



## **Mandalay Resources Corporation Provides Exploration Update**

TORONTO, ON, September 30, 2019 – Mandalay Resources Corporation ("Mandalay" or the "Company") (TSX: MND, OTCQB: MNDJF) is pleased to present an update on the continuing exploration programs at its Costerfield operation in Victoria, Australia, as well as its Björkdal operation in Sweden. The Company is also pleased to report additional diamond drilling results from both operations based on drilling that was carried out since the Company's last exploration release on June 18, 2019. Readers are advised to review the corresponding figures found at the end of this press release.

### **Exploration Update Highlights**

#### *Costerfield*

- Youle northern extensional drilling met with early success
- Potential for further discovery at Costerfield with target test drilling from surface at MacDonald
- First hole of Costerfield deep drilling completed at 1,700 metres ("m"). Program has advanced knowledge of the structural framework of the Costerfield mineral district. Commenced a shallower daughter hole allowing for exploration target testing

#### *Björkdal*

- Aurora zone open to extension. Assay results continue to grow the potential resource
- Drill results at newly discovered Lake Zone skarn deposit demonstrated that the skarn geology is continuing deeper.

Mandalay's drilling programs have continued to yield encouraging results at both Costerfield and Björkdal operations. At Costerfield, the Company is testing extensions to the Youle orebody, (see table 1) and has completed the first hole of a deep drilling program under the known Costerfield mineralized system, in search of high-grade mineralization at depth. At Björkdal, the Company is testing up-dip and down-dip extensions to the Aurora mineralization and is also testing the down-dip extension of the newly discovered high-grade skarn at Lake zone (see tables 2, 3, 4, and 5).

Dominic Duffy, President and CEO of Mandalay, commented; "Recent drilling results at Costerfield and Björkdal continue to demonstrate the significant upside value potential of our operations."

"At Costerfield, further testing of the northern extension of the high-grade Youle deposit is strengthening our confidence of grade continuity within the Inferred Resources. Additionally, drilling further north of the Youle line of lode resulted in the identification of continuous mineralization through a low-grade zone, along with indications of a higher-grade zone of antimony and gold concentration approximately 200 metres away from the existing Youle Inferred Resources at a target known as MacDonald."

Mr. Duffy continued, "We are now well underway with phase 1 of our deep drilling program at Costerfield. The first deep hole was completed at a depth of 1,700 metres and has provided valuable structural information below the Costerfield and Youle deposits. One high potential target has already been generated further up-dip as a result of this first hole. A daughter hole will now be wedged off the parent hole to test this target. Multi-element geochemical assaying of core drilled through potential fluid conduits is currently underway, with geochemical vectoring techniques to be applied once the analysis is complete."

Mr. Duffy concluded, "At Björkdal, drilling at the Aurora zone was not able to commence until May 2019. However, results demonstrated that Aurora is still open both vertically and along strike. Lastly, we commenced testing the down-dip extension of the newly discovered Lake Zone skarn deposit. Results to date, show that the skarn geology continues deeper, but further assay results are required before assessing to what depth this deposit economically extends."

## **Mandalay Drilling Programs**

### ***Costerfield Drilling Programs***

Mandalay continues its two exploration programs commenced in May 2019.

#### *Youle Extension Drilling Program*

The focus of the Youle extension program has been to delineate a complex high-grade zone to the north, expanding on the early success of the program reported in June 2019.

With the use of regional modelling, historic research, and structural information gained from the second quarter of 2019 drilling program, an additional package of gold and antimony concentration was interpreted to exist as a target north of a low-grade zone along the structural trend of Youle and the Main Costerfield mine. As a result, the Youle extension drilling was re-designed to prioritize drill testing of this zone and has met with initial success (refer to Drilling Results, Figure 1 and Table 1 for details).

This "shoot repetition" has now been observed multiple times through the district, most notably in the Cuffley, Brunswick and Augusta Deposits.

#### *Costerfield Deep Drilling Program*

As Mandalay continues to increase momentum within the Youle expansion program, it also advances deep targeted testing of the Costerfield line of lode following Mandalay's developing understanding of gold enrichment environments. The first hole of this two-hole program with secondary wedge holes, has been completed at a depth of 1,700 m. This first hole was designed to investigate the deep environment at the northern end of the current mine area, below the historical Costerfield mine and the currently active Youle lode.

### ***Björkdal Drilling Programs***

Underground extensional and production drilling during 2019 has continued to focus on the high-grade mineralization recently discovered at Björkdal (i.e., Aurora Zone and Lake Zone skarn). Both these horizons provide the Company with the potential to mine high-tonnage and higher-

grade ore more cost effectively over the upcoming years.

### *Aurora Drilling Program*

Underground drilling focused on extending the existing Aurora zone. Results to date confirm the potential for Aurora to be extended both up and down dip and along strike in both directions. Although drilling the upper section of Aurora has encountered problems due to the difficult nature of drilling positive gradient diamond drill holes, with several holes having to be abandoned when intercepting major faults before intercepting the Aurora zone. As a result, the focus of Aurora drilling has been changed to the deeper holes seeking to extend the higher-grade mineralization at depth. The upper holes will now be drilled from surface in later 2019 or early 2020. The zone is currently being mined on five active levels.

### *Lake Zone Skarn Program*

The recognition of skarn related mineralization at Björkdal during 2018 is of interest due to its anomalously high grade. Seven diamond drill holes have recently been drilled with the aim to define the down dip extension of the mineralized body. These drill holes have demonstrated the continuation of the skarnified horizon further to the north and at depth.

