

10 August 2018

DISCOVERY OF BROAD SCANDIUM ZONES FURTHER ENHANCES HIGH-GRADE ITAPITANGA NICKEL-COBALT DISCOVERY, BRAZIL

Exploration Target updated to include highly valuable by-product metal

- Extensive zones of scandium mineralisation identified coincident with or adjacent to the high-grade nickel and cobalt mineralisation at the Itapitanga nickel-cobalt discovery in northern Brazil.
- Results for scandium from the extended RC drilling assay program include the following intersections:
 - 21.0m at 41.1g/t scandium from 4.0m in hole ITAP-RC-18-060;
 - **9.0m at 35.3g/t scandium from 2.0m** in hole ITAP-RC-18-003;
 - 12.0m at 32.7g/t scandium from 2.0m in hole ITAP-RC-18-002;
 - 17.0m at 30.1g/t scandium from surface in hole ITAP-RC-18-076;
 - 30.0m at 26.5g/t scandium from surface in hole ITAP-RC-18-083;
 - 8.0m at 25.0g/t scandium from surface in hole ITAP-RC-18-014;
 - 10.0m at 22.7g/t scandium from surface in hole ITAP-RC-18-025;
 - 15.0m at 21.8g/t scandium from 4.0m in hole ITAP-RC-18-077;
 - 19.0m at 21.2g/t scandium from surface in hole ITAP-RC-18-046; and
 - 13.0m at 20.0g/t scandium from surface in hole ITAP-RC-18-007.
- The Itapitanga Nickel-Cobalt Exploration Target has been updated to include scandium:

35-45Mt @ 0.80% to 1.10% nickel, 0.07% to 0.12% cobalt and 18g/t to 30g/t scandium

Centaurus cautions that the potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to define a JORC compliant Mineral Resource. It is also uncertain if further exploration and resource development work will result in the estimation of a Mineral Resource.

- Scandium has the potential to be a high value by-product at Itapitanga given that scandium oxide prices, as reported in the 2018 US Geological Survey (USGS) Commodity Report, have recently been in the order of US\$4,000-US\$5,000 per kilogram.
- The extended assay program has also identified precious metals mineralisation, with ITAP-RC-18-076 returning 4m at 0.42 g/t PGMs (platinum + palladium) and ITAP-RC-18-064 intersecting 2m at 0.31 g/t gold.

Centaurus Metals (ASX Code: CTM) is pleased to advise that it has identified broad zones of scandium mineralisation at the Itapitanga Nickel-Cobalt Project in northern Brazil following an extension of the assay program for its recent Reverse Circulation (RC) drilling program to include ICP analysis. The discovery adds a potentially valuable by-product which further enhances the quality of the emerging high-grade nickel-cobalt discovery.

Australian Office Centaurus Metals Limited Level 3, 10 Outram St WEST PERTH WA 6005 Brazilian Office
Centaurus Brasil Mineração Ltda
Avenida Barão Homem de Melo, 4391
Salas 606 e 607 - Estoril
Belo Horizonte - MG - CEP: 30.494.275
BRAZIL

ASX: CTM
ACN 009 468 099
office@centaurus.com.au
Telephone: +61 8 6424 8420



The new assay results have allowed the Company to update the Exploration Target to include scandium. The Exploration Target for the Itapitanga Nickel-Cobalt Project now stands at **35-45Mt at 0.80% to 1.10% nickel, 0.07% to 0.12% cobalt and 18g/t to 30g/t scandium**. Full details of the Exploration Target estimate are set out below and are summarised in Table 3.

The Exploration Target estimate for the Itapitanga Project comprises between 280,000-495,000 tonnes of nickel, 24,500-54,000 tonnes of cobalt and 965-2,065 tonnes of scandium oxide.

The extension of the assay program was prompted by the identification of scandium mineralisation in the recent metallurgical testwork samples, as well as by the quality of the processing results. The scandium recovery for the samples was 99% from the high-pressure acid leach testwork and 94% for the atmospheric leach testwork. See further detail below on the metallurgical testwork results.

Centaurus is encouraged by the potential for scandium to be a high value by-product at Itapitanga given that scandium oxide prices, as reported in the 2018 US Geological Survey (USGS) Commodity Report for scandium, have recently been in the order of US\$4,000-US\$5,000/kg. The DFS completed recently by Clean TeQ on its Sunrise Project in NSW (see their ASX release, 25 June 2018) used a long-term price for scandium oxide of US\$1,500/kg.

The same 2018 USGS Report referred to above reported that the principal uses for scandium in 2017 were in aluminium-scandium alloys and solid oxide fuel cells (SOFCs). Other uses included ceramics, electronics, lasers, lighting, and radioactive isotopes. In SOFCs, electricity is generated directly from oxidizing a fuel. Scandium is added to a zirconia-base electrolyte to improve the power density and lower the reaction temperature of the cell.

Scandium Mineralisation

Like the nickel-cobalt mineralisation at Itapitanga, the scandium mineralisation occurs either at or very close to surface and is generally coincident to, or located immediately above, the nickel-cobalt mineralisation. There are only three isolated cases (within the 83 holes sampled to date) where the scandium mineralisation is not immediately coincident with nickel-cobalt mineralisation. These cases appear to be associated with the lateral limits of the ultramafic protore.

