

**6 December 2013**

**ALLIANCE RESOURCES LTD**

**ASX:** AGS

**ABN:** 38 063 293 336

**Market Cap:** A\$42.65 M @

A\$0.125

**Shares on issue:** 341,172,309

**Cash:** \$24.4 M (30 Sep 2013)

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**Projects:**

**Four Mile (25%):** uranium

**East Frome:** copper, base-  
metals

**Cabeza de Vaca, Chile:**  
copper-gold

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## FOUR MILE PROJECT – NEW DISCOVERY

Alliance Resources Ltd (**ASX:AGS**) is pleased to announce the discovery of high grade equivalent uranium intersections from a delineation drilling program over a new area located 1.2 kilometres to the northeast of the Four Mile East uranium deposit.

Significant uranium intersections include:

Hole ID	m @ % pU <sub>3</sub> O <sub>8</sub>	m%pU <sub>3</sub> O <sub>8</sub>
FMD0001	3.7m @ 0.14%	GT 0.51
	5.0m @ 0.18%	GT 0.92
	2.8m @ 0.26%	GT 0.73
FMC0003	7.0m @ 1.19%	GT 8.32
FMD0006	9.0m @ 0.85%	GT 7.65
FMD0015	5.9m @ 0.14%	GT 0.85
	6.5m @ 0.54%	GT 3.5

Hole ID	m@%eU3O8	m%eU3O8
FMD0002	7.96m @ 0.37%	GT 2.94

pU<sub>3</sub>O<sub>8</sub> is the equivalent grade as estimated from Prompt Fission Neutron (PFN) logging.  
eU3O8 is the equivalent grade as estimated from Gamma logging.  
GT = grade (%U3O8) x thickness (m).

High grade uranium mineralisation has been intersected over a strike length of approximately 1100 metres and a maximum width of approximately 500 metres. Depth to the top of mineralisation varies from 216.8 to 258.9 metres. Thickness of host sediments ranges from 0.9 to 9.0 metres. The average cumulative thickness of intercepts in holes reporting mineralisation is 6.8 metres.

Details of all drilling are listed in Table 1 and Figures 1 and 2.

It is emphasised that results may be subject to revision once the geophysical logs are made available to Alliance.

**Steve Johnston**  
**Managing Director**

*The Four Mile Uranium Project area is located 550 kilometres north of Adelaide in South Australia. Alliance's 100% owned subsidiary, Alliance Craton Explorer Pty Ltd (ACE) is the registered holder of 25% of ML6402 and EL5017 (Project). Quasar Resources Pty Ltd (Quasar) is the registered holder of 75% and acts as the manager of the Project.*

*ACE and Quasar disagree about the nature of the regional delineation drilling. Quasar asserts it is a mining development cost for which ACE must pay its share. ACE asserts it is an exploration cost for which Quasar must pay in full.*