## **Mandalay Drilling Results**

### ***Costerfield Drilling Results***

#### *Youle Extension Drilling Program*

Drill hole BC071 has been completed, targeting the multiple veins that make up the northern high-grade area of Youle. This hole intercepted multiple parallel veins, with the most significant being 18.4 g/t gold ("Au") and 5.7% antimony ("Sb") over a true width of 0.24 m.

Other recent drilling within the program focused on testing for a northern continuation of mineralization. The structure that hosts the majority of Youle mineralization was intercepted in BC067AW1, BC067AW2 and BC070 with the structure being enriched in gold and antimony in all 3 intercepts.

Historic research, together with field mapping and LiDAR (light imaging, detection, and ranging) analysis has identified substantial workings along the line of the historic Costerfield mine to the north. From our understanding of the other mineralized packages in the district, a steeply plunging low-grade zone occurring between these workings and the Costerfield mine is likely, and fits with observations and inferences of bedding and faulting interactions to the north of Youle and Costerfield. From these findings a highly prospective zone now exists north of Costerfield mine, being the MacDonald target.

BC075 intercepted two mineralized zones. A gold and antimony bearing laminated quartz vein (0.42 m @ 7.2 g/t Au & 4.4% Sb), which is spatially associated with the historic workings, and additional quartz-stibnite veining (0.45 m @ 1.3 g/t Au & 7.3% Sb composite of multiple veins) approximately 80 m to the east of the initial intercept. These results support the northern enrichment model and excitingly indicate a potential for multiple veining and mining fronts.

*Table 1: Youle Drilling Results (June 2019 – September 2019)*

Hole ID	Hole Completion Date	Total hole Depth	Intercept Easting (Mine Grid)	Intercept Northing (Mine Grid)	Intercept Elevation (Mine Grid)	Drilled Width (m)	True Width (m)	Au Grade (g/t)	Sb Grade (%)	AuEq (g/t) over min. 1.8m mining width
<b>BC067AW1</b>	4/07/2019	531.2	15441	7251	817	0.09	0.07	8.7	19.8	1.4
<b>BC067AW2</b>	17/07/2019	518.9	15406	7235	799	0.08	0.07	5.3	8.6	0.7
<b>BC069</b>	27/06/2019	699.6	No Significant Intercept							
<b>BC070</b>	9/08/2019	734.8	15442	7350	747	0.31	0.22	0.8	0.5	0.2
<b>BC071</b>	5/08/2019	492.1	15392	7156	849	0.55	0.26	18.4	5.7	3.9
<b>BC071</b>	5/08/2019	492.1	15389	7156	854	0.28	0.20	2.1	3.4	0.8
<b>BC075</b>	10/09/2019	357.5	15521	7439	1122	0.51	0.42	7.2	4.4	3.2
<b>BC075</b>	10/09/2019	357.5	15608	7356	1048	0.52	0.45	1.3	7.3	3.1

Note:

- Assumes metal prices of: Au\$1,450/ oz and Sb\$7,000/ t

- AuEq (g/t) = Au (g) + Sb (%) x [Price per 10 Sb (kg) x Sb Recovery (%) / Price per 1 Au (g) x Au Recovery (%)]

### *Costerfield Deep Drilling Program*

The upper majority of the first hole in this program (CD001) found a geological environment consistent with our current understanding; a west-dipping sequence of Upper Costerfield Formation siltstones passing into the turbidites and mudstones of the Lower Costerfield Formation. As anticipated by the geological model, a sequence of dark, carbon-rich turbidites and sandstones inferred to be favorable to high-grade gold mineralization was passed through between 904 – 995 m, which included quartz veining with anomalous gold values (up to 0.7 g/t Au) and minor visible stibnite mineralization (up to 0.01% Sb).

At a downhole depth of 1,015 m, a west-dipping fault containing laminated quartz with significant apparent thrust offset was intercepted (Figure 2). Below this fault, folded but predominantly east-dipping turbidites, giving way to siltstones disrupted by apparent strike-slip faulting was encountered. A large fault between 1,545 and 1,555 m marked a transition into dark-coloured, east-dipping slaty turbidites which displayed abundant irregular quartz veining leading up to a thick quartz blow between 1,583 – 1,595 m. This wide interval of quartz contained minor pyrite mineralization and zones of sericite-chlorite alteration.

Stratigraphic correlations between the Youle mine area, and the first 1,000 m of CD001 infer the existence of an anticlinal environment or thrust ramp in the area between, which presents a compelling target for Costerfield-style mineralization down-dip of the known Youle lode. This environment is additionally, likely to be coincident with the occurrence of the dark carbon-rich sandstones which enhance the potential for high-grade gold mineralization.

Trace-level analysis assays have been returned for the core down to a depth of 1,040 m, which display strong positive correlation between gold, antimony and arsenic (Figure 3). Of importance is a wide zone of enrichment of these elements, approximately between 975 – 1,040 m downhole, which appears to be centered on the large fault at 1,015 m. Additionally, silver ("Ag") shows a strong relative enrichment in this zone on the footwall of the fault. Subsequent hyperspectral logging of CD001 has additionally brought to light a wide envelope of muscovite alteration surrounding this fault, mirroring the elevated assays. Muscovite alteration of wall rock white micas

is a common feature of central Victorian gold deposits, and the coincidence of muscovite alteration and gold-antimony-arsenic enrichment here is interpreted as evidence of the large fault acting as an active conduit or feeder zone for ore-forming hydrothermal fluids. Assays from CD001 have been added to Mandalay's regional multi-element geochemical database, which integrates exploration drill core, regolith and bedrock assays to fingerprint mineralized systems and lithological packages in the Costerfield area. The information contained within the database is constantly updated and used to refine exploration models which assist in the generation and testing of new mineralization targets.

