



Rum Jungle Uranium Ltd
ABN 33 122 131 622
20/90 Frances Bay Drive
Stuart Park NT 0820
GPO Box 775
Darwin NT 0801
Tel: (08) 8942 0385
Fax: (08) 8942 0318

Listings Officer

ASX Melbourne

ASX Announcement by Electronic Lodgment, Tuesday, August 31, 2010.

KARINGA CREEK POTASH UPDATE AUGUST 31, 2010

Joint Venture between Rum Jungle Uranium Ltd and Reward Minerals Ltd

(RUM 50%-RWD 50%)

Assay results for 30 additional brine samples collected from a follow up sampling program in July have been received and confirm the prospective nature of the Karinga Creek Potash Project in the Amadeus Basin, Central Australia. The samples confirm the high level and potentially economic quantities of potassium, magnesium and sulphur occurring as sulphate within the Central Australian Groundwater Discharge Zone. The sampling took place over four large lake clusters spanning 95km both north and south of Lasseters Highway in Central Australia. Potassium values of around 5000 mg/L are considered commercially attractive provided sufficient quantities of brine are available, so the results highlighted below are considered particularly encouraging.

Assaying is carried out at the laboratories of Geo-processors Pty Ltd in Sydney.

HIGHLIGHTS

Sample	K (mg/L)	Mg (mg/L)	SO4 (mg/L)	LAKE
122289	8000	9392	30842	Mallee Well East
122286	7700	11786	40872	Mallee Well East
122293	7500	8785	41803	Curtin West
122281	7700	17989	39008	Island lake 5
122277	7100	10161	37766	Island Lake 3

It is becoming increasingly clear that potassium magnesium sulphate or **schoenite** ($K_2SO_4MgSO_4 \cdot 6H_2O$) will be the key product that may be produced from the groundwater brines and because it also contains magnesium it will be a premium product to both Muriate of Potash (KCL) and Sulphate of Potash (K_2SO_4). Other by-products that may be produced include Thenardite (sodium sulphate) and Epsomite (Epsom salt). Muriate of Potash (MOP) is the product produced in Canada and exported all over the world, whilst China has become a dominant player in the Schoenite market manufacturing from salt lakes in China.

Since March 2010, 92 one litre brine samples have been collected from the lake system which has identified four key lake clusters with suitable geochemistry for schoenite production and has also shown that water type is consistent across all prospective clusters.

Two archaeological surveys have also been conducted and three groups of senior Traditional Owners have been taken onsite to conduct cultural heritage surveys to ensure any sites of cultural significance are avoided.

The next step in the exploration process is to conduct drilling where access occurs between the salt lake clusters into subsurface palaeochannels associated with the Central Australian Groundwater Discharge Zone which stretches from the Western Australian border continuously through to the Finke River east of Erldunda. The target in this instance is the palaeochannel brine that is currently supplying recharge water to the surficial salt lakes. If palaeochannels are found of suitable geochemistry, trenches or costeans will be dug into these channels and the water will be pump tested to determine flow rates and recharge rates. These palaeochannels are considered critical to determine the resource potential of the project.

Geo-Processors have proposed two process route options for recovery of salt products however these are yet unproven. Process route testing and bench scale production trials will not commence until brine resources are proven from drilling and pump flow testing. Drilling is scheduled for late September/October 2010.

Table 1 to 4 show brine assays from first and second pass samples within each lake cluster.

Figure 1. Karinga Creek Project Location within the Central Australian Groundwater Discharge Zone. Arrows depict water flows into salt lake discharge zone. Source: Geological Atlas of The Amadeus Basin. AGSO

