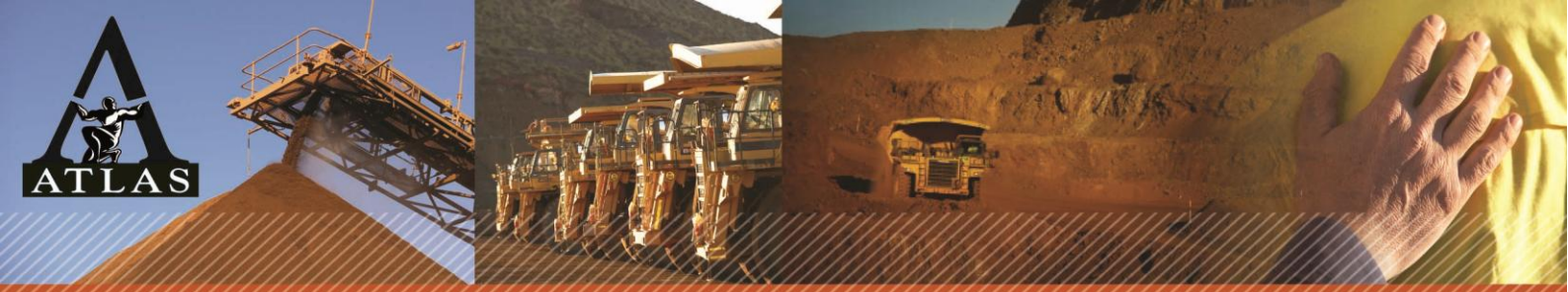

ASX ANNOUNCEMENT

9 December 2013

Outstanding drill results show Corunna Downs is emerging as a major new North Pilbara iron ore province

Atlas sets initial exploration target of 100-150Mt at 55-58% Fe for the first 8km drill tested, of 80km of prospective stratigraphy within trucking distance of Port Hedland

HIGHLIGHTS

- **Testing of new prospects at Corunna Downs has returned outstanding drill intercepts, including:**
  - 108m at 60.4% Fe and 0.064% P from 36m in CDRC0185 at Shark Gully,
  - 100m at 58.2% Fe and 0.09% P from surface in CDRC0184 at Shark Gully,
  - 78m at 59.0% Fe and 0.037% P from 2m in CDRC0195 at Runway, and
  - 96m at 59.1% Fe and 0.032% P from surface in CDRC0196 at Runway.
- **Results come from drilling over an 8km strike length in the north of the Corunna Project; Atlas has 80km of strike length in similar geology on its tenements**
- **Atlas tenements link Corunna Downs to McPhee Creek in prospective iron host**
- **"These results and the 80km strike length of Atlas' tenements connecting Corunna to McPhee Creek is a potential game-changer for Atlas." – Atlas MD Ken Brinsden**

Atlas Iron (ASX:AGO) is pleased to advise it has received a host of outstanding drilling results from its Corunna Downs exploration program in the Pilbara. The latest results demonstrate Corunna Downs is emerging as a major new iron ore province within trucking distance of Port Hedland.

Atlas has now set an initial exploration target for the first 8km of strike in the north of the Corunna Project to 100-150 million tonnes at 55-58% Fe. As well as highlighting the potential scale and grade of Corunna Downs, the results point to low deleterious element levels.

Atlas Iron Managing Director, Ken Brinsden said exploration drilling along 8km of strike had been conducted in the northern-most portion of the tenement.

"This drilling represents some 10 per cent of the 80km strike length of prospective rock units contained on Atlas' 100 per cent-owned tenure connecting the Corunna Downs and McPhee Creek projects," Mr Brinsden said.

He said assessments of Atlas' tenure between the Corunna Downs project south of the Split Rock resource and north-east towards McPhee Creek have determined additional targets in similar geology.

"This information, combined with the project's strategic location (Figure 1), leaves Atlas increasingly confident about the potential for Corunna Downs to become a substantial new iron ore province for the Company."

"The Corunna area is a potential game-changer for Atlas. It has the scope to provide grade, scale, low impurities levels and be delivered by road to Port Hedland or assist in providing the critical mass of tonnes required for future infrastructure solutions."

The cross sections in Figure 3, Figure 4 and Figure 5 highlight the favourable geometry and consistency of the results at the new Runway, Shark Gully and Razorback discoveries, with the key elements being:

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- >60m thick Banded Iron Formation section (true thickness); and
- Low phosphorous, silica and alumina.

Atlas is continuing exploration and in-fill drilling within the north of the Corunna project with a view to realising the potential in the new exploration target area. Further prioritisation of exploration targets on Atlas tenements between Corunna and McPhee Creek is continuing.