The environment passed through in the latter 660 m of CD001 can be interpreted as the disrupted eastern limb of a regional-scale anticline, the thrust-offset crest of which hosts the Costerfield mine. This deep, capped-off eastern limb is in a similar structural position to the sub King Cobra mineralization at Augusta which contains some exceptionally high-grade gold assays. The steeply dipping fault at 1,545 m is interpreted to be analogous to the Lyre Fault which appears to be significant to setting up the sub King Cobra mineralized environment. Initial assays through this zone show anomalous gold and antimony however the method of analysis used, is designed for ore grade analysis and is not accurate at trace ranges.

The next hole in this program, CD001W1, has commenced wedging off CD001 at a depth of 400 m to investigate the carbonaceous sandstones near to their inferred culmination above the 1,015 m fault, and the environment immediately below (See Figure 2).

### ***Björkdal Drilling Results***

Since the Company's last exploration press release on June 18, 2019, the Company has assayed 20 drill holes at the Aurora zone at Björkdal (see tables 4) and 4 drill holes at its Lake Zone skarn deposit (see table 5). Recent highlights from the Aurora and Lake Zone skarn assays include the following intercepts:

*Table 2: Aurora Drilling Highlights*

<b>Hole ID</b>	<b>True Width</b>	<b>Au g/t</b>
<b>DOD2019-058</b>	2.93	7.80
<b>DOD2019-076</b>	3.34	5.37
<b>DOD2019-077</b>	2.51	7.24
<b>DOD2019-078</b>	6.03	2.78
<b>DOD2019-079</b>	3.50	6.99

*Table 3: Lake Zone Skarn Drilling Highlights*

<b>Hole ID</b>	<b>True Width</b>	<b>Au g/t</b>
<b>MU9-009A</b>	0.65	23.77
<b>MU9-014</b>	1.65	14.31