Highlights of the scandium assay results received to date from the RC samples include the following intersections. A complete list of the results is set out in Table 1. Note that all scandium intersections reported are the same intersections as reported for the nickel-cobalt mineralisation, with the exception of the holes marked (*) below:

- 21.0m at 41.1 g/t scandium from 4.0m in ITAP-RC-18-060*;
- 9.0m at 35.3 g/t scandium from 2.0m in ITAP-RC-18-003;
- 12.0m at 32.7 g/t scandium from 2.0m in ITAP-RC-18-002;
- 17.0m at 30.1 g/t scandium from surface in ITAP-RC-18-076*;
- 30.0m at 26.5 g/t scandium from surface in ITAP-RC-18-083*;
- 8.0m at 25.0 g/t scandium from surface in ITAP-RC-18-014;
- 10.0m at 22.7 g/t scandium from surface in ITAP-RC-18-025;
- **15.0m at 21.8 g/t scandium from 4.0m** in ITAP-RC-18-077;
- 19.0m at 21.2 g/t scandium from surface in ITAP-RC-18-046; and
- 13.0m at 20.0 g/t scandium from surface in ITAP-RC-18-007.

The position of the scandium mineralised zones, generally coincident or above the nickel-cobalt zones, means that the mineralised zones would be mined together. No additional waste strip or mining would be required to access the scandium mineralised zones.

Metallurgical testwork

The testwork has demonstrated that the high-grade nickel-cobalt laterite mineralisation found at the Itapitanga Project is highly amenable to both Atmospheric Acid Leach (AL) and High-Pressure Acid Leach (HPAL) processing.



The first bench-scale leach test work completed on the high-grade Itapitanga nickel-cobalt mineralisation delivered outstanding results, including:

High Pressure Acid Leach (HPAL):

• Extraction of 98% of nickel, 94% of cobalt and 99% of scandium.

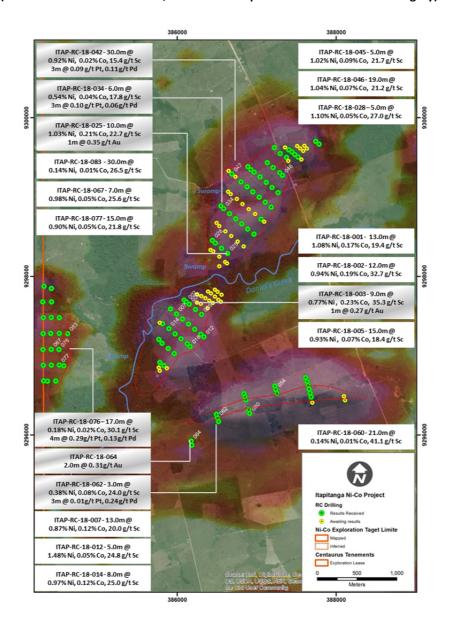
Atmospheric Leach:

- Extraction of 99% of nickel, 99% of cobalt and 94% of scandium (HCl); and
- Extraction of 98% of nickel, 97% of cobalt and 96% of scandium (H₂SO₄).

The results demonstrate that both HPAL and Atmospheric leaching processes are strong process route options for the Company when considering the future development of the Project. Further, the metallurgical testwork has demonstrated that the production of scandium as a by-product would be compatible with either of the process options tested to date so whilst the scandium grades seen to date are modest, the recovery of scandium can potentially add a significant by-product credit without impacting the recovery of nickel or cobalt.

For more information on the testwork please refer to ASX announcement on 10 July 2018.

Figure 1 – The Itapitanga Nickel-Cobalt Project – Significant Scandium and Precious Metals Results (Scandium are in white boxes; scandium and precious metal results are in grey).





Precious Metals

During the extension of the assay program, the Company also completed fire assay for gold and PGEs (platinum and palladium). ITAP-RC-18-076 returned the best PGM intersection located at the eastern limit of the Western Target of 4m at 0.42 g/t PGMs (platinum and palladium) within a broader zone of 17m at 0.21 g/t PGMs.

This localised PGM mineralisation in the laterite profile indicates a potential primary platinum and palladium source and will be followed up in the next round of drilling.

Gold intersections (ITAP-RC-18-025 - 1m @ 0.35g/t gold and ITAP-RC-18-003 - 1m @ 0.27g/t gold) were also identified around the fault zones that separate the northern and southern zones of the Northern target, while the westernmost hole of the Southern Target (ITAP-RC-18-064) intersected 2m at 0.31 g/t gold in granitic saprolite.

The exploration team will conduct a detailed mapping and soil sampling program around these new precious metal targets.

While the RC rig has now left Itapitanga, a field team remains on-site carrying out auger drilling of the wetlands and vegetated areas. The Company has applied for drilling permits in these areas so that they can be properly tested.

Management Comment

Centaurus' Managing Director, Darren Gordon, said that the identification of significant thick zones of scandium mineralisation at Itapitanga was an exciting and potentially important development for the emerging discovery.