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ATTACHMENT 1 – FIGURES

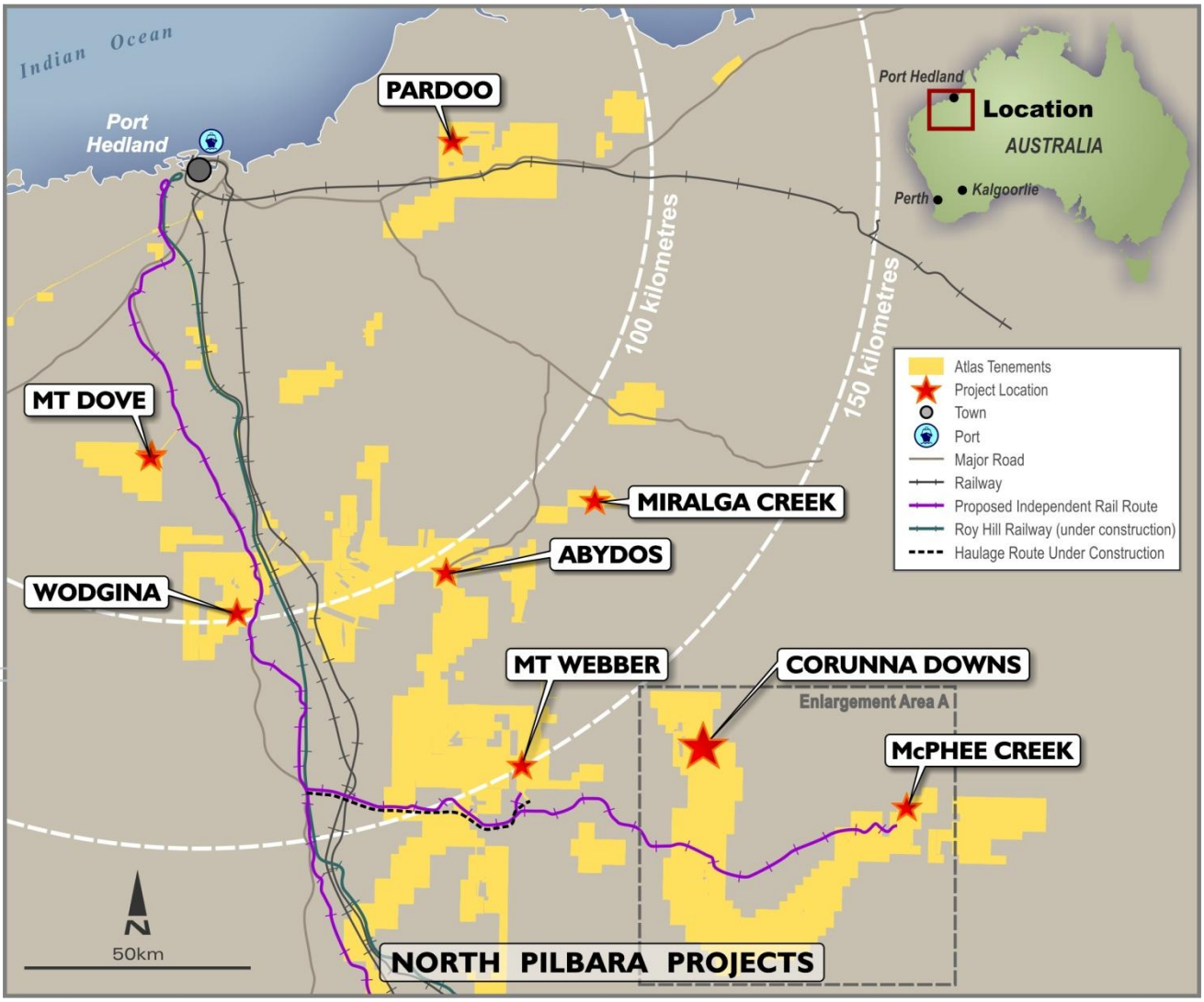

Figure 1 - North Pilbara Projects, Atlas Tenements, Existing and Proposed Infrastructure.

