

Salamanca Uranium Project - Feasibility Study

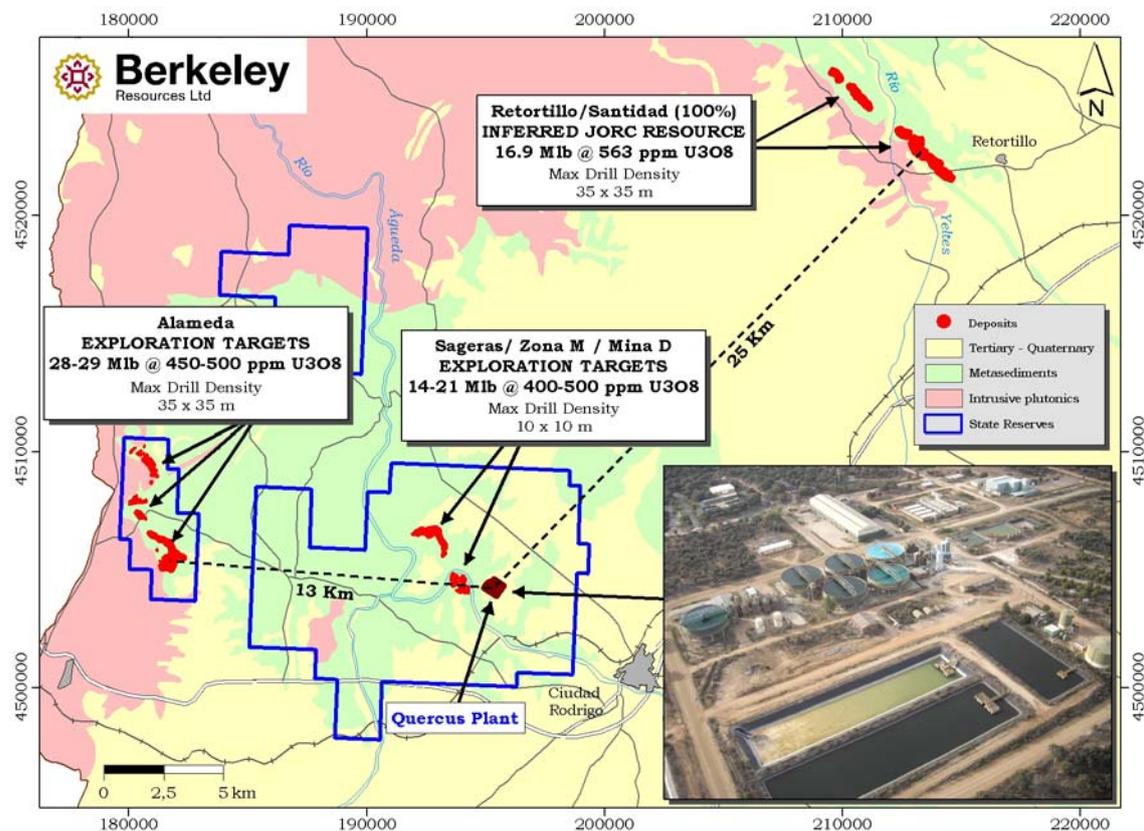


Figure 1 – Salamanca Uranium Project

Preliminary work on the Salamanca Uranium Project (SUP) feasibility study has progressed well during the quarter, culminating in commencement of a confirmatory drilling program in October at the Mina D deposit.

After completing a comprehensive review of the historical data as well as radiometric surveys and field studies, confirmatory drilling projects for Mina D, Sageras/Zona M and Alameda (totalling approximately 60 holes and 5,000m) were submitted to the regulatory bodies (the Nuclear Safety Council and Regional Mines and Environmental Departments) in July. Approval for the drilling at Mina D has been received and 3 diamond drilling rigs mobilised in October.

Following the completion of the assessment of the environmental and radiological conditions by Berkeley, Golder Associates and Ingemisa SA, environmental and radiological base line studies for the drilling projects have been completed at all of the sites.

Ongoing discussions with local Mayors, stakeholders and land owners have been positive and supportive of Berkeley's activities in the area.

Environmental and Radiological

Environmental responsibility, radiological protection and community awareness, engagement and support are paramount considerations for the success of Berkeley's Salamanca Uranium Project.



Environmental and radiological protection studies have been undertaken on Berkeley's behalf by Golder Associates and Ingemisa SA. These studies have included both fieldwork and desktop reviews of the available historical documentation provided by ENUSA.

Fieldwork by Berkeley staff and consultants, assisted by ENUSA personnel, comprised a thorough site reconnaissance of the existing processing facilities, the rehabilitated mined areas and zones around the Sageras and Mina D deposits.

The review of the extensive archives involved examination of key environmental and radiological protection data of the ecological and hydrological situation during mining, restoration and the monitoring periods.

An initial review of the regulatory processes for securing permission to restart mining and uranium processing in Salamanca has also commenced, and will be completed in the December quarter.

Geology and Exploration

Significant advances in the understanding of the deposits within the Salamanca Uranium Project (Figure 1) were made during the quarter. The work undertaken continues to provide additional confidence in the quality of the historical data supplied by ENUSA.

