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Company Announcements Office  
Australian Stock Exchange Limited  
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Dear Sir/Madam

## **CHARLEY CREEK PROJECT**

### **Xenotime identified in Exploration Results**

- **New regional stream sediment results at Charley Creek confirm widespread indications of xenotime, a mineral enriched in valuable Heavy Rare Earth Elements (HREE).**
- **The results highlight new target areas for HREE mineralization**

Crossland and its Joint Venture partners hold titles covering rare earth bearing alluvial deposits in the West MacDonnell Ranges in Central Australia.

Within these titles, rare earth enriched alluvial deposits are present over a lateral distance of 130km. Crossland has conducted regional stream sediment programs to identify areas with the potential to host commercial deposits of REE, and this release updates progress with this work.

Analyses of 931 regional stream sediment samples have identified the presence of high concentrations of HREE in alluvial deposits at Charley Creek. The results include 0.6% TREO in alluvium\* (5,778ppm total rare earth oxides or TREO). Within these samples the HREO/TREO ratio is as high as 69.5% (refer Table 1).

Of the total 931 samples, 199 samples (or 21%) had a HREO/TREO ratio greater than 20%. This ratio of HREO is high when compared to most rare earth deposits.

The results provide focus and guidance to identify areas where further exploration and drilling could delineate high HREE material. Previous mineralogical studies have shown that Xenotime is the HREE host mineral in the Charley Creek Project area. Xenotime is highly enriched in high-value heavy rare earths and Yttrium. Refer figure 1.

The HREO/TREO ratio at Charley Creek is important because it is the heavy rare earth elements, particularly Terbium, Dysprosium and Yttrium that are in critical short supply. Charley Creek could be a valuable resource of these strategically vital high-value minerals.

The technique of stream sediment sampling with heavy mineral concentrate is an effective exploration technique to identify the source of REE within the tenements. This provides a focus for further exploration programs and resource identification.

Surface alluvial mineral deposits have an advantage because they are easy and cheap to explore by shallow drilling. They are also cost effective in mining.

Crossland's extensive drilling programs have defined alluvium from 3m up to 32m thick from surface, in the Dad's Dam, Western Dam and Cattle Creek areas. These returned average HREO/TREO ratios of about 17% by weight. The new stream sediment results suggest that higher ratios of HREO could be expected in the large alluvial deposits to the east of Cattle Creek.

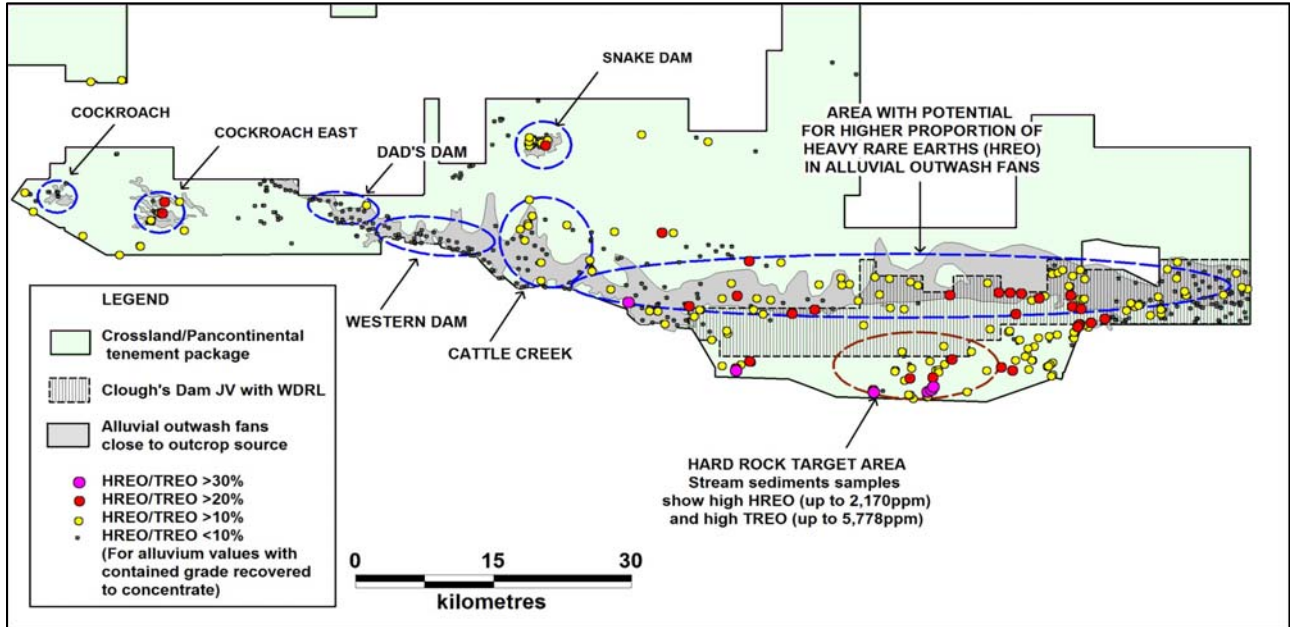


Figure 1

Highly anomalous HREO results from stream samples in the south of the alluvial areas (see Fig.1) indicate the potential for hard rock mineralisation and warrant follow up for hard rock xenotime occurrences.