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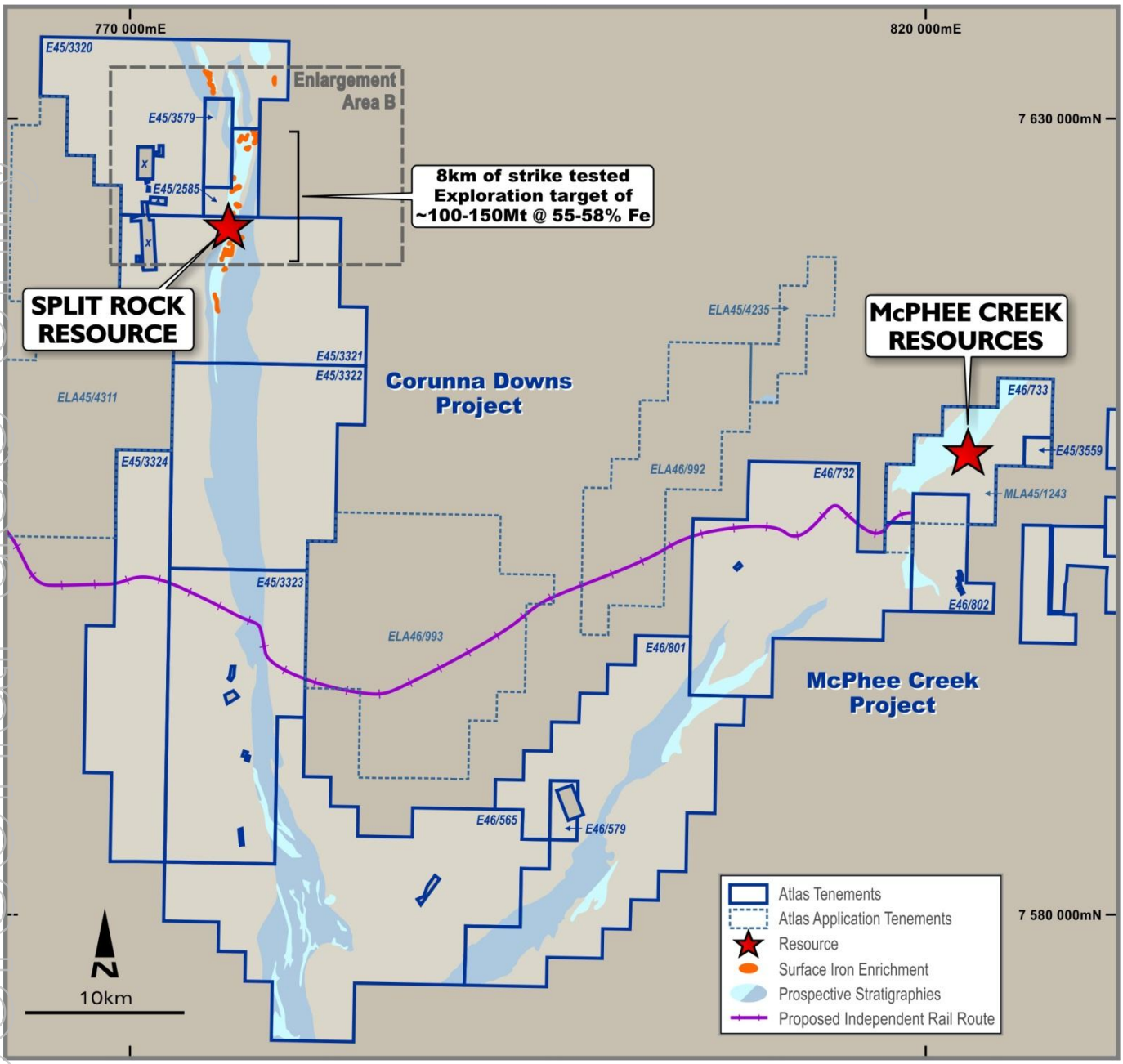

Enlargement Area A – Corunna Downs and McPhee Creek Projects Showing Atlas Tenements and prospective stratigraphy.

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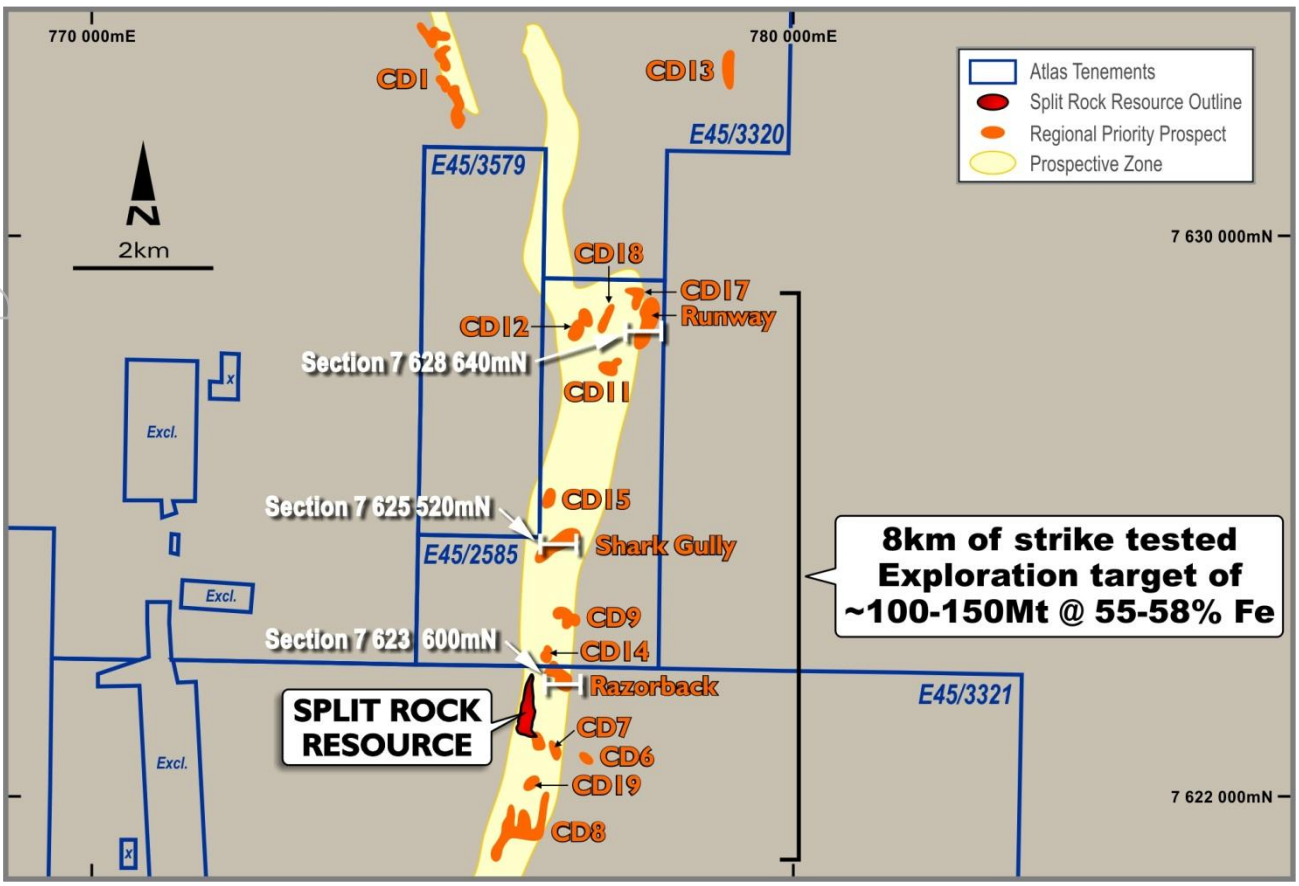