"We can now consider scandium as a valuable by-product to the nickel-cobalt product stream at Itapitanga," he said. "The scandium mineralisation would be mined and processed together with the nickel-cobalt mineralisation and has the potential to be a material by-product credit given the strong recoveries seen in the initial metallurgical testwork program and the price currently being reported in the market.

"We have updated the Exploration Target accordingly which now stands at 35-45Mt at 0.80% to 1.10% nickel, 0.07% to 0.12% cobalt and 18g/t to 30g/t scandium. This is a great result considering that we picked up this previously unworked tenement only six months ago.

"The Phase 1 drill program at Itapitanga has been completed and we expect to receive the remaining results from this first phase of drilling over the next couple of weeks. In the meantime, we continue to test, where we can, the areas that were not accessible to the RC rig with our auger drills and have lodged the application for the drilling licence for the wetland and vegetated areas.

"The RC rig is currently on its way to the Pebas Copper-Gold Project, where drilling is expected to start later this month."

-ENDS-

Released by:

Nicholas Read Read Corporate M: +61 419 929 046 On behalf of:

Darren Gordon Managing Director Centaurus Metals Limited



Competent Person Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Roger Fitzhardinge who is a Member of the Australasian Institute of Mining and Metallurgy. Roger Fitzhardinge is a permanent employee of Centaurus Metals Limited. Roger Fitzhardinge 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'. Roger Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Exploration Target

This report comments on and discusses Centaurus Metals Limited's exploration in terms of target size and type. The information relating to Exploration Targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. The potential quantity and quality of material discussed as Exploration Targets is conceptual in nature since there has been insufficient work completed to define them as Mineral Resources or Ore Reserves. It is uncertain if further exploration work will result in the determination of a Mineral Resource or Ore Reserve.