The results reported here cover areas held by the Crossland (CUX)/Pancontinental (PUC) Joint Venture and the Clough's Dam Joint Venture with Western Desert Resources Limited, (WRDL) where the CUX/PUC Joint Venture is earning an initial 60% interest.

*Geoff Eupene*

**Geoff Eupene**  
Exploration Director

\* Stream sediment samples averaging around 20kg are processed in the field to produce heavy mineral concentrates, and it is these concentrates that are assayed. The grades quoted in this report are therefore the back-calculated grades of alluvium based on the contained grades recovered to concentrate. This gives some measure of recoverable grades of REE in the alluvium sampled. The grades of the heavy mineral concentrates produced are much higher than the back-calculated recovered grades of alluvium quoted herein.(see Table 1 for more information).

The review of exploration activities and results contained in this report are based on information compiled by **Geoffrey S Eupene CP**, a Fellow of the Australasian Institute of Mining and Metallurgy. He is a director of the Company and a full time employee of Eupene Exploration Enterprises Pty Ltd. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Geoffrey S Eupene has consented to the inclusion in this report of the matters based on this information in the form and context in which it appears.

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TABLE 1: AVERAGE AND RANGE OF REO IN: A. HEAVY MINERAL CONCENTRATES, AND B. RECOVERED CONCENTRATE BACK-CALCULATED TO SAMPLED ALLUVIUM, FROM 931 REGIONAL STREAM SEDIMENT SAMPLES COLLECTED FROM THE CHARLEY CREEK PROJECT AREA

A. Heavy Mineral Concentrates	%Heavy Mineral Concentrate (HMC)	HMC CeO2%	HMC Dy2O3%	HMC Er2O3%	HMC Eu2O3%	HMC Gd2O3%	HMC Ho2O3%	HMC La2O3%
MIN.	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Average	2.540	2.551	0.073	0.034	0.006	0.124	0.013	1.240
MAX.	16.961	26.041	0.987	0.572	0.059	1.591	0.285	13.194
B. Back- calculated Recovered Alluvial Grades		CeO2 in alluvium _ppm	Dy2O3 in alluvium _ppm	Er2O3 in alluvium_ppm	Eu2O3 in alluvium_ppm	Gd2O3 in alluvium_ppm	Ho2O3 in alluvium _ppm	La2O3 in alluvium _ppm
MIN.		0.027	0.003	0.002	0.00	0.00	0.00	0.01
Average		59.723	1.920	0.963	0.18	2.89	0.35	29.65
MAX.		1596.560	42.197	21.569	4.49	61.64	8.03	822.65
A. Heavy Mineral Concentrates	HMC Lu2O3%	HMC Nd2O3%	HMC Pr6O11%	HMC Sm2O3%	HMC Tb4O7%	HMC Y2O3%	HMC Yb2O3%	LREO% in HM concentrate
MIN.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
Average	0.005	0.889	0.273	0.158	0.015	0.389	0.028	4.95
MAX.	0.184	8.596	2.561	1.322	0.140	6.350	0.569	50.35
B. Back- calculated Recovered Alluvial Grades	Lu2O3 in alluvium _ppm	Nd2O3 in alluvium _ppm	Pr6O11 in alluvium _ppm	Sm2O3 in alluvium_ppm	Tb4O7 in alluvium_ppm	Y2O3 in alluvium_ppm	Yb2O3 in alluvium_ppm	LREO in alluvium _ppm
MIN.	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.05
Average	0.12	21.34	6.44	3.73	0.38	10.74	0.79	117.16
MAX.	3.34	564.09	158.66	88.49	8.31	266.70	15.68	3,141.96
A. Heavy Mineral Concentrates	MREO% in HM concentrate	HREO% in HM concentrate	TREO% in HM concentrate	%LREO/T REO in HM Conc.	%MREO/T REO in HM Conc.	%HREO/TREO in HM Conc.	eMonazite in HMC, g/T	eXenotime in HMC, g/T
MIN.	0.00	0.00	0.00	0.54	0.03	0.06	0	0
Average	0.29	0.56	5.80	79.59	5.03	14.32	87,372	8,310
MAX.	2.71	9.26	54.15	92.98	19.78	69.52	928,984	187,218
B. Back- calculated Recovered Alluvial Grades	MREO in alluvium _ppm	HREO in alluvium_ppm	TREO in alluvium_ppm	LREO/ TREO%	MREO/ TREO%	HREO/ TREO%	Recovered eMonazite in alluvium, g/T	Recovered eXenotime in alluvium, g/T
MIN.	0.01	0.03	0.15	25.52	2.73	3.66	0	0
Average	6.79	15.40	139.36	78.61	5.11	16.29	213	30
MAX.	153.46	367.31	3,484.22	92.39	19.78	69.52	8,068	3,623

Note1: All samples analysed by lithium borate fusion followed by acid dissolution and ICP-MS or ICP-AES for higher REE grades.

Note 2: eMonazite and eXenotime calculated from average Charley Creek Monazite and Xenotime contents as determined from Mineral Liberation Analysis of concentrates.