Enlargement Area B – Corunna Downs Prospect locations showing location of sections in Figures 3, 4 and 5.

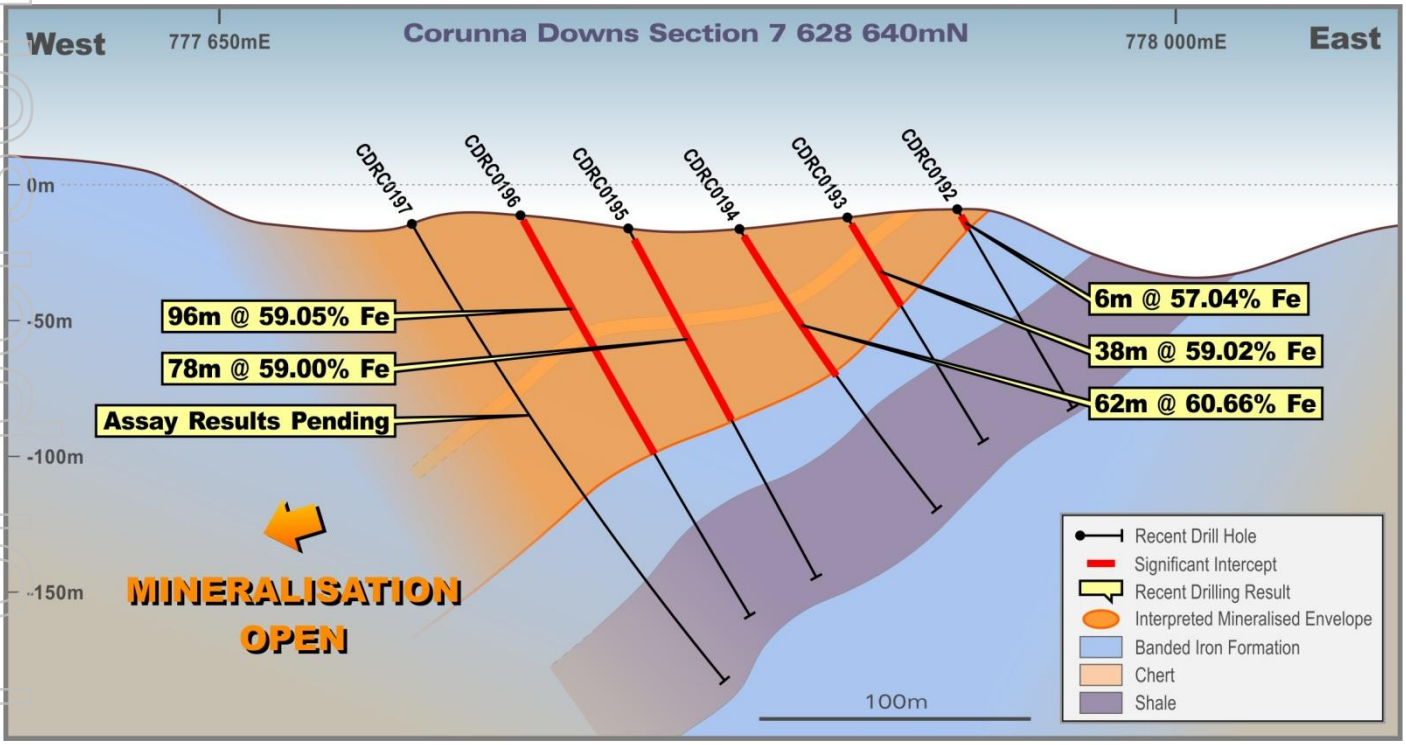

Figure 3 – Cross-section from Runway (formerly CD2) showing significant intercepts and stratigraphy.

