

21 Sep 2016

ASX Release: PGM

COBALT RESOURCE FOR OWENDALE

Highlights

- **Platina reviewed its current Owendale Mineral Resource to focus initial development on the highest combined scandium (Sc) and cobalt (Co) localities in light of growing global demand for cobalt**
- **Owendale JORC Measured, Indicated and Inferred Mineral Resource is reported at a new 0.1% Co cut-off with 8.6 Mt containing 330 ppm Sc and 0.15% Co (refer Table 3 for full details)**
- **Re-assaying of historical drilling samples is underway**
- **Excellent potential to increase the high grade Sc and Co Mineral Resource**
- **Owendale has the highest grade Sc, Co and Pt lateritic resource so far discovered**
- **Feasibility Study to focus on Sc and Co development.**

Platina Resources Limited (ASX: PGM) is pleased to announce additional Mineral Resource report focusing on cobalt details for the Owendale project near Tullamore in Central New South Wales, Australia.

The review was undertaken in light of growing global demand for cobalt for industrial purposes, as part of the Company's Feasibility Study activities for the Owendale project.

Platina is now undertaking a re-assaying program of the historical drill samples with the aim of extending the cobalt resource.

Platina CEO Rob Mosig commented: "The polymetallic nature of the Owendale deposit provides Platina with the opportunity to selectively maximise the development of the highest grade cobalt localities while maintaining a very high scandium grade of 330 ppm".

"We are very fortunate to have the unique combination of high cobalt and very high scandium grades accompanied by significant levels of platinum at Owendale."

Environmental components of the Feasibility Study have commenced and the Feasibility Study is expected to be underway by the end of October. The Study is expected to be completed in late 2017. Further details will be provided in the next few weeks.

Previous Mineral Resource Statement

ResEval Pty Ltd has estimated the Mineral Resource for the Owendale laterite project, which is 100% owned by Platina Resources Ltd. The Mineral Resource estimate, announced on 12 July 2016, is unchanged and remains current for the scandium cut-offs of 300 ppm and 600 ppm presented in Table 1 and Table 2, respectively.

The Mineral Resource is based on the scandium, cobalt, nickel and platinum results from Platina drilling completed between 2010 and 2014 (mostly RC and some diamond core) and some re-assayed older diamond core, for a total of 338 drill holes and 16,288 samples. Other older drilling with limited geochemistry has only been used to help estimate Inferred Mineral Resource areas.

Table 1 Owendale Mineral Resource estimate at a 300 ppm Sc cut-off grade

Mineral Resource Classification	Tonnes	Grades				In-situ Metal Content ~			
	Mt	Sc ppm	Pt g/t	Ni %	Co %	Sc ₂ O ₃ * t	Pt koz	Ni t	Co t
Measured	4.3	405	0.53	0.12	0.07	2 700	74	5 300	2 800
Indicated	5.9	375	0.35	0.11	0.07	3 400	66	6 400	3 900
Inferred	15.6	380	0.29	0.12	0.06	9 000	145	18 800	9 600
Total	25.9	380	0.34	0.12	0.06	15 100	285	30 600	16 300

Table 2 Owendale Mineral Resource estimate at a higher 600 ppm Sc cut-off grade

Mineral Resource Classification	Tonnes	Grades				In-situ Metal Content ~			
	kt	Sc ppm	Pt g/t	Ni %	Co %	Sc ₂ O ₃ * t	Pt koz	Ni t	Co t
Measured	120	665	0.52	0.17	0.17	120	2.0	200	200
Indicated	100	670	0.56	0.20	0.18	110	1.9	210	190
Inferred	390	650	0.39	0.21	0.12	390	4.9	800	490
Total	610	655	0.44	0.20	0.14	620	8.7	1 210	870

* Scandium is typically sold as Scandia or Scandium Oxide (Sc₂O₃) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form.

~ In-situ metal content includes no metallurgical or other recovery factors.

Additional Mineral Resource report at 0.1% Co cut-off

The variations of original rock types within the laterite profile at Owendale provide different spatial zones with elevated grades of enrichment in scandium, cobalt, platinum and nickel grades.

In addition, elements can vary in the level of enrichment within the laterite profile depending on whether the enrichment is dominated by residual or supergene processes or a mixture of both. Higher scandium grades are enriched in the upper to mid-section of the laterite profile. Nickel is typically enriched in the mid to lower part of the laterite, cobalt is generally enriched in a narrow mid-section of the laterite and platinum is enriched throughout the profile.

These lateral and vertical grade variations provide Platina with a range of development options to target different elements and grade concentrations depending prices available during mining.

The 0.1% Co cut-off Mineral Resource totalling 8.6 Mt is provided in Table 3. The subset figures in grey indicate a breakdown of the high cobalt Mineral Resource in black and include the subset previously reported inside the scandium Mineral Resource (4.9 Mt) and the subset which is additional to the previous reports (3.7 Mt) as the scandium is below the 300 ppm cut-off used for reporting.

Table 3: Owendale Mineral Resource estimate at a 0.1% Co cut-off

Mineral Resource Classification	Tonnes	Grades				In-situ Metal Content ~			
	Mt	Sc ppm	Pt g/t	Ni %	Co %	Sc ₂ O ₃ * t	Pt koz	Ni t	Co t
Total >0.1% Co									
Measured	2.0	310	0.60	0.34	0.17	950	39	6 820	3 440
Indicated	2.4	315	0.35	0.21	0.14	1 160	27	4 970	3 500
Inferred	4.2	355	0.24	0.21	0.13	2 280	33	8 700	5 660
Total	8.6	330	0.35	0.24	0.15	4 390	99	20 500	12 600
Subset within 300 ppm Sc Mineral Resource Statement in Table 1									
Measured	0.9	450	0.58	0.25	0.18	630	17	2 270	1 650
Indicated	1.3	405	0.36	0.19	0.16	790	15	2 370	2 010
Inferred	2.7	435	0.26	0.19	0.13	1 810	23	5 130	3 660
Sub-total	4.9	430	0.35	0.20	0.15	3 230	55	9 770	7 310
Subset outside 300 ppm Sc Mineral Resource in Table 1 (i.e. additional material <300 ppm Sc)									
Measured	1.1	190	0.61	0.42	0.16	320	22	4 550	1 790
Indicated	1.1	210	0.34	0.23	0.13	370	12	2 600	1 500
Inferred	1.5	205	0.21	0.24	0.13	470	10	3 570	2 000
Sub-total	3.7	205	0.37	0.29	0.14	1 150	44	10 720	5 290

* Scandium is typically sold as Scandia or Scandium Oxide (Sc₂O₃) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form.

~ In-situ metal content includes no metallurgical or other recovery factors.