Table 1 - Itapitanga Nickel-Cobalt Project - RC Drill Results

								Significant Intersections						
Hole ID	Target	Easting	Northing	mRL	Azi	Dip	Depth	From (m)	To (m)	Interval (m)	Ni %	Co %	Sc g/t	
ITAP-RC-18-001	Northern	386087	9297696	205	0	-90	25	2	15	13	1.08	0.17	19.4	
ITAP-RC-18-002	Northern	386114	9297676	213	0	-90	19	2	14	12	0.94	0.19	32.7	
ITAP-RC-18-003	Northern	386152	9297645	212	0	-90	32	2	11	9	0.77	0.23	35.3	
ITAP-RC-18-004	Northern	386229	9297580	217	0	-90	30	0	18	18	1.05	0.11	16.8	
ITAP-RC-18-005	Northern	386307	9297517	221	0	-90	35	1	16	15	0.93	0.07	18.4	
ITAP-RC-18-006	Northern	385914	9297587	211	0	-90	44	0	24	24	0.94	0.08	10.7	
ITAP-RC-18-007	Northern	385990	9297523	221	0	-90	31	0	13	13	0.87	0.12	20.0	
ITAP-RC-18-008	Northern	386067	9297459	219	0	-90	28	0	10	10	0.76	0.09	18.3	
ITAP-RC-18-009	Northern	386144	9297395	217	0	-90	25	5	10	5	0.70	0.01	30.8	
ITAP-RC-18-010	Northern	386219	9297330	223	0	-90	35	4	13	9	0.90	0.04	8.9	
ITAP-RC-18-011	Northern	386296	9297267	221	0	-90	32	4	18	14	1.73	0.05	14.2	
ITAP-RC-18-012	Northern	386335	9297234	222	0	-90	37	7	12	5	1.48	0.05	24.8	
ITAP-RC-18-013	Northern	385816	9297401	210	0	-90	25	0	8	8	0.67	0.08	23.7	
ITAP-RC-18-014	Northern	385896	9297338	211	0	-90	30	0	8	8	0.97	0.12	25.0	
ITAP-RC-18-015	Northern	385973	9297272	212	0	-90	20	0	8	8	1.16	0.03	5.0	
ITAP-RC-18-016	Northern	386049	9297209	214	0	-90	25	0	10	10	0.82	0.03	8.4	
ITAP-RC-18-017	Northern	386126	9297146	219	0	-90	30	1	11	10	0.82	0.04	4.2	
ITAP-RC-18-017	Northern	386163	9297140	223	0	-90	33	4	9	5	0.88	0.03	31.4	
	Northern	385963	9297023	214	0	-90		1		10		0.10	7.3	
ITAP-RC-18-019 ITAP-RC-18-020							31		11	10	0.70	0.03	7.5	
	Northern	385887	9297088	209	0	-90	60	No Significan		0	0.71	0.00	0.0	
ITAP-RC-18-021	Northern	385810	9297152	207		-90	38	2	10	8	0.71	0.08	8.9	
ITAP-RC-18-022	Northern	385768	9297201	206	0	-90	25	0	10	10	0.59	0.04	8.2	
ITAP-RC-18-023	Northern	385782	9296911	203	0	-90	24	4	13	9	0.82	0.02	5.2	
ITAP-RC-18-024	Northern	385831	9296871	205	0	-90	24	6	22	16	0.55	0.02	4.4	
ITAP-RC-18-025	Northern	386635	9298288	210	0	-90	30	0	10	10	1.03	0.21	22.7	
ITAP-RC-18-026	Northern	386559	9298350	210	0	-90	24	1	15	14	0.73	0.09	16.3	
ITAP-RC-18-027	Northern	386479	9298418	209	0	-90	13	3	9	6	0.91	0.07	28.7	
ITAP-RC-18-028	Northern	386444	9298451	208	0	-90	18	4	9	5	1.10	0.05	27.0	
ITAP-RC-18-029	Northern	386967	9298531	212	0	-90	30	No Significan						
ITAP-RC-18-030	Northern	386886	9298594	211	0	-90	43	0	15	15	0.61	0.05	6.2	
ITAP-RC-18-031	Northern	386812	9298659	206	0	-90	17	0	6	6	0.59	0.09	13.0	
ITAP-RC-18-032	Northern	386736	9298723	206	0	-90	21	0	8	8	0.59	0.06	11.8	
ITAP-RC-18-033	Northern	386660	9298787	205	0	-90	19	4	10	6	0.83	0.07	17.8	
ITAP-RC-18-034	Northern	386585	9298853	203	0	-90	18	4	10	6	0.54	0.04	17.8	
ITAP-RC-18-035	Northern	386549	9298885	203	0	-90	19	4	8	4	0.54	0.02	7.9	
ITAP-RC-18-036	Northern	387182	9298870	211	0	-90	40	0	10	10	0.98	0.04	15.0	
ITAP-RC-18-037	Northern	387109	9298934	211	0	-90	25	0	4	4	0.55	0.07	24.5	
ITAP-RC-18-038	Northern	387033	9298997	215	0	-90	23	0	4	4	0.51	0.08	16.0	
ITAP-RC-18-039	Northern	386952	9299063	218	0	-90	20	0	10	10	0.90	0.04	6.8	
ITAP-RC-18-040	Northern	386881	9299127	215	0	-90	25	0	10	10	0.76	0.04	8.5	
ITAP-RC-18-041	Northern	386804	9299190	210	0	-90	28	3	8	5	0.61	0.04	14.8	
ITAP-RC-18-042	Northern	386687	9299288	213	0	-90	49	10	40	30	0.92	0.02	15.4	
ITAP-RC-18-043	Northern	387133	9299433	219	0	-90	28	3	14	11	1.05	0.04	11.2	
ITAP-RC-18-044	Northern	387208	9299369	223	0	-90	25	6	11	5	0.52	0.03	7.7	
ITAP-RC-18-045	Northern	387290	9299305	226	0	-90	28	4	9	5	1.02	0.09	21.7	
ITAP-RC-18-046	Northern	387325	9299271	227	0	-90	37	0	19	19	1.04	0.07	21.2	
ITAP-RC-18-047	Southern	387687	9296476	202	0	-90	40	8	10	2	0.54	0.035	11.5	
ITAP-RC-18-048	Southern	387674	9296524	203	0	-90	46	5	8	3	0.46	0.09	13.3	
ITAP-RC-18-049	Southern	387661	9296572	205	0	-90	40	No Significan	t Intersection					
ITAP-RC-18-050	Southern	387648	9296621	210	0	-90	42	7	11	4	0.57	0.10	12.8	
ITAP-RC-18-051	Southern	387635	9296669	215	0	-90	39	3	7	4	0.58	0.06	24.5	
ITAP-RC-18-052	Southern	387616	9296721	208	0	-90	46	9	18	9	0.66	0.03	15.3	
ITAP-RC-18-053	Southern	387258	9296523	199	0	-90	40	6	9	3	0.62	0.02	6.0	
ITAP-RC-18-054	Southern	387239	9296568	199	0	-90	43	No Significan	t Intersection					
ITAP-RC-18-055	Southern	387228	9296616	199	0	-90	31	No Significan						
ITAP-RC-18-056	Southern	386865	9296438	197	0	-90	25	No Significan						

 $Significant\ Intersections\ considered\ a\ 0.50\ \%\ nickel\ or\ 0.08\%\ cobalt\ cut-off\ and\ 2m\ maximum\ internal\ waste.$



