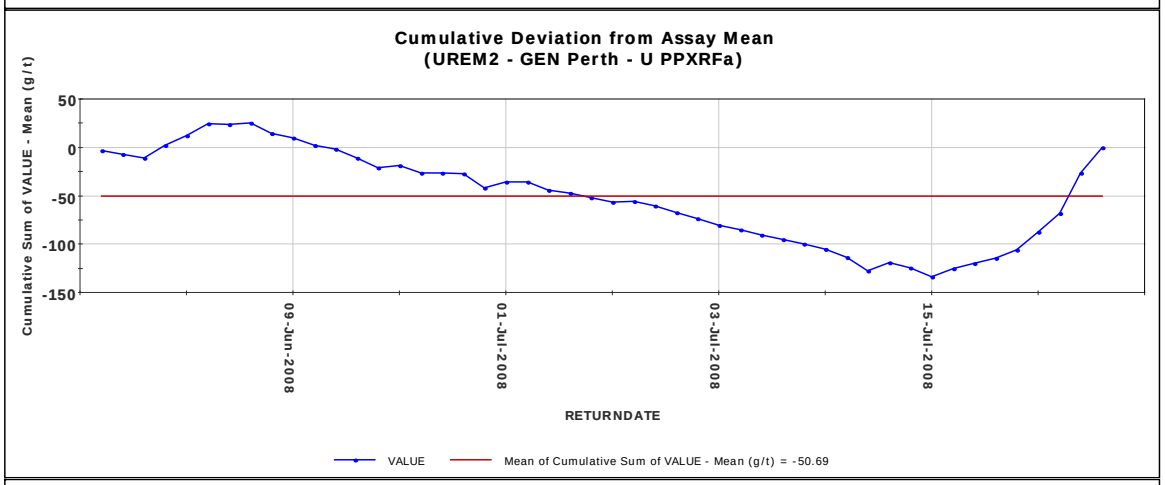
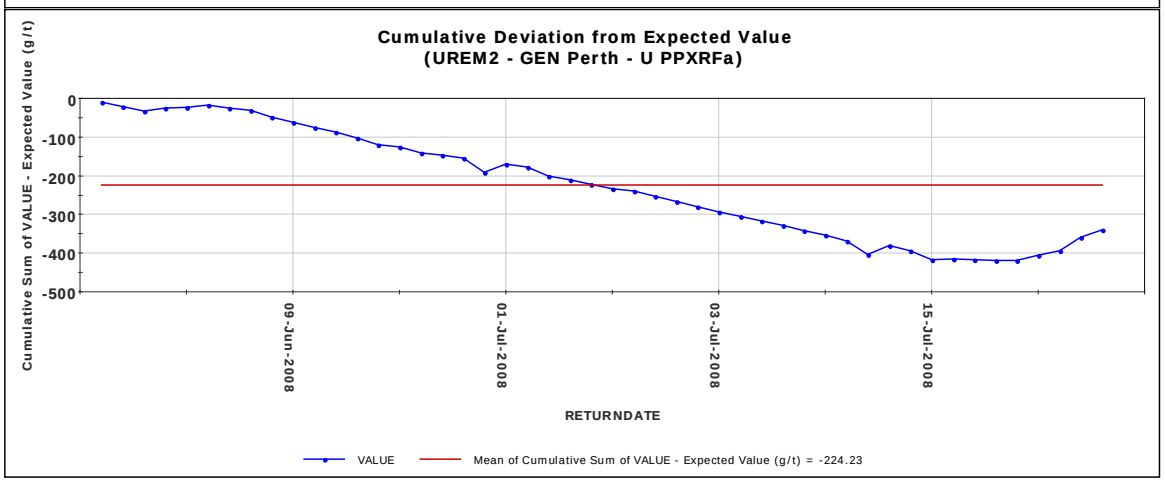
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM2 - GEN Perth - U PPXRFa)

Standard:	UREM2	No of Analyses:	48
Element:	U	Minimum:	410.00
Units:	ppm	Maximum:	463.00
Detection Limit:		Mean:	420.92
Expected Value (EV):	428.00	Std Deviation:	10.14
E.V. Range:	363.80 to 492.20	% in Tolerance	100.00 %
		% Bias	-1.65 %
		% RSD	2.41 %







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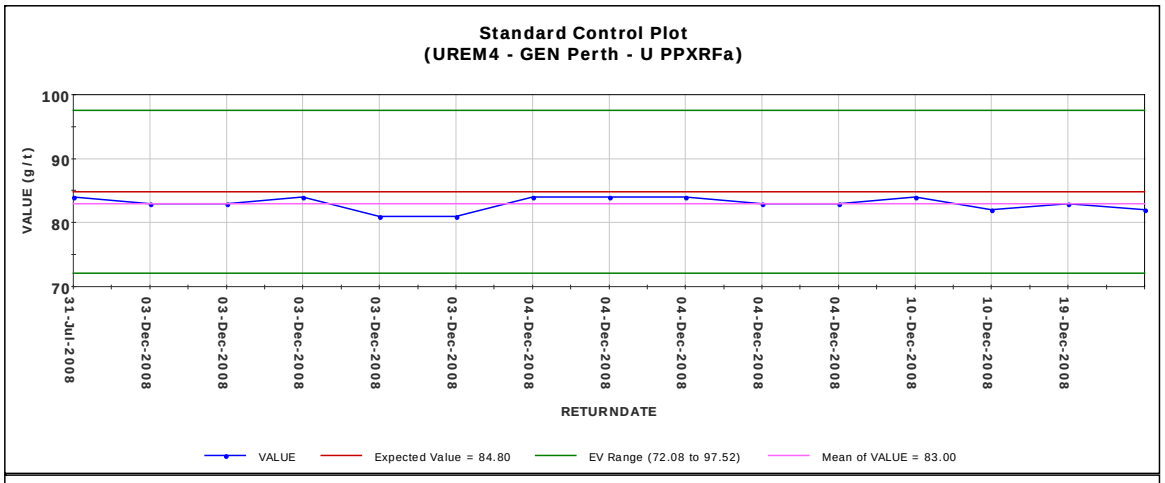
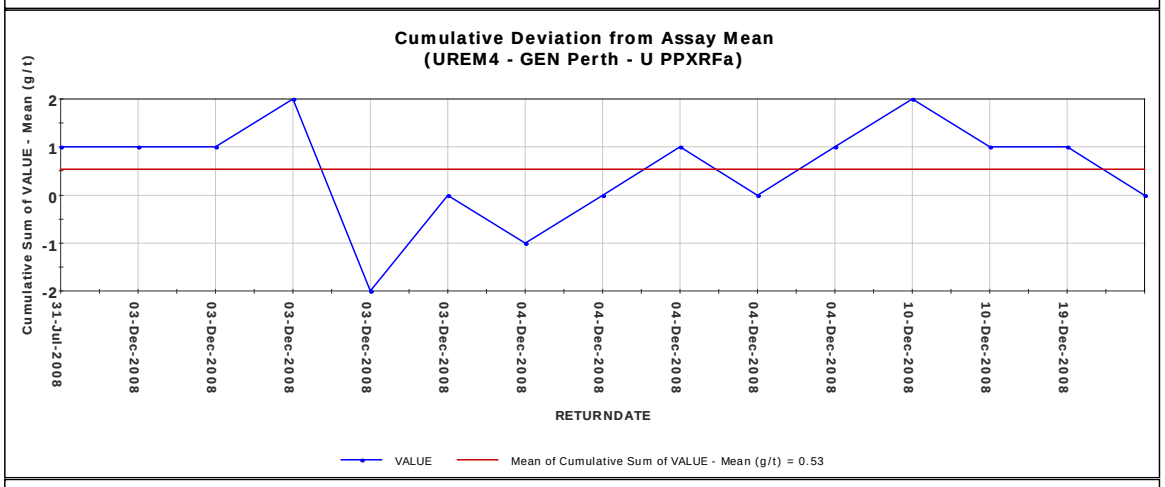
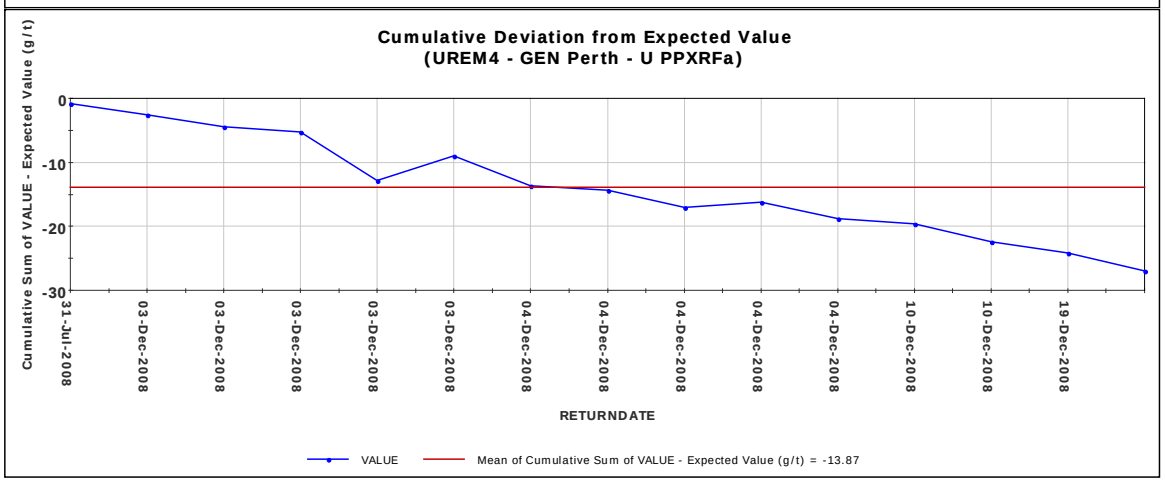
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM4 - GEN Perth - U PPXRFa)

Standard:	UREM4	No of Analyses:	15
Element:	U	Minimum:	81.00
Units:	ppm	Maximum:	84.00
Detection Limit:		Mean:	83.00
Expected Value (EV):	84.80	Std Deviation:	1.03
E.V. Range:	72.08 to 97.52	% in Tolerance	100.00 %
		% Bias	-2.12 %
		% RSD	1.24 %







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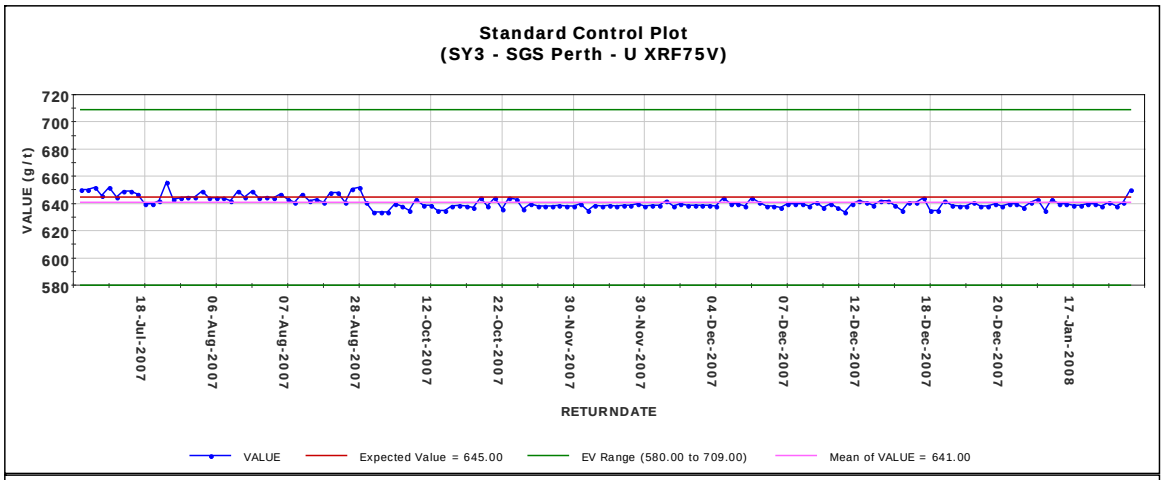
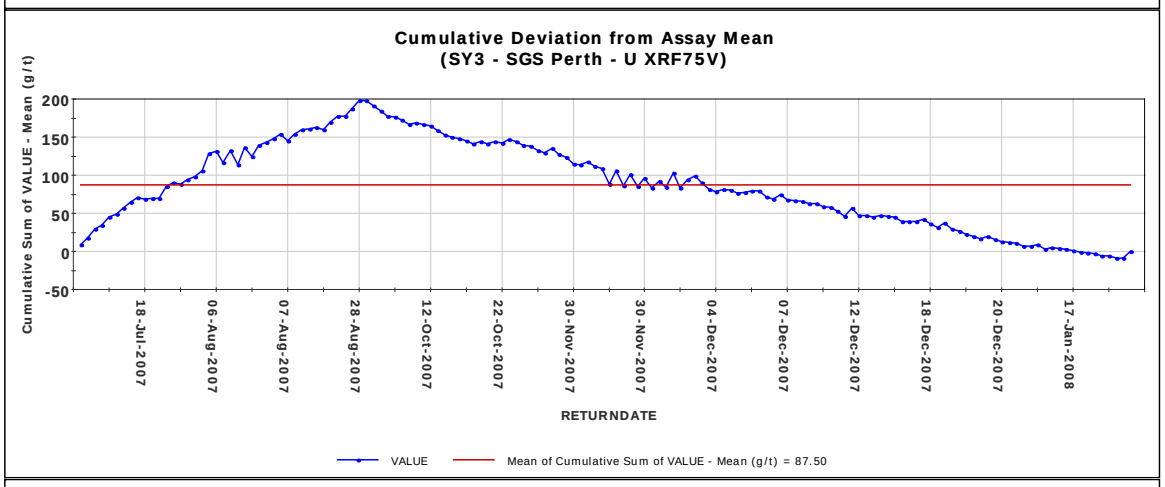
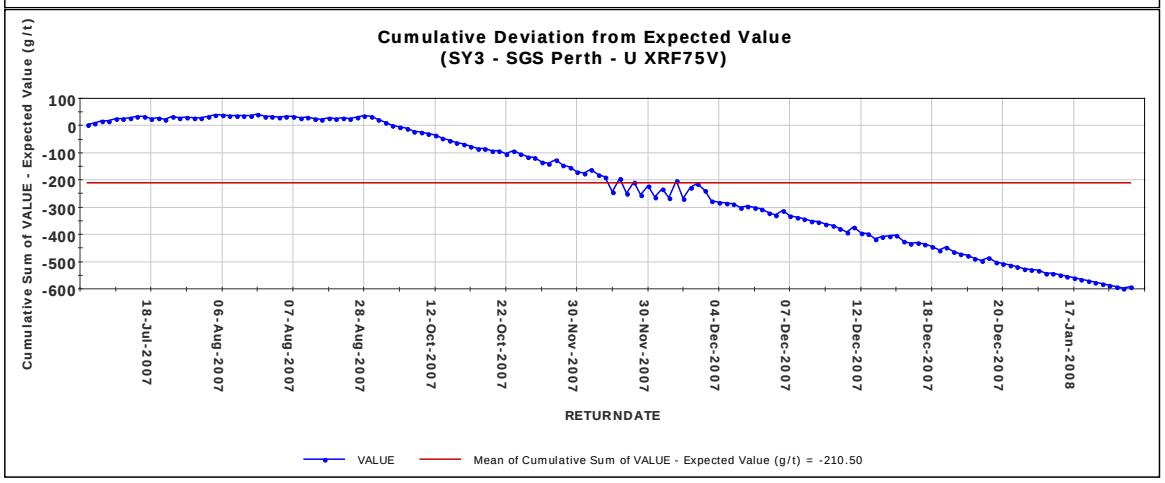
Appendix 1
QAQC Plots

LAB STANDARDS
(SY3 - SGS Perth - U XRF75V)

Standard:	SY3	No of Analyses:	148
Element:	U	Minimum:	634.00
Units:	ppm	Maximum:	656.00
Detection Limit:		Mean:	641.00
Expected Value (EV):	645.00	Std Deviation:	4.23
E.V. Range:	580.00 to 709.00	% in Tolerance	100.00 %
		% Bias	-0.62 %
		% RSD	0.66 %







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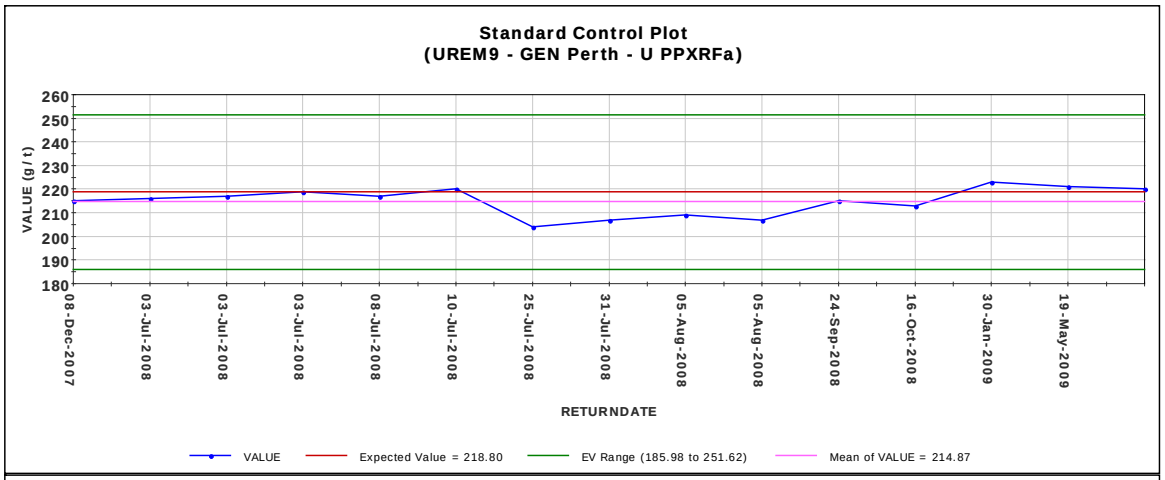
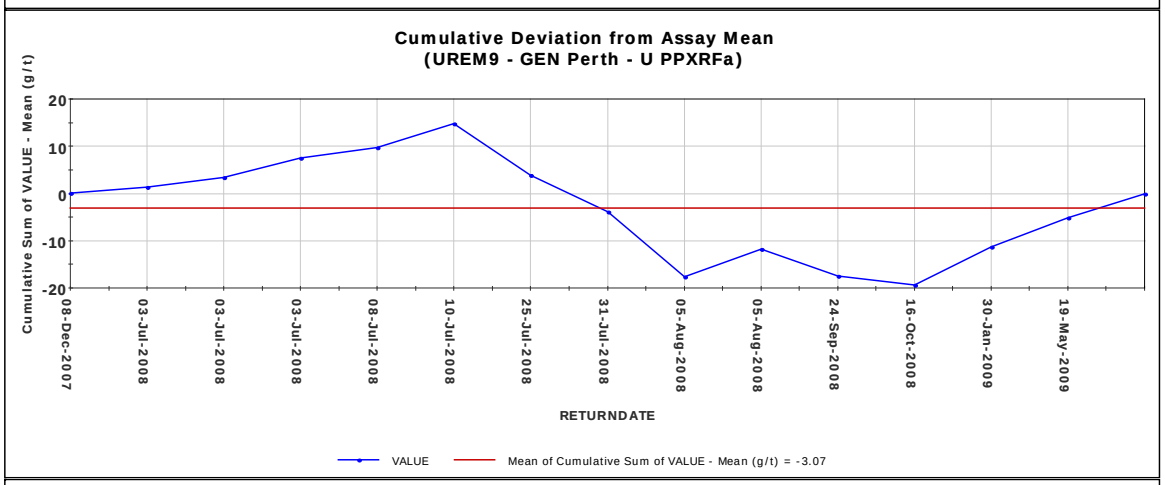
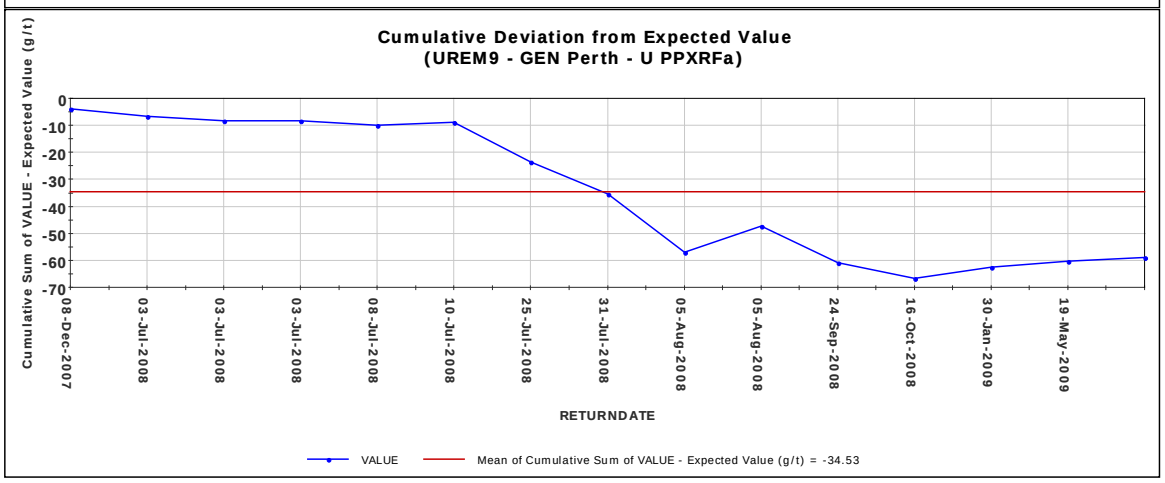
Appendix 1
QAQC Plots

LAB STANDARDS
(UREM9 - GEN Perth - U PPXRFa)

Standard:	UREM9	No of Analyses:	15
Element:	U	Minimum:	204.00
Units:	ppm	Maximum:	223.00
Detection Limit:		Mean:	214.87
Expected Value (EV):	218.80	Std Deviation:	5.56
E.V. Range:	185.98 to 251.62	% in Tolerance	100.00 %
		% Bias	-1.80 %
		% RSD	2.59 %







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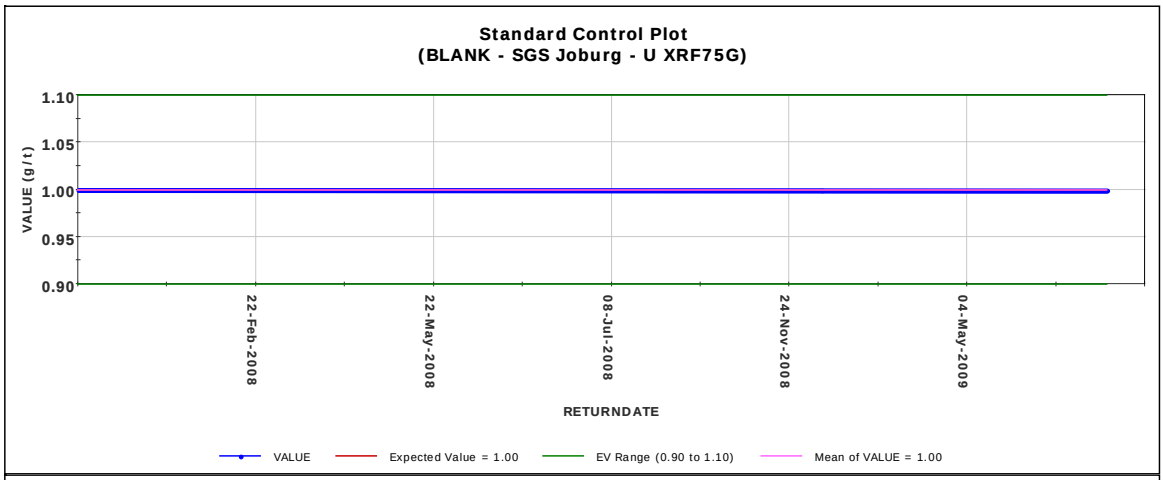
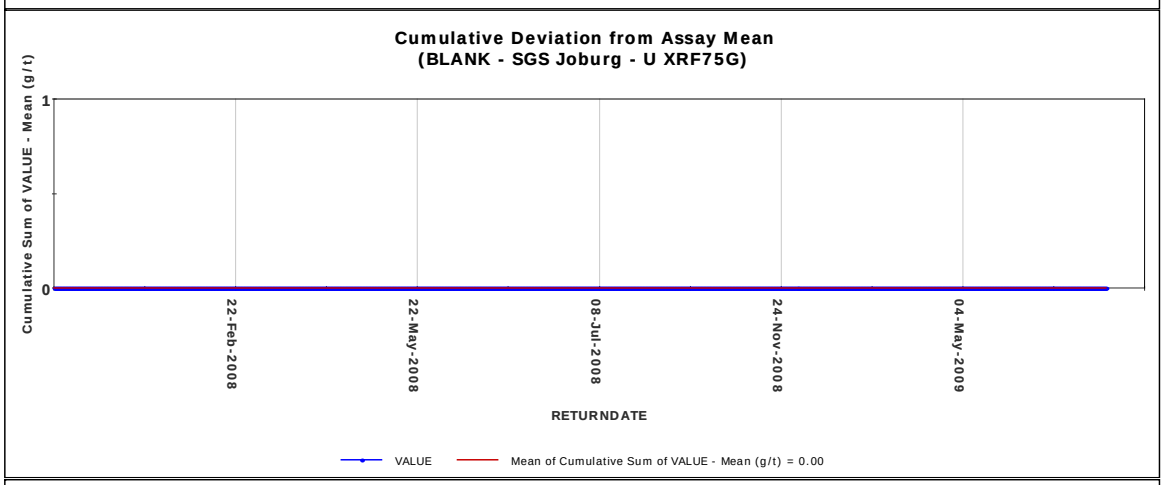
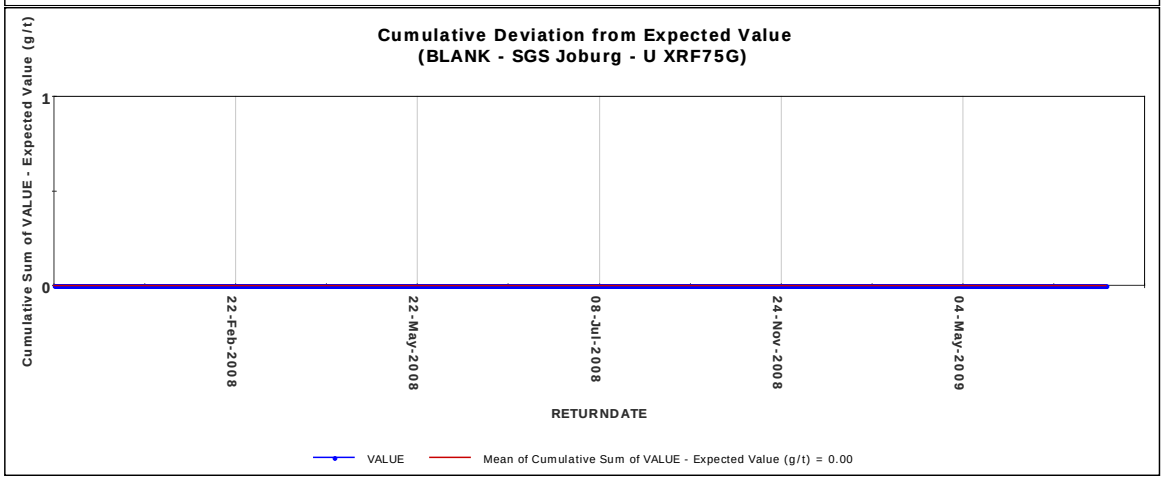
Appendix 1
QAQC Plots

LAB BLANKS
(BLANK - SGS Joburg - U XRF75G)

Standard:	BLANK	No of Analyses:	5786
Element:	U	Minimum:	1.00
Units:	ppm	Maximum:	1.00
Detection Limit:	-	Mean:	1.00
Expected Value (EV):	1.00	Std Deviation:	0.00
E.V. Range:	0.90 to 1.10	% in Tolerance	100.00 %
		% Bias	0.00 %
		% RSD	0.00 %







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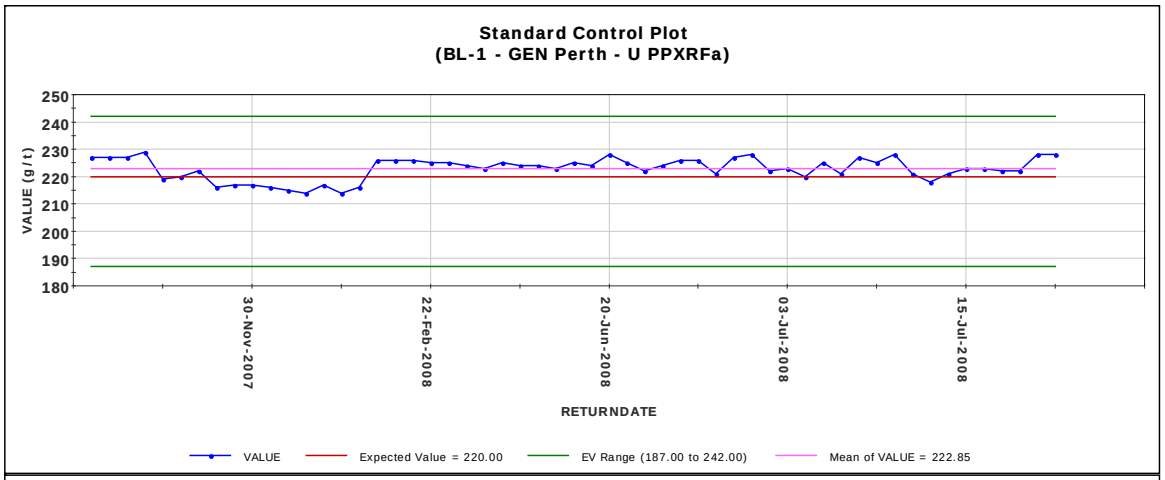
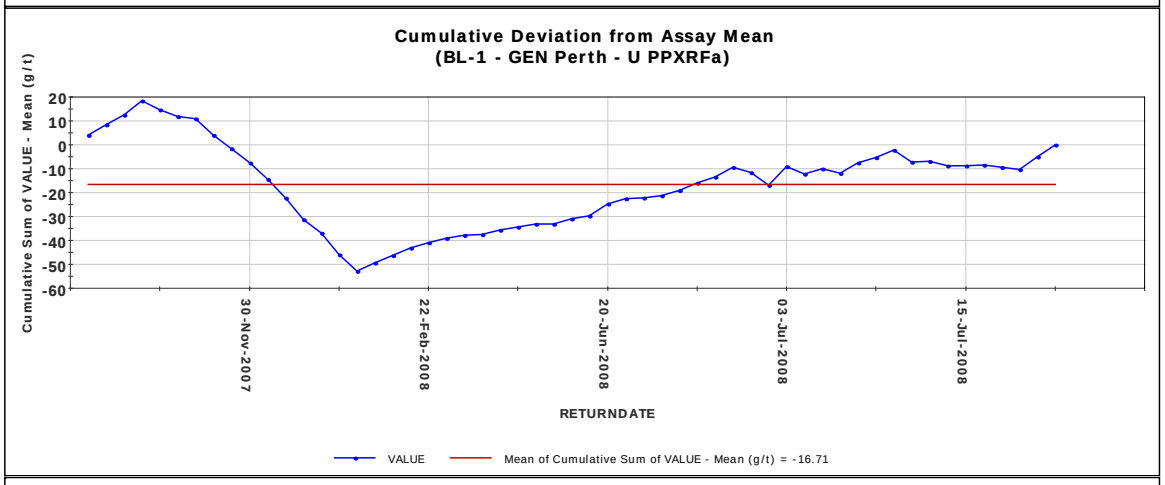
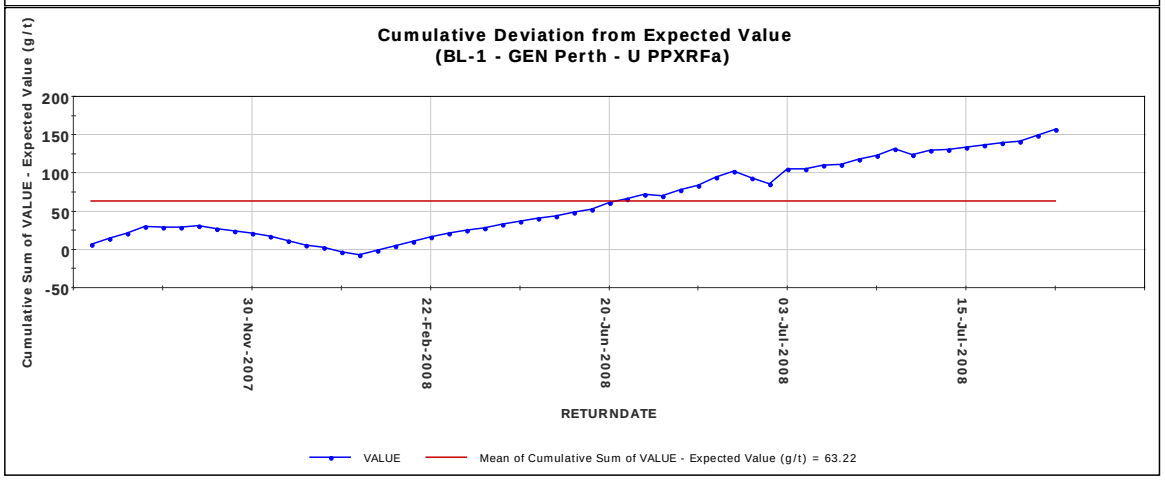
Appendix 1
QAQC Plots

LAB STANDARDS
(BL-1 - GEN Perth - U PPXRFa)

Standard:	BL-1	No of Analyses:	55
Element:	U	Minimum:	214.00
Units:	ppm	Maximum:	229.00
Detection Limit:	-	Mean:	222.85
Expected Value (EV):	220.00	Std Deviation:	4.00
E.V. Range:	187.00 to 242.00	% in Tolerance	100.00 %
		% Bias	1.30 %
		% RSD	1.79 %







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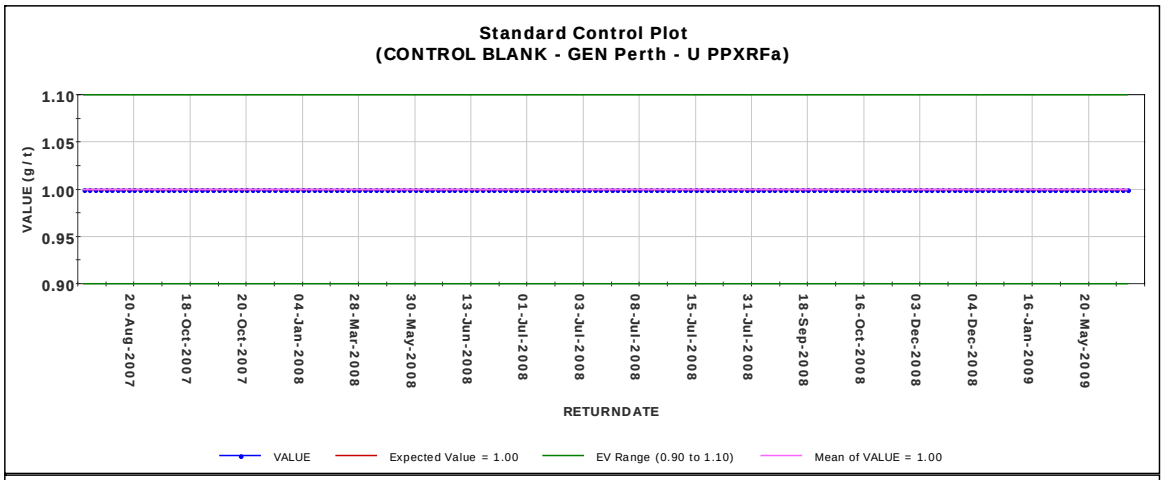
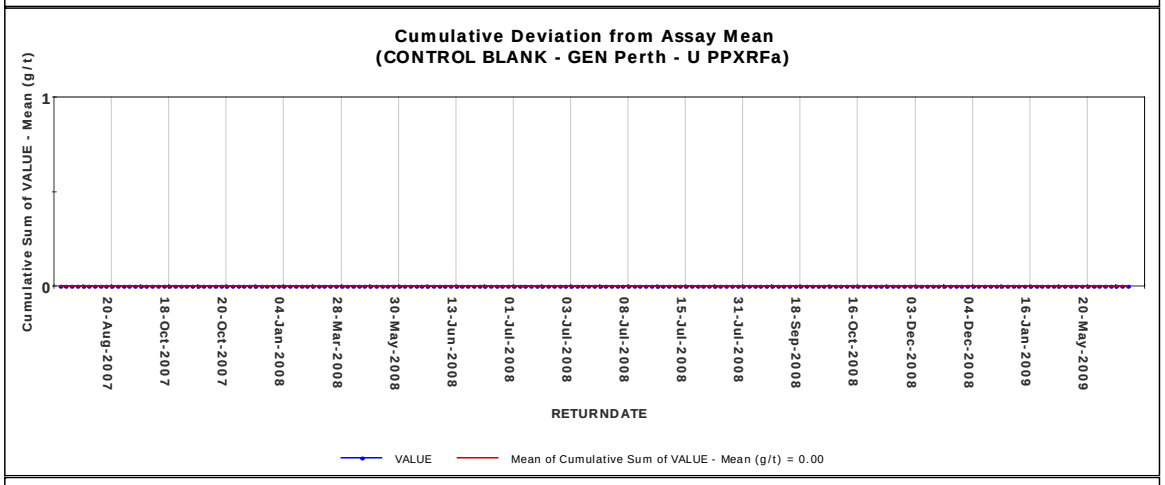
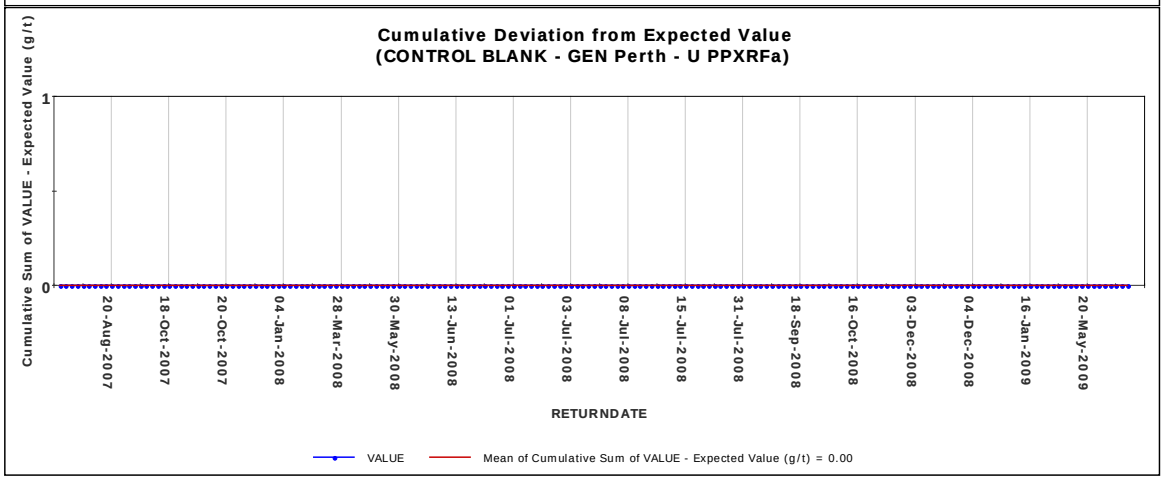
Appendix 1
QAQC Plots

LAB BLANKS
(CONTROL BLANK - GEN Perth - U PPXRFa)

Standard:	CONTROL BLANK	No of Analyses:	187
Element:	U	Minimum:	1.00
Units:	ppm	Maximum:	1.00
Detection Limit:	-	Mean:	1.00
Expected Value (EV):	1.00	Std Deviation:	0.00
E.V. Range:	0.90 to 1.10	% in Tolerance	100.00 %
		% Bias	0.00 %
		% RSD	0.00 %







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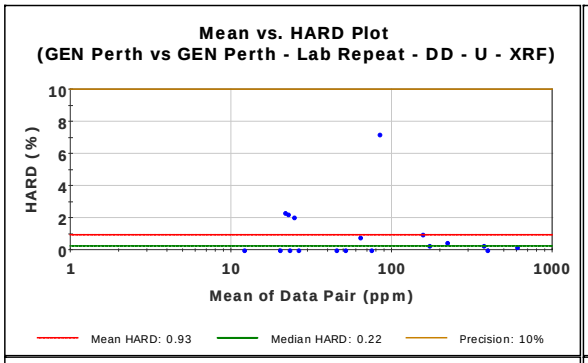
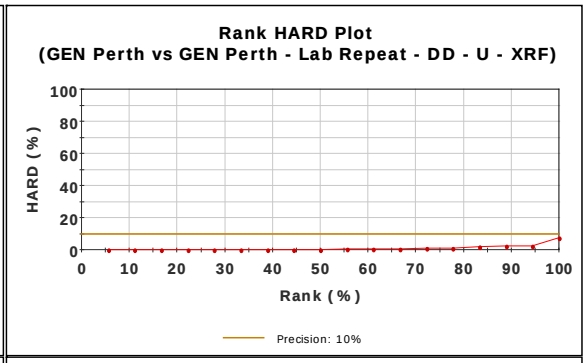
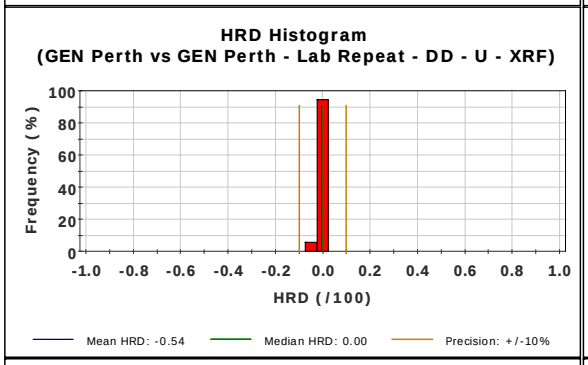
Appendix 1
QAQC Plots

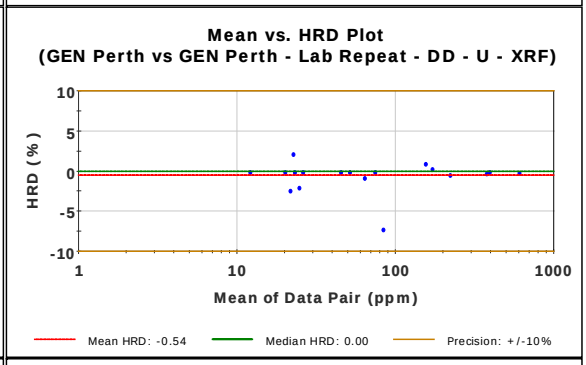
Comparative Stats
(GEN Perth vs GEN Perth - Lab Repeat - DD - U - XRF)

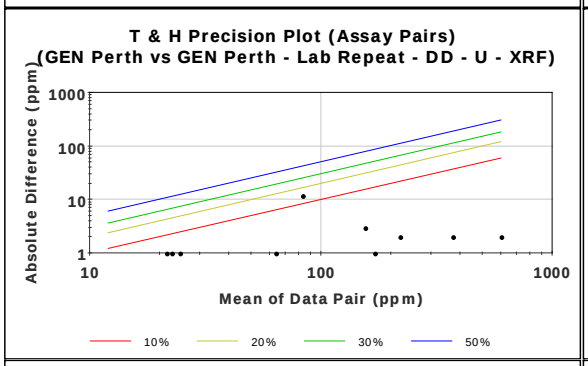
	assay_or	assay_chk	Units		Result
No. Pairs:	18	18		Pearson CC:	1.00
Minimum:	12.00	12.00	ppm	Spearman CC:	1.00
Maximum:	600.00	602.00	ppm	Mean HARD:	0.93
Mean:	131.50	132.39	ppm	Median HARD:	0.22
Median	57.00	57.50	ppm		
Std. Deviation:	160.63	160.88	ppm	Mean HRD:	-0.54
Coefficient of Variation:	1.22	1.22		Median HRD	0.00

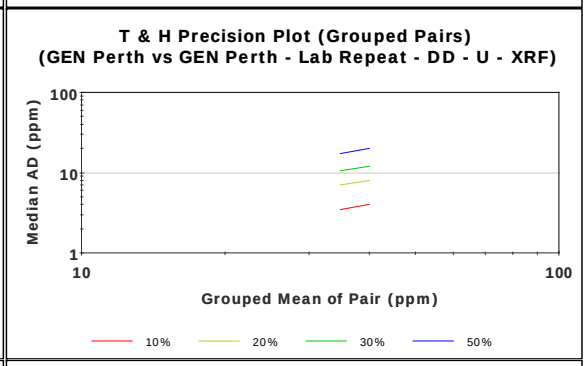


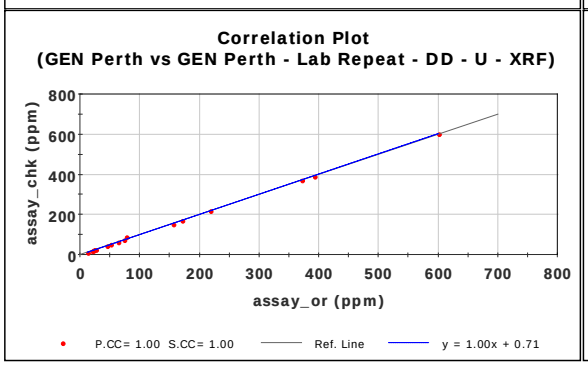


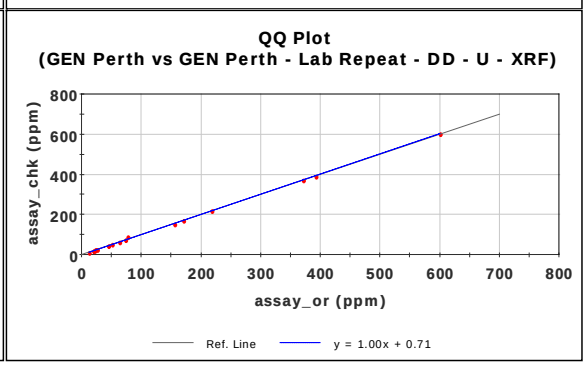












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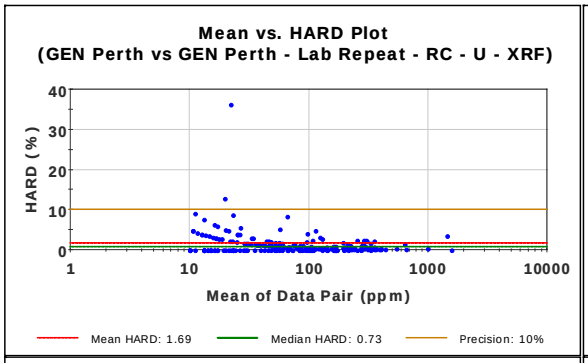
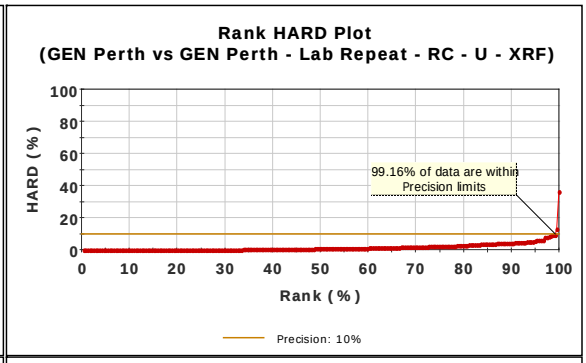
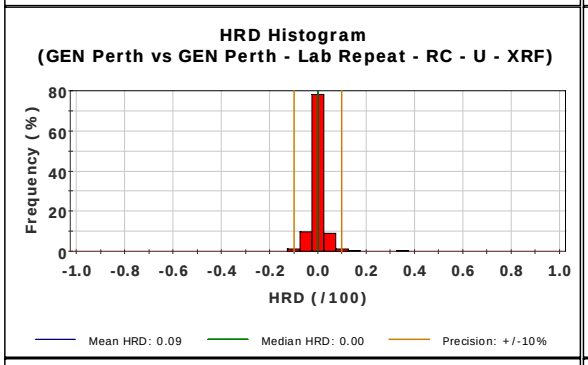
Appendix 1
QAQC Plots

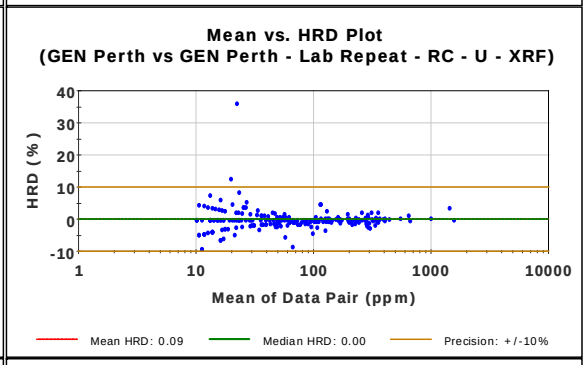
Comparative Stats
(GEN Perth vs GEN Perth - Lab Repeat - RC - U - XRF)

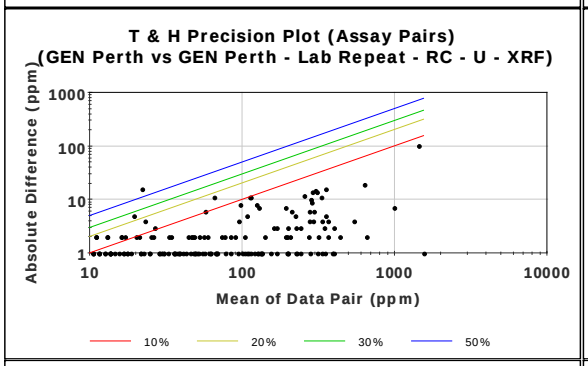
	assay_or	assay_chk	Units		Result
No. Pairs:	239	239		Pearson CC:	1.00
Minimum:	10.00	10.00	ppm	Spearman CC:	1.00
Maximum:	1,556.00	1,557.00	ppm	Mean HARD:	1.69
Mean:	122.68	122.18	ppm	Median HARD:	0.73
Median	57.00	59.00	ppm		
Std. Deviation:	182.85	179.40	ppm	Mean HRD:	0.09
Coefficient of Variation:	1.49	1.47		Median HRD	0.00

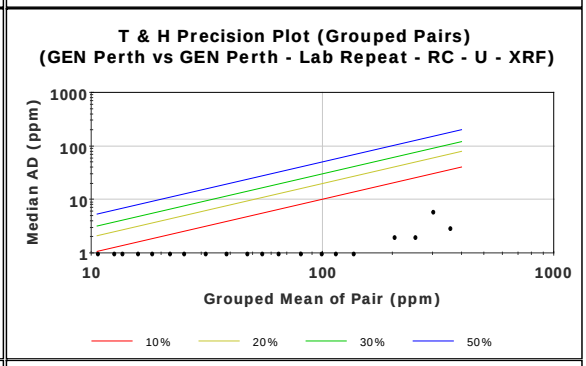


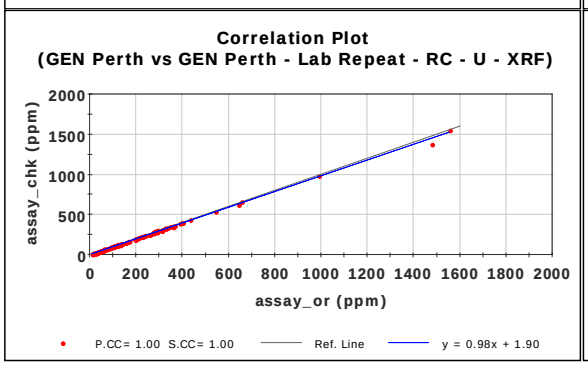


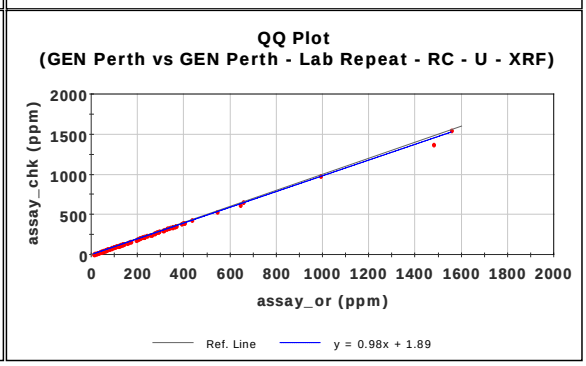












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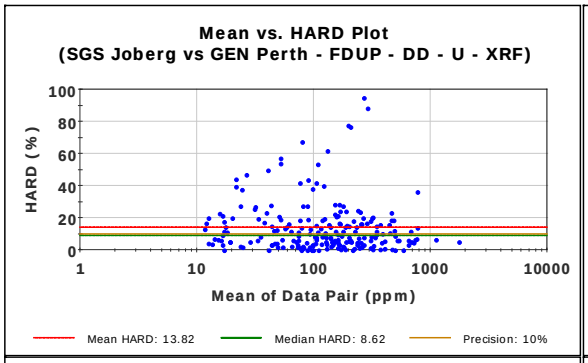
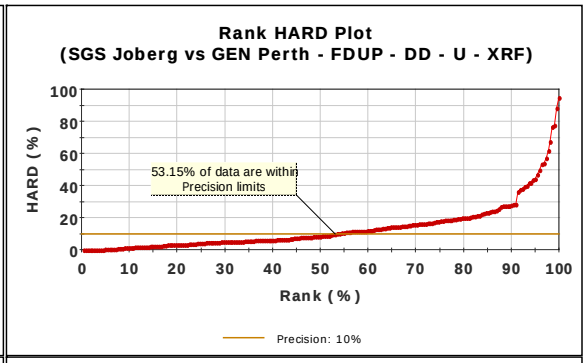
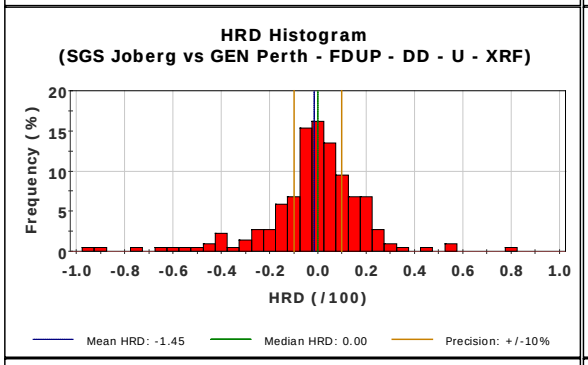
Appendix 1
QAQC Plots

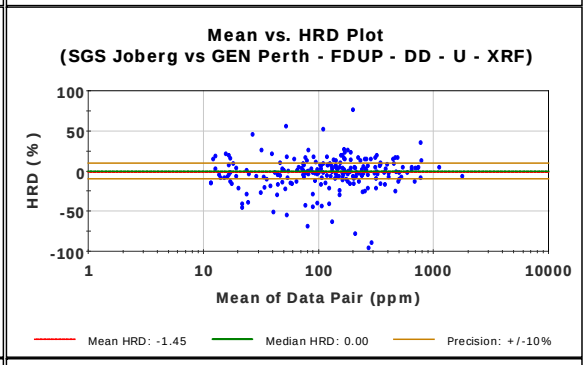
Comparative Stats
(SGS Joberg vs GEN Perth - FDUP - DD - U - XRF)

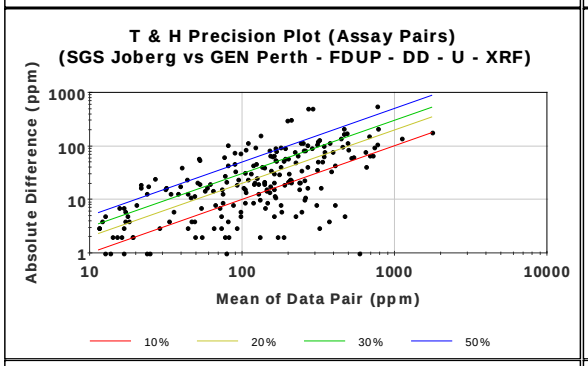
	assay_or	assay_chk	Units		Result
No. Pairs:	222	222		Pearson CC:	0.91
Minimum:	10.00	10.00	ppm	Spearman CC:	0.88
Maximum:	1,655.00	1,836.00	ppm	Mean HARD:	13.82
Mean:	187.95	187.74	ppm	Median HARD:	8.62
Median	129.00	128.00	ppm		
Std. Deviation:	213.47	206.19	ppm	Mean HRD:	-1.45
Coefficient of Variation:	1.14	1.10		Median HRD	0.00

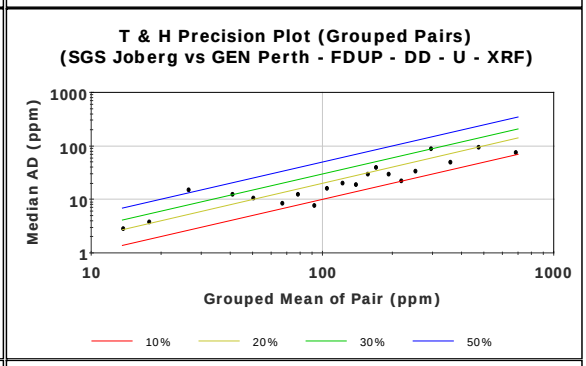


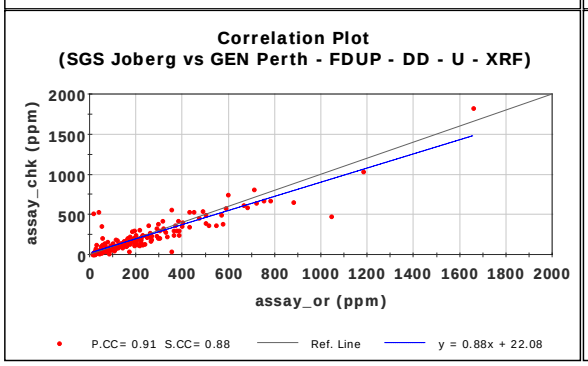


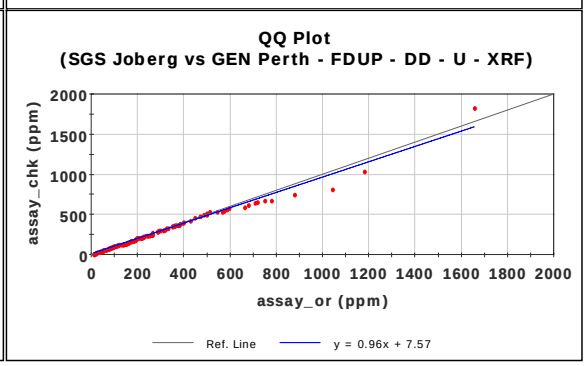












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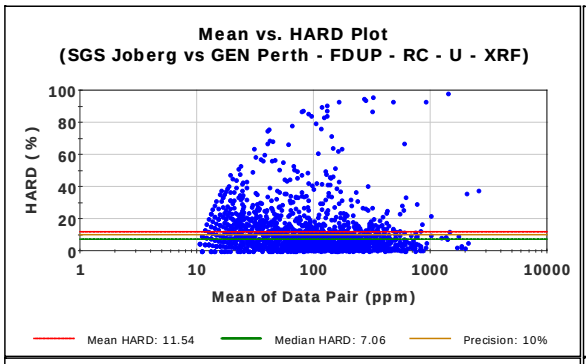
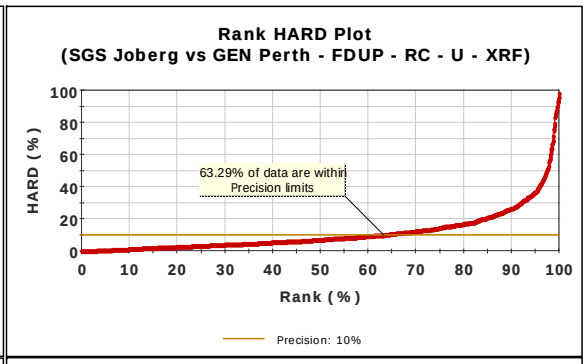
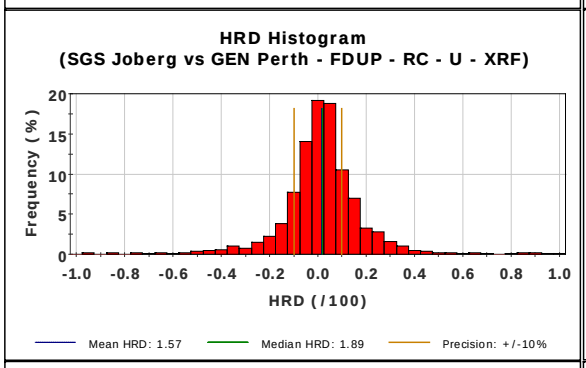
Appendix 1
QAQC Plots

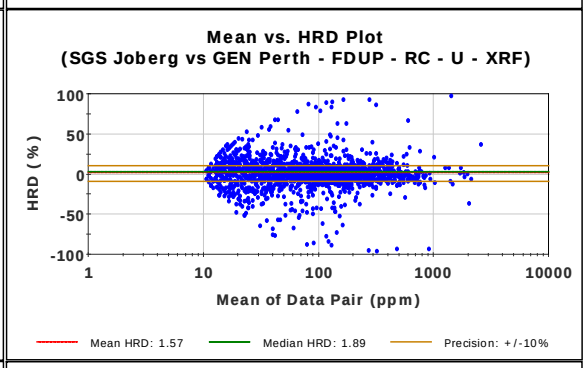
Comparative Stats
(SGS Joberg vs GEN Perth - FDUP - RC - U - XRF)

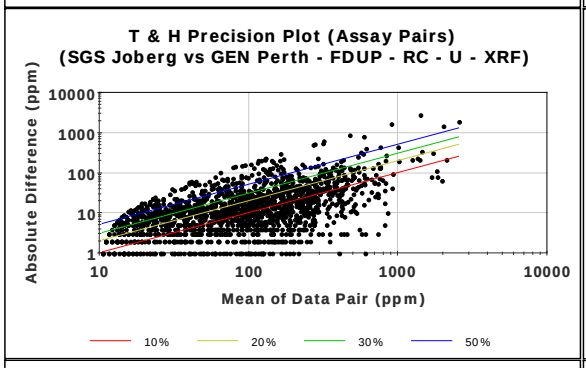
	assay_or	assay_chk	Units		Result
No. Pairs:	1,817	1,817		Pearson CC:	0.86
Minimum:	10.00	10.00	ppm	Spearman CC:	0.92
Maximum:	3,495.00	2,735.00	ppm	Mean HARD:	11.54
Mean:	150.73	146.85	ppm	Median HARD:	7.06
Median	90.00	90.00	ppm		
Std. Deviation:	214.37	201.93	ppm	Mean HRD:	1.57
Coefficient of Variation:	1.42	1.38		Median HRD	1.89