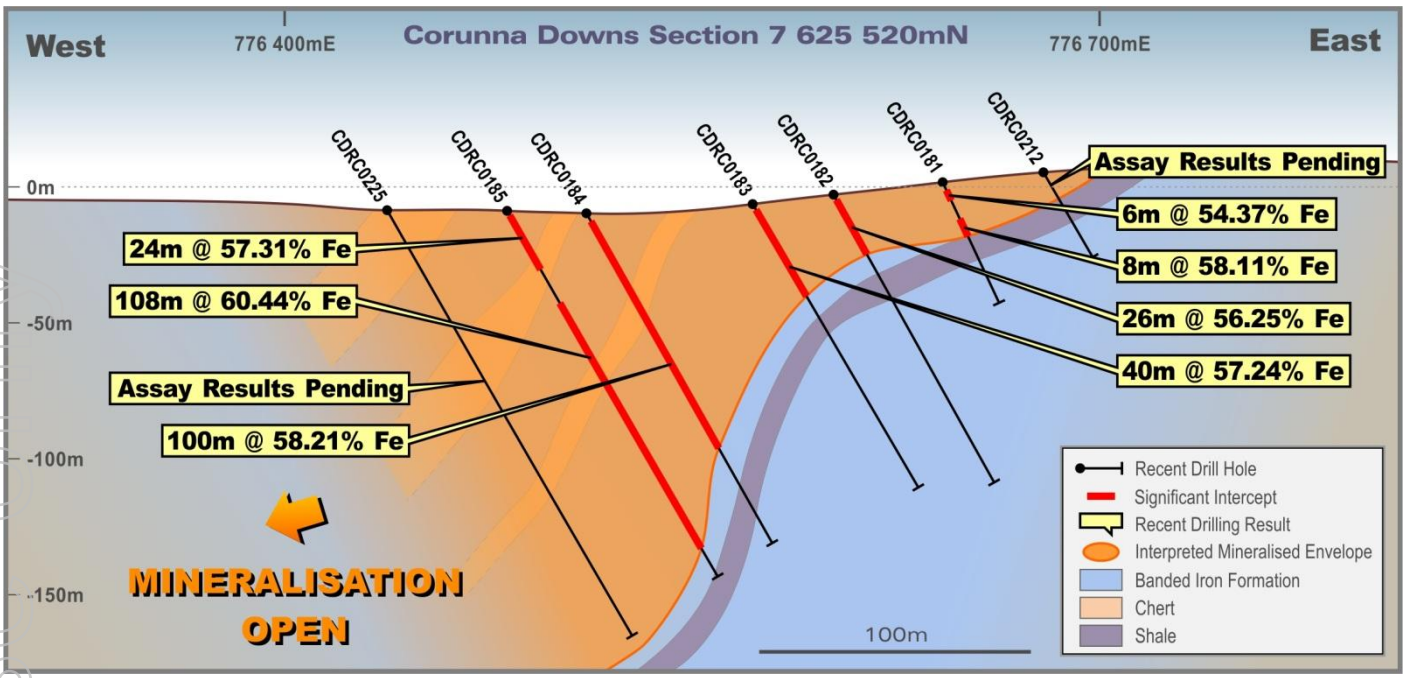

Figure 4 – Cross section from Shark Gully (formerly CD10) showing significant intercepts and stratigraphy.