Table 1 (continued) – Itapitanga Nickel-Cobalt Project – RC drill results

								Significant Intersections					
Hole ID	Target	Easting	Northing	mRL	Azi	Dip	Depth	From (m)	To (m)	Interval (m)	Ni %	Co %	Sc g/t
ITAP-RC-18-057	Southern	386852	9296477	198	0	-90	8	No Significan	t Intersection				
ITAP-RC-18-058	Southern	386840	9296517	198	0	-90	11	No Significan	t Intersection				
ITAP-RC-18-059	Southern	386901	9296314	201	0	-90	20	8	12	4	0.54	0.02	7.9
ITAP-RC-18-060*	Southern	386912	9296269	201	0	-90	25	4	25	21	0.14	0.01	41.1
ITAP-RC-18-061	Southern	386495	9296258	200	0	-90	20	4	11	7	0.54	0.09	16.8
ITAP-RC-18-062	Southern	386505	9296213	202	0	-90	24	7	10	3	0.38	0.08	24.0
ITAP-RC-18-063	Southern	386519	9296167	203	0	-90	39	No Significan	t Intersection				
ITAP-RC-18-064	Southern	386175	9295918	209	0	-90	25	No Significan	t Intersection				
ITAP-RC-18-065	Southern	386184	9295868	210	0	-90	34	No Significan	t Intersection				
ITAP-RC-18-066	Western	384311	9297075	214	0	-90	31	5	10	5	0.99	0.01	14.0
ITAP-RC-18-067	Western	384414	9297076	215	0	-90	18	3	10	7	0.98	0.05	25.6
ITAP-RC-18-068	Western	384313	9297276	214	0	-90	35	7	9	2	0.51	0.03	9.3
ITAP-RC-18-069	Western	384408	9297277	213	0	-90	31	4	13	9	0.70	0.03	8.7
ITAP-RC-18-070	Western	384516	9297278	213	0	-90	35	2	5	3	0.50	0.05	30.7
ITAP-RC-18-071	Western	384315	9297476	212	0	-90	25	2	9	7	0.67	0.08	18.0
ITAP-RC-18-072	Western	384413	9297478	211	0	-90	25	0	19	19	0.69	0.05	10.9
ITAP-RC-18-073	Western	384516	9297477	210	0	-90	17	No Significan	t Intersection				
ITAP-RC-18-074	Western	384419	9297676	214	0	-90	27	No Significan	t Intersection				
ITAP-RC-18-075	Western	384309	9297675	213	0	-90	55	3	20	17	0.74	0.03	12.3
ITAP-RC-18-076*	Western	384511	9297075	216	0	-90	34	0	17	17	0.18	0.02	30.1
ITAP-RC-18-077	Western	384515	9296879	213	0	-90	31	4	19	15	0.90	0.05	21.8
ITAP-RC-18-078	Western	384415	9296877	213	0	-90	28	5	28	23	0.81	0.03	11.6
ITAP-RC-18-079	Western	384315	9296875	213	0	-90	24	4	8	4	1.13	0.04	26.0
ITAP-RC-18-080	Western	384368	9296675	210	0	-90	23	5	11	6	0.74	0.12	28.7
ITAP-RC-18-081	Western	384472	9296677	212	0	-90	20	No Significan	t Intersection				
ITAP-RC-18-082	Western	384572	9296869	213	0	-90	22	No Significan	t Intersection				
ITAP-RC-18-083*	Western	384619	9297276	213	0	-90	37	0	30	30	0.14	0.01	26.5

 $Significant\ Intersections\ considered\ a\ 0.50\ \%\ nickel\ or\ 0.08\%\ cobalt\ cut-off\ and\ 2m\ maximum\ internal\ waste.$

Table 2 – Itapitanga Nickel-Cobalt Project – RC drill results (Precious metals)

										Significant In	tersections		
Hole ID		Easting	Northing	mRL	Azi	Dip	Depth	From (m)	To (m)	Interval (m)	Au g/t	Pt g/t	Pd g/t
ITAP-RC-18-003	Northern	386152	9297645	212	0	-90	32	15	16	1	0.27	0.01	0.01
ITAP-RC-18-025	Northern	386635	9298288	210	0	-90	30	4	5	1	0.35	0.01	0.01
ITAP-RC-18-034	Northern	386585	9298853	203	0	-90	18	1	4	3	0.01	0.10	0.06
ITAP-RC-18-042	Northern	386687	9299288	213	0	-90	49	16	19	3	0.01	0.09	0.11
ITAP-RC-18-054	Southern	387239	9296568	199	0	-90	43	5	6	1	0.13	0.01	0.01
ITAP-RC-18-062	Southern	386505	9296213	202	0	-90	29	5	8	3	0.01	0.01	0.24
ITAP-RC-18-064	Southern	386175	9295918	209	0	-90	25	10	12	2	0.31	0.01	0.01
ITAP-RC-18-076	Western	384511	9297075	216	0	-90	34	0	17	17	0.01	0.13	0.08
							including	3	7	4	0.03	0.29	0.13

Significant Intersections considered a 0.1 g/t Au or 0.1 g/t PGMs cut-off

^{*}Significant Intersections considered a 20 g/t scadium cut-off and 2m maximum internal waste.