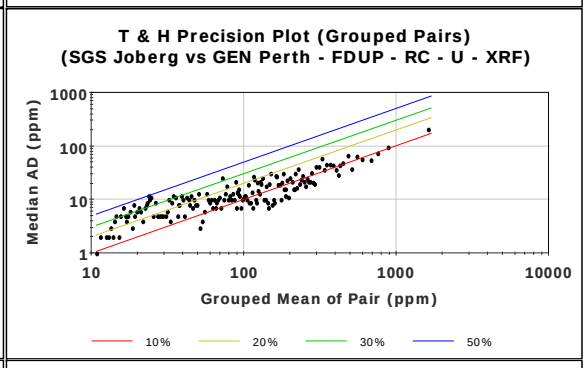


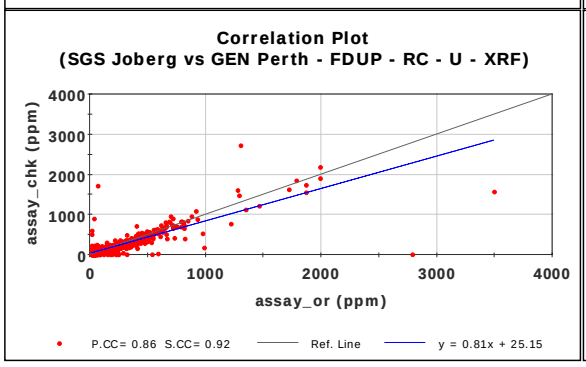


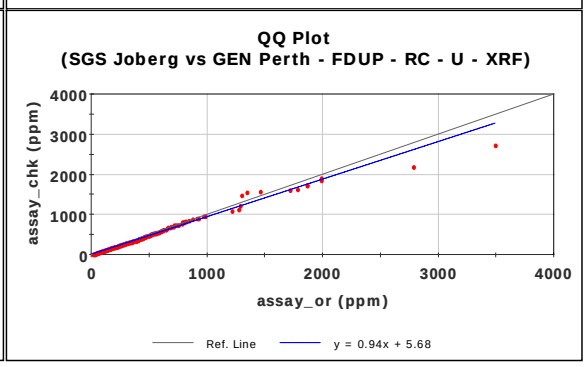












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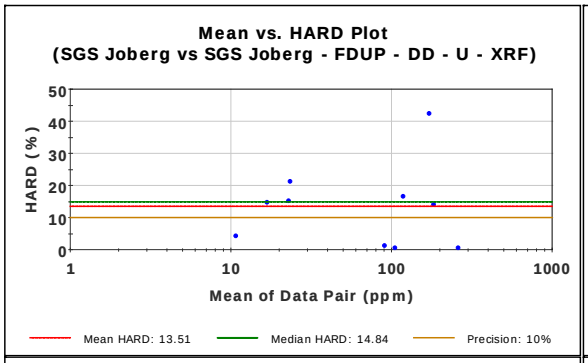
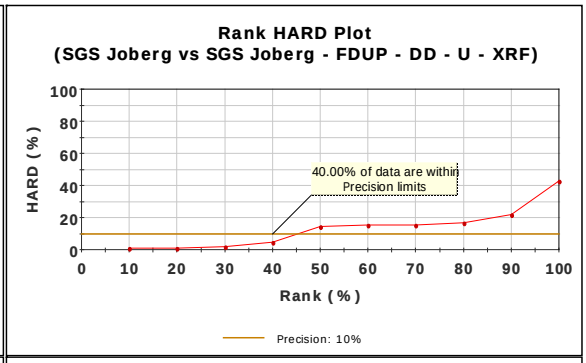
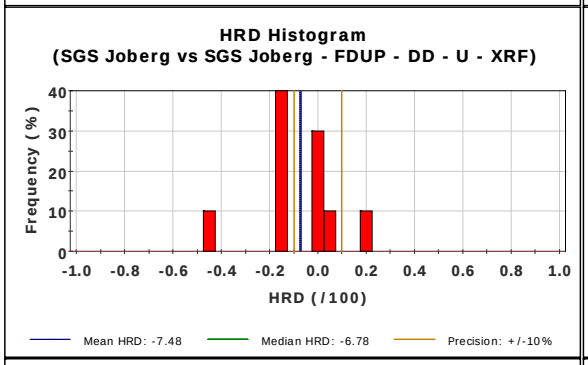
Appendix 1
QAQC Plots

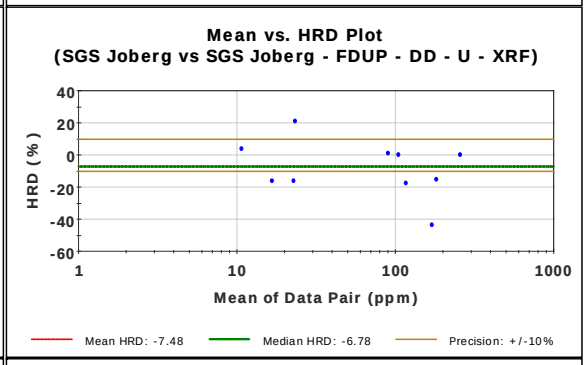
Comparative Stats
(SGS Joberg vs SGS Joberg - FDUP - DD - U - XRF)

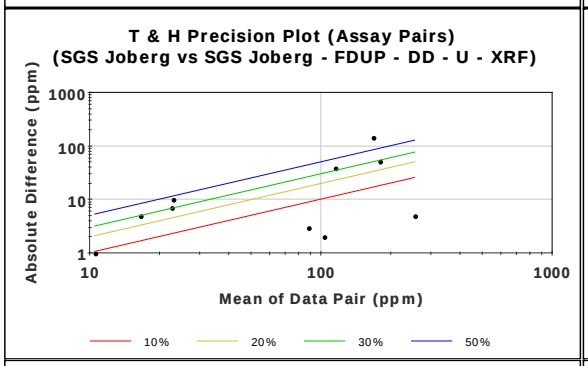
	assay_or	assay_chk	Units		Result
No. Pairs:	10	10		Pearson CC:	0.87
Minimum:	11.00	10.00	ppm	Spearman CC:	0.90
Maximum:	257.00	252.00	ppm	Mean HARD:	13.51
Mean:	86.80	109.40	ppm	Median HARD:	14.84
Median	93.00	94.50	ppm		
Std. Deviation:	72.75	90.06	ppm	Mean HRD:	-7.48
Coefficient of Variation:	0.84	0.82		Median HRD	-6.78

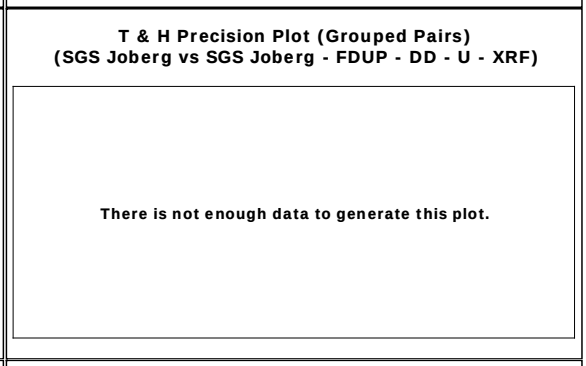


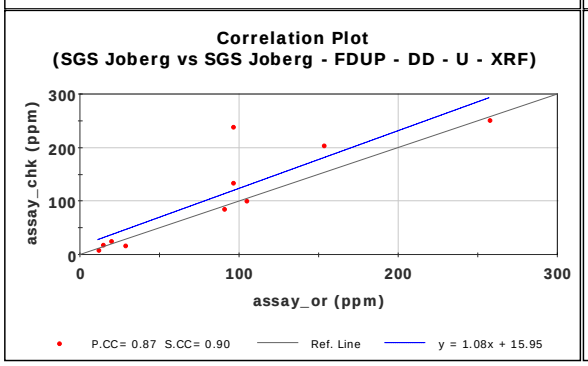


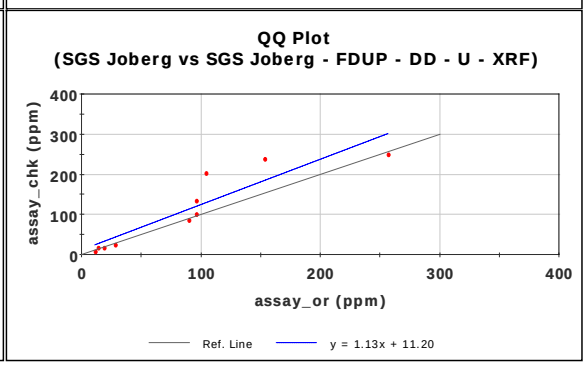












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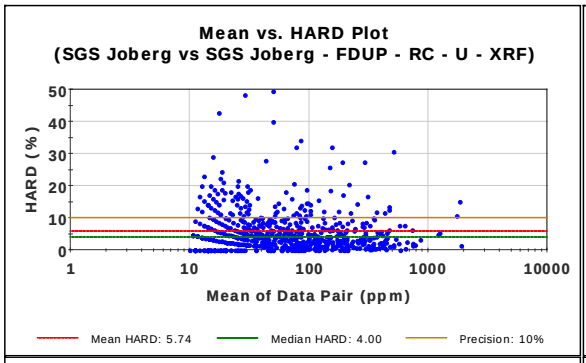
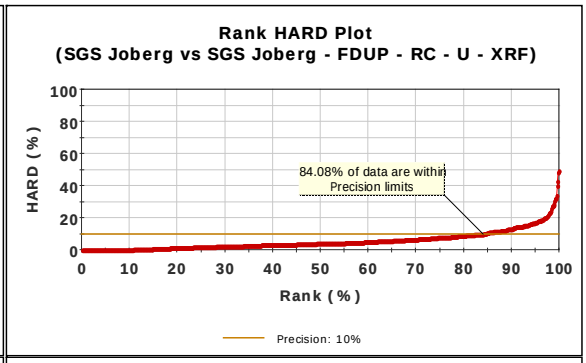
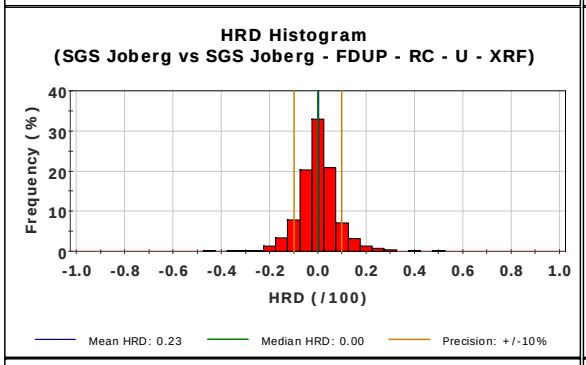
Appendix 1
QAQC Plots

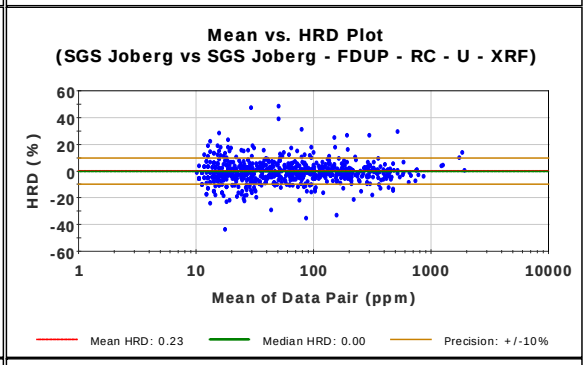
Comparative Stats
(SGS Joberg vs SGS Joberg - FDUP - RC - U - XRF)

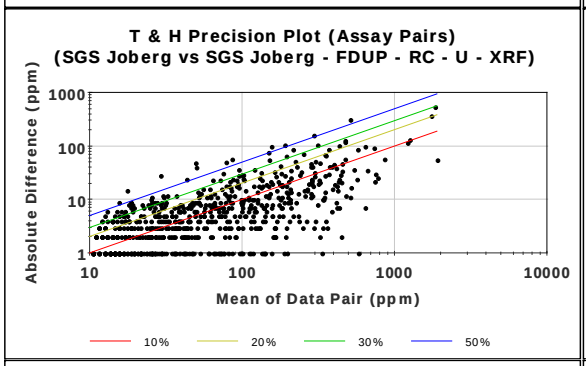
	assay_or	assay_chk	Units		Result
No. Pairs:	785	785		Pearson CC:	0.98
Minimum:	10.00	10.00	ppm	Spearman CC:	0.99
Maximum:	2,105.00	1,865.00	ppm	Mean HARD:	5.74
Mean:	107.17	105.82	ppm	Median HARD:	4.00
Median	46.00	45.00	ppm		
Std. Deviation:	180.50	167.82	ppm	Mean HRD:	0.23
Coefficient of Variation:	1.68	1.59		Median HRD	0.00

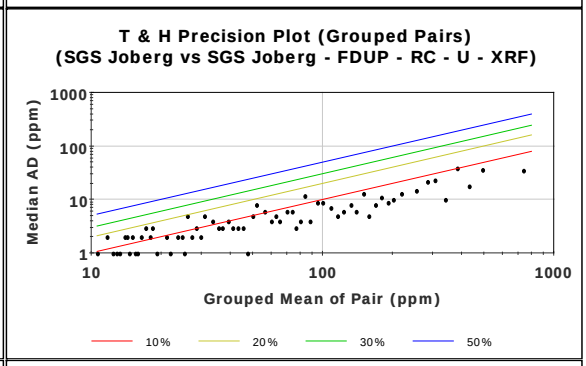


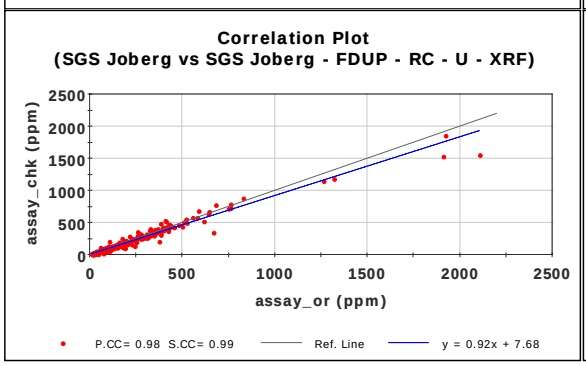


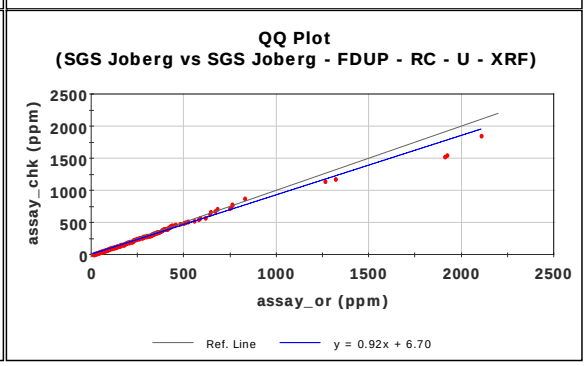












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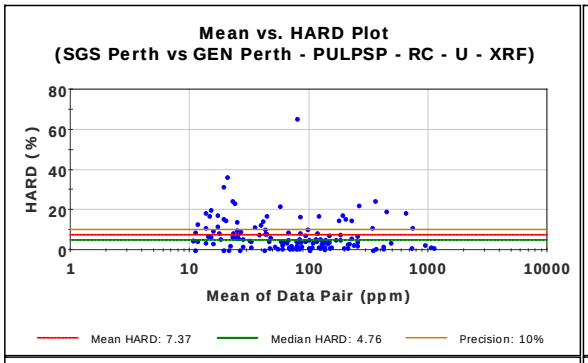
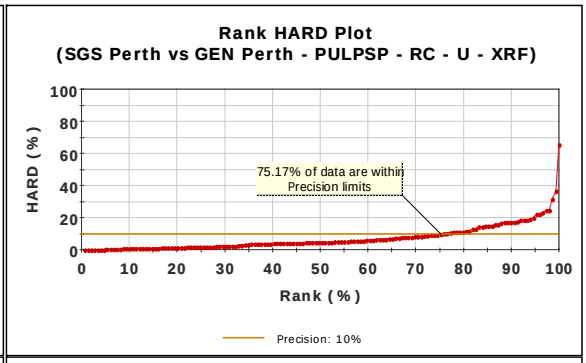
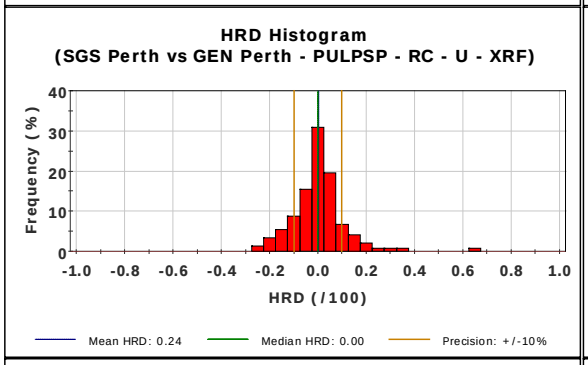
Appendix 1
QAQC Plots

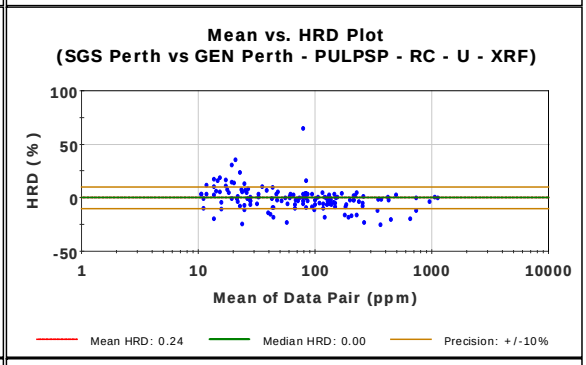
Comparative Stats
(SGS Perth vs GEN Perth - PULPSP - RC - U - XRF)

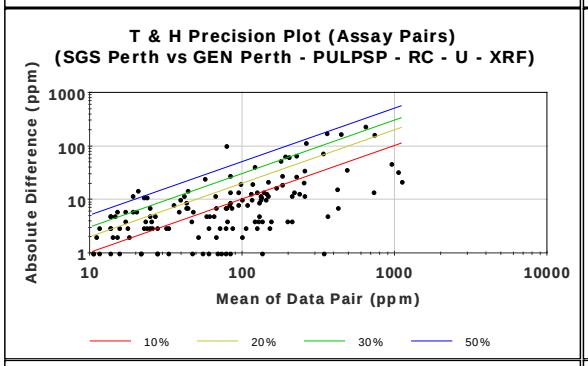
	assay_or	assay_chk	Units		Result
No. Pairs:	149	149		Pearson CC:	0.98
Minimum:	10.00	10.00	ppm	Spearman CC:	0.98
Maximum:	1,120.00	1,098.00	ppm	Mean HARD:	7.37
Mean:	125.31	133.15	ppm	Median HARD:	4.76
Median	75.00	72.00	ppm		
Std. Deviation:	176.34	188.80	ppm	Mean HRD:	0.24
Coefficient of Variation:	1.41	1.42		Median HRD	0.00

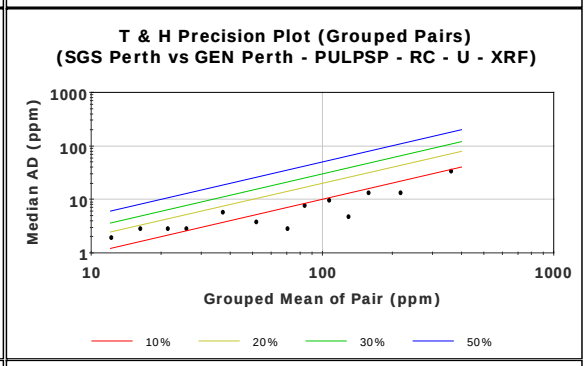


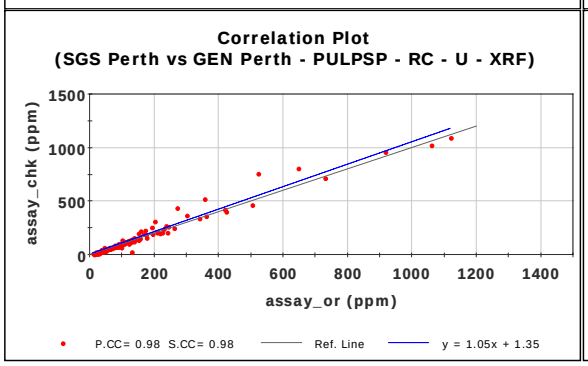


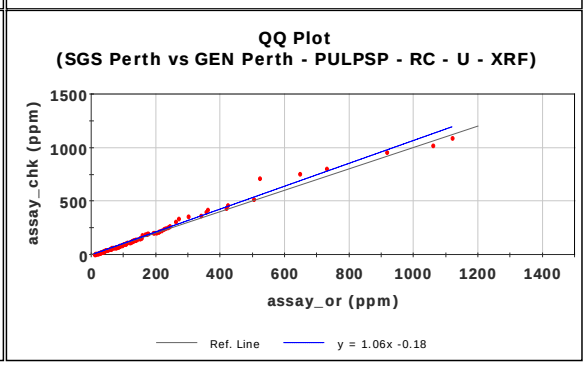












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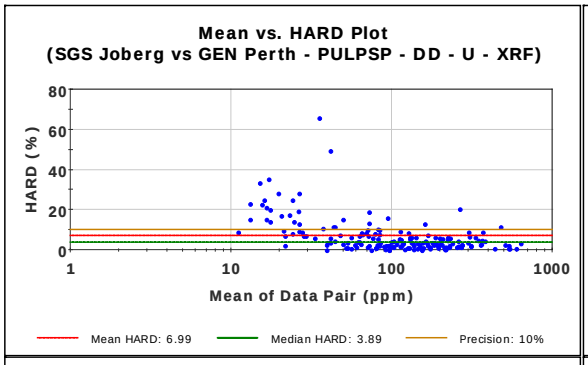
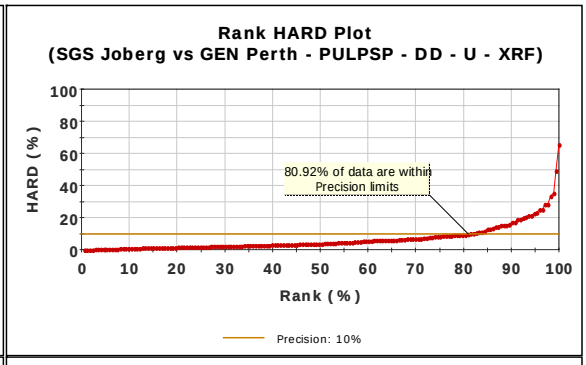
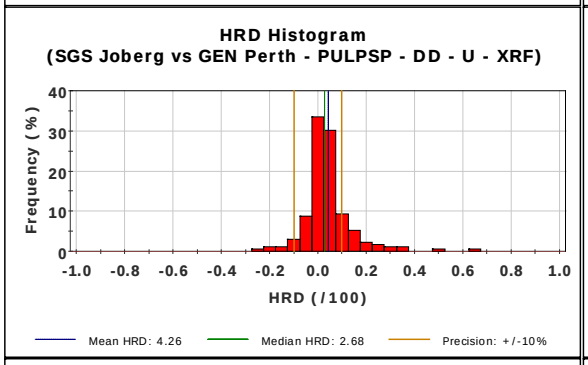
Appendix 1
QAQC Plots

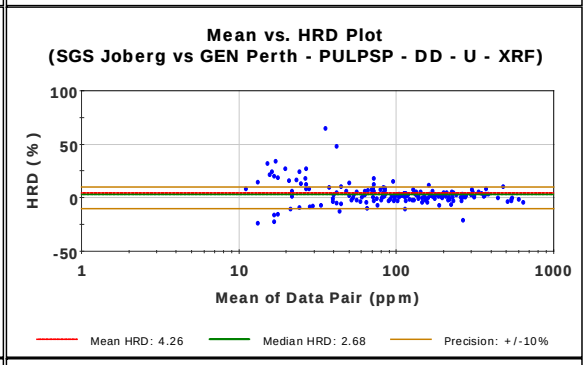
Comparative Stats
(SGS Joberg vs GEN Perth - PULPSP - DD - U - XRF)

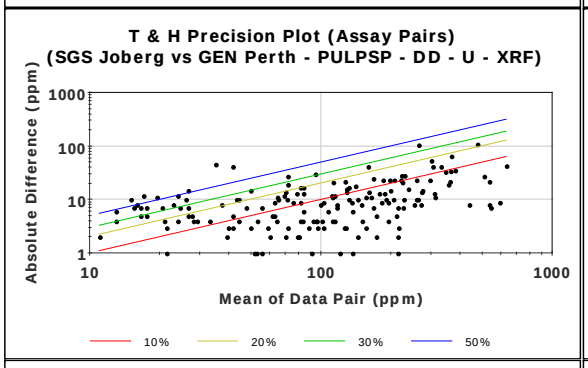
	assay_or	assay_chk	Units		Result
No. Pairs:	173	173		Pearson CC:	0.99
Minimum:	10.00	10.00	ppm	Spearman CC:	0.99
Maximum:	609.00	652.00	ppm	Mean HARD:	6.99
Mean:	145.29	138.23	ppm	Median HARD:	3.89
Median	107.00	103.00	ppm		
Std. Deviation:	125.87	124.07	ppm	Mean HRD:	4.26
Coefficient of Variation:	0.87	0.90		Median HRD	2.68

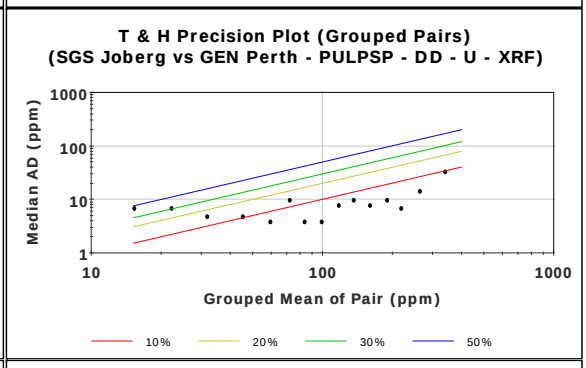


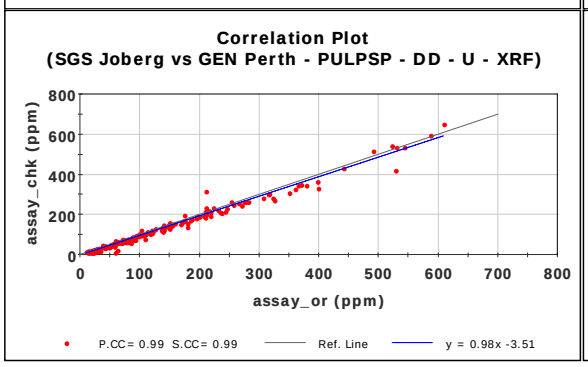


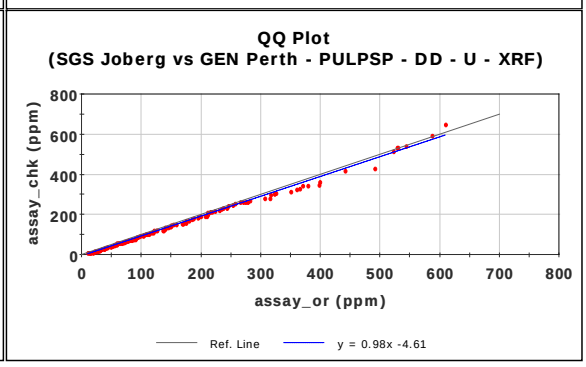












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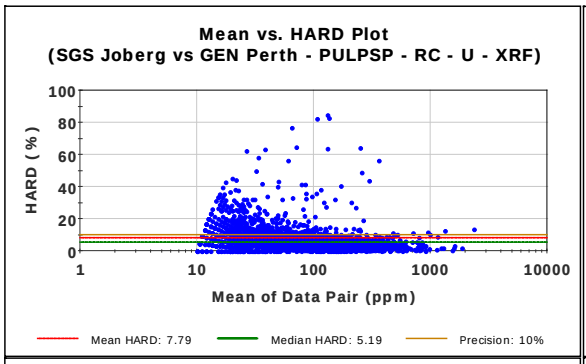
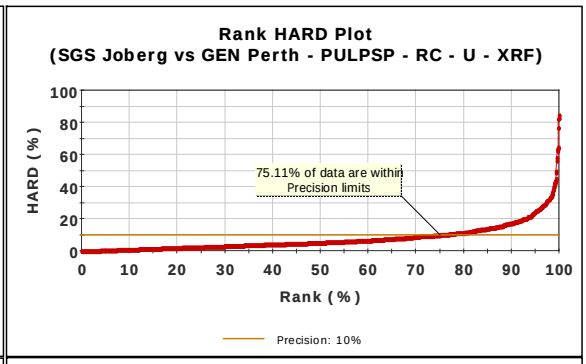
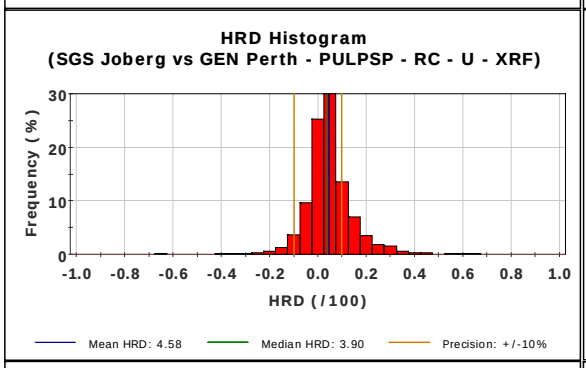
Appendix 1
QAQC Plots

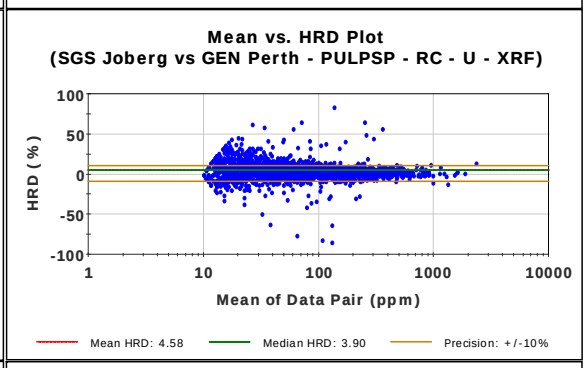
Comparative Stats
(SGS Joberg vs GEN Perth - PULPSP - RC - U - XRF)

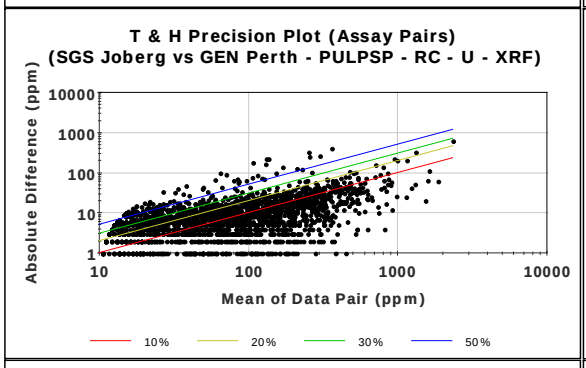
	assay_or	assay_chk	Units		Result
No. Pairs:	2,178	2,178		Pearson CC:	0.99
Minimum:	10.00	10.00	ppm	Spearman CC:	0.98
Maximum:	2,637.00	2,012.00	ppm	Mean HARD:	7.79
Mean:	130.08	122.30	ppm	Median HARD:	5.19
Median	72.00	67.50	ppm		
Std. Deviation:	171.69	162.67	ppm	Mean HRD:	4.58
Coefficient of Variation:	1.32	1.33		Median HRD	3.90

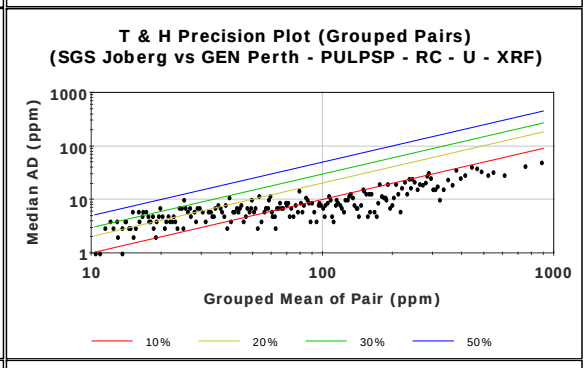


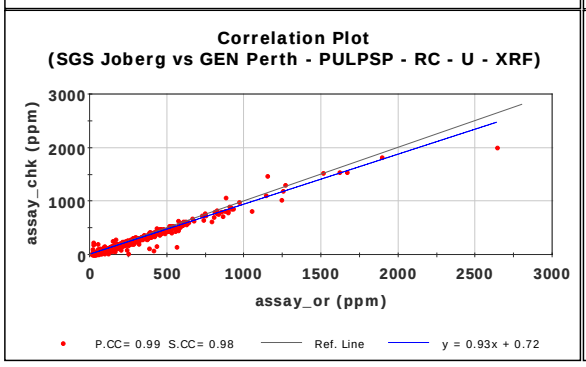


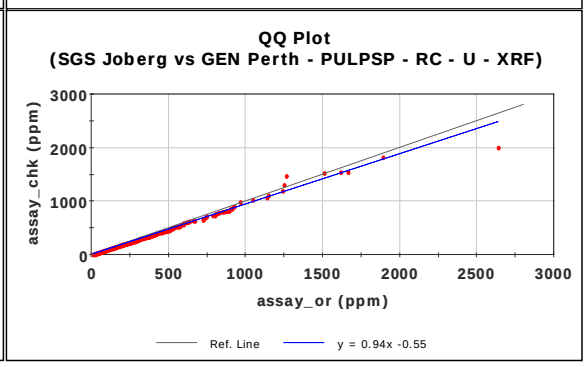












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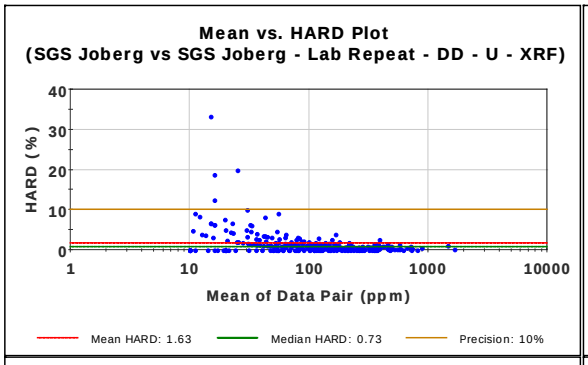
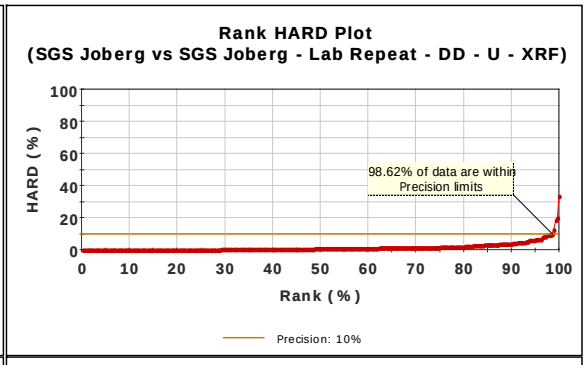
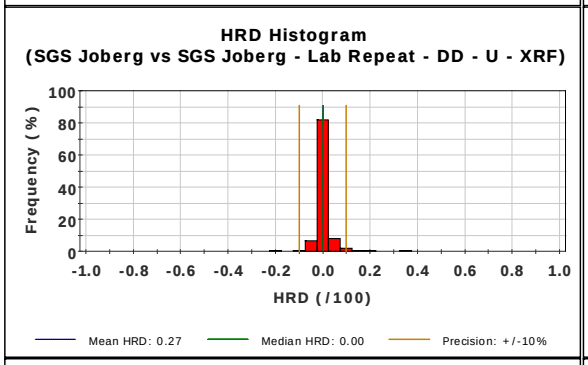
Appendix 1
QAQC Plots

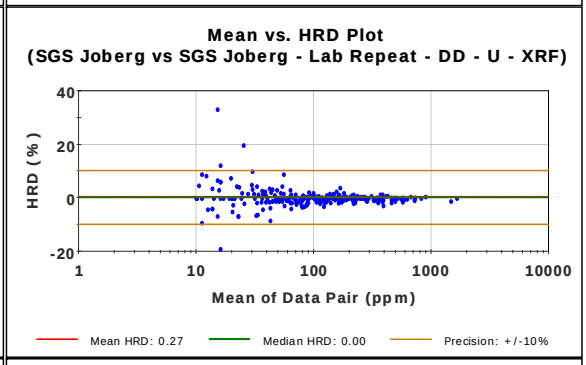
Comparative Stats
(SGS Joberg vs SGS Joberg - Lab Repeat - DD - U - XRF)

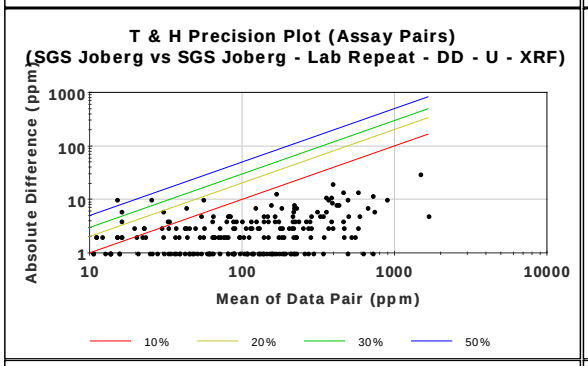
	assay_or	assay_chk	Units		Result
No. Pairs:	290	290		Pearson CC:	1.00
Minimum:	10.00	10.00	ppm	Spearman CC:	1.00
Maximum:	1,655.00	1,650.00	ppm	Mean HARD:	1.63
Mean:	165.28	165.41	ppm	Median HARD:	0.73
Median	109.00	107.50	ppm		
Std. Deviation:	194.14	194.92	ppm	Mean HRD:	0.27
Coefficient of Variation:	1.17	1.18		Median HRD	0.00

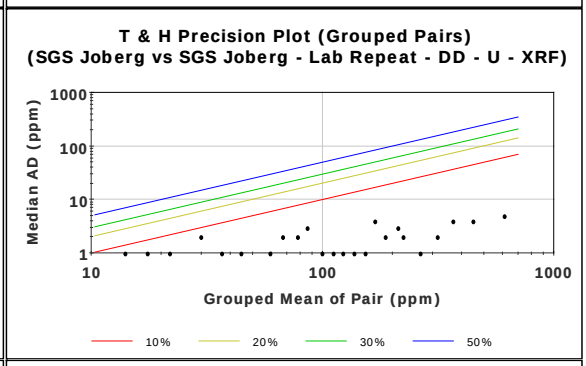


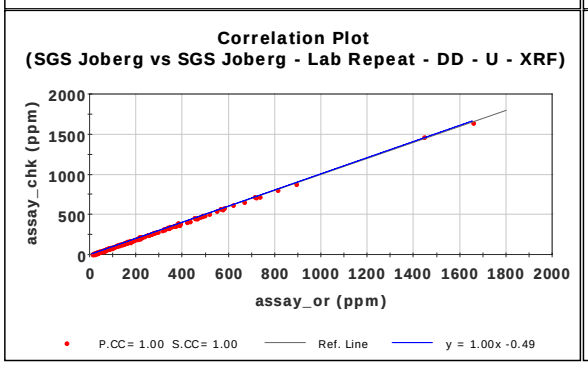


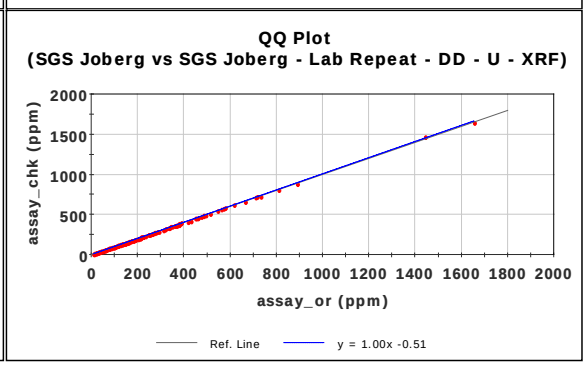












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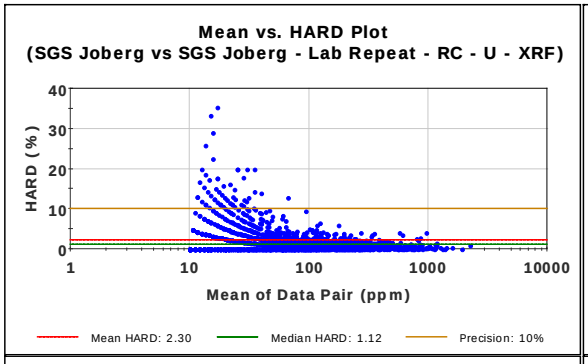
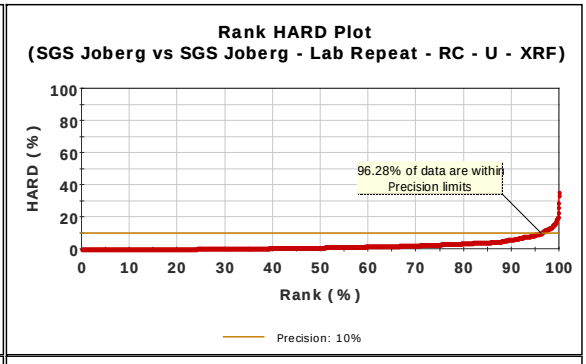
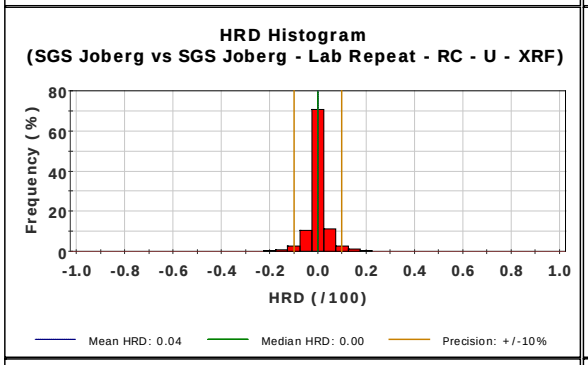
Appendix 1
QAQC Plots

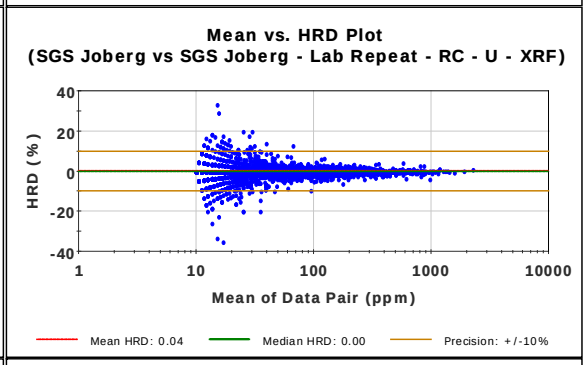
Comparative Stats
(SGS Joberg vs SGS Joberg - Lab Repeat - RC - U - XRF)

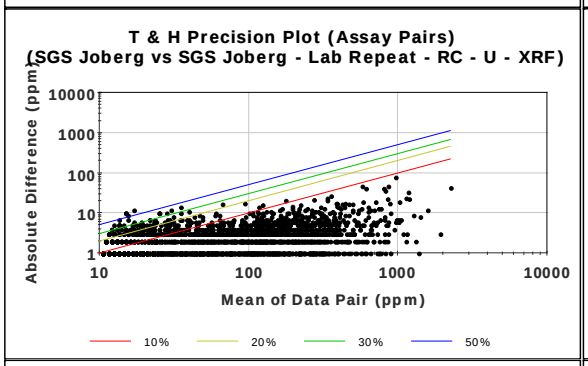
	assay_or	assay_chk	Units		Result
No. Pairs:	2,930	2,930		Pearson CC:	1.00
Minimum:	10.00	10.00	ppm	Spearman CC:	1.00
Maximum:	2,269.00	2,225.00	ppm	Mean HARD:	2.30
Mean:	120.89	120.88	ppm	Median HARD:	1.12
Median	60.00	60.00	ppm		
Std. Deviation:	168.69	168.63	ppm	Mean HRD:	0.04
Coefficient of Variation:	1.40	1.39		Median HRD	0.00

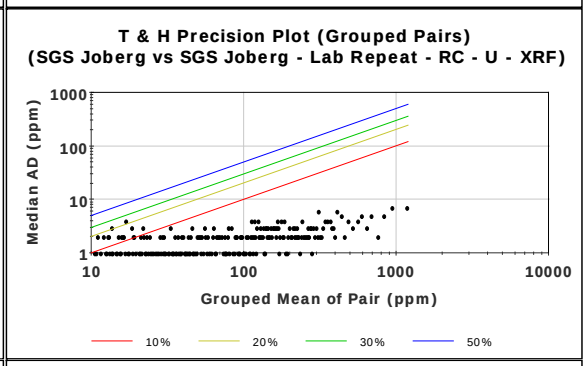


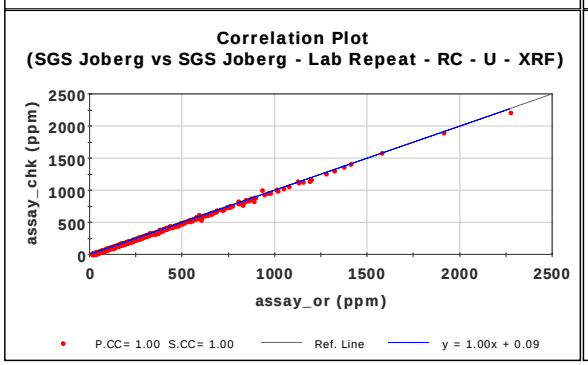


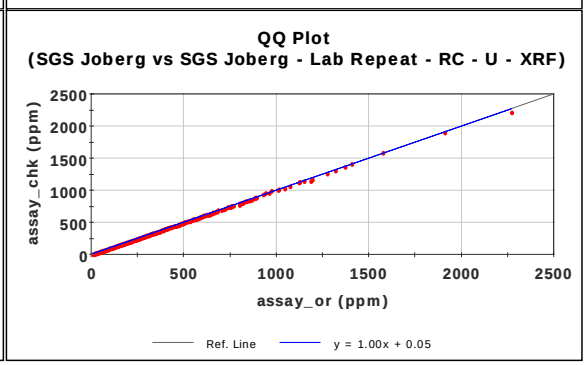












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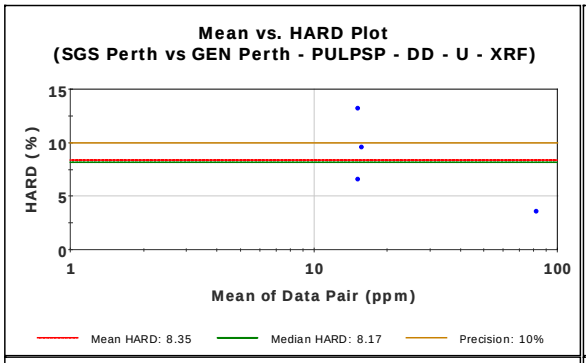
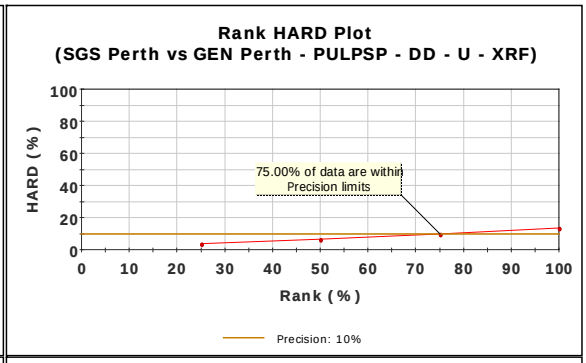
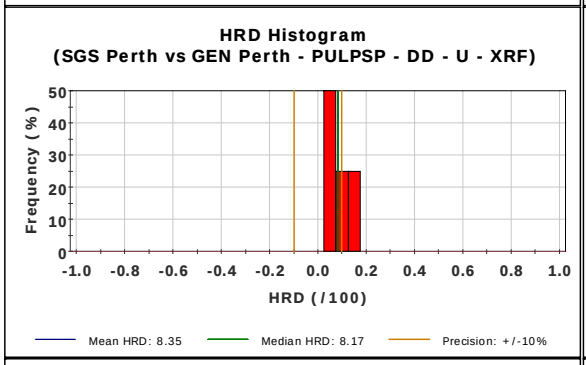
Appendix 1
QAQC Plots

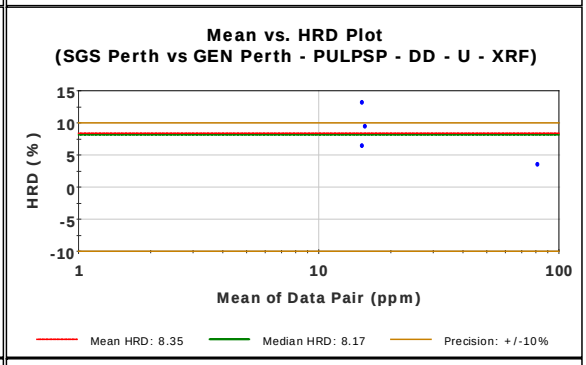
Comparative Stats
(SGS Perth vs GEN Perth - PULPSP - DD - U - XRF)

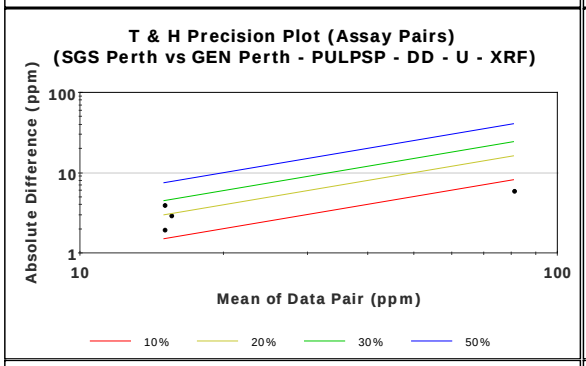
	assay_or	assay_chk	Units		Result
No. Pairs:	4	4		Pearson CC:	1.00
Minimum:	16.00	13.00	ppm	Spearman CC:	0.80
Maximum:	84.00	78.00	ppm	Mean HARD:	8.35
Mean:	33.50	29.75	ppm	Median HARD:	8.17
Median	17.00	14.00	ppm		
Std. Deviation:	29.16	27.86	ppm	Mean HRD:	8.35
Coefficient of Variation:	0.87	0.94		Median HRD	8.17

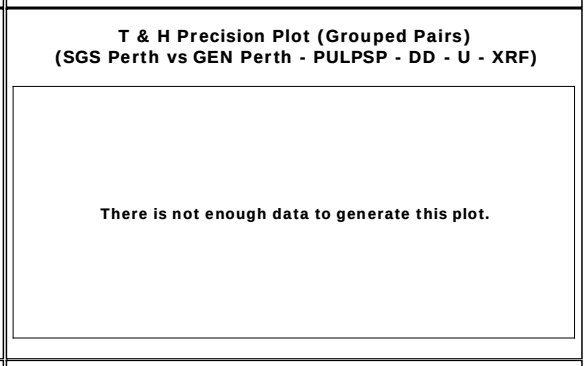


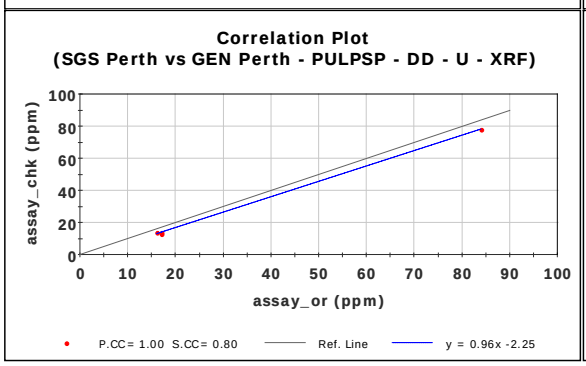


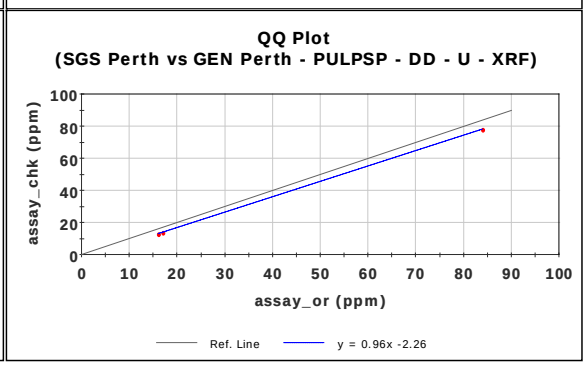












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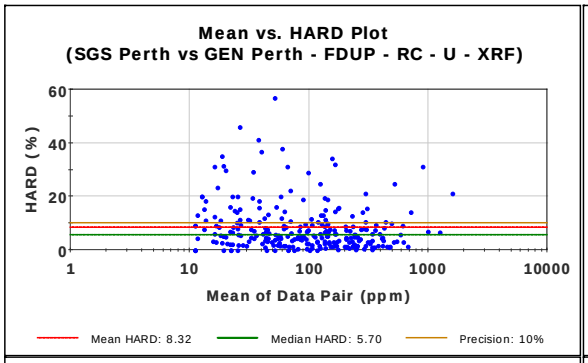
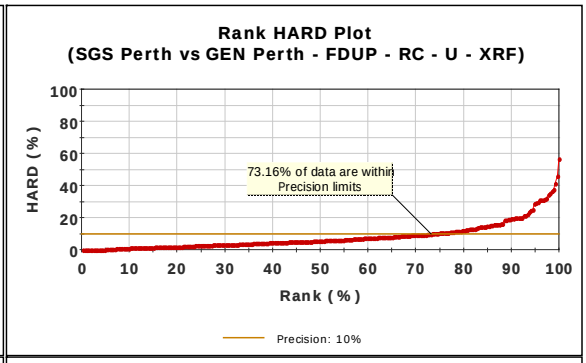
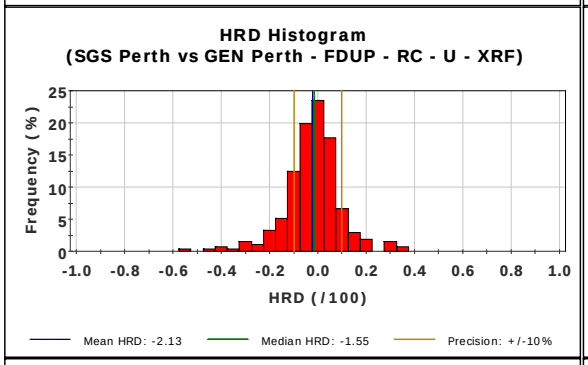
Appendix 1
QAQC Plots

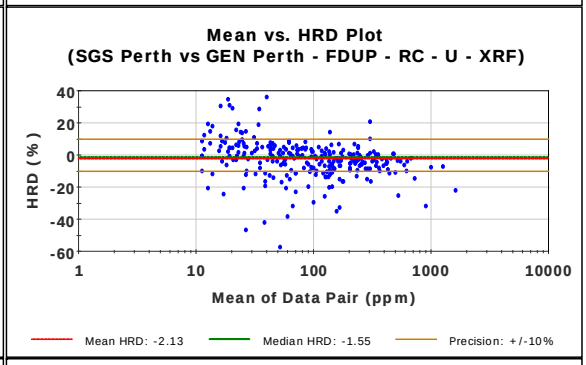
Comparative Stats
(SGS Perth vs GEN Perth - FDUP - RC - U - XRF)

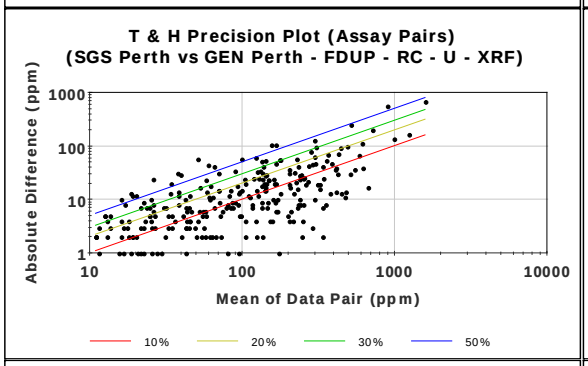
	assay_or	assay_chk	Units		Result
No. Pairs:	272	272		Pearson CC:	0.97
Minimum:	10.00	10.00	ppm	Spearman CC:	0.98
Maximum:	1,250.00	1,923.00	ppm	Mean HARD:	8.32
Mean:	143.04	159.68	ppm	Median HARD:	5.70
Median	88.50	94.50	ppm		
Std. Deviation:	167.74	210.40	ppm	Mean HRD:	-2.13
Coefficient of Variation:	1.17	1.32		Median HRD	-1.55

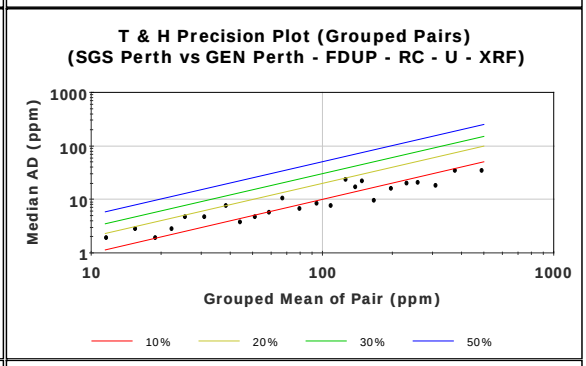


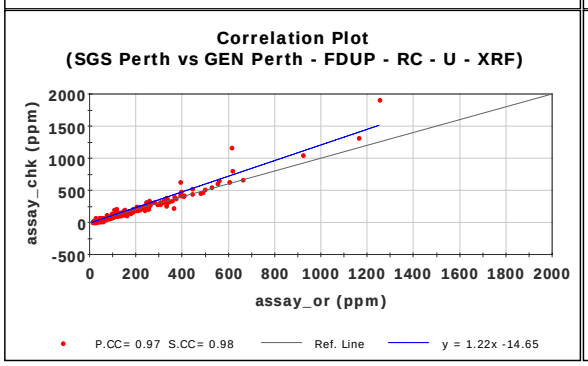


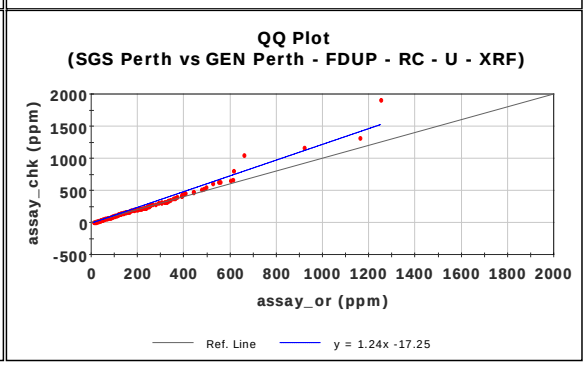












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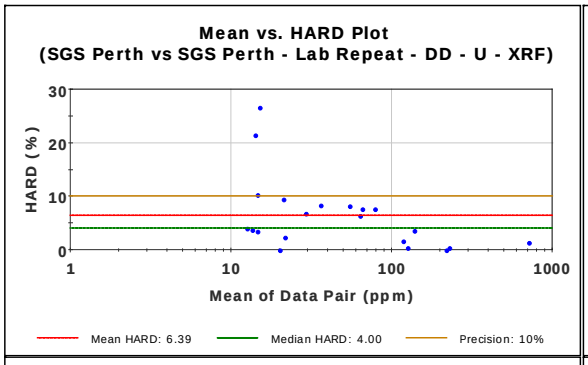
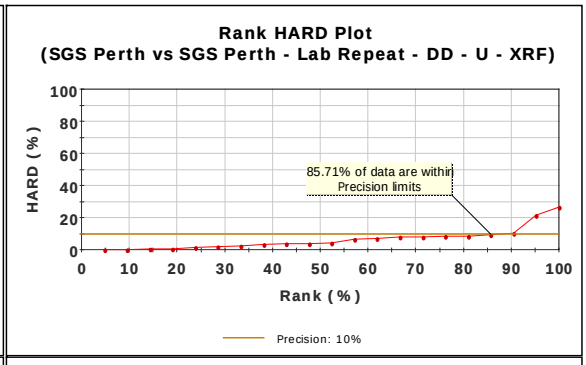
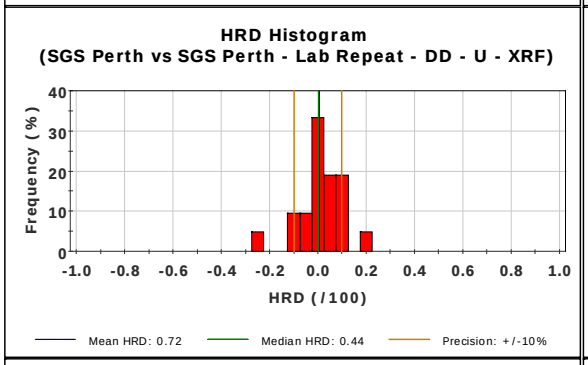
Appendix 1
QAQC Plots

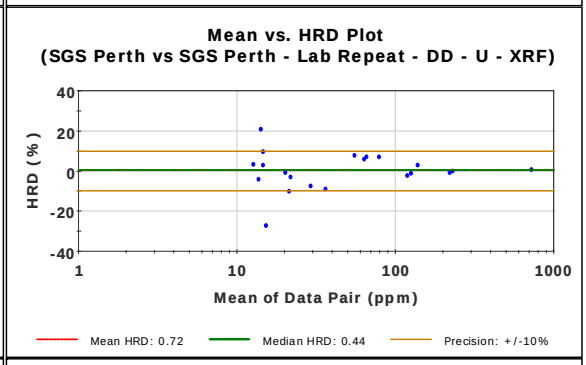
Comparative Stats
(SGS Perth vs SGS Perth - Lab Repeat - DD - U - XRF)

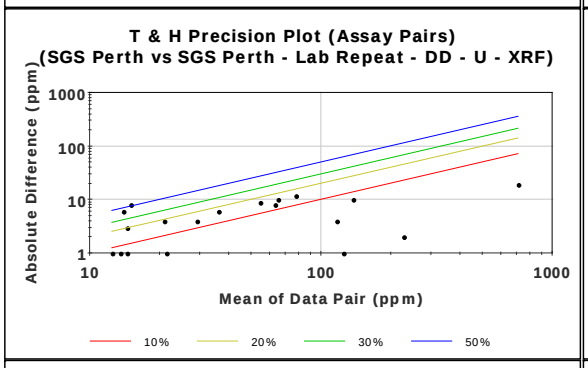
	assay_or	assay_chk	Units		Result
No. Pairs:	21	21		Pearson CC:	1.00
Minimum:	11.00	11.00	ppm	Spearman CC:	0.96
Maximum:	722.00	703.00	ppm	Mean HARD:	6.39
Mean:	96.90	94.43	ppm	Median HARD:	4.00
Median	33.00	39.00	ppm		
Std. Deviation:	153.84	150.09	ppm	Mean HRD:	0.72
Coefficient of Variation:	1.59	1.59		Median HRD	0.44

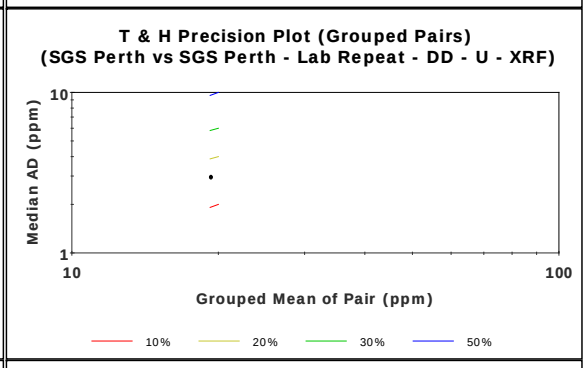


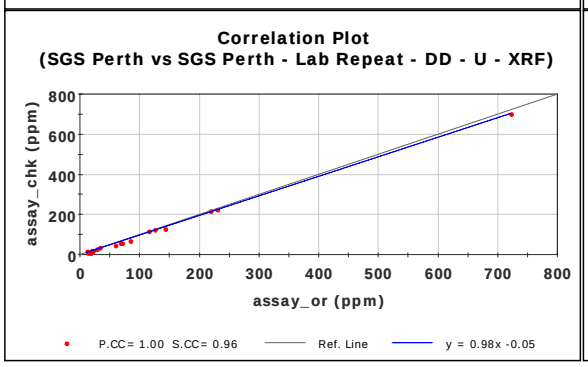


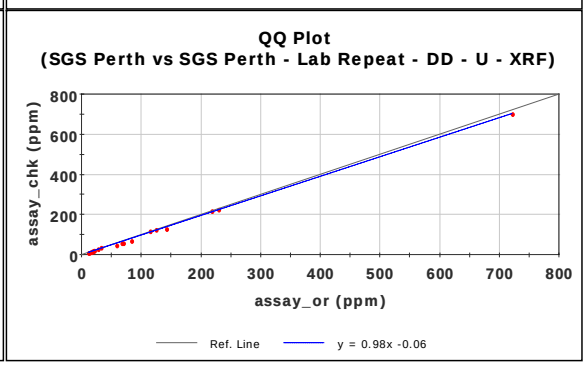












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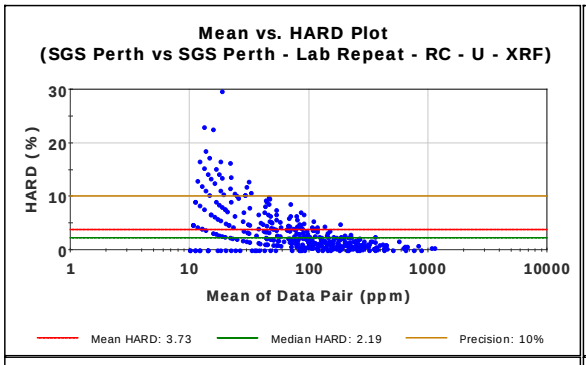
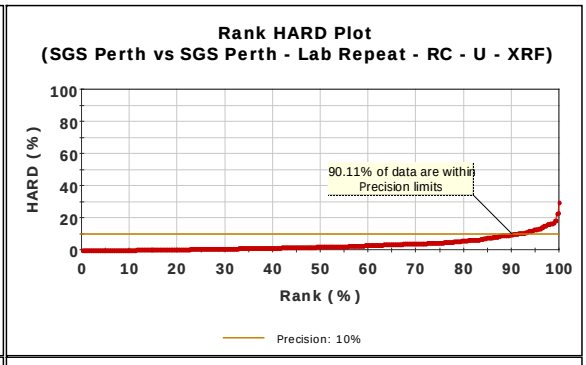
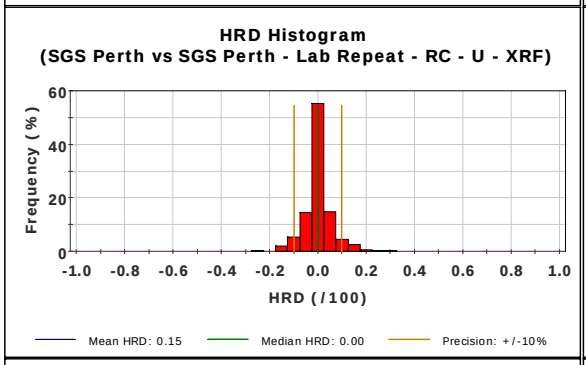
Appendix 1
QAQC Plots