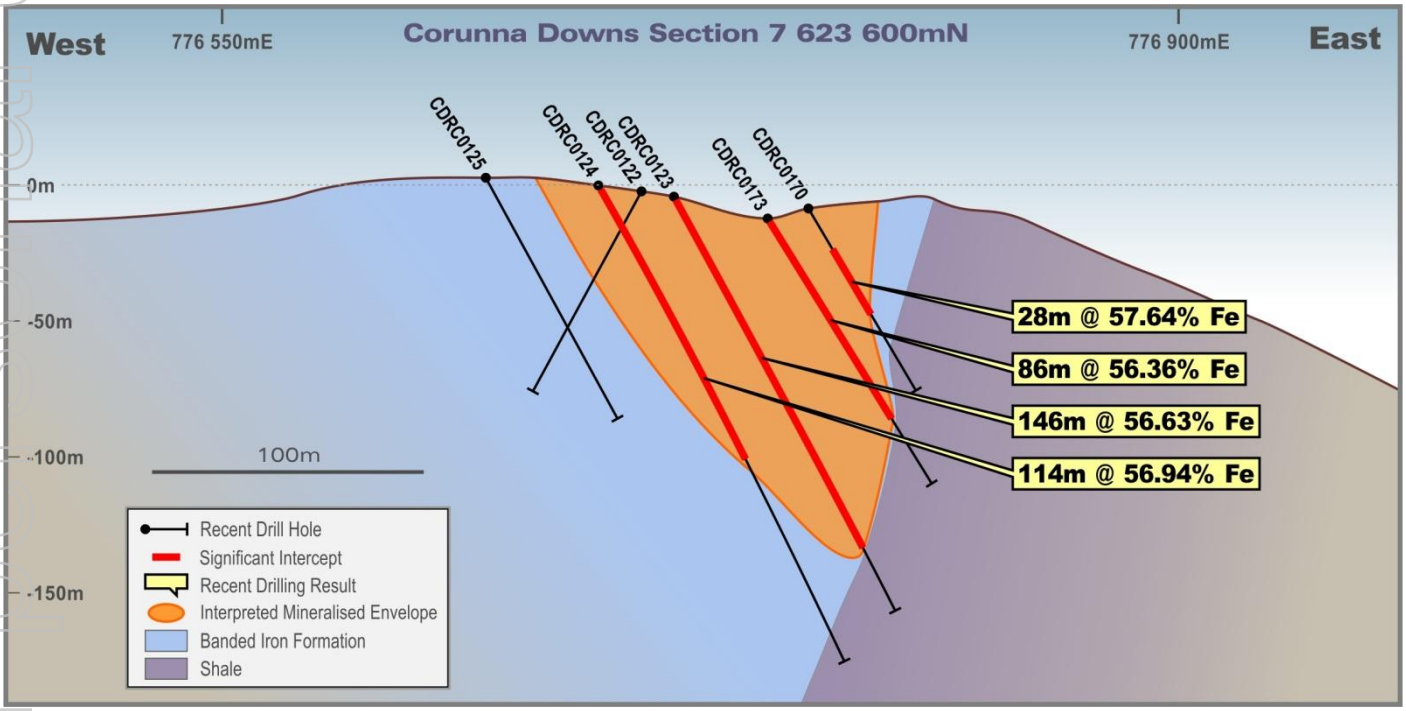

Figure 5 – Cross-section from Razorback (formerly CD3) showing significant intercepts and stratigraphy. (Note CDRC0122-0125 previously released)

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ATTACHMENT 2 – SIGNIFICANT INTERCEPTS

HOLE ID	EAST GDA_94_Z50	NORTH GDA_94_Z50	RL (m)	AZIMUTH	DIP	FROM (m)	TO (m)	Fe%	SiO2%	Al2O3%	P%	LOI1000%	S%
CDRC0123	776710.25	7623597.13	404.8	90	-60	0	146	56.63	5.78	2.27	0.051	10	0.008
CDRC0124	776683.29	7623597.15	408.2	90	-60	0	114	56.94	7.36	1.88	0.051	8.35	0.01
CDRC0170	776760	7623590	401	90	-60	18	46	57.64	5.02	1.47	0.064	10.22	0.008
CDRC0173	776745	7623595	396	90	-60	0	86	56.36	7.48	1.33	0.034	9.61	0.007
CDRC0181	776640	7625520	470	90	-60	0	6	54.37	6.5	4.12	0.068	10.94	0.025
CDRC0181	776640	7625520	470	90	-60	14	22	58.11	6.2	2.09	0.05	8.24	0.012
CDRC0182	776600	7625520	468	90	-60	0	26	56.25	5.65	3.12	0.052	10.31	0.012
CDRC0183	776570	7625520	465	90	-60	0	40	57.24	5.02	2.76	0.06	9.97	0.01
CDRC0184	776510	7625520	449	90	-60	0	100	58.21	4.4	2.19	0.09	9.49	0.009
CDRC0185	776480	7625520	451	90	-60	0	24	57.31	5.58	1.98	0.098	9.88	0.013
CDRC0185	776480	7625520	451	90	-60	36	144	60.44	2.8	1.17	0.064	9.13	0.007
CDRC0192	777920	7628640	400	90	-60	0	6	57.04	6.29	2.44	0.038	9.31	0.027
CDRC0193	777880	7628640	397	90	-60	0	38	59.02	5.18	1.77	0.036	7.94	0.011
CDRC0194	777840	7628640	393	90	-60	0	62	60.66	4.75	0.95	0.031	6.62	0.011
CDRC0195	777800	7628640	393	90	-60	2	80	59	2.92	2.35	0.037	9.2	0.015
CDRC0196	777760	7628640	398	90	-60	0	96	59.05	2.24	2.11	0.032	9.98	0.017

Table 1: Significant Intercepts Results at Corunna Downs new Prospects.

Notes to Table 1: Assay results are based on 2 meter samples from cone split RC samples, analysis by XRF with total LOI by Thermo-Gravimetric Analysis. 10% of samples are subject to QAQC procedures (standards and duplicates). Laboratory check samples are routinely performed on each sample submission. Significant Intercepts are reported at a 53% Fe cut-off grade, and include a maximum of 6m internal dilution and 6m minimum width for intersection. Drill holes are spaced on a nominal 80m X 40m grid pattern, with collar locations surveyed by handheld GPS or DGPs_RTK for Holes CDRC0123 and 0124. (Note CDRC0123 and 0124 previously released).