*Table 4: Aurora Drilling Results (June 2019 – September 2019)*

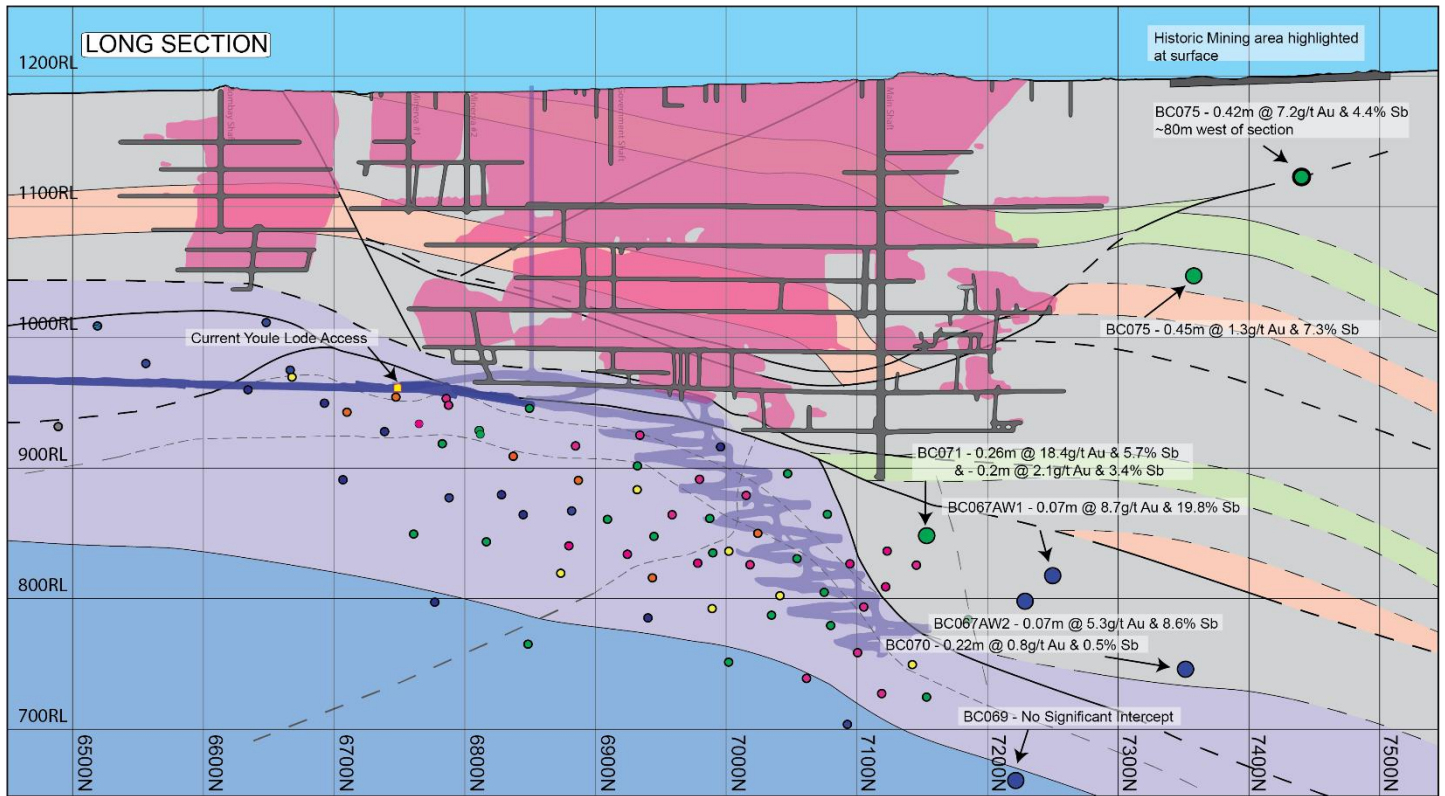
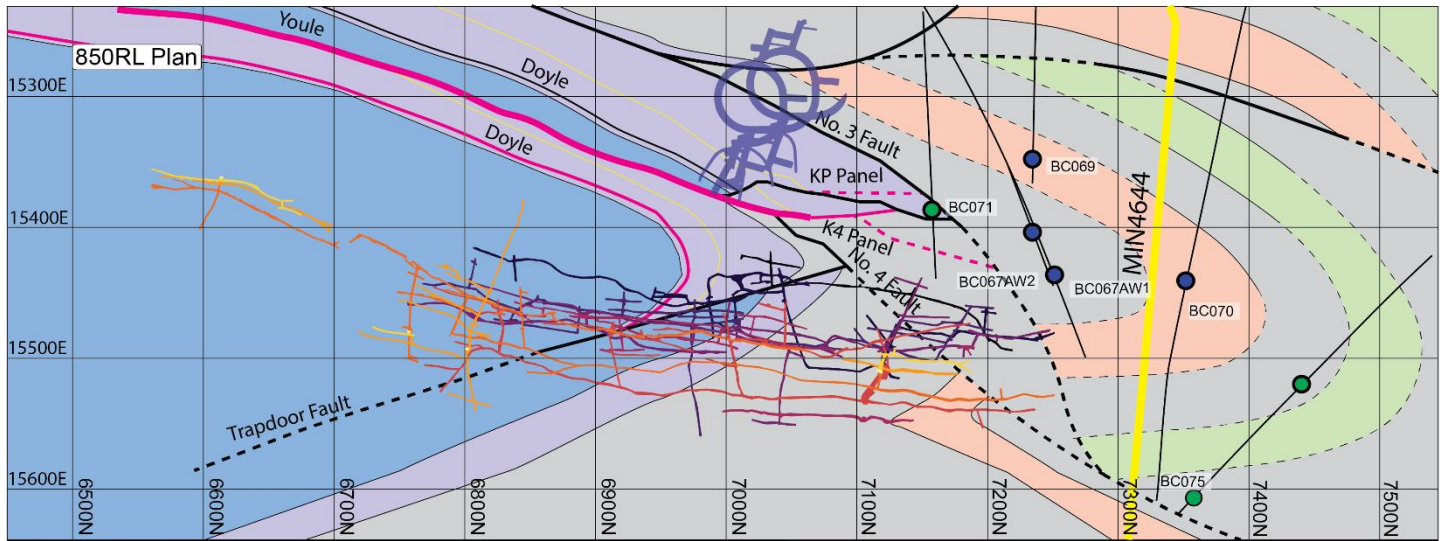
Hole ID	Hole Completion Date	Intercept Northing (Mine Grid)	Intercept Easting (Mine Grid)	Intercept Elevation (Mine Grid)	From (m)	To (m)	Drilled Width (m)	True Width (m)	Au (g/t)	Au (g/t) over min. 3 m mining width
DOD2019-052	06/07/2019	1755.778	1126.208	-402.341	120.2	125	4.8	4.45	0.74	0.74
DOD2019-054	20/07/2019	1751.489	1148.12	-396.642	111.9	114.95	3.05	2.98	1.86	1.85
DOD2019-058	07/08/2019	1737.463	1179.071	-373.329	81.37	84.7	3.33	2.93	7.80	7.62
DOD2019-062	11/08/2019	1744.189	1202.82	-374.002	77.16	84.74	7.58	7.37	1.20	1.20
DOD2019-064	14/08/2019	1745.167	1229.26	-373.199	76.4	85	8.6	8.46	1.44	1.44
DOD2019-065	17/08/2019	1740.74	1247.04	-361.376	81.65	84.6	2.95	2.78	1.13	1.05
DOD2019-071	11/08/2019	1743.136	1278.844	-354.397	93.1	101.25	8.15	7.65	2.10	2.10
DOD2019-072	17/08/2019	1746.972	1309.528	-355.602	92.53	95.14	2.61	2.61	0.75	0.65
DOD2019-073	21/08/2019	1753.994	1371.047	-347.596	115	119	4	3.51	1.25	1.25
DOD2019-074	23/07/2019	1754.501	1272.581	-378.005	73.85	75.55	1.7	1.65	2.32	1.28
DOD2019-075	27/06/2019	1767.642	1275.186	-399.987	78.4	82.6	4.2	4.07	1.54	1.54
DOD2019-076	30/06/2019	1763.209	1290.188	-389.498	75.15	78.5	3.35	3.34	5.37	5.37
DOD2019-077	02/07/2019	1773.238	1300.484	-402.742	83.08	85.72	2.64	2.51	7.24	6.04
DOD2019-078	20/07/2019	1775.85	1321.227	-399.189	81.9	88.05	6.15	6.03	2.78	2.78
DOD2019-079	18/07/2019	1761.896	1321.197	-377.872	75.45	78.97	3.52	3.50	6.99	6.99
MU9-019	08/08/2019	1858.279	1518.94	-529.552	150.2	158.35	8.15	5.24	1.46	1.46
MU9-020	18/08/2019	1887.54	1511.106	-600.533	204.7	224.15	19.45	9.19	1.57	1.57
POD2019-012	08/05/2019	1806.281	1414.745	-451.053	84.2	89	4.8	4.43	0.85	0.85
POD2019-013	11/05/2019	1803.162	1433.972	-446.062	78.16	85.55	7.39	7.07	1.47	1.47
POD2019-014	16/05/2019	1809.44	1445.913	-451.242	82.3	95.2	12.9	12.02	1.29	1.29