Activities undertaken during the period included:

- A total of 1,500 files representing a major portion of the historical data held at the ENUSA archive at Ciudad Rodrigo have been scanned. The files, consisting of reports, maps, drill logs and datasheets, are being transformed and incorporated into the Berkeley data base.
- Over 1,500 hectares of detailed ground radiometrics (50-100m line spacing) have been completed over the Sageras-Zona M, Mina D and Alameda deposits. A number of significant anomalies have been identified at Zona M and Alameda and the data is assisting drill target definition.
- Appraisal of the existing geological mapping has been completed in the Sageras, Mina D and Alameda areas.
- ENUSA's diamond drill core storage facility has been renovated and the drill core has been identified, indexed and re-logged.
- A total of 419 density measurements were taken from the ENUSA drill core and these have confirmed the densities used by ENUSA in historical calculations.
- Issues associated with spatial location of data have been resolved by installing and surveying 15 base stations across the ENUSA project area, permitting transformation parameters to be established between the ENUSA coordinate systems and the national UTM system. Additionally 300 collar locations have been surveyed to assist the process.
- A down hole survey tool has been acquired and a program to re-survey existing holes commenced in the December quarter.
- A total of 138 existing holes at Sageras and Mina D have now been logged with the Berkeley gamma probe. The results confirm the original ENUSA data in both location down the hole and intensity of mineralisation.
- An extensive review of ENUSA reports for each deposit was completed and a detailed chronology of previous exploration has been compiled.
- Digital sample data provided by ENUSA has been verified from the scanned drill hole logs.
- A detailed review of the resource models provided by ENUSA has been completed and new geological models are being developed for all of the deposits.
- A review of the exploration potential around the main mineral deposits has been completed. Potential for lateral and depth extensions of mineralisation not fully tested by ENUSA has been identified at all 3 main deposits.

- A review of the existing data of the peripheral/satellite resources has been undertaken, including the unmined remnant parts of the main Mina Fe deposit. Good potential has been recognised below and to the east of the mined Mina Fe open pit in the Majuelos area (Figure 2 & 3). A reverse circulation drilling program is planned to commence in the December quarter to test these areas.