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ATTACHMENT 3 – JORC Compliance Statements

Competent Person's Statement – Exploration Results
The information in this report that relates to Exploration Results is based on information compiled by Pip Darvall, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Pip Darvall is a full time employee of Atlas Iron Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Pip Darvall consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. The Exploration Results have been verified by Steven Warner, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Steven Warner is a full time employee of Atlas Iron Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Steven Warner consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement – Mineral Resources
The information in this report that relates to Mineral Resources is based on information compiled by Steven Warner who is a member of the Australasian Institute of Mining and Metallurgy. Steven Warner is a permanent employee of Atlas Iron Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Steven Warner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Exploration and Resource Targets
Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Atlas is confident that it will report additional JORC compliant resources for the Corunna Downs Project, there has been insufficient exploration to define mineral resources in addition the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.

JORC 2012 TABLE 1 – CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA **CORUNNA DOWNS PROSPECTS – DECEMBER 2013**	
CRITERIA	**EXPLANATION**
SECTION 1 - SAMPLING TECHNIQUES AND DATA	
Sampling techniques	• Reverse Circulation (RC) chip samples collected via cone splitter. • One 6kg (average) sample taken for each two metre sample length and collected in pre-numbered calico sample bags. • 6kg sample was dried, crushed and pulverised (total prep) to produce a sub sample for analysis for XRF and total LOI by TGA. • Quality of sampling continuously monitored by field geologist during drilling. • To monitor the representivity of the sample, 5 duplicates are taken for every 100 samples (1:20). • Sampling carried out under Atlas protocols and QAQC procedures as per industry best practice.
Drilling techniques	• Reverse Circulation (RC) drilling employing a 140mm diameter face sampling hammer. • Nominal drill spacing of 80mN by 40mE
Drill sample recovery	• RC sample recovery is recorded by the geologist and is based on how much of the sample is returned from the cone splitter. This is recorded as good, fair, poor or no sample. • To ensure maximum sample recovery and the representivity of the samples, the field geologist is present during drilling and monitors the sampling process. Any issues are immediately rectified. • No significant sample recovery issues were encountered. • No twin RC or diamond drill holes have been completed to assess sample bias due to preferential loss/gain of fine/coarse material or due to wet drilling.
Logging	• Logging of every 2m interval (Atlas procedure) corresponding with 2m sampled interval. This level of detail supports appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Geophysical data collated from RC holes (natural gamma, gamma density, magnetic susceptibility & resistivity). Not all holes were open at depth which precluded 100% recovery of measurements from all of the drill holes.

Sub-sample techniques and sample preparation	• **Sampling technique:**
	  • RC Chip Samples:
	  • ~6kg RC chip samples are collected via cone splitter for each 2m interval drilled in a pre-numbered calico bag. Samples are kept dry where possible.
	  • The sample sizes are considered to be appropriate to correctly represent the mineralisation based on the style of mineralisation (massive goethite/hematite), the thickness and consistency of intersections, the sampling methodology and percent value assay ranges for

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	the primary elements.
	• **Sample preparation:**
	  • Sample dried at 105°C for 12-24 hrs
	  • Crushed to nominal -3mm
	  • Pulverised to 90% passing at 75µm
	• **Quality Control Procedures**
	  • Duplicated sample: 5 every 100 samples (1:20).
	  • Certified Reference Material assay standards inserted: 5 in every 100 samples (1:20).
	  • Overall QAQC insertion rate of 1:10.
	  • Sample weights recorded for all samples.
	  • Lab duplicates taken where large samples required splitting down by the lab.
	  • Lab repeats taken and standards inserted at predetermined level specified by the lab.