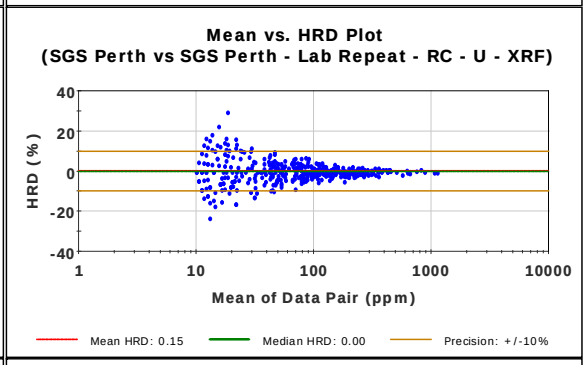
Comparative Stats
(SGS Perth vs SGS Perth - Lab Repeat - RC - U - XRF)

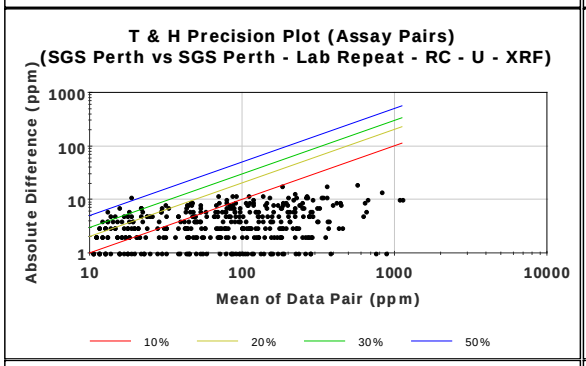
	assay_or	assay_chk	Units		Result
No. Pairs:	435	435		Pearson CC:	1.00
Minimum:	10.00	10.00	ppm	Spearman CC:	1.00
Maximum:	1,120.00	1,130.00	ppm	Mean HARD:	3.73
Mean:	120.44	120.71	ppm	Median HARD:	2.19
Median	77.00	76.00	ppm		
Std. Deviation:	144.31	144.90	ppm	Mean HRD:	0.15
Coefficient of Variation:	1.20	1.20		Median HRD	0.00

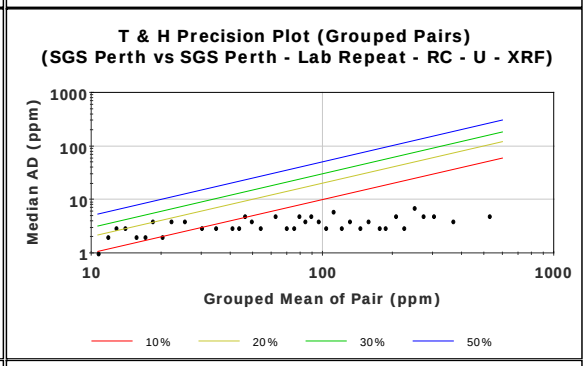


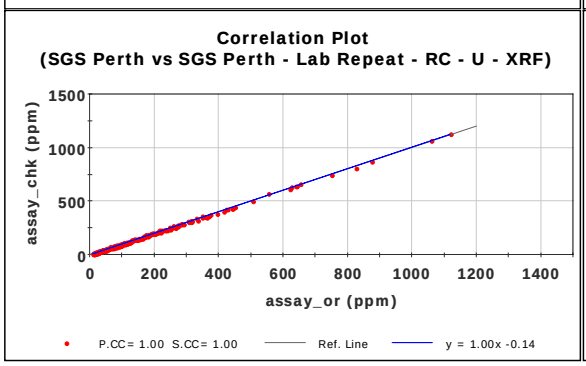


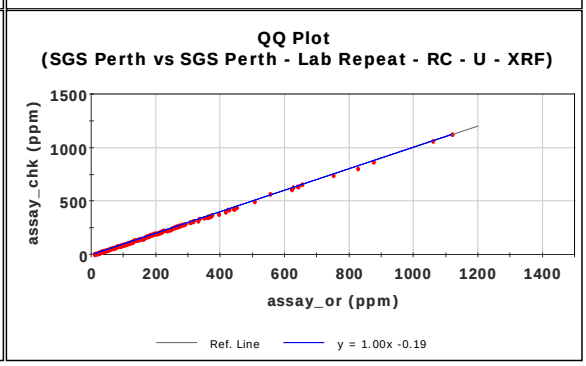












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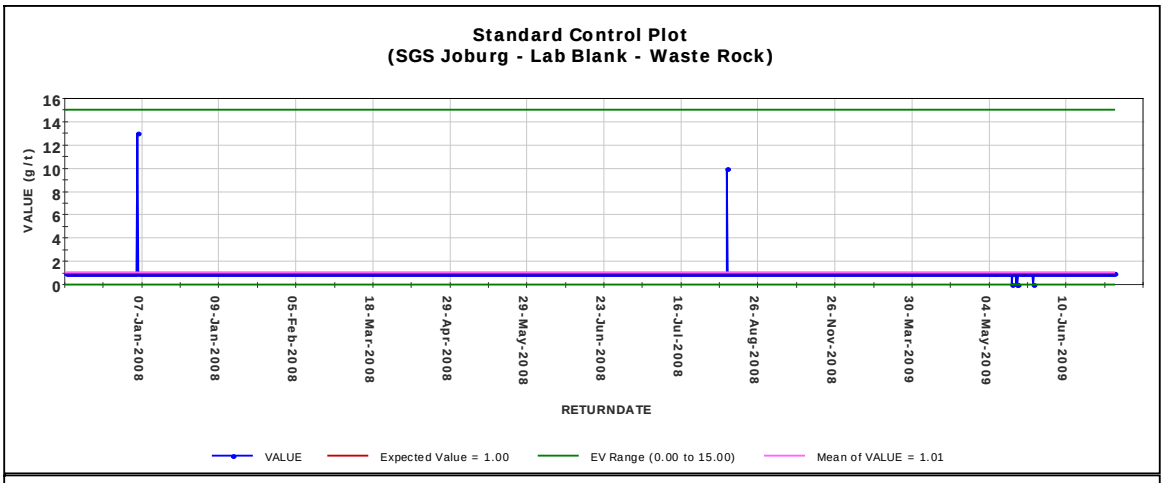
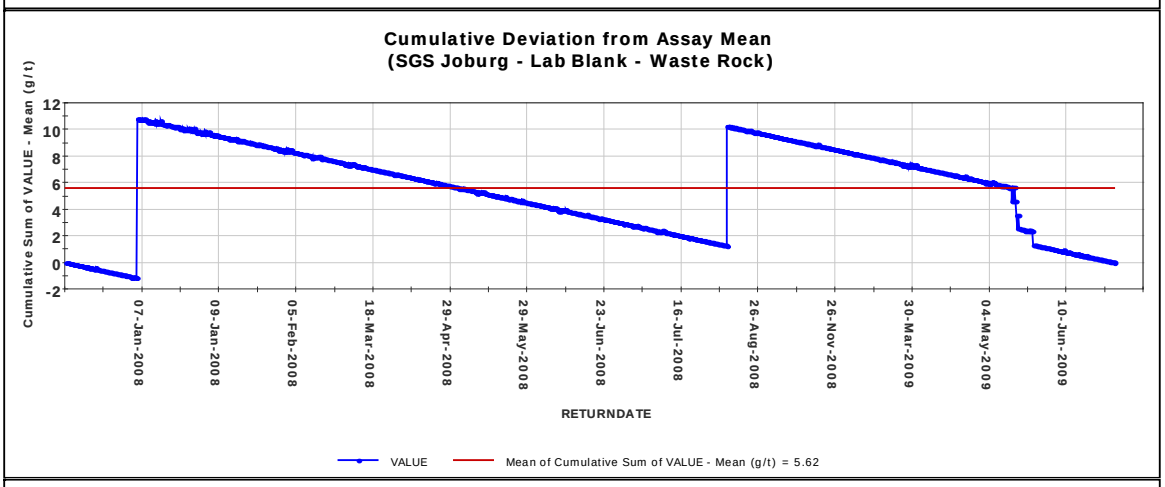
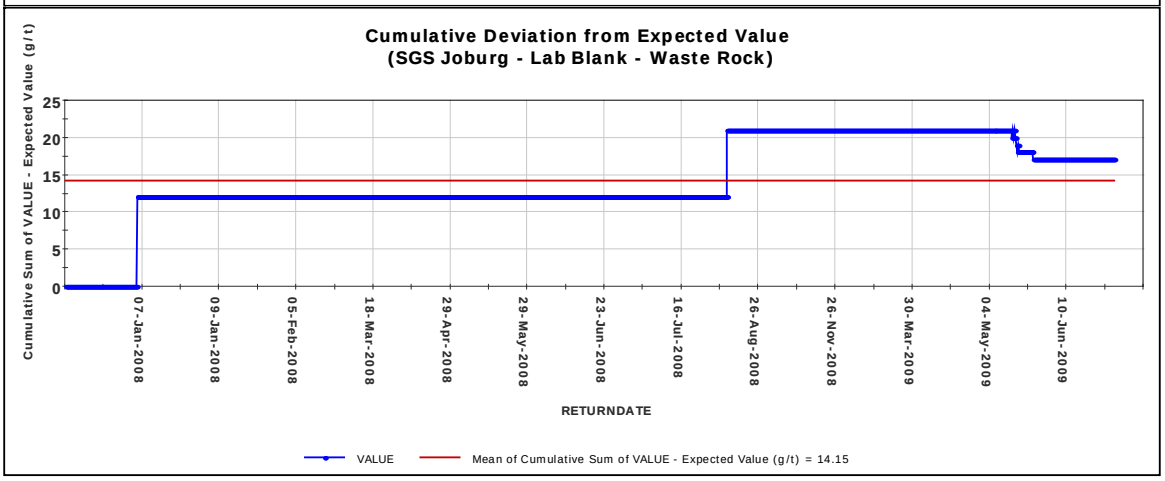
Appendix 1
QAQC Plots

LAB STANDARDS
(SGS Joburg - Lab Blank - Waste Rock)

Standard:	WASTE ROCK	No of Analyses:	1363
Element:	U	Minimum:	0.01
Units:	ppm	Maximum:	13.00
Detection Limit:		Mean:	1.01
Expected Value (EV):	1.00	Std Deviation:	0.41
E.V. Range:	0.00 to 15.00	% in Tolerance	100.00 %
		% Bias	1.25 %
		% RSD	40.46 %







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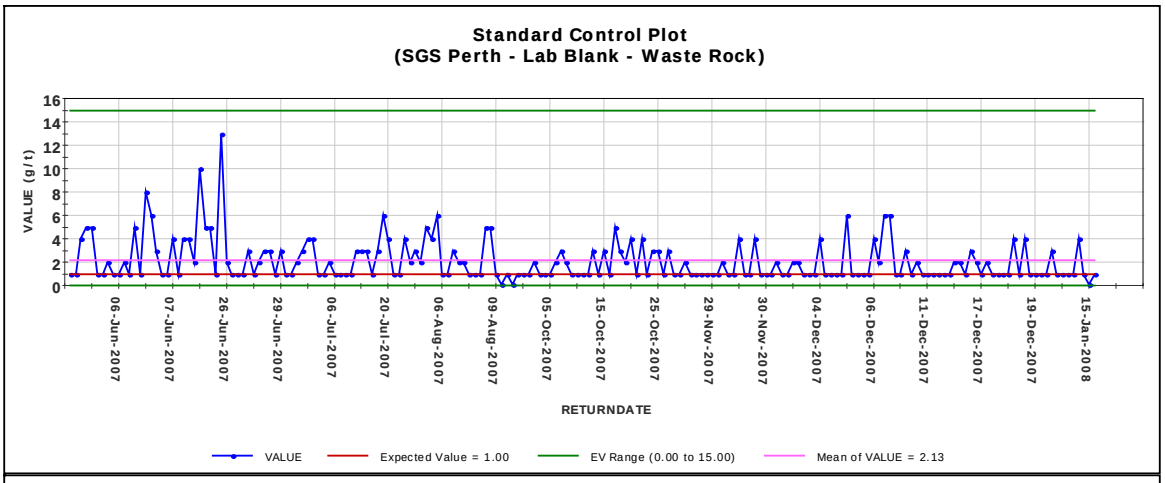
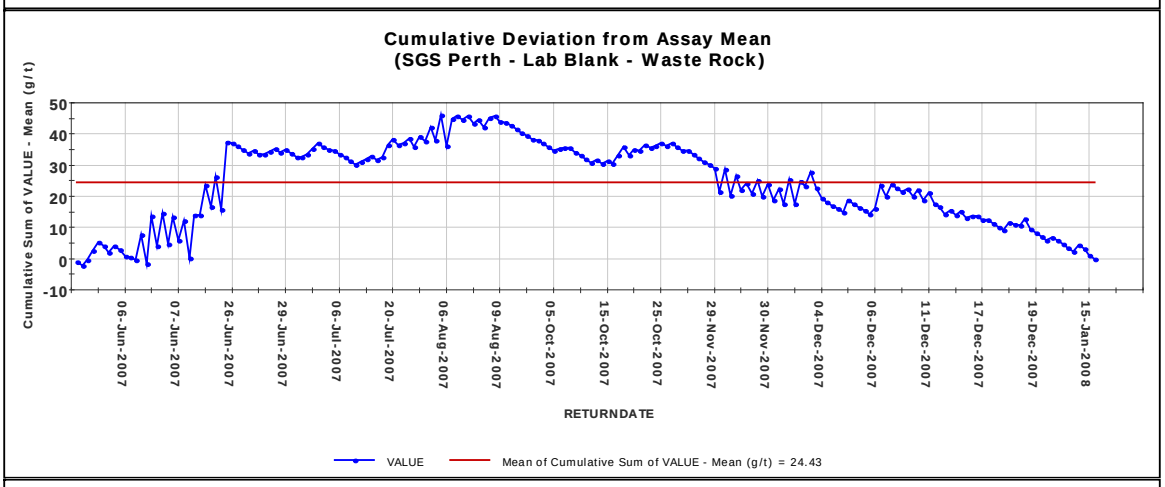
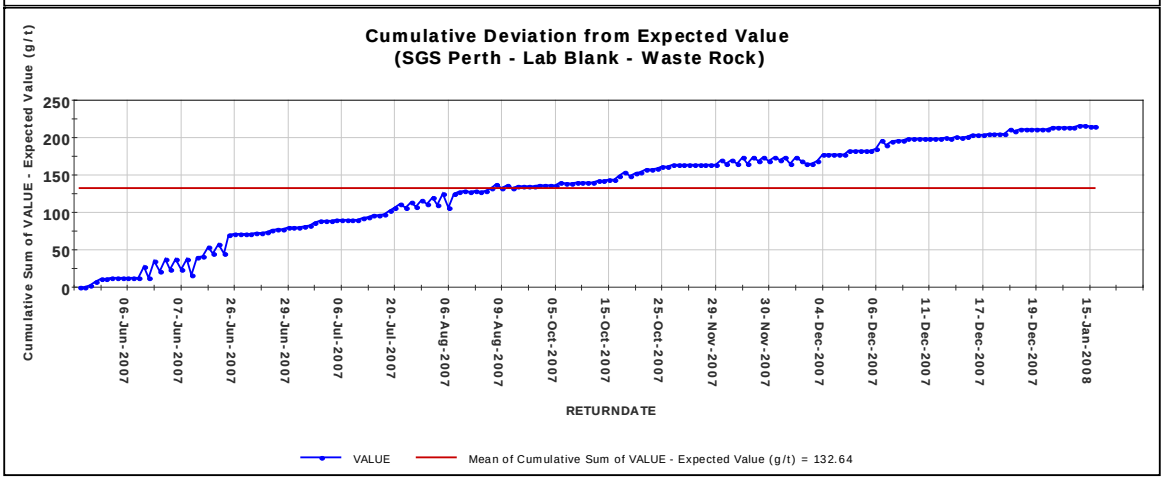
Appendix 1
QAQC Plots

LAB STANDARDS
(SGS Perth - Lab Blank - Waste Rock)

Standard:	WASTE ROCK	No of Analyses:	191
Element:	U	Minimum:	0.10
Units:	ppm	Maximum:	13.00
Detection Limit:		Mean:	2.13
Expected Value (EV):	1.00	Std Deviation:	1.78
E.V. Range:	0.00 to 15.00	% in Tolerance	100.00 %
		% Bias	112.72 %
		% RSD	83.58 %







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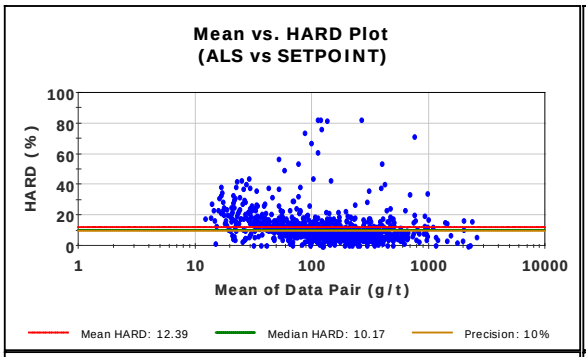
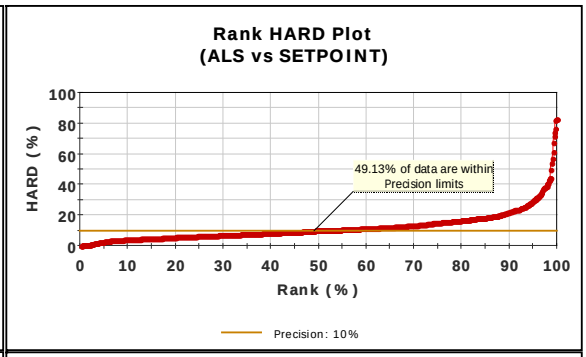
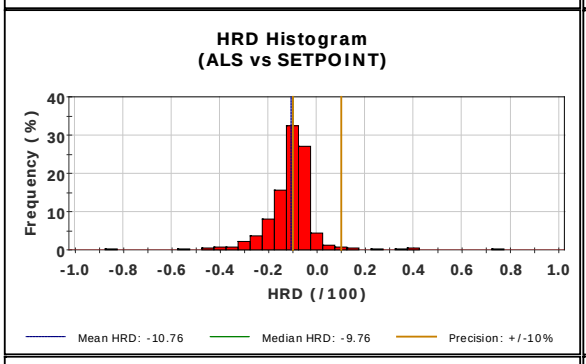
Appendix 1
QAQC Plots

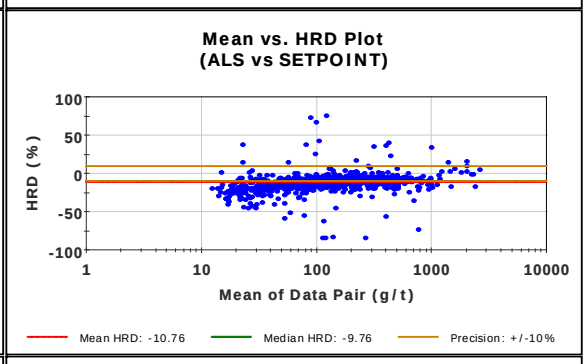
Laboratory Comparisons
(ALS vs SETPOINT)

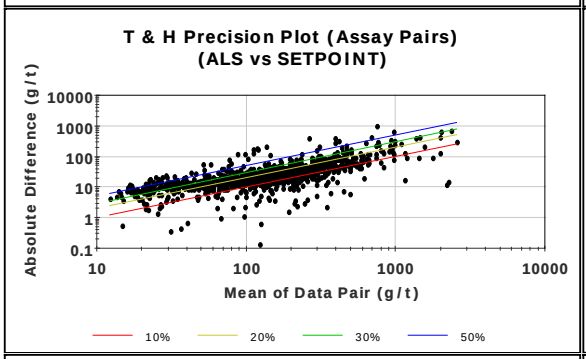
	VALUE_ALS	CheckValue_SETPOINT	Units		Result
No. Pairs:	920	920		Pearson CC:	0.96
Minimum:	10.00	13.57	g/t	Spearman CC:	0.97
Maximum:	2,730.00	2,743.85	g/t	Mean HARD:	12.39
Mean:	197.31	229.15	g/t	Median HARD:	10.17
Median	124.00	147.58	g/t		
Std. Deviation:	271.41	280.73	g/t	Mean HRD:	-10.76
Coefficient of Variation:	1.38	1.23		Median HRD	-9.76

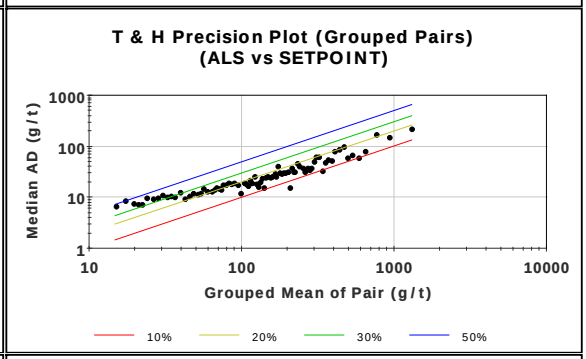


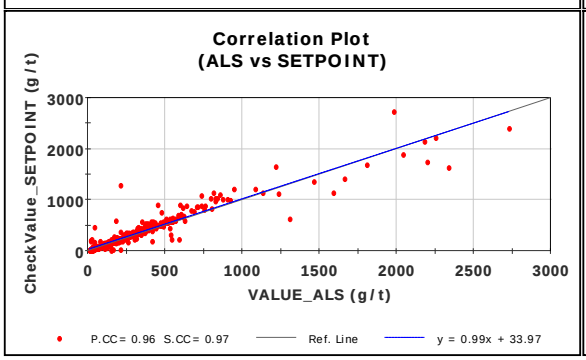


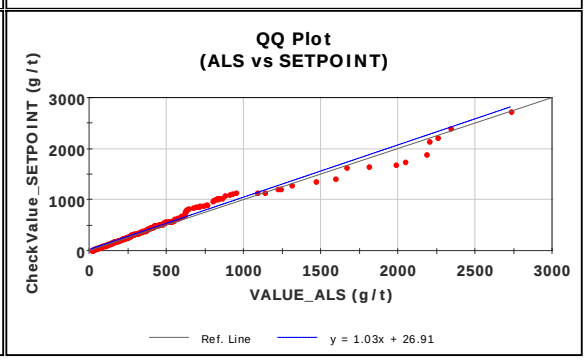












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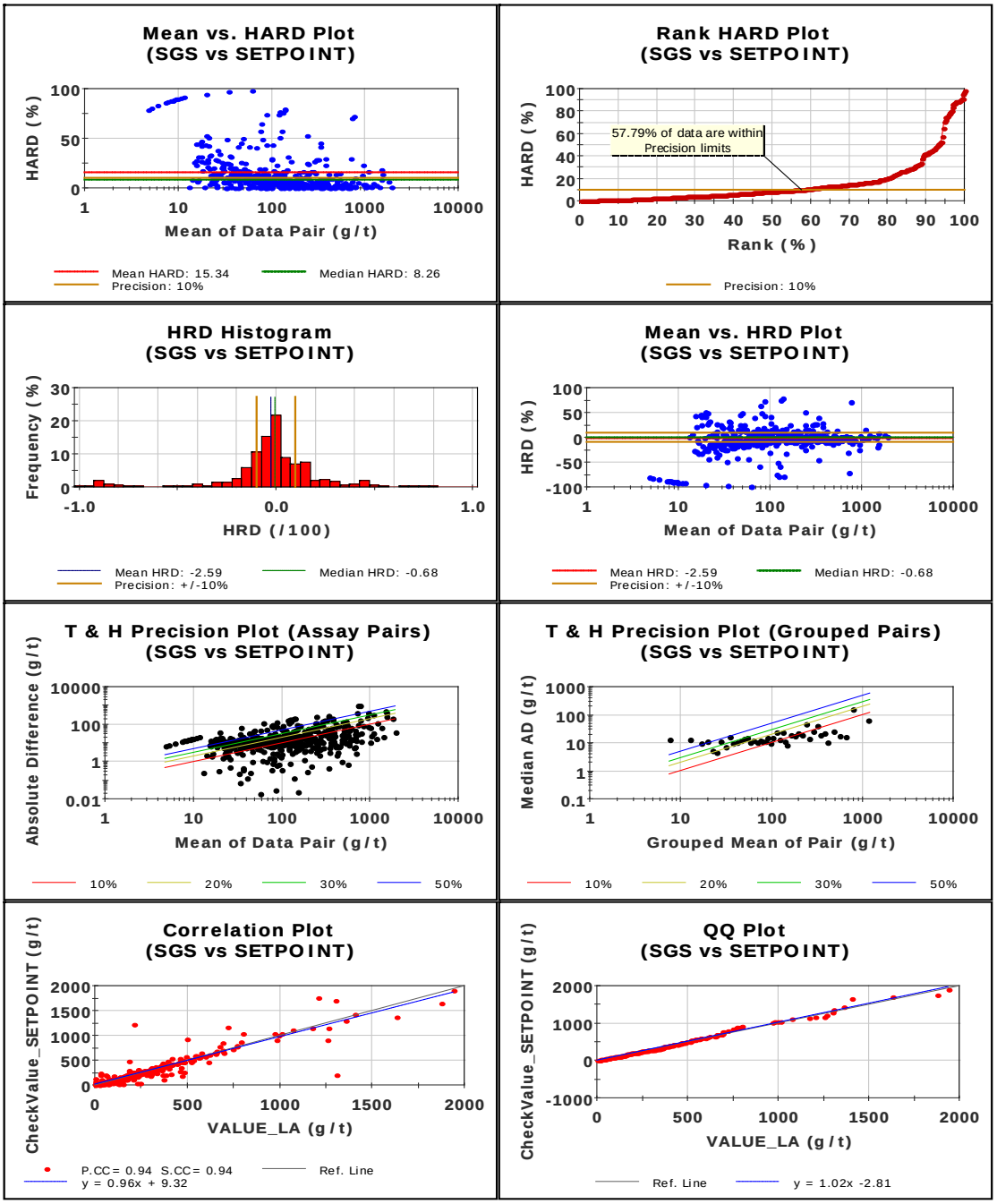
Appendix 1
QAQC Plots

Lab Comparisons
(SGS vs SETPOINT)

	VALUE_LA	CheckValue_SETPOINT	Units		Result
No. Pairs:	488	488		Pearson CC:	0.94
Minimum:	1.00	8.48	g/t	Spearman CC:	0.94
Maximum:	1,937.00	1,899.07	g/t	Mean HARD:	15.34
Mean:	201.71	202.88	g/t	Median HARD:	8.26
Median	100.50	97.96	g/t		
Std. Deviation:	268.97	275.11	g/t	Mean HRD:	-2.59
Coefficient of Variation:	1.33	1.36		Median HRD	-0.68



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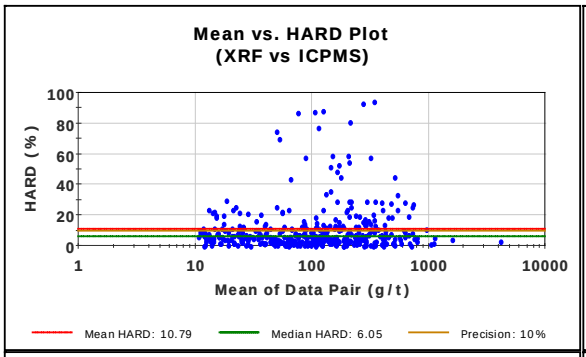
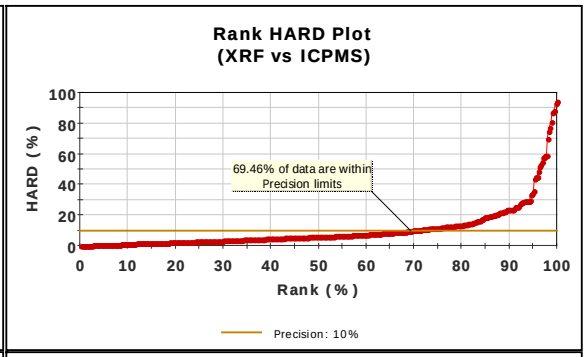
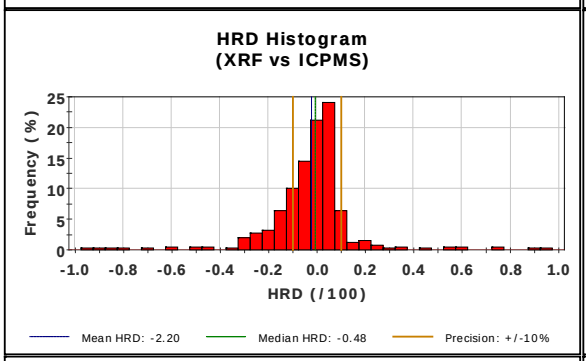
Appendix 1
QAQC Plots

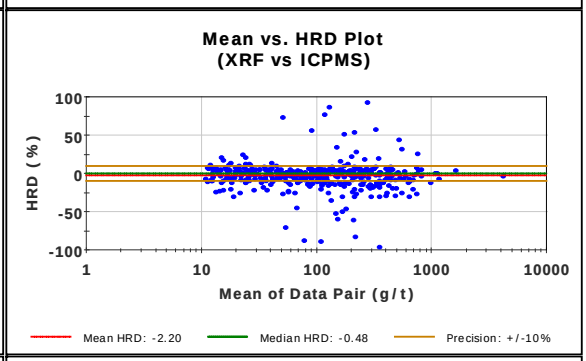
Lab Comparisons
(XRF vs ICPMS)

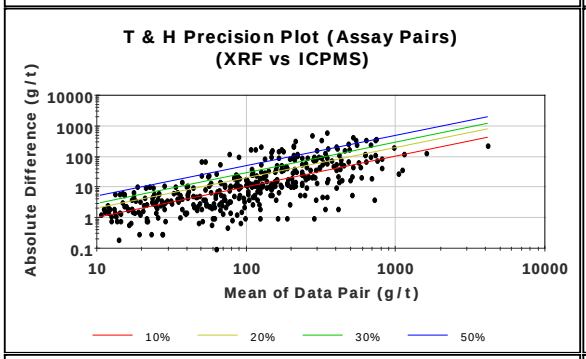
	VALUE_XRF	CheckValue_ICP	Units		Result
No. Pairs:	406	406		Pearson CC:	0.95
Minimum:	10.00	10.00	g/t	Spearman CC:	0.91
Maximum:	4,000.00	4,240.00	g/t	Mean HARD:	10.79
Mean:	173.80	183.75	g/t	Median HARD:	6.05
Median	93.50	98.90	g/t		
Std. Deviation:	275.54	288.95	g/t	Mean HRD:	-2.20
Coefficient of Variation:	1.59	1.57		Median HRD	-0.48

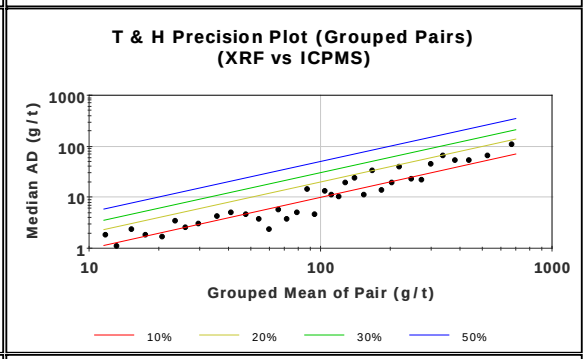


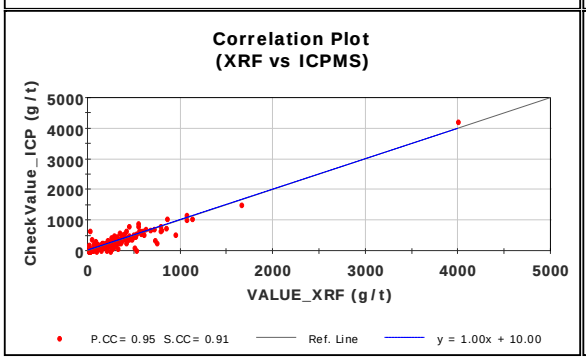


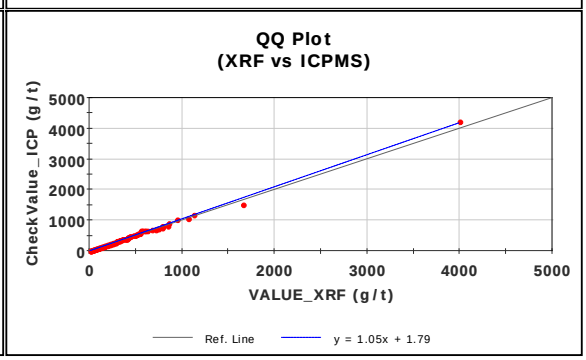












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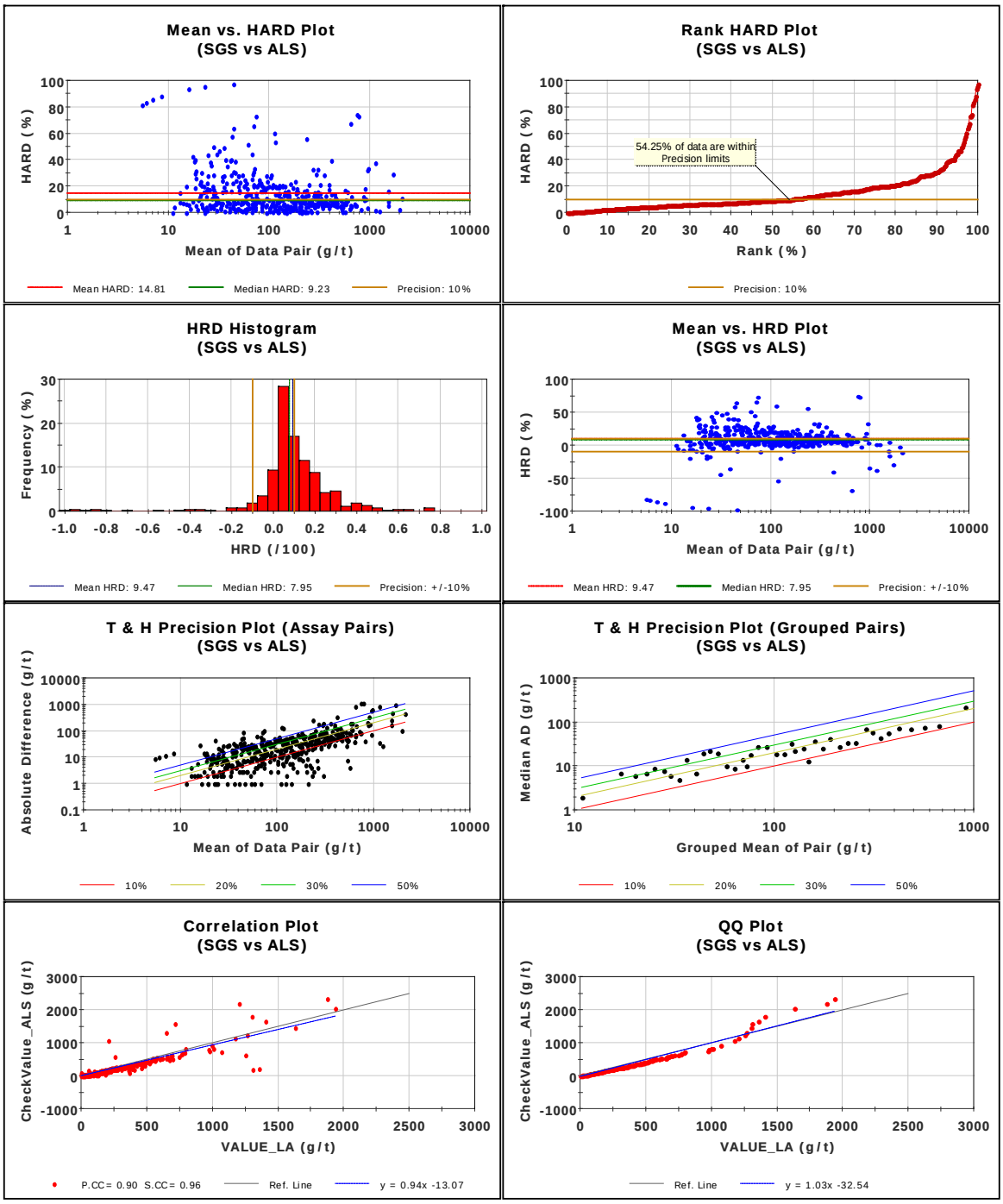
Appendix 1
QAQC Plots

Lab Comparisons
(SGS vs ALS)

	VALUE_LA	CheckValue_ALS	Units		Result
No. Pairs:	459	459		Pearson CC:	0.90
Minimum:	1.00	10.00	g/t	Spearman CC:	0.96
Maximum:	1,937.00	2,340.00	g/t	Mean HARD:	14.81
Mean:	214.23	188.13	g/t	Median HARD:	9.23
Median	118.00	95.00	g/t		
Std. Deviation:	272.75	285.93	g/t	Mean HRD:	9.47
Coefficient of Variation:	1.27	1.52		Median HRD	7.95



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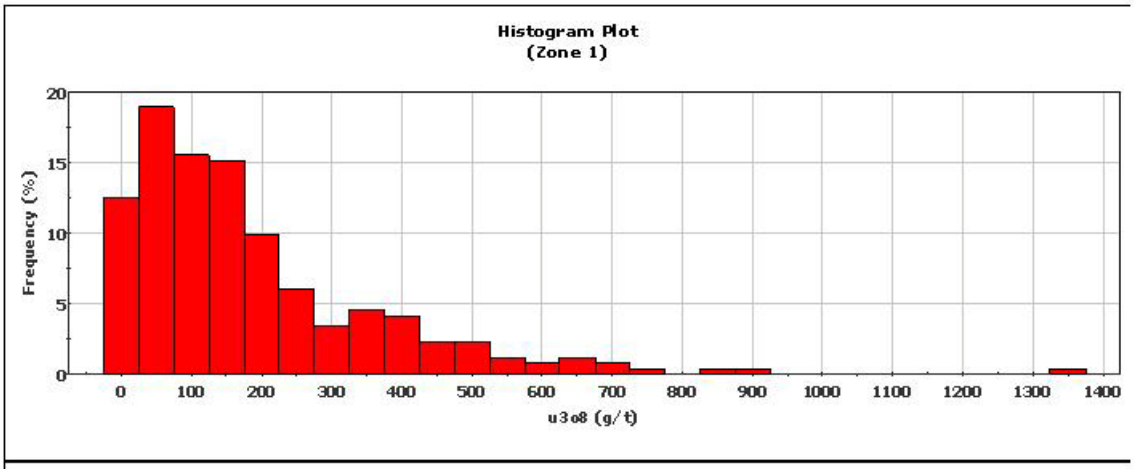
Appendix 2

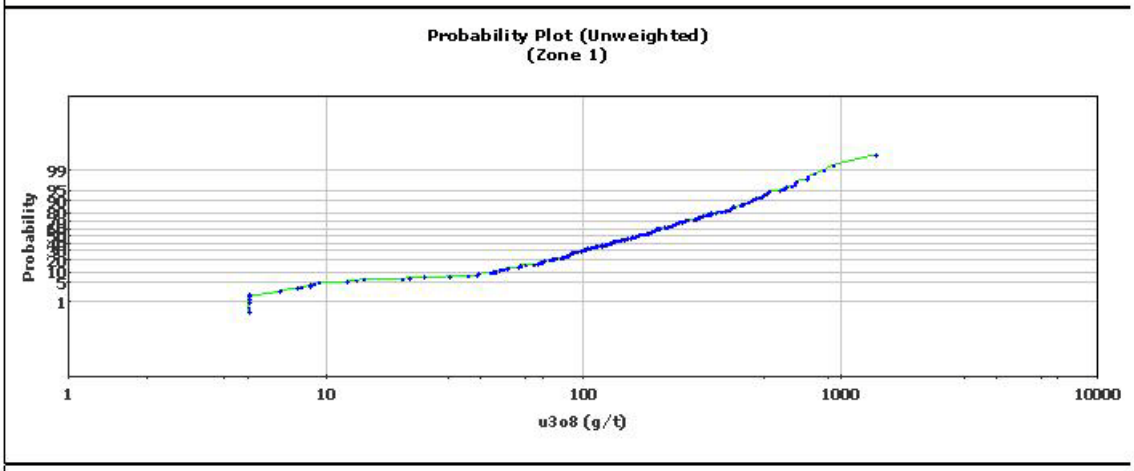
Composite Statistics

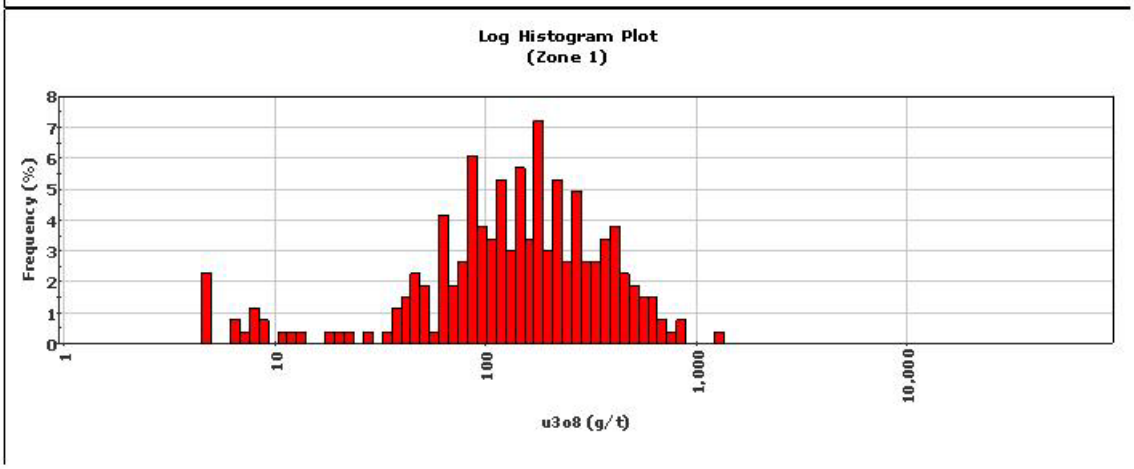
Appendix 2
Composite Statistics

Anomaly A
(Zone 1)

	Unweighted	Weighted	Units
Samples:	264	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,364.33	N/A	g/t
Mean:	209.81	N/A	g/t
Median	159.17	N/A	g/t
Std. Deviation:	184.71	N/A	g/t
Coefficient of Variation:	0.88	N/A	







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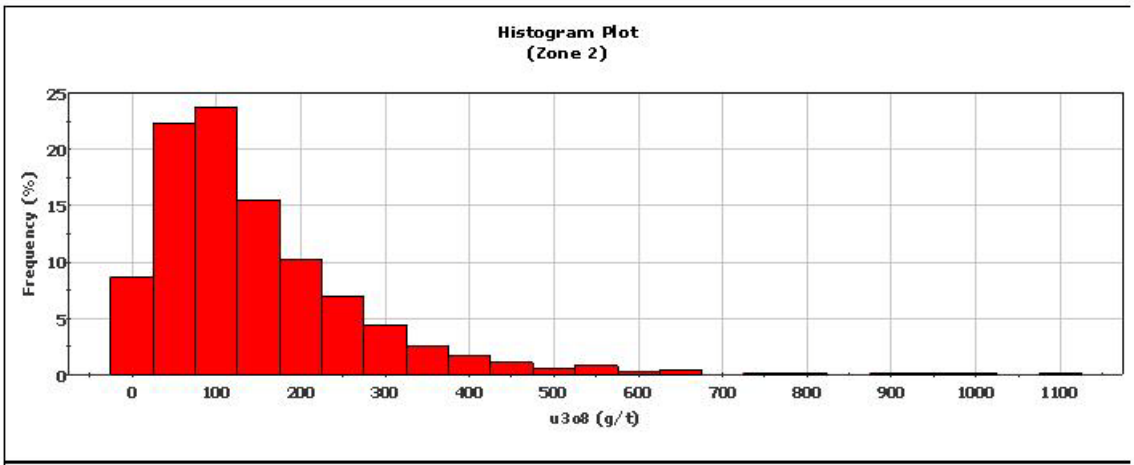
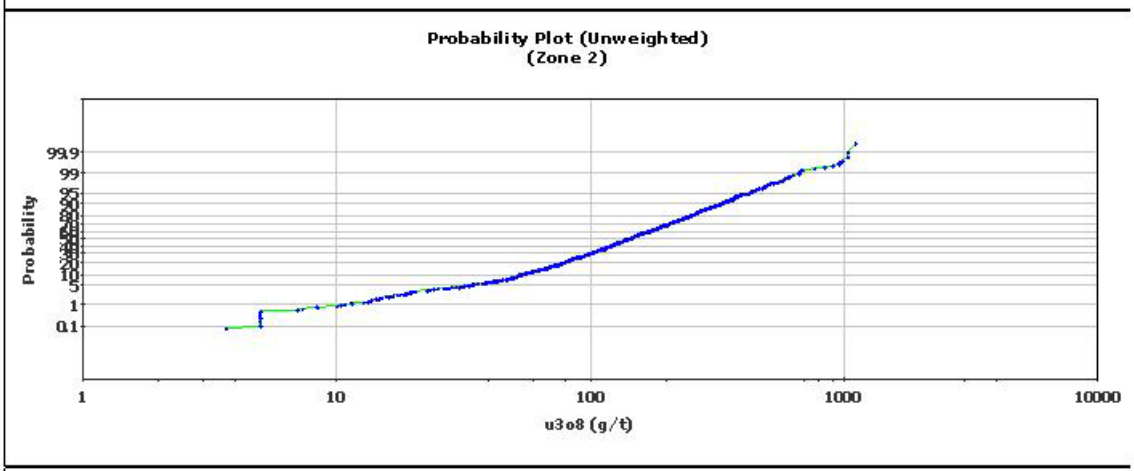
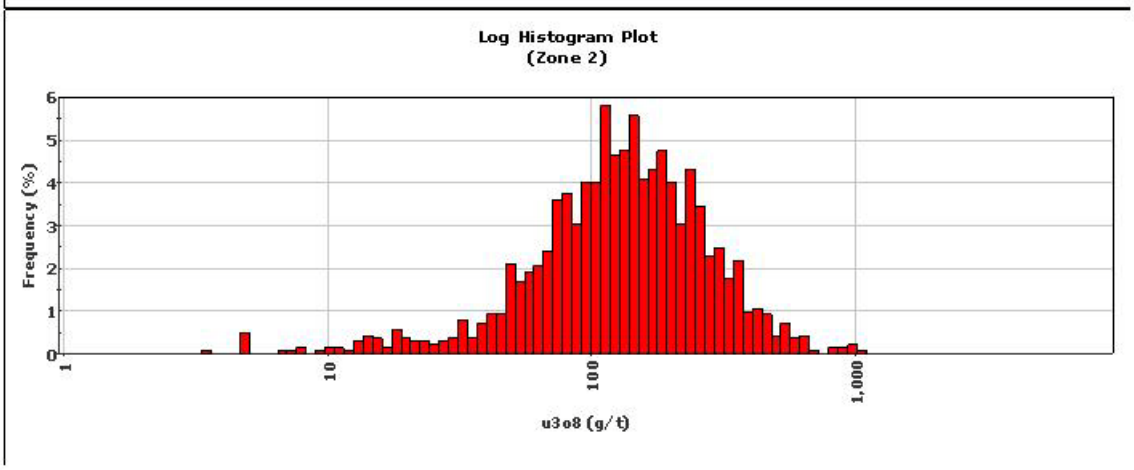
Appendix 2
Composite Statistics

Anomaly A
(Zone 2)

	Unweighted	Weighted	Units
Samples:	1,416	N/A	
Minimum:	3.67	N/A	g/t
Maximum:	1,104.33	N/A	g/t
Mean:	172.14	N/A	g/t
Median	139.00	N/A	g/t
Std. Deviation:	131.10	N/A	g/t
Coefficient of Variation:	0.76	N/A	







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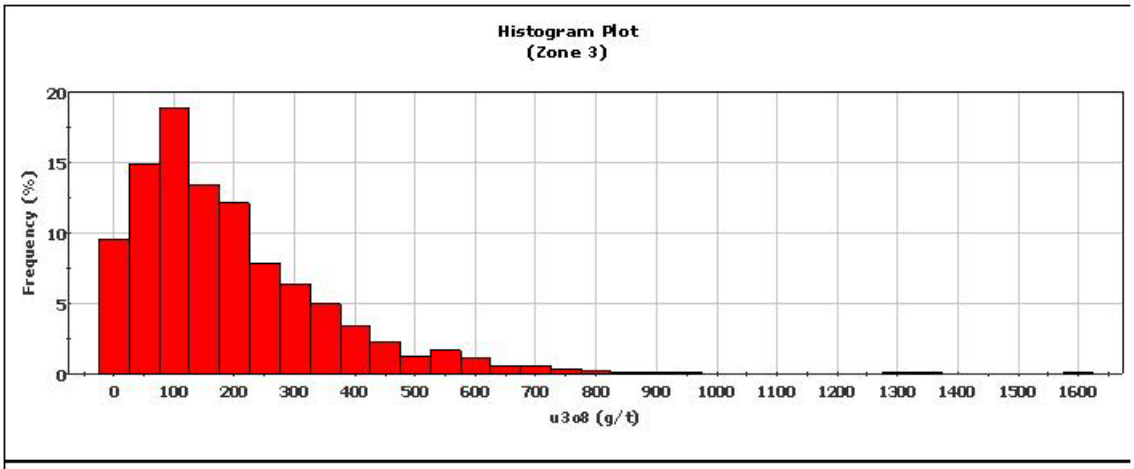
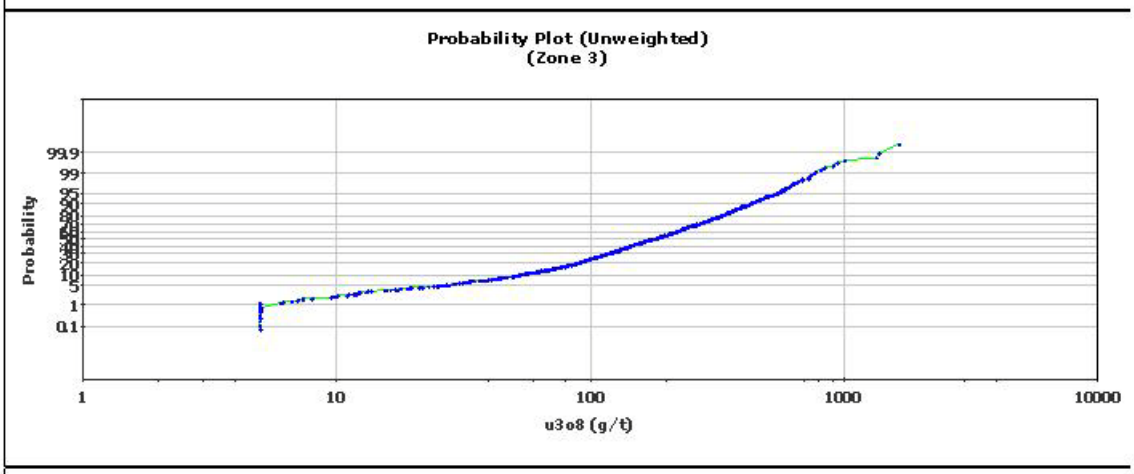
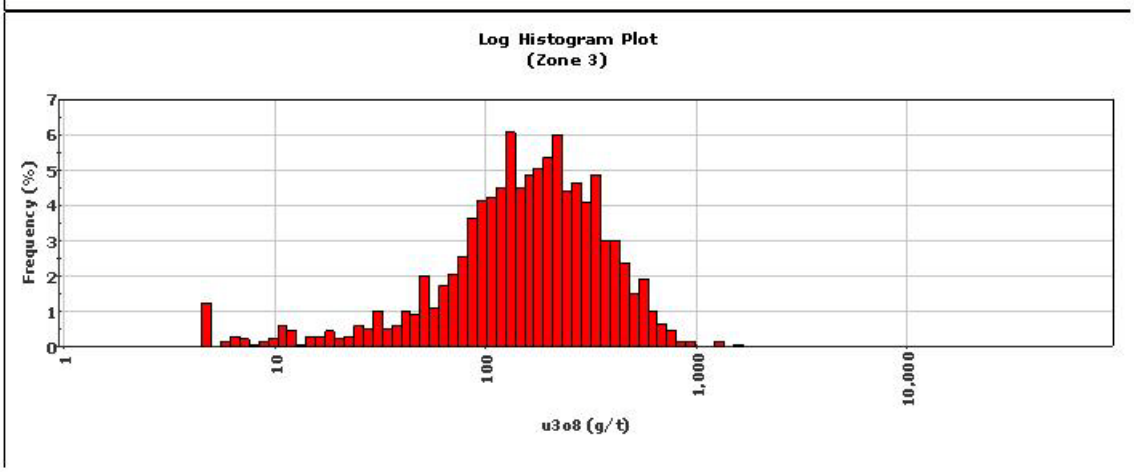
Appendix 2
Composite Statistics

Anomaly A
(Zone 3)

	Unweighted	Weighted	Units
Samples:	1,401	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,632.33	N/A	g/t
Mean:	214.83	N/A	g/t
Median	173.33	N/A	g/t
Std. Deviation:	166.49	N/A	g/t
Coefficient of Variation:	0.78	N/A	







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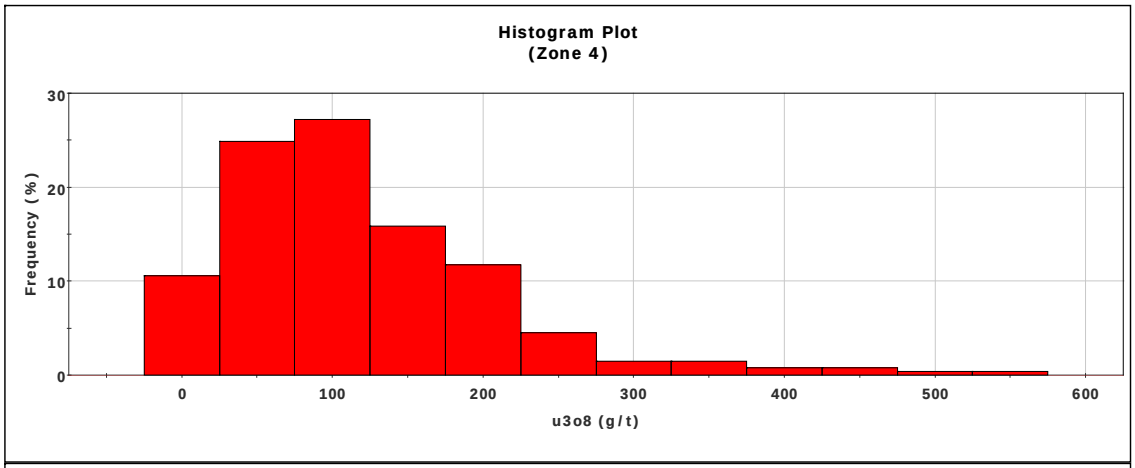
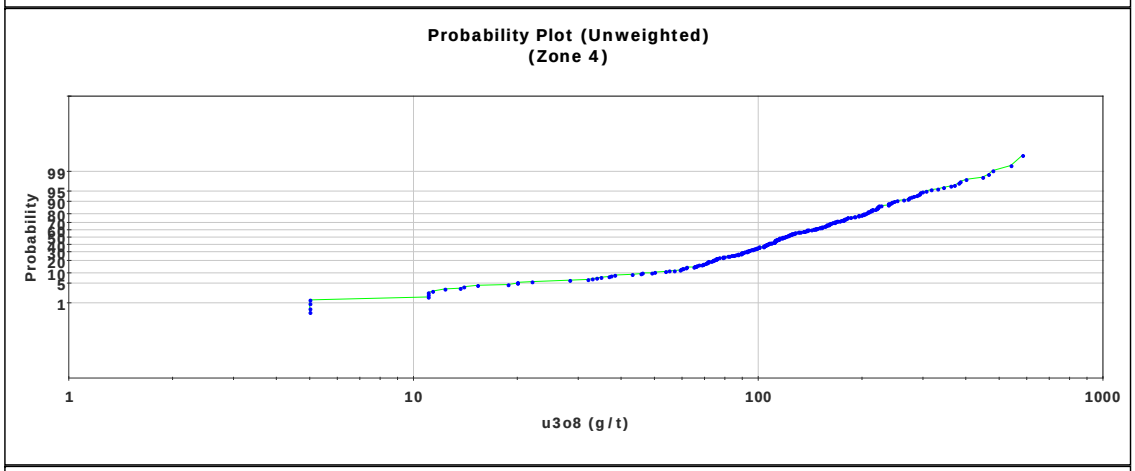
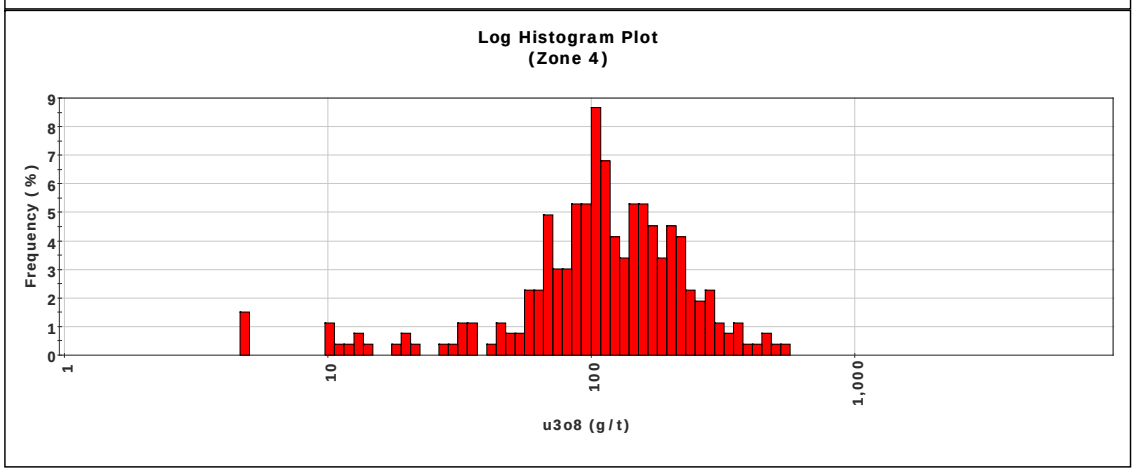
Appendix 2
Composite Statistics

Anomaly A
(Zone 4)

	Unweighted	Weighted	Units
Samples:	265	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	585.00	N/A	g/t
Mean:	141.41	N/A	g/t
Median	118.00	N/A	g/t
Std. Deviation:	92.73	N/A	g/t
Coefficient of Variation:	0.66	N/A	







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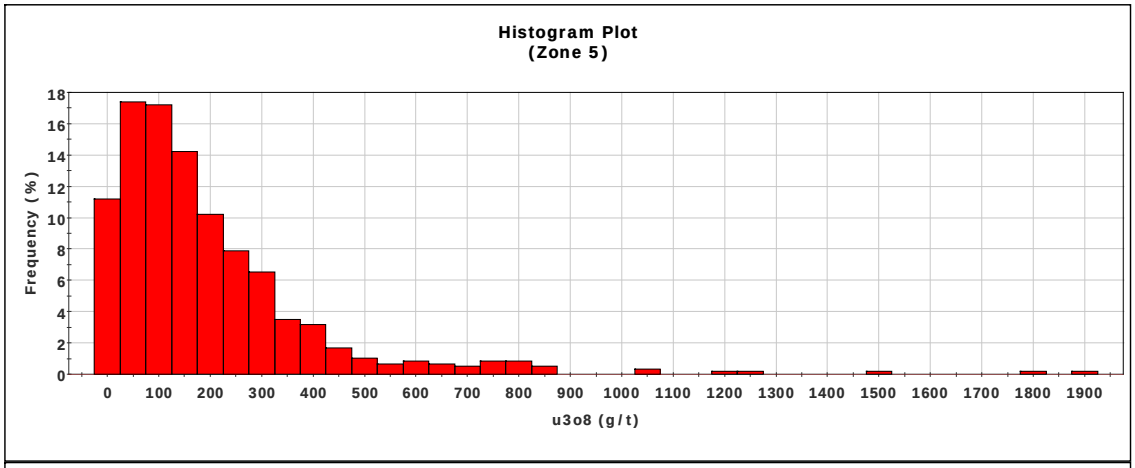
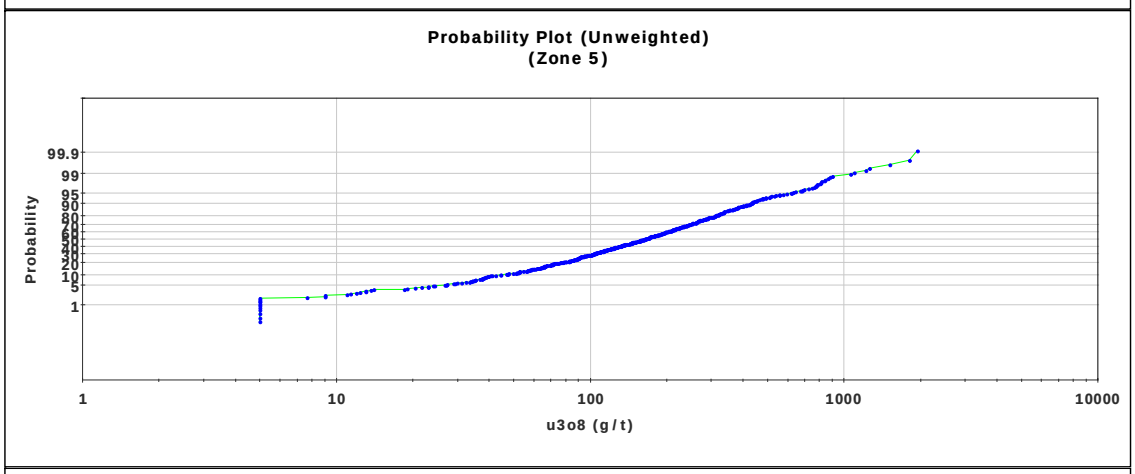
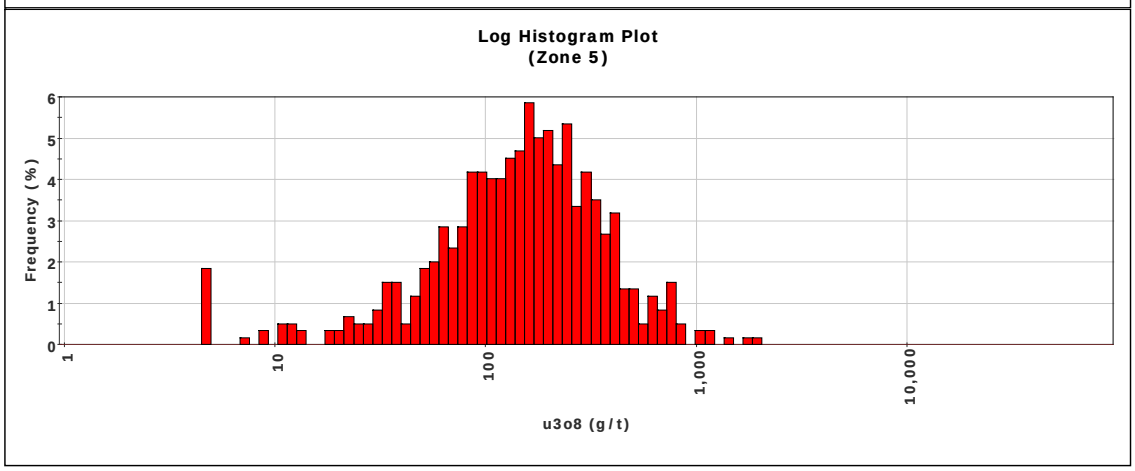
Appendix 2
Composite Statistics