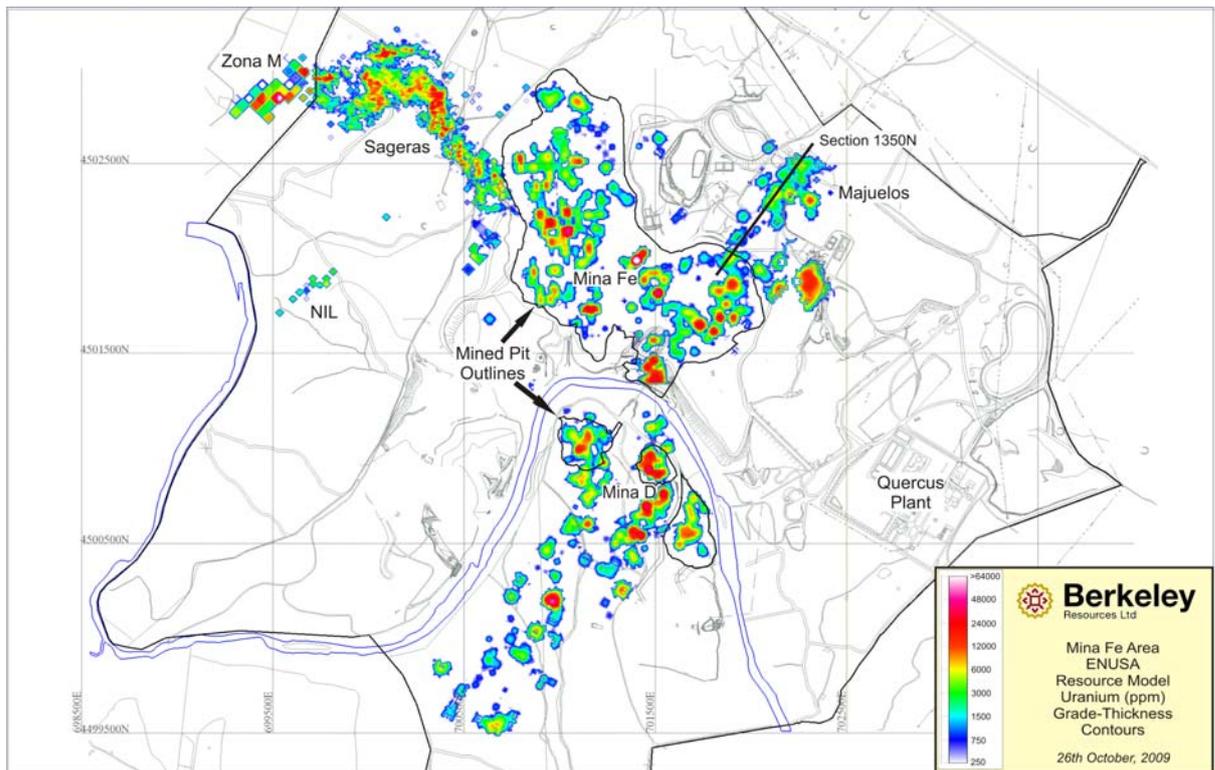


Figure 2 – Mina Fe Area Deposits

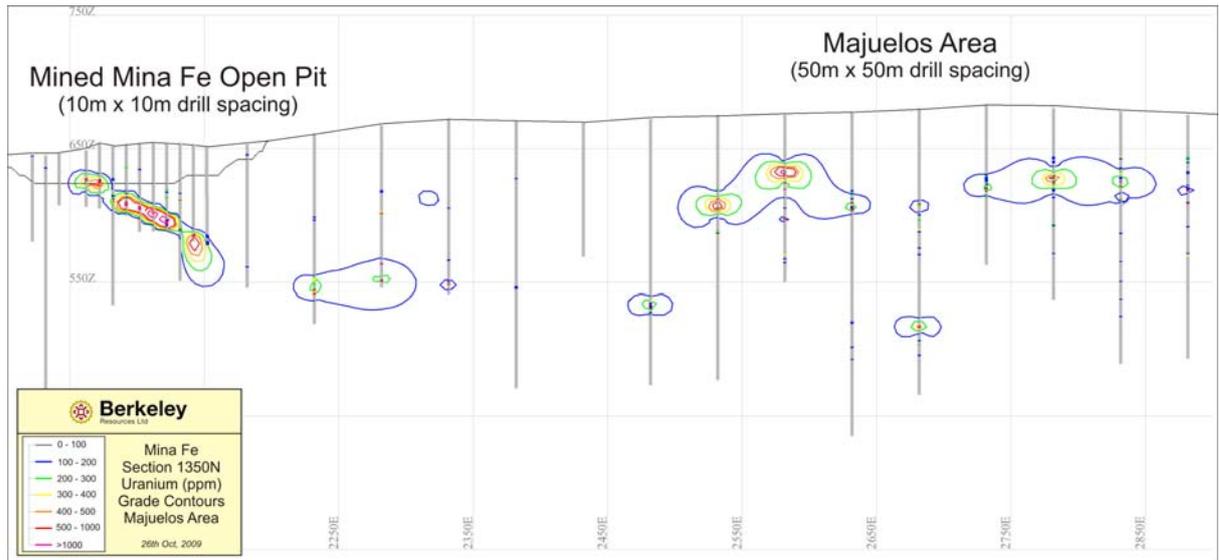


Figure 3 – Mina Fe and Majuelos Cross Section

Drilling

A confirmatory drilling program consisting of 63 diamond holes commenced in October at the main ENUSA uranium deposits (Figure 1). Approval was received from the Mines Department for drilling at the Mina D deposit and three diamond drilling rigs have been mobilised. The objectives of the program are to:

- Confirm the ENUSA radiometric and chemical grades.
- Provide geological and structural information.
- Provide geotechnical data for use in pit optimisations.
- Provide metallurgical samples for heap leach column test work.
- Enable density measurements within the ore zones.

The confirmatory drilling program comprises.

Deposit	Number Of Holes	Drill Metres
Sageras	19	1,300
Zona M	12	1,000
Mina D	14	1,300
Alameda	19	1,500
	63	5,100

Table 1 – Planned Drilling

The Mina D Deposit

Three diamond drilling rigs have been mobilised to Mina D. The collar locations of the planned holes are shown in Figure 4 and a cross section of the first two planned holes in Figure 5. These have been designed to test a high grade mineralized zone dipping below the previously mined open pit.