*Table 5: Skarn Drilling Results (June 2019 – September 2019)*

Hole ID	Hole Completion Date	Intercept Northing (Mine Grid)	Intercept Easting (Mine Grid)	Intercept Elevation (Mine Grid)	From (m)	To (m)	Drilled Width (m)	True Width (m)	Au (g/t)	Au min. 3m mining width (g/t)
MU9-009A	24/06/2019	1690.45	1586.03	-508.33	67.65	68.95	1.3	0.65	23.77	5.15
MU9-012	04/08/2019	1687.81	1612.9	-507.67	69.7	72	2.3	0.95	1.32	0.42
MU9-013	09/08/2019	1677.41	1637.61	-504.47	72.6	77.74	5.14	1.81	1.71	1.03
MU9-014	11/08/2019	1659.49	1619.51	-486.32	45.9	49.05	3.15	1.65	14.31	7.87

*Figure 1: Longitudinal Section and Plan Section of Youle (Costerfield) Illustrating Location of Recent*

Intercepts along with first access on Youle



**MANDALAY RESOURCES**  
Costerfield Operations  
Youle Lode  
September 2019

**Mine Workings**

Workings

**Lode Sampling**

Hole ID  
 Au (ppm) ● Sb (wt%)  
 True Thickness (m)  
 ▲ Offsection (West)  
 ▼ Offsection (East)

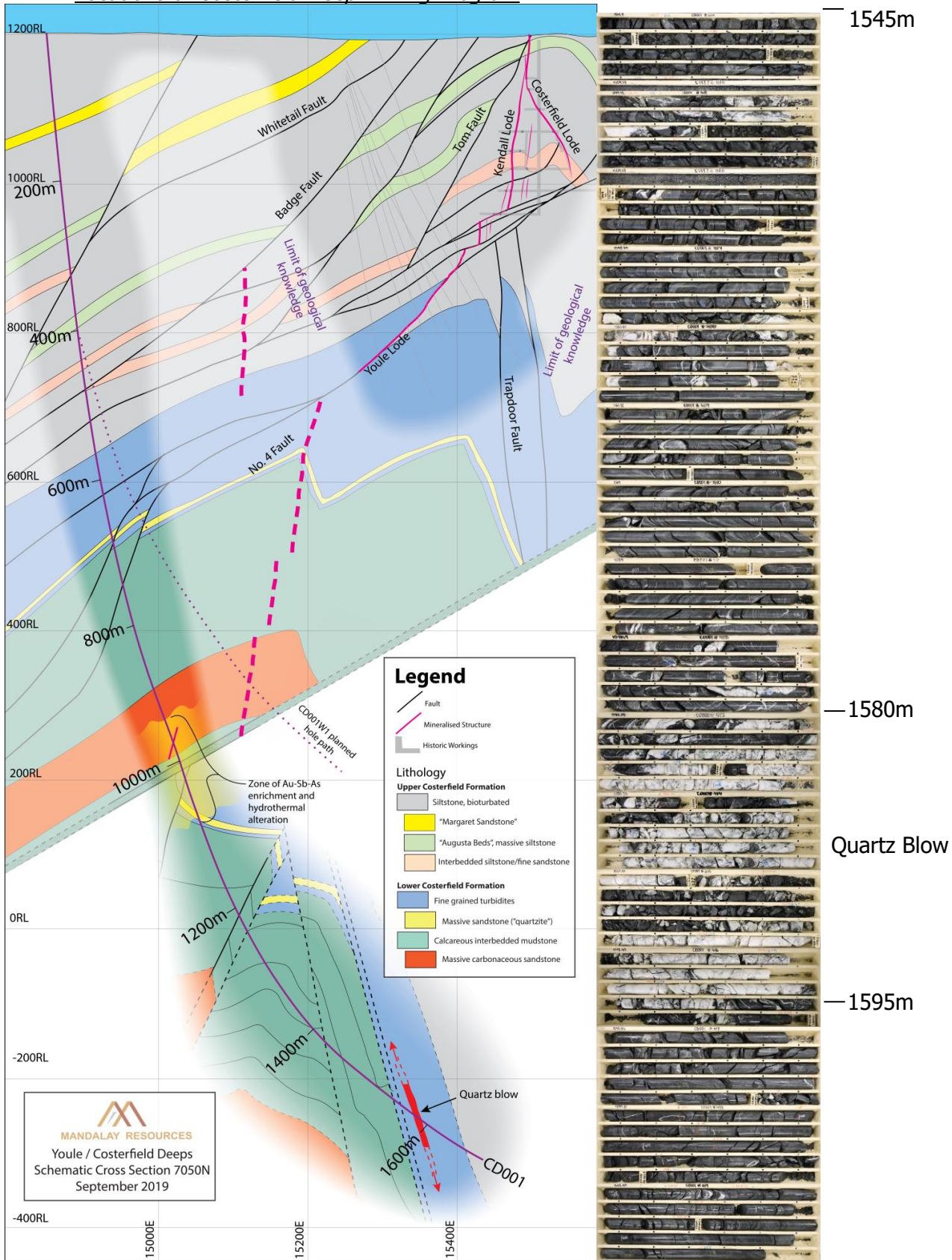
Note 1: Grades are diluted to 1.8m minimum mining width.  
 Note 2: True widths may vary from those used in resource estimation

- >20g/t AuEq
- 10.5g/t - 20g/t AuEq
- 7.5g/t - 10.5g/t AuEq
- 1.5g/t - 7.5g/t AuEq
- <1.5g/t AuEq

