27 February 2013

Company Announcements Office ASX Limited Exchange Centre 20 Bridge Street Sydney NSW 2000



Zoroastrian Resource Increase and Upgrade

excelsior and

Highlights:

Zoroastrian gold resource increased by 56,600ozs Au to

5.76 million tonnes @ 2.62g/t Au for 485,300ozs at 0.6 and 3.0g/t Au lower cut-offs

- Resource estimates incorporate previously announced new drilling results including
 - 50 metres @ 3.20g/t Au from 90 metres including 7 metres @ 13.5g/t from 107 (KNC120266)
 - 16 metres @ 13.9g/t Au from 78 metres including 1 metre @ 174g/t from 78 metres (KNC130008)
 - 11 metres @ 4.45g/t Au from 79 metres including 1 metre @ 35.6g/t from 78 (KNC130001)
- Infill drilling improves resource status 72% of potential open pit and 67% of total resource now classified as Indicated.
- Approximately 330,000ozs (at a 0.6g/t lower cut) of this new resource are contained within the pit optimization shell defined on the smaller previous resource model
- Deepest hole to date highlights future underground mine potential
 - > 19 metres @ 5.44g/t Au from 318 metres (KNCD120257)
- Reverse circulation drilling continuing at Zoroastrian to increase and improve resource status.
- Total Kalgoorlie North Gold Project resources increased to

20.59 million tonnes @ 1.74g/t Au for 1,153,700ozs at 0.6 and 3.0g/t Au lower cut-offs

Excelsior Gold is pleased to advise that resource calculations based on infill and extensional drilling results received to date at the Zoroastrian gold deposit within the Kalgoorlie North Gold Project has led to an increase in total resource ounces of 12% and a 28% upgrade of Inferred resources to the Indicated category.



The new Indicated and Inferred gold resources at Zoroastrian total:

5,763,500 tonnes at 2.62g/t for 485,300 ounces

Total Measured, Indicated and Inferred gold resources at 0.6 and 3.0g/t Au lower cut-off grades for the Kalgoorlie North Gold Project have increased to:

20.59 million tonnes at 1.74g/t Au for 1,153,700 ounces

The resource update includes 85 new reverse circulation (RC) and diamond (DD) drill holes made up of 61 infill RC holes for 9,627 metres of drilling, 18 extensional RC drill holes for 3,582 metres and 6 extensional diamond drill holes for 876.9 metres. The drilling was designed to infill within the optimal pit shell defined on the previous resource (ASX announcement 7 December 2012) to improve the resource confidence and convert Inferred resources to Indicated classification for the prefeasibility study due for completion June 2013.

As in previous resource calculations, the new Zoroastrian resource is subdivided into shallower zones of mineralisation less than 150 metres vertical depth which are potentially amenable to open pit mining (calculated at a lower cut 0.6q/t Au) and deeper, greater than 150 metres vertical depth mineralisation which presents underground mining opportunities and is modelled at a lower cut-off grade greater than 3.0g/t Au (refer Table 1).

MODEL	LOWER	IN	DICATE	כ	IN	FERRED)	TOTAL RESOURCES			
	CUT <i>(g/t Au)</i>	Tonnes <i>(t)</i>	Grade (g/t Au)	Ounces <i>(oz)</i>	Tonnes <i>(t)</i>	Grade (g/t Au)	Ounces <i>(oz)</i>	Tonnes <i>(t)</i>	Grade (g/t Au)	Ounces <i>(oz)</i>	
Open Pit	0.6	3,402,400	2.47	270,000	1,710,600	1.89	104,100	5,113,000	2.28	374,100	
Under- ground	3.0	345,700	4.89	54,300	304,800	5.80	56,900	650,500	5.32	111,200	
TOTAL		3,748,100	2.69	324,300	2,015,400	2.48	161,000	5,763,500	2.62	485,300	

Resource modelling parameters are appended at the back of this report.

Underground potential modelled @ nominal true width > 1.2m with variable top-cuts

Rounding errors may occur Table 1. Zoroastrian Resource Summary

While the majority of the recent drilling has been infill rather than resource extension drilling and therefore designed to increase resource confidence rather than resource size, the results have potential to impact positively on the ongoing mining studies at Zoroastrian.

The current optimal pit shell at Zoroastrian based on the December 2012 resource is 1,250 metres long up to 400 metres wide and extends to a maximum depth of 190 metres. When this optimal pit shell is intersected with this new resource model, the pit shell contains resources totalling 4.24 million tonnes @ 2.43g/t Au for 331,500 resource ounces[#] (at a 0.6g/t lower cut) which represents an increase of 42,000ozs over the previous 7 December 2012 resource within the shell. This indicates that the infill drilling is increasing ounces within the potential open pit and reducing the waste to ore strip ratio.