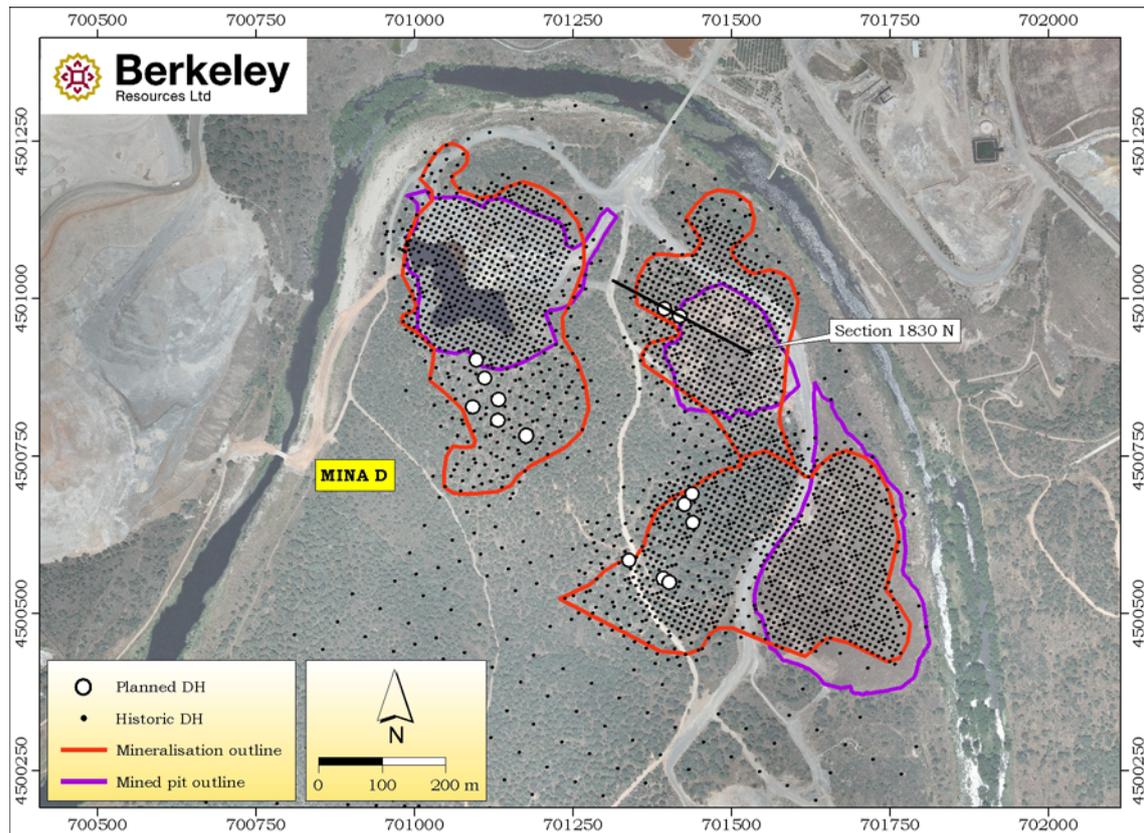


Figure 4 – Planned Mina D Drilling

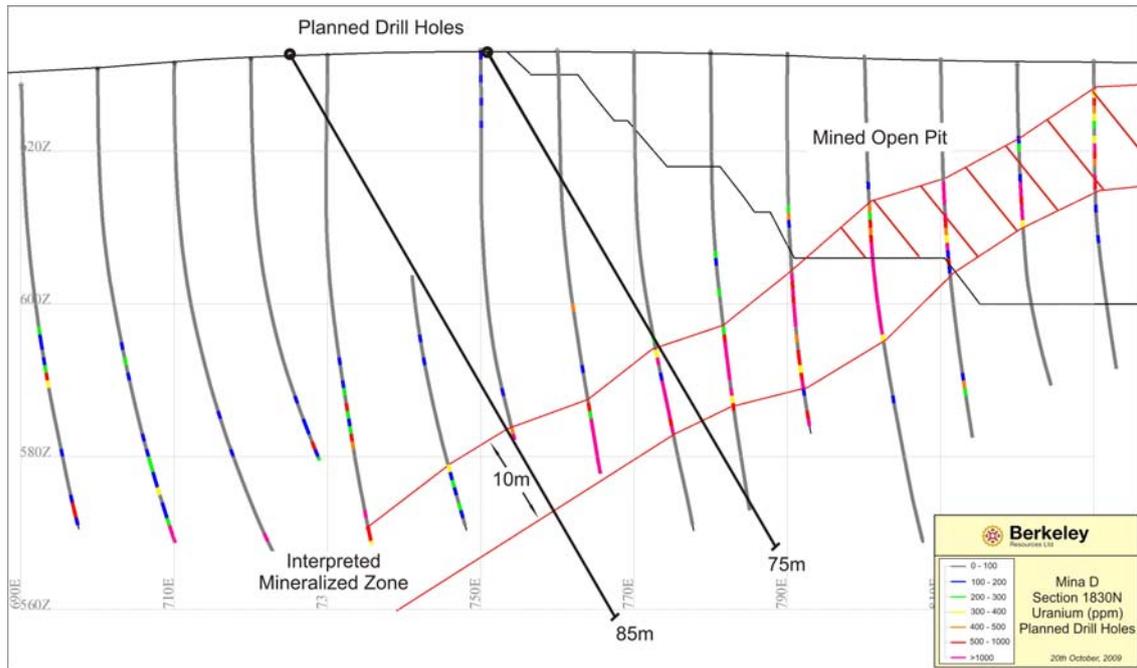


Figure 5 – Mina D Cross Section 1830N

The Sageras/Zona M Deposit

The Sageras-Zona M deposit is interpreted as the North West extension of Mina Fe and is located within 2 km of the Quercus processing plant. Sageras is the portion of the deposit that lies within the ENUSA farm boundary and it has been predominantly drilled out by open hole roto-percussion methods on a 10m x 10m drill spacing, with down hole radiometric assaying. Berkeley is planning to drill nineteen diamond holes across the Sageras deposit in a series of traverses across the ore zone (Figure 6).