**Lithology**

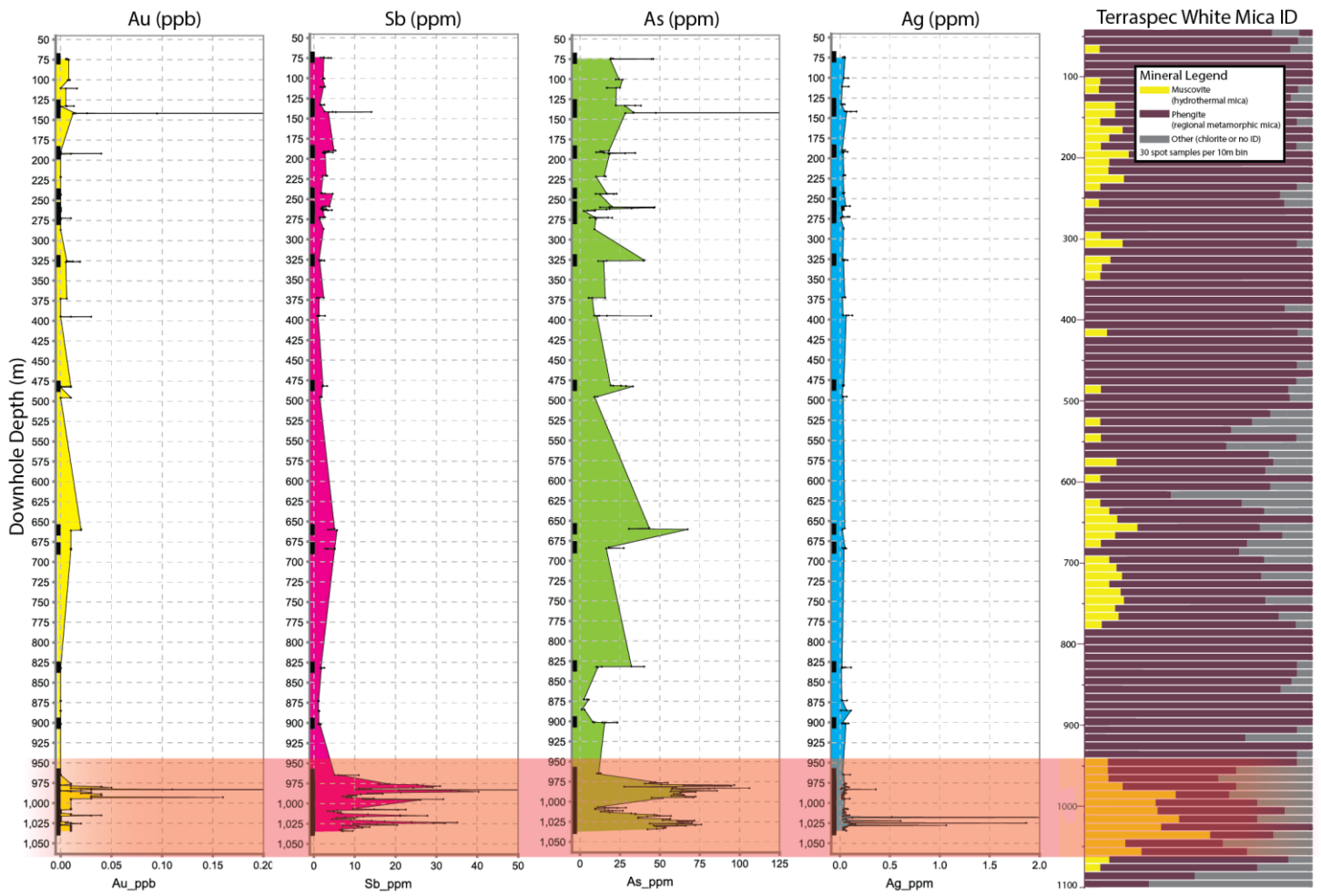
- Upper Costerfield formation
- Lower Costerfield formation
- Upper siltstone unit
- Augusta beds
- Lower siltstone unit
- Siliciclastic unit
- Quartzite unit
- Calcareous mudstone

Figure 2: Longitudinal Section Illustrating Current Drill Hole CD001 and Planned Drill Hole Locations of Costerfield Deep Drilling Program





*Figure 3: Downhole trace-level geochemistry of CD001, showing correlation of elevated Au-Sb-As-Ag and hydrothermal muscovite alteration between 975-1040m.*



*Figure 4: Björkdal Mine Scale Overview Map Showing the Location of the Aurora Zone and Lake Zone Skarn in Relation to Mine Development. Black Box Denotes Level Plan for Lake Zone Skarn*