Previous Mineral Resource Information

The following section provides relevant information included in the Mineral Resource announced on 12 July 2016 and which is unchanged.

Platina note that work has commenced on re-assaying the Platina drill hole samples in key areas to complete the geochemical profile for the Feasibility Study.

Location and tenure

The Owendale project is located in central New South Wales, approximately 75km northwest of Parkes and 45 km northeast of Condobolin (Figure 1). Owendale is also located 12km north of the Fifield Deep Lead where platinum had been mined in the past.

The Owendale deposit falls within Exploration Licence EL7644. This licence is 100% owned by Platina Resources Ltd and was granted on the 2 Dec 2010 and renewal has been offered for a further term of 5 years expiring in 2020 (Figure 2). The licence measures approximately 9.3 km north-south and 7.8 km east-west.



Figure 1: Owendale project location

Geology

Owendale is a Devonian-age, Alaskan-style intrusive complex that can be divided into mafic-felsic series (monzonite) and an ultramafic series (Figure 2). The ultramafic series comprises dunite-wehrlite, olivine-pyroxenites and olivine-clinopyroxenite rocks. The relative abundance of nickel, cobalt, scandium and platinum in these ultramafic rocks has been enriched to higher grades in the laterite profile due to either residual or supergene enrichment processes. The variations in element abundance in the original ultramafic basement rock affect the enriched concentrations in the laterite along with the development of the laterite and any erosion of the laterite profile.

The types of laterite-hosted mineralisation identified thus far show strong correlations with particular lithologies and are: platinum-copper mineralisation overlying dunite-wehrlite rocks with variable cobalt, nickel and gold content; cobalt-nickel mineralisation with platinum credits associated with underlying olivine pyroxenites; and elevated chrome and scandium has been noted where dunite-wehrlite lithologies predominate but mainly occur with clinopyroxenite lithologies.

The lateritisation process developed in the past over a long period of leaching which removed some elements and concentrating others by residual processes. Movement of water can also result in dissolution and precipitation of some elements by supergene processes. The Owendale area is relatively flat and supergene enrichment appears to only result in vertical enrichment within the profile and there is no evidence of significant lateral movement or enrichment. The lateritisation process results in a thin laterally extensive zone depicted in the section in Figure 3.

Much of the Owendale resource is covered by alluvial material comprised of quartz gravels and sands. This develops to a significant alluvial channel to the north-west of Owendale North prospect, which is up to 40 m in depth.

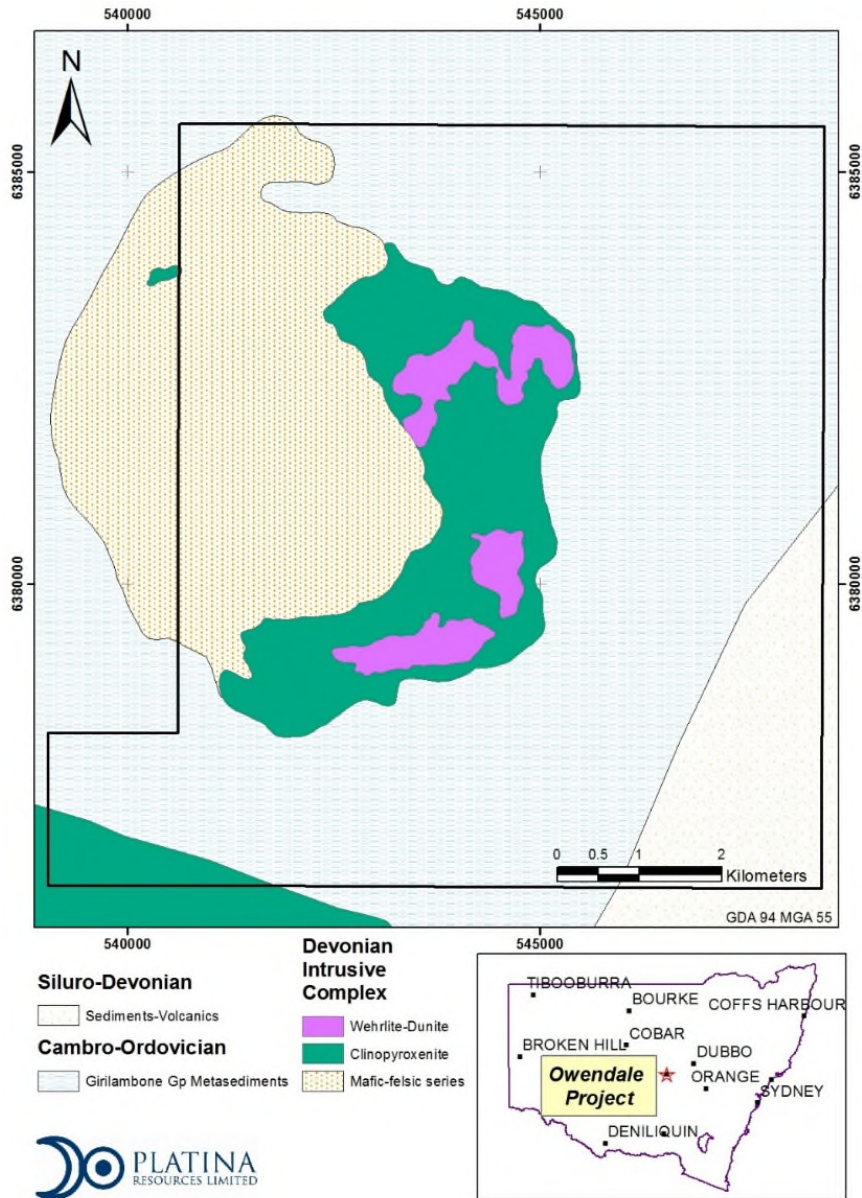


Figure 2: Owendale local geology and exploration lease

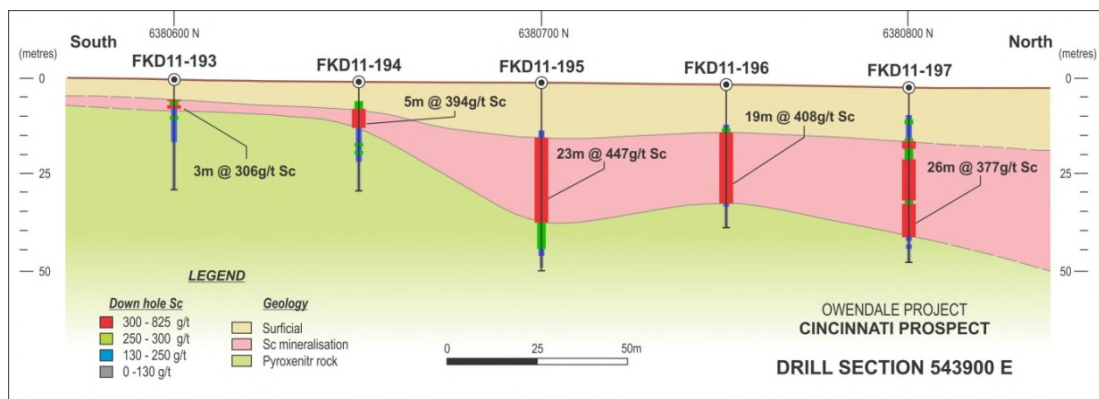


Figure 3: Cincinnati - Cross section 543900E

Drilling and sampling

Exploration is principally over two phases including:

- By Helix and various joint venture partners from 1986 to 2006
- By Platina from 2007 with most drilling and sampling from 2011 to 2013.