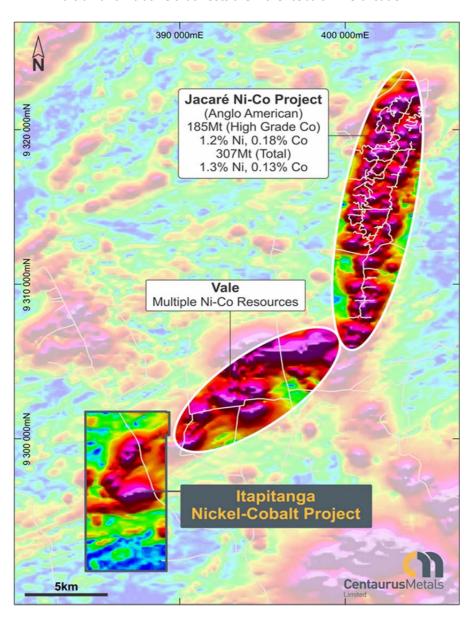
About the Itapitanga Nickel-Cobalt Project

The Itapitanga Project covers an area of approximately 50km² and is located in the Carajás Mineral Province of northern Brazil. The Project is the southern extension of the same ultramafic-mafic intrusive complex that hosts both the Jacaré Ni-Co deposit and several unpublished nickel-cobalt resources held by Vale (see Figure 2 below).

Anglo American's neighbouring world-class Jacaré Ni-Co Deposit, is one of the highest large-tonnage nickel-cobalt grades in the world with a Mineral Resource of 307Mt at 1.3% Ni and 0.13% Co, including a high-grade cobalt resource of 185Mt at 1.2% Ni and 0.18% Co¹.

The Itapitanga Project is located on farm land 50km northeast of the regional centre of São Felix de Xingu and accessible all year via unpaved road. The project is located 110km from Vale's operating nickel mine Onça-Puma.

Figure 2 – Location of the Itapitanga Nickel-Cobalt Project. The regional magnetic signature (AS) is coincident with the ultramafic intrusive that hosts the nickel-cobalt mineralisation.



¹ Resource data sourced from Anglo American Presentations "O Depósito de Níquel Laterítico do Jacaré (PA), Brasil" – Simexmin 2010 and Ore Reserves and Mineral Resources Report 2016



Detail of the Itapitanga Exploration Target

The Itapitanga Exploration Target tonnage and grade potential is based on the following data:

- An extensive RC and auger drilling database for mineralisation width, depth and grade ranges across the three main targets. The Northern target has been separated into two targets for the purpose of the tonnage and grade estimation;
- The width of mineralisation is primarily based on the RC drilling. The lower range is a conservative estimate of mineralisation intersected to date. The upper range recognises the potential for additional mineralisation where the targets remain open, mainly along the western limits of the Northern target as well as the gap between the northern and southern zones of the Northern Target;
- The grade ranges for nickel and cobalt are based on the nickel and cobalt grades intersected in the RC and auger drilling received to date. Results have been received for the first 103 RC drill holes which comprises 2,943m of drilling;
- The grade ranges for scandium are based on the scandium grades intersected in the RC drilling for drill holes ITAP-RC-18-001 to ITAP-RC-18-083. The grade range considers only the scandium grade that is coincident with the nickel-cobalt mineralised zones;
- This first phase of RC drilling was completed primarily on 200m line spacing with 100m between drill holes. There are localised cases where the section spacing is 400m or 100m. There are also localised cases of 50m between holes on section;
- Surface mapping, soil sampling and geophysical images for interpretation of areas that have not been drill tested due to access issues;
- A dry bulk density value of 1.5 t/m³, based on tests completed on in-situ mineralisation; and
- A digital terrain model from SRTM survey (30m resolution).

The Itapitanga Nickel-Cobalt Project preliminary Exploration target results are outlined in Table 3 below.

Table 3 – Itapitanga Project Exploration Target Potential Estimate

Target	Tonnage F	Range (Mt)	Ni% I	Range	Co% I	Range	Sc g/t Range		
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	
Northern (north of Daniel's Creek)	16	19	0.80	1.10	0.06	0.11	18	25	
Northern (south of Daniel's Creek)	13	16	0.85	1.20	0.08	0.14	18	35	
Southern	3	5	0.60	0.70	0.05	0.09	18	25	
Western	3	5	0.75	1.00	0.05	0.09	18	30	
Total	35	45	0.80	1.10	0.07	0.12	18	30	

^{*}Rounding differences may occur.

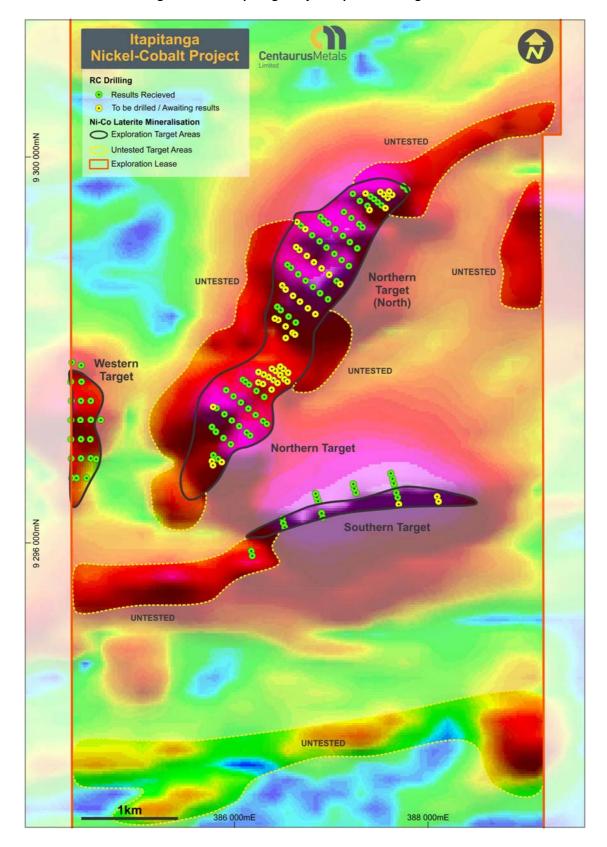
The Exploration Target estimate for the Itapitanga Project comprises between 280,000-495,000 tonnes of nickel, 24,500-54,000 tonnes of cobalt and 965-2,065 tonnes of scandium oxide. The in-situ metal content estimation includes no metallurgical or other recovery factors.