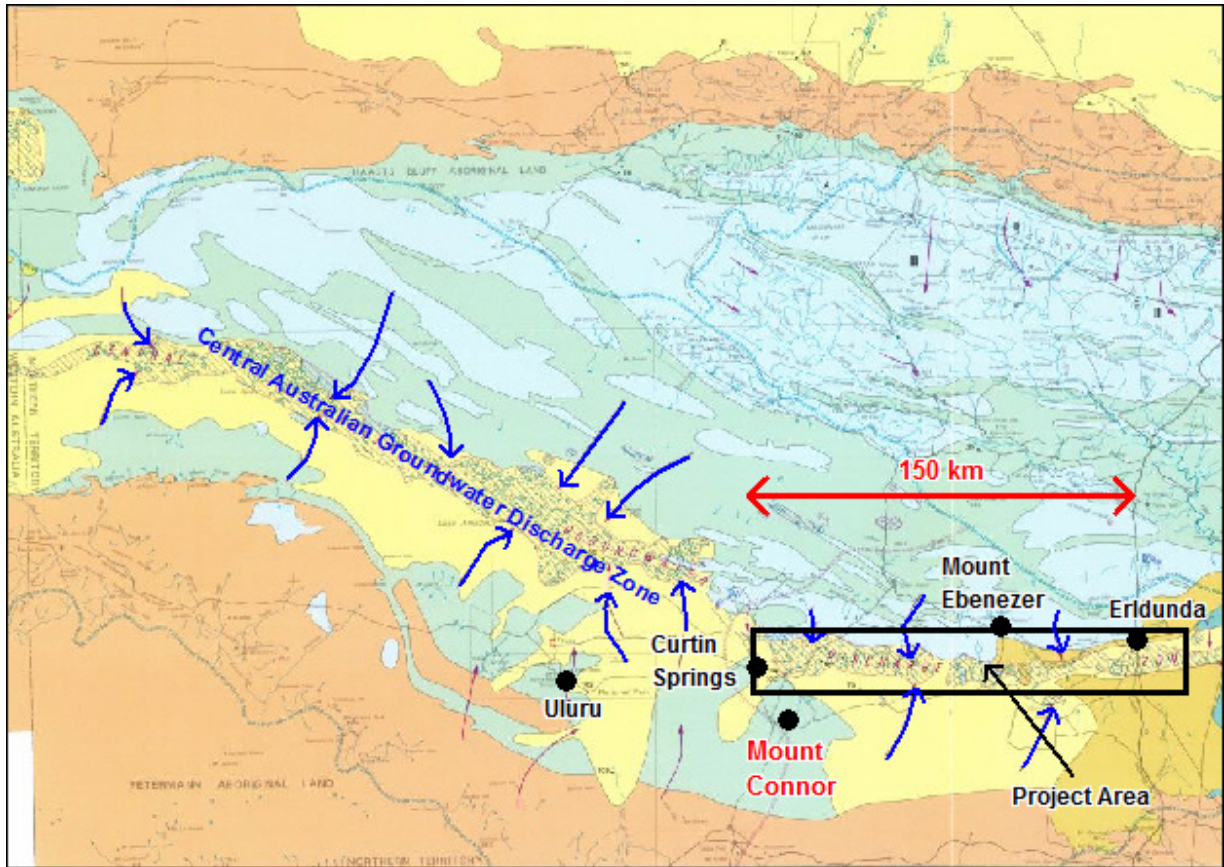
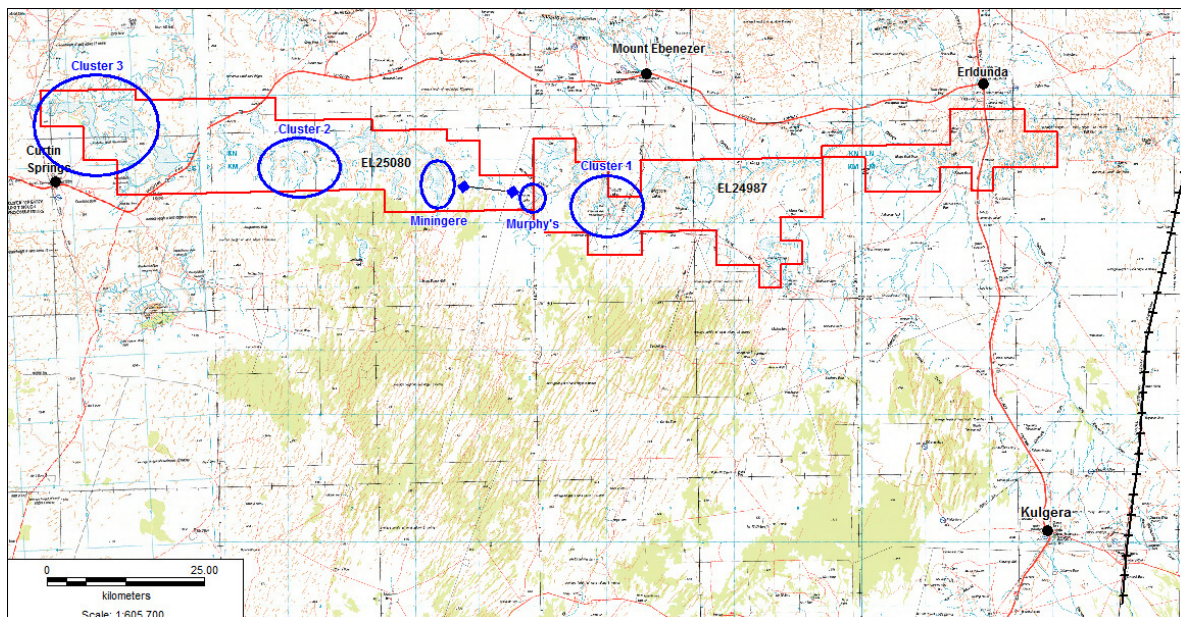