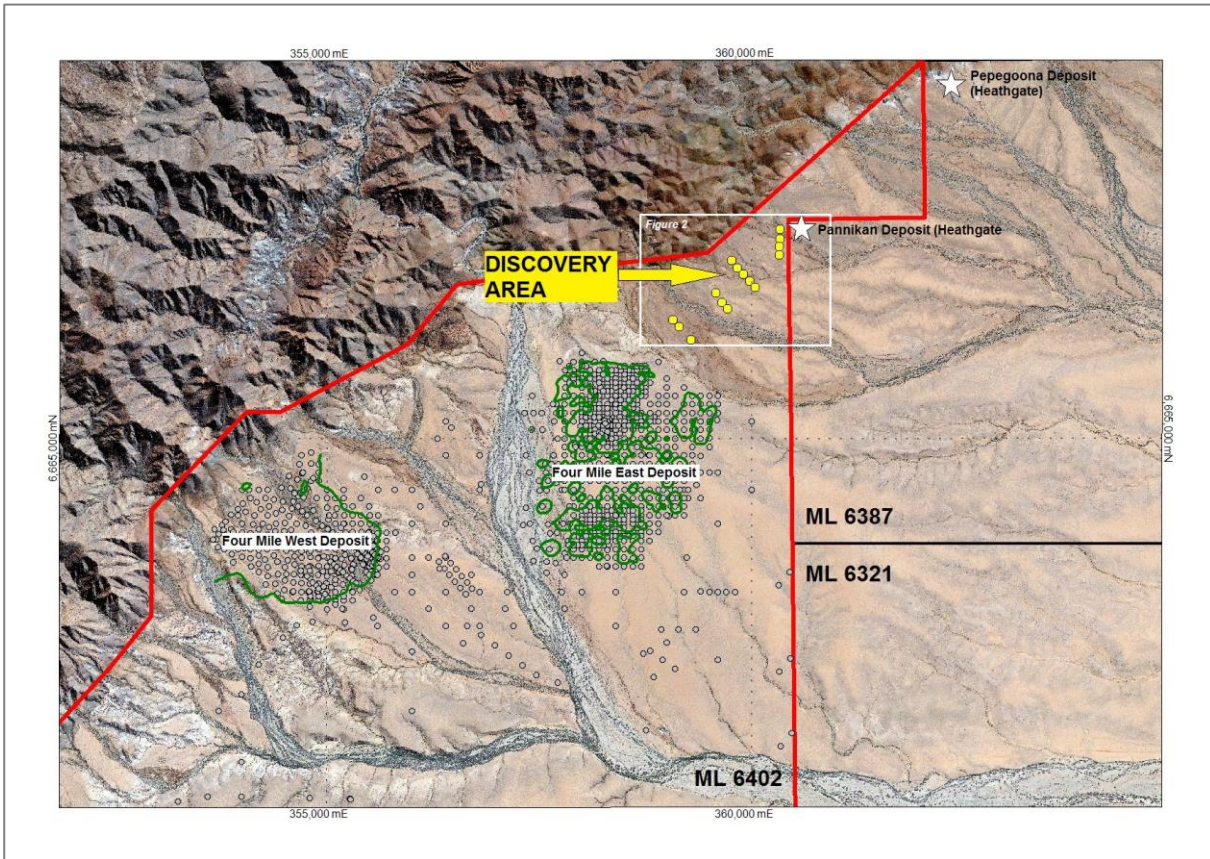


Figure 1: Location of Discovery Area

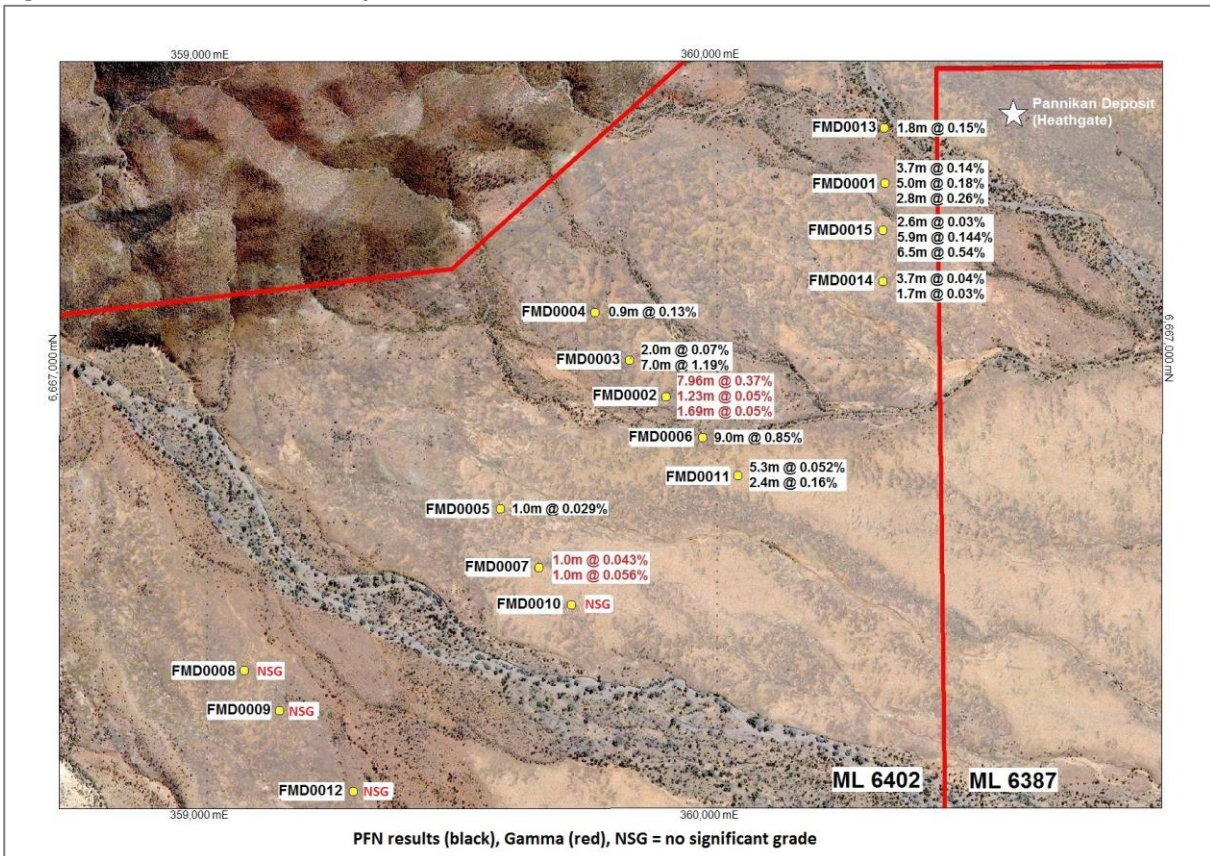


Figure 2: Discovery Area showing drill hole intersections - PFN (black), Gamma (red)

ID	GDA94_E	GDA94_N	Total Depth (m)	Gamma					PFN				
				From	To	Interval (m)	eU3O8(%)	GT	From	To	Interval (m)	pU3O8 (%)	GT
FMD0001	360329	6667342	276	221.60	225.30	3.70	0.21	0.78	221.60	225.30	3.70	0.14	0.51
				227.20	232.20	5.00	0.21	1.05	227.20	232.20	5.00	0.18	0.92
				253.60	256.40	2.80	0.20	0.56	253.60	256.40	2.80	0.26	0.73
FMD0002	359900	6666924	282	246.98	254.94	7.96	0.37	2.94	Blocked			-	
				219.80	221.03	1.23	0.05	0.06	Blocked			-	
				241.36	243.05	1.69	0.05	0.08	Blocked			-	
FMD0003	359827	6666996	276	216.80	218.80	2.00	0.03	0.07	216.80	218.80	2.00	0.07	0.14
				249.00	256.00	7.00	0.74	5.18	249.00	256.00	7.00	1.19	8.32
FMD0004	359760	6667090	282	258.90	259.80	0.90	0.18	0.16	258.90	259.80	0.90	0.13	0.12
FMD0005	359574	6666706	276	251.00	252.00	1.00	0.035	0.035	251.00	252.00	1.00	0.03	0.03