Though costeans and geophysical surveys were undertaken during exploration the resource

definition relies on drilling results which is summarised in Table 4 and Figure 4.

Table 4: Owendale drill hole summary

Company	Drill Type	Year	Holes	Metres Drilled	Maximum Depth (m)	Number of Samples by Element					
						Pt	Sc	Ni	Co	Fe	Mg
Anaconda	DDH	1966-67	2	628	320	0	0	0	0	0	0
Helix	DDH	1986-95	13	5326	718	2911	445	1274	663	712	605
	RAB	1988-98	968	38960	89	1017	0	6679	4127	0	0
	RC	1989-99	78	9897	204	2468	0	979	340	0	0
Platina	DDH	2010-14	14	2529	502	2357	1869	2298	2232	1886	533
	RC	2008-13	344	15090	201	1430	1397	1397	1397	1343	8759
Total			1419	72430		3221	1628	2520	2133	1603	9897

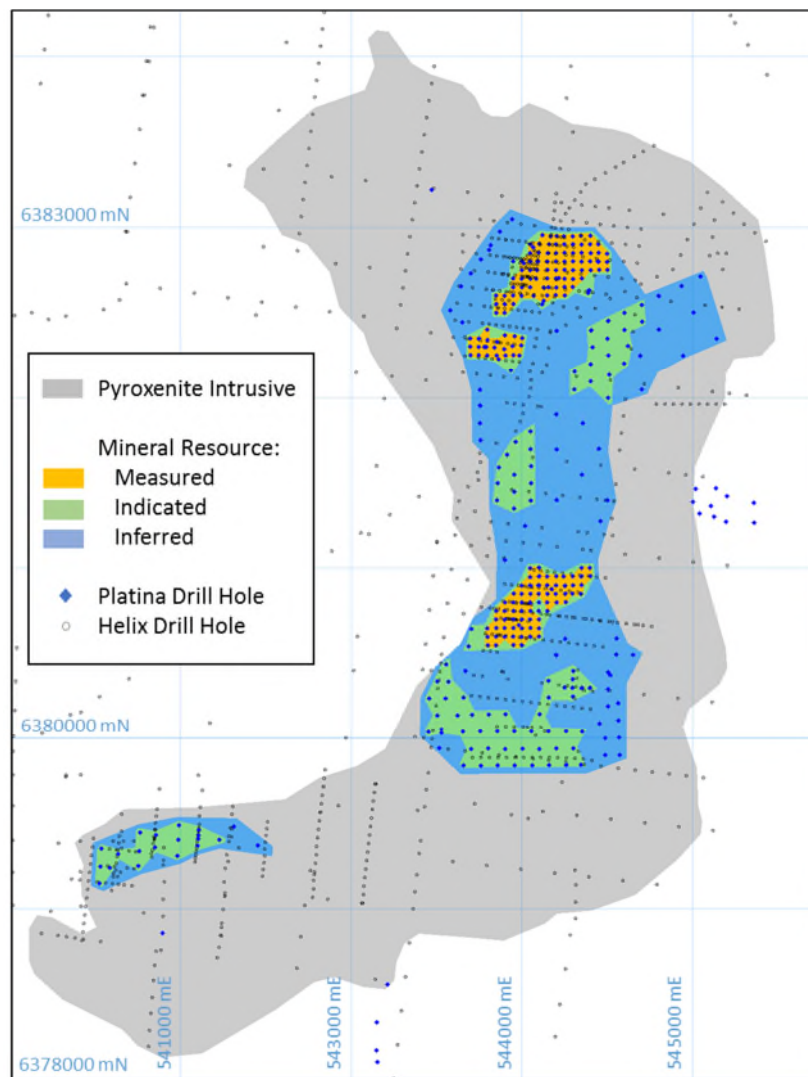


Figure 4. Owendale drilling campaigns and resource classification

Both phases of expiration include some diamond drilling that targets platinum and sulphide mineralisation potential in the ultramafic bedrock. Laterite targeted diamond drilling was largely for bulk density and metallurgical sampling.

Helix undertook widespread regional drilling targeting the platinum enriched in the laterite profile as well as definition and regional sampling of the bedrock material. Helix drilling is principally by rotary air blast (RAB) and some reverse circulation (RC) on mostly 2 m samples often composited to 4 m with selective sampling for platinum. After recognising some enriched nickel-cobalt laterite mineralisation some re-assaying for Ni and Co was undertaken along with definition drilling of some

target platinum and nickel-cobalt zones. Limited QAQC is available but indicates some early drilling may understate platinum. Due to the limited geochemistry Helix drilling is excluded from the Mineral Resource estimate where within 50 m of a Platina drill hole such that it only contributes to the estimation of the geological volumes and Pt, Ni and Co grade for Inferred Mineral Resource areas.

Platina drilling was regularly sampled in 1 m intervals from principally RC drilling using face sampling hammer bit with nominal hole diameter of 114 mm. One metre samples were collected directly from the cyclone and subsampled with a 3 or 2 tier Jones Riffle splitter. Platina drilling included some diamond core which was half or quarter core sampled in 1 m intervals. Diamond core recovery exceeds 90% and RC recovery is estimated to exceed 80% based on weighed samples mass.

Platina sample preparation from 2008 to mid-2013 was undertaken at SGS West Wyalong and included a dry, crush and pulverize to 75 µm. Samples greater than 3 kg included a rotary split stage to reduce the pulverization size to 3 kg. Sample weight was recorded before and after drying to define sample moisture content. Platina sample preparation after mid-2013 was undertaken at ALS in Orange using a similar commercial sample preparation process.

Platina analysis was principally by SGS in Townsville and Perth except for the last program in 2013 that was undertaken by ALS in Orange and Brisbane. Both laboratories used similar methods that included:

- Pt, Pd and Au analysis by 25g fire assays and ICP finish
- Sc, Ni, Co, Zn, Fe analysis by four acid digest and ICP and at time multi-element analysis by ICP
- In phases multi-element analysis was by glass fusion XRF for a range of elements along with loss on ignition (LOI) analysis.