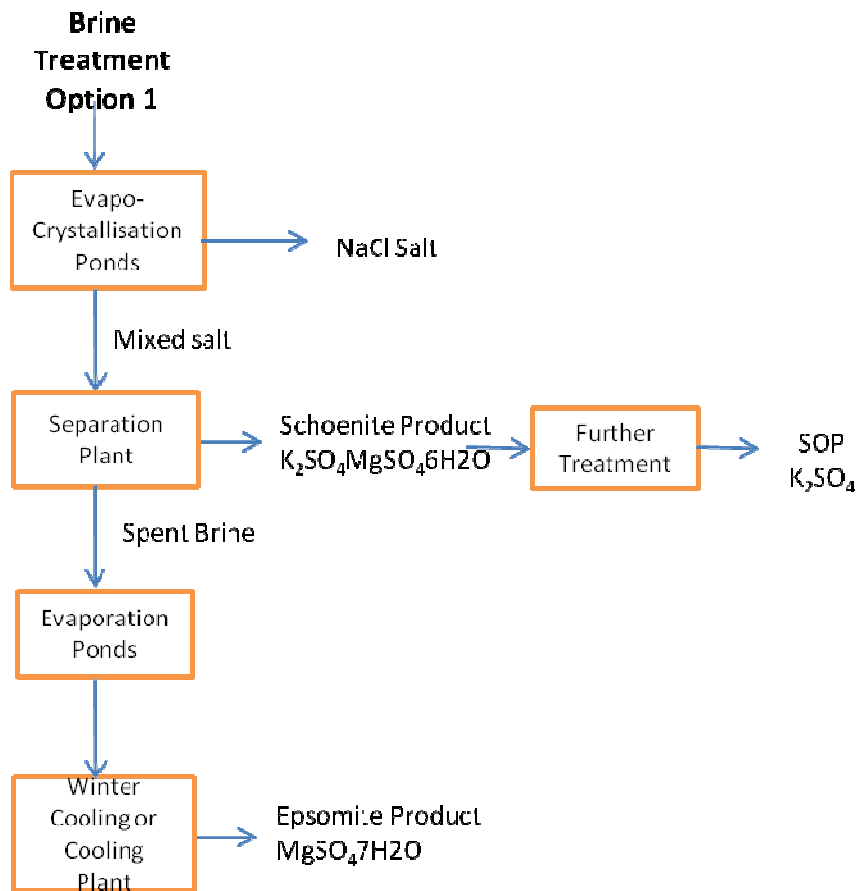