(NOTE: # The open pit mining studies carried out by Auralia Mining Consulting Pty Ltd referred to in this document are classed as conceptual level only. Due to this, the subsequent material inventories resulting from this work do not constitute or imply Minable Reserves. The estimates and beliefs applied in undertaking the conceptual mining studies, either stated or implied, by the Company and its consultants are based on a number of assumptions that involve known and unknown risks and uncertainties which may result in future outcomes that may significantly differ to any expressed or implied estimates or projections derived from these conceptual studies. Given the level of study, any data resulting from these conceptual studies refers solely to potential and does not guarantee that future work will result in the determination of Minable Reserves.)



Further pit optimisation studies will be conducted based on the new resource model.

The updated resource estimates for the Zoroastrian deposit incorporate recent significant drilling results encountered to the north, south and at depth along the extensive Zoroastrian mineralised system. The strong gold mineralisation reported in Drilling Updates 4, 5, 6 and 7 *(refer ASX announcements 10 December, 20 December 2012,1 February 2013 and 7 February 2013)* was included in the new resource model and additional drilling result received up to 25 February 2013 have also been utilised. All new drilling results received subsequent to Drilling Update No. 7 on 7 February 2013 are summarised in *Table 2* and locations are illustrated in *Figure 2*.

The bulk of the most recent drilling was infill drilling in the central portion of the resource area.

Numerous high grade intersections from the drilling to test for resource extensions outside of the optimal shell demonstrate the potential to further expand the possible open pit. Results currently outside the optimal pit shell include

16 metres @ 13.9g/t Au from 78 metres including **1 metre @ 174g/t** from 78 metres and **6 metres @ 1.69g/t Au** from 215 metres (*KNC130008 at 6642065mN*) **11 metres @ 4.45g/t Au** from 79 metres including **1 metre @ 35.6g/t** from 78 metres (*KNC130001 at 6643067mN*)

50 metres @ 3.20g/t Au from 90 metres including 7 metres @ 13.5g/t from 107 metres (KNC120266 at 6643060mN)

The Company also continues to receive assay results from the diamond drilling program which was completed in December 2012. Recent results from the diamond drilling confirm the shallow northerly plunge to the high-grade gold stock work mineralisation with an interval of

19 metres @ 5.44g/t Au from 318 metres (KNCD120257).

This intercept representing the deepest intersection at Zoroastrian to date (280m vertical below surface) and confirms the potential of underground mining opportunities on wide zones of high grade mineralisation beneath any open pit.

The continuing expansion of the Zoroastrian deposit is further evidence that the extensive mineralised zone has potential to host a very substantial gold deposit and that the central part of the Kalgoorlie North tenements is evolving into a major gold camp. The area hosts multiple gold deposits including the 456,100 ounce gold resource at the Excelsior gold deposit located 300 metres east of Zoroastrian (*refer Figure 1*).

Reverse circulation drilling is continuing at Zoroastrian with two drill rigs in operation. Results of approximately 40 additional drill holes are still awaited and further expansion and upgrade of the gold resources at Zoroastrian is anticipated in late March 2013.





Figure 1. Kalgoorlie North Project – Central Resource Area Geological Plan (showing current resource areas with resources quoted at 0.6 and 3.0g/t Au lower cut-offs)

For further information visit www.excelsiorgold.com.au or contact

Excelsior Gold Limited

David Hamlyn Managing Director T: + 61 8 9335 7770 E: <u>dhamlyn@excelsiorgold.com.au</u> David Potter Technical Director T: + 61 8 9335 7770 E: <u>admin@excelsiorgold.com.au</u>





Figure 2. Zoroastrian Drilling Results and Structural Model – Plan View (showing existing open pit, pit optimisation shell, gold mineralised structural trends and recent RC drilling results with new drilling results in red)