Quality of assay data and laboratory tests	• All samples submitted to SGS Laboratory in Perth are assayed for the full iron ore suite by XRF (24 elements) and a total LOI by thermogravimetric technique. • Laboratory procedures are in line with industry standards and appropriate for iron ore deposits. • Samples are dried at 105°C in gas fired ovens for 18-24 hours before being crushed to a nominal -3mm size by Boyd crusher, then pulverised to 90% passing 75 micron using a LM2 mill. Sub-samples are collected to produce a 0.66g sample that is dried further, fused at 110°C for 10 minutes poured into a platinum mould and placed in the XRF machine for analysing and reporting. • LOI is measured by Thermogravimetric methods (TGA). • Certified Reference Material assay standards, field duplicates and umpire laboratory analysis are used for quality control. • There were no discernible issues with sample representivity and all duplicate samples were within 10% of the original sample value. • Umpire laboratory campaigns with another laboratory (Ultratrace) have been carried out as independent checks of the assay results and these show good precision. • Certified Reference Material assay standards having a good range of values, were inserted at predefined intervals by Atlas and randomly by the lab at set levels. Results highlight that sample assay values are accurate and precise. • Analysis of field duplicate and lab pulp repeat samples reveals that greater than 90% of pairs have less than 10% difference and the precision of samples is within acceptable limits, which concurs with industry best practice. • Geophysical gamma density was collected by Geovista Dual Density logging tool (Cesium source, density range 1-3.5g/cc) to ascertain approximate in-situ density values, but was not estimated into the model. The density tool is calibrated every 2 weeks using a range of materials with known density and is run down a calibration hole at the commencement of, and regularly during, the collection of data.
Verification of sampling and assaying	• Significant intersections have been independently verified by alternative company personnel. • The Competent Person has visited site and inspected the sampling process in the field and also inspected the Laboratory. • Primary data are captured on field Toughbook laptops using acQuire^{tm} software. The software has validation routines to prevent data entry errors. • All data is sent to Perth and stored in the secure, centralised acQuire SQL database which is managed by a full time database administrator. • No adjustments or calibrations were made to any assay data used in the estimate, apart from resetting below detection values to half positive detection.
Location of data points	• All Collars were surveyed by Atlas personnel using hand held GPS. Elevation values are in AHD RL. Expected accuracy is +/- 5m for easting, northing and elevation coordinates. • Down hole gyroscopic surveys are attempted on all RC holes by ABIMS. Readings are taken at 5m intervals down hole using a SPT north seeking gyroscopic survey tool. Stated accuracy is +/-1° in azimuth and +/-0.1^{o} in inclination. All holes had down hole surveys completed. • QC of the gyro tool involved field calibration using a test stand and also a calibration hole. • The grid system for Split Rock is MGA_GDA94 Zone 50. • LiDAR Topographic data collected by Outline Global Pty Ltd based on 10cm resolution RGB imagery. 5m DTM automatically derived from stereoscopic imagery. 2m vertical contour interval resolution derived from DTM. Aerial survey flown on the 16th March 2013. Data supplied in projection MGA_GDA94 Zone 50.
Data spacing and distribution	• Drill spacing on an approximate 80m (N-S) by 40m (E-W) grid. • This drill spacing is sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC code. • Samples are collected at 2m intervals.
Orientation of data in relation	• The attitude of the lithological units is dominantly westerly dipping from 70-80 degrees and is

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to geological structure	drilled to grid east with drill holes inclined between -60 and -90 degrees which is slightly oblique to the orientation of the mineralisation. As such, due to the varying intersection angles all results are defined as down hole widths.
Sample security	• Samples are packed into sealed polyweave bags and then placed inside sealed Bulka bags. Samples are delivered to a despatch point in Port Hedland by Atlas staff. • Chain of custody is managed by Atlas. • Samples are transported to the relevant Perth laboratory by courier (TOLL). • Once received at the laboratory, samples are stored in a secure yard until analysis. • The lab receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.
Audits or reviews	• An audit of the Atlas acQuire drill hole database was completed in August 2012 by independent database management company (Roredata Pty Ltd). • The Atlas acQuire database is considered to be of sufficient quality. • A regular review of the data and sampling techniques is carried out internally.
SECTION 2 - REPORTING OF EXPLORATION RESULTS	
Mineral tenement and land tenure status	• Exploration Prospects are located wholly within Exploration Leases 100% owned by Atlas • The tenements lie within the Njamal Native Title Claim (WC1999/088). • At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenement is in good standing.
Exploration done by other parties	• Rock chip sampling at Corunna Downs was initially conducted by Gondwana Resource Pty Ltd.
Geology	• The Corunna BIF-hosted iron ore mineralisation is hosted by the ca. 3.02 Ga Cleaverville formation (Gorge Creek group, De Grey Supergroup). The prospect is located in the Kelly greenstone belt within the East Pilbara terrane of Western Australia, approximately 170 km southwest of Port Hedland. The N-S trending Kelly greenstone belt is bound by the Corunna Downs and Shaw granitoid complexes. .
Drill hole information	• Refer to Figure 3, Figure 4 and Table 1 in body of Text.
Data aggregation methods	• A nominal 53% lower Fe cut is applied with 6m internal dilution and 6m minimum width for significant intercepts.
Relationship between mineralisation widths and intercept lengths	• The attitude of the mineralisation is variably westerly dipping and is drilled to grid east with drill holes inclined between -60 and -90 degrees which is slightly oblique to the orientation of the mineralisation. As such, due to the varying intersection angles all results are defined as down hole widths and not true widths
Diagrams	• Sections through the deposit with stratigraphic and mineralisation interpretations can be seen in Figure 3, Figure 4 and Figure 5.
Balanced reporting	• All results are reported.
Other substantive exploration data	• Surface Geological (stratigraphic and structural) mapping of the Split Rock prospect completed by Atlas and contract Geologists. • Geologists from the Centre for Exploration Targeting (CET), University of Western Australia (UWA) commenced mapping over remainder of the Corunna Downs project area to evaluate main controls on mineralisation. The nature and timing of mineralisation events is also being evaluated through isotopic and geochemical analysis. • Preliminary Metallurgical test work from a selection of RC chip samples has been completed by SGS Lakefield Oretest Pty Ltd. • Routine multi-element analysis of potential deleterious or contaminating substances such as Arsenic, Lead, Zinc and Sulphur is completed for all samples.
Further work	• Geological mapping, rock chip sampling and follow up exploration RC drilling over a number of other prospects along the trend is ongoing. • Infill drilling will be undertaken on the basis of successful results being received.

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