Figure 2. Key lake clusters at Karinga Creek in proximity to Central Australian Railway and Lassiter Highway



Technically feasible treatment options for recovery of potassium and other salts of value from Karinga Creek brines (proposed only-not yet proven)



Technically feasible treatment options for recovery of potassium and other salts of value from Karinga Creek brines (proposed only-not yet proven)

**Brine Treatment
Option 2**

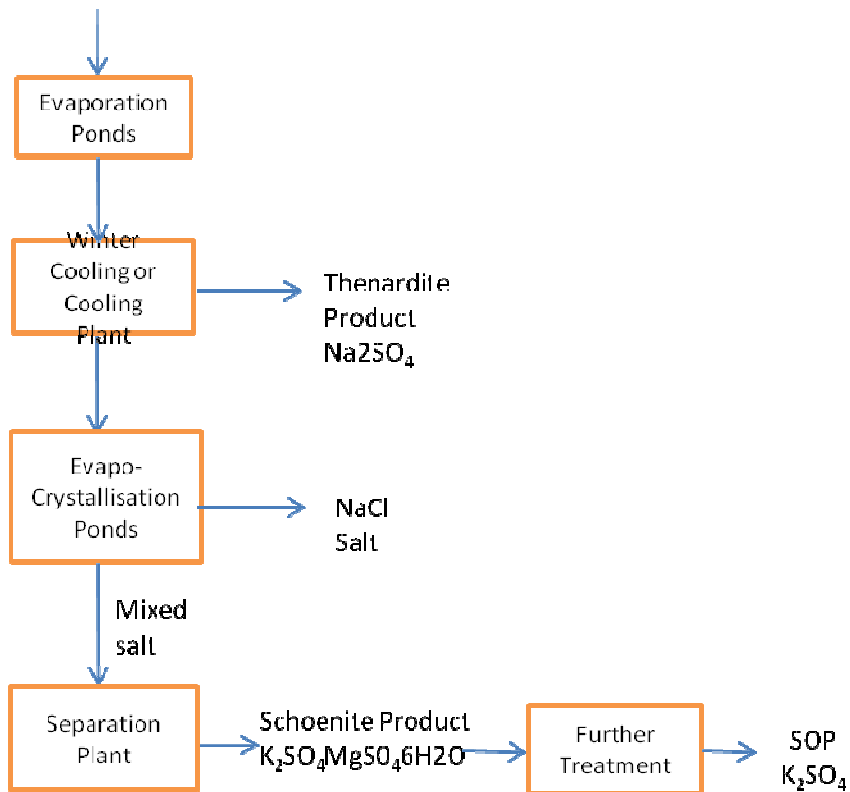


Table 1. Brine assay results for Cluster 1

GEO Lab No	Field No.	Sample Location	SG	TDS	Na	K	Mg	SO4	Cl
CLUSTER 1	(RJU)			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Geo-NT002	122202	Pulcura L	1.19	306131	110000	4100	4619	23793	163100
Geo-NT006	122206	Pulcura L	1.21	336290	120000	5800	6660	40250	163102
Geo-NT007	122207	Pulcura L	1.20	331493	120000	4700	5834	30128	170193
Geo-NT008	122208	Pulcura L	1.19	327868	120000	4500	4375	28141	170193
Geo-NT012	122212	Corkwood L	1.19	292926	100000	4400	8800	37456	141828
Geo-NT013	122213	Corkwood L	1.19	306586	100000	4800	8557	36835	156010
Geo-NT014	122214	Mygoora S L	1.21	325276	110000	4900	7585	32177	170193
Geo-NT015	122215	Mygoora S L	1.21	329813	120000	4900	6100	28141	170193
Geo-NT016	122216	Mygoora S L	1.21	336455	120000	5500	5883	27302	177285
Geo-NT017	122217	Mygoora S L	1.21	336733	120000	5400	6077	27302	177285
		Average	1.20	322957	114000	4900	6449	31153	165938

Table 2. Brine Assay results for Cluster 2

GEO Lab No	Field No.	Sample Location	SG	TDS	Na	K	Mg	SO4	Cl
CLUSTER 2	(RJU)			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Geo-NT031	122231	Curtin boundary L	1.19	308069	110000	4600	7074	37456	148919
Geo-NT032	122232	Curtin boundary L	1.19	314815	110000	4500	6709	34040	159556
Geo-NT033	122233	Curtin boundary L	1.19	322526	110000	5200	8581	42735	156010
Geo-NT034	122234	Curtin boundary L	1.18	288685	100000	3600	7184	32488	145373
Geo-NT035	122235	Skinny L	1.21	330833	110000	4800	10247	35593	170193
Geo-NT036	122236	Skinny L	1.20	326545	110000	4900	7451	39319	164875
Geo-NT037	122237	Skinny L	1.20	313609	100000	4600	7329	42114	159556
Geo-NT038	122238	Skinny L	1.20	322366	110000	3900	8399	33419	166648
Geo-NT046	122246	Skinny L	1.21	333884	110000	4900	12447	32798	173739
Geo-NT045	122245	Lyndavale W	1.21	318300	110000	7600	10234	27364	163102
Geo-NT047	122247	Curtin island L	1.21	330159	110000	5900	11960	33419	168420
Geo-NT048	122248	Curtin island L	1.25	389121	120000	12000	20372	57581	179058
Geo-NT049	122249	Curtin island L	1.24	350355	100000	11000	18232	47334	173739
Geo-NT074	122277	Island Lake 3	1.20	300,386	96,000	7,100	10,161	37,766	148,932
Geo-NT075	122278	Island Lake 3	1.19	289,459	97,000	5,900	7,451	31,556	147,159
Geo-NT076	122279	Island Lake 4	1.17	251,726	79,000	5,200	6,515	30,966	129,429
Geo-NT077	122280	Island Lake 4	1.14	206,899	71,000	4,700	6,160	42,735	81,558
Geo-NT078	122281	Island Lake 5	1.22	341,567	110,000	7,700	17,989	39,008	166,648
Geo-NT079	122282	Island Lake 2	1.21	320,475	98,000	5,400	13,000	40,872	163,100
Geo-NT080	122283	Island Lake 5	1.18	267,057	86,000	4,900	8,541	35,903	131,190
Geo-NT092	122297	Lyndavale West	1.21	327,486	110,000	3,900	10,461	32,488	170,194
		Average	1.20	312110	102714	5824	10309	37474	155590