HOLE NUMBER	EAST MGA94 Z51	NORTH MGA94 Z51	AHD RL (m)	RC DEPTH (m)	COLLAR DIP	COLLAR AZIM	FROM (m)	ТО (m)	LENGTH (m)	GRADE (Au g/t)	
ZOROASTRI	AN NORTH										
KNC132002	335060	6642990	438.3	190	-60	90	57	58	1	4.03	
							71	72	1	1.23	
							81	83	2	1.16	
							98	99	1	2.9	
							120	122	2	3.83	
ZOROASTRIAN CENTRAL											
KNC130011	335105	6642280	440.0	280	-60	90	148	149	1	5.16	
							159	160	1	1.97	
							176	178	2	1.61	
							185	186	1	2.9	
							219	226	7	2.56	
							233	234	1	1.94	
							250	259	9	2.89	
KNC120012	225240	6642240	441.0	120	60	00	263	264 N	1	1.63	
KNC130012	335240	6642280	441.0	210	-60	90		N	ISI		
KNC130017	335125	6642475	438.5	150	-60	90	78	94	16	3.39	
	000120	0012110	100.0	100	00	incl	79	84	5	9.20	
							100	101	1	3.22	
							113	114	1	2.39	
KNC130018	335150	6642475	438.5	120	-60	90	53	55	2	9.02	
							60	61	1	5.81	
							113	114	1	6.24	
KNC130019	335135	6642440	438.5	110	-60	90	82	89	7	2.72	
							92	98	6	4.66	
KNC132004	335060	6642900	440.5	138	-60	90	55	57	2	5.51	
KNC132005	335020	6642900	439.6	168	-60	90	95	113	18	1.28	
							120	121	1	1.95	
KNC132006	335070	6642820	439.8	196	-60	90	56	65	9	0.91	
							74	75	1	1.44	
KNC132007	335080	6642780	438.6	120	-60	270	NSI				
KNC132008	335080	6642570	437.6	132	-60	90	54	55	1	3.22	
							77	78	1	1.04	
							84	87	3	1.95	
							111	117	6	1.47	
KNC132009	335080	6642570	437.6	160	-60	90	81	85	4	1.71	
							91	92	1	3.03	
KNC122010	224090	6642000	400.0	010	60	00	131	134	<u></u> ১	1.94	
KNC132010	334980	6642900	438.3	212	-60	90	64	CE IN	101	1.01	
KNC132011	335110	6642520	434.9	124	-60	90	64 101	00 100	0	1.81	
KNC420040	225150	6640500	121 0	100	60	00	21	09	0	4.03	
KING 132012	333150	0042520	434.9	120	-00	90	∠ I 50	58	8	2 50	
KNC132013	335220	6642620.0	435 347	108	-50	90	70	71	1	9.14	
KNC132014	335090	6642620.0	438 468	126	-60	90	48	54	6	3.70	
1110102014	00000	00 12020.0	100.400	120	00	00	94	110	16	2.52	
KNC132015	335190	6642540	435.3	125	-60	90	103	104	1	1.39	
							118	119	1	1.79	

Table 2: Zoroastrian Drill Hole Summary (26 February 2013)



HOLE NUMBER	EAST MGA94 Z51	NORTH MGA94 Z51	AHD RL (m)	RC DEPTH (m)	COLLAR DIP	COLLAR AZIM	FROM (m)	ТО (m)	LENGTH (m)	GRADE (Au g/t)
ZOROASTRI	AN CENTRA	AL (continue	ed)							
KNC132016	335235	6642540	433.7	120	-60	90	54	55	1	1.98
							82	83	1	22.0
KNC132017	335305	6642410	437.6	110	-60	90	45	48	3	1.50
							88	89	1	1.25
KNC133007	335170	6642500	436.6	100	-60	270	80	81	1	1.60
KNC133010	335265	6642450	438.4	90	-60	90	57	58	1	1.62
KNC133012	335325	6642450	437.5	90	-60	90	21	23	2	1.04
							32	36	4	1.03
KNC122012	225265	6640070	126 1	00	60	00	50	51	1	1.29
KNC133013	335305	6642370	430.1	90	-00	90	20	/1	2	1 / 2
KNC155014	333323	0042370	430.2	150	-00	90	68	72	2	2.40
KNC133015	335315	6642280	434 1	138	-60	90	43	44	1	8.50
	000010	0042200	404.1	100	00	00	68	69	1	1.45
							86	89	3	1.67
KNCD120256	335045	6642330	437.0	378.6	-60	90	297	298	1	1.12
							302	304	2	2.96
KNCD120257	335020	6642370	436.6	348.6	-60	90	0	150	N	SI
							150	313	awaiting	g results
							318	337	19	5.44
ZOROASTRI	AN SOUTH									
KNC130013	335180	6642140	430.3	190	-60	90	123	124	1	2.88
							128	130	2	3.15
							146	153	7	1.52
							158	160	2	2.92
KNC130014	335320	6642000	430.1	108	-60	90	162	163	1	6.06
KNC130016	335325	6642110	434.4	180	-60	90	33	40	7	1.83
	000020	0042110	404.4	100	00	00	117	123	6	2.08
KNC133016	335340	6642200	433.4	160	-60	90	18	24	6	2.04
							69	71	2	1.39
KNC133017	335380	6641960	431.7	120	-60	90	60	61	1	5.31
KNC133018	335380	6642000	432.6	73	-60	90		abandoned	before target	
KNC133019	335400	6641840	427.9	163	-60	90	31	32	1	1.83
							58	60	2	1.03
							65	66	1	1.35
							69	72	3	4.38
							89	90	1	1.7
KNC133026	335420	6641800	427.3	100	-60	90	4	5	1	3.48
							47	48	1	2.74
							53 80	22	2	1.16
KNC120247	335302	6641960	428.8	186	-60	90	00	0-66m ev		1.40
1110120241	000002	0041300	420.0	100	00	50	158	159	1	2.55
							173	174	1	1.24
							178	183	5	1.93

