

14th September 2010

Australian Stock Exchange Limited
Via Electronic Lodgement

BASSIT BORE UPDATE

Gascoyne Resources Limited is pleased to announce that the results from the recent aircore drilling at the Bassit Bore project have been received. A total of 2,307 metres of reverse circulation / aircore drilling in 46 holes was completed. This drilling, the first that has been undertaken at the Bassit Bore project area was targeted on anomalous historical soil sampling sites. The drilling identified a number of anomalous intersections including 4m @ 485 ppb Au in BBAC006, 10m @ 257ppb Au in hole BBAC009 (to the end of hole), 4m @ 711ppb Au in BBAC21 and 4m @ 485 ppb Au in BBAC028, See Table One. Drill hole collar details and hole depths are presented in Table Two.

A total of 11 of the 46 holes returned intersections of greater than 200ppb. For the first pass drill testing of an area, the program was successful in identifying a number of targets at which resampling of anomalous intervals is underway.

In addition to the drilling, the analytical results of the regional stream sediment program that was completed in July have been received. The sampling has identified a number of highly anomalous drainages, with 27 drainages returning over 5ppb Au including 4 which returned results above 20ppb. To put these results into perspective, previous stream sediment surveys showed a background level of around 1.5ppb Au.

The highest result from the recent stream sediment survey was 830ppb Au.

As a result of the stream sediment sampling, a soil sampling program to cover the anomalous drainages (at 200m line spacing) has commenced and will be completed within the next week with results expected within a month.

FORWARD PROGRAM:

Glenburgh Project:

Heritage surveys have been planned and are to commence within the next week. This will enable a shallow geochemical drill program to commence in early October. This program is to test a number of zones where previous surface geochemical sampling has been ineffective.

Another RC drilling program is also planned and is expected to commence in October. This will test a number of structural and geochemical trends that have been identified from the ongoing review and assessment of the exploration results that have been amassed at this project.

Bassit Bore Project:

It is expected that the follow up to the stream sediment sampling and the soil sampling that is in progress will require additional and infill soil sampling to better define the anomalies before drilling can be planned.



Gordon Dunbar
Managing Director

Information in this announcement relating to mineral resources and exploration results is based on data compiled by Gascoyne's General Manager Mr Mike Dunbar and who is a member of The Australasian Institute of Mining and Metallurgy. Mr Dunbar has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons under the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dunbar consents to the inclusion of the data in the form and context in which it appears.

The drilling was conducted using Aircore drilling with samples being collected at one metre intervals and composited into 4 m samples with a subsample of approximately 2-4 kg collected by spear sampling. This subsample was sent to Genalysis Laboratory Services Pty Ltd in Perth Western Australia. The sample was pulverized and analysis for gold using a 25 gram aqua regia digest and an atomic absorption spectrometry finish to a 1ppb Au and 1ppm Cu detection limits. Full analytical quality assurance – quality control (QA/QC) is achieved using a suite of laboratory standards, field duplicates, laboratory duplicate, repeats, blanks and grind size analysis.

The spatial location of the samples is derived using surveyed local grid co-ordinates, downhole surveys where not taken as the holes were only ~ 50m deep and any deviation from the collar direction over this length is not considered material given the broad drill spacing.

Intersections have been reported using a 0.2g/t cutoff and allowance for up to 4m of internal waste.

True widths have not been determined as the level of detail needed to calculate accurate true widths is not yet available, as a result down hole widths have been reported, however true widths are not expected to significantly change from the down hole widths.

TABLE ONE: Significant Intersections from Recent Drilling

Hole Number	From	To	interval	Au (ppb)	Cu (%)	Notes
BBAC005	44	48	4	207		
BBAC006	0	4	4	229		
BBAC006	20	24	4	485	0.67	
BBAC009	40	50	10	257	0.24	EOH
including	48	50	2	435	0.22	EOH
BBAC013	24	28	4	222		
BBAC014	4	8	4	293		
BBAC020	12	16	4	210		
BBAC021	4	8	4	711		
BBAC028	16	28	12	172		
BBAC028	44	48	4	485	0.67	
BBAC032	12	24	12	287	0.23	
BBAC044	0	8	8	173		
BBAC046	4	8	4	312		