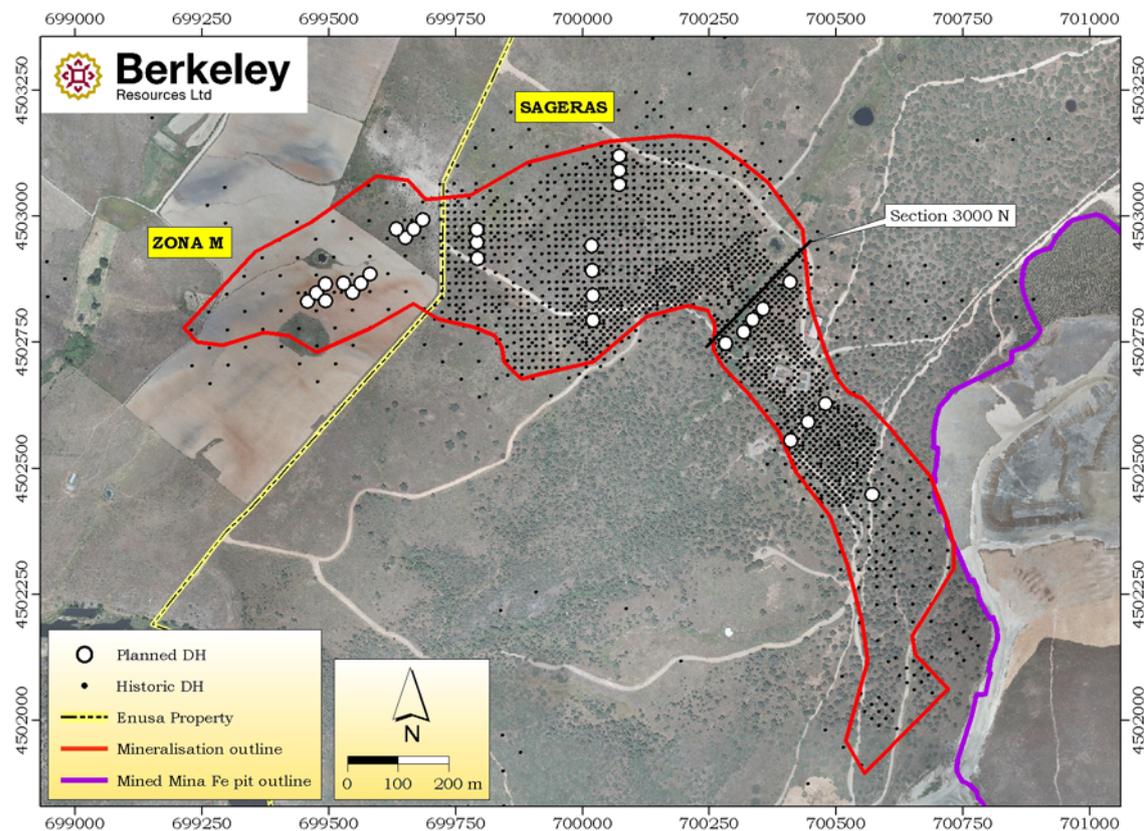


Figure 6 – Planned Sageras-Zona M Drilling

Zona M is the extension of the Sageras deposit that lies outside the ENUSA farm boundary. It has been tested with 50m x 50m spaced diamond drilling, with chemical assays. Berkeley plans to drill twelve diamond holes to infill around the higher grade ENUSA drill holes (Figure 6). A further RC drilling program will be drilled subsequently with a view to upgrading the resource categorisation.

Additional reverse circulation (RC) holes are also being planned to test for extensions of the ore zones at depth and to the east of the deposit (see Figure 7).

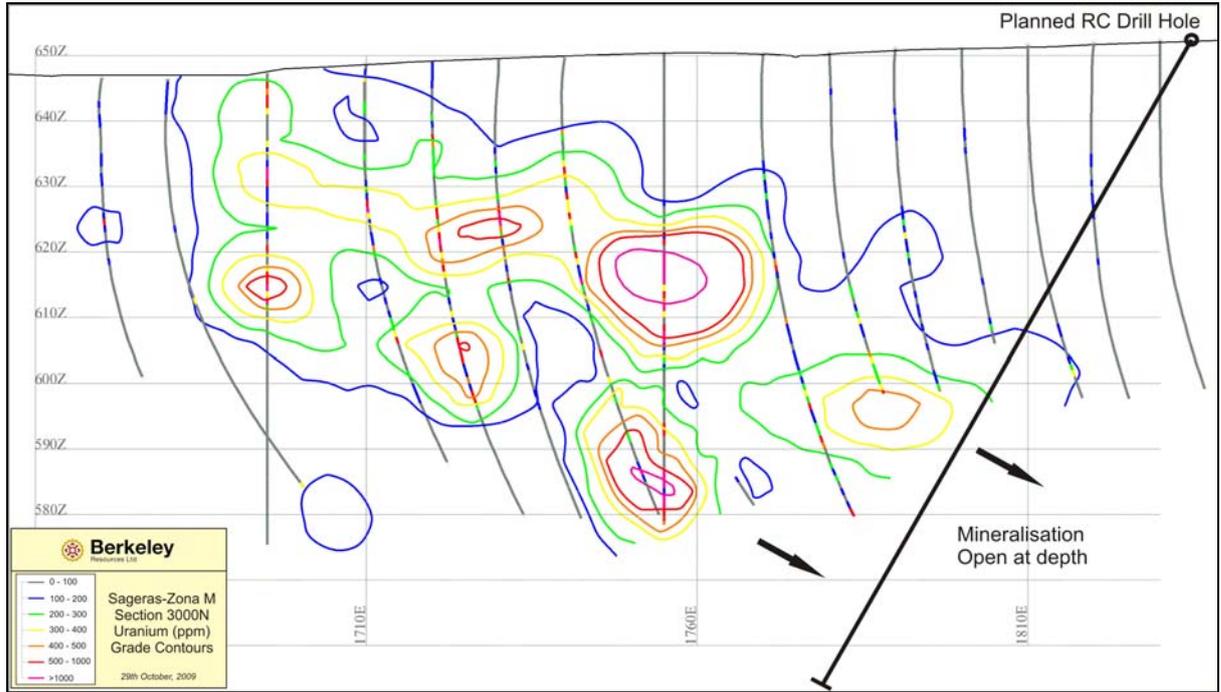


Figure 7 – Sageras Cross Section 3000N

The Alameda Deposits

The Alameda deposits are located 13km to the west of the Quercus plant (Figure 1). The main deposit - Alameda South - has been explored by 50m x 50m spaced vertical diamond drill holes, with chemical assays. Berkeley plans to drill nineteen diamond holes across the Alameda South deposit in the current program, to confirm the ENUSA chemical assay grades and to provide metallurgical samples (Figure 8). A further RC drilling program is also planned to infill the diamond drilling, to upgrade the resource categorisation and test peripheral areas.