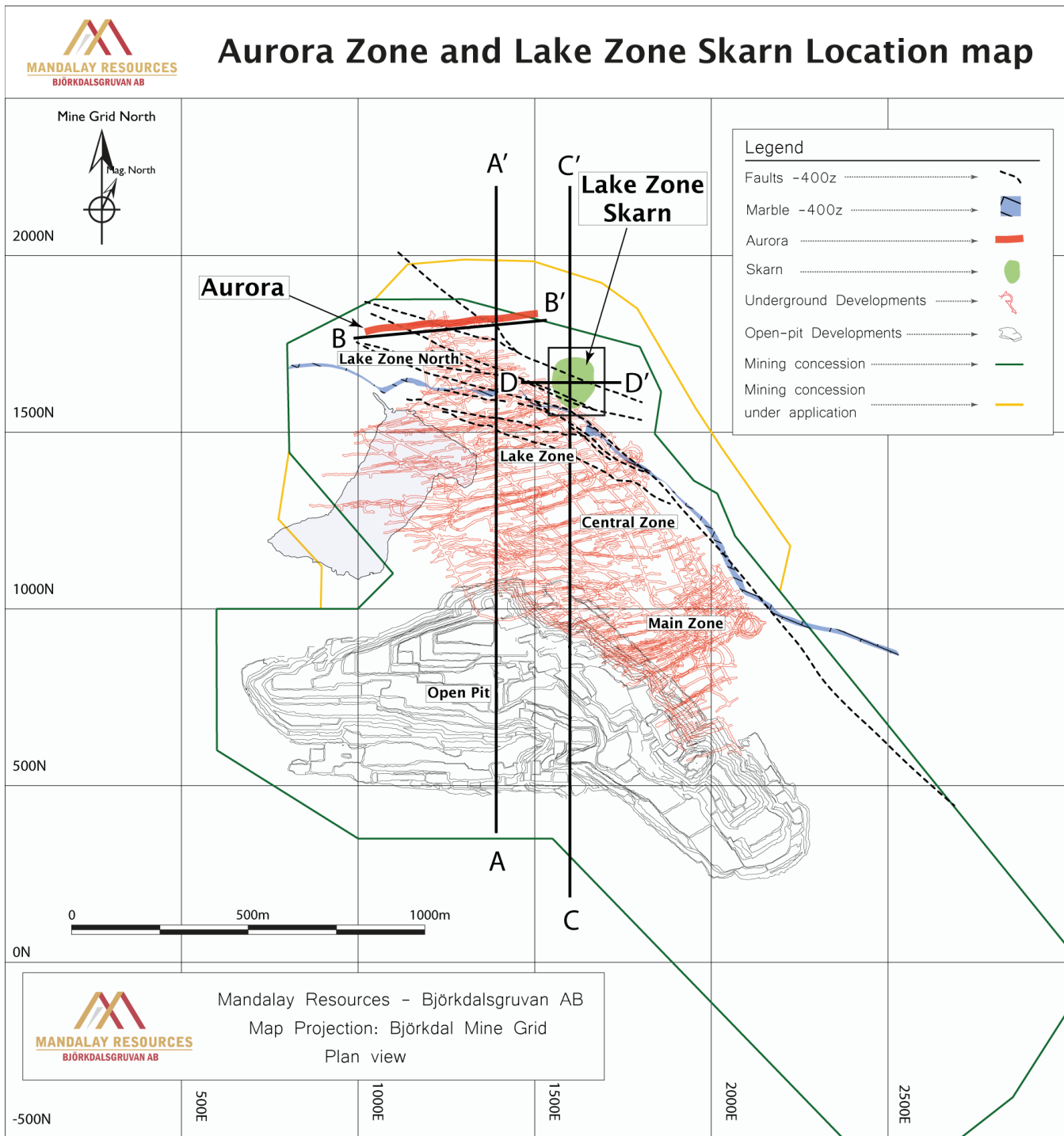
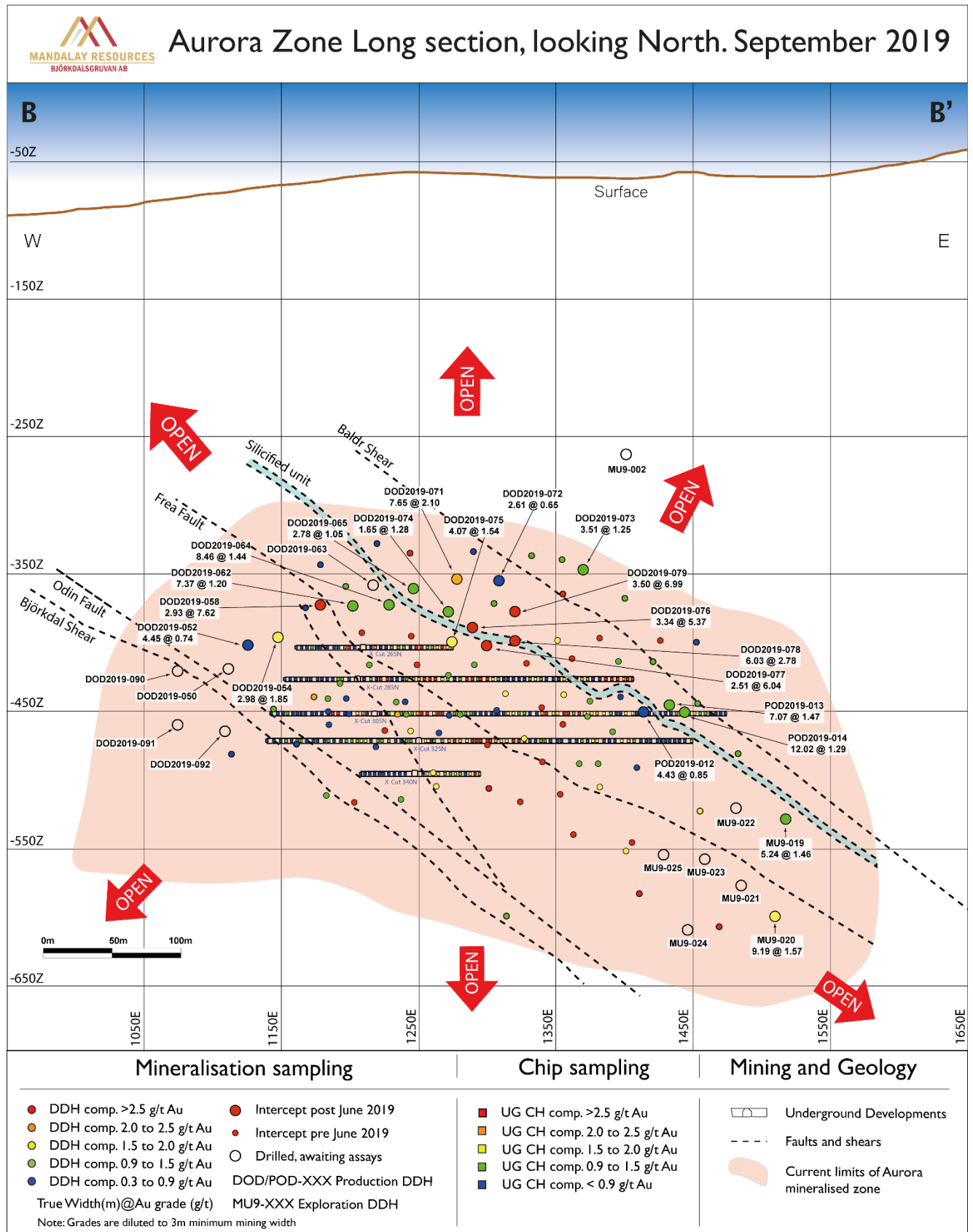