Anomaly A
(Zone 5)

	Unweighted	Weighted	Units
Samples:	598	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,943.67	N/A	g/t
Mean:	218.49	N/A	g/t
Median	164.50	N/A	g/t
Std. Deviation:	213.70	N/A	g/t
Coefficient of Variation:	0.98	N/A	







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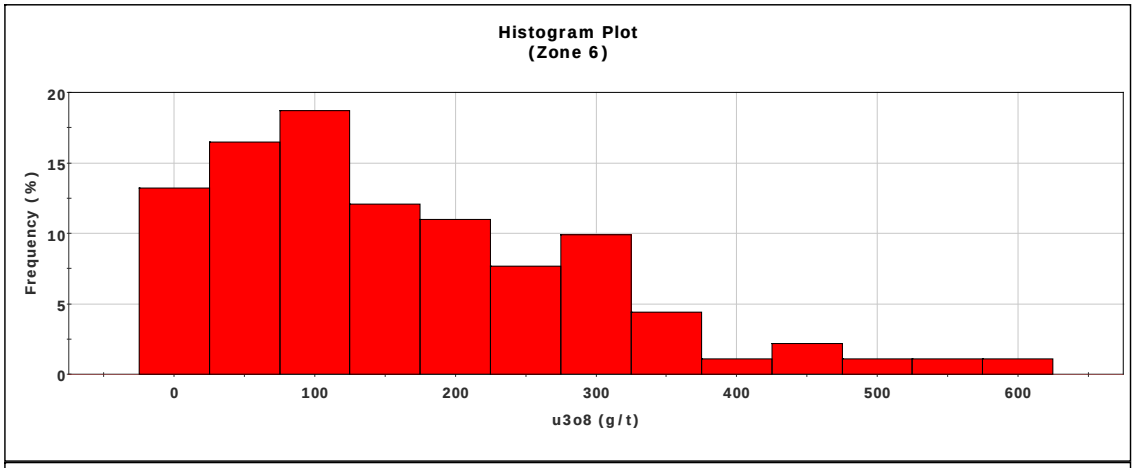
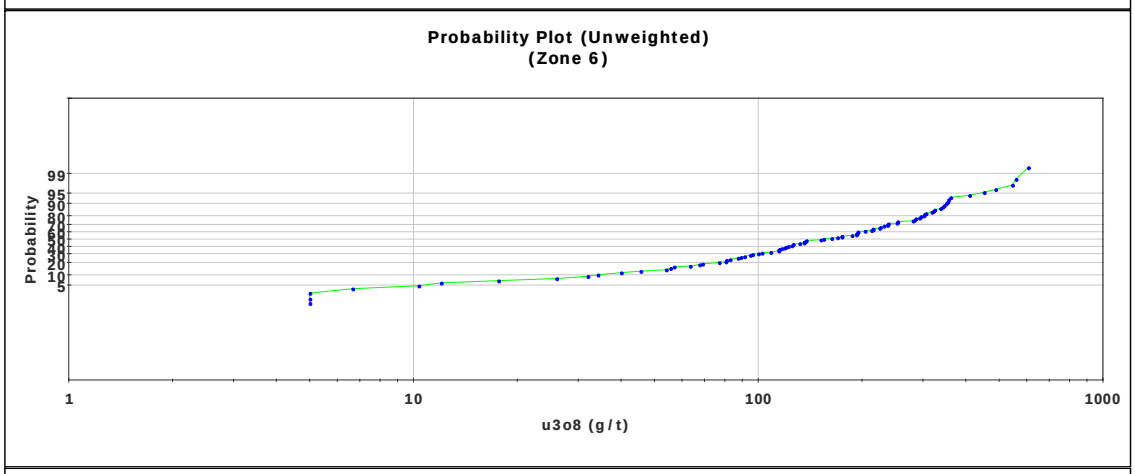
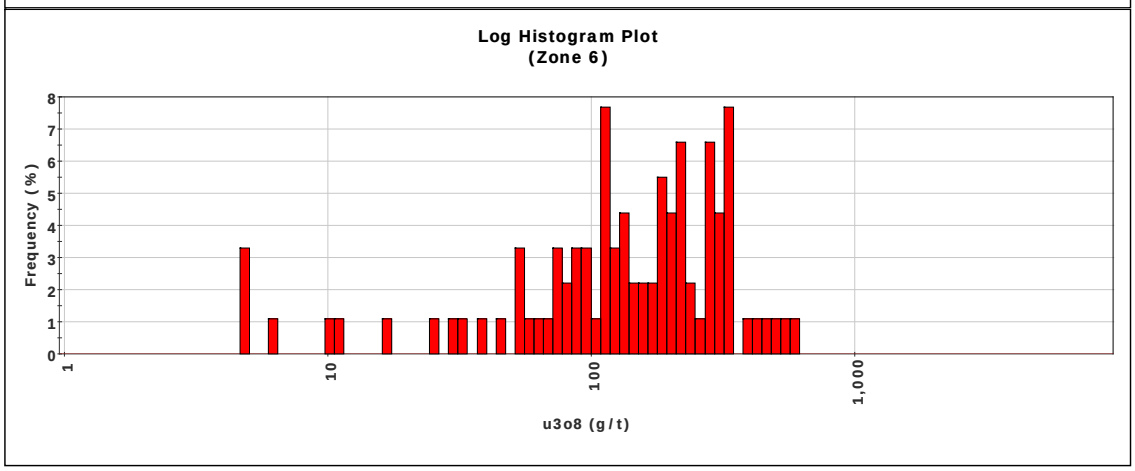
Appendix 2
Composite Statistics

Anomaly A
(Zone 6)

	Unweighted	Weighted	Units
Samples:	91	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	606.50	N/A	g/t
Mean:	186.53	N/A	g/t
Median	154.33	N/A	g/t
Std. Deviation:	133.15	N/A	g/t
Coefficient of Variation:	0.71	N/A	







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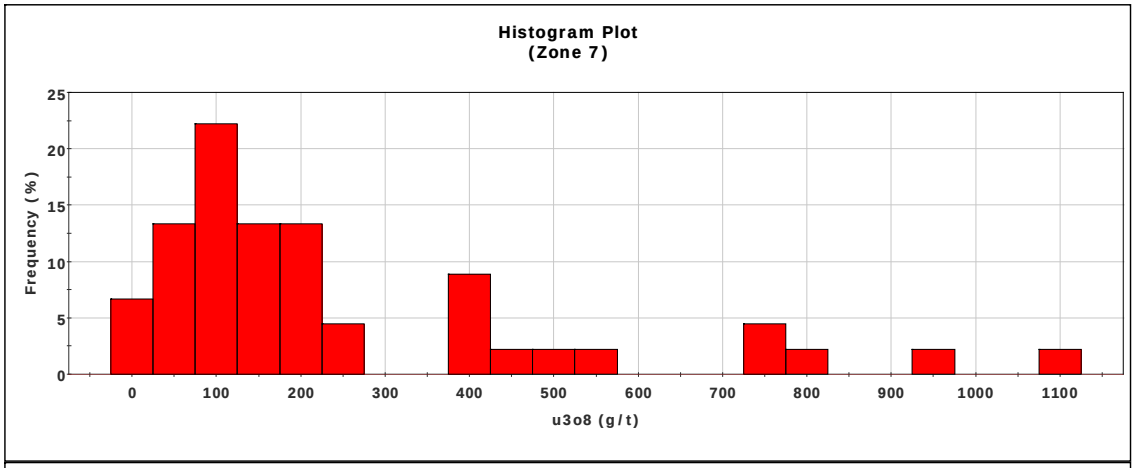
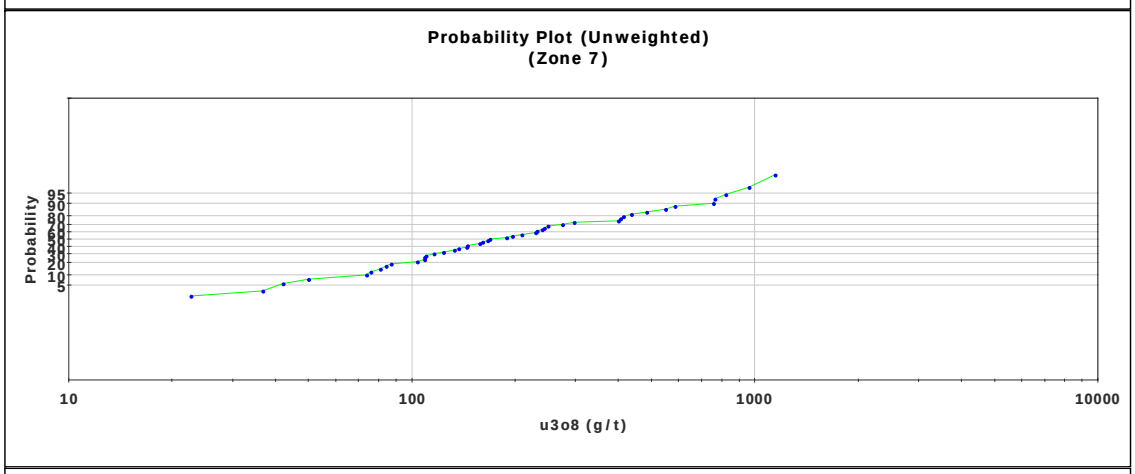
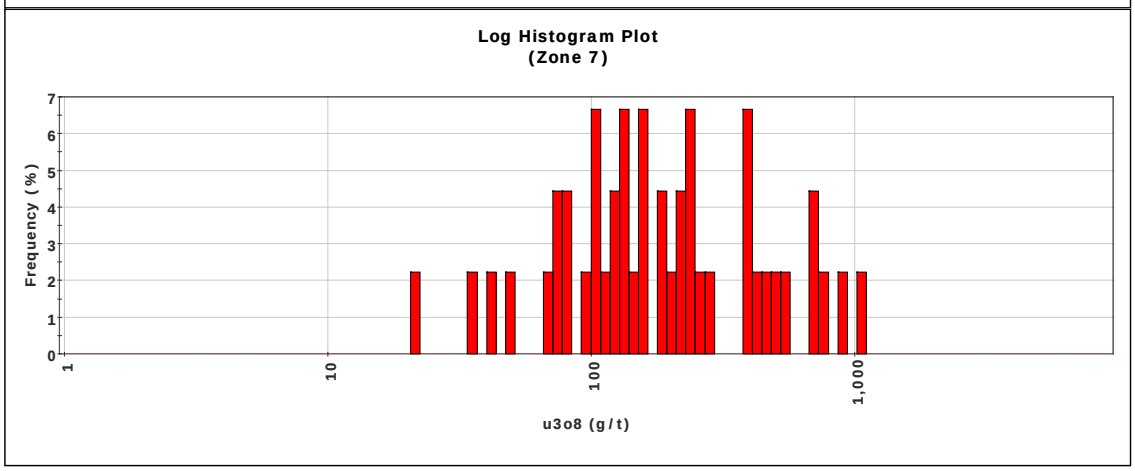
Appendix 2
Composite Statistics

Anomaly A
(Zone 7)

	Unweighted	Weighted	Units
Samples:	45	N/A	
Minimum:	22.67	N/A	g/t
Maximum:	1,142.00	N/A	g/t
Mean:	277.93	N/A	g/t
Median	169.00	N/A	g/t
Std. Deviation:	258.23	N/A	g/t
Coefficient of Variation:	0.93	N/A	







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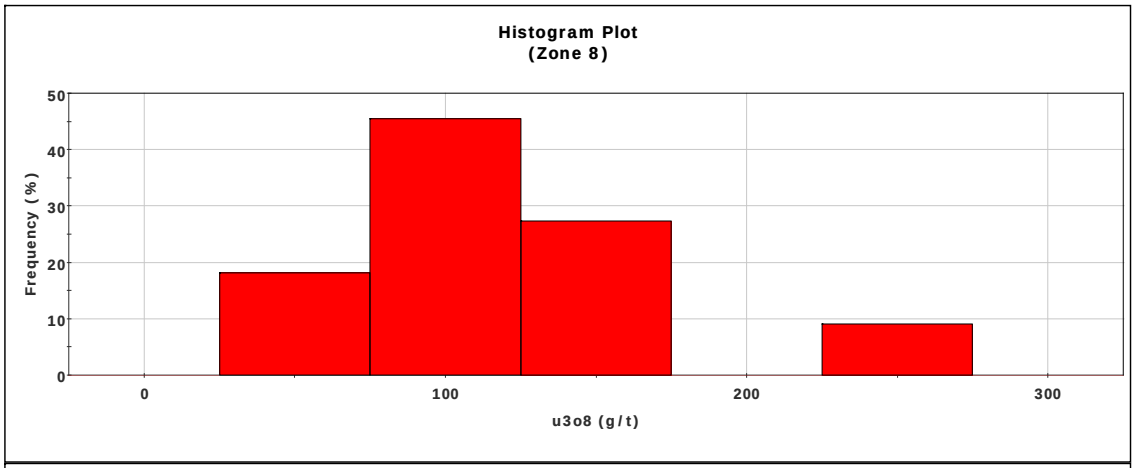
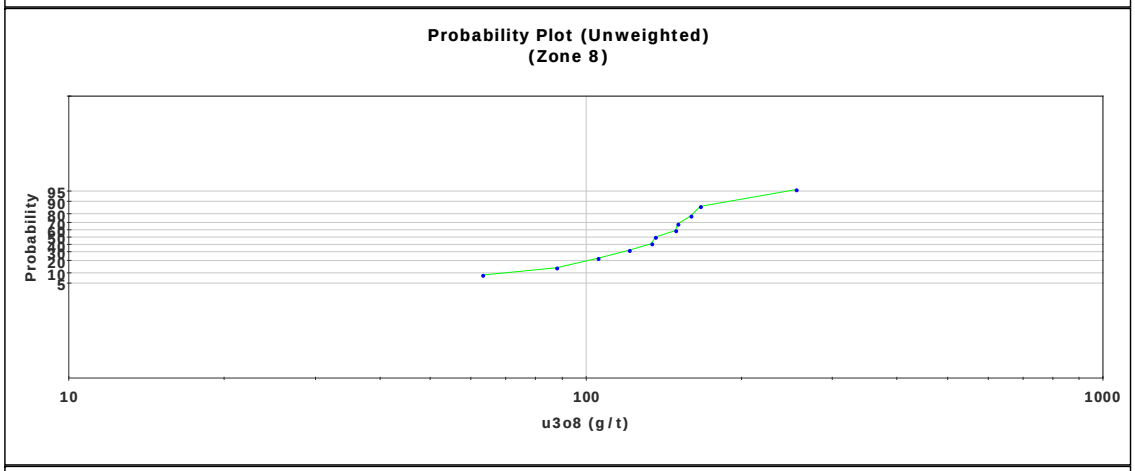
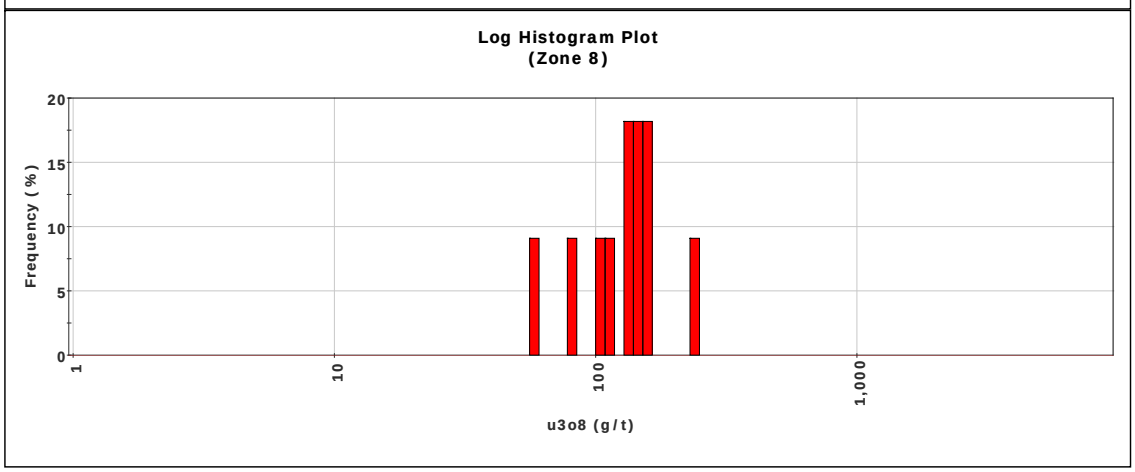
Appendix 2
Composite Statistics

Anomaly A
(Zone 8)

	Unweighted	Weighted	Units
Samples:	11	N/A	
Minimum:	63.00	N/A	g/t
Maximum:	255.00	N/A	g/t
Mean:	138.85	N/A	g/t
Median	136.00	N/A	g/t
Std. Deviation:	47.42	N/A	g/t
Coefficient of Variation:	0.34	N/A	







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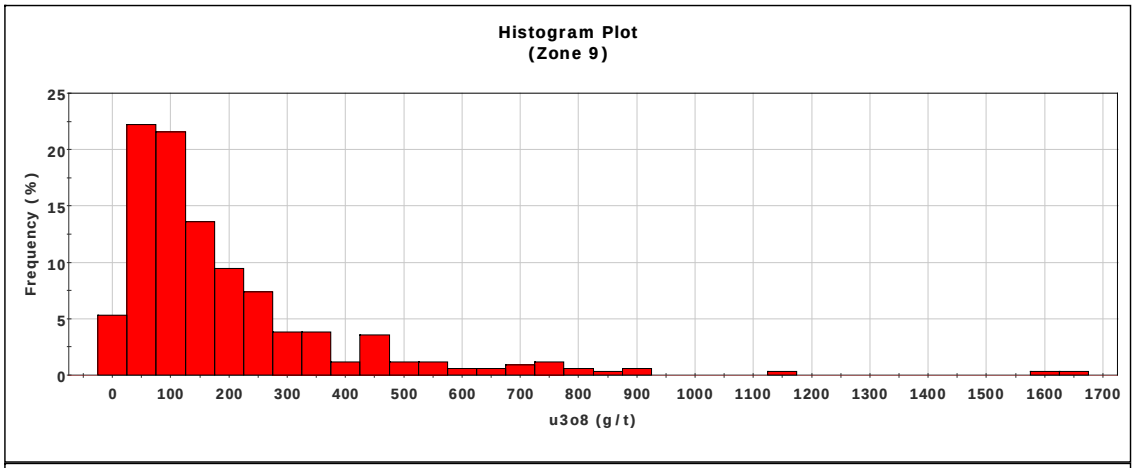
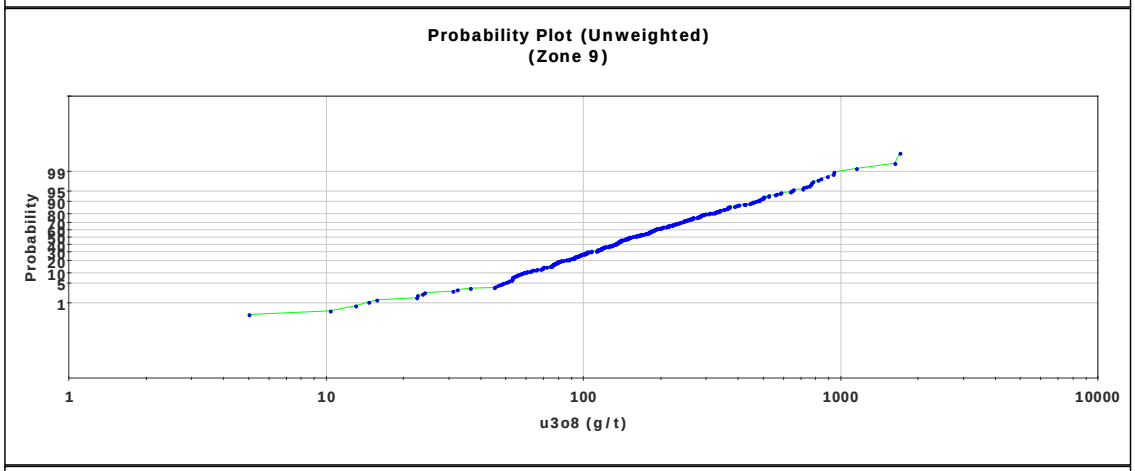
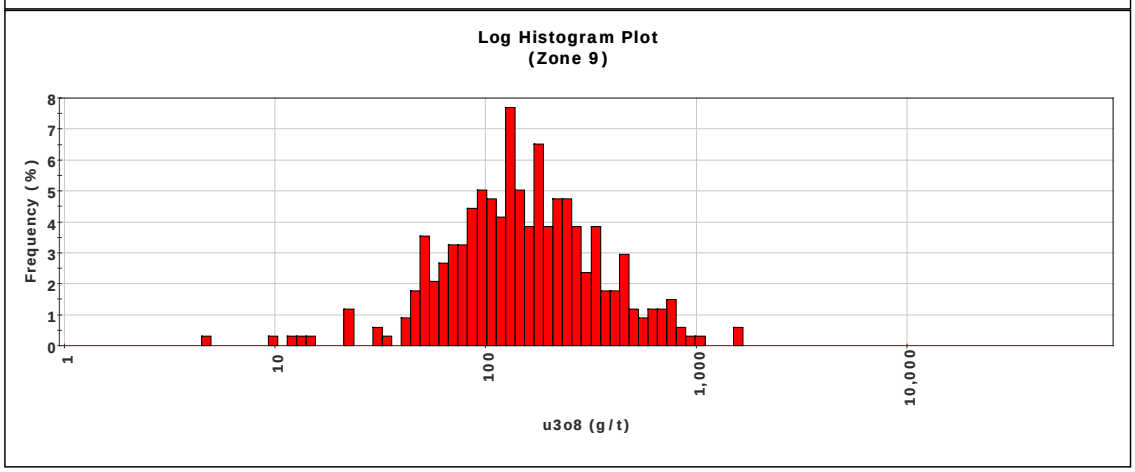
Appendix 2
Composite Statistics

Anomaly A
(Zone 9)

	Unweighted	Weighted	Units
Samples:	338	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,694.67	N/A	g/t
Mean:	221.46	N/A	g/t
Median	152.17	N/A	g/t
Std. Deviation:	212.28	N/A	g/t
Coefficient of Variation:	0.96	N/A	







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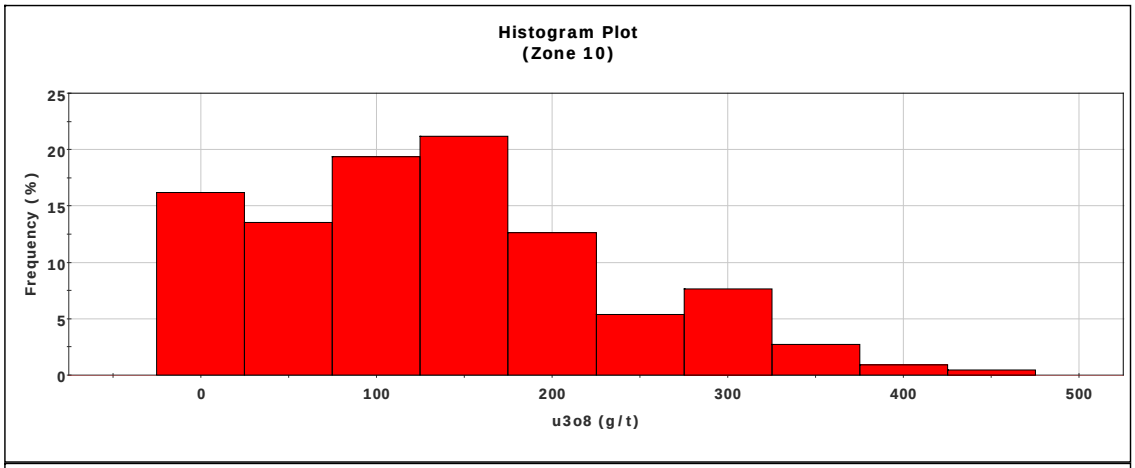
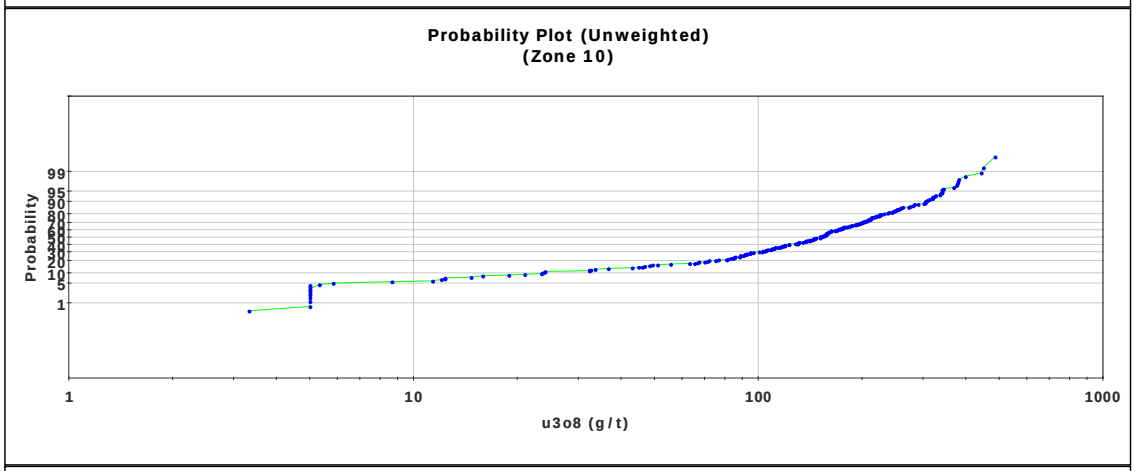
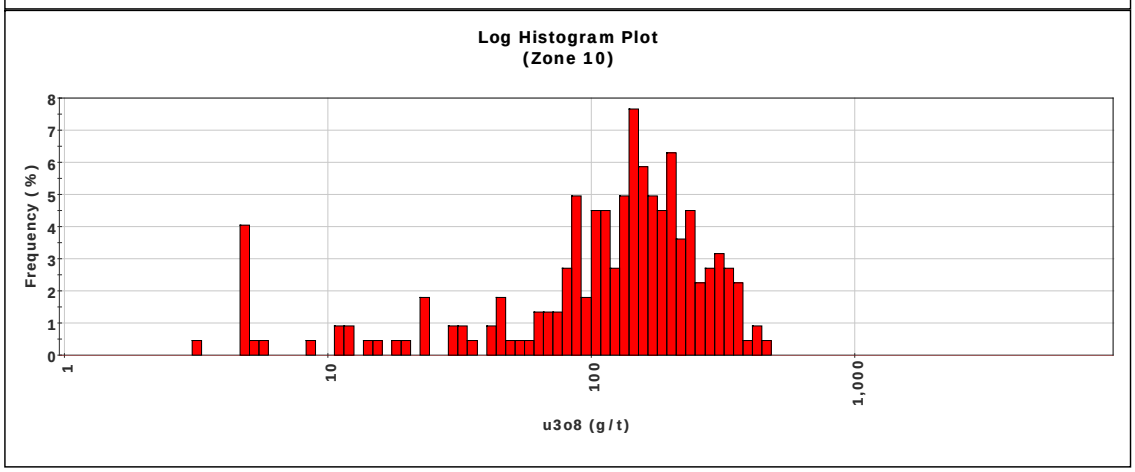
Appendix 2
Composite Statistics

Anomaly A
(Zone 10)

	Unweighted	Weighted	Units
Samples:	222	N/A	
Minimum:	3.33	N/A	g/t
Maximum:	484.67	N/A	g/t
Mean:	157.79	N/A	g/t
Median	151.17	N/A	g/t
Std. Deviation:	100.64	N/A	g/t
Coefficient of Variation:	0.64	N/A	







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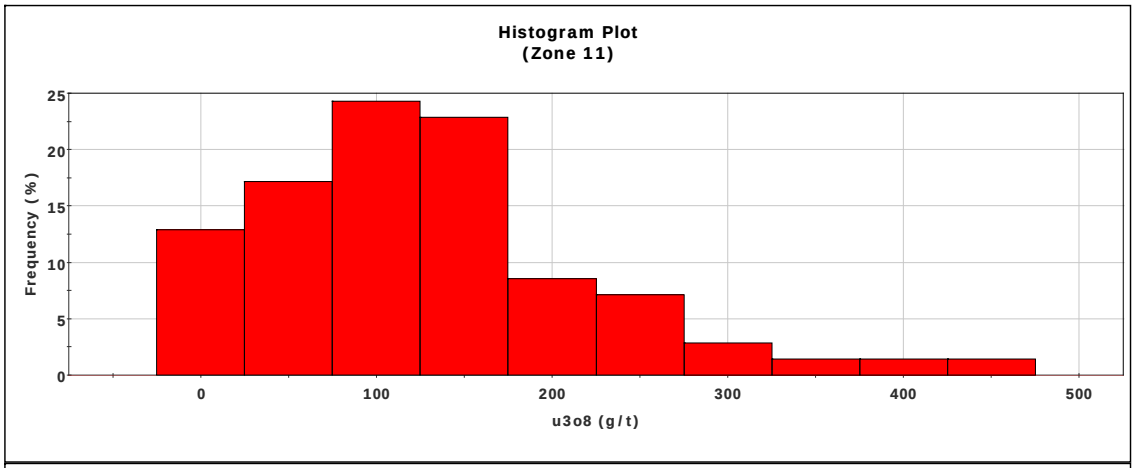
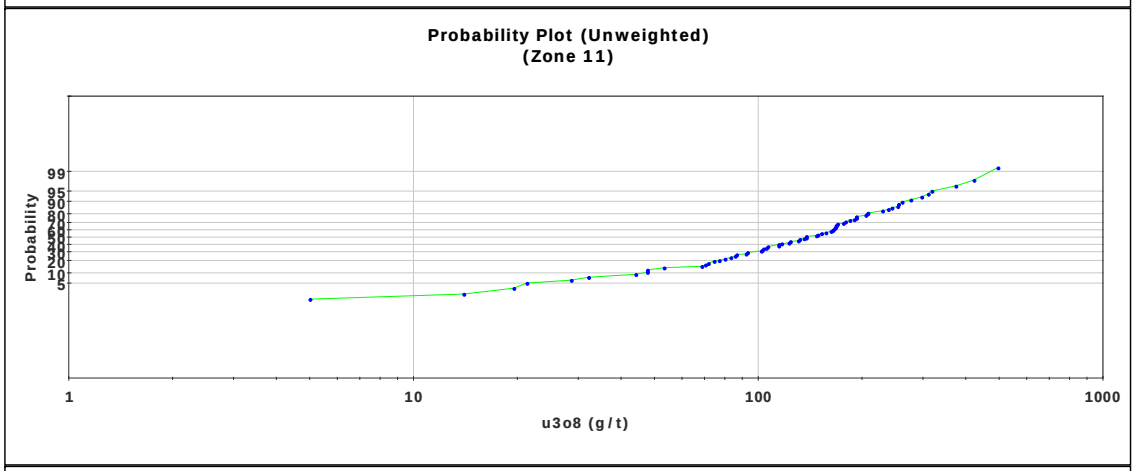
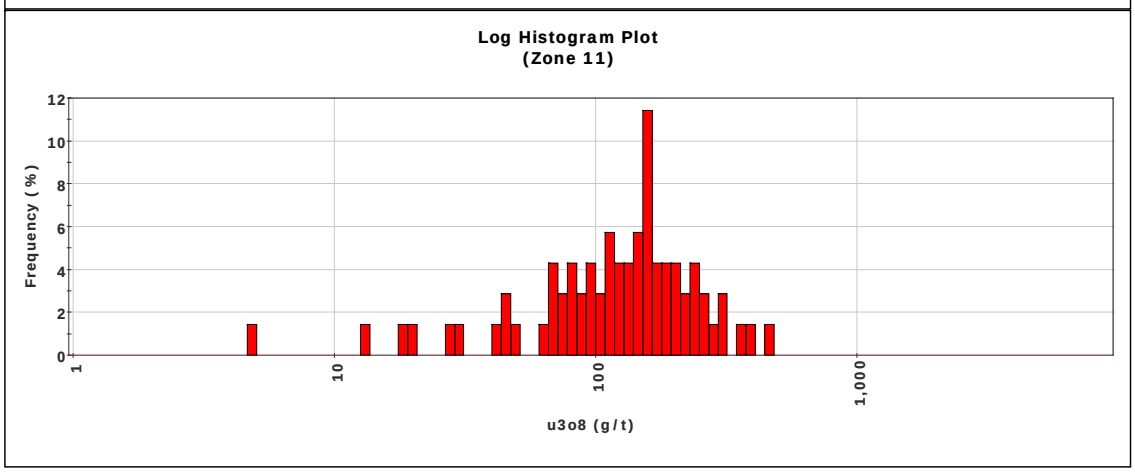
Appendix 2
Composite Statistics

Anomaly A
(Zone 11)

	Unweighted	Weighted	Units
Samples:	70	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	496.00	N/A	g/t
Mean:	151.84	N/A	g/t
Median	137.69	N/A	g/t
Std. Deviation:	94.59	N/A	g/t
Coefficient of Variation:	0.62	N/A	







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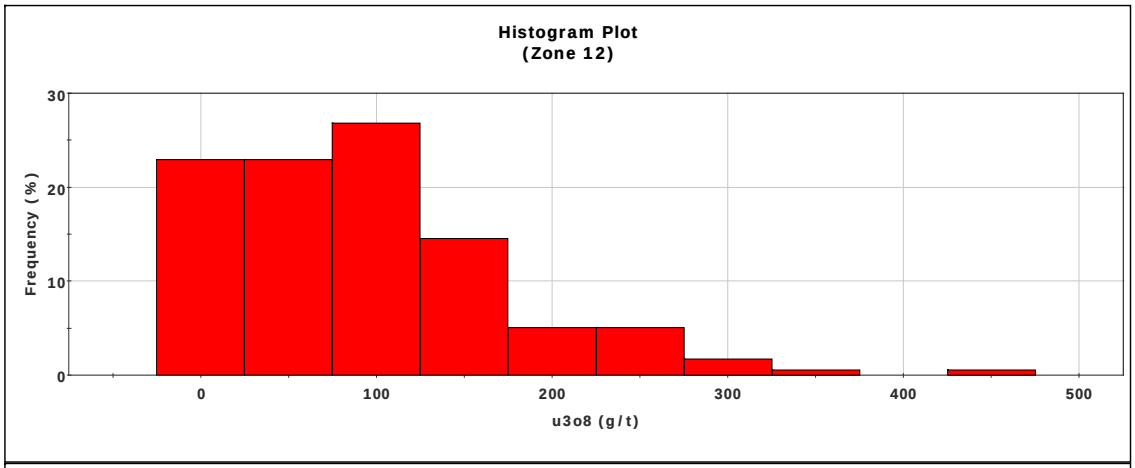
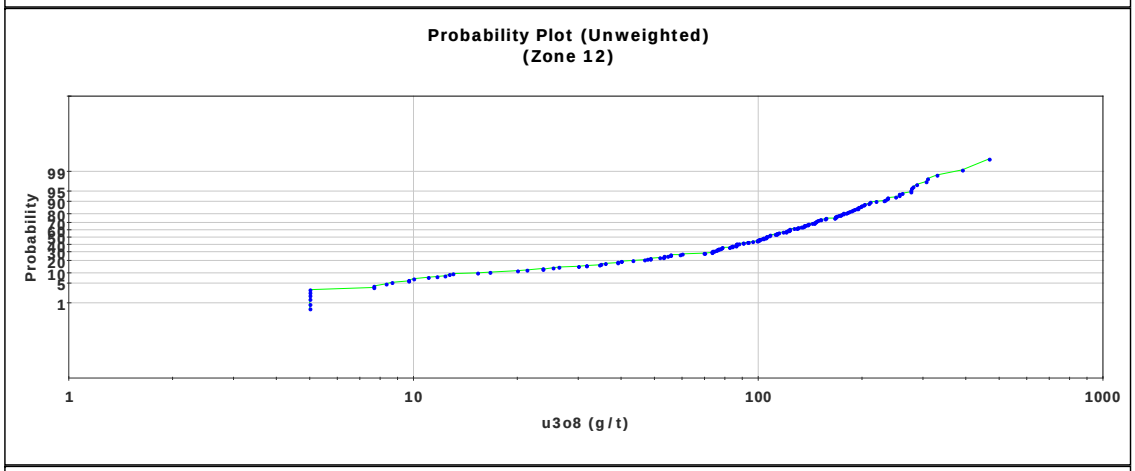
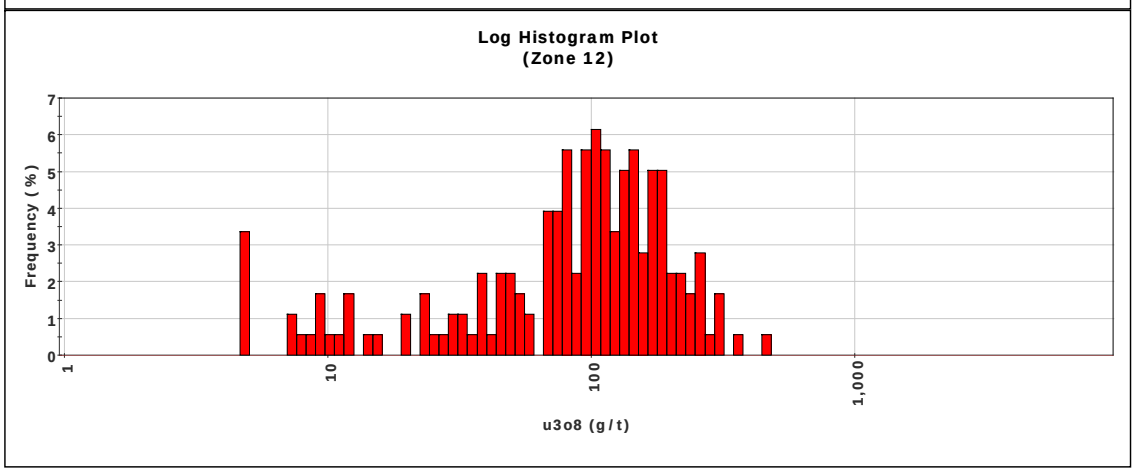
Appendix 2
Composite Statistics

Anomaly A
(Zone 12)

	Unweighted	Weighted	Units
Samples:	179	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	467.67	N/A	g/t
Mean:	116.14	N/A	g/t
Median	105.33	N/A	g/t
Std. Deviation:	81.42	N/A	g/t
Coefficient of Variation:	0.70	N/A	







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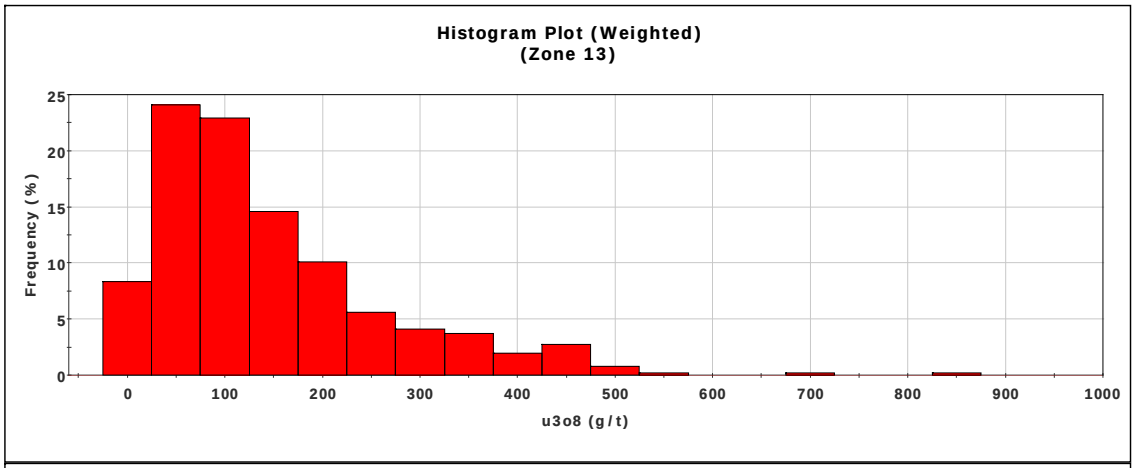
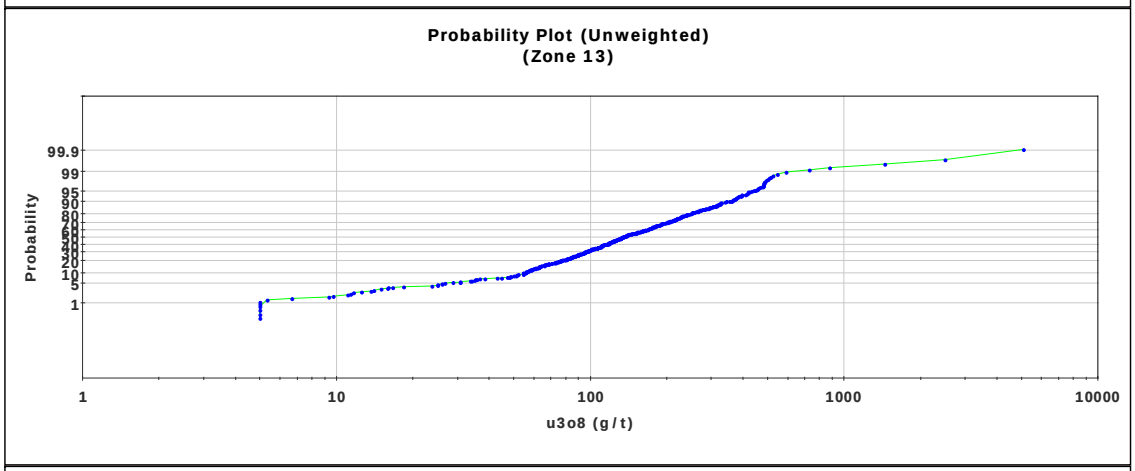
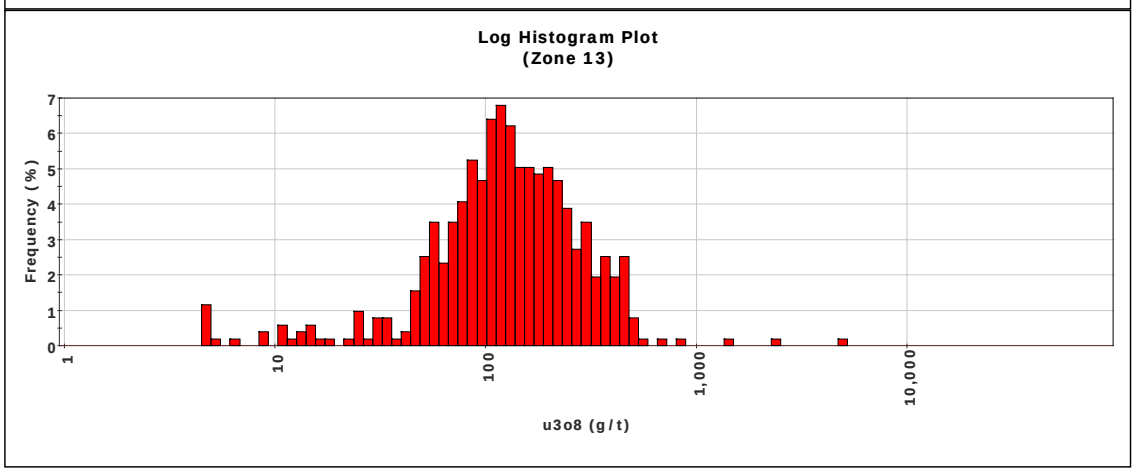
Appendix 2
Composite Statistics

Anomaly A
(Zone 13)

	Unweighted	Weighted	Units
Samples:	515	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	5,063.00	N/A	g/t
Mean:	185.28	N/A	g/t
Median	133.67	N/A	g/t
Std. Deviation:	273.10	N/A	g/t
Coefficient of Variation:	1.47	N/A	







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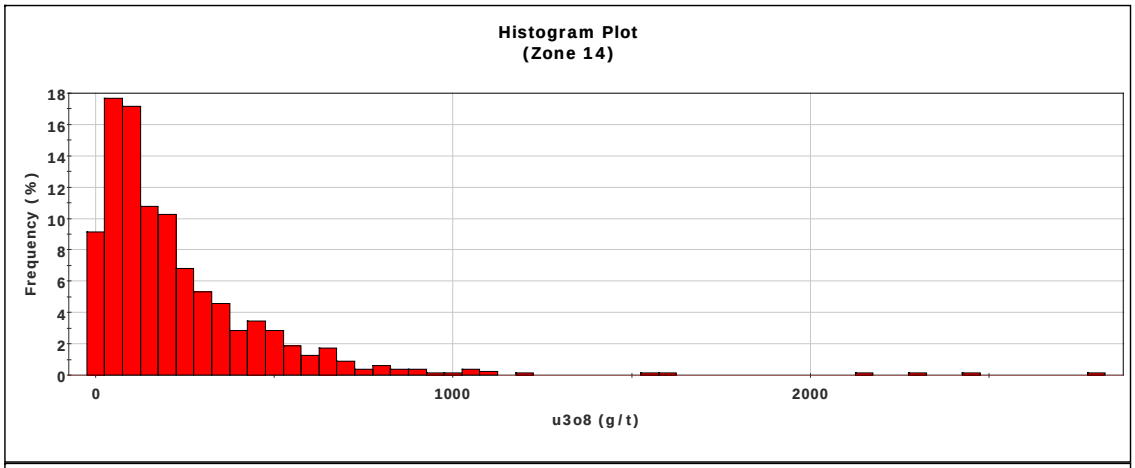
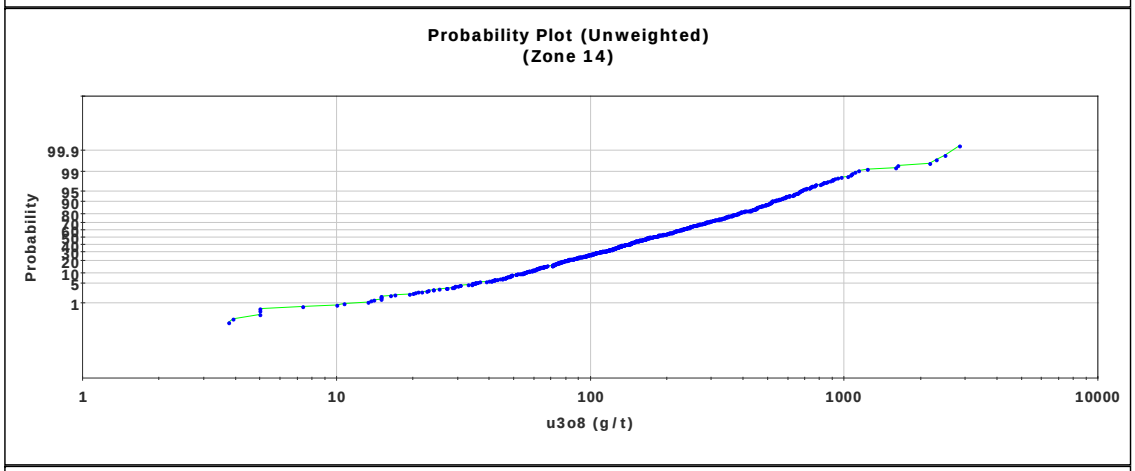
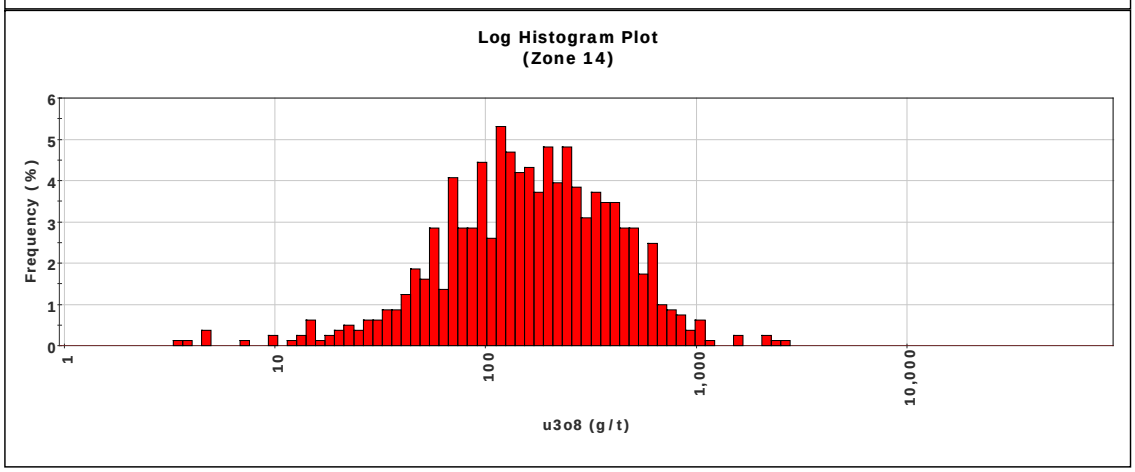
Appendix 2
Composite Statistics

Anomaly A
(Zone 14)

	Unweighted	Weighted	Units
Samples:	809	N/A	
Minimum:	3.75	N/A	g/t
Maximum:	2,841.67	N/A	g/t
Mean:	253.16	N/A	g/t
Median	172.00	N/A	g/t
Std. Deviation:	264.16	N/A	g/t
Coefficient of Variation:	1.04	N/A	







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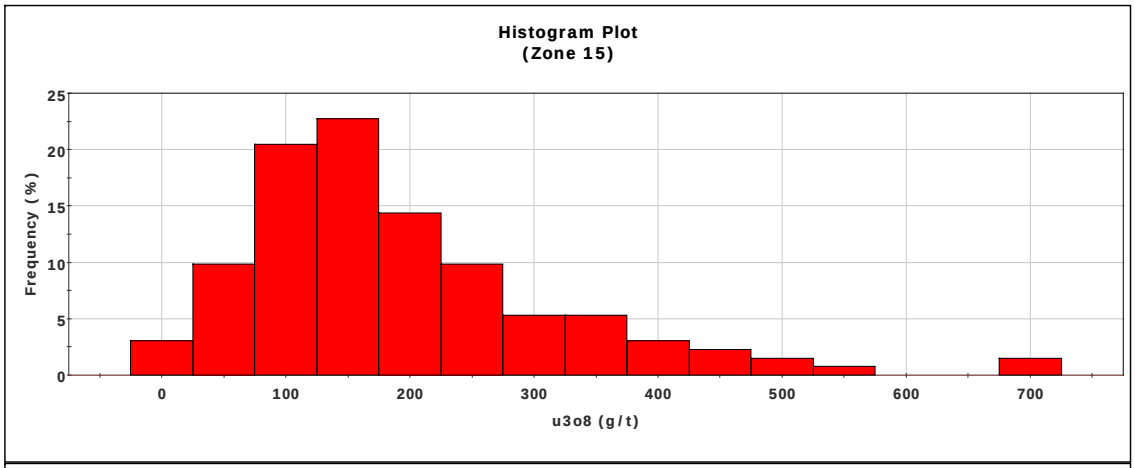
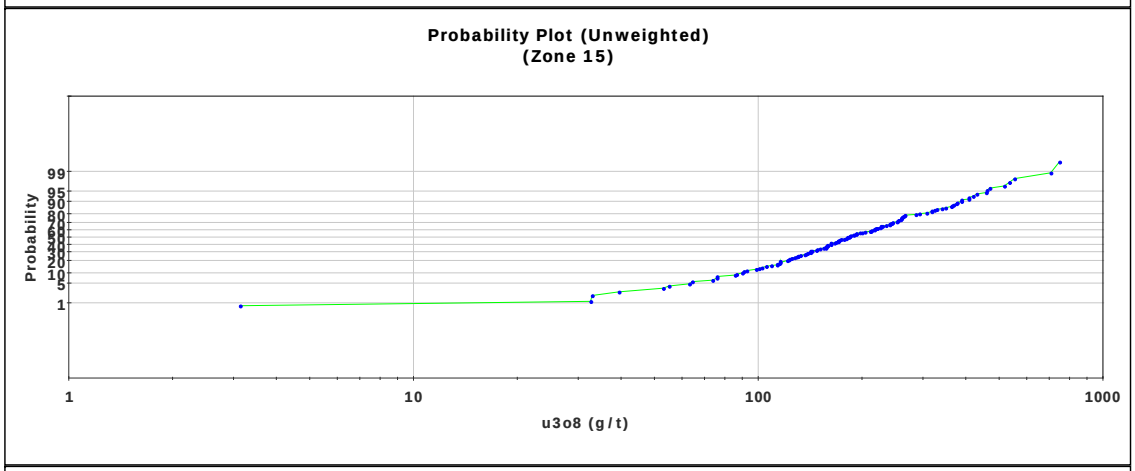
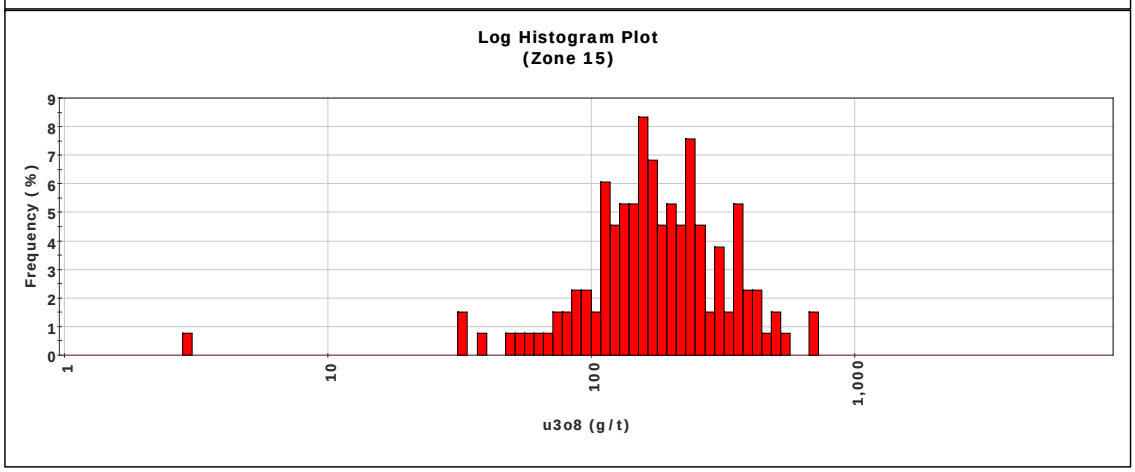
Appendix 2
Composite Statistics

Anomaly A
(Zone 15)

	Unweighted	Weighted	Units
Samples:	132	N/A	
Minimum:	3.14	N/A	g/t
Maximum:	748.67	N/A	g/t
Mean:	215.29	N/A	g/t
Median	182.33	N/A	g/t
Std. Deviation:	127.85	N/A	g/t
Coefficient of Variation:	0.59	N/A	







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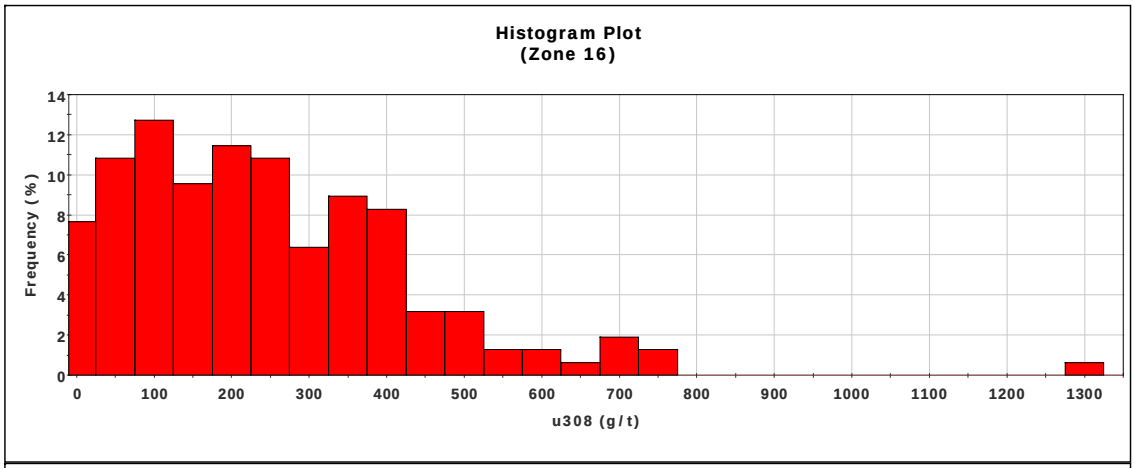
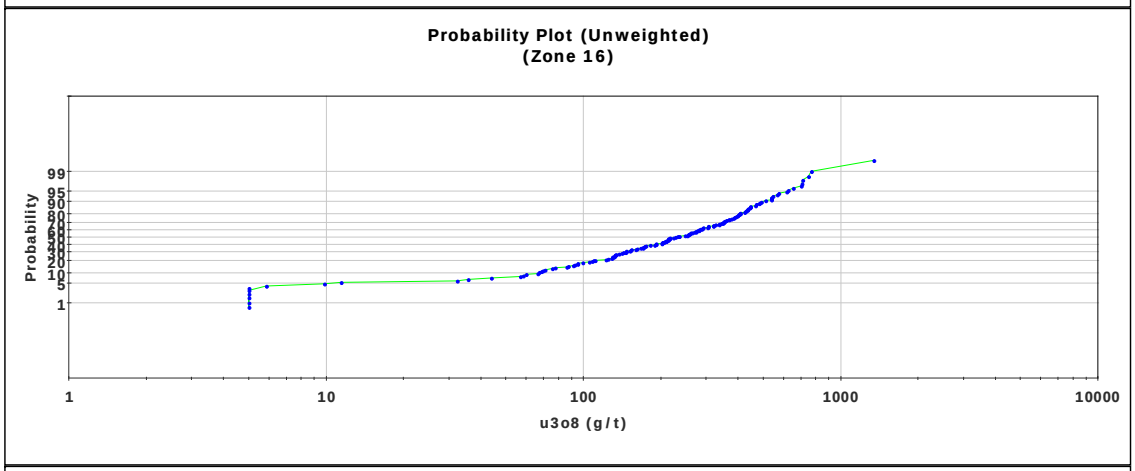
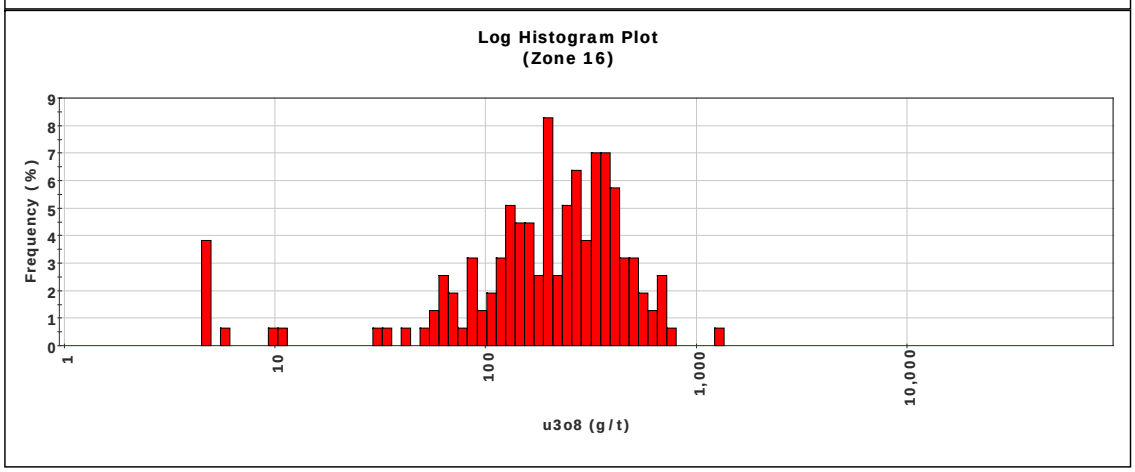
Appendix 2
Composite Statistics

Anomaly A
(Zone 16)

	Unweighted	Weighted	Units
Samples:	157	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,339.67	N/A	g/t
Mean:	269.04	N/A	g/t
Median	227.67	N/A	g/t
Std. Deviation:	193.27	N/A	g/t
Coefficient of Variation:	0.72	N/A	







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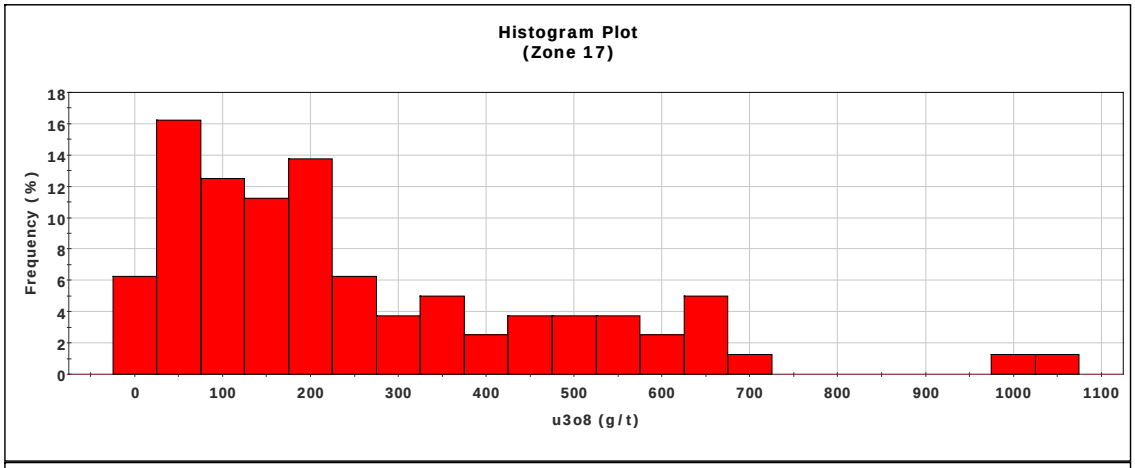
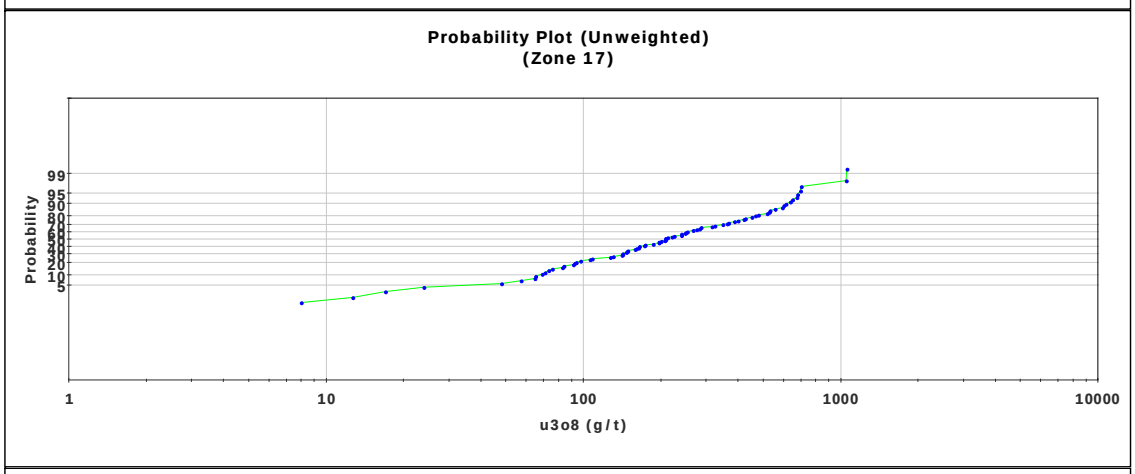
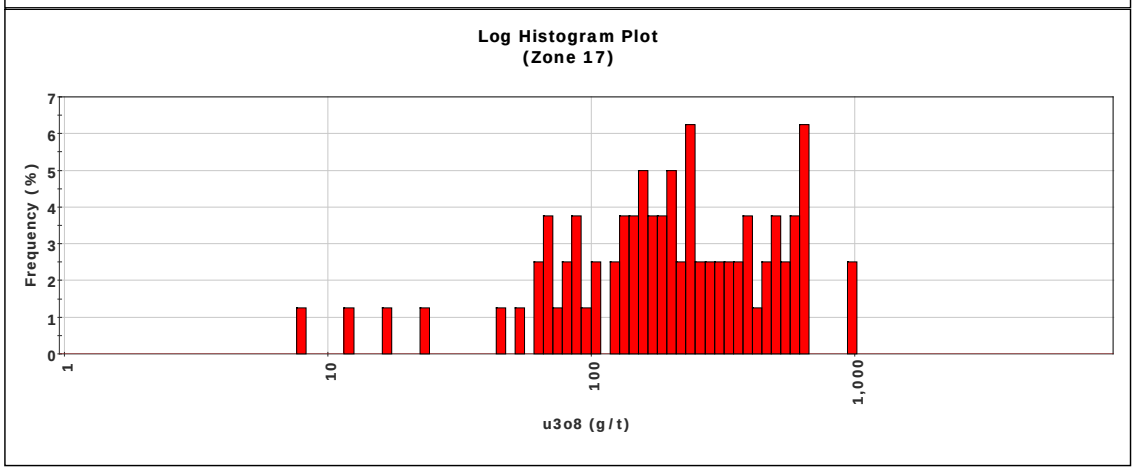
Appendix 2
Composite Statistics