Table 2: Zoroastrian Drill Hole Summary continued (26 February 2013)



HOLE NUMBER	EAST MGA94 Z51	NORTH MGA94 Z51	AHD RL (m)	RC DEPTH (m)	COLLAR DIP	COLLAR AZIM	FROM (m)	ТО (m)	LENGTH (m)	GRADE (Au g/t)	
MILL SITE STERILISATION											
KNC133020	334830	6643300	440.0	103	-60	90	NSI				
KNC133021	334870	6643300	440.0	115	-60	90	NSI				
KNC133022	334910	6643300	440.0	109	-60	90	NSI				
KNC133023	334950	6643300	440.0	80	-60	90	NSI				
KNC133024	335030	6643300	440.0	100	-60	90	NSI				
KNC133025	334990	6643300	440.0	96	-60	90	NSI				

All assay results based on SGS Kalgoorlie 50g fire assay charge with an atomic absorption analysis

Intersections greater than 10 gram metres (assay x interval > 10) in BOLD.

NSI = No Significant Intersection

Table 2: Zoroastrian Drill Hole Summary continued (26 February 2013)



KALGOORLIE NORTH GOLD RESOURCES		м	EASURE	D	INDICATED			INFERRED			TOTAL RESOURCES		
Deposit	Cut-Off (g/t Au)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)
Excelsior	0.6	5,175	1.40	232.2	3,230	1.20	124.9	2,652	1.16	99 .0	11,057	1.28	456.1
Zoroastrian (O/P)	0.6				3,402	2.47	270.0	1,711	1.89	104.1	5,113	2.28	374.1
Zoroastrian (U/G)	3.0				346	4.89	54.3	305	5.80	56.9	650	5.32	111.2
Zoroastrian (Total)					3,748	2.69	324.3	2,015	2.48	161.0	5,763	2.62	485.3
Satellite Resources (within 4	km radius	s of Exce	Isior)									
Lochinvar	0.6				448	1.74	25.1	60	1.70	3.3	508	1.74	28.4
Three Star	0.6							92	2.26	6.7	92	2.26	6.7
Ellen Pearce	0.6							35	1.75	2.0	35	1.75	2.0
Navan	0.6							76	1.61	3.9	76	1.61	3.9
Jackorite	0.6				89	2.73	7.8	29	1.79	1.7	118	2.50	9.5
Castlereagh	0.6				194	1.48	9.2	13	1.29	0.5	207	1.47	9.8
Nerrin Nerrin	0.6				62	2.54	5.1	34	2.42	2.7	96	2.50	7.7
Parkerville	0.6				97	1.90	5.9	52	1.42	2.4	149	1.73	8.3
Big Blow South	0.6				133	3.56	15.3	192	1.99	12.3	325	2.64	27.6
Total Satellite Resou	irces				1023.2	2.08	68.4	582.8	1.89	35.4	1,606	2.01	103.8
Other Resources (gi	reater th	an 4km fr	om Excel	lsior)									
Eldorado	0.6				362	1.61	18.8	31	1.43	1.4	393	1.60	20.2
North Talbot	0.6							662	1.67	35.6	662	1.67	35.6
North Duke	0.6							706	1.12	25.4	706	1.12	25.4
Bulletin South	0.6							363	2.01	23.4	363	2.01	23.4
Windanya	1.0							42	3.00	4.0	42	3.00	4.0
Total Other Resourc	es				362	1.61	18.8	1,803	1.55	89.8	2,165	1.56	108.6
TOTAL RESOURCES		5,175	1.40	232.2	8,363	1.99	536.3	7,053	1.70	385.2	20,591	1.74	1,153.7

Table 3: Kalgoorlie North Project Resource Inventory (February 2013)

Competent Person Statement:

Information in this announcement that relates to Mineral Resource and exploration results is based on information compiled by Mr. David Potter who is the Technical Director of Excelsior Gold Limited. Mr. Potter is a Member of The Australian Institute of Geoscientists and 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 Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Potter consents to the inclusion in the document of the information in the form and context in which it appears



Zoroastrian Resource Modelling Process

The mineralisation in the Zoroastrian area is predominately associated with a complex array of multiple dimensional and variable orientated quartz veins and stock works within the differentiated Zoroastrian Dolerite. In places a surficial 1-2m thick calcrete/lateritic gold bearing horizon and small near surface supergene pods exist. Recent open pits, historical workings and shafts exist within this unit throughout the Company's tenements and beyond. Detailed mapping and sampling of these workings and structural measurements from orientated diamond core drilling forms the basis of the geological interpretation.