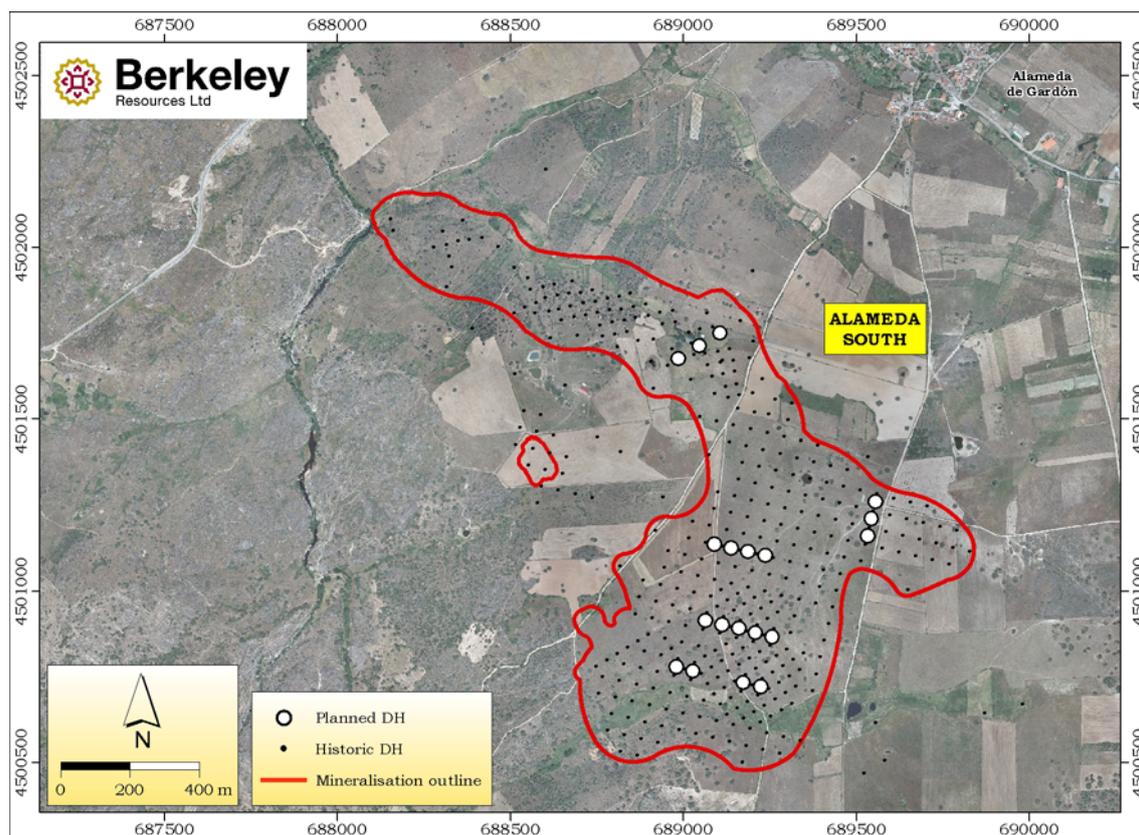


Figure 8 – Planned Alameda South Drilling

Ground radiometrics completed over the Alameda deposits have shown good correlation with the mineralisation outlined by drilling (Figure 9). The main high grade central core of the Alameda South deposit is overlain by recent cover, resulting in a radiometric low. This highlights the potential of the areas adjacent to the granite further to the south which are also overlain by Tertiary cover (Figure 10). Berkeley has a large land holding over this prospective area and is currently reviewing the available data.