Anomaly A
(Zone 17)

	Unweighted	Weighted	Units
Samples:	80	N/A	
Minimum:	8.00	N/A	g/t
Maximum:	1,054.67	N/A	g/t
Mean:	283.56	N/A	g/t
Median	208.50	N/A	g/t
Std. Deviation:	226.37	N/A	g/t
Coefficient of Variation:	0.80	N/A	







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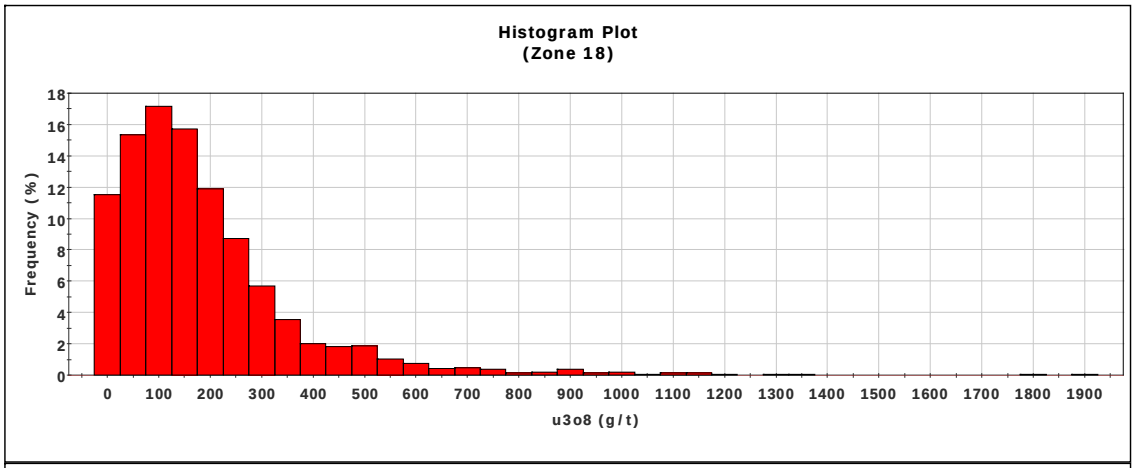
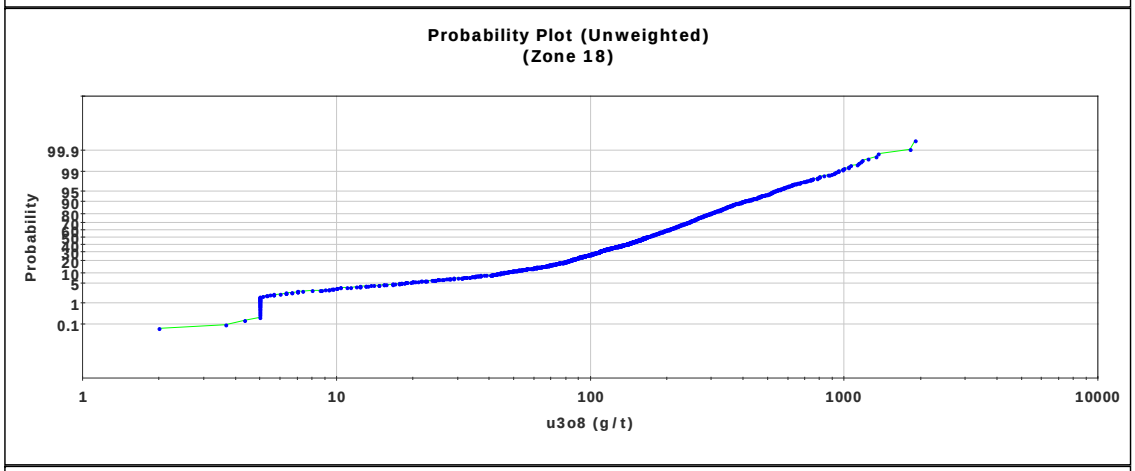
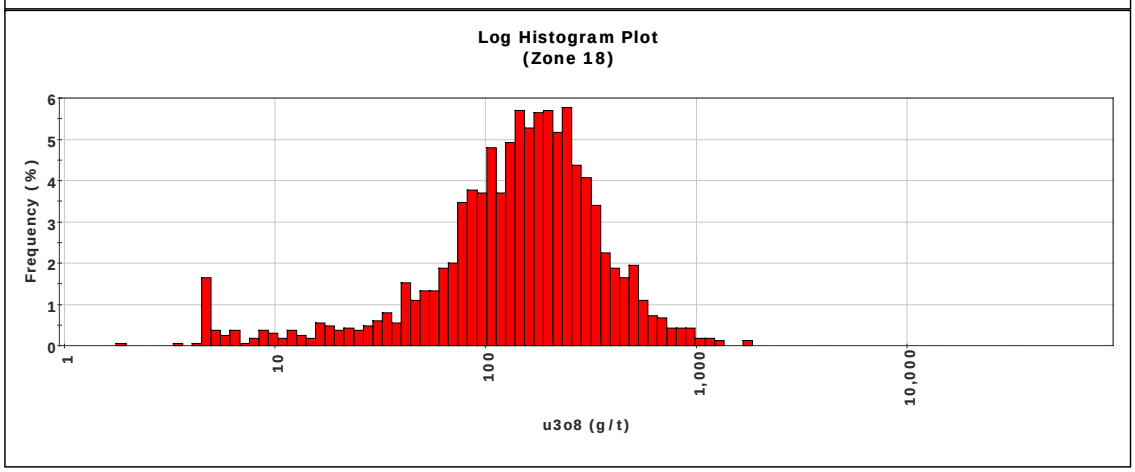
Appendix 2
Composite Statistics

Anomaly A
(Zone 18)

	Unweighted	Weighted	Units
Samples:	1,647	N/A	
Minimum:	2.00	N/A	g/t
Maximum:	1,908.33	N/A	g/t
Mean:	208.83	N/A	g/t
Median	166.33	N/A	g/t
Std. Deviation:	183.46	N/A	g/t
Coefficient of Variation:	0.88	N/A	







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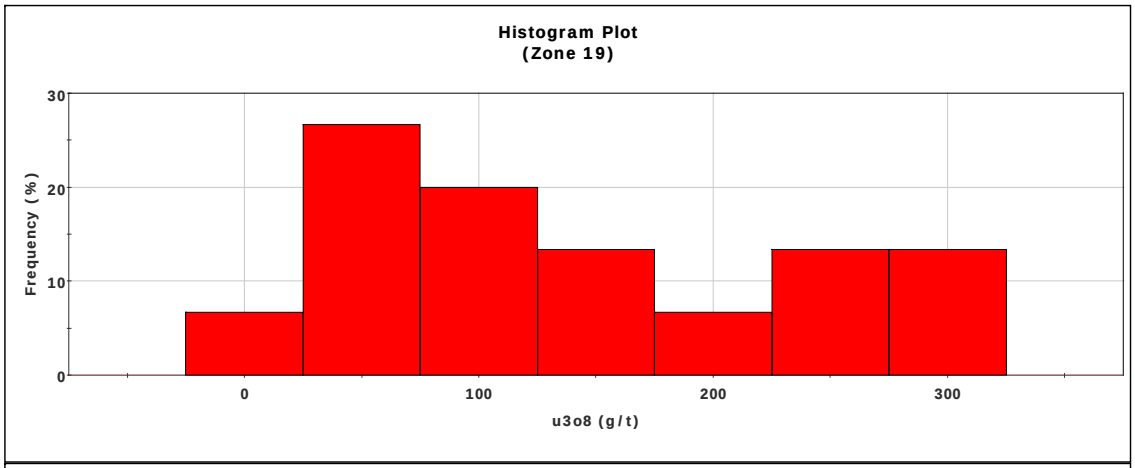
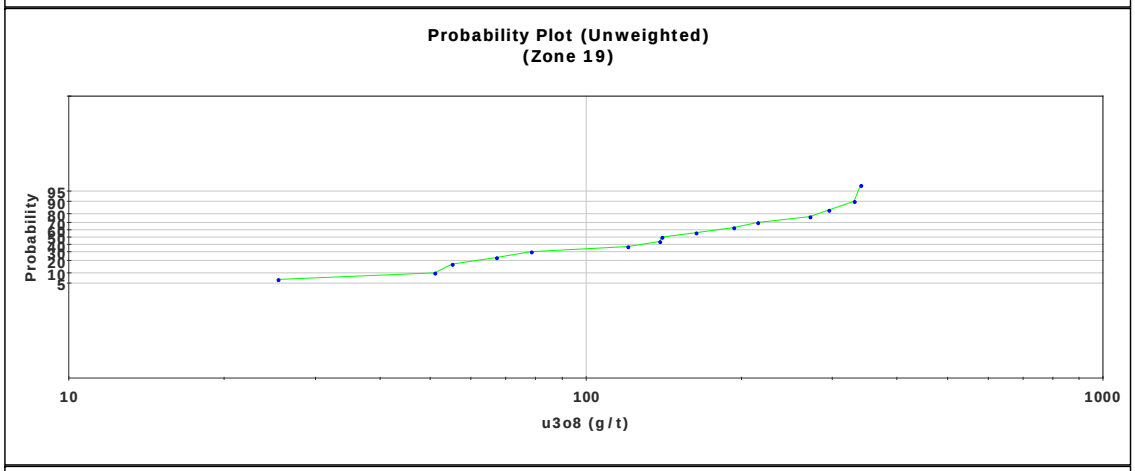
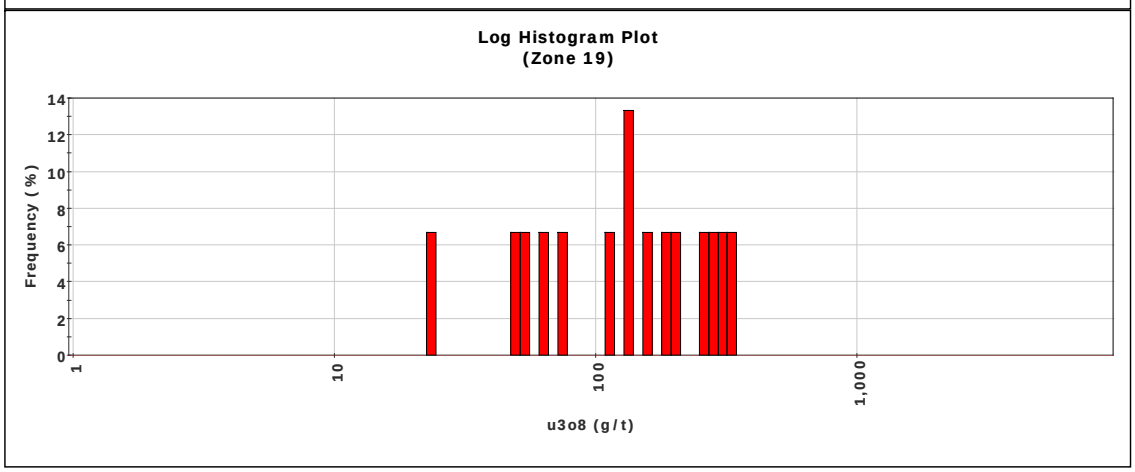
Appendix 2
Composite Statistics

Anomaly A
(Zone 19)

	Unweighted	Weighted	Units
Samples:	15	N/A	
Minimum:	25.33	N/A	g/t
Maximum:	339.33	N/A	g/t
Mean:	165.48	N/A	g/t
Median	140.00	N/A	g/t
Std. Deviation:	101.34	N/A	g/t
Coefficient of Variation:	0.61	N/A	







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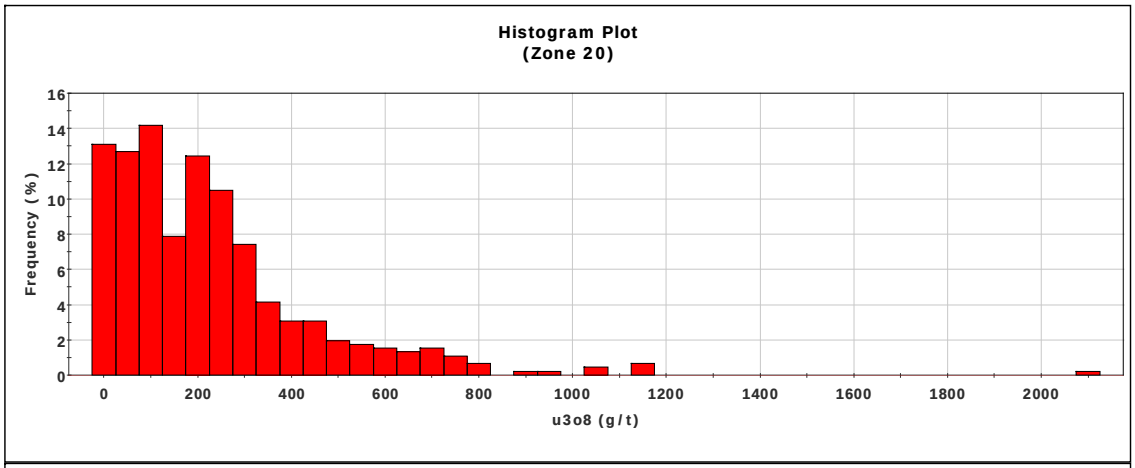
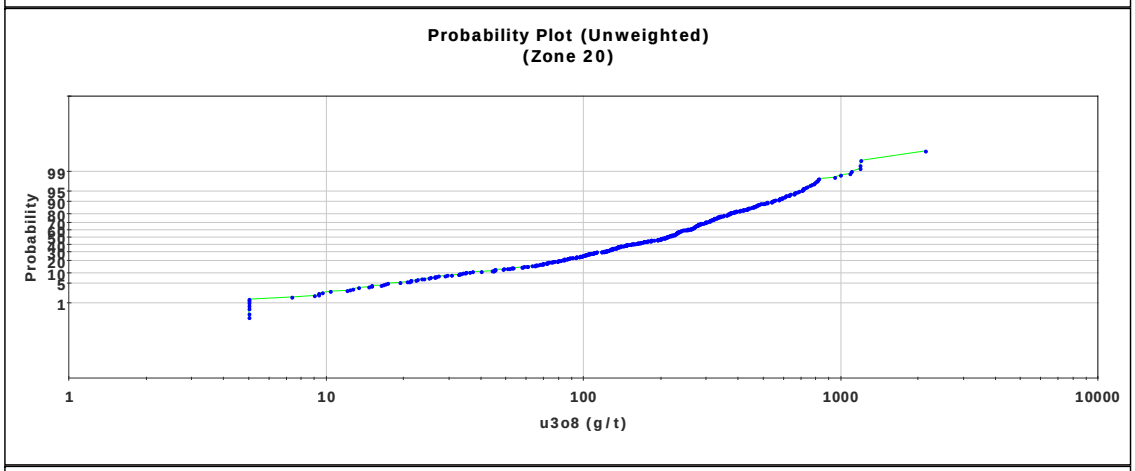
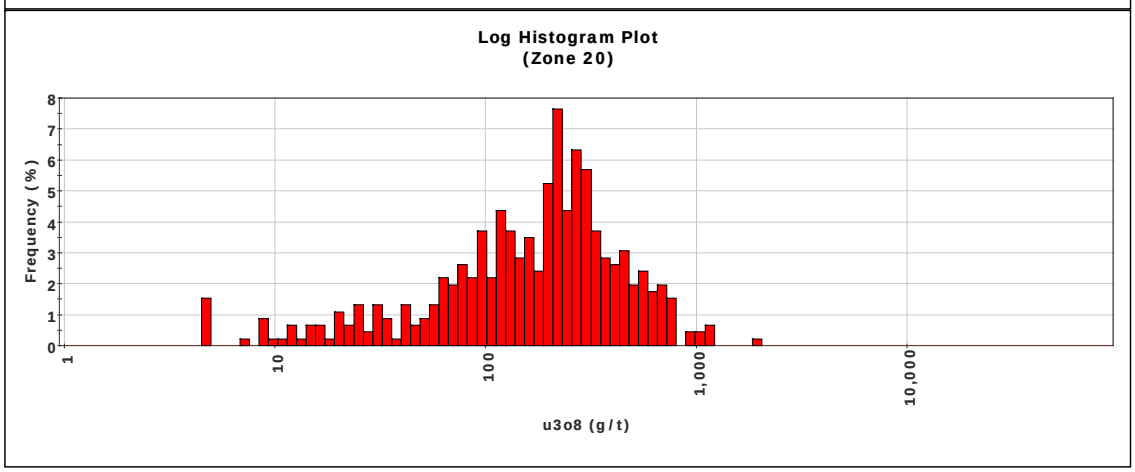
Appendix 2
Composite Statistics

Anomaly A
(Zone 20)

	Unweighted	Weighted	Units
Samples:	458	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	2,132.33	N/A	g/t
Mean:	252.64	N/A	g/t
Median	210.50	N/A	g/t
Std. Deviation:	228.30	N/A	g/t
Coefficient of Variation:	0.90	N/A	







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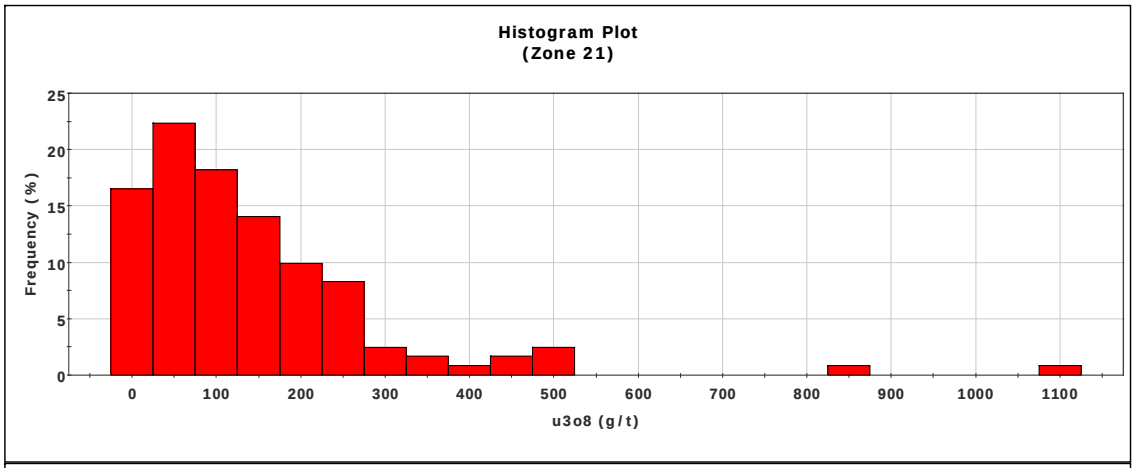
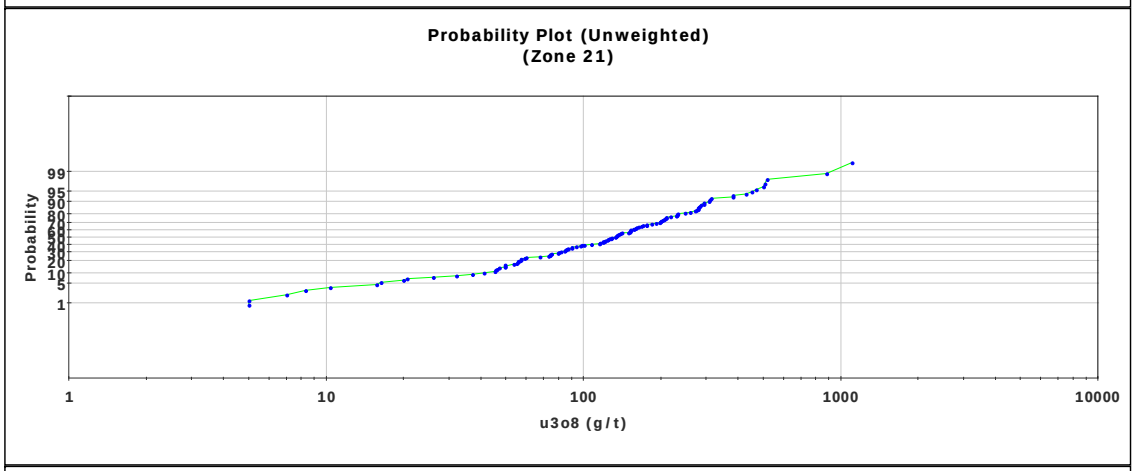
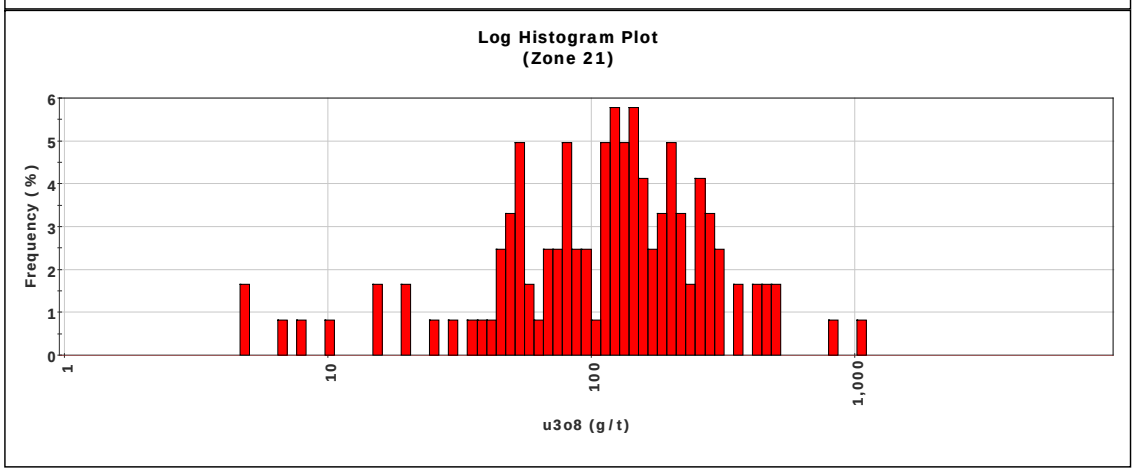
Appendix 2
Composite Statistics

Anomaly A
(Zone 21)

	Unweighted	Weighted	Units
Samples:	121	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,104.67	N/A	g/t
Mean:	167.19	N/A	g/t
Median	133.33	N/A	g/t
Std. Deviation:	156.35	N/A	g/t
Coefficient of Variation:	0.94	N/A	







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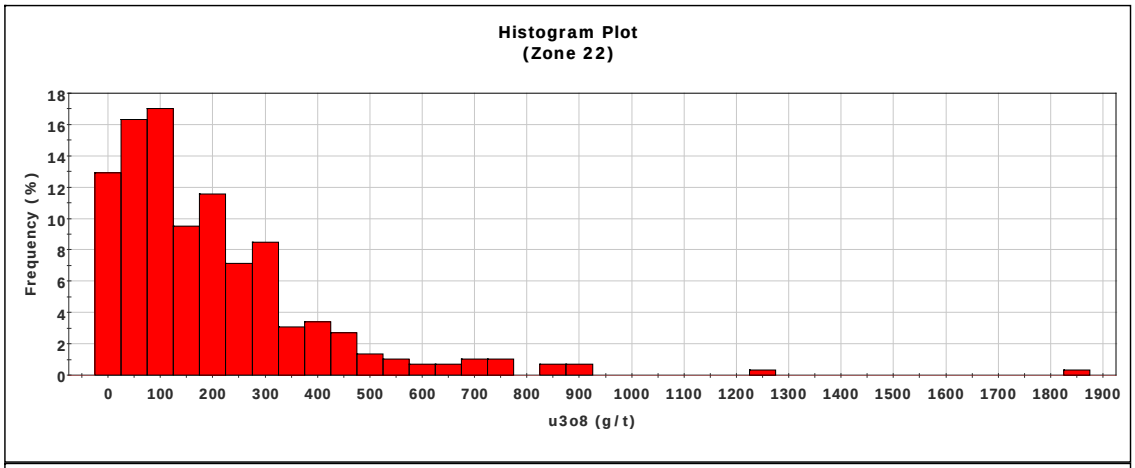
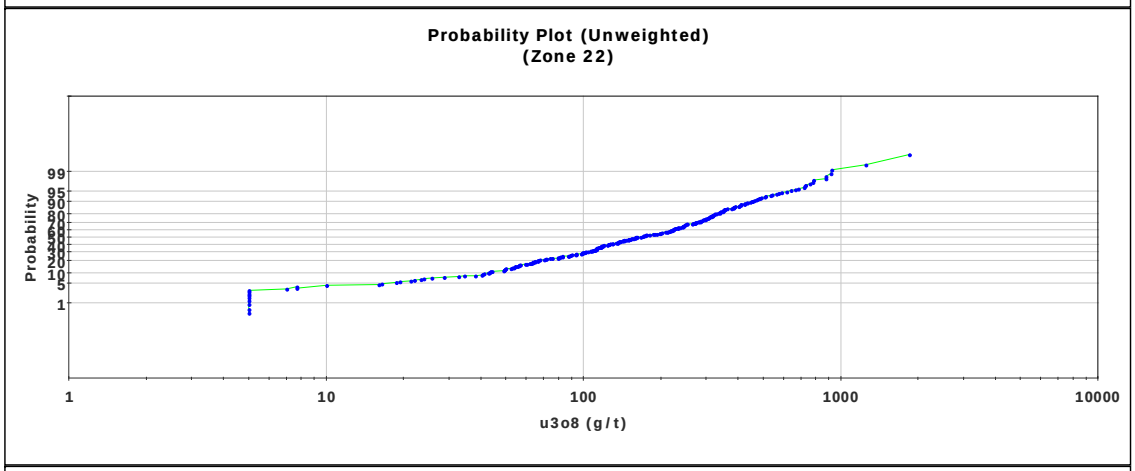
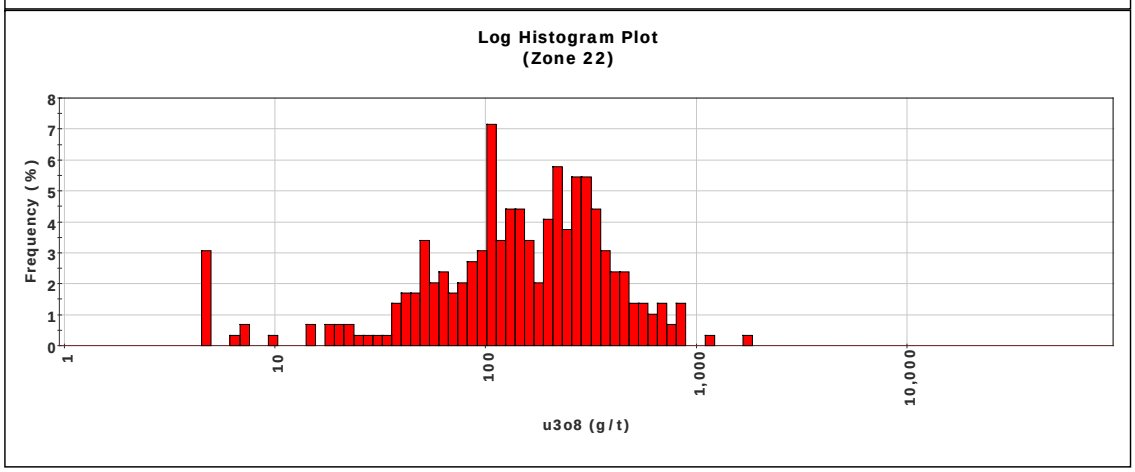
Appendix 2
Composite Statistics

Anomaly A
(Zone 22)

	Unweighted	Weighted	Units
Samples:	294	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,852.00	N/A	g/t
Mean:	224.37	N/A	g/t
Median	161.50	N/A	g/t
Std. Deviation:	212.57	N/A	g/t
Coefficient of Variation:	0.95	N/A	







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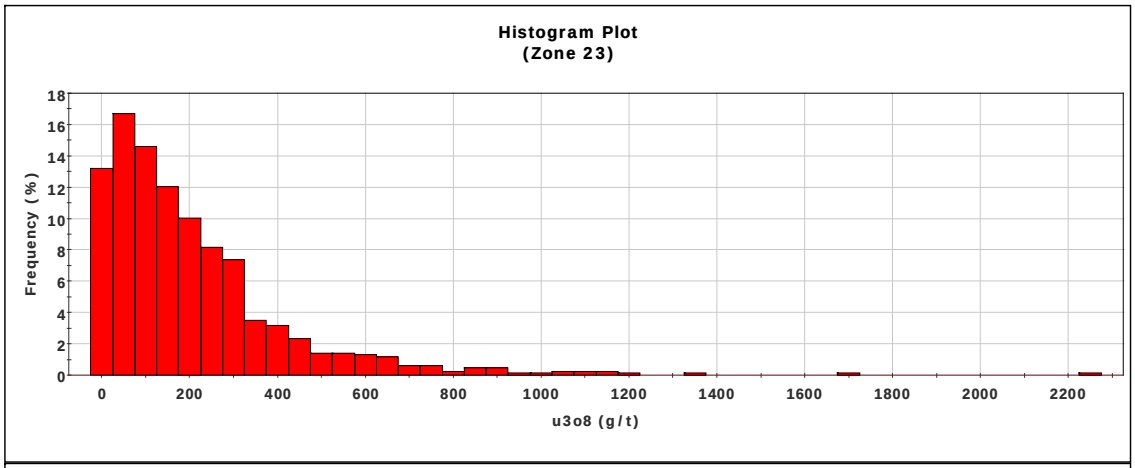
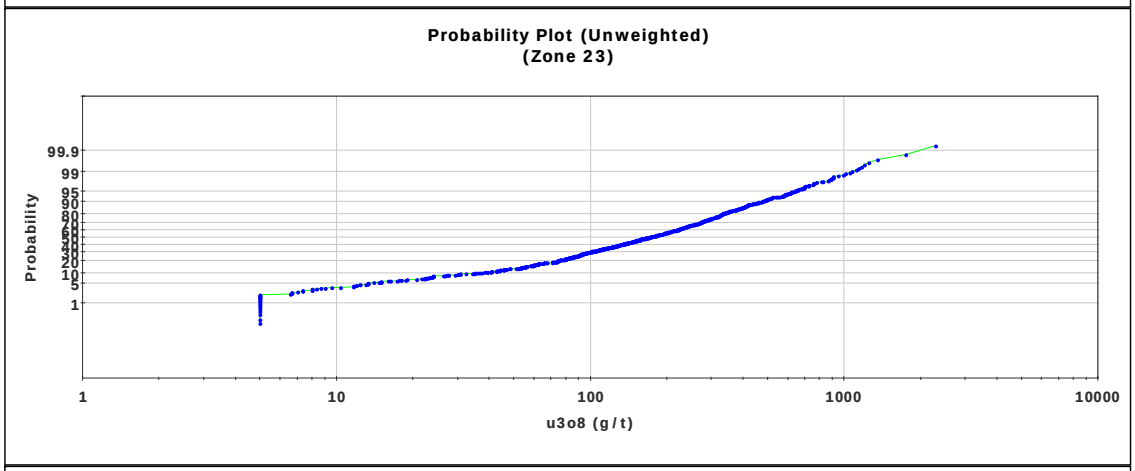
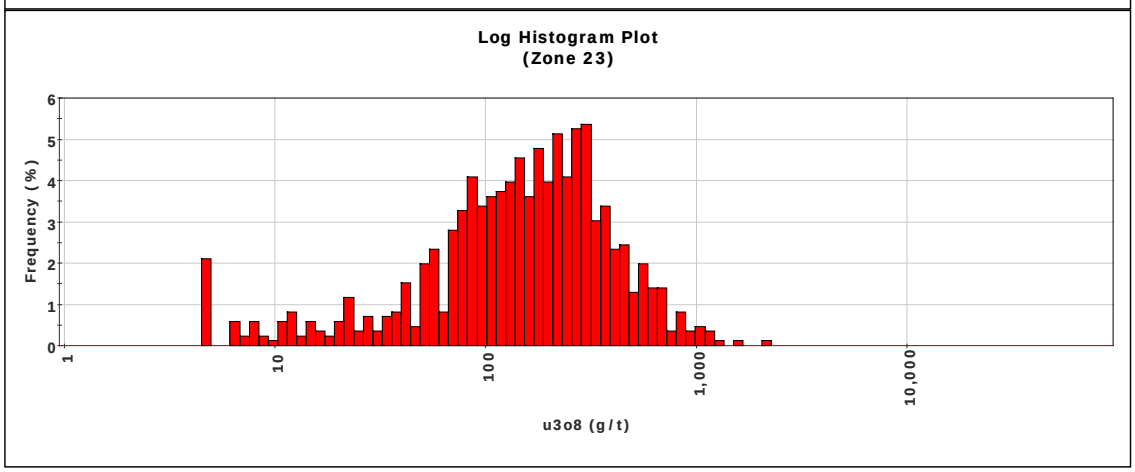
Appendix 2
Composite Statistics

Anomaly A
(Zone 23)

	Unweighted	Weighted	Units
Samples:	857	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	2,282.33	N/A	g/t
Mean:	229.22	N/A	g/t
Median	171.67	N/A	g/t
Std. Deviation:	220.02	N/A	g/t
Coefficient of Variation:	0.96	N/A	







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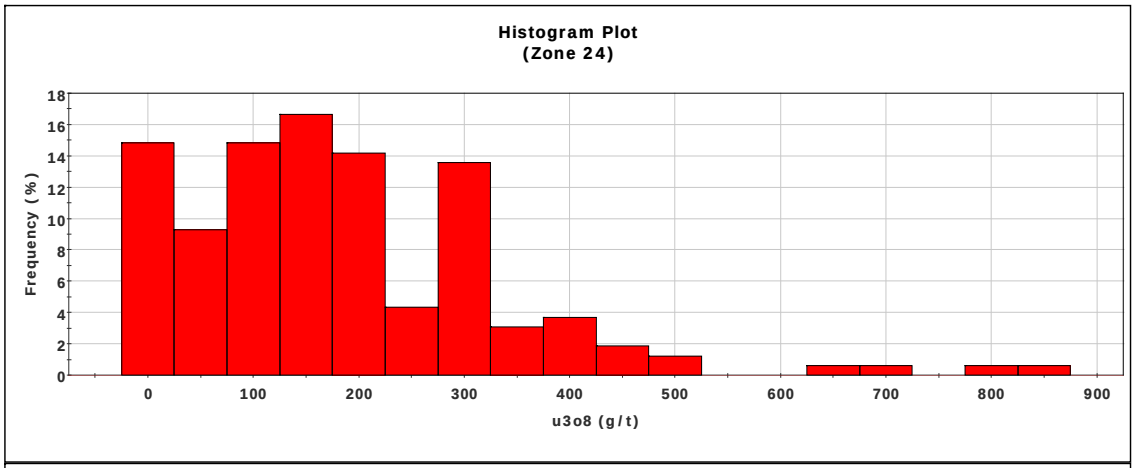
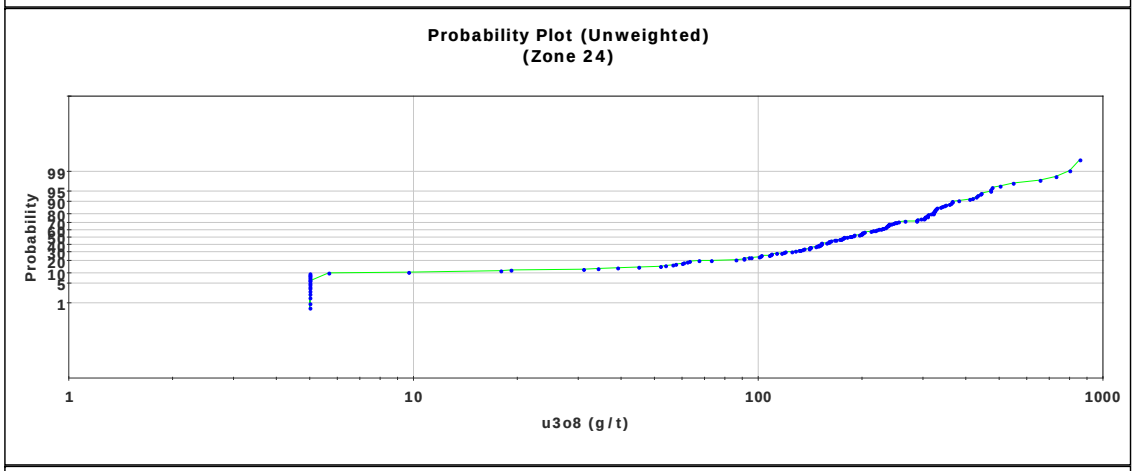
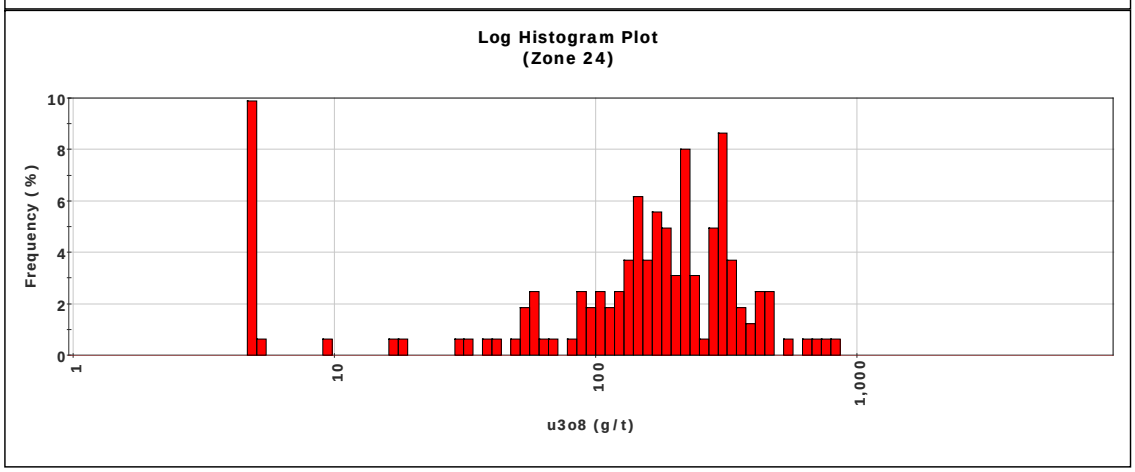
Appendix 2
Composite Statistics

Anomaly A
(Zone 24)

	Unweighted	Weighted	Units
Samples:	162	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	855.00	N/A	g/t
Mean:	204.81	N/A	g/t
Median	179.00	N/A	g/t
Std. Deviation:	153.58	N/A	g/t
Coefficient of Variation:	0.75	N/A	







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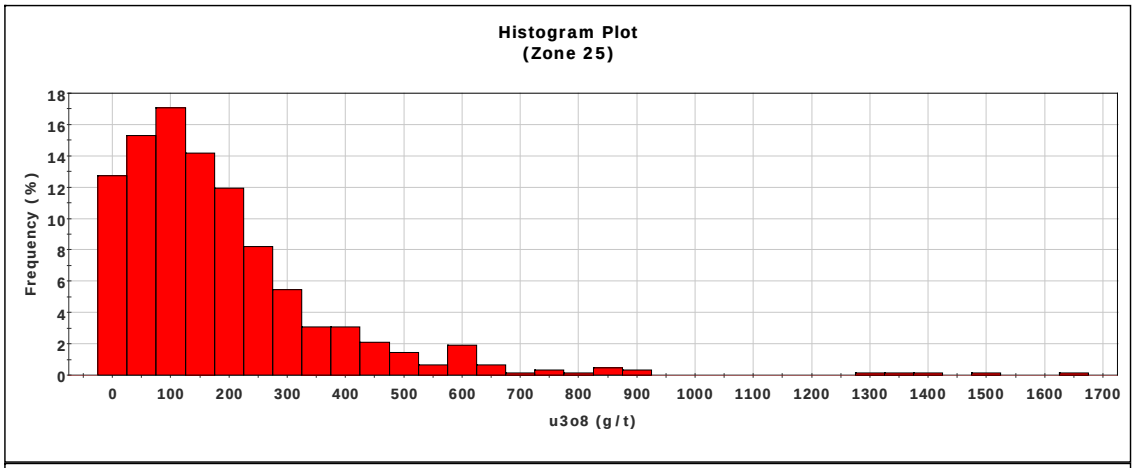
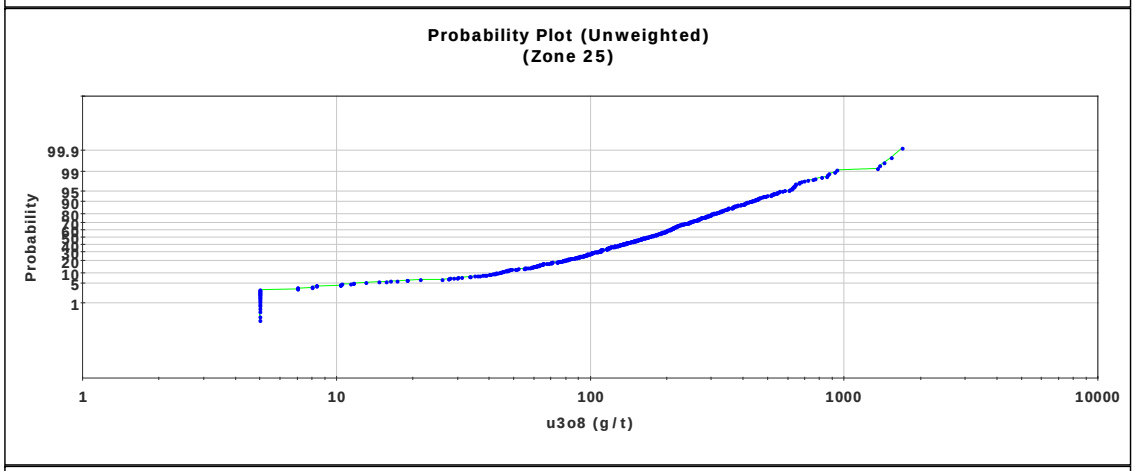
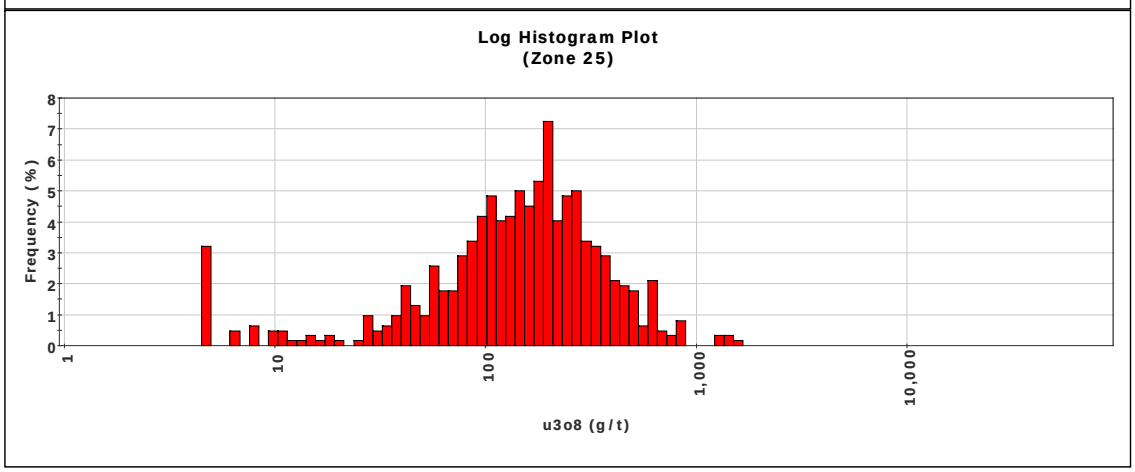
Appendix 2
Composite Statistics

Anomaly A
(Zone 25)

	Unweighted	Weighted	Units
Samples:	621	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,688.67	N/A	g/t
Mean:	213.28	N/A	g/t
Median	167.00	N/A	g/t
Std. Deviation:	197.99	N/A	g/t
Coefficient of Variation:	0.93	N/A	







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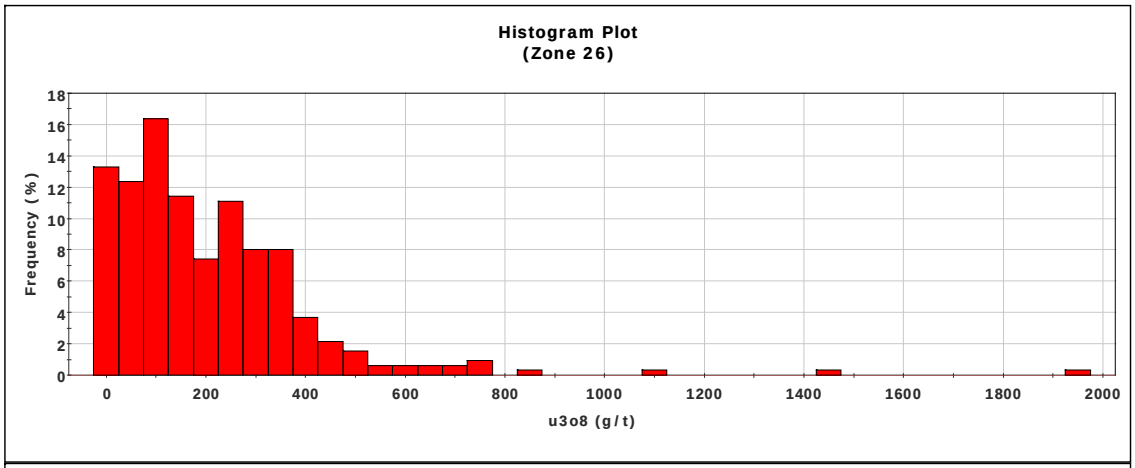
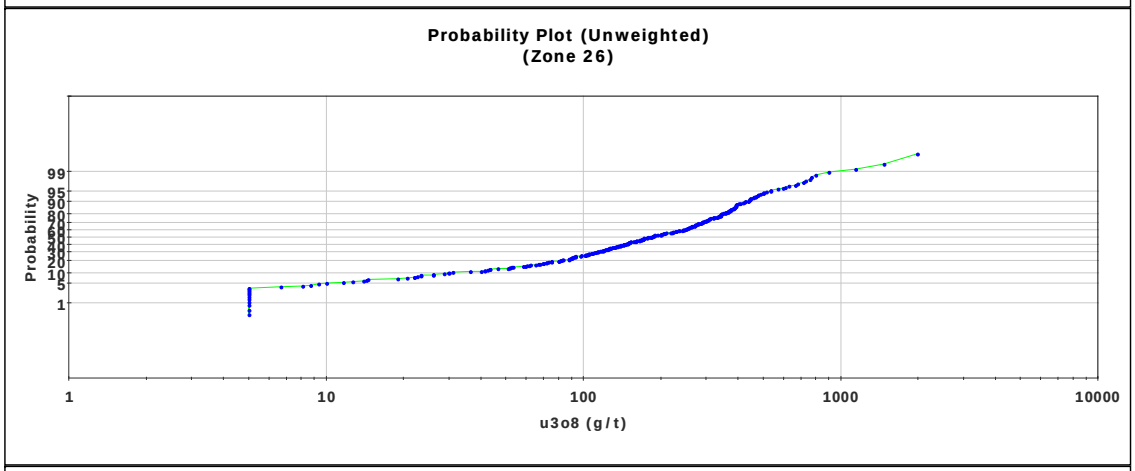
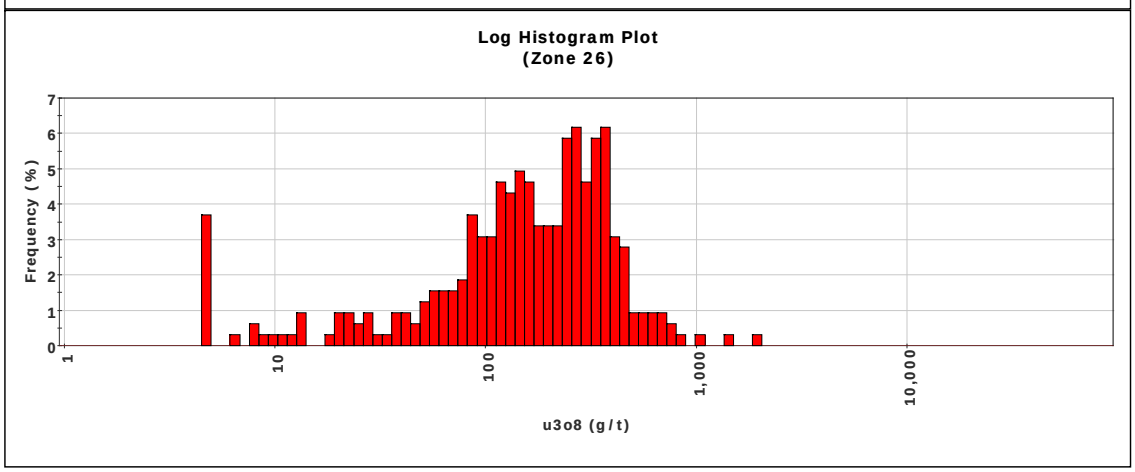
Appendix 2
Composite Statistics

Anomaly A
(Zone 26)

	Unweighted	Weighted	Units
Samples:	324	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,988.67	N/A	g/t
Mean:	229.21	N/A	g/t
Median	182.33	N/A	g/t
Std. Deviation:	207.94	N/A	g/t
Coefficient of Variation:	0.91	N/A	







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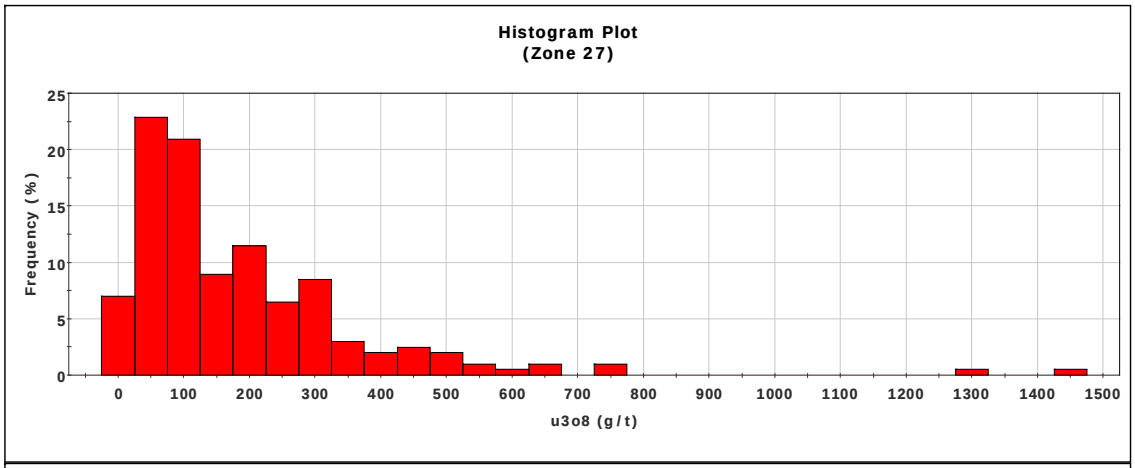
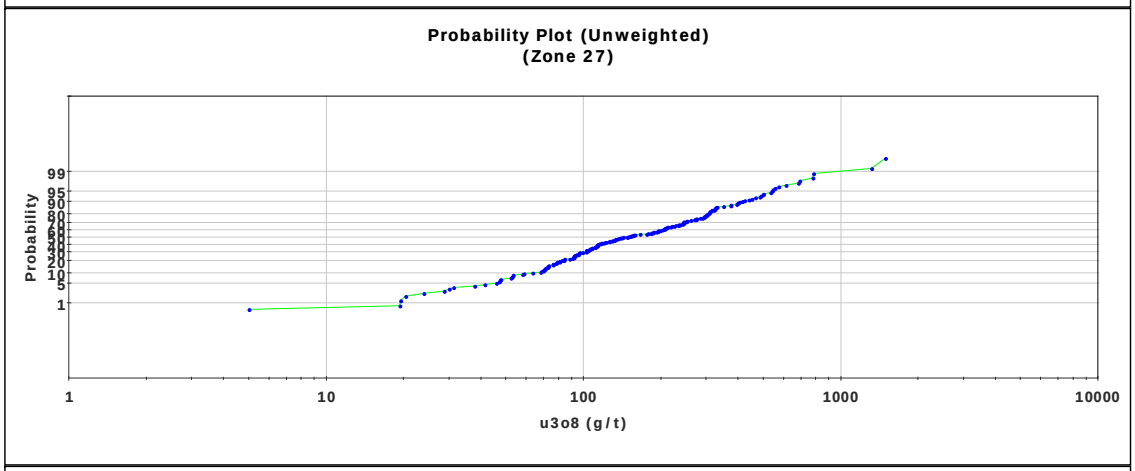
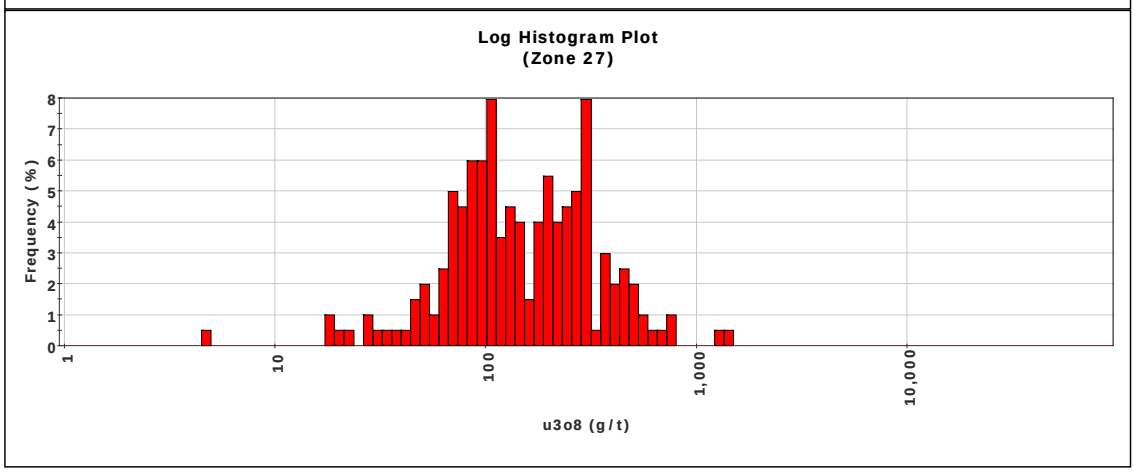
Appendix 2
Composite Statistics

Anomaly A
(Zone 27)

	Unweighted	Weighted	Units
Samples:	201	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,492.33	N/A	g/t
Mean:	210.83	N/A	g/t
Median	147.90	N/A	g/t
Std. Deviation:	191.99	N/A	g/t
Coefficient of Variation:	0.91	N/A	







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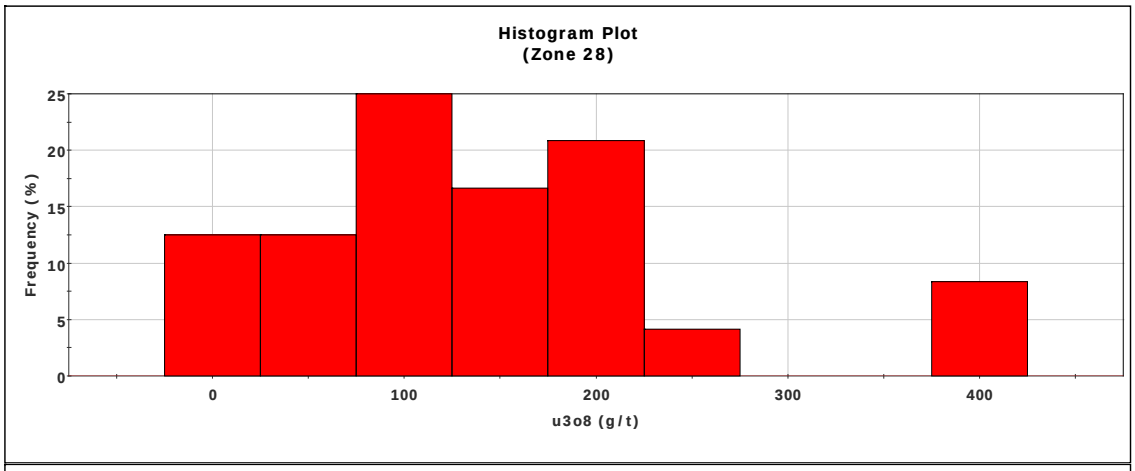
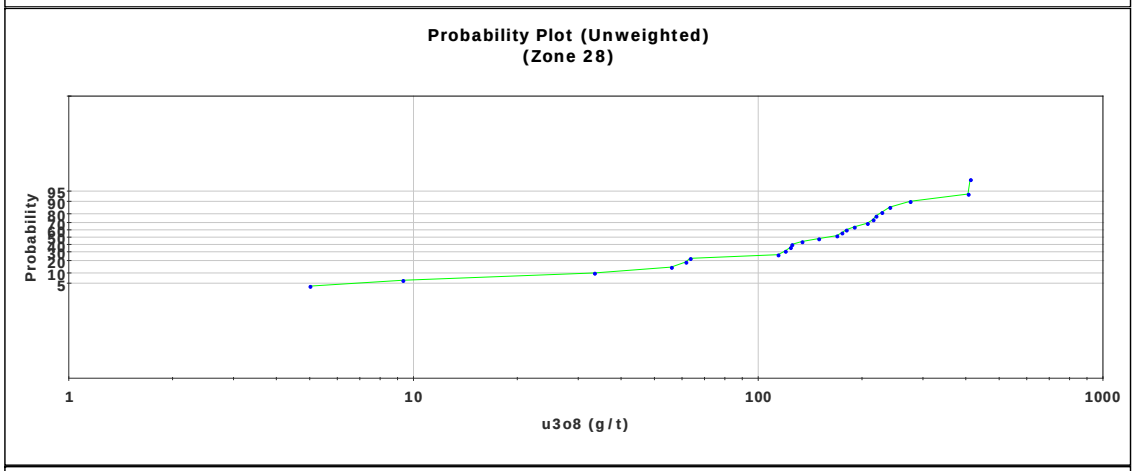
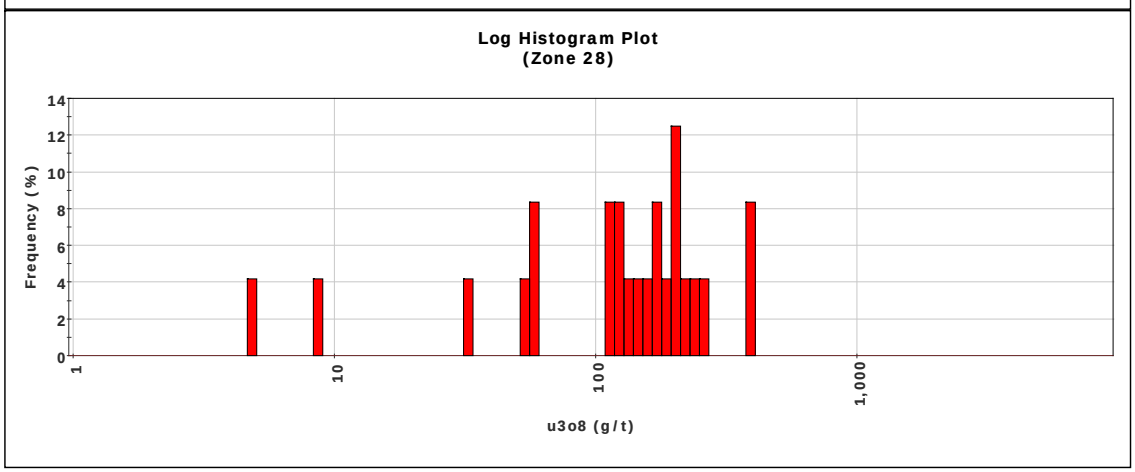
Appendix 2
Composite Statistics

Anomaly A
(Zone 28)

	Unweighted	Weighted	Units
Samples:	24	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	411.80	N/A	g/t
Mean:	162.93	N/A	g/t
Median	159.17	N/A	g/t
Std. Deviation:	103.74	N/A	g/t
Coefficient of Variation:	0.64	N/A	







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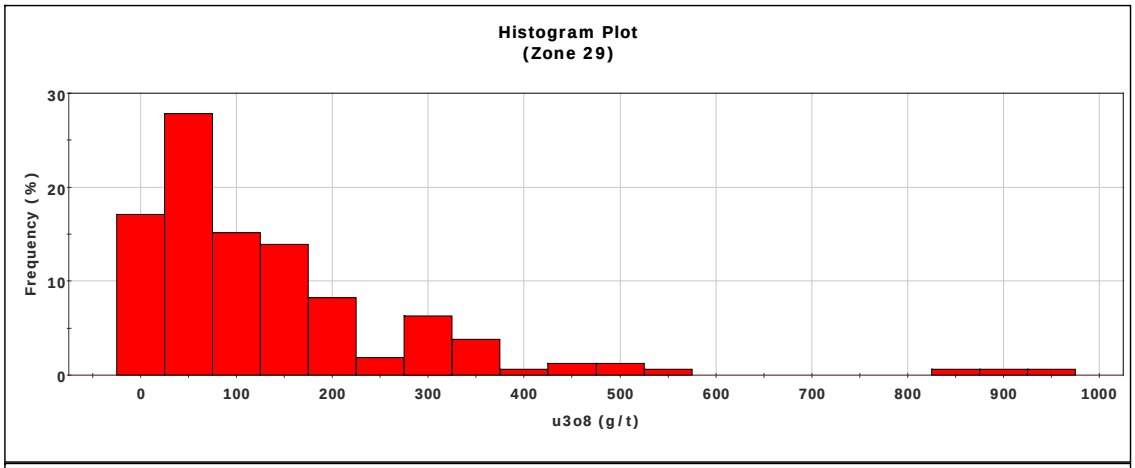
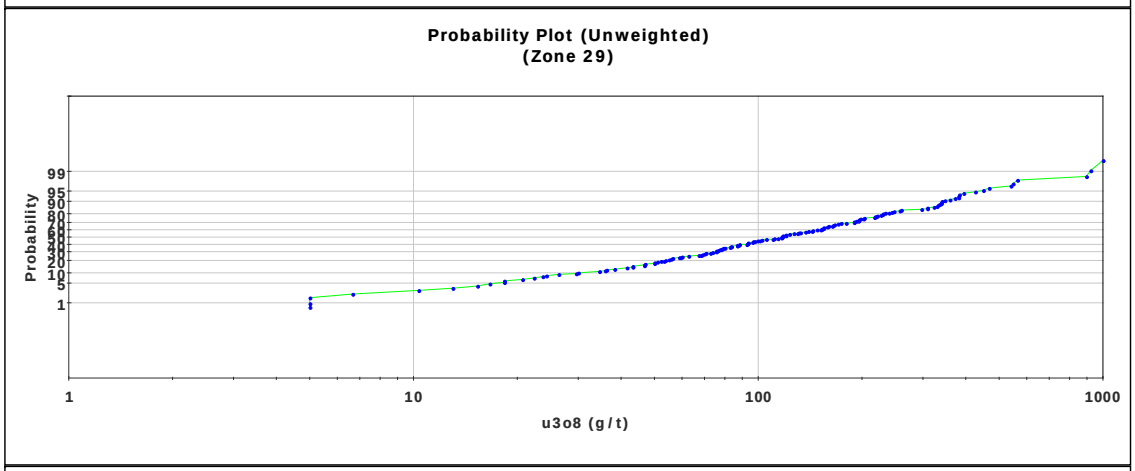
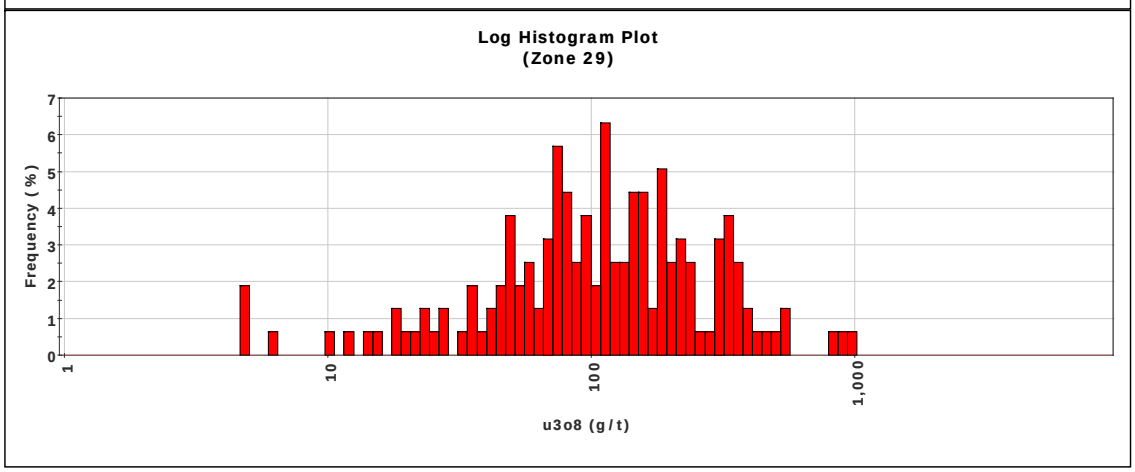
Appendix 2
Composite Statistics