The Zoroastrian Dolerite is equivalent to the northern extensions of the Paddington Dolerite which produced in excess of two million ounces of gold from a similar style of mineralisation at the Paddington Operations 17 kilometres to the south.

The high grade vein structures at Zoroastrian display highly variable analytical gold results due to a large nugget effect as demonstrated by coarse gold seen within the quartz veins in the historical open pit and in the recently drilled diamond core holes. Despite not always returning significant assay results the intersection of voids and quartz lodes within drillholes where the gold mineralisation is predicted to occur confirms geological interpretations. The gold mineralisation associated with quartz stock work form broader mineralisationand is more consistent in gold grade.

From 3D geological interpretation 68 gold bearing lodes of varying dimensions and orientations within the system were used to calculate resources. The total volume of these wireframes was 3,154,698 bank cubic metres. The removal of historical open pit and underground voids resulted in the removal of 88,680 bank cubic metres

Within the modelled area, 633 aircore, reverse circulation and diamond drill holes totalling 58,374.02 metres of drilling have been completed within an area of approximately 1500m (north) x 400 m (east) down to a maximum depth of 280 m below surface. Drill spacing is irregular ranging from on a nominal 15 m x 15m (or closer) grid pattern with the remainder at a maximum spacing of approximately 40 m x 20 m or 40m x 40m

A total of 4,367 one metre composited gold assay results were used in the estimation. Gold grades were obtained either using a standard fire assay extraction with an AAS or ICP-MS analysis or an accelerated 4 hour Leach Well on a 400g sample with analysis by Flame Atomic Absorption.

A blank model was built to allow for future optimisations based on the following block parameters.

Entire Model	Minimum	Maximum	Panel Size	Number of panels	sub-blocking
Easting	334,850	335,550	2	351	4
Northing	6,641,160	6,643,250	5	419	2
Elevation	80	440	5	73	2



The blocks were filled with specific gravity data based on interpreted weathering horizons and historical bulk density data collected by previous owners during mining of the existing Excelsior pit. The density data assigned was oxide – 2.1t/m3, transitional -- 2.4t/m3, fresh -- 2.75t/m3. These bulk density values are based on data collected from drill core and previous mining. The oxide material contains a large but variable proportion of quartz.

Geostatistical analysis and variography were conducted on various sample populations and the final data set to help assess the appropriate estimation technique and to ascertain Krigging parameters. A number of different estimation techniques including Indicator Krigging, Ordinary Krigging and Inverse Weighted Distance were conducted. Multiple runs were made for each technique adjusting the various parameters to assess the most appropriate technique and parameters. From this work the final block estimation was undertaken using a combination of Ordinary Krigging and Inverse Weighted Distance. Multiple search ellipsoids and run criteria were used to reflect the different lode characteristics.

Statistical and visual analysis of the final calculated block model gold grades and distribution was undertaken to ensure the estimation parameters used produced estimated grades that best honoured the available data.

The models and associated calculations utilised all available data and whilst depleted for known workings no adjustment was made for smaller undefined workings.

Excelsior follows the JORC classification system with final individual block classification being assigned by statistically and visually taking into account the following factors and adjusting on:

- > Drill spacing and orientation.
- > Average distance to fill individual blocks.
- > Number of holes and points used to fill the block.
- Statistical analysis of results.
- > Classification of surrounding blocks, and
- > Lode position and confidence in interpretation

Excelsior does not classify any resources that make use of historical data as Measured due to varying QAQC data. Those blocks that were nominally classified as Measured were automatically reclassified as Indicated. Further, Excelsior does not classify any resources that are based on historical data as Indicated unless this has been confirmed by drilling undertaken by the company. Those blocks that were nominally classified as Measured/Indicated where confirmation drilling has not been undertaken are automatically reclassified as Inferred.

Approximately 9% of the modelled blocks were classified as Measured and reclassified to Indicated, 48% as Indicated (total Indicated 57%) and 41% as Inferred. A further 2% of the modelled blocks were unclassified and are not reported in the JORC resource.