Multi-element analysis by XRF provides a whole rock composition but is not complete within the database and is only available for 50% of the Platina laterite samples. The selective the analyses were undertaken in a manner to provide sufficient geochemical information for the current phase of work.

Estimation

A block model was constructed to represent the laterite profile using regular block size of 12.5 by 12.5 by 1 m with no sub-blocking.

Block grades were estimated using Ordinary kriging (OK). Unfolding to the top of each laterite domain was used to reflect the geological profile and improve sample selection during estimation. Grades were estimated on a parent block basis using block discretisation of 5 by 5 by 1. A three-pass search ellipse was used during estimation at an increasing radius of 70, 140 and 420 m. Figure 5 displays an example of the block model estimates from Owendale North which crosses from a high Platinum zone into a high scandium zone with some overlap of the mineralisation.

Extreme grades for potential economic elements were restricted by applying top-cut values determined from summary statistics (the 99.9 percentile). Applying the top-cut values to the drill hole assay data does not have a significant impact on the average grades except for platinum, which has a more skewed distribution.

The estimate was validated by: visual inspection of the model, construction of swath plots in easting, northing and RL comparing drilling with model estimates and comparison with the previous Mineral Resource.

In-situ dry bulk density values were assigned to each laterite horizon based on average measurements from drill core and is supported by geophysical density measurements.

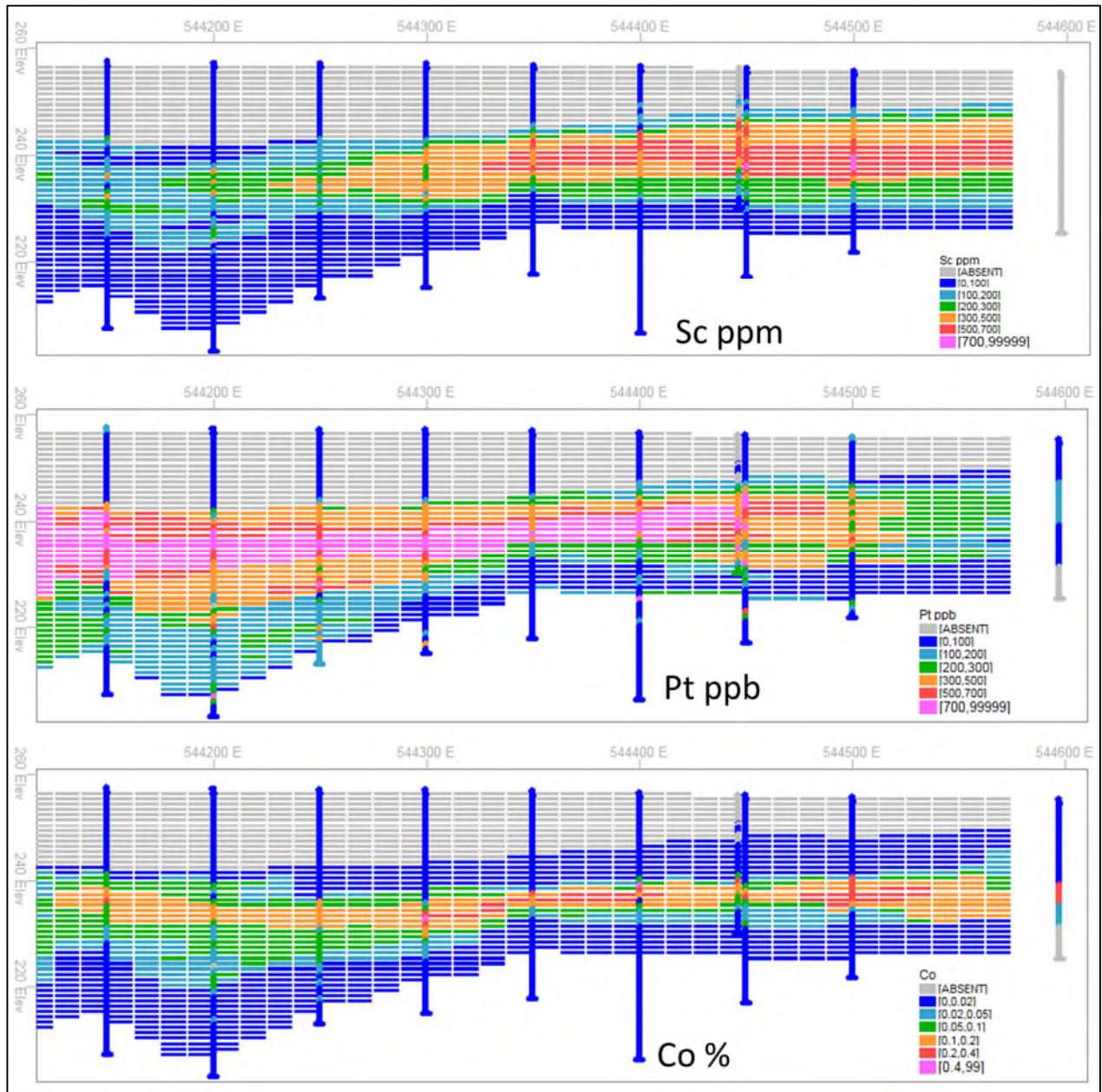


Figure 5: Owendale North section 6382800mN – block model grades for scandium, platinum and cobalt

Resource comparison

Previous resource estimates include report at both scandium and platinum cut-offs and as a result incorporated both elements into the classification. Exclusion of the more variable platinum from the classification has allowed the classification to be reconsidered based on the greater continuity displayed by scandium.

A comparison of the previous statement by Golder Associates Pty Ltd (Golder) and current Mineral Resource statements in Table 5 at the 300 ppm Sc cut-off indicates a small global change but a significant upgrade in classification based on the continuity of scandium. The changes incorporate some small boundary changes after exclusion of the platinum for classification as well as some extensions from the last phase of RC drilling in late 2013.

Table 5: Owendale resource estimate comparison for 300 ppm Sc cut-off*

Classification	2013 Estimate (Golder)			2016 Estimate		
	Mt	Sc ppm	Sc ₂ O ₃ t	Mt	Sc ppm	Sc ₂ O ₃ t
Measured				4.3	404	2700
Indicated	4.2	400	2600	5.9	373	3400
Inferred	19.4	380	11300	15.6	378	9000
Total	23.7	380	13900	25.9	381	15100

Note

Scandium is commonly sold as scandium oxide (Scandia) Sc₂O₃. Conversion factor from Sc to Sc₂O₃ is 1.5338
Scandium oxide presented is in-situ and includes no mining or metallurgical recovery factors

Classification

Classification previously considered Platinum that is residually enriched in the laterite profile and has inherent variability present in the bedrock that is passed on into the laterite profile.