Anomaly A
(Zone 29)

	Unweighted	Weighted	Units
Samples:	158	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	998.33	N/A	g/t
Mean:	163.53	N/A	g/t
Median	117.17	N/A	g/t
Std. Deviation:	160.52	N/A	g/t
Coefficient of Variation:	0.98	N/A	







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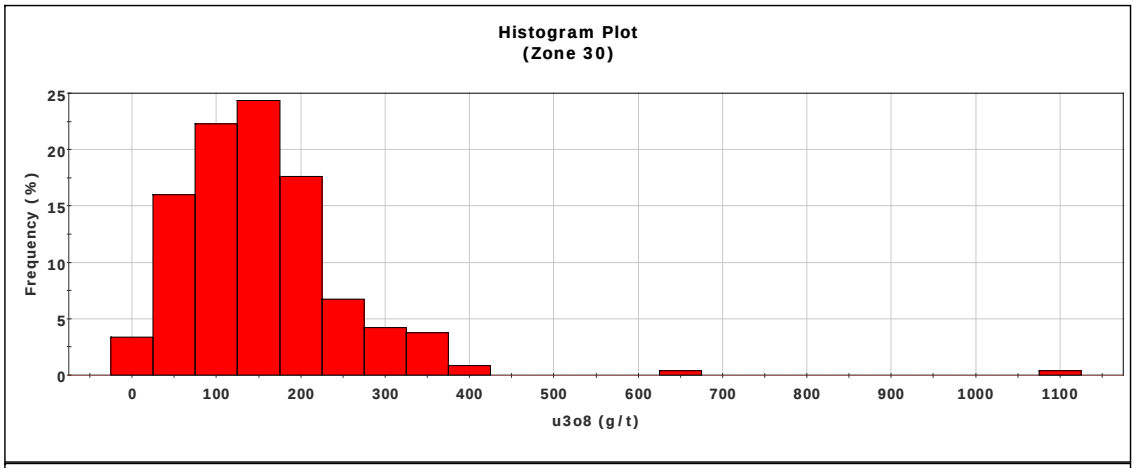
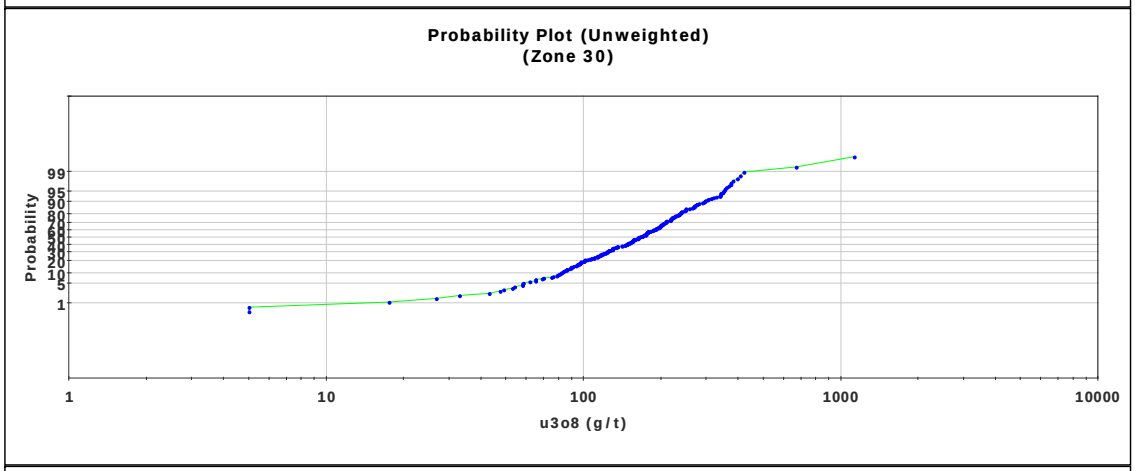
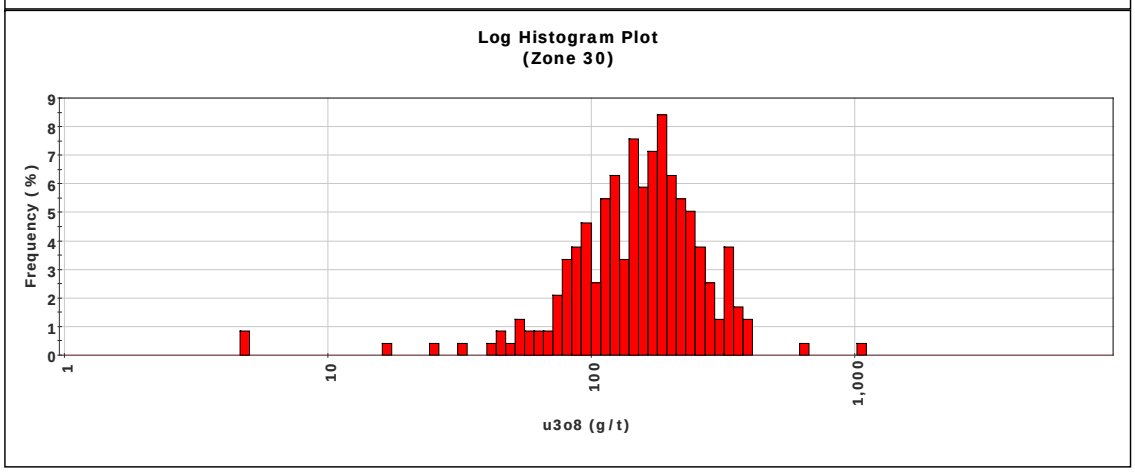
Appendix 2
Composite Statistics

Anomaly A
(Zone 30)

	Unweighted	Weighted	Units
Samples:	238	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,127.00	N/A	g/t
Mean:	180.26	N/A	g/t
Median	164.50	N/A	g/t
Std. Deviation:	107.89	N/A	g/t
Coefficient of Variation:	0.60	N/A	







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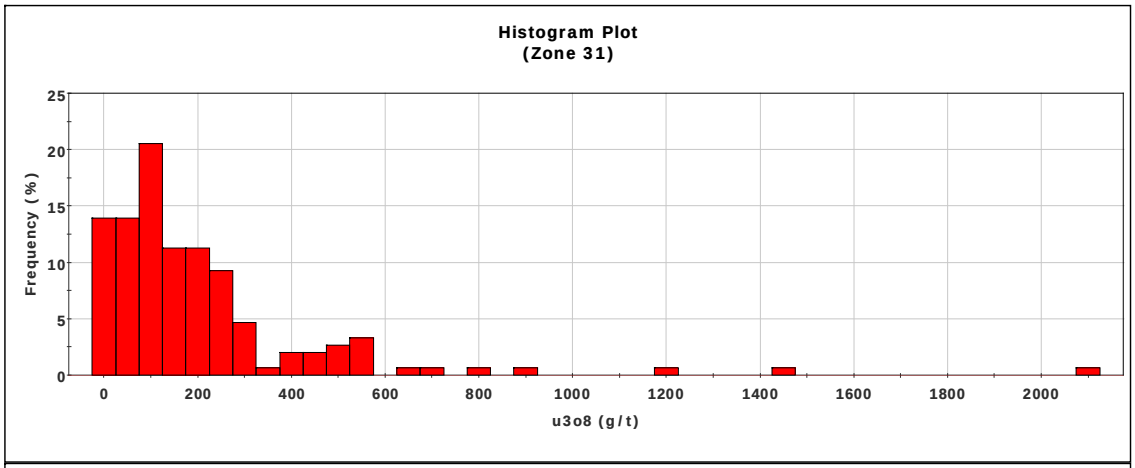
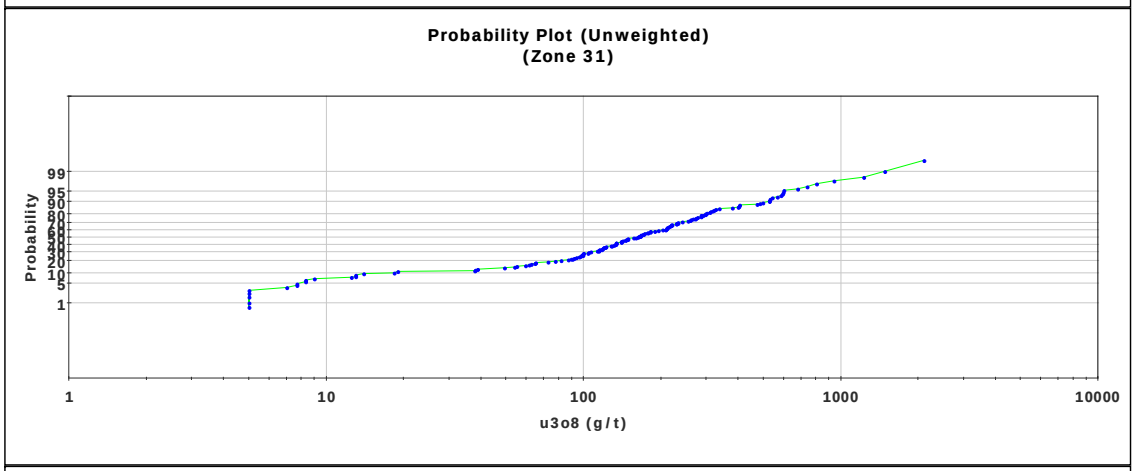
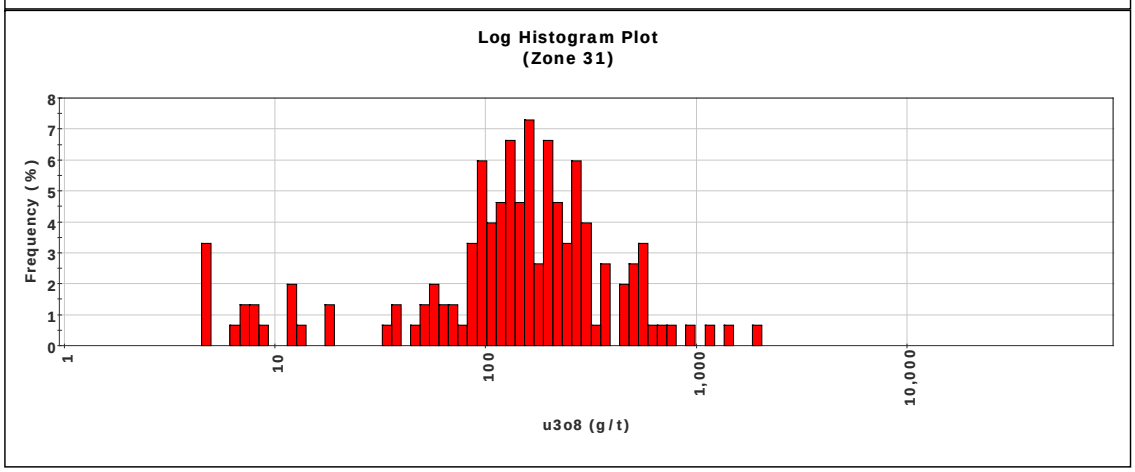
Appendix 2
Composite Statistics

Anomaly A
(Zone 31)

	Unweighted	Weighted	Units
Samples:	151	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	2,110.00	N/A	g/t
Mean:	230.55	N/A	g/t
Median	162.43	N/A	g/t
Std. Deviation:	265.35	N/A	g/t
Coefficient of Variation:	1.15	N/A	







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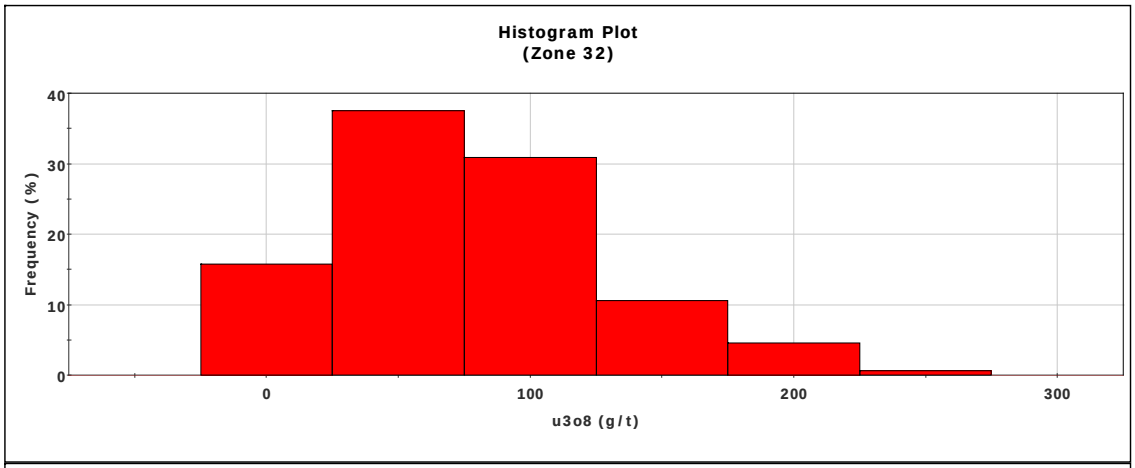
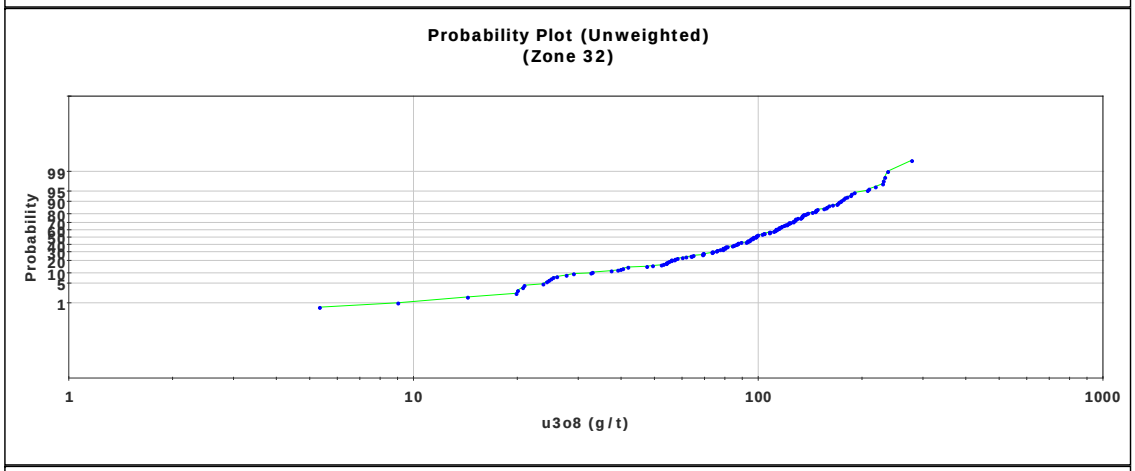
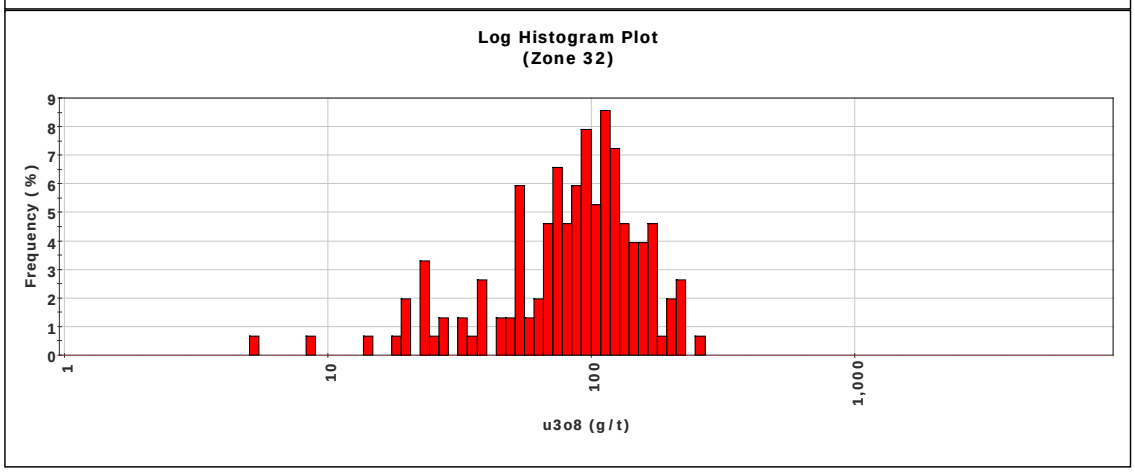
Appendix 2
Composite Statistics

Anomaly A
(Zone 32)

	Unweighted	Weighted	Units
Samples:	152	N/A	
Minimum:	5.33	N/A	g/t
Maximum:	278.67	N/A	g/t
Mean:	101.86	N/A	g/t
Median	97.33	N/A	g/t
Std. Deviation:	52.79	N/A	g/t
Coefficient of Variation:	0.52	N/A	







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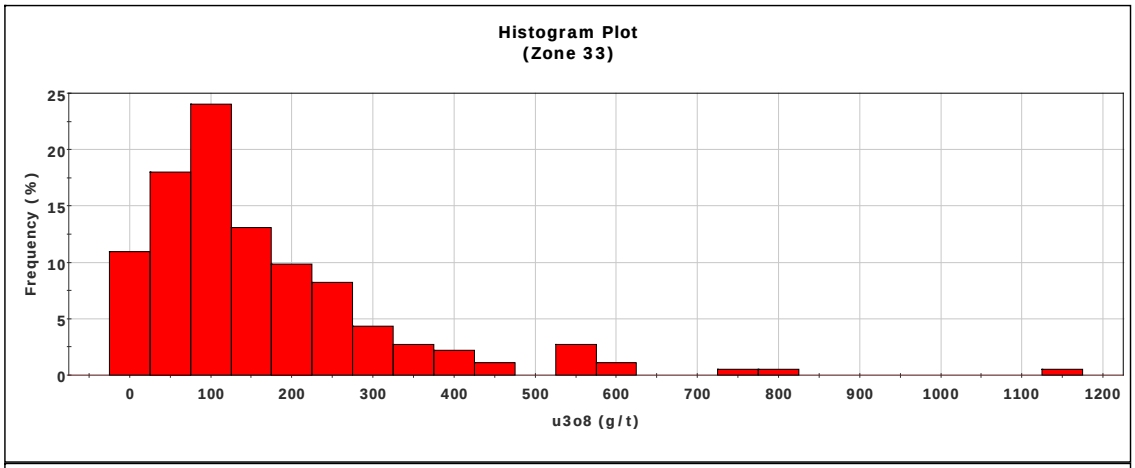
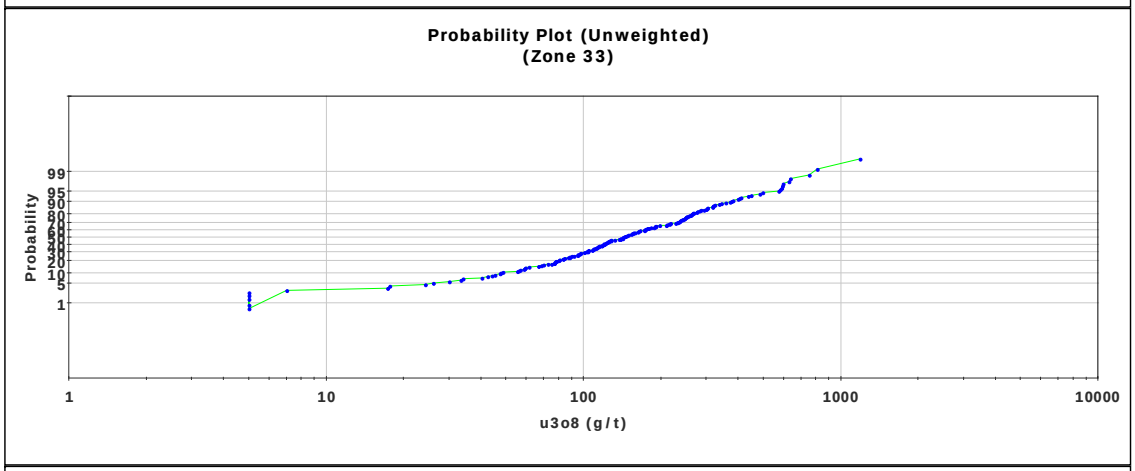
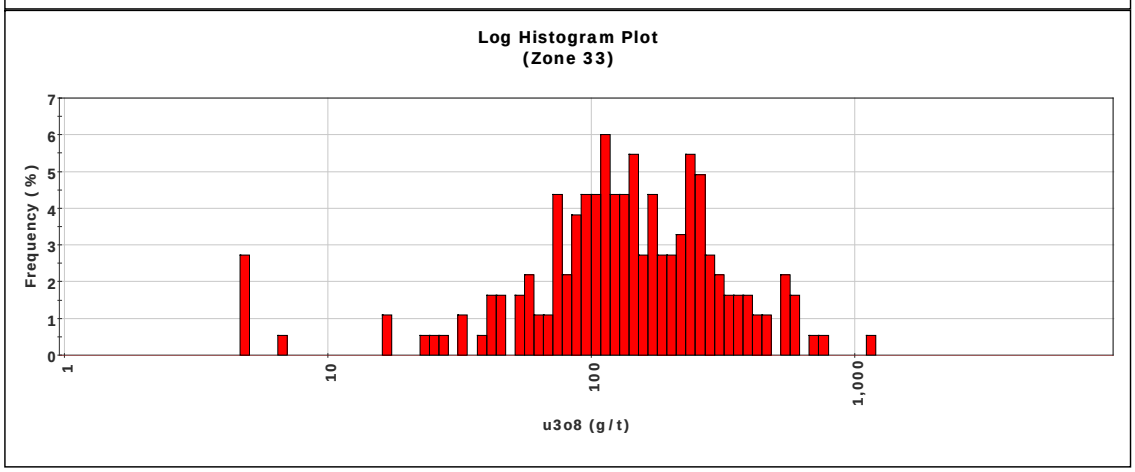
Appendix 2
Composite Statistics

Anomaly A
(Zone 33)

	Unweighted	Weighted	Units
Samples:	183	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,188.00	N/A	g/t
Mean:	191.16	N/A	g/t
Median	143.00	N/A	g/t
Std. Deviation:	163.78	N/A	g/t
Coefficient of Variation:	0.86	N/A	







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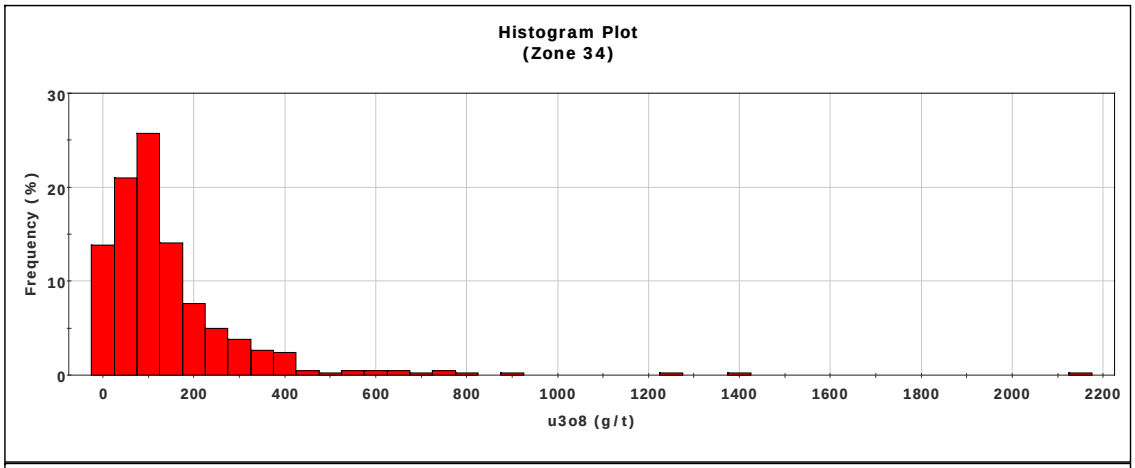
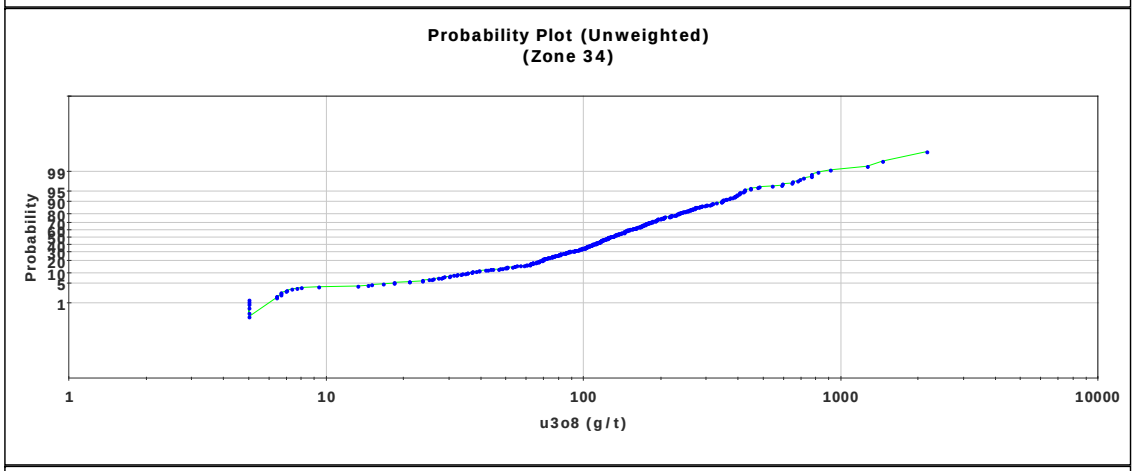
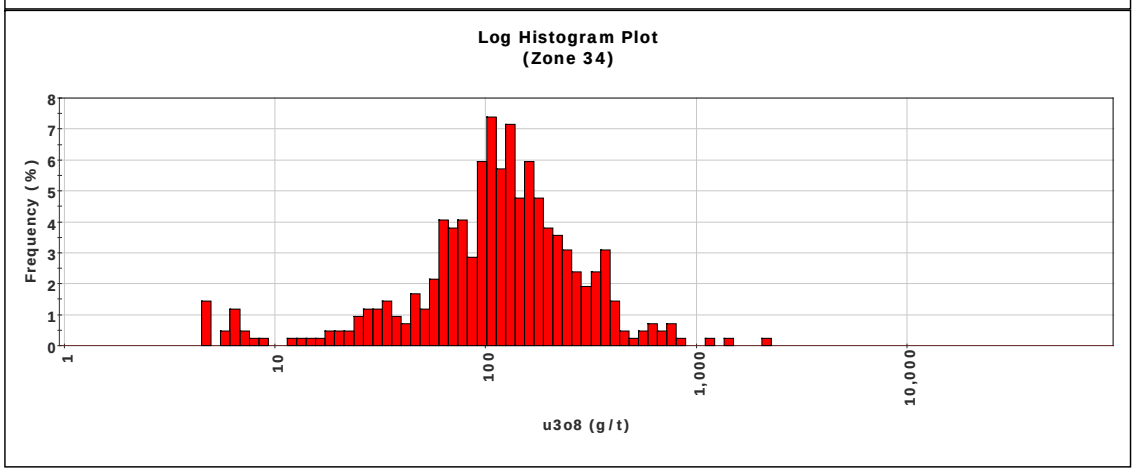
Appendix 2
Composite Statistics

Anomaly A
(Zone 34)

	Unweighted	Weighted	Units
Samples:	420	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	2,165.33	N/A	g/t
Mean:	172.35	N/A	g/t
Median	126.00	N/A	g/t
Std. Deviation:	186.60	N/A	g/t
Coefficient of Variation:	1.08	N/A	







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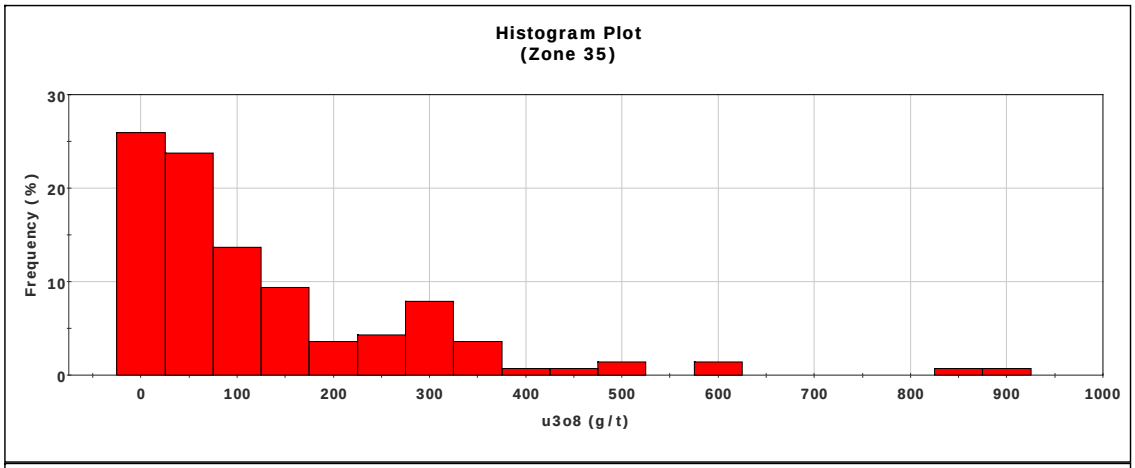
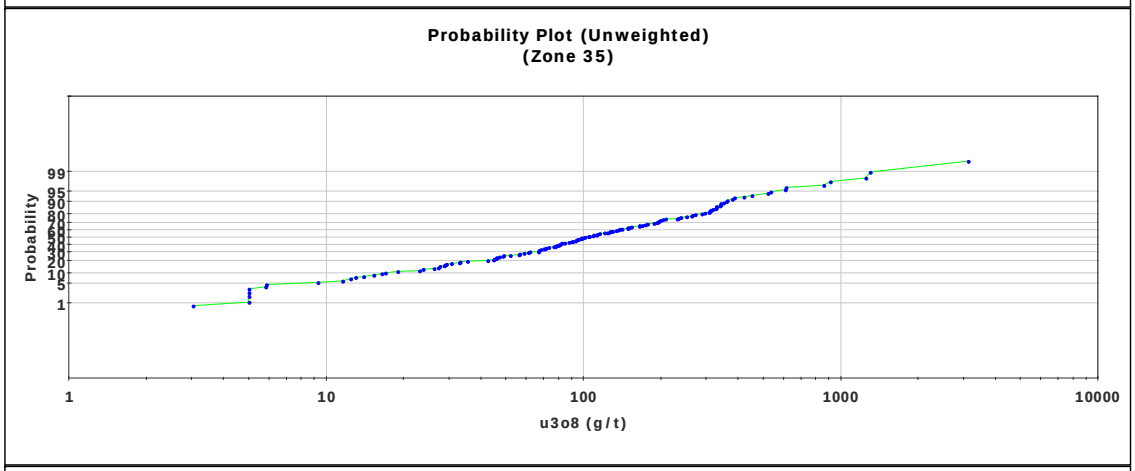
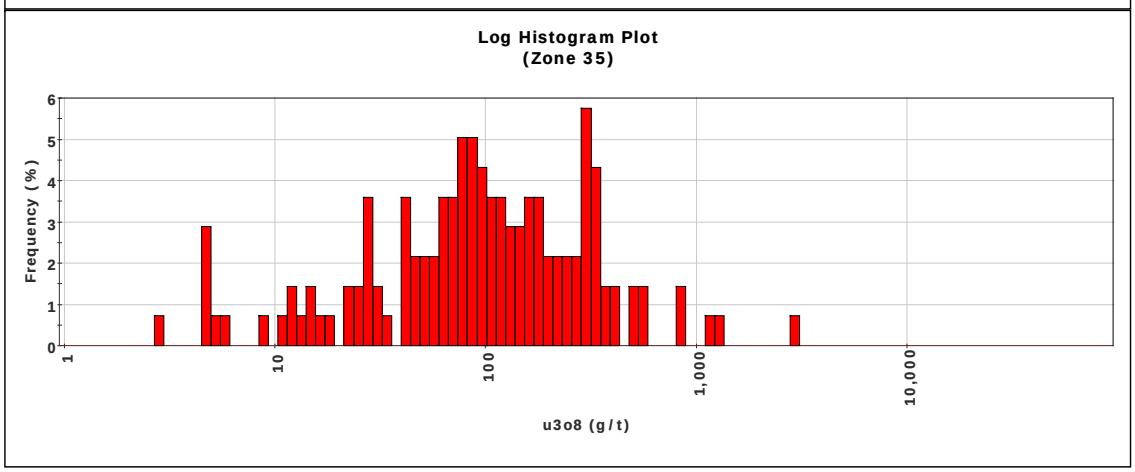
Appendix 2
Composite Statistics

Anomaly A
(Zone 35)

	Unweighted	Weighted	Units
Samples:	139	N/A	
Minimum:	3.04	N/A	g/t
Maximum:	3,132.13	N/A	g/t
Mean:	193.17	N/A	g/t
Median	101.33	N/A	g/t
Std. Deviation:	324.06	N/A	g/t
Coefficient of Variation:	1.68	N/A	







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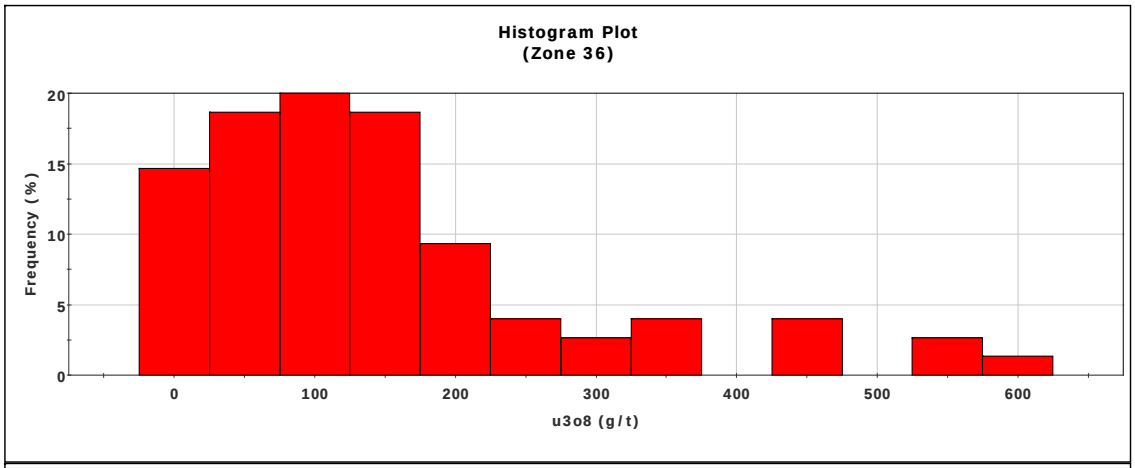
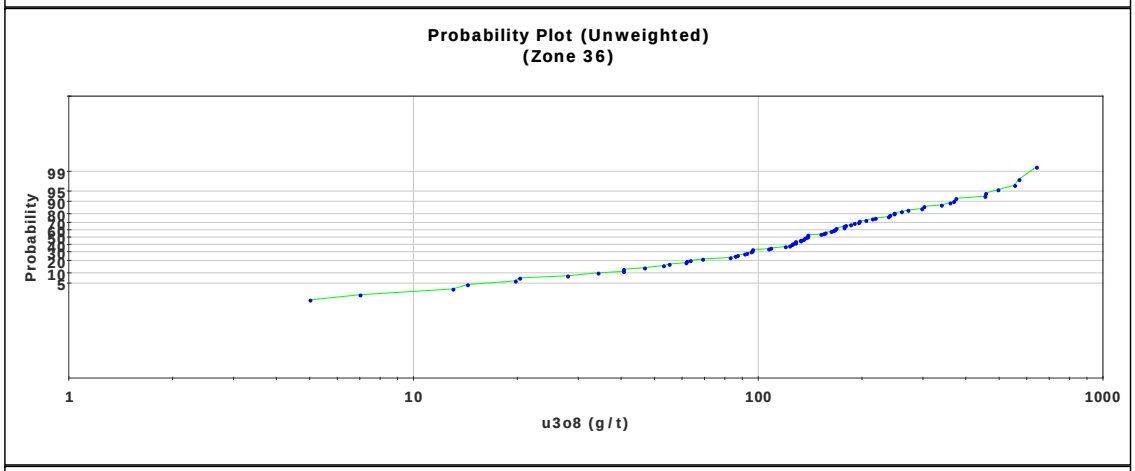
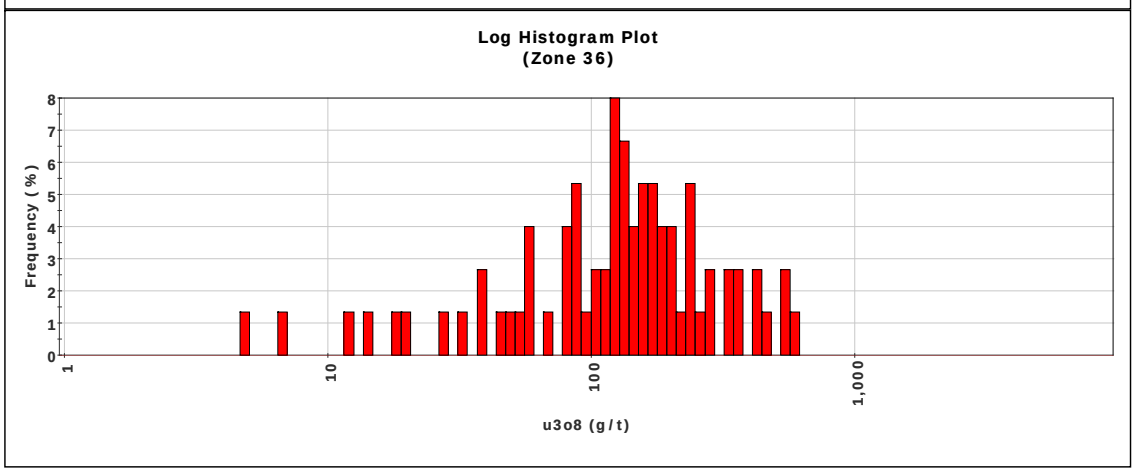
Appendix 2
Composite Statistics

Anomaly A
(Zone 36)

	Unweighted	Weighted	Units
Samples:	75	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	639.67	N/A	g/t
Mean:	174.04	N/A	g/t
Median	138.67	N/A	g/t
Std. Deviation:	136.94	N/A	g/t
Coefficient of Variation:	0.79	N/A	







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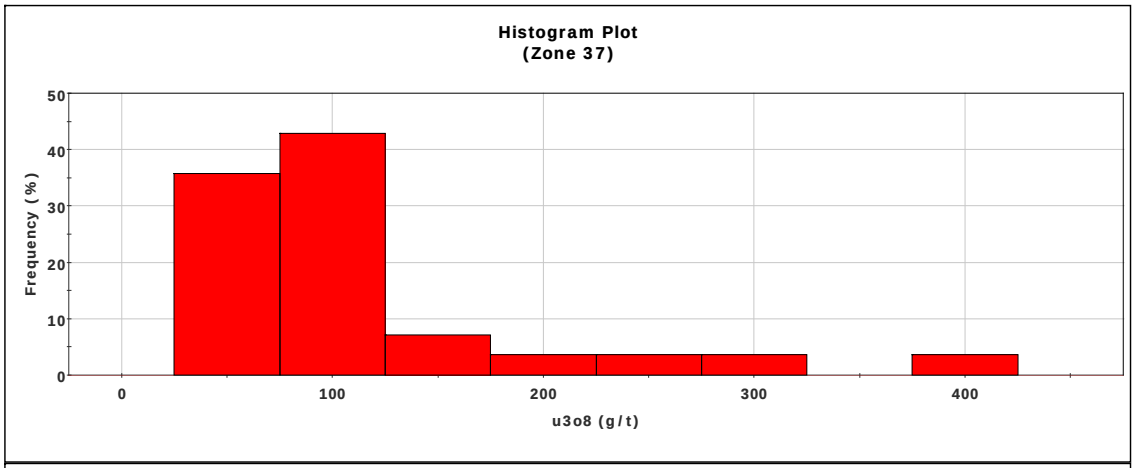
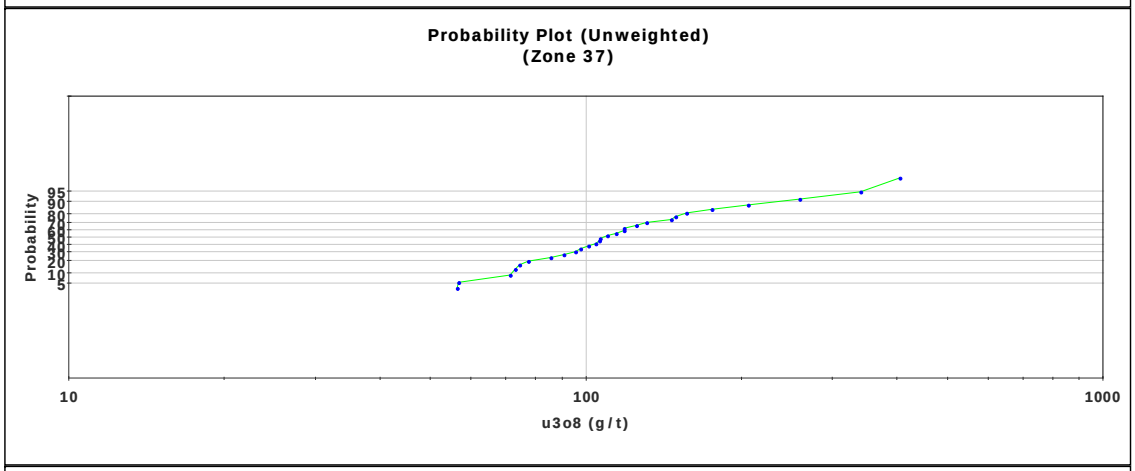
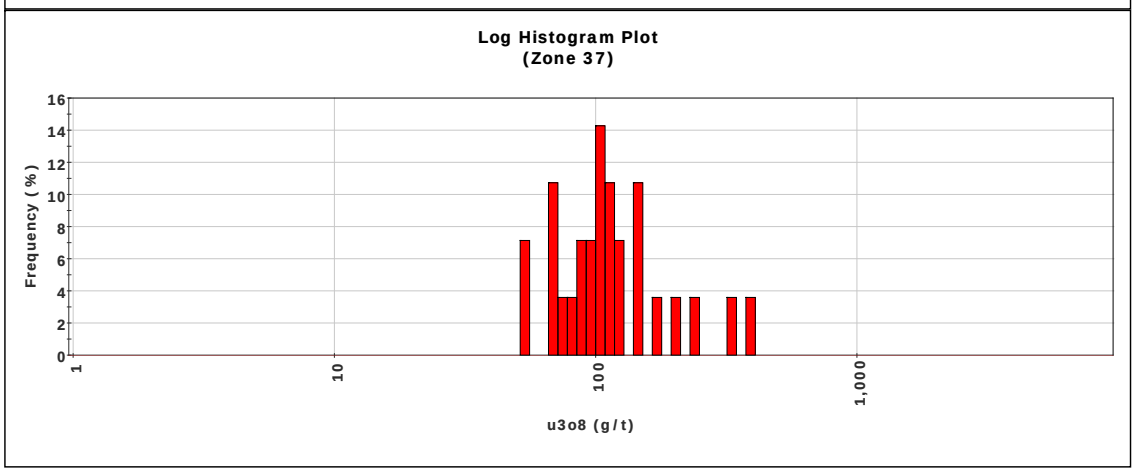
Appendix 2
Composite Statistics

Anomaly A
(Zone 37)

	Unweighted	Weighted	Units
Samples:	28	N/A	
Minimum:	56.33	N/A	g/t
Maximum:	404.00	N/A	g/t
Mean:	133.90	N/A	g/t
Median	108.17	N/A	g/t
Std. Deviation:	79.55	N/A	g/t
Coefficient of Variation:	0.59	N/A	







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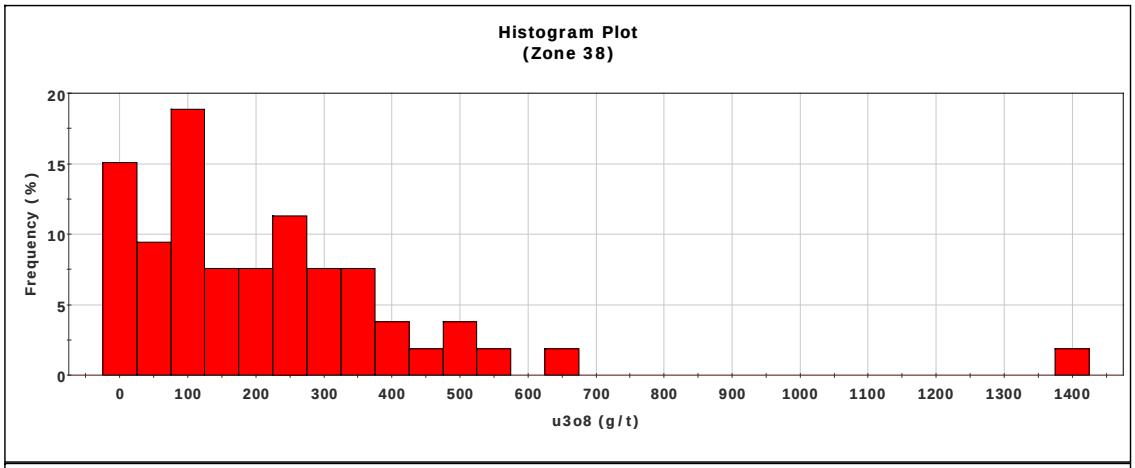
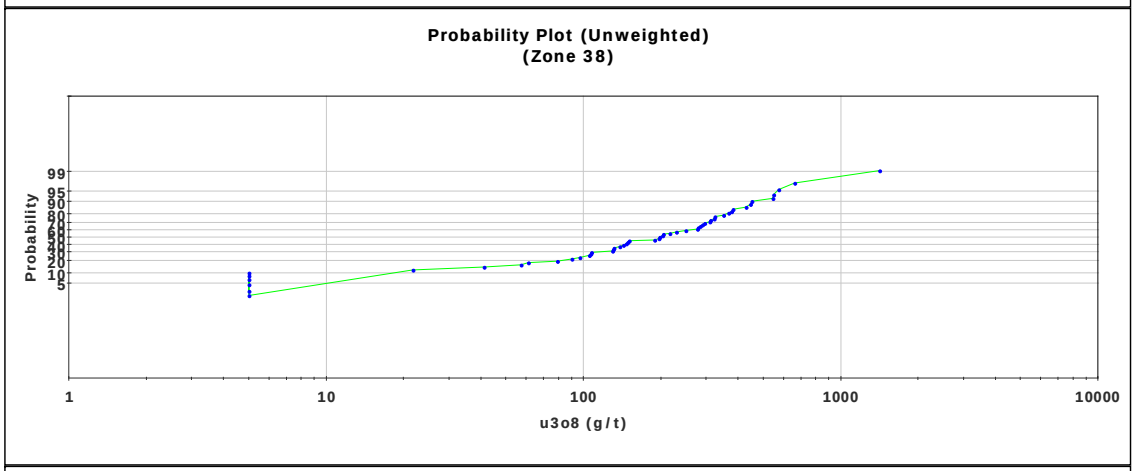
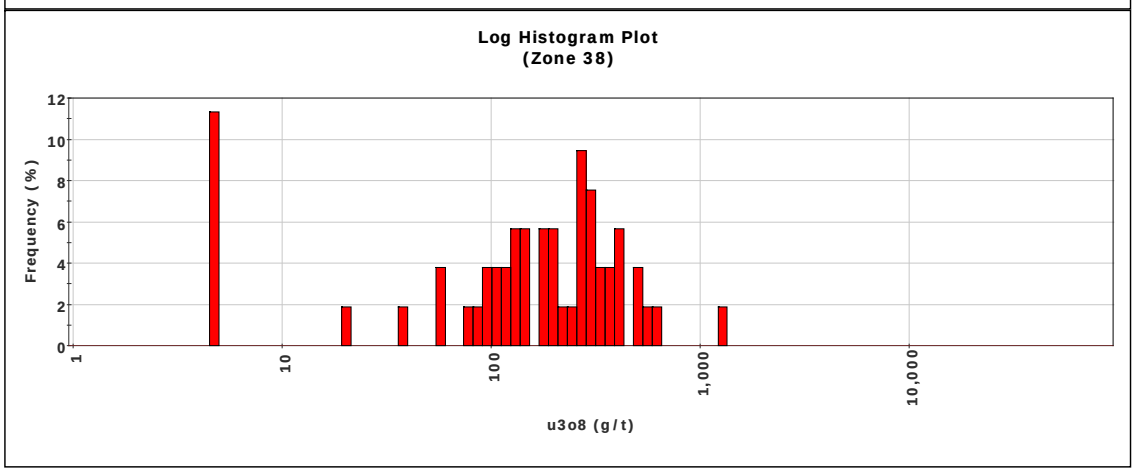
Appendix 2
Composite Statistics

Anomaly A
(Zone 38)

	Unweighted	Weighted	Units
Samples:	53	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,417.00	N/A	g/t
Mean:	242.38	N/A	g/t
Median	198.28	N/A	g/t
Std. Deviation:	229.18	N/A	g/t
Coefficient of Variation:	0.95	N/A	







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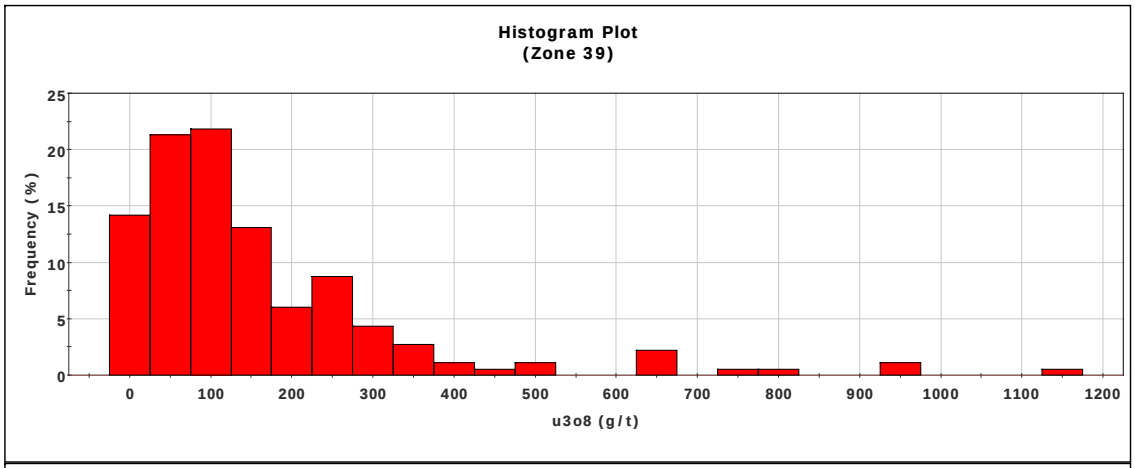
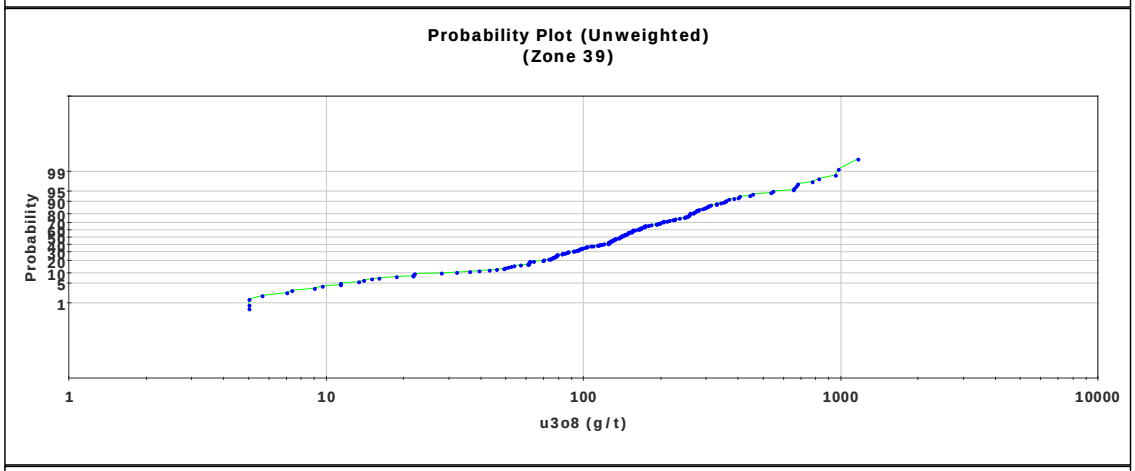
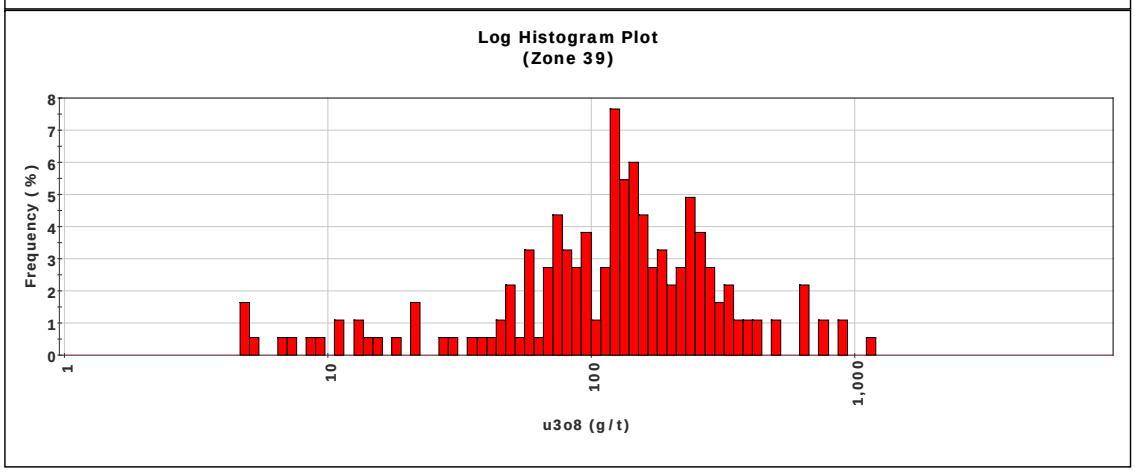
Appendix 2
Composite Statistics

Anomaly A
(Zone 39)

	Unweighted	Weighted	Units
Samples:	183	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,168.67	N/A	g/t
Mean:	184.86	N/A	g/t
Median	138.00	N/A	g/t
Std. Deviation:	182.10	N/A	g/t
Coefficient of Variation:	0.99	N/A	







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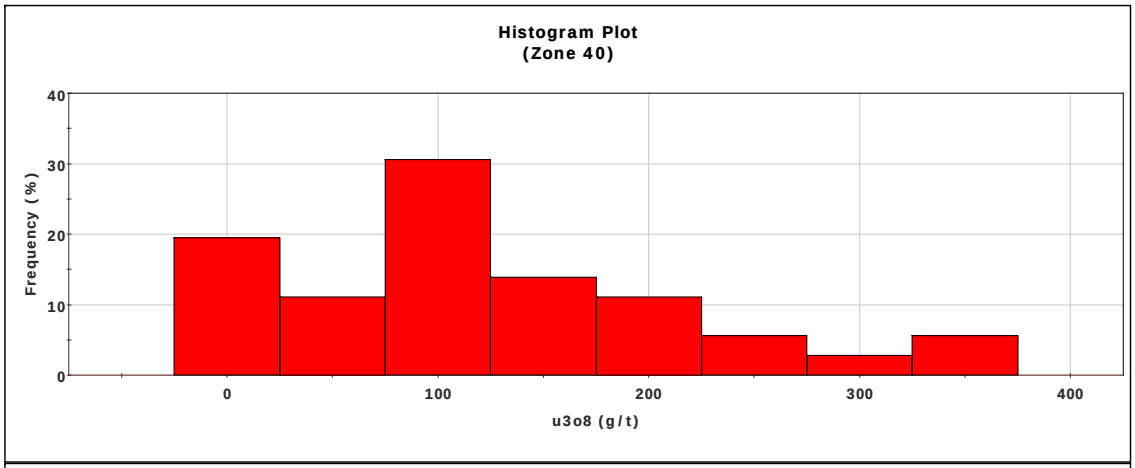
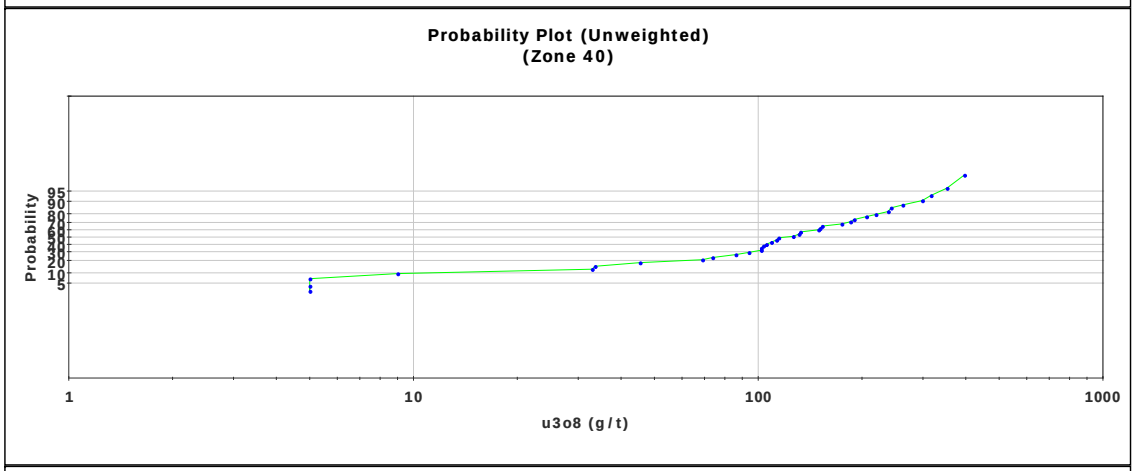
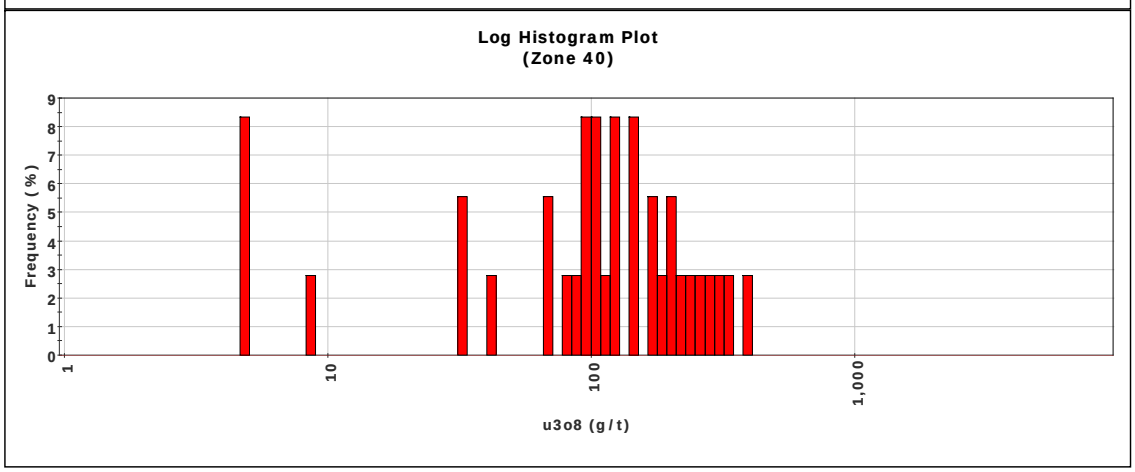
Appendix 2
Composite Statistics

Anomaly A
(Zone 40)

	Unweighted	Weighted	Units
Samples:	36	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	396.00	N/A	g/t
Mean:	142.56	N/A	g/t
Median	120.33	N/A	g/t
Std. Deviation:	97.87	N/A	g/t
Coefficient of Variation:	0.69	N/A	







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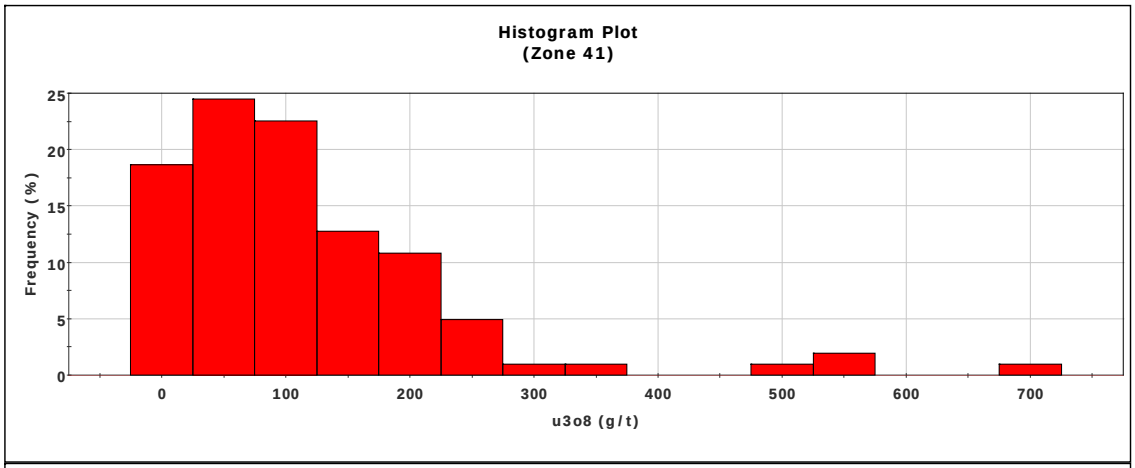
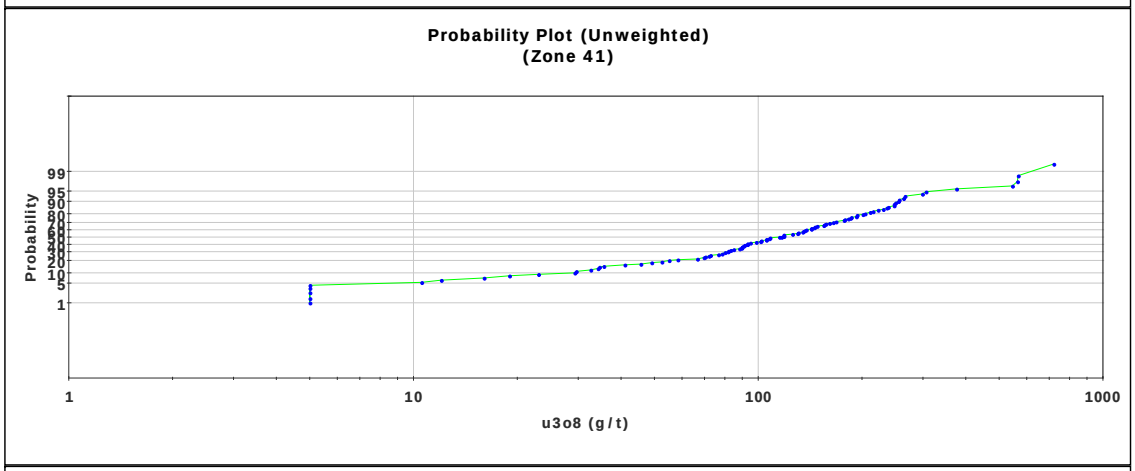
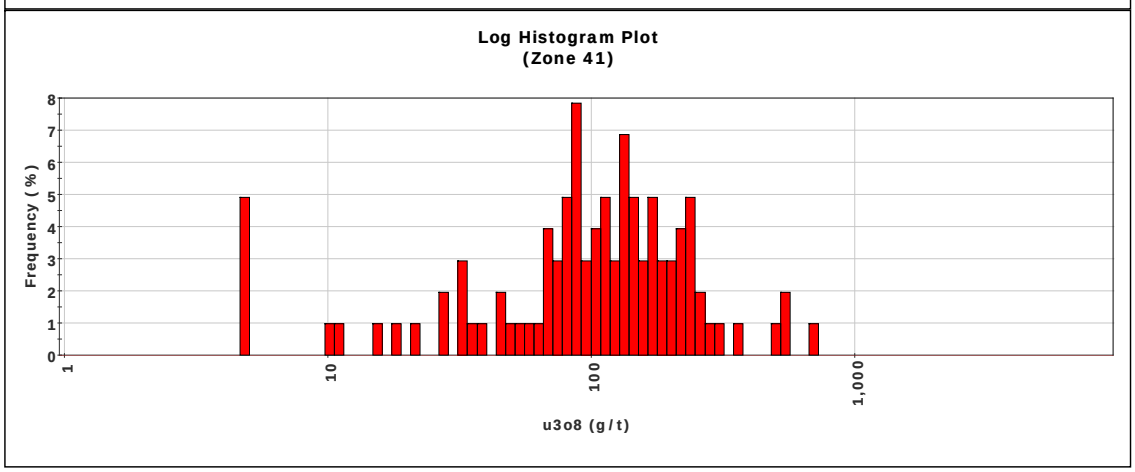
Appendix 2
Composite Statistics