TABLE TWO: Details of drill hole locations, dips, azimuths and total depths

Hole Number	NORTHING (Local)	EASTING (Local)	RL	Total Depth	HoleType	Prospect	Dip	Azimuth
BBAC001	1025	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC002	1050	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC003	1075	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC004	1100	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC005	1125	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC006	1150	700	400	53	Air Core	Bassit Prospect	-60	180
BBAC007	1175	700	400	53	Air Core	Bassit Prospect	-60	180
BBAC008	1200	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC009	1225	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC010	975	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC011	1000	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC012	1025	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC013	1050	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC014	1075	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC015	1100	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC016	1125	800	400	42	Air Core	Bassit Prospect	-60	180
BBAC017	1150	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC018	1175	800	400	57	Air Core	Bassit Prospect	-60	180

GASCOYNE RESOURCES LIMITED



ACN: 139 522 900

Hole Number	NORTHING (Local)	EASTING (Local)	RL	Total Depth	HoleType	Prospect	Dip	Azimuth
BBAC019	1200	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC020	1225	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC021	1250	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC022	925	500	400	51	Air Core	Bassit Prospect	-60	180
BBAC023	950	500	400	51	Air Core	Bassit Prospect	-60	180
BBAC024	975	500	400	50	Air Core	Bassit Prospect	-60	180
BBAC025	1000	500	400	50	Air Core	Bassit Prospect	-60	180
BBAC026	775	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC027	825	700	400	51	Air Core	Bassit Prospect	-60	180
BBAC028	875	700	400	57	Air Core	Bassit Prospect	-60	180
BBAC029	925	700	400	50	Air Core	Bassit Prospect	-60	180
BBAC030	525	1100	400	50	Air Core	Bassit Prospect	-60	180
BBAC031	550	1100	400	50	Air Core	Bassit Prospect	-60	180
BBAC032	575	1100	400	50	Air Core	Bassit Prospect	-60	180
BBAC033	600	1100	400	50	Air Core	Bassit Prospect	-60	180
BBAC034	625	1100	400	44	Air Core	Bassit Prospect	-60	180
BBAC035	400	900	400	50	Air Core	Bassit Prospect	-60	180
BBAC036	425	900	400	50	Air Core	Bassit Prospect	-60	180
BBAC037	475	900	400	50	Air Core	Bassit Prospect	-60	180
BBAC038	375	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC039	400	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC040	425	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC041	450	800	400	50	Air Core	Bassit Prospect	-60	180
BBAC042	1600	900	400	50	Air Core	Beagle Prospect	-60	180
BBAC043	1650	900	400	53	Air Core	Beagle Prospect	-60	180
BBAC044	1700	900	400	50	Air Core	Beagle Prospect	-60	180
BBAC045	1975	1000	400	53	Air Core	Beagle Prospect	-60	180
BBAC046	2000	1000	400	42	Air Core	Beagle Prospect	-60	180

Drilling was undertaken on local grids, GPS pickups of the collar positions are yet to be completed.

BACKGROUND ON GASCOYNE RESOURCES

Gascoyne Resources Limited was listed on the ASX in December 2009 following the amalgamation of the gold assets of Helix Resources Limited and Giralia Resources NL in the Gascoyne Region and a capital raising. Both Helix and Giralia have distributed in-specie 80% of their shareholding in Gascoyne to their shareholders.

Gascoyne Resources is endowed with

- The Glenburgh Project that has an inferred resource estimate of: 2.4Mt @ 2.6g/t Au for 203,000oz gold from several prospects within a 20km long shear zone.
- Advanced exploration projects at Mt James where drilling has outlined a +1 g/t Au mineralisation over at least 2.5km strike within a 300m thick package of sheared mafic amphibolites and BIFs: and at Bustler Well where previous RC drilling returned narrow high grade intersections including 1m @ 37.4g/t Au, 2m @ 9.08 g/t Au and 3m @ 7.62 g/t Au from a 150m long quartz-shear lode.
- Geochemical anomalies at Bassit Bore that require follow up exploration.

Gascoyne Resources' immediate primary focus is to continue the evaluation of the Glenburgh gold deposits to delineate meaningful increases in the resource base and to identify and test additional targets in the Glenburgh mineralised system and to explore for additional gold resources on the exploration properties. Success in these activities is expected to lead to the development of a gold project based on the Glenburgh gold deposits.

Further information is available at www.gascoyneresources.com.au