Classification is now reassessed based solely on Scandium, the current focus for development. Scandium is enriched through supergene processes and as a result has significant lateral continuity. This is evident as consistent enrichment throughout the laterite profile to levels typically >100 ppm Sc as well as higher enrichment in the upper iron rich part of the laterite profile that is the basis of the 300 ppm cut-off and Mineral Resource statement.

The Mineral Resource classification is based on strict drill hole spacing criteria used to determine the confidence categories of the mineralisation as follows (see Figure 4):

- Measured Mineral Resource regular pattern of 50 m spaced drill holes
- Indicated Mineral Resource regular pattern of 100 m spaced drill holes
- Inferred Mineral Resource generally 200 m drill hole spacing

Extrapolation is limited to one quarter of the target drill spacing for each classification.

Only Platina drilling with scandium assays available were considered for classification purposes. Older Helix drilling was used where more than 50 m from a Platina drill hole to help model the geology and estimate grades for Ni, Co and Pt, where available.

Mining

The laterite at Owendale is thin, laterally extensive and has minimal cover. The topography is relatively flat making strip mining feasible where free digging is expected. Hence there are no technical impediments to mining the estimated Mineral Resources.

The Mineral Resource is based on block grade estimates within the laterite profile. At the 300 ppm Sc cut-off the Mineral Resource is drawn from within the upper laterite horizon. The estimation of Sc grade does not use any selective grade boundary interpretations, instead using block grade estimation to define blocks above 300 ppm Sc. Block estimation and inherent smoothing will have introduced most of the expected mining dilution required for mine planning.

Metallurgy

Platina has completed some preliminary metallurgical test work for various acid leach processing with chlorination of the residue from the leach for platinum recovery. These indicate recoveries in the order of:

- Atmospheric leach Sc 60%; Ni 70%; Co 60%
- High pressure acid leach Sc 90%; Ni 95%; Co 95%
- Chlorination Pt 95%

Cut-off grade

There is currently not a significant scandium market and the first stable mine production will affect both supply and demand. Owendale also presents a large relatively high grade Mineral Resource.

Consequently, the selection of the scandium cut-off grade is not based on marginal economics which at current metal prices would include the majority of the laterite profile as potentially economic. Instead a 300 ppm scandium cut-off was selected to present a significant Mineral

Resource, effectively reporting 22% for the laterite profile over all drilled areas. The 300 ppm Sc cut-off represents a robust cut-off with extensive lateral continuity that should not present any mining selectivity issues. Better definition of the higher grade zones will be the focus of future drilling and Mineral Resource updates.

Competent Person statements

This Mineral Resource estimate was undertaken or supervised by Mr John Horton, Principal Geologist, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a full time employee of ResEval Pty Ltd. Mr Horton has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. This includes more than 20 years of experience in Nickel Laterite deposits and over 8 years of experience with Scandium resource estimation.

The Mineral Resource estimate is based on exploration data compiled by Mr Robert Mosig who is a full time employee of Platina Resources Limited and who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Mosig 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.

Yours faithfully,

Robert W. Mosig
Managing Director

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Appendix A JORC 2012 Table 1 criteria assessment

A technical report has been prepared that documents aspects of the Mineral Resource estimate. The following tables provide a brief summary of that information in the order and form of the JORC (2012) Table1.

Section 1: Sampling Techniques and Data

Criteria	Explanation
<i>Sampling techniques</i>	<p>Exploration is principally over two phases, including:</p> <ul style="list-style-type: none"> • By Helix and various joint venture partners between 1986 to 2006 • By Platina from 2007 with most drilling and sampling between 2011 to 2013 <p>Helix surface costeans and other surface samples were not considered for resource evaluation purposes.</p> <p>Helix and Platina drilling samples were generally collected via a cyclone mounted on the drill rig or trailer and split using a riffle splitter for field sampling.</p> <p>Some Helix drilling was noted to use spear sampling methods. Though spear sampling methods can have issues with particulate materials they are generally not an issue with sampling of laterites which are usually more finely sized and evenly distributed. There is no available trial sampling to verify the spear sampling robustness nor are there sufficient records to indicate how many Helix samples used spear sampling.</p> <p>Helix drilling was primarily by RAB with analyses initially on composited 4 m intervals, with selective re-assaying on the original 1 m or composited 2 m intervals. Limited assaying for Pt was later expanded to some other elements.</p> <p>Platina drilling was regularly sampled in 1 m intervals from principally RC drilling.</p> <p>Platina drilling included some diamond core which was half or quarter core sampled in 1 m intervals.</p>
<i>Drilling techniques</i>	<p>Anaconda completed two diamond drill holes in 1967 but there are no assays available.</p> <p>Helix drilling (1986 to 1999) consists of:</p> <ul style="list-style-type: none"> • RC drilling (78 holes for 9897 m) by a Warman 650 drill rig with both vertical and inclined drilling. This used blade bit to refusal followed by an RC hammer bit. Sampling over 2 m intervals was via a cyclone bag which was subsampled on site to 2-3 kg using several spears. Some early drill holes are likely to have used cross over subs susceptible to down hole contamination. • Diamond drilling (13 holes for 5326 m) by a Warman 1000 drill rig using HQ after a short RAB precollar. Down hole surveys were collected using an Eastman single shot camera. • RAB drilling (968 holes for 38 960 m) sampled via a cyclone on 2 m intervals and riffle split. <p>Platina drilling (2008 to 2014) consists of:</p> <ul style="list-style-type: none"> • RC drilling (344 holes for 15 090 m) by a small reverse circulation drill rig with a face sampling hammer bit with nominal hole diameter of 114 mm. One metre samples were collected directly from the cyclone and subsampled with a 3 or 2 tier Jones Riffle splitter. • Diamond drilling (14 holes for 2529 m) initially triple tube HQ (63.5 mm) to approximately 50 m followed by conventional NQ (47.6 mm) tail to EOH. Subsequent PQ diamond drill holes were for metallurgical samples and have no assay data used for the resource estimate. Down hole surveys were collected using an Eastman single shot camera. <p>Drilling methods are generally suitable and acceptable in their day. Resource definition drilling has and will continue to replace early RC and RAB drilling by Helix.</p>
<i>Drill sample recovery</i>	<p>Helix drill recovery is not reported.</p> <p>Snowden estimated Platina RC drill recovery in 2011 and 2012 averaged around 15 kg which equates to about 80% of the expected sample for the current assumed density.</p>