Anomaly A
(Zone 41)

	Unweighted	Weighted	Units
Samples:	102	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	718.67	N/A	g/t
Mean:	142.04	N/A	g/t
Median	116.00	N/A	g/t
Std. Deviation:	121.33	N/A	g/t
Coefficient of Variation:	0.85	N/A	







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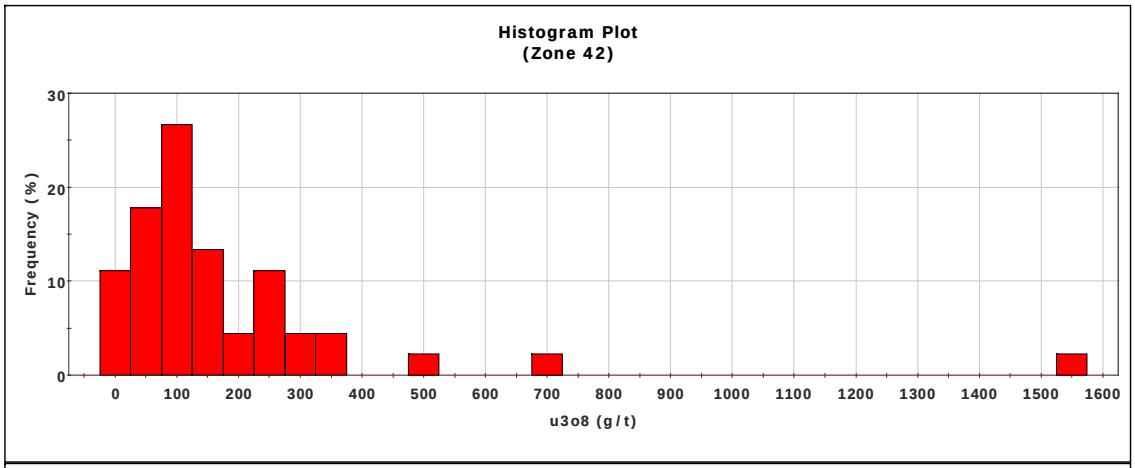
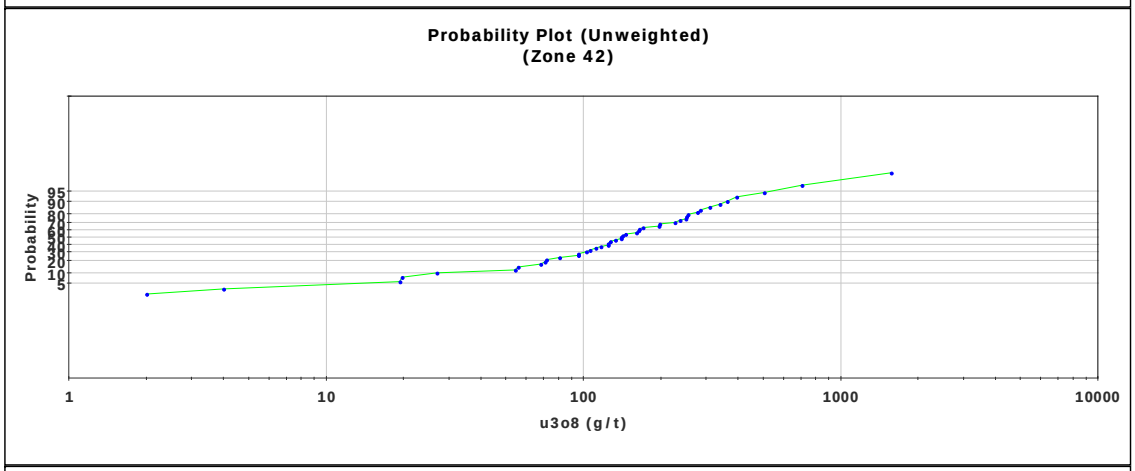
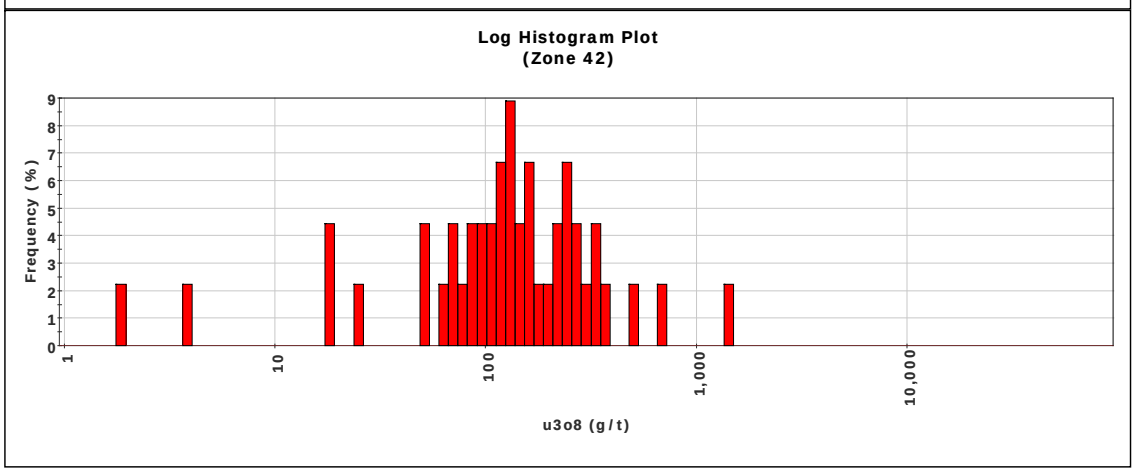
Appendix 2
Composite Statistics

Anomaly A
(Zone 42)

	Unweighted	Weighted	Units
Samples:	45	N/A	
Minimum:	2.00	N/A	g/t
Maximum:	1,574.00	N/A	g/t
Mean:	204.59	N/A	g/t
Median	140.33	N/A	g/t
Std. Deviation:	246.29	N/A	g/t
Coefficient of Variation:	1.20	N/A	







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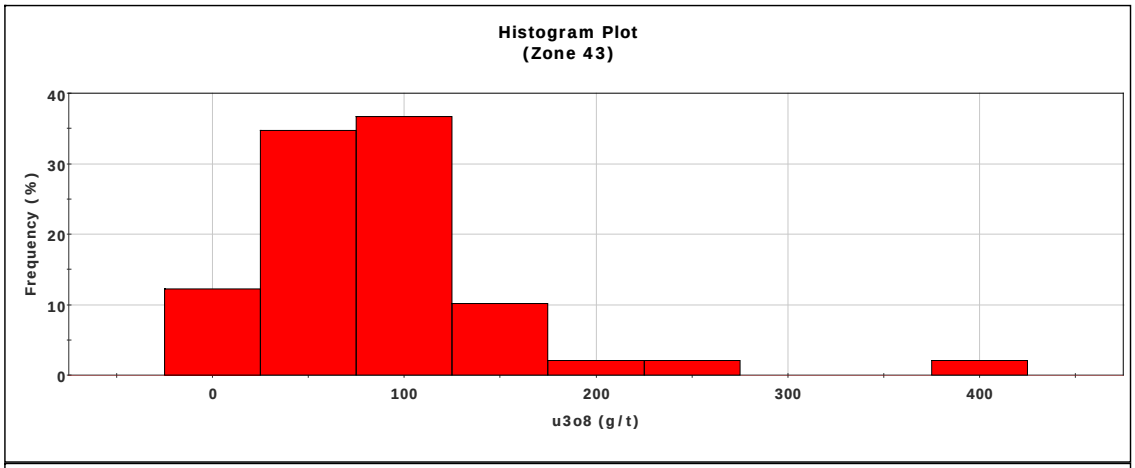
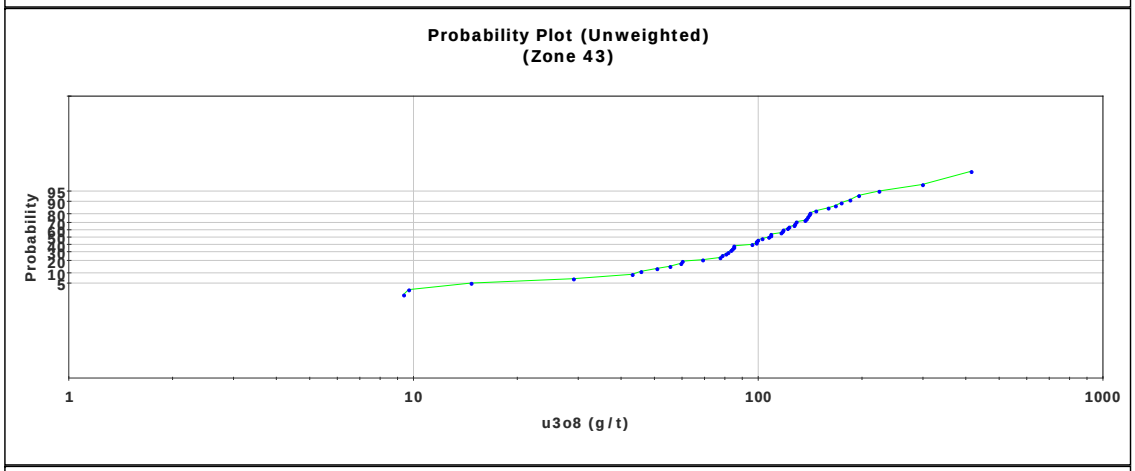
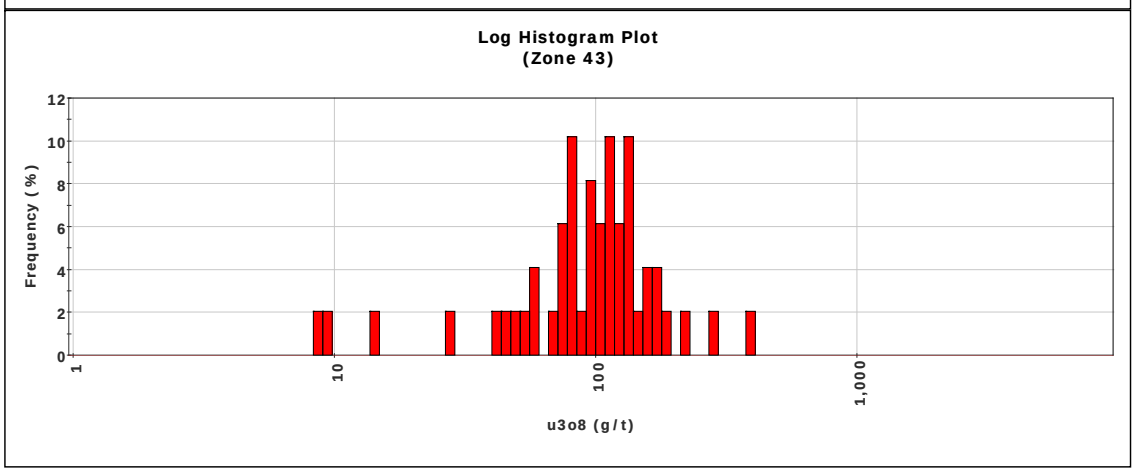
Appendix 2
Composite Statistics

Anomaly A
(Zone 43)

	Unweighted	Weighted	Units
Samples:	49	N/A	
Minimum:	9.33	N/A	g/t
Maximum:	414.63	N/A	g/t
Mean:	113.37	N/A	g/t
Median	107.00	N/A	g/t
Std. Deviation:	69.23	N/A	g/t
Coefficient of Variation:	0.61	N/A	







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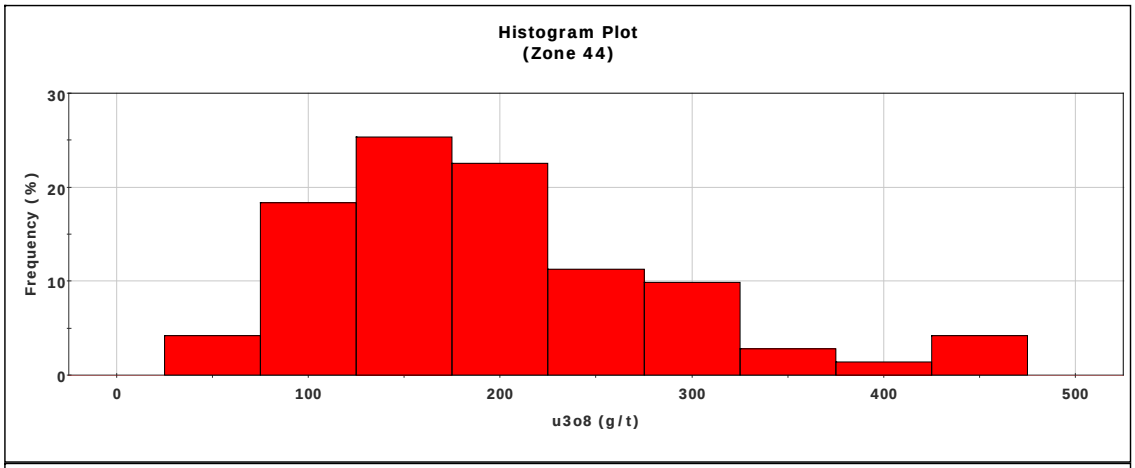
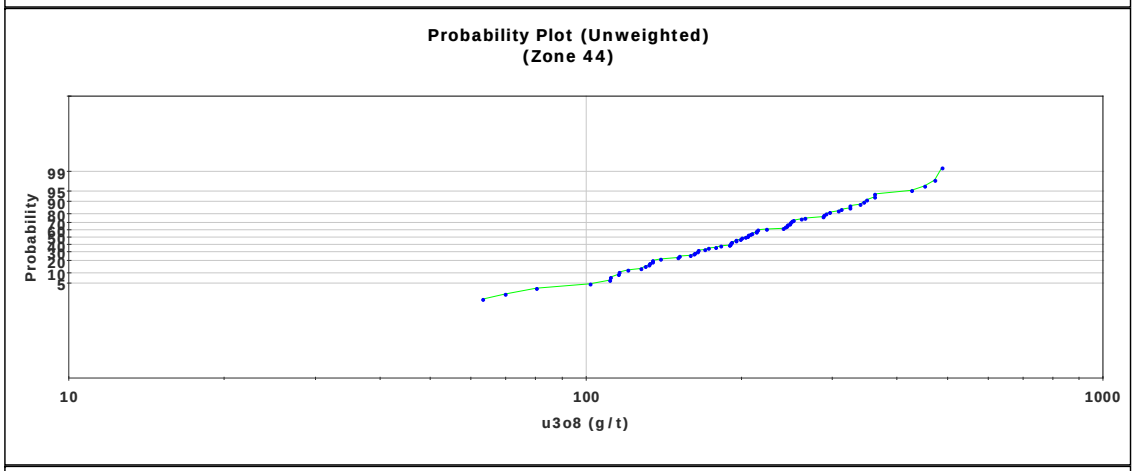
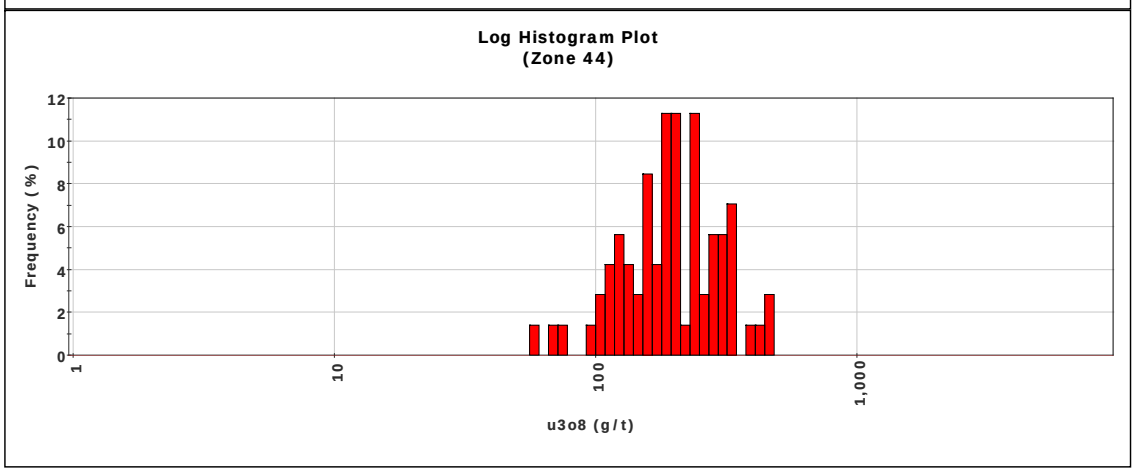
Appendix 2
Composite Statistics

Anomaly A
(Zone 44)

	Unweighted	Weighted	Units
Samples:	71	N/A	
Minimum:	63.00	N/A	g/t
Maximum:	488.68	N/A	g/t
Mean:	219.69	N/A	g/t
Median	203.00	N/A	g/t
Std. Deviation:	93.07	N/A	g/t
Coefficient of Variation:	0.42	N/A	







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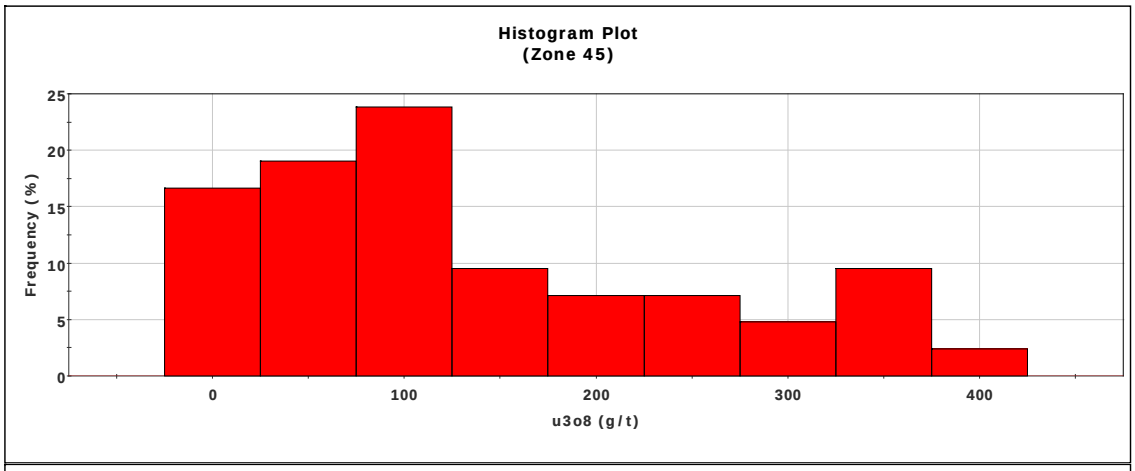
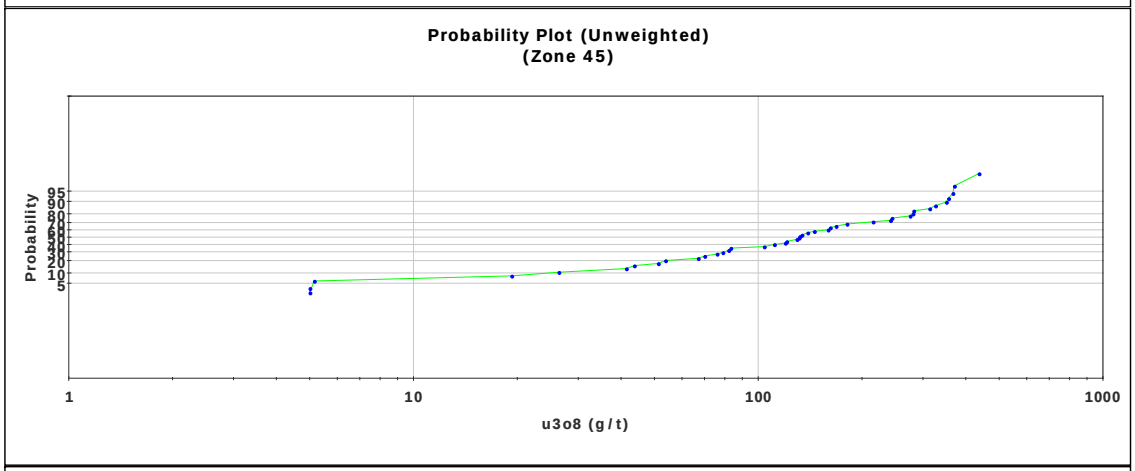
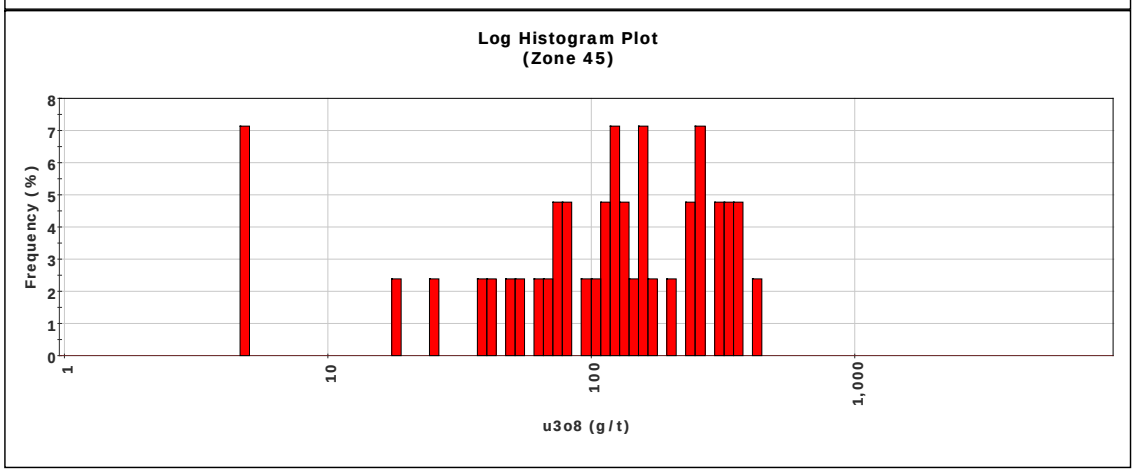
Appendix 2
Composite Statistics

Anomaly A
(Zone 45)

	Unweighted	Weighted	Units
Samples:	42	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	436.00	N/A	g/t
Mean:	159.57	N/A	g/t
Median	131.33	N/A	g/t
Std. Deviation:	115.94	N/A	g/t
Coefficient of Variation:	0.73	N/A	







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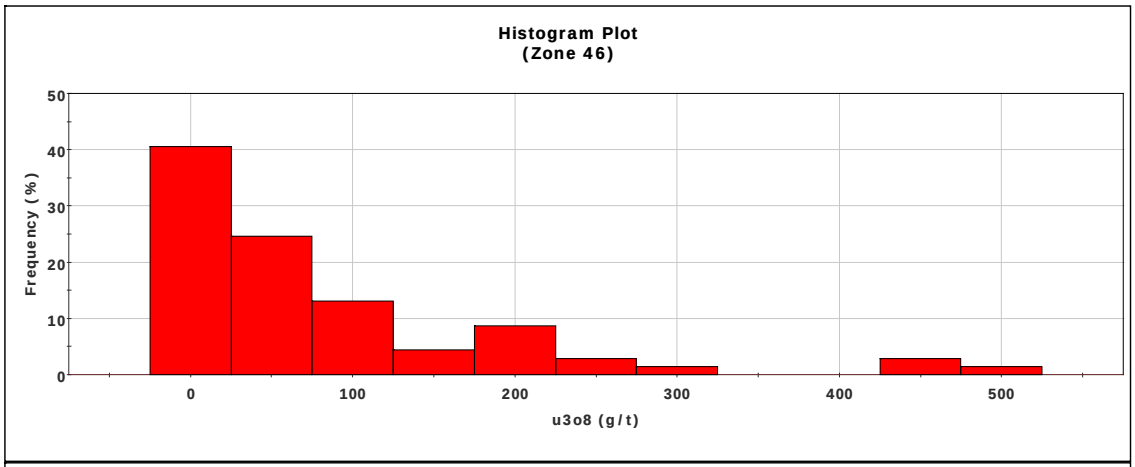
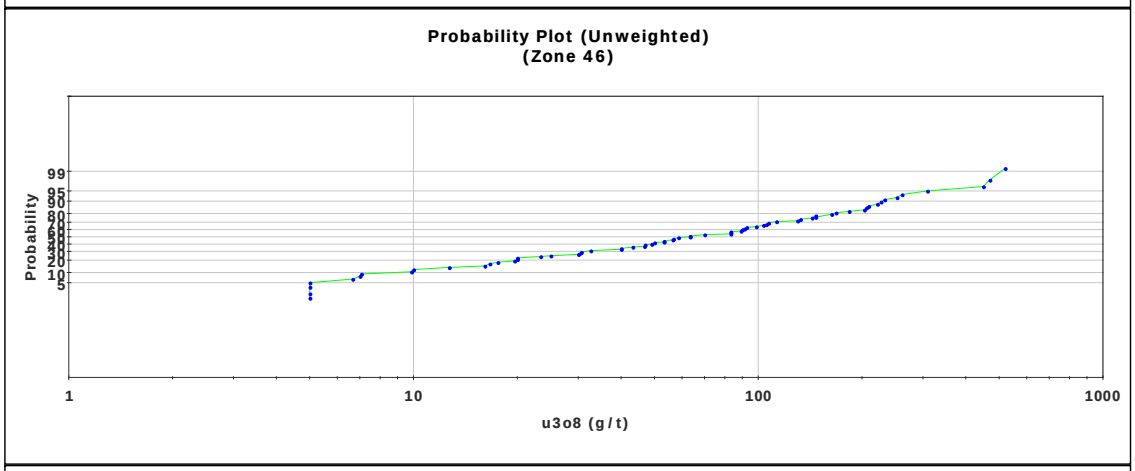
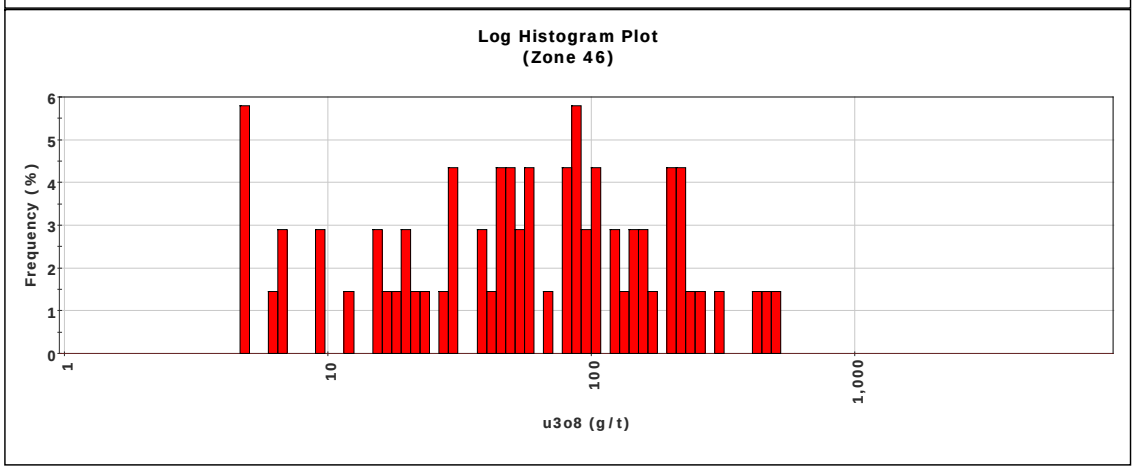
Appendix 2
Composite Statistics

Anomaly A
(Zone 46)

	Unweighted	Weighted	Units
Samples:	69	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	519.67	N/A	g/t
Mean:	102.34	N/A	g/t
Median	63.33	N/A	g/t
Std. Deviation:	109.47	N/A	g/t
Coefficient of Variation:	1.07	N/A	







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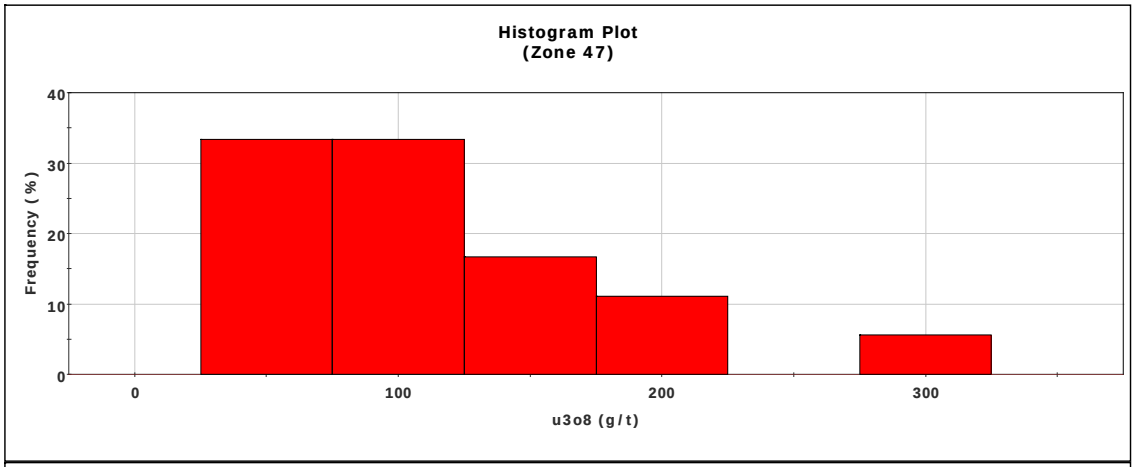
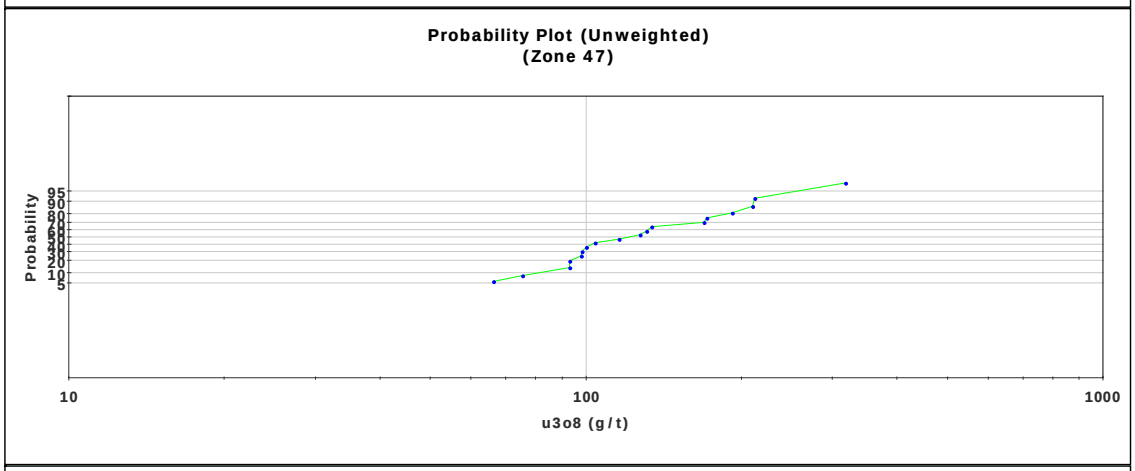
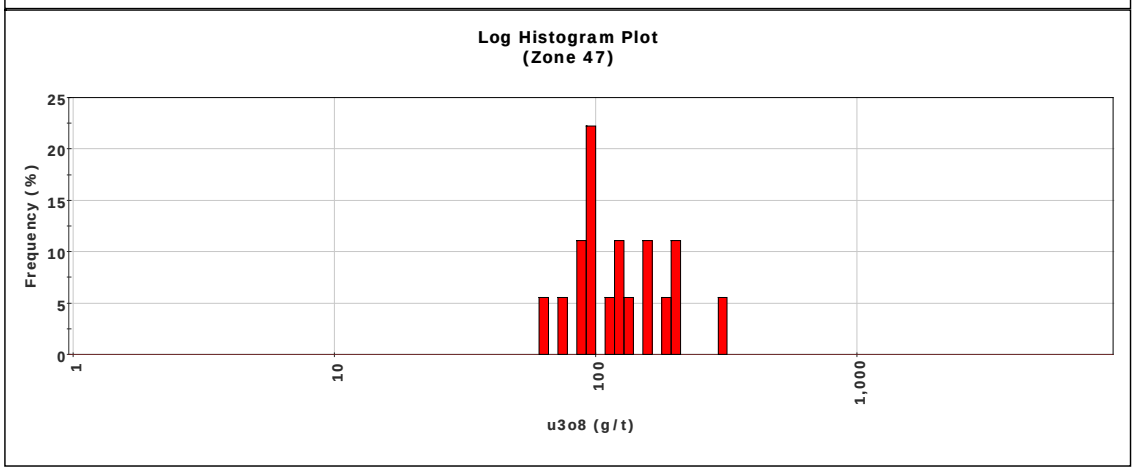
Appendix 2
Composite Statistics

Anomaly A
(Zone 47)

	Unweighted	Weighted	Units
Samples:	18	N/A	
Minimum:	66.33	N/A	g/t
Maximum:	317.39	N/A	g/t
Mean:	139.28	N/A	g/t
Median	121.60	N/A	g/t
Std. Deviation:	61.15	N/A	g/t
Coefficient of Variation:	0.44	N/A	







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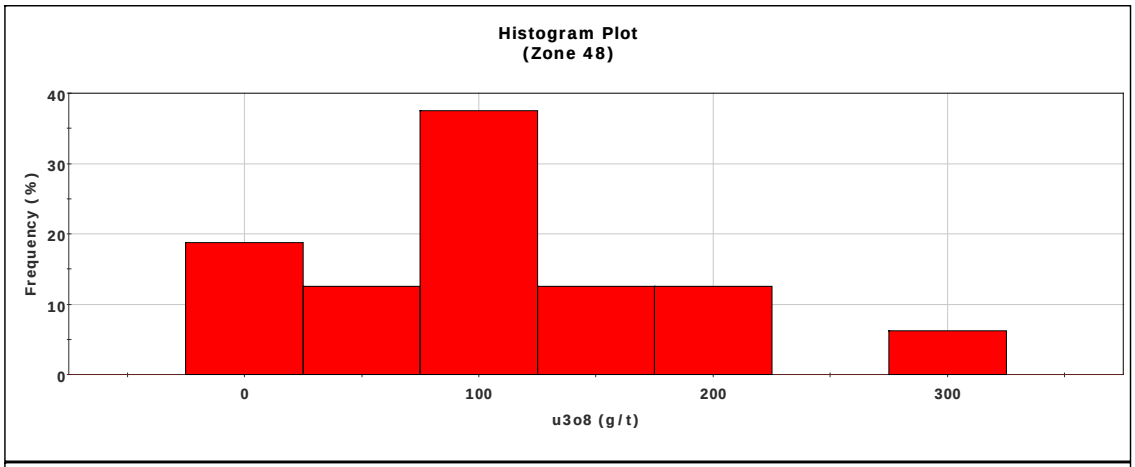
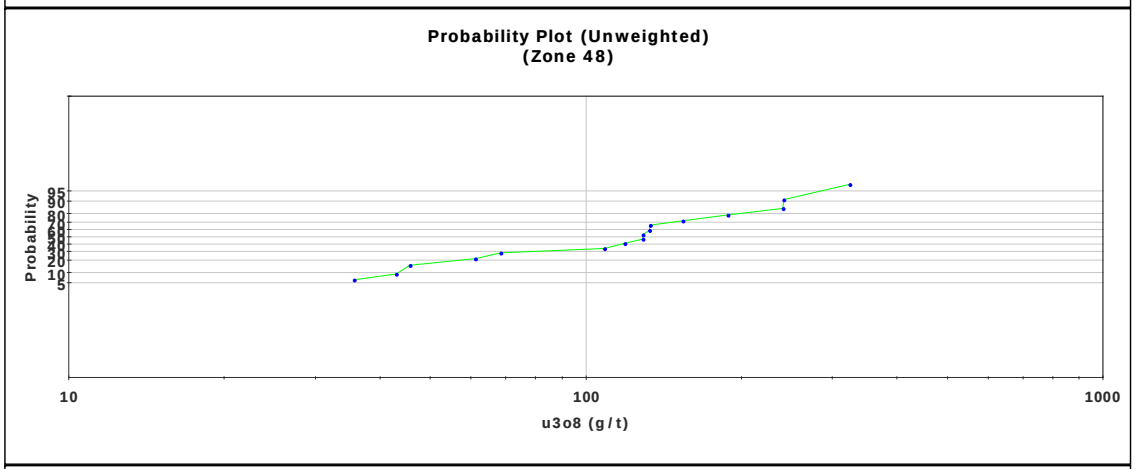
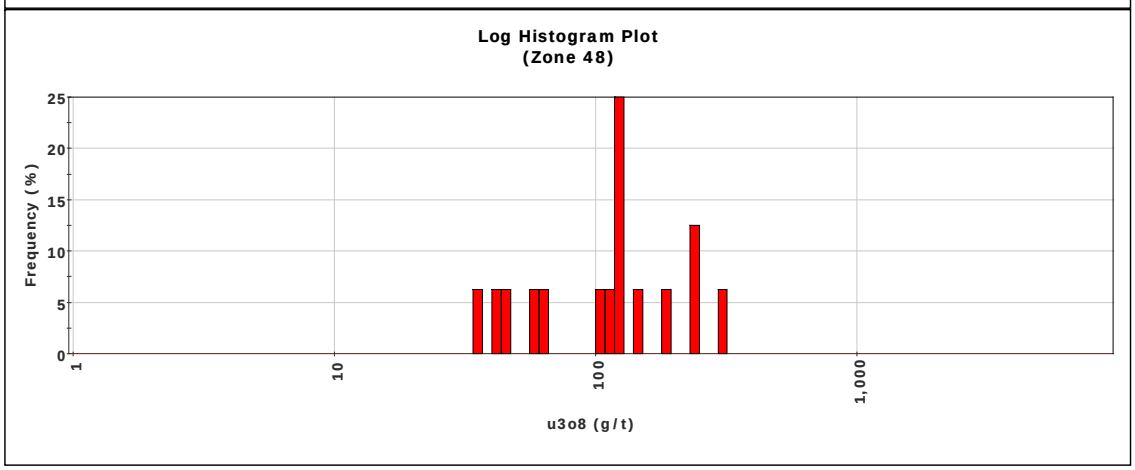
Appendix 2
Composite Statistics

Anomaly A
(Zone 48)

	Unweighted	Weighted	Units
Samples:	16	N/A	
Minimum:	35.67	N/A	g/t
Maximum:	323.33	N/A	g/t
Mean:	134.52	N/A	g/t
Median	129.00	N/A	g/t
Std. Deviation:	78.37	N/A	g/t
Coefficient of Variation:	0.58	N/A	







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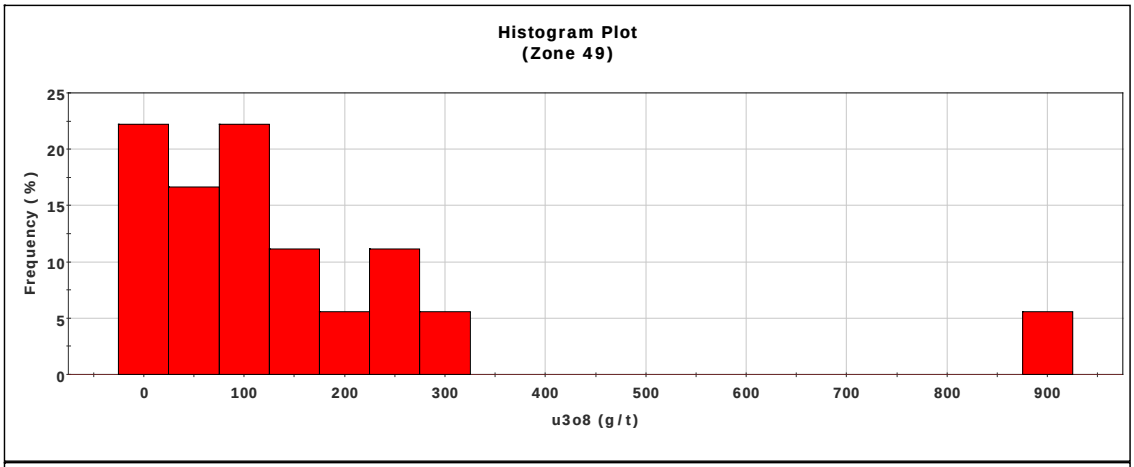
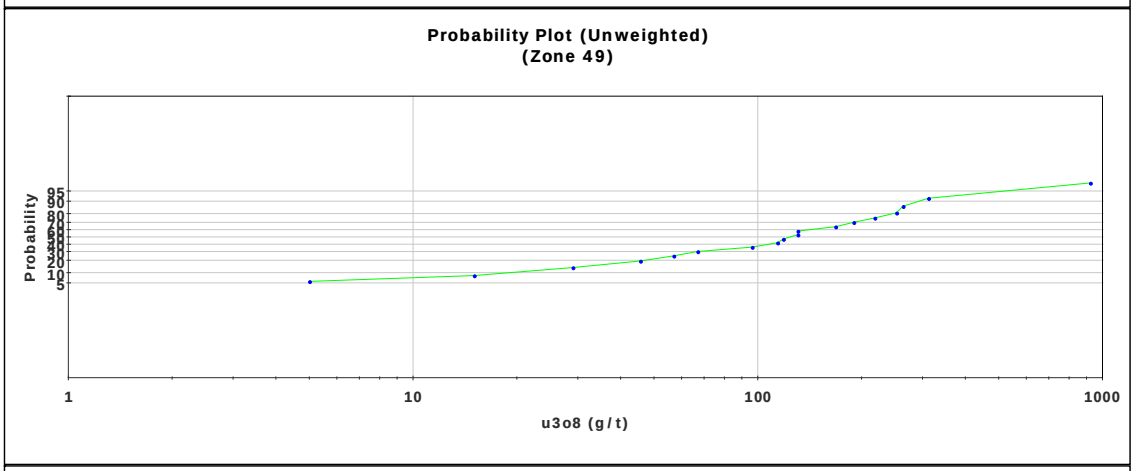
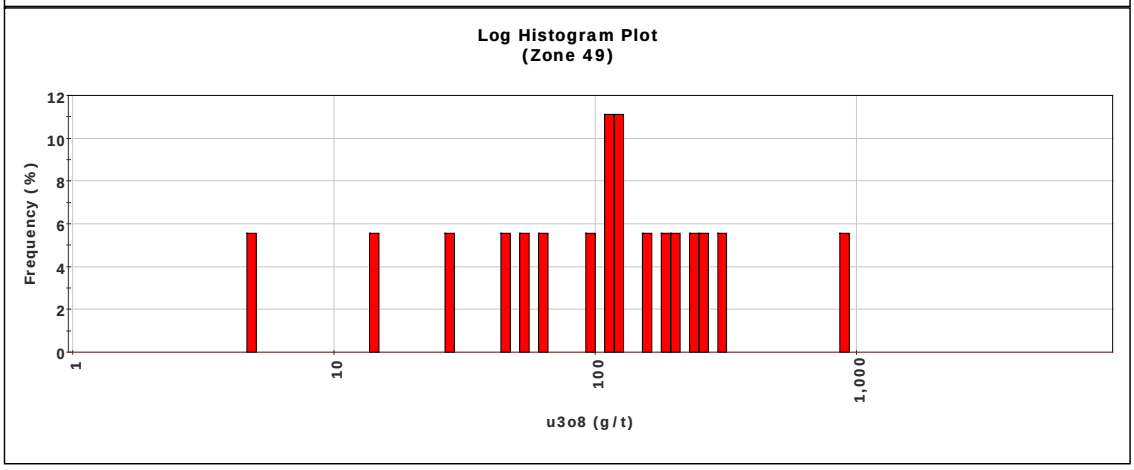
Appendix 2
Composite Statistics

Anomaly A
(Zone 49)

	Unweighted	Weighted	Units
Samples:	18	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	922.00	N/A	g/t
Mean:	174.26	N/A	g/t
Median	124.33	N/A	g/t
Std. Deviation:	201.17	N/A	g/t
Coefficient of Variation:	1.15	N/A	







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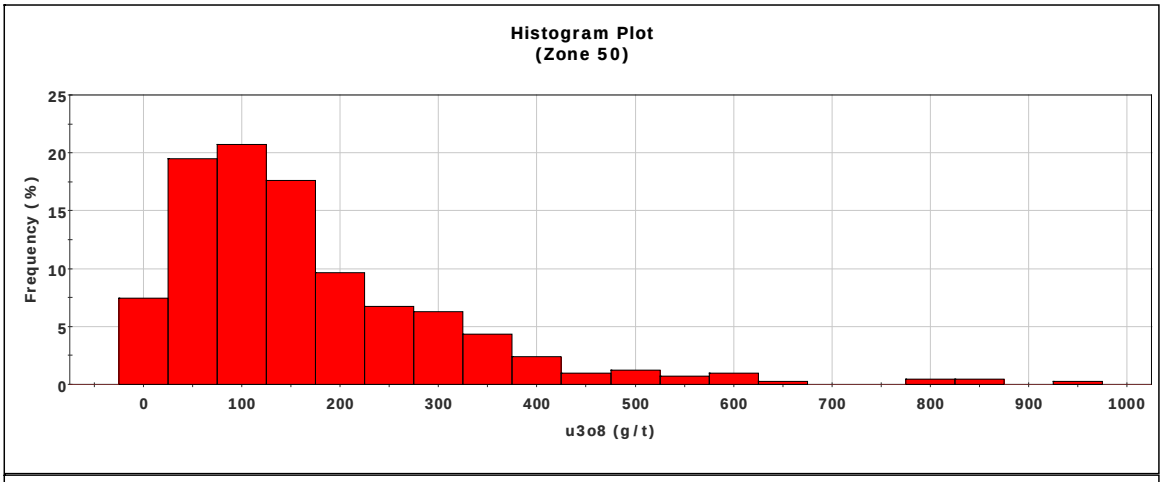
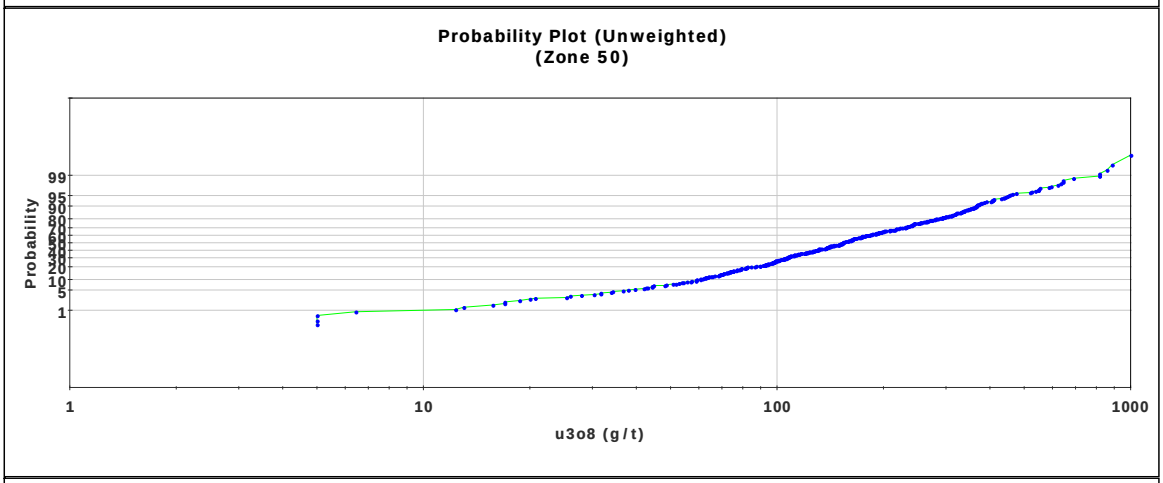
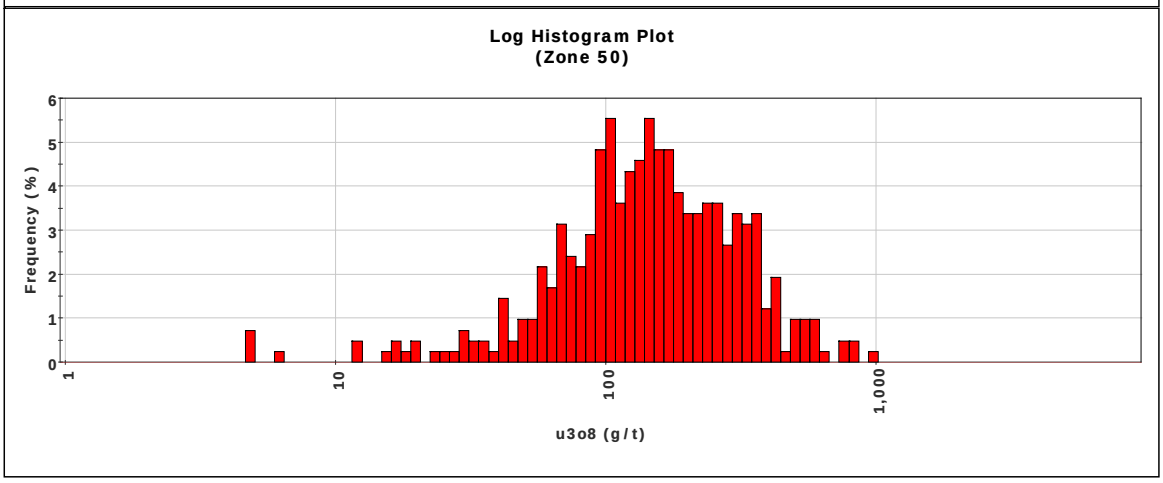
Appendix 2
Composite Statistics

Anomaly A
(Zone 50)

	Unweighted	Weighted	Units
Samples:	415	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	999.33	N/A	g/t
Mean:	192.92	N/A	g/t
Median	153.00	N/A	g/t
Std. Deviation:	146.65	N/A	g/t
Coefficient of Variation:	0.76	N/A	







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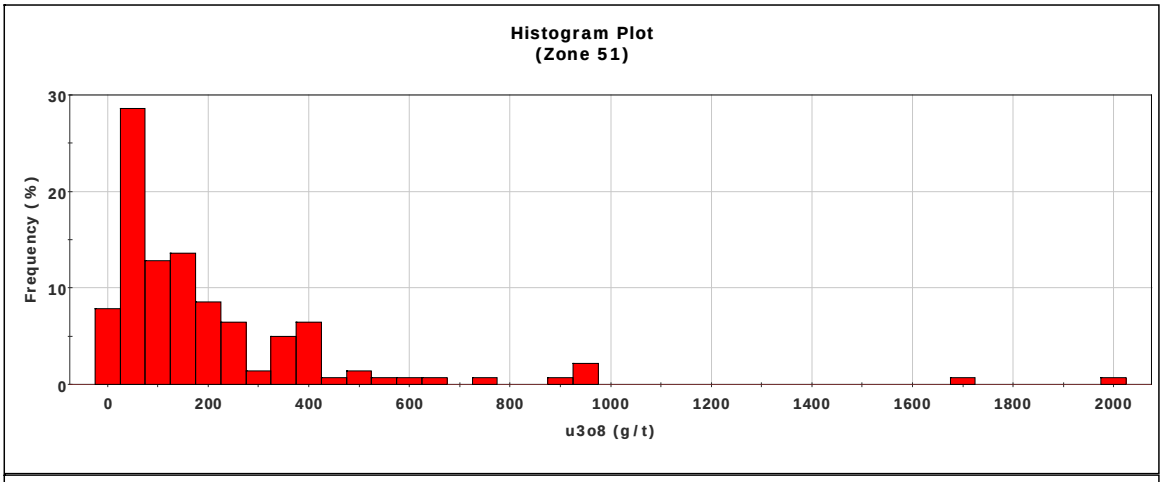
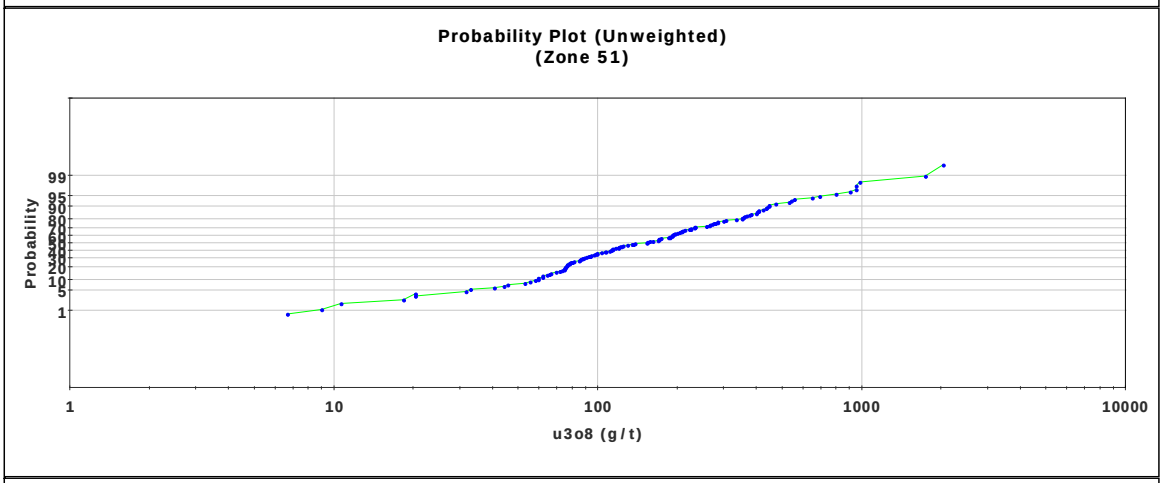
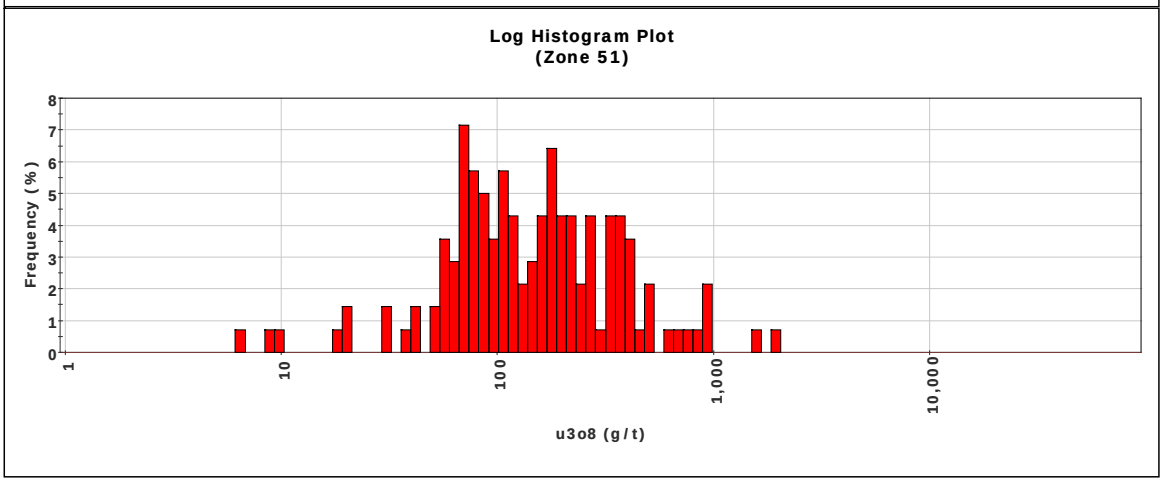
Appendix 2
Composite Statistics

Anomaly A
(Zone 51)

	Unweighted	Weighted	Units
Samples:	140	N/A	
Minimum:	6.67	N/A	g/t
Maximum:	2,033.00	N/A	g/t
Mean:	234.17	N/A	g/t
Median	153.50	N/A	g/t
Std. Deviation:	278.17	N/A	g/t
Coefficient of Variation:	1.19	N/A	







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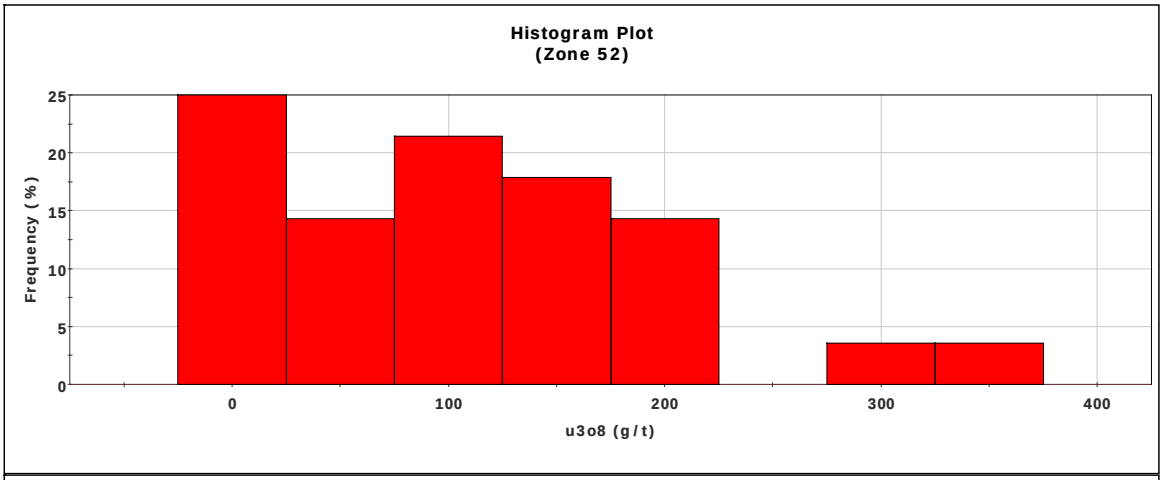
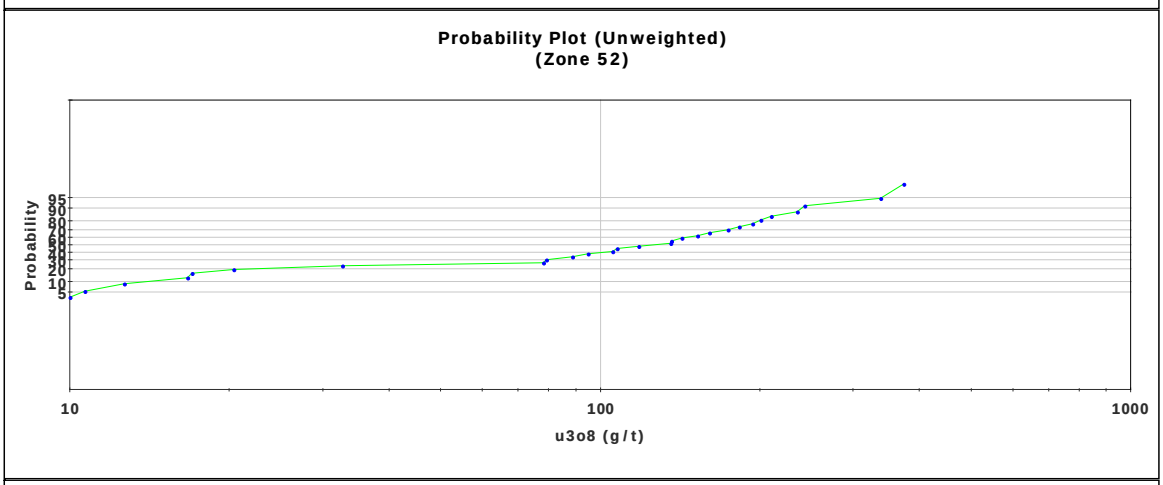
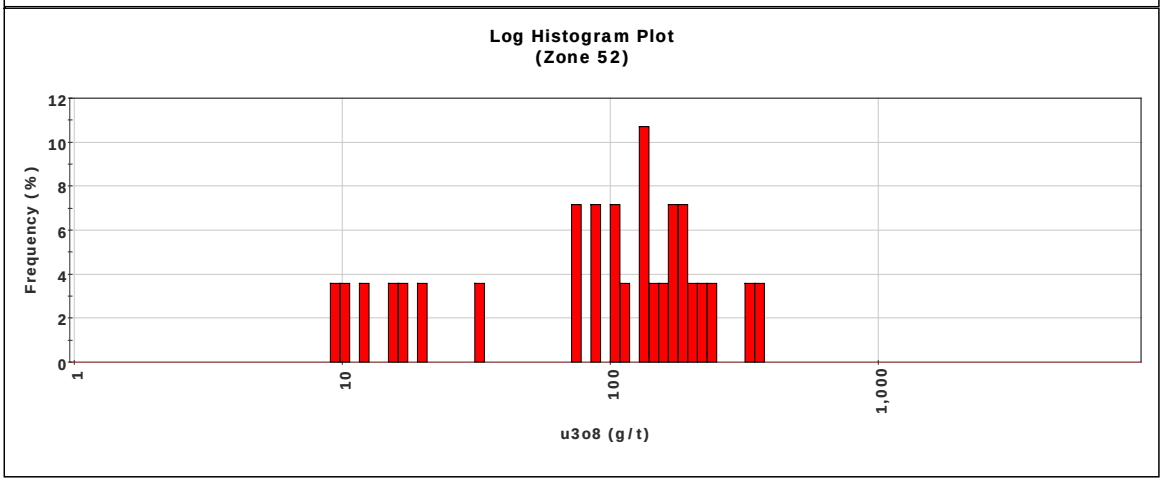
Appendix 2
Composite Statistics

Anomaly A
(Zone 52)

	Unweighted	Weighted	Units
Samples:	28	N/A	
Minimum:	10.00	N/A	g/t
Maximum:	373.00	N/A	g/t
Mean:	131.04	N/A	g/t
Median	126.83	N/A	g/t
Std. Deviation:	93.90	N/A	g/t
Coefficient of Variation:	0.72	N/A	