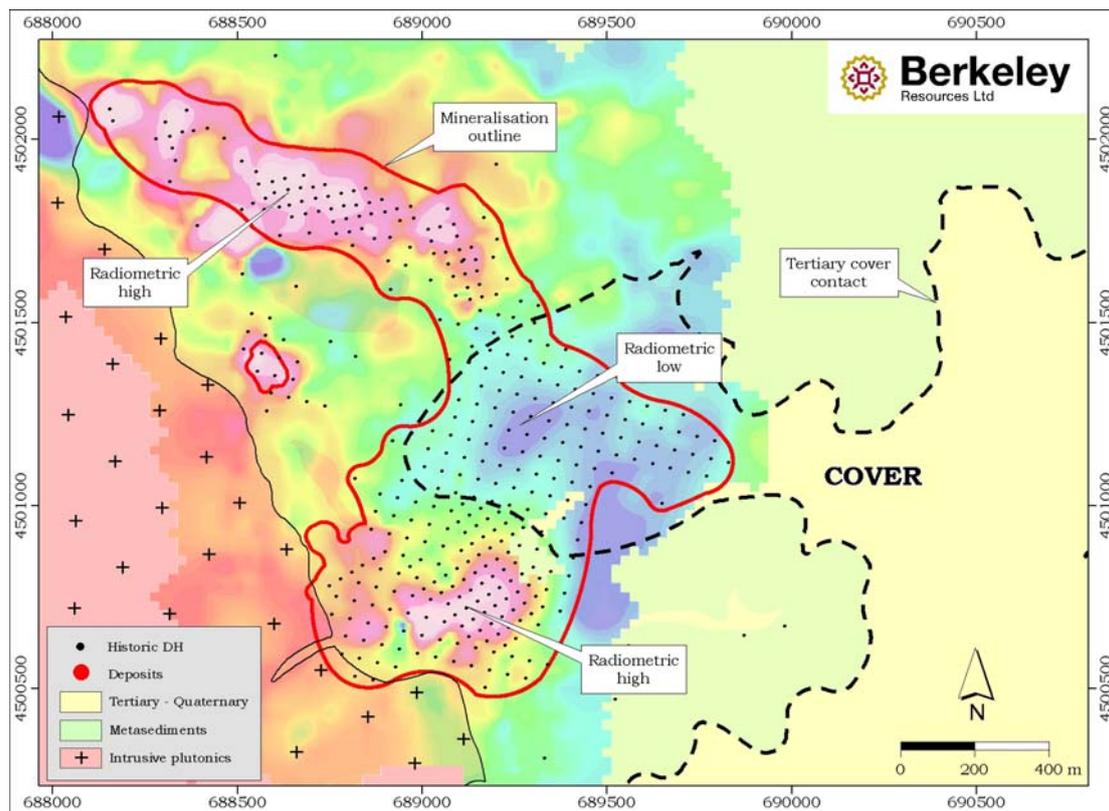


Figure 9 – Alameda South Ground Radiometrics

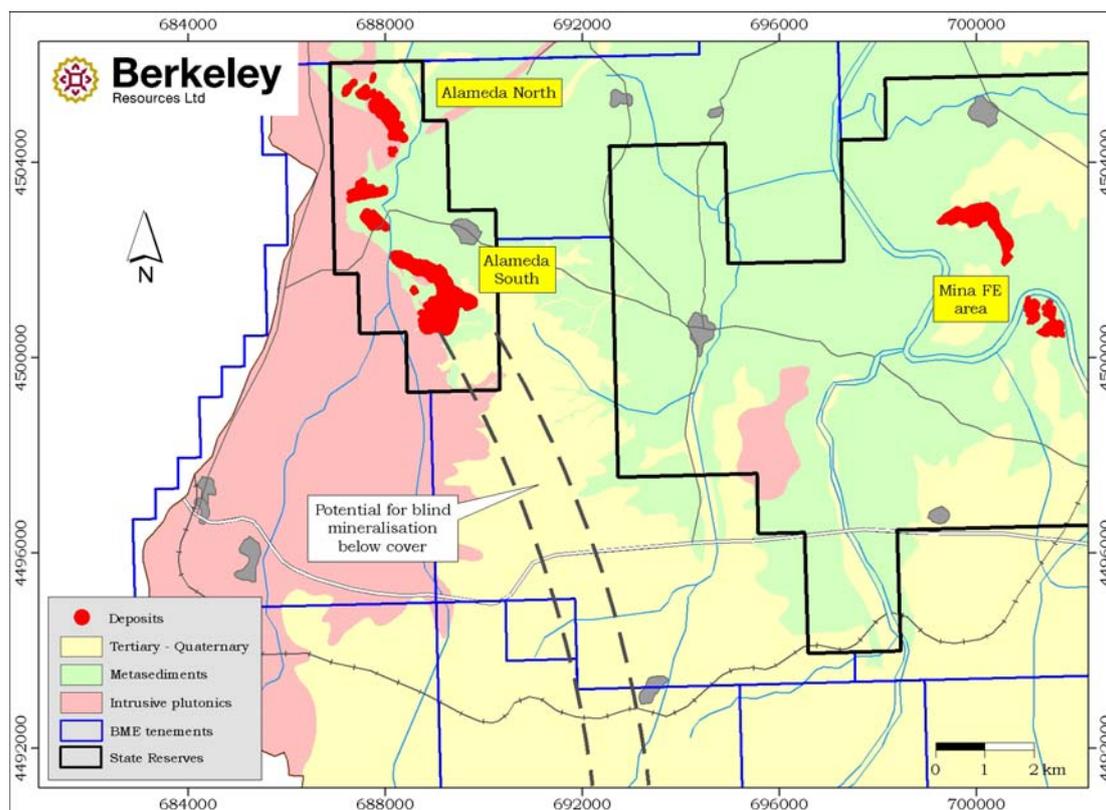


Figure 10 – Potential below tertiary cover south of Alameda

Mining Studies

An initial review of the historical mining data from the Mina Fe and Mina D deposits has been completed, in conjunction with Golder Associates and AMC Consultants. Along with contemporary costs for the main production inputs, these have provided Berkeley with data to complete pit optimisations on the main Salamanca deposits.

Berkeley and its consultants then began work on assessing a number of production scenarios to optimise mining and processing of the various deposits that comprise the Salamanca Uranium Project. Work completed or in progress at the end of the quarter includes:

- Review of the transportation options from Alameda and Retortillo.
- Compilation of scheduling scenarios.
- Preparation of Ore Mining Schedules for various processing options.
- Material movement schedules.
- Cash flow modeling.
- Sensitivity Analyses (U_3O_8 Price, Process Recovery, Capital Costs and Operating Costs).