Criteria	Explanation
	Platina core recovery exceeded 90%.
<i>Logging</i>	<p>Helix database records contain logged rock type and magnetic susceptibility.</p> <p>Platina drilling is logged in more detail with records indicating:</p> <ul style="list-style-type: none"> • Detail geology, oxidation, colour, texture, minerals, drill type and sampling method • Diamond drill core is photographed prior to sampling • RC chips trays are retained for all RC drilling <p>Platina drill hole logging data is entered either directly into LogChief or excel spreadsheet using notebook computers. Validation of the drill hole logging data is done during data entry. Data is saved interactively via wireless connection onto the main server reducing the risk of data loss on the notebooks.</p>
<i>Sub-sampling techniques and sample preparation</i>	<p>Diamond core generally quarter core sampled.</p> <p>Field RC and RAB samples were generally riffle split and sometimes spear sampled to create a 3 to 5 kg primary sample.</p> <p>Helix sample preparation was by Classic Comlabs at Temora. Pulverisation using a 4 kg mixer mill produced 95% passing <75 microns and was subsampled to 200 g pulps.</p> <p>Platina sample preparation from 2008 to Mid-2013 was undertaken at SGS West Wyalong and included a dry, crush and pulverize to 75 µm. Samples greater than 3 kg included a rotary split stage to reduce the pulverization size to 3 kg. Sample weight was recorded before and after drying to define sample moisture content.</p> <p>Platina sample preparation after Mid-2013 was undertaken at ALS in Orange using a similar commercial sample preparation process.</p> <p>The subsampling methods are considered suitable for the laterite material.</p>
<i>Quality of assay data and laboratory tests</i>	<p>Helix</p> <p>Helix drill sample analysis was undertaken at Classic Comlabs principally for Pt by fire assay. Ni and Co analysis was selectively undertaken using an AAS method.</p> <p>There is little available information recorded on the Helix QAQC processes. Exploration reports indicate that in 1989 the assaying process was improved to account for incomplete dissolution of the sample during assaying. Helix (1989) noted that some re-assaying had revealed that previous assaying by Helix-Chevron understated platinum by approximately 50% when assays were above 0.3 g/t Pt. Other exploration reports indicate some RAB samples were selectively re-assayed for other elements such as copper, nickel, cobalt and iron.</p> <p>Platina</p> <p>Platina analysis was principally by SGS in Townsville and Perth except for the last program in 2013 that was undertaken by ALS in Orange and Brisbane. Both laboratories used similar methods that included:</p> <ul style="list-style-type: none"> • Pt, Pd and Au analysis by 25 g fire assays and ICP finish • Sc, Ni, Co, Zn, Fe analysis by four acid digest and ICP • In phases multi-element analysis was by glass fusion XRF for a range of elements along with loss on ignition (LOI) analysis. <p>The Platina drilling sample preparation, analytical, and security procedures were adequate to ensure high quality drill hole assay data acceptable for geological modelling and reliable resource estimation.</p> <p>Platina QAQC procedures comprise inserting of certified reference materials (CRMs), field blanks (FBs), and duplicates (DPs) into sample dispatches. Three types of duplicate samples were collected: field, coarse, and pulp. Field duplicates were obtained from RC samples; coarse duplicates, from crushed samples; and pulp duplicates, from pulverized samples. In addition, the analytical laboratory used internal reference materials and pulp replicates. CRMs are used to measure accuracy; FBs, to check for contamination and mix-ups; and DPs to monitor precision at several stages of sample preparation.</p> <p>Results from the Duplicate assays showed that high grade Pt samples were harder to repeat within a ±10% tolerance; however, most were repeatable within a ±15% tolerance. This suggests that a possible nugget effect maybe occurring within the higher grade samples and</p>

Criteria	Explanation
	<p>selective repeat assaying of sub-grade to ore-grade samples is recommended.</p> <p>Platina field banks reveal very low level Pt values indicating no significant contamination. Platina undertakes regular check analyses programmes and has monitored the current SGS method for platinum and scandium for several years. The regular QAQC samples and periodic check sample programmes have not resulted in any significant assaying issues. There is some evidence of underreporting of scandium by up to 9% in standards and check samples that require further follow-up.</p>
<i>Verification of sampling and assaying</i>	<p>Helix completed a check sampling program in 1995. 1519 previously drilled RAB samples were selected for resampling and analysed for base metals only.</p> <p>Platina completed a check sample programme in 2011 and 2013. Umpire laboratory pulps were collected from the pulped original sample packets and were submitted to the ALS laboratory in Orange (2013) and Genalysis in Perth (2011). Results from 2011 show that overall there is minor bias in samples >1000 ppb Pt between the check sample assays and the original assays but no weight is attributed to the discrepancy due to the small number of samples involved. Results from 2013 show that overall there is bias in some samples between the check sample assays and the original assays.</p> <p>Platina also undertook check sampling for density measurements.</p> <p>In 2011 the Platina RC drilling program (Figure 4) was principally designed to verify known mineralisation drilled previously by Helix with RAB drilling at Owendale North, Box Cowal, Cincinnati and Kelvin Grove prospects as well as some other anomalies.</p>
<i>Location of data points</i>	<p>Helix drilling was undertaken on a local grid and surveyed by undisclosed methods. The collar coordinates were converted to MGA Zone 55 regional grid coordinates by an independent surveyor (LVIS) based on differential global positioning locations of 13 drill holes. This resulted in a +6°25' rotation from grid north to the previous local grid north.</p> <p>Drilling by Platina was initially surveyed by an independent surveyor (K.I. Lupis) with a Trimble TSC2 Controller, 5800 receiver, 5700 Base and Zephyr Geodetic antenna. Subsequently since 2012 Platina drilling was surveyed internally using an Omnistar corrected GPS.</p> <p>Drilling is generally vertical and short and consequently is not surveyed down hole. This does not present significant location issues for the thin laterite zone comprising the current resource estimate.</p> <p>Topography data is provided by a detailed ground gravity survey completed by Platina in 2011. This provides sub-meter topography accuracy implemented in a topography surface model using 1 m contours.</p>
<i>Data spacing and distribution</i>	<p>Majority of the drill holes were sampled on regular 1 m intervals with some wider samples and composite samples for older drilling. The drill hole samples were composited to 1 m down hole intervals by laterite domain.</p> <p>The sample spacing is adequate to define the continuity and thickness of the laterite profile.</p> <p>Lateral drill hole spacing is reflected by the resource classification and is principally at regular spacings of 50, 100 and 200 m.</p>
<i>Orientation of data in relation to geological structure</i>	<p>The drill holes are mostly vertical with only a few inclined drill holes used when targeting deeper fresh rock zones. This intersects the flat laterally extensive laterite profile at the optimal angle.</p>
<i>Sample security</i>	<p>No specific security measures were undertaken by Platina.</p> <p>All samples were collected and organised by Platina personnel. Sampling procedures have been documented in internal reports. Snowden personnel audited the process in 2011 and 2013 and found that the process was well organised and consistently applied and maintained. Sample location integrity was maintained through the use of sample bag numbering and by the inclusion of numbered tags, with sampling records maintained and monitored by the supervising geologist. Sample dispatch from site to laboratory was undertaken through commercial transport companies, laboratory personnel or Platina personnel. Sample dispatch forms were forwarded to laboratories and reconciled upon</p>