Table 3. Brine assay results for Cluster 3

GEO Lab No	Field No.	Sample Location	SG	TDS	Na	K	Mg	SO4	Cl
CLUSTER 3	(RJU)			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Geo-NT001	122201	Mallee Well	1.20	313160	100000	7100	10716	35282	159556
Geo-NT057	122258	Mallee Well	1.18	295465	100000	8000	6539	47800	132946
Geo-NT058	122259	Mallee Well	1.19	305027	100000	8400	7694	42956	145737
Geo-NT059	122260	Mallee Well	1.19	295591	100000	8200	7196	46869	132946
Geo-NT060	122261	Curtin N L	1.18	269030	96000	3500	5093	22609	141828
Geo-NT061	122262	Curtin N L	1.19	302404	100000	3300	9821	27954	161329
Geo-NT062	122263	Curtin N L	1.20	314982	110000	4000	10708	30718	159556
Geo-NT081	122286	Mallee Well East	1.20	308,162	95,000	7,700	11,786	40,872	152,465
Geo-NT082	122287	Mallee Well East	1.20	312,778	100,000	7,400	7,606	44,947	152,465
Geo-NT083	122288	Mallee Well East	1.19	287,927	99,000	6,100	6,731	37,456	138,282
Geo-NT084	122289	Mallee Well East	1.23	352,390	130,000	8,000	9,392	30,842	173,740
Geo-NT085	122290	Mallee Well Lake	1.19	298,857	95,000	6,300	8,165	36,524	152,465
Geo-NT086	122291	Mallee Well Lake	1.21	326,066	110,000	7,700	8,639	36,214	163,100
Geo-NT087	122292	Mallee Well Lake	1.19	289,990	100,000	7,700	6,804	34,972	140,050
Geo-NT088	122293	Curtin West	1.21	318,604	100,000	7,500	8,785	41,803	159,556
Geo-NT089	122294	Curtin West	1.19	298,758	97,000	7,200	7,096	45,063	141,828
Geo-NT090	122295	Curtin West	1.19	295,709	95,000	6,900	7,656	40,250	145,373
		Average	1.20	304994	101588	6765	8260	37831	150190

Table 4. Brine assay results for Miningera/Murphy's Cluster

GEO Lab No	Field No.	Sample Location	SG	TDS	Na	K	Mg	SO4	Cl
MININGERE	(RJU)			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Geo-NT027	122227	Miningere Lake	1.18	285598	100000	6800	5093	31867	141828
Geo-NT028	122228	Miningere Lake	1.18	300451	110000	8400	4630	35593	141828
Geo-NT029	122229	Miningere Lake	1.19	320502	110000	11000	4302	42735	152465
Geo-NT030	122230	Miningere Lake	1.20	326038	110000	8600	6990	40872	159556
		Average	1.19	308147	107500	8700	5254	37766	148919
MURPHYS									
Geo-NT065	122266	Murphys	1.20	303,101	99,000	5,300	10,137	37,456	150,705
Geo-NT066	122267	Murphys	1.18	279,255	89,000	5,200	11,985	32,488	140,067
Geo-NT067	122268	Murphys	1.18	272,191	82,000	5,400	9,870	37,766	136,521
		Average	1.19	284,849	90,000	5,300	10,664	35,903	142,431

Note: Assays were taken from one litre brine samples from pits dug on salt lakes. Samples were assayed by Geo-Processors Pty Ltd in Sydney. One mg/L is equivalent to 1ppm (part per million).



D.W.Muller M.Sc., M.B.A., F.Aus.I.M.M.

Managing Director

The information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr. David Muller, who is a Fellow of the Australian Institute of Mining and Metallurgy. Assay information has been provided by Geo-processors Pty Ltd.

Mr. Muller is Managing Director and a consultant to the Company. Mr. Muller has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the "Australian Code for Reporting of Exploration results, Mineral resources and Ore Reserves".

Mr. Muller consents to the inclusion in this report on the matters based on his information in the form and context in which it appears.

Further Information call Rum Jungle Office Darwin: 08 89420385