FMD0006	359972	6666845	270	246.00	255.00	9.00	0.60	5.40	246.00	255.00	9.00	0.85	7.65
FMD0007	359650	6666591	276	243.00	244.00	1.00	0.04	0.04	No PFN				
				251.00	252.00	1.00	0.06	0.06	No PFN				
FMD0008	359072	6666389	110	No significant grade									
FMD0009	359142	6666311	137	No significant grade									
FMD0010	359714	6666518	276	No significant grade									
FMD0011	360041	6666771	276	234.00	239.30	5.30	0.05	0.27	234.00	239.30	5.30	0.05	0.27
				245.00	247.40	2.40	0.15	0.36	245.00	247.40	2.40	0.16	0.38
FMD0012	359286	6666153	220	No significant grade									
FMD0013	360327	6667450	276	256.60	258.40	1.80	0.21	0.38	256.60	258.40	1.80	0.15	0.27
FMD0014	360325	6667150	276	230.00	233.70	3.70	0.04	0.13	230.00	233.70	3.70	0.04	0.15
				237.70	239.40	1.70	0.02	0.03	237.70	239.40	1.70	0.03	0.05
FMD0015	360325	6667250	270	222.00	224.60	2.60	0.03	0.06	222.00	224.60	2.60	0.03	0.08
				243.60	249.50	5.90	0.11	0.65	243.60	249.50	5.90	0.14	0.85
				249.50	256.00	6.50	0.37	2.41	249.50	256.00	6.50	0.54	3.51