Criteria	Explanation
	receipt.
<i>Audits or reviews</i>	<p>Snowden Mining Industry Consultants Pty Ltd (2012) prepared an NI43-101 format technical report that was not publicly released. Snowden report completing a 10% audit of the Platina database against hard copy assay certificates, a reviewed 2011 QAQC and a site visit in April 2011.</p> <p>Snowden subsequently reviewed exploration field procedures on a site visit 14 April 2013.</p> <p>Geo Logical Pty Ltd independently compiled and reviewed the QAQC data for Platina drilling programs in 2013 and 2014.</p> <p>During the 2013 resource update Golder Associates Pty Ltd undertook drill hole database validation, statistical review, established laterite domaining process and reviewed the previous QAQC data.</p>

Section 2: Reporting of Exploration Results

Criteria	Explanation
<i>Mineral tenement and land tenure status</i>	<p>The Owendale deposit falls within Exploration Licence EL7644. This licence is 100% owned by Platina Resources Ltd and was granted on the 2 Dec 2010 and renewal has been offered for a further term of 5 years expiring in 2020 (Figure 2).</p> <p>The licence measures approximately 9.3 km north-south and 7.8 km east-west.</p>
<i>Exploration done by other parties</i>	<p>The Owendale intrusive was first recognised in 1961 by a Bureau of Mineral Resource aeromagnetic survey. The area has been held under a series of exploration licences and companies since 1964 including:</p> <ul style="list-style-type: none"> • 1964 to 1967 Anaconda Australia Inc and Quality Earths Pty Ltd • 1969 to 1970 Platina Developments NL • 1982 to 1983 CRA Exploration Pty Ltd • 1979 to 1980 Shell Company of Australia Ltd • 1985 to 2006 Helix Resources Ltd and in joint ventures with Chevron Exploration Corporation (1985 to 1988) and Black Range Minerals (1999 to 2004) • 2006 to 2013 Platina Resources Ltd <p>Initial exploration focused on vermiculite, kaolin and deep lead platinum mineralisation. Helix undertook the first extensive drilling program with 39 000 m of RAB drilling, 10 000 m of RC drilling and 6 000 m of costeans. This identified a number of platinum group mineral anomalies that included placer, residual and primary mineralisation. Helix also explored for copper porphyry systems and nickel laterite mineralisation.</p> <p>Platinum production is limited to the Fifield deep lead deposits to the south of Owendale.</p>
<i>Geology</i>	<p>The nickel-cobalt laterite at Owendale is developed over ultramafic rocks and is typical for laterite mineralisation which forms through both residual and supergene enrichment processes. The relatively low grade of nickel at Owendale, compared to other nickel laterite resources, is consistent with the lower grade of the underlying ultramafic rocks.</p> <p>The enrichment of scandium occurs during lateritisation through similar processes to nickel-cobalt and is similar to other known occurrences nearby at Syerston and in North Queensland. The high scandium grades are also consistent with higher than usual scandium grades in the underlying ultramafic units.</p> <p>Enrichment of platinum in the laterite profile appears to be from residual processes as there is no evidence of supergene processes.</p>
<i>Drill hole information</i>	Exploration results and individual drill holes are not presented in this report.
<i>Data aggregation</i>	<p>Exploration results and aggregates are not presented in this report.</p> <p>No metal equivalent calculations are used or reported.</p>

Criteria	Explanation
<i>methods</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	Exploration results are not presented in this report.
<i>Diagrams</i>	A maps are provided in Figure 2 and Figure 4. Example sections are provided in Figure 3 and Figure 5.
<i>Balanced reporting</i>	Exploration results are not presented in this report.
<i>Other substantive exploration data</i>	Mineral Resources are primarily defined by drilling and assaying. Geophysics and surface geochemistry are used in exploration but have no meaningful input to the resource definition.
<i>Further work</i>	<p>Recent wide spaced drilling requires additional infill drilling to bring the Inferred Mineral Resources to Indicated Mineral Resources and allow economic assessments.</p> <p>Additional mineralised areas defined by older Helix drilling require verification drilling to allow inclusion into the resource estimate.</p> <p>High grade scandium is noted in several areas as apparent pods at Owendale North. The inter-connection and local continuity of the very high grades requires infilling and extension of the current 50 m drilling grid.</p> <p>Scandium requires further investigation to determine the process and economics of extraction as well as the purity of the expected product from a future operation on site.</p>

Section 3: Estimation and reporting of Mineral Resources

Criteria	Explanation
<i>Database integrity</i>	<p>Platina have engaged a database management company Maxwell Geoservices to maintain their drill hole database in Datashed and Microsoft Access.</p> <p>The Helix drilling database remains in its original format in a Microsoft Access database.</p> <p>Platina is yet to fully integrate the Helix data into their database but maintain their own drilling data to an acceptable standard incorporating QAQC data and using external expertise.</p>
<i>Site visits</i>	<p>Consulting geologists from Snowden who completed previous resource estimates and visited the site for review purposes in 2011 and again in early 2013 to review field practises.</p> <p>Exploration by Platina was overseen by Robert Mosig, CEO who was involved with previous Helix exploration. Robert has visited the site on multiple occasions since 1986 through to 2016. The site was last visited in March 2016.</p>
<i>Geological interpretation</i>	<p>Interpretation of the laterite profile is based on anomalous platinum and scandium grade. This was initially undertaken on a 100 ppb Pt or 100 ppm Sc thresholds. These thresholds were progressively reduced to values of 50 ppb Pt and 50 ppm Sc in lower grade and marginal areas to assist the lateral extension of the laterite domaining. The geochemical domaining process defined the mineralised laterite zone which is abruptly lower grade in platinum going up into the alluvial cover and a more gradational lower boundary going down into the saprock and bedrock where basement grades range from 30 to 80 ppb Pt.</p> <p>Where Platina drilling was available with multi-element chemistry the laterite profile was subdivided into vertical zones for limonite, transition and saprolite. Where magnesium was assayed the thresholds of 2% (limonite-transition) and 8% (transition-saprolite) MgO were used. Where iron assays existed but no magnesium assays then the thresholds of 22% (limonite-transition) and 38% (transition-saprolite) Fe₂O₃ were used.</p> <p>This approach reflects the systematic geochemical laterite profile and is consistent with other laterite deposits where geochemical domaining is more reliable than qualitative geological logging.</p>
<i>Dimensions</i>	<p>The laterite deposit is thin (up to 55 m in depth) and laterally extensive. The main area has an extent of about 3 km (north-south) by 1 km (east-west) and is horizontal. The deposit is covered by alluvium over all areas.</p> <p>The estimated geological resource cover 341 Ha with an average thickness of 18 m of laterite and 5 m of overburden.</p> <p>The scandium Mineral Resource Statement covers a smaller area of 169 Ha with an average resource thickness of 8 m and 13 m of overburden.</p>
<i>Estimation and modelling techniques</i>	<p>A block model was constructed to represent the laterite profile using regular block size of 12.5 by 12.5 by 1 m with no sub-blocking.</p> <p>Block grade were estimated using Ordinary kriging (OK). Unfolding to the top of each laterite domain was used to reflect the geological profile and improve sample selection during estimation. Grades were estimated on a parent block basis using block discretisation of 5 by 5 by 1. A three pass search ellipse was used during estimation at an increasing radius of 70, 140 and 420 m.</p> <p>Extreme grades for potential economic elements were restricted by applying top-cut values determined from summary statistics (the 99.9 percentile). Applying the top-cut values to the drill hole assay data do not have a significant impact on the average grades except for platinum, which has a more skewed distribution.</p> <p>The estimate was validated by: visual inspection of the model, construction of swath plots in easting, northing and RL comparing drilling with model estimates and comparison with the previous Mineral Resource.</p>
<i>Moisture</i>	<p>All density samples are calculated on a dry basis and dry bulk density used for the resource estimation.</p> <p>Average moisture content derived from sample drying weights was also estimated and</p>

