

Cameco Australia Pty. Ltd. Summary of 1999 Exploration on Deaf Adder Project

Category	Exploration	Contractor	Coverage	Objectives	Results
Exploration Drilling	Diamond Drilling	Century Drilling	2279 m in two holes	To characterise the stratigraphy of the McKay and Kombolgie Sandstone and to determine the basement lithologies in areas to the south. To follow-up uranium mineralisation identified in a structural setting in surface exposures of Kombolgie Sandstone at the Spectre prospect.	Drilled two holes in excess of 1000 m each at DDH DAD-0006 and DAD-0007. Both holes began in the McKay Sandstone and terminated in the Lower Kombolgie Sandstone. Drill equipment limitations prevented continuation of both holes
Geological Mapping	Regional Mapping	Cameco Personnel	Property wide	The work undertaken during 1999 was to better define the McKay Sandstone and units above.	Mapping completed and compiled into Mapinfo GIS
	Detailed	Cameco Personnel	3 areas	To complete detailed mapping of new prospects and anomalies identified from the multi-spectral analysis	Mapping completed and compiled into Mapinfo GIS
	Structural Mapping	Cameco Personnel	Property wide	To define structural elements associated with major lineaments identified from various sources	Work concentrated in the greater Spectre Area, structural lineament south of Casper, large anomalous region south of the Mann River camp. The synthesis of the data is currently ongoing.
Geophysics: Airborne	Radiometric & Magnetic Survey	UTS	5772 line-km	To provide detailed magnetics, radiometrics and dtm information over current prospects and areas of interest from Stretch Prospect in the north to the Spectre Prospect in the south.	This data was used to plan drilling at Spectre Prospect and investigate U anomalism at a new Prospect named Hawthorne.
Geophysics: Surface	Gravity	Haines Geophysics	530 stations	To define structure and lithological variations across major structures and to aid in defining sandstone geometry and basement lithologies	Modelling has been completed, however constraining the results have not been possible because of the lack of basement knowledge. Data confirms deepening of the sandstone to the south east.
	Multi-parameter Down-hole Survey	Surtron	1060 m	To probe DAD-0006 throughout the entire length of NQ core with all available down-hole surveys.	Natural Gamma, Inductive Conductivity, Magnetic Susceptibility, Resistivity, Borehole Temperature, Full-Wave Sonic, Density and Calliper parameters collected.
Lithogeochemistry	Outcrop/Rock	Cameco Personnel	230	To complete the initial phase of follow-up to anomalies identified in the multispectral analysis completed in June 1999. The technique used incorporated both detailed and specific sampling using PIMA, multi-element total and partial digestions, physical property measurements etc.	A cross-section of all anomaly types were visited and sampled or resampled. Continued multispectral analysis of all data is underway.
	Outcrop/Rock	ChemNorth	626 samples	To compliment the dataset already in existence with high precision uncontaminated results.	Data will be incorporated into the multispectral synthesis
Multispectral Studies	Multi-Spectral Analysis	Cameco Personnel	Compiled all existing datasets	To provide insight into "finger-printing" and characterising remote-sensing, physical and geochemical properties from various geological environments within the property.	Using the airborne radiometric survey to establish anomalies based on UXU/Th ratios, all other datasets were normalised to these anomalous regions and classified based on several pre-defined criteria such as geology, sample density, geochemistry and PIMA. These classified anomalies were systematically followed-up by additional sampling and prospecting.
	PIMA	Cameco Personnel	626 outcrop samples and 2512 drill core samples	To continue building a library of background and anomalous spectral signatures for Arnhem Land	Completed spectral measurements and analysed using Minspec and TSG software programs
Research & Development	Water Sampling	Cameco Personnel	18 samples	A cross section of various water sources were sampled using syringes and filters. The objective was to obtain background levels of trace-elements in surface and ground water	An initial review of the data suggests anomalous levels of trace element geochemistry was not delineated in waters sampled during the 1999 program.
	Petrography (Drill and Outcrop)	Pontifex and Associates & Petrographics International	223 drill core and 626 outcrop samples	To obtain petrographic samples of all outcrop samples collected and at least one sample from each tray of drill core.	All samples from DAD-0006 and selected samples from DAD-0007 are part of a study by Pontifex and Associates. All others will be reviewed by Cameco staff initially.
	Drill Core (Historical)	Pontifex and Associates	54 samples	To document the lithological variations throughout the stratigraphic column and comment on evidence of fluid flow and alteration	Pontifex Report for DAD-0006 includes a complete description of all samples. Descriptions include comparing and contrasting the Kombolgie sandstone with the overlying McKay Sandstone and detailed descriptions of the volcanic flows and dolerite encountered in the hole.
	Drill Core (Historical)	Eric Hyatt, Queen's University	Drill Core from DAD-0002	To identify lithofacies within the Kombolgie Sandstone and complete a first-pass sequence stratigraphy.	From initial examination there appears to be a reasonable correlation with other drill holes on the property using combinations of PIMA, lithogeochemistry and geological logging