**Table 1:** Significant intersections above cut-off criteria of 0.05% pU<sub>3</sub>O<sub>8</sub>, minimum width of 0.5 metres and maximum internal dilution of 1 metre. Drill hole collar locations based on handheld GPS coordinates. Intercepts >0.5m% (GT-PFN) highlighted.



## JORC Code, 2012 Edition – TABLE 1 report

Criteria	Commentary
<i>Sampling techniques</i>	<p>The principal sampling method was by downhole geophysical PFN and gamma probes in rotary mud drill holes for both grade and lithological logging, PFN grade logging directly measures in-situ uranium grade, thus avoiding the issue of variable radiometric disequilibrium that can affect results from gamma, which measures uranium daughter products.</p> <p>The natural gamma tool is calibrated for uranium grade at the 'Adelaide Model' geophysical calibration pits. The PFN is calibrated at the purpose built calibration facility located at Beverley.</p>
<i>Drilling techniques</i>	Drill holes are drilled vertically using the rotary mud method.
<i>Drill sample recovery</i>	Rotary mud chip cuttings are collectively photographed at the drill site. Chip tray samples are kept in storage.
<i>Logging</i>	Chip samples are not collected for laboratory chemical assay.
<i>Sub-sampling techniques and sample preparation</i>	<p>Sub-samples of the chip cuttings are stored in chip trays as a physical record of the intersection sequence. Handheld XRF analyses of chip tray samples are collected.</p> <p>The rotary mud chip cuttings are collectively photographed at the drill site.</p>
<i>Quality of assay data and laboratory tests</i>	Not applicable.
<i>Verification of sampling and assaying</i>	Not applicable.
<i>Location of data points</i>	Collar coordinates were determined by handheld GPS. Survey data are GDA94, MGA Zone 54.
<i>Data spacing and distribution</i>	Although full grid drilling was not envisaged for this drill program, provisional drill holes were planned in fences 400m apart with hole locations spaced at 100m intervals along the fences. The actual location of drill holes to be completed is dependent on the discovered locations of redox/roll fronts.
<i>Orientation of data in relation to geological structure</i>	Drill holes fences are oriented perpendicular to the interpreted strike of the large scale regional roll-front redox boundary. Vertical drilling intersects the expected sub-horizontal sediments and mineralization at close to right angles.
<i>Sample security</i>	Drill hole cuttings are stored at the Beverley Mine.
<i>Audits or reviews</i>	The raw data underpinning the information contained herein has <b>not</b> been independently reviewed by Mr Bowden as CP for Alliance and relies on information provided by Quasar Resources Pty Ltd, the manager and holder of a 75% interest in the Project