The map in Figure 3 below shows the surface expression of the Exploration Targets limits. Much of the western limit of the Northern Target is either inaccessible due to wetlands or in vegetated areas (where drilling is not permitted under the current drilling license). Only a portion of this area has been included in the Exploration Target.

Together with the western limit of the Northern Target there are multiple un-tested nickel-cobalt mineralisation targets that have been identified through mapping, soil sampling and geophysical interpretation. Where these areas could not be tested as part of the recent RC drill program, the Company plans to test them with its handheld auger drills. Centaurus is also in the process of obtaining the drilling licenses required for the wetland and vegetated areas.









APPENDIX B – TECHNICAL DETAILS OF THE ITAPITANGA NICKEL-COBALT PROJECT, JORC CODE, 2012 EDITION – TABLE 1 SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	Commentary
Sampling techniques	 Soil samples were collected at roughly 100-150m intervals along a fence line oblique to the mineralisation. Surface material was first removed and sample holes were dug to roughly 30cm depth. A 2-3kg sample was taken from the subsoil. The sample was placed in a plastic sample bag with a sample tag before being sent to the lab. Surface rock chip/soil samples were collected from in situ outcrops and rolled boulders for chemical analysis. Channel samples were taken at a road cutting site vertically across the profile. The channel sample height was 2.5m, approximately 3-5kg of sample was collected. Auger samples are taken by a hand-held auger. Sections are 200-400m apart with 50-100m between holes. Care is taken to try to remove up hole contamination from the auger bit during sampling. A 3-5kg sample was taken from the bit. The sample is placed in a plastic sample bag with a sample tag before being sent to the laboratory. The first phase of RC drilling involves drill sections that are 200 or 400m. Generally there is 100m spacing between drill holes on sections. Samples are split to make 3-5kg samples, a twin 3-5kg sample is kept for metallurgical testwork. The sample is placed in a plastic sample bag with a sample tag
Drilling techniques	 before being sent to the laboratory. Auger drilling was completed using a hand-held auger with a 200mm auger bit. Drilling depth is
	 RC drilling was completed using a face sampling hammer (4.5"). Sample is collected from the sample cyclone in large plastic sample bags. Samples are then split either by riffle splitters or manually (fish bone method) where there is high moisture content. All RC holes were sampled on 1m intervals. Sample size, sample recovery estimate and conditions were recorded.
	All holes drilled to date have been vertical.
Drill sample recovery	 RC sample weights are taken for all samples and a recovery estimate is made where the sample is not wet. Where the sample is wet a visual estimate of the sample recovery is made. To date the estimated recovery is approximately 80%, which is considered acceptable for a nickel-cobalt laterite deposit. To ensure the representative nature of the sample the cyclone and sample hoses are cleaned after each metre of drilling, the rig has two cyclones to facilitate the process. Additionally, extra care is taken when drilling through the water table or other zones of difficult ground conditions.
Logging	All outcrop and soil sample points were registered and logged in the Centaurus geological mapping points database.
	 Geologists complete a visual log of the RC samples on 1m intervals at the time of drilling. Logging captures colour, rock-type, mineralogy, alteration and mineralisation style. A hand-held XRF is also used to take real time geochemical readings to assist in the logging process. Logging is both qualitative and quantitative.
Sub-sampling techniques	 Chip trays have been collected, photographed and stored for all drill holes to-date. 1m samples were taken from the cyclone and then split by rifle splitter (if dry) or manually (if wet)
and sample preparation	 using the fish-bone technique. Sample weight is between 3-5kg. QAQC: A blank sample is inserted at the start of each hole. Standards (3 different standards are used on a rotating basis) are inserted every 20 samples. Field duplicates are completed every 20 samples. Sample sizes are appropriate for the nature of the mineralisation.
	 All geological samples were received and prepared by SGS Geosol Laboratories in Parauapebas, Brazil as 0.5-5kg samples. They were dried at 105°C until the sample was completely dry (6-12hrs), crushed to 90% passing 3mm and reduced to 200-300g. The samples were pulverised to 95% passing 150µm and split further to 50g aliquots for chemical analysis.
Quality of assay data and laboratory tests	 Chemical analysis for metal oxides is determined using XRF analysis (XRF79C). Fusion disks are made with pulped sample and the addition of a borate based flux. Analysis at SGS is for a 12 element suite. LOI is determined by thermo-gravimetric analysis at 1000°C. Fusion/XRF analysis is considered to be an industry standard to analyse nickel-cobalt laterite ore. Chemical analysis was completed for gold by fire assay and ICP for limit of 0.001ppm as well as multi
	 element using ICP (IC40B) for select samples. SGS Geosol Laboratories insert their own standards at set frequencies and monitor the precision of the XRF and ICP analysis. These results reported well within the specified 2 standard deviations of the mean grades for the main elements.
	 Additionally, the laboratories perform repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). These compare very closely with the original analysis for all elements. Laboratory procedures are in line with industry standards.
Verification of sampling	 All samples were collected by Centaurus field geologists. All assay results were verified by alternative