Metallurgical and Processing

In conjunction with consultants Aker Solutions and Kappes Cassidy, Berkeley has completed an initial review of the historical metallurgical and processing data for the Salamanca Uranium Project. As part of the initial phase of the Feasibility Study, Berkeley has also now defined the base parameters, established conceptual flow sheets and modelled initial capital and operating costs for three alternative processing scenarios:

- Option 1: Tank Leach Plant to treat all ore
- Option 2: Tank Leach Plant coupled with a Heap Leach Facility
- Option 3: Heap Leach Plant to treat all ore

Results of this initial study are anticipated in the final quarter of 2009.

Metallurgical Testwork: Retortillo

As reported in June, SGS Lakefield Oretest Pty Ltd in Perth have completed the column leach test work on two representative samples of “oxidized” (Top Composite sample) and “transition/fresh” (Bottom Composite sample) mineralization from the Retortillo deposit. The two column leach tests were conducted over 60 days and indicated the following:

- The overall mass loss of the ore was low, with values of 2.0% (w/w) and 2.8% (w/w) for the top composite column and bottom composite column respectively. Acid consumption varied slightly with values of 23.3kg/t and 22.3kg/t. Slump tests conducted were low at 0.3% for both columns.
- The final Uranium extraction was calculated at the end of the leach test by analyzing the final leach liquor, the wash liquors and residues. Extractions of 98% in the top composite column were achieved and 92% extraction in the bottom composite.
- Extractions were also calculated from leach residue samples collected from top, middle and bottom of the column to provide an indication of the extraction profiles, the values confirmed that the extractions were higher at the top of the column, which was also reflected in the mass loss of the ore.
- The introduction of trivalent iron into the column to assist with uranium extraction had an immediate effect on the uranium recovery, which increased from 46% to 70% in the top composite and 47% to 70% in the bottom composite.

- On completion of each of the leach tests, a size by size analysis was conducted on the leach residue from each of the columns to determine element and mass distribution. The results showed that, the uranium distribution in each leach residue appears to mirror the mass distribution, suggesting that the uranium is leached evenly across all particle sizes.

These encouraging column leach results for the two representative Retortillo samples open up the possibility of a heap leach operation providing uranium in solution for final recovery at the Quercus plant.

NOTE

The Sageras-Zona M, Mina D and Alameda deposits have been extensively explored by ENUSA but do not presently have JORC compliant resources. Berkeley's targets are conceptual in nature and based on a review of the available data on the projects to date. As there has been insufficient exploration to define a JORC compliant Mineral Resource, it is uncertain whether further exploration will result in the determination of a Mineral Resource.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Ross Corben, who is a Member of The Australian Institute of Mining and Metallurgy and an employee of Berkeley Resources Limited. Mr. Corben has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Corben consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

BERKELEY RESOURCES LIMITED

ABN

40 052 468 569

Quarter ended ("current quarter")

30 September 2009

Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (3 months) \$A'000
Cash flows related to operating activities		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration and evaluation	(1,214)	(1,214)
(b) development	-	-
(c) production	-	-
(d) administration	(360)	(360)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	72	72
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other		
- Business development	(134)	(134)
Net Operating Cash Flows	(1,636)	(1,636)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.9 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other		
- Refund of security deposits	54	54
Net investing cash flows	54	54
1.13 Total operating and investing cash flows (carried forward)	(1,582)	(1,582)

+ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(1,582)	(1,582)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	11	11
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other		
	– capital raising expenses	(72)	(72)
	Net financing cash flows	(61)	(61)
	Net increase (decrease) in cash held	(1,643)	(1,643)
1.20	Cash at beginning of quarter/year to date	11,568	11,568
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	9,925	9,925

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	217
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Payments include executive remuneration, superannuation, directors' and consulting fees.

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Not applicable

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Not applicable

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	1,500
4.2 Development	-
Total	1,500

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	1,801	2,543
5.2 Deposits at call	8,124	9,025
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	9,925	11,568

+ See chapter 19 for defined terms.

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	WA: P15/4528 P15/4529 P15/4545 P15/5053 to P15/5065	-	100%
6.2	Interests in mining tenements acquired or increased	-	-	-

+ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	123,486,312	123,486,312	Not Applicable	Not Applicable
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	15,033	15,033	Not Applicable	Not Applicable
7.5 +Convertible debt securities				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options			<i>Exercise price</i>	<i>Expiry date</i>
-Unlisted Options	10,600,000	-	\$0.70	30 April 2010
-Incentive Options	2,160,000	-	\$1.86	5 August 2011
-Incentive Options	787,500	-	\$1.00	19 June 2012
-Listed Options	12,924,723	12,924,723	\$0.75	15 May 2013
-Unlisted Options	2,500,000	-	\$1.00	31 May 2013
7.8 Issued during quarter				
7.9 Exercised during quarter	15,033	15,033	<i>Exercise price</i> \$0.75	<i>Expiry date</i> 15 May 2013
7.10 Expired during quarter -Incentive Options -Employee Options (ceasing eligible employment)				
7.11 Debentures <i>(totals only)</i>				
7.12 Unsecured notes <i>(totals only)</i>				

+ See chapter 19 for defined terms.

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does ~~/does not~~* (*delete one*) give a true and fair view of the matters disclosed.

Sign here: Date: 30 October 2009
(~~Director~~/Company secretary)

Print name: **CLINT MCGHIE**

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** - The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** - ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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+ See chapter 19 for defined terms.