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>Mineral Lease 6402 is held 25% by Alliance Craton Explorer Pty Ltd (a wholly owned subsidiary of Alliance Resources Limited)(ACE) and 75% by Quasar Resources Pty Ltd, an affiliate of Heathgate Resources Pty Ltd, both wholly owned subsidiaries of private US corporation, General Atomics. Quasar as manager for the project, utilizes staff, facilities and equipment at Heathgate’s adjacent Beverley Mine site.</p> <p>A Native Title Mining Agreement is in effect with traditional owners.</p> <p>The 12,206ha mining lease was granted for a period of 10 years from 26 April 2012 and production planning is progressing for the Four Mile East deposit.</p>
<i>Exploration done by other parties</i>	<p>The Oilmin-Transoil-Petromin Group discovered Beverley in 1969 and ISL development was proposed by South Australian Uranium Corp in 1982 but did not proceed until after Heathgate acquired it in 1990 and commenced production in 2000. In 2005 Quasar resumed exploration drilling at 4,000m x 2,000m spacing on the ‘Arkaroola’ licence to the west (then held by ACE).This led to the discovery of Four Mile East in hole AK010 which returned 1m @ 0.16% eU3O8 from 181m depth.</p>
<i>Geology</i>	<p>The mineralisation is of the sandstone uranium type, associated with redox interfaces. The mineralisation announced today is interpreted to lie within an apparent regional roll-front type redox interface that embraces the Four Mile West, Four Mile East, Pepegooona and Pannikan deposits over a total strike length of 7.5 kilometres.</p> <p>A detailed interpretation of the sedimentary sequence is not yet available for these preliminary drill holes.</p> <p>Mineralisation is hosted in Mesozoic sediments of the Frome Embayment and underlain by crystalline Meso/Palaeoproterozoic basement, with Mesoproterozoic granites considered source rocks. Other deposits occur in Tertiary sands of the overlying Callabonna Sub Basin of the Lake Eyre Basin, extending over an area of approximately 25,000km<sup>2</sup> between the Mount Painter Inlier in the north west, Olary Block to the south and Broken Hill Block to the east.</p>
<i>Drill hole Information</i>	<p>Drill hole coordinates together with uranium mineralized intersections detected by PFN and gamma log probes are presented in Table 1.</p>
<i>Data aggregation methods</i>	<p>PFN grade logging directly measures in-situ uranium grade and thickness. For gamma logs, the area under an anomalous gamma curve is proportional to the grade x thickness (GT) of the mineralised intercept. In both cases calibration data unique to the individual probe are used to “correct” the measured data to standard measures in purpose built calibration facilities. In order to derive an estimate of equivalent uranium grade from gamma logs it is necessary to estimate the intercept thickness (T) and calculate grade by division grade <math>G=GT/T</math>. Anomalous intersections indicated by the down hole gamma probe are expected to exceed the true width due to the “shoulder effect” whereby radiation is “recorded” by the probe as it approaches and leaves the mineralised zone. Classically, the shoulder effect is compensated in gamma logs by a deconvolution process. This process is not utilised by Quasar which, as a “rule of thumb”, applies the PFN derived thickness to the gamma log GT to obtain gamma log equivalent grade.</p>

Criteria	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	Unless there has been significant structural disturbance the sedimentary beds are expected to be sub-horizontal and the intersected thickness is expected to be close to the true thickness.
<i>Diagrams</i>	
<i>Balanced reporting</i>	
<i>Other substantive exploration data</i>	Assuming no sampling or calibration errors, the difference between the gamma derived equivalent uranium grade and the PFN measured uranium grade should be a measure of disequilibrium within the mineralised intersection. Inspection of the results shown in Table 1 implies significant disequilibrium is present in this area.
<i>Further work</i>	The current drill program is in progress.

## Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Bowden who is a Chartered Geologist and Fellow of the Geological Society of London, a Recognised Overseas Professional Organisation included in a list promulgated by the ASX from time to time. Mr Bowden is a part-time employee of Alliance Resources Ltd and 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bowden consents to the inclusion in the report of the matters based on information provided to him by Quasar Resources Pty Ltd in the form and context in which it appears and subject to the qualifications entered in the JORC 2012 Table 1 Report