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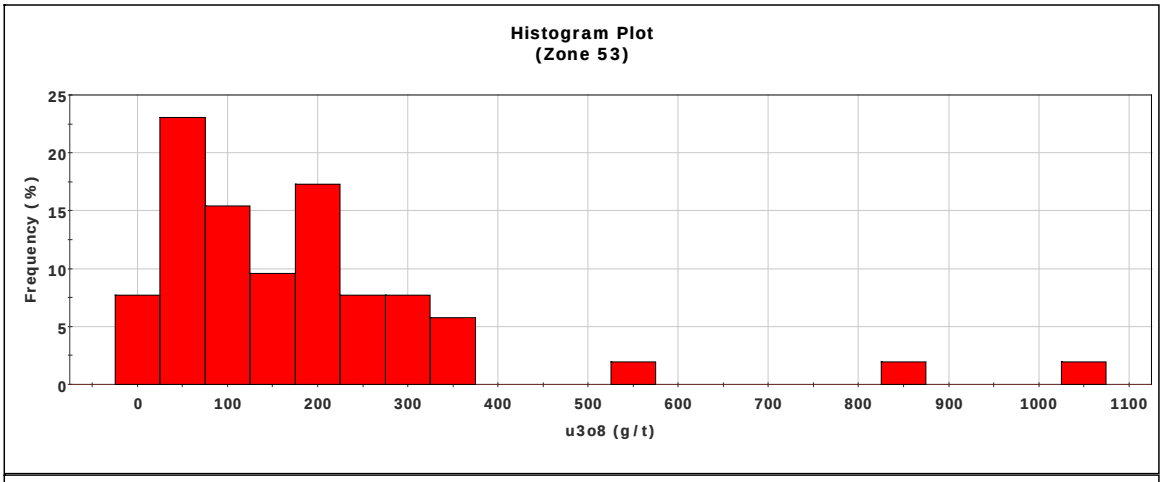
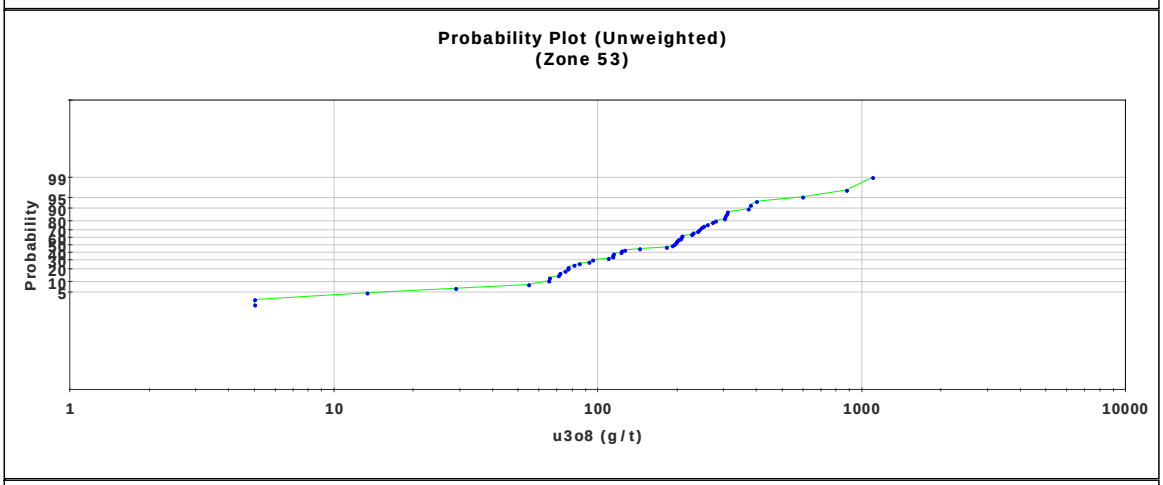
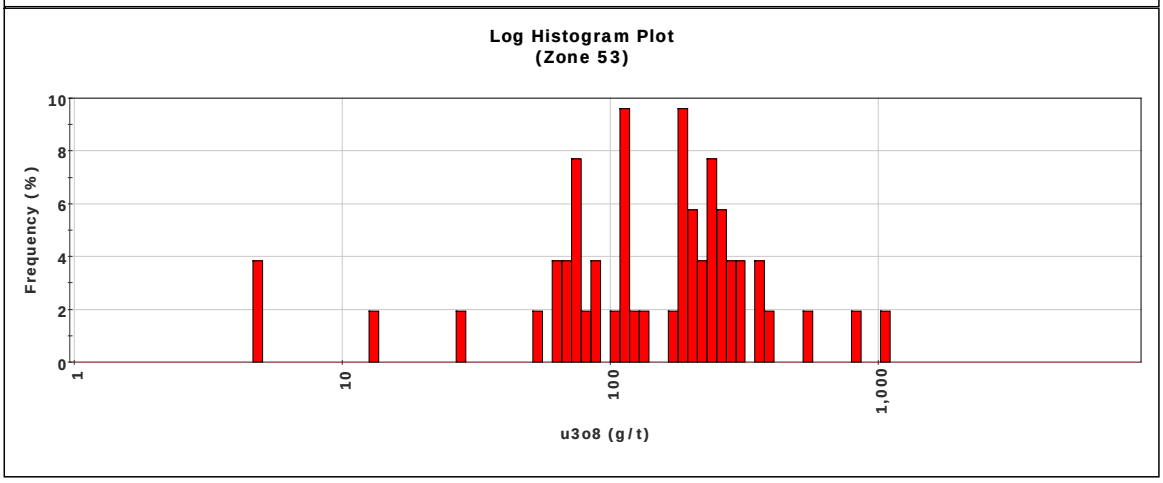
Appendix 2
Composite Statistics

Anomaly A
(Zone 53)

	Unweighted	Weighted	Units
Samples:	52	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,097.00	N/A	g/t
Mean:	209.68	N/A	g/t
Median	193.50	N/A	g/t
Std. Deviation:	194.22	N/A	g/t
Coefficient of Variation:	0.93	N/A	







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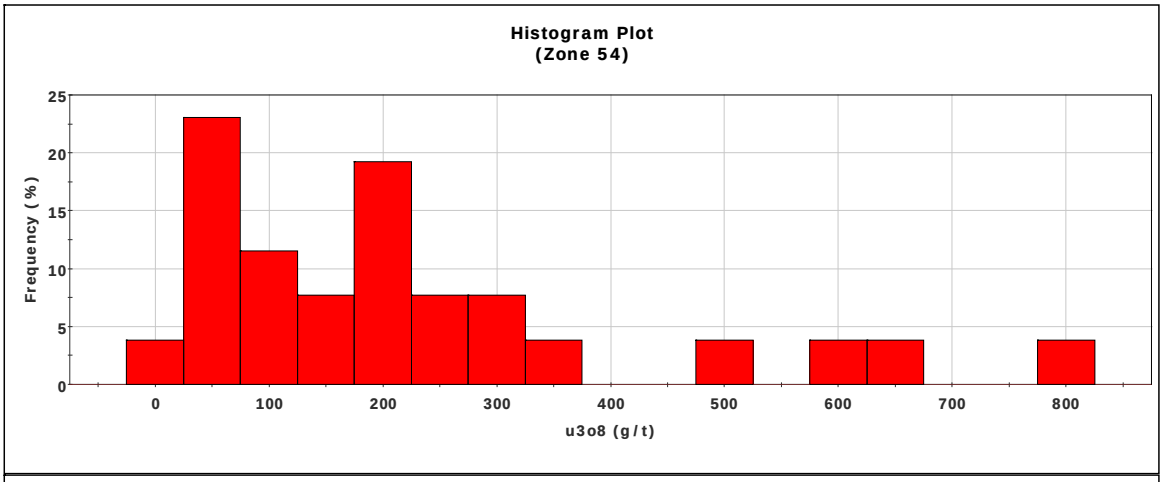
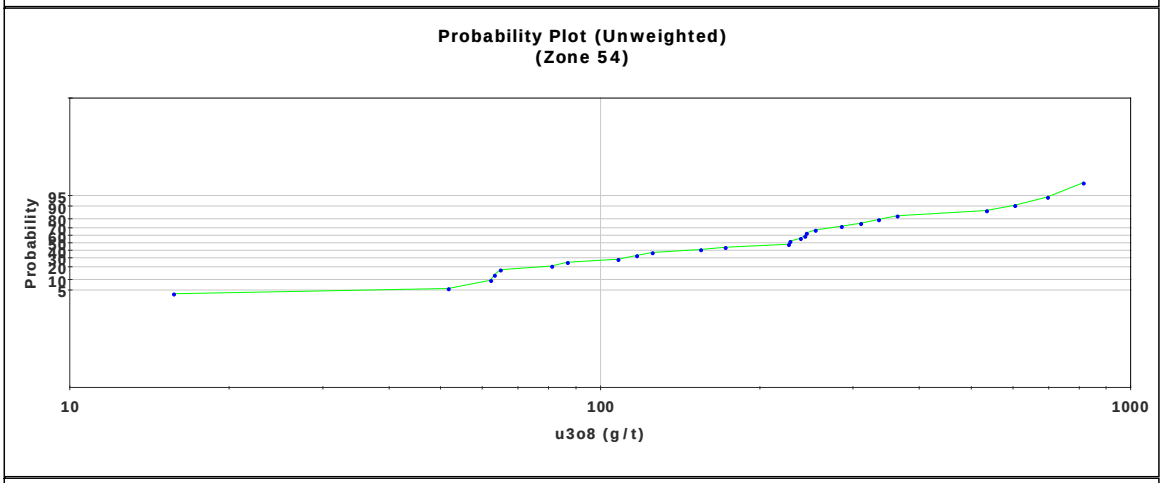
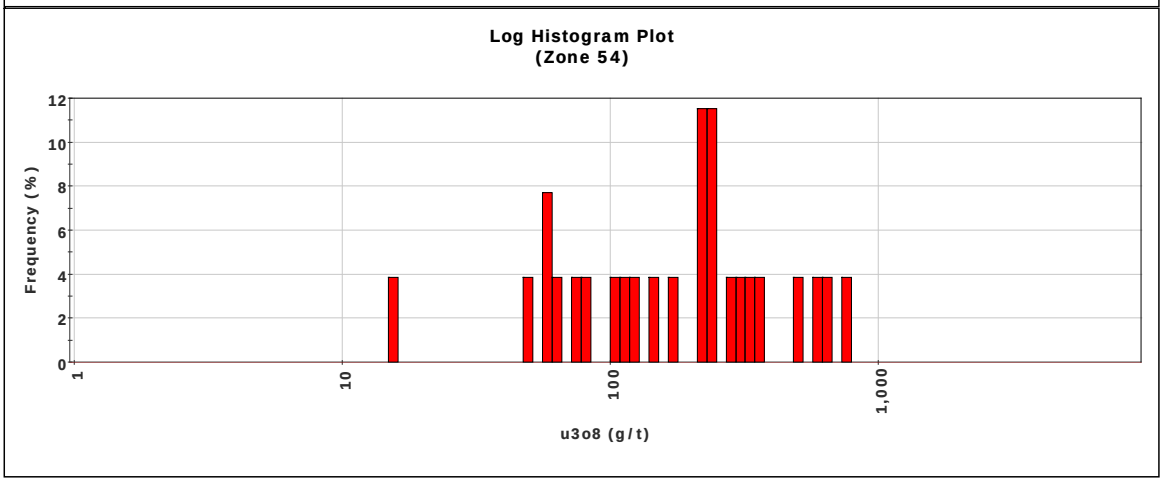
Appendix 2
Composite Statistics

Anomaly A
(Zone 54)

	Unweighted	Weighted	Units
Samples:	26	N/A	
Minimum:	15.67	N/A	g/t
Maximum:	812.00	N/A	g/t
Mean:	248.96	N/A	g/t
Median	226.83	N/A	g/t
Std. Deviation:	202.90	N/A	g/t
Coefficient of Variation:	0.82	N/A	







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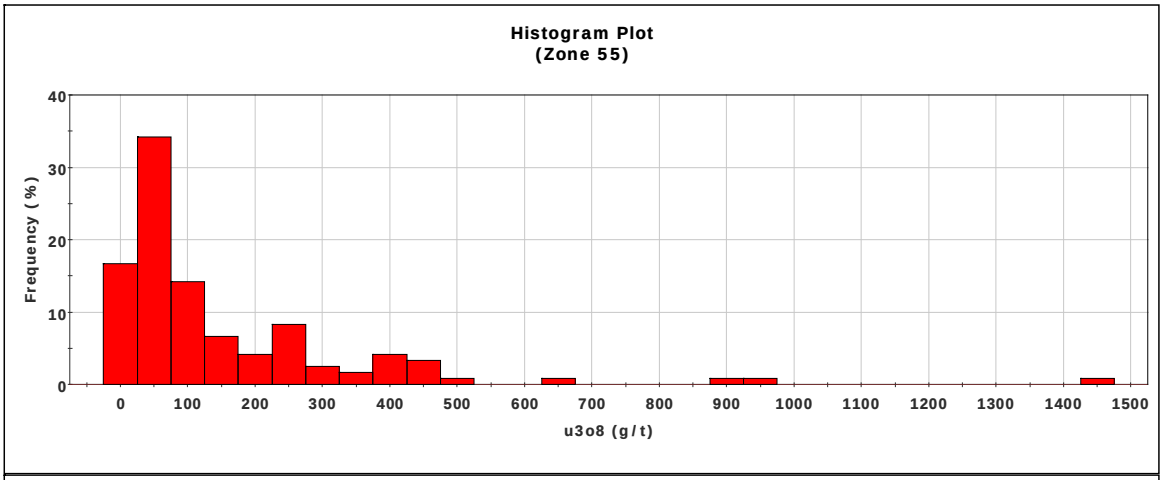
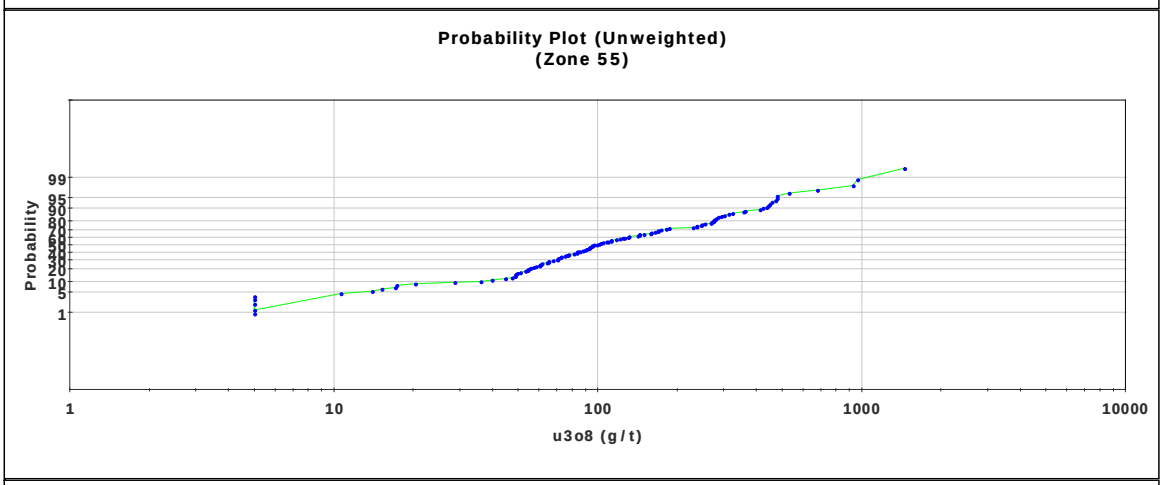
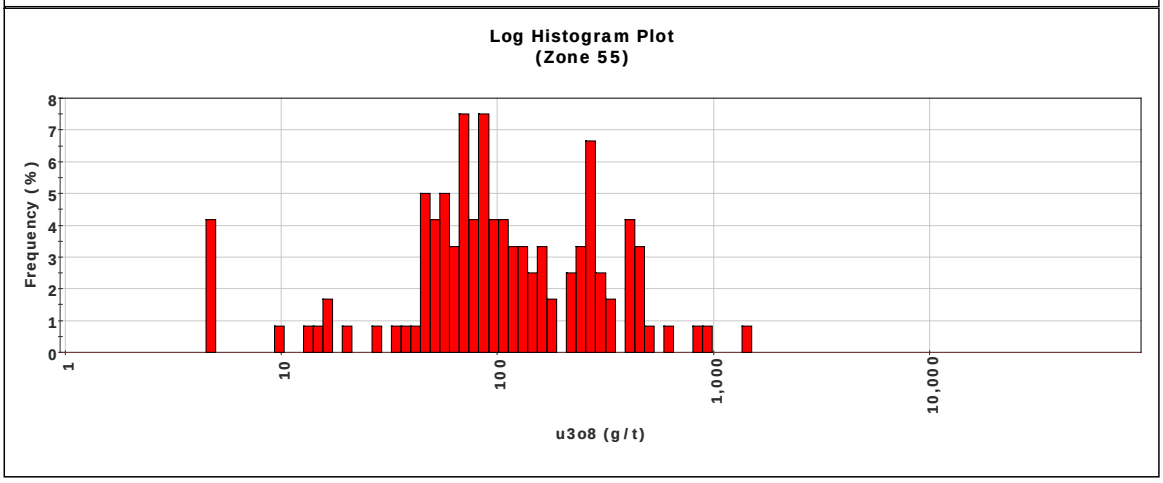
Appendix 2
Composite Statistics

Anomaly A
(Zone 55)

	Unweighted	Weighted	Units
Samples:	120	N/A	
Minimum:	5.00	N/A	g/t
Maximum:	1,456.67	N/A	g/t
Mean:	176.93	N/A	g/t
Median	98.17	N/A	g/t
Std. Deviation:	205.63	N/A	g/t
Coefficient of Variation:	1.16	N/A	







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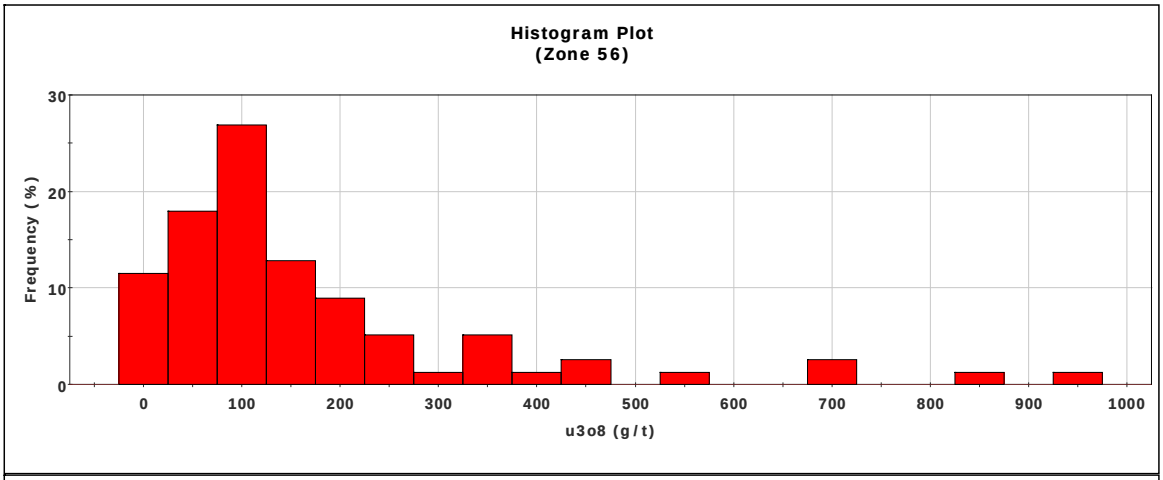
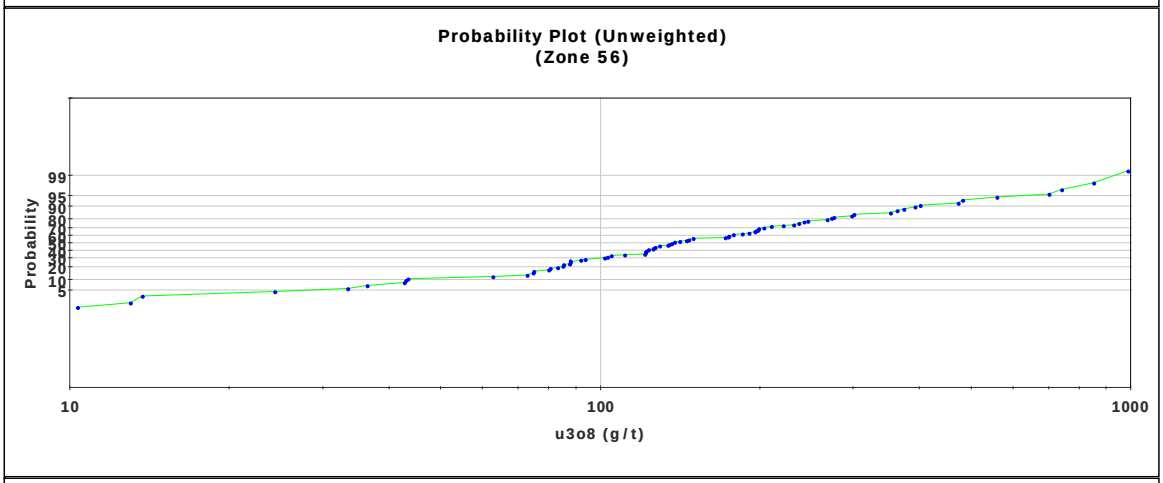
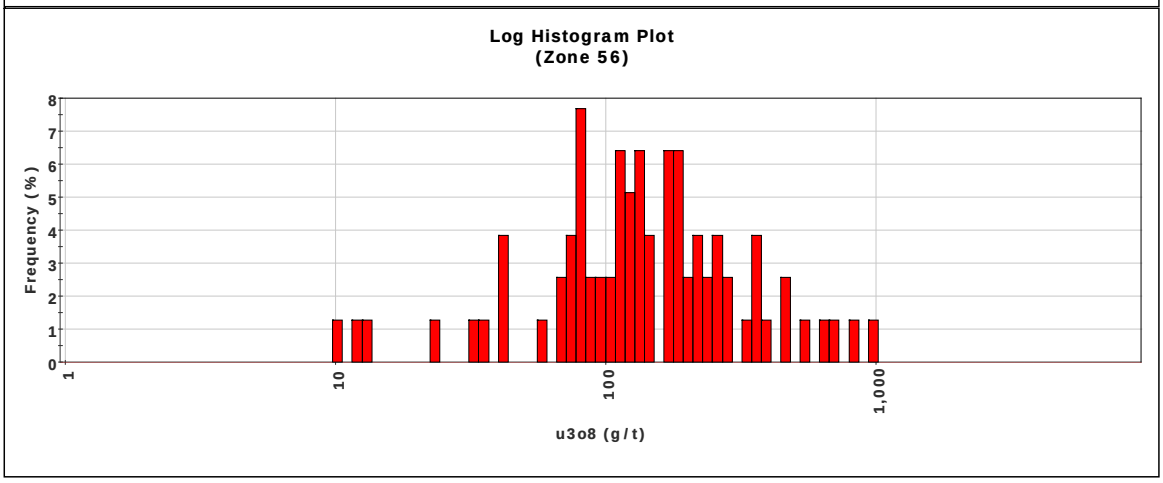
Appendix 2
Composite Statistics

Anomaly A
(Zone 56)

	Unweighted	Weighted	Units
Samples:	78	N/A	
Minimum:	10.33	N/A	g/t
Maximum:	986.00	N/A	g/t
Mean:	200.11	N/A	g/t
Median	137.00	N/A	g/t
Std. Deviation:	184.21	N/A	g/t
Coefficient of Variation:	0.92	N/A	







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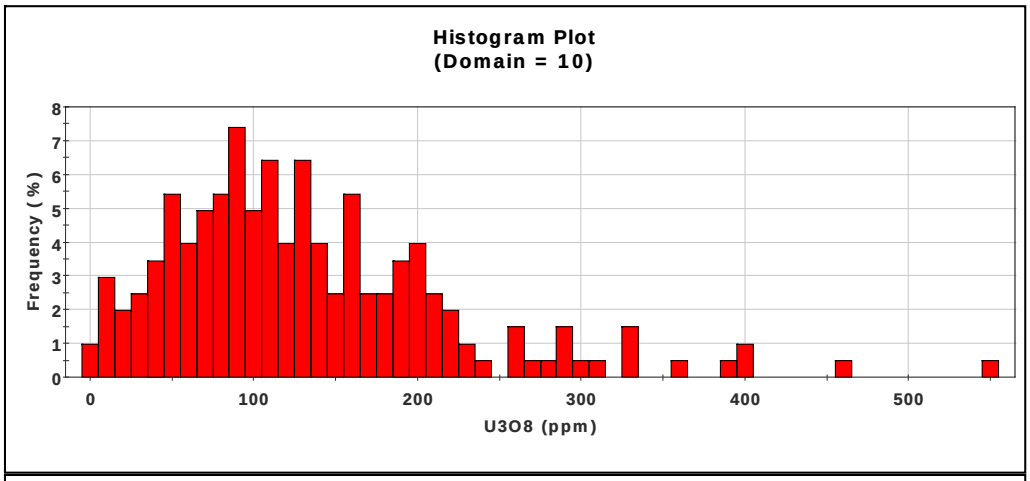
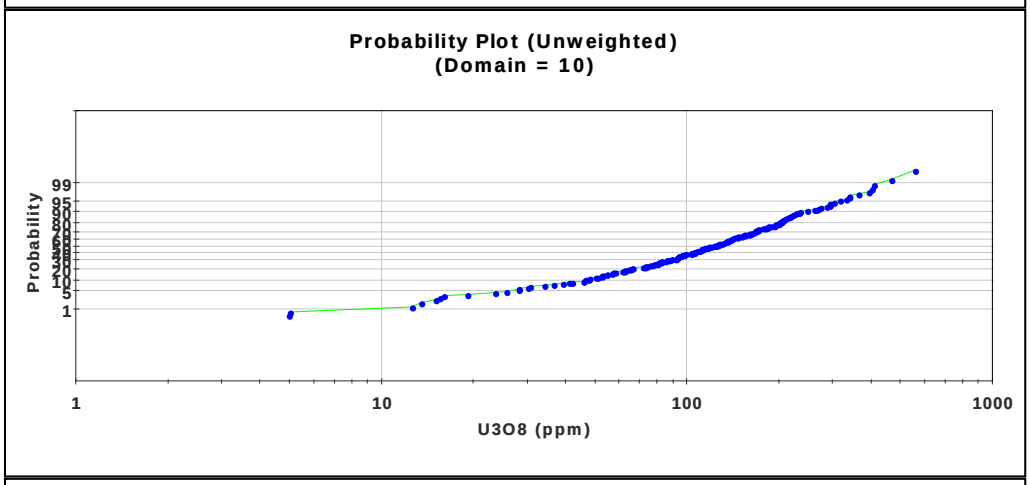
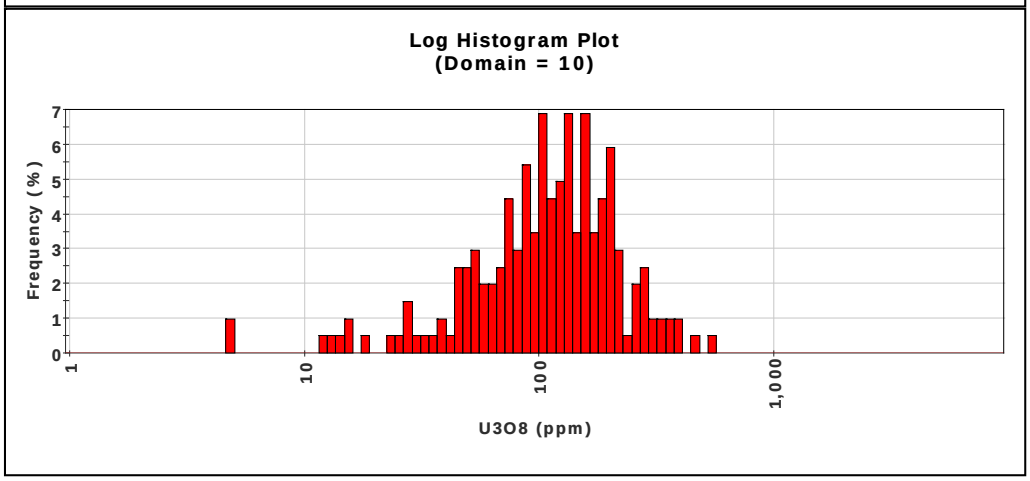
Appendix 2
Composite Statistics

Onkello Composite Data (Domain = 10)

	Unweighted	Weighted	Units
Samples:	203	N/A	
Minimum:	4.95	N/A	ppm
Maximum:	554.00	N/A	ppm
Mean:	136.99	N/A	ppm
Median	119.00	N/A	ppm
Std. Deviation:	88.12	N/A	ppm
Coefficient of Variation:	0.64	N/A	







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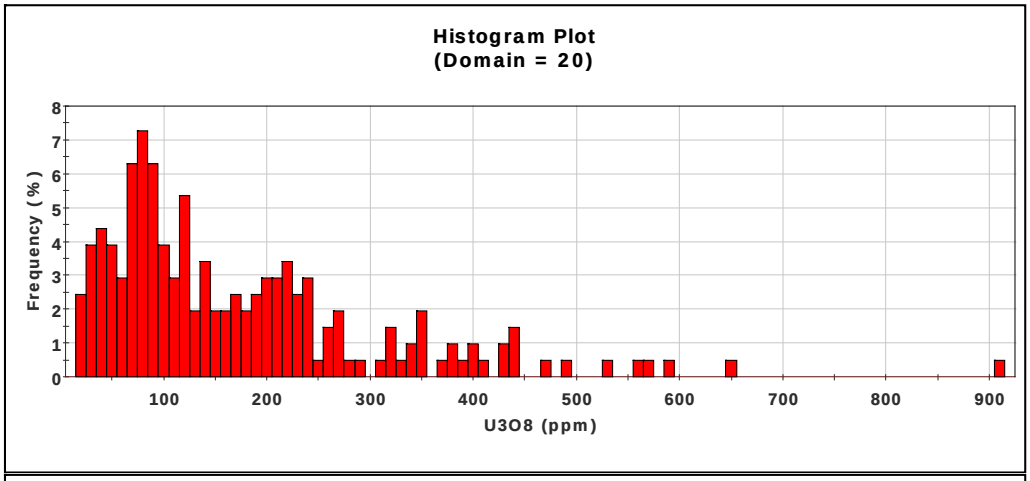
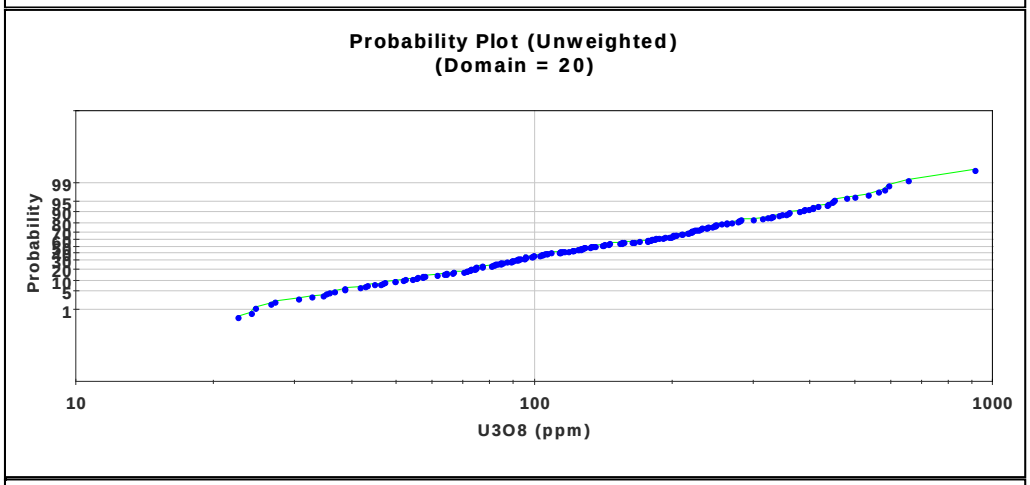
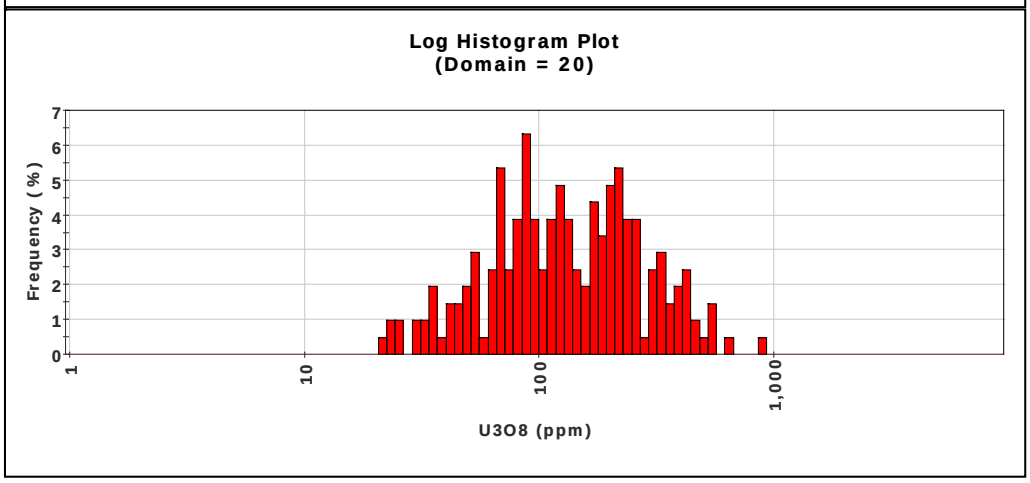
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domain = 20)

	Unweighted	Weighted	Units
Samples:	206	N/A	
Minimum:	22.50	N/A	ppm
Maximum:	911.50	N/A	ppm
Mean:	176.68	N/A	ppm
Median	132.00	N/A	ppm
Std. Deviation:	136.06	N/A	ppm
Coefficient of Variation:	0.77	N/A	







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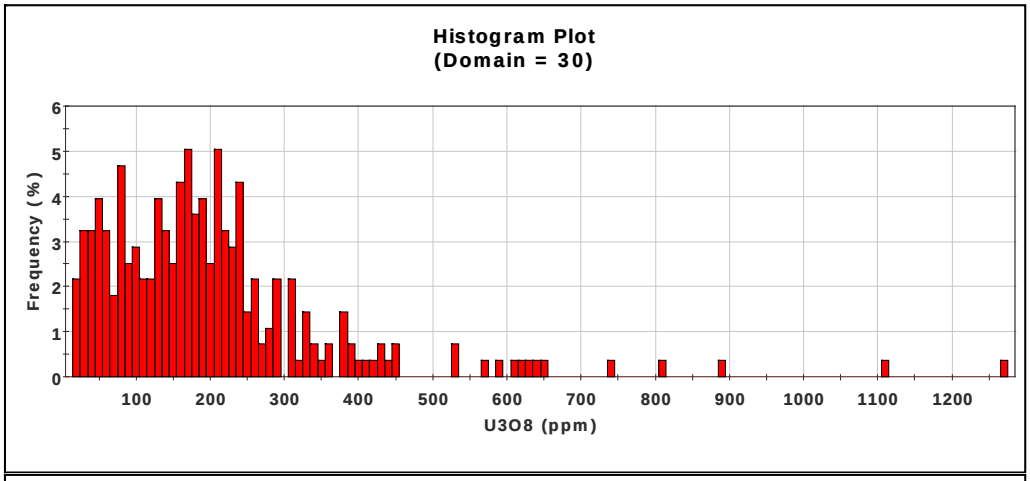
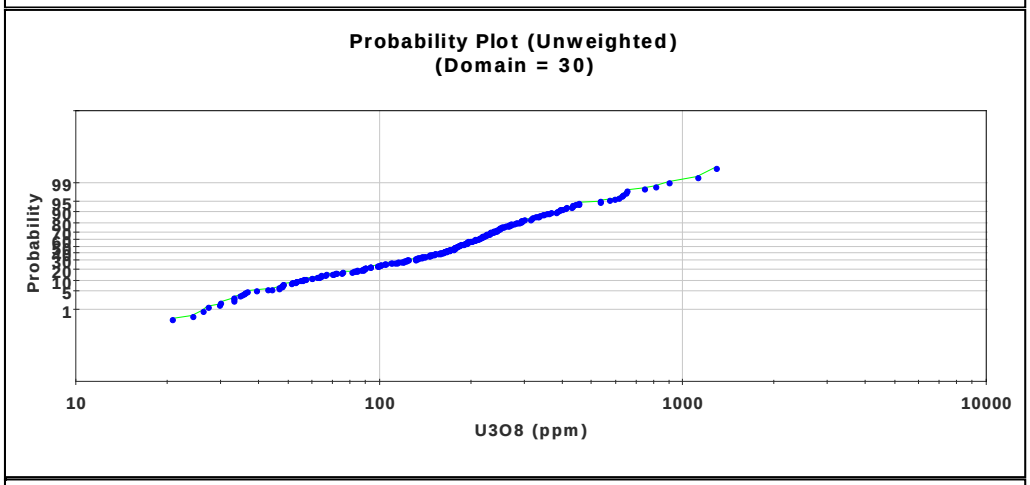
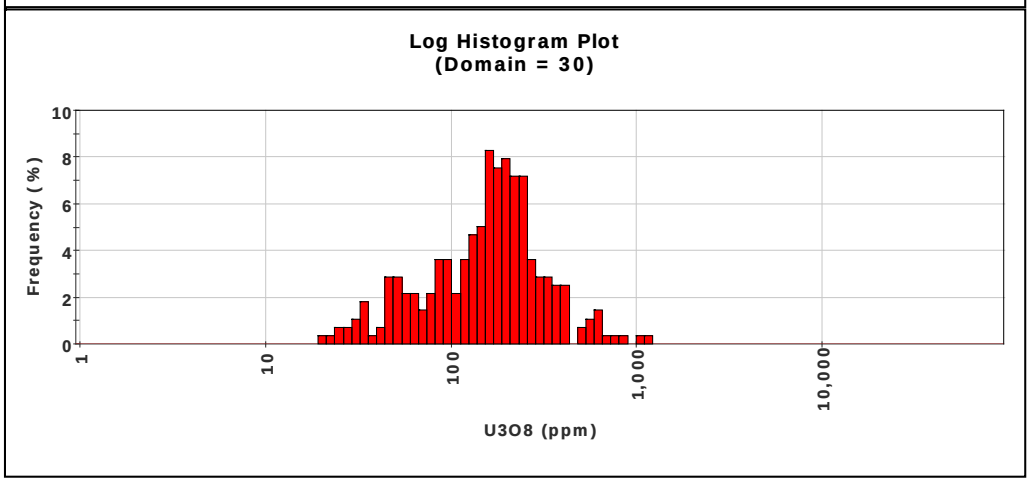
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domain = 30)

	Unweighted	Weighted	Units
Samples:	278	N/A	
Minimum:	20.61	N/A	ppm
Maximum:	1,276.00	N/A	ppm
Mean:	205.44	N/A	ppm
Median	177.50	N/A	ppm
Std. Deviation:	162.01	N/A	ppm
Coefficient of Variation:	0.79	N/A	







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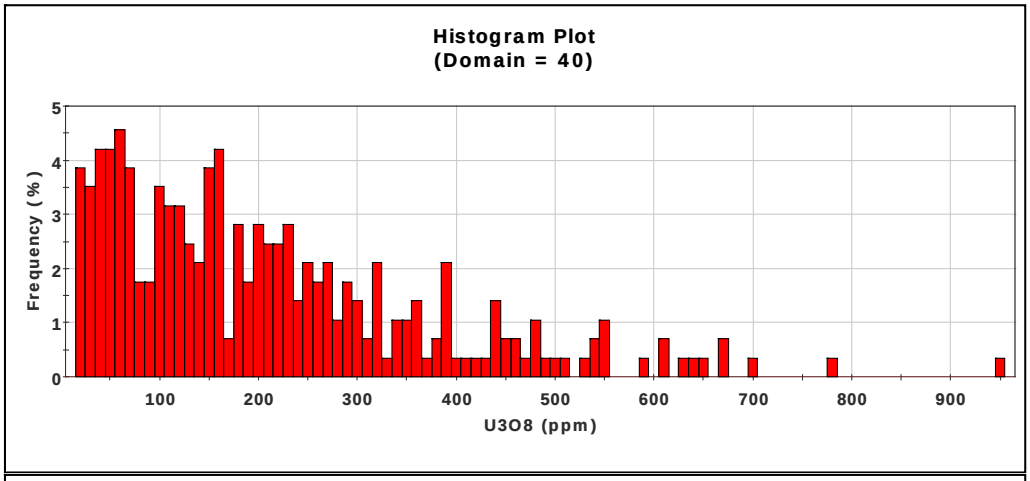
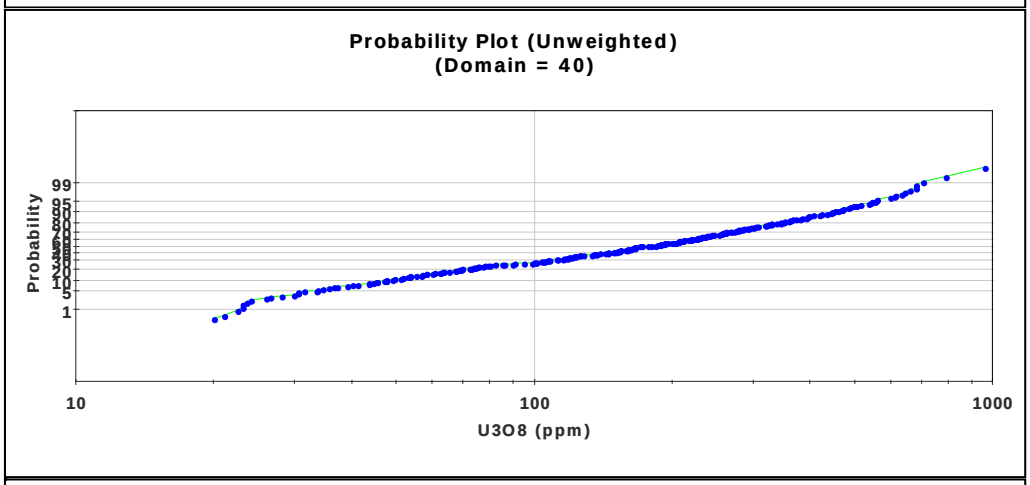
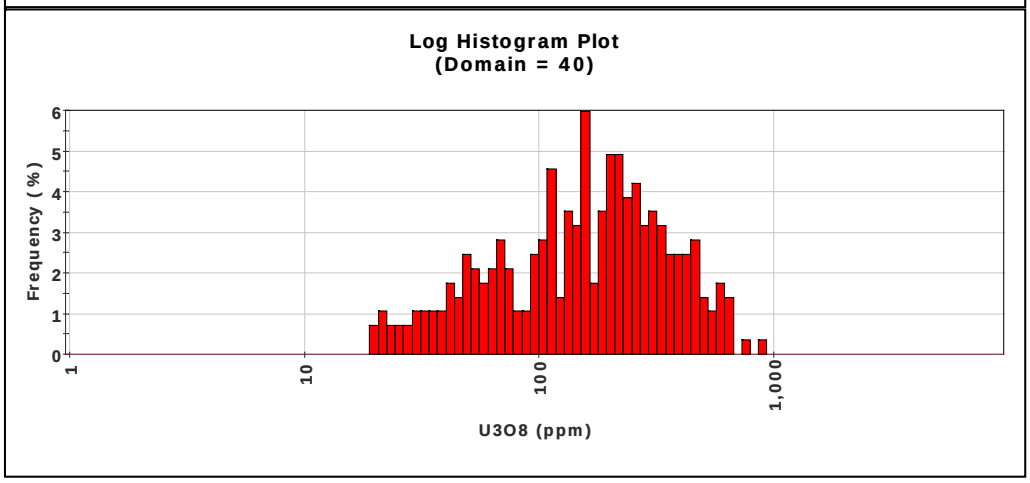
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domain = 40)

	Unweighted	Weighted	Units
Samples:	285	N/A	
Minimum:	20.00	N/A	ppm
Maximum:	958.00	N/A	ppm
Mean:	214.36	N/A	ppm
Median	169.50	N/A	ppm
Std. Deviation:	163.08	N/A	ppm
Coefficient of Variation:	0.76	N/A	







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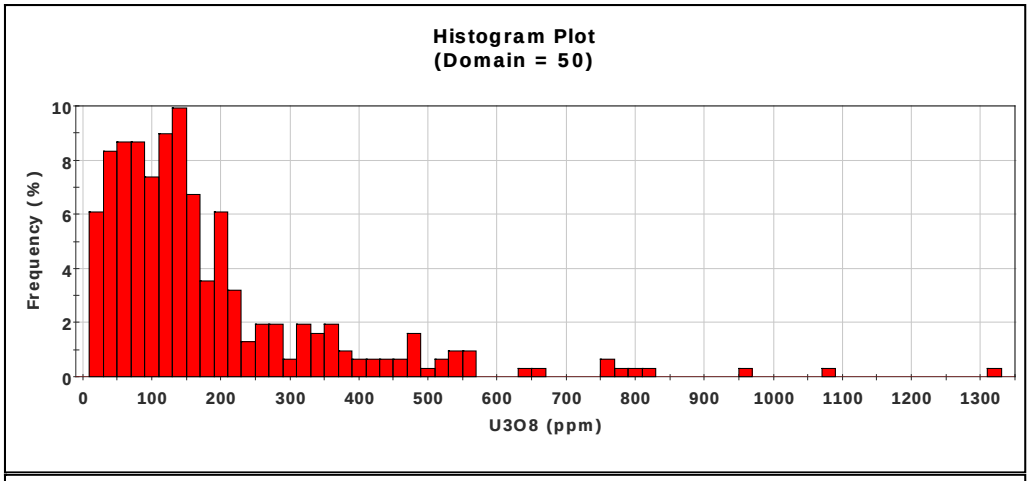
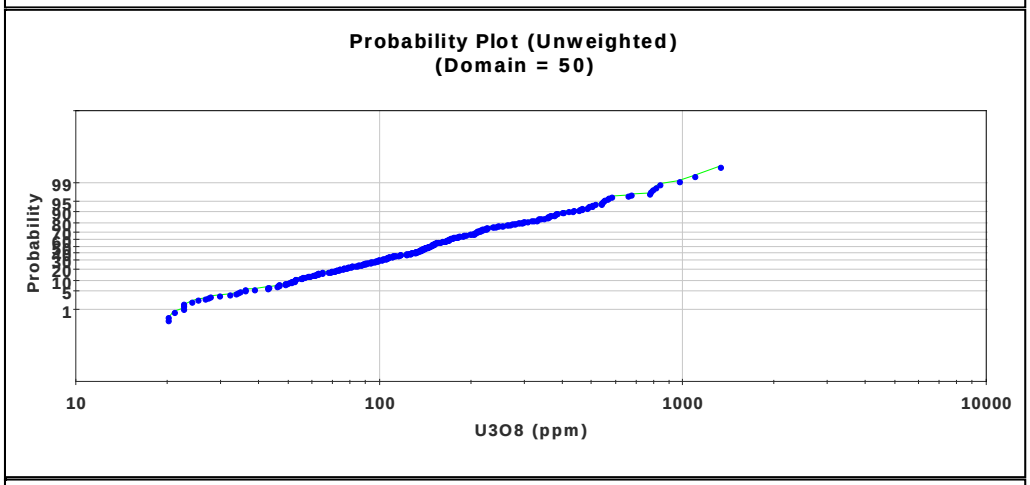
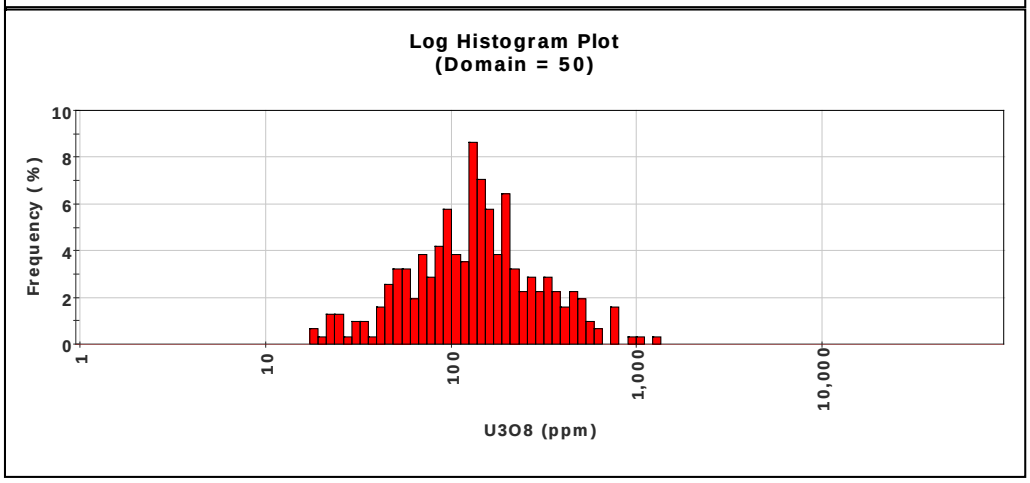
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domain = 50)

	Unweighted	Weighted	Units
Samples:	312	N/A	
Minimum:	20.00	N/A	ppm
Maximum:	1,320.00	N/A	ppm
Mean:	193.78	N/A	ppm
Median	143.25	N/A	ppm
Std. Deviation:	176.91	N/A	ppm
Coefficient of Variation:	0.91	N/A	







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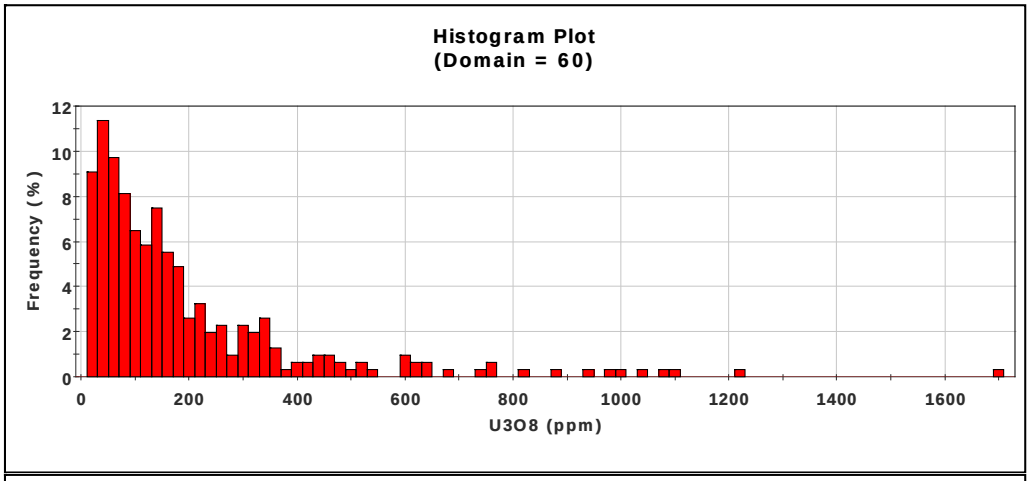
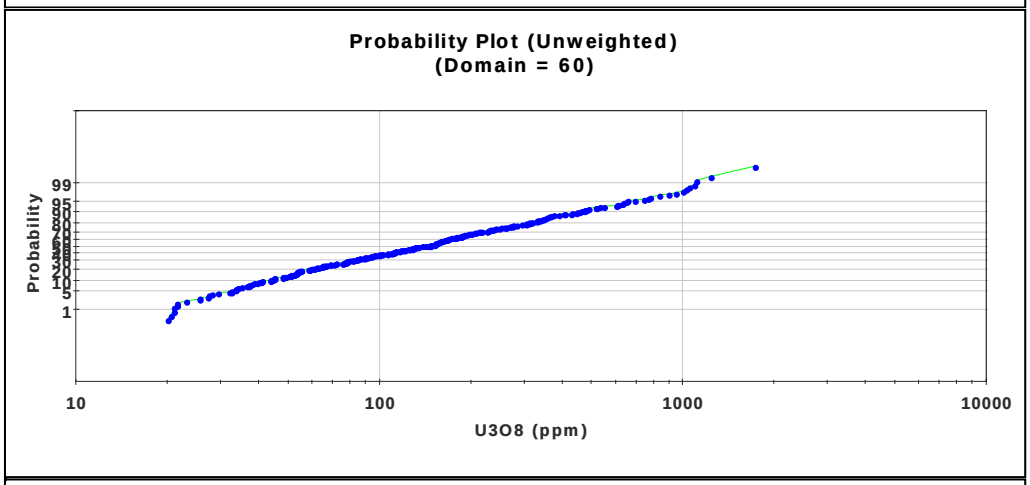
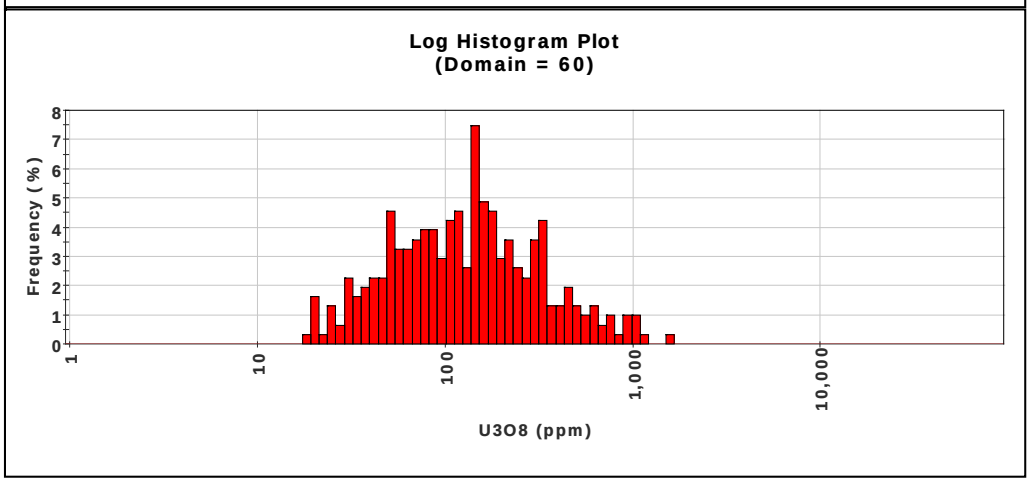
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domain = 60)

	Unweighted	Weighted	Units
Samples:	308	N/A	
Minimum:	20.00	N/A	ppm
Maximum:	1,715.00	N/A	ppm
Mean:	206.03	N/A	ppm
Median	135.75	N/A	ppm
Std. Deviation:	223.61	N/A	ppm
Coefficient of Variation:	1.09	N/A	







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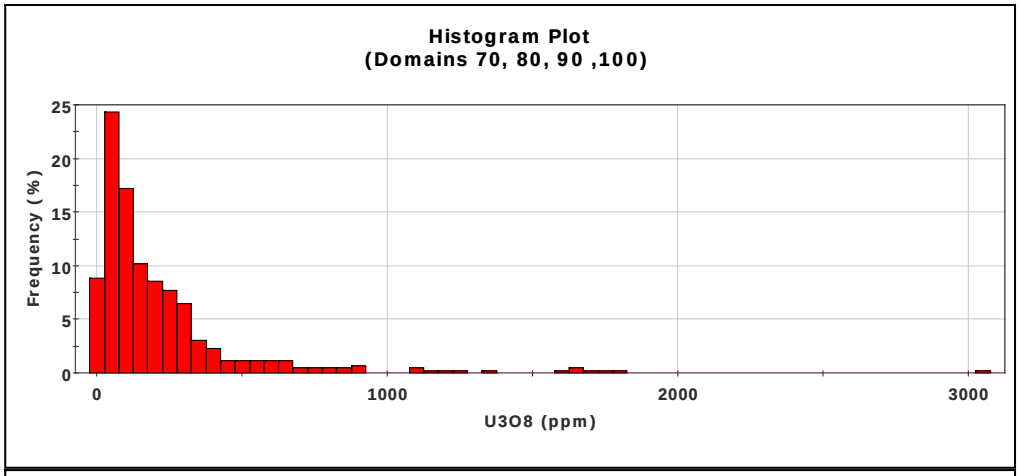
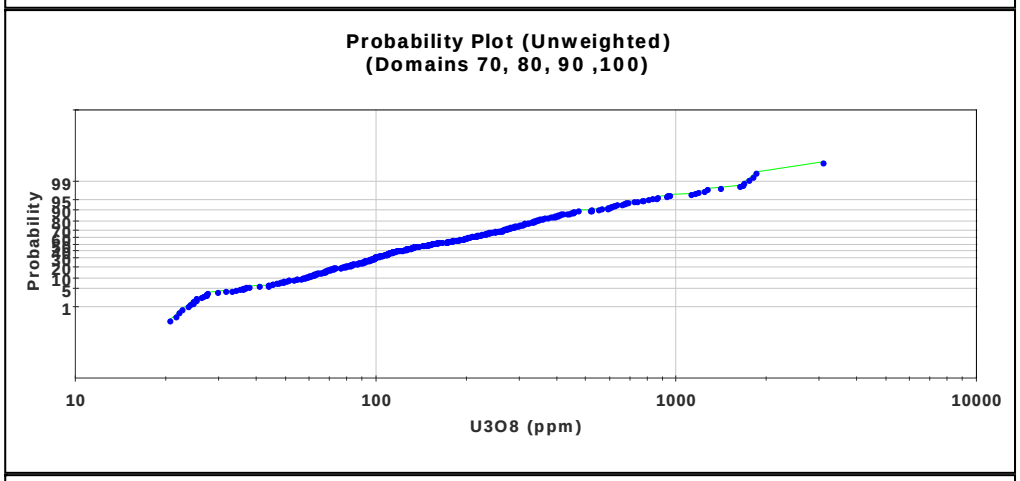
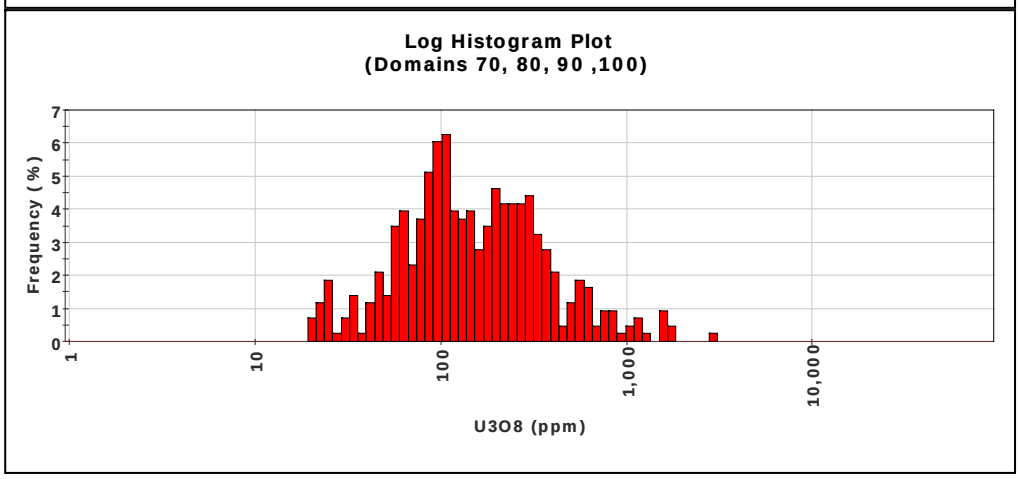
Appendix 2
Composite Statistics

Onkello Uranium Project
(Domains 70, 80, 90 ,100)

	Unweighted	Weighted	Units
Samples:	431	N/A	
Minimum:	20.50	N/A	ppm
Maximum:	3,068.50	N/A	ppm
Mean:	245.03	N/A	ppm
Median	148.00	N/A	ppm
Std. Deviation:	305.53	N/A	ppm
Coefficient of Variation:	1.25	N/A	







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Appendix 3

Certificates

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Coffey Mining Pty. Ltd.

Certificate of Qualified Person

As an author of the report entitled "National Instrument 43-101 Technical Document - Etango Uranium Project – Etango Project - July 2009 Resource Update" dated 31 August 2009, on the Etango Project property of Bannerman Resources Limited (the "Study"), I hereby state:

1. My name is Neil Andrew Inwood and I am a Specialist Resource Geologist with the firm of Coffey Mining Pty. Ltd. of 1162 Hay Street, West Perth, WA, 6005, Australia.
2. I am a practising geologist and a member of the AusIMM (210871).
3. I am a graduate of Curtin University of Technology in Western Australia with a BSc in Geology in 1993 and a PGradDip in Hydro-Geology in 1994. In 2007 I graduated from the University of Western Australia with an MSc in Geology and from Edith Cowan University with a Post Graduate Certificate in Geostatistics.
4. I have practiced my profession continuously since 1994.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I visited the Etango Project property and surrounding areas for 4 days in August 2007, and August 2008. I have performed consulting services during and reviewed files and data supplied by Bannerman Resources between July 2007 and September 2009.
7. I contributed to and am responsible for Sections 14.2, 14.3. 17 and 20.1 and the associated text in the summary, conclusions and recommendations.
8. As of the date of this certificate, to the best of my knowledge, information and belief, the Study contains all scientific and technical information that is required to be disclosed to make the Study not misleading.
9. I am independent of Bannerman Resources pursuant to section 1.4 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Study has been prepared in compliance with the Instrument and the Form.
11. I do not have nor do I expect to receive a direct or indirect interest in the Etango Project property of Bannerman Resources, and I do not beneficially own, directly or indirectly, any securities of Bannerman Resources or any associate or affiliate of such company.

Dated at Perth, Western Australia, on 31 August 2009.

[signed]

Neil Inwood
Specialist Resource Consultant

BSc (Geology)
MSc (Geology)
Post Grad Cert Geostatistics

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Coffey Mining Pty. Ltd.

Certificate of Qualified Person

As an author of the report entitled "National Instrument 43-101 Technical Document - Etango Uranium Project – Etango Project - July 2009 Resource Update" dated 31 August 2009, on the Etango Project property of Bannerman Resources Limited (the "Study"), I hereby state:

1. My name is Iain Macfarlane and I am a Senior Consultant Resources with the firm of Coffey Mining Pty. Ltd. of 1162 Hay Street, West Perth, WA, 6005, Australia.
2. I am a practising geologist and a member of AusIMM.
3. I am a graduate of University of Strathclyde in Scotland and hold a BSc (Hons) degree in Applied Geology (1976).
4. I have practiced my profession continuously since 1977.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I have performed consulting services and reviewed files and data supplied by Bannerman Resources between July and September 2009.
7. I contributed to and am responsible for parts of Sections 17 and 20.1 of the Study and the associated text in the summary, conclusions and recommendations.
8. As of the date of this certificate, to the best of my knowledge, information and belief, the Study contains all scientific and technical information that is required to be disclosed to make the Study not misleading.
9. I am independent of Bannerman Resources pursuant to section 1.4 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Study has been prepared in compliance with the Instrument and the Form.
11. I do not have nor do I expect to receive a direct or indirect interest in the Etango Project property of Bannerman Resources, and I do not beneficially own, directly or indirectly, any securities of Bannerman Resources or any associate or affiliate of such company.

Dated at Perth, Western Australia, on 31 August 2009.

[signed]

Iain Macfarlane BSc (App. Geol)
MAusIMM
Senior Consultant Resources

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Bannerman Resources Ltd.

Certificate of Qualified Person

As an author of the report entitled "National Instrument 43-101 Technical Document - Etango Uranium Project, Namibia – Etango Project - July 2009 Resource Update" dated 31 August 2009, on the Etango Project property of Bannerman Resources Limited (the "Study"), I hereby state:

1. My name is Andrew Ian Cunningham and I am Superintendent Geology Projects with Bannerman Resources Ltd. of 45 Mandume Ya Ndemufayo Street, Swakopmund, Namibia.
2. I am a practising geologist and a member of the Geological Society of South Africa (965003).
3. I am a graduate of the University of Stellenbosch (South Africa) with a BA in 1990 and a BSc Geology with Honours in 2001.
4. I have practiced my profession continuously since 1998.
5. I am a "qualified person" as that term is defined in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) (the "Instrument").
6. I am a full time employee of Bannerman Resources Limited at the Etango Project property and have worked on the project since October 2007. During my employment I have preformed various geological duties as required by my position.
7. I contributed to all sections of the Study apart from Sections 14.2, 14.3, 17, 20.1 and the associated text in the summary, conclusions and recommendations.
8. As of the date of this certificate, to the best of my knowledge, information and belief, the Study contains all scientific and technical information that is required to be disclosed to make the Study not misleading.
9. I am an employee of Bannerman Resources and am therefore not independent as outlined under section 1.4 of the Instrument.
10. I have read the National Instrument and Form 43-101F1 (the "Form") and the Study has been prepared in compliance with the Instrument and the Form.
11. I could be considered to have an indirect interest in the Etango Project property of Bannerman Resources as I own securities (employee options) of Bannerman Resources.

Dated at Swakopmund, Namibia, on 31 August 2009.

[signed]

Andrew Cunningham
Superintendent Geology Projects

BSc Hons (Geol)
MGSSA