Criteria	Explanation								
	average 13%.								
<i>Cut-off parameters</i>	<p>Previously Mineral Resources were stated for both cut-off grade of 0.3 g/t Pt and 300 ppm Sc, which overlapped in significant areas. The dominance of Sc as a more immediate target for development has resulted in the concentration on for classification and reporting. This does not discount the potential development of a standalone Platinum operation.</p> <p>There is not a significant Scandium market and the first stable mine production will affect both supply and demand. Owendale also presents a large relatively high grade Mineral Resource. Consequently, the selection of cut-off grade is not based on a marginal economics which at current metal prices would classify the majority of laterite profile at Owendale as potentially economic. Instead a 300 ppm scandium cut-off was selected to present a significant Mineral Resource, effectively reporting 15% for the laterite profile or 28% of the upper laterite profile. The 300 ppm Sc cut-off represents a robust cut-off with extensive lateral continuity that should not present any mining selectivity issues.</p>								
<i>Mining factors or assumptions</i>	<p>The laterite at Owendale is thin, laterally extensive and has minimal cover. The topography is relatively flat making strip mining feasible where free digging is expected. Hence there are no technical impediments to mining the estimated Mineral Resources.</p> <p>The Mineral Resource is based on block grade estimates within the laterite profile. At the 300 ppm Sc cut-off the Mineral Resource is drawn from within the upper laterite horizon. The estimation of Sc grade does not use any selective grade boundary interpretations, instead using block grade estimation to define blocks above 300 ppm Sc. Block estimation and inherent smoothing will have introduced most of the expected mining dilution required for mine planning.</p>								
<i>Metallurgical factors or assumptions</i>	<p>Platina has completed some preliminary metallurgical test work for various acid leach processing with chlorination of the residue from the leach for platinum recovery. These indicate recoveries in the order of:</p> <table border="0"> <tr> <td>Atmospheric Leach</td> <td>Sc 60%; Ni 70%; Co 60%</td> </tr> <tr> <td>Pressure acid leach</td> <td>Sc 80%; Ni 90%; Co 95%</td> </tr> <tr> <td>High pressure acid leach</td> <td>Sc 90%; Ni 95%; Co 95%</td> </tr> <tr> <td>Chlorination</td> <td>Pt 95%</td> </tr> </table>	Atmospheric Leach	Sc 60%; Ni 70%; Co 60%	Pressure acid leach	Sc 80%; Ni 90%; Co 95%	High pressure acid leach	Sc 90%; Ni 95%; Co 95%	Chlorination	Pt 95%
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Pressure acid leach	Sc 80%; Ni 90%; Co 95%								
High pressure acid leach	Sc 90%; Ni 95%; Co 95%								
Chlorination	Pt 95%								
<i>Environmental factors or assumptions</i>	There are no significant known environmental liabilities on the Platina exploration licence.								
<i>Bulk density</i>	<p>Dry bulk density determinations (823) were derived from 5 Platina PQ core metallurgical drill holes using standard water immersion methods.</p> <p>Down hole gamma tools density measurements were also recorded and help to support the density assumptions for each domain.</p> <p>Average dry bulk density for the resource material is 1.8 t/m³.</p>								
<i>Classification</i>	<p>Classification previously considered Platinum that is residually enriched in the laterite profile and has inherent variability present in the bedrock that is passed on into the laterite profile.</p> <p>Classification is now reassessed based solely on Scandium, the current focus for development. Scandium is enriched through supergene processes and as a result has significant lateral continuity. This is evident as consistent enrichment throughout the laterite profile to levels typically >100 ppm Sc as well as higher enrichment in the upper iron rich part of the laterite profile.</p> <p>Only Platina drilling with scandium assays available were considered for classification purposes. Average drill spacing was used to determine the confidence categories of the mineralisation as follows (see Figure 4):</p> <table border="0"> <tr> <td>Measured Mineral Resource</td> <td>regular pattern of 50 m spaced drill holes</td> </tr> <tr> <td>Indicated Mineral Resource</td> <td>regular pattern of 100 m spaced drill holes</td> </tr> <tr> <td>Inferred Mineral Resource</td> <td>generally 200 m drill hole spacing</td> </tr> </table> <p>Older Helix drilling was used where more than 50 m from a Platina drill hole to help model the geology and estimate grades for Ni, Co and Pt, where available.</p>	Measured Mineral Resource	regular pattern of 50 m spaced drill holes	Indicated Mineral Resource	regular pattern of 100 m spaced drill holes	Inferred Mineral Resource	generally 200 m drill hole spacing		
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Criteria	Explanation
<i>Audits or reviews.</i>	The Mineral Resource estimate has not been independently reviewed. Comparison of the resource estimate to the previous estimate (completed by separate consultants) has demonstrated similar results when using the same areas and data.
<i>Discussion of relative accuracy/confidence</i>	No statistical or geostatistical method (non-linear or simulation) was used to quantify the relative accuracy of the estimate within confidence limits. Accuracy of the estimate is strongly dependent on: density of the drilling data as indicated in the classification and quality of the drilling data. Future work will assess the removal or exclusion of the older Helix drilling where it has been effectively replaced.