Figure 5: Longitudinal Section of the Aurora Zone Illustrating Location of Recent Intercepts



**Figure 6: Cross Sections of Björkdal Mine Area Showing the Location and Current Size of the Aurora Zone (A-A') and Lake Zone Skarn (C-C'), in which the Black Box Denotes Focused Cross Section in Figure 7**

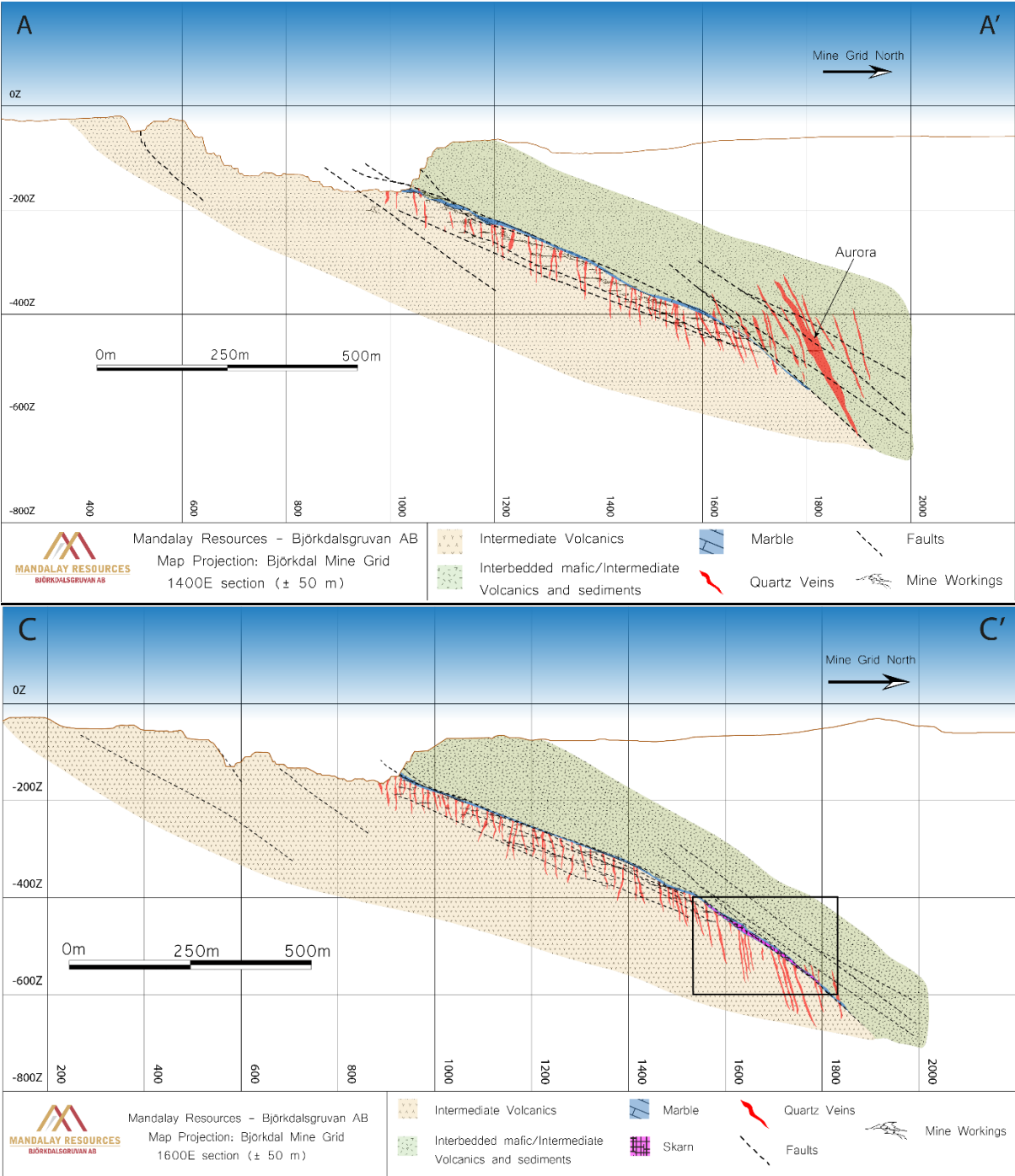


Figure 7: Cross Section Displaying the Current Limits of the Lake Zone Skarn Horizon