and assaying	 Company personnel and the Competent Person before release. All RC sampling is completed by Centaurus field staff under supervision of Centaurus geologists. Logging is entered into the Centaurus database (MS-Access) on site. SGS Geosol send assay results as csv files which are imported into the Centaurus database by geologists. All data is validated by Centaurus geologists and the Exploration Manager. Although no RC twin holes have been completed to date good correlation has been observed between the RC drill results and the auger result.
Location of data points	 To date drill collars have been picked up using hand-held GPS units. Drill collars and the project topography will be surveyed once the first phase of drilling is complete. The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements. No mapping points are reported.
distribution	 Soil sampling was completed on 200-400m line spacing with 50m between samples. Auger drilling was completed on 200-400m line spacing with 50-100m between holes. The first phase of RC drilling is being completed primarily on 400m line spacing with 100m between drill holes. There are localised cases where the section spacing is 200m and there is 50m between holes on section. No sample compositing has been applied.
Orientation of data in relation to geological structure	 The extent and orientation of the mineralisation was interpreted based on initial field mapping, soil sampling, auger drilling and regional geophysical interpretations. All drill holes to date are vertical and give a true width of the laterite mineralisation.
Sample security	 All samples were placed in plastic sample bags and then numbered. Bags are sealed and placed in larger bags (10 samples per bag) and then transported to the SGS Geosol laboratory in Parauapebas, PA. Sample request forms are sent with the samples and via email to the laboratory. Samples are checked at the laboratory and a work order is generated by the laboratory which is checked against the sample request.

SECTION 2 REPORTING OF EXPLORATION RESULTS

SECTION 2 REPORTING OF E	Commentary
Criteria	Commentary
Mineral tenement and land tenure status	 The Itapitanga project includes one exploration licence 850.475/2016, for a total area of circa 50km². The tenements are part of an agreement where Centaurus will pay R\$150k (~A\$60k) over six months. At the end of the period, assuming Centaurus continues with the project, it will pay the vendor a further R\$500k (~A\$200k). Further, milestone payments to the vendor may be made - R\$1 million (~A\$400,000) if a JORC Resource is defined and R\$1.5 million (~A\$600,000) if a Mining Lease is granted by the Brazilian Mines Department (DNPM). All mining projects in Brazil are subject to a CFEM royalty, a government royalty of 2% on base metals revenues. Landowner royalty is 50% of the CFEM royalty. The project is located primarily in farming land.
Exploration done by other parties	The company is not aware of any historical exploration.
Geology	 The Itapitanga Project forms part of the southern extension of the ultramafic-mafic intrusive complex (2.8Ga) that intrudes the Archean Xingu basement granites in the western region of the Carajás Mineral Province. Nickel-cobalt laterite mineralisation generally occurs from surface and is associated with the ferruginous laterite of the ultramafic protore. Nickel mineralisation is associated with the saprolite that underlies the ferruginous laterite.
Drill hole Information	 Assay results have been received for 103 drill holes for a total of 2,943m drilled. Refer to Table 1 for full list of significant intersections and RC hole data from recent and previously announced drilling.
Data aggregation methods	 Continuous sample intervals are calculated via weighted average. Significant intersections considered a 0.50 % nickel or 0.08% cobalt cut-off and 2m maximum internal waste. Three significant intersections for scandium only have been reported, see Table 1. Further details of the intersections can be found in the drill hole results table. No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	 All RC holes are vertical and have intersected the complete mineralisation profile into the underlying un-mineralised protore. It is considered the holes are 90° to mineralisation and therefore intersections are considered to be of true width.
Diagrams	Refer to Figures 1-3.



Criteria	Commentary
Balanced reporting	 All exploration results received by the Company to date are included in this report or can be referenced to previous ASX releases.
Other substantive exploration data	 The Company is working with the CPRM geological and geophysical regional data set (Carajás – Área I (1047)). The Company is working with the SRTM topographical surface (30m resolution). Dry bulk density estimations have been carried out on in situ samples. Samples were taken using a 30cm steel mould that is cut into the in-situ laterite mineralisation. Samples were then weighed wet and dry. The average dry bulk density for the mineralisation is 1.5 t/m³.
Further work	 The Company has made applications for drilling in the vegetated and wetland areas that were not drilled in the first campaign. Auger drilling is underway for these areas that were not accessed under current drilling permits. Additional metallurgical samples have been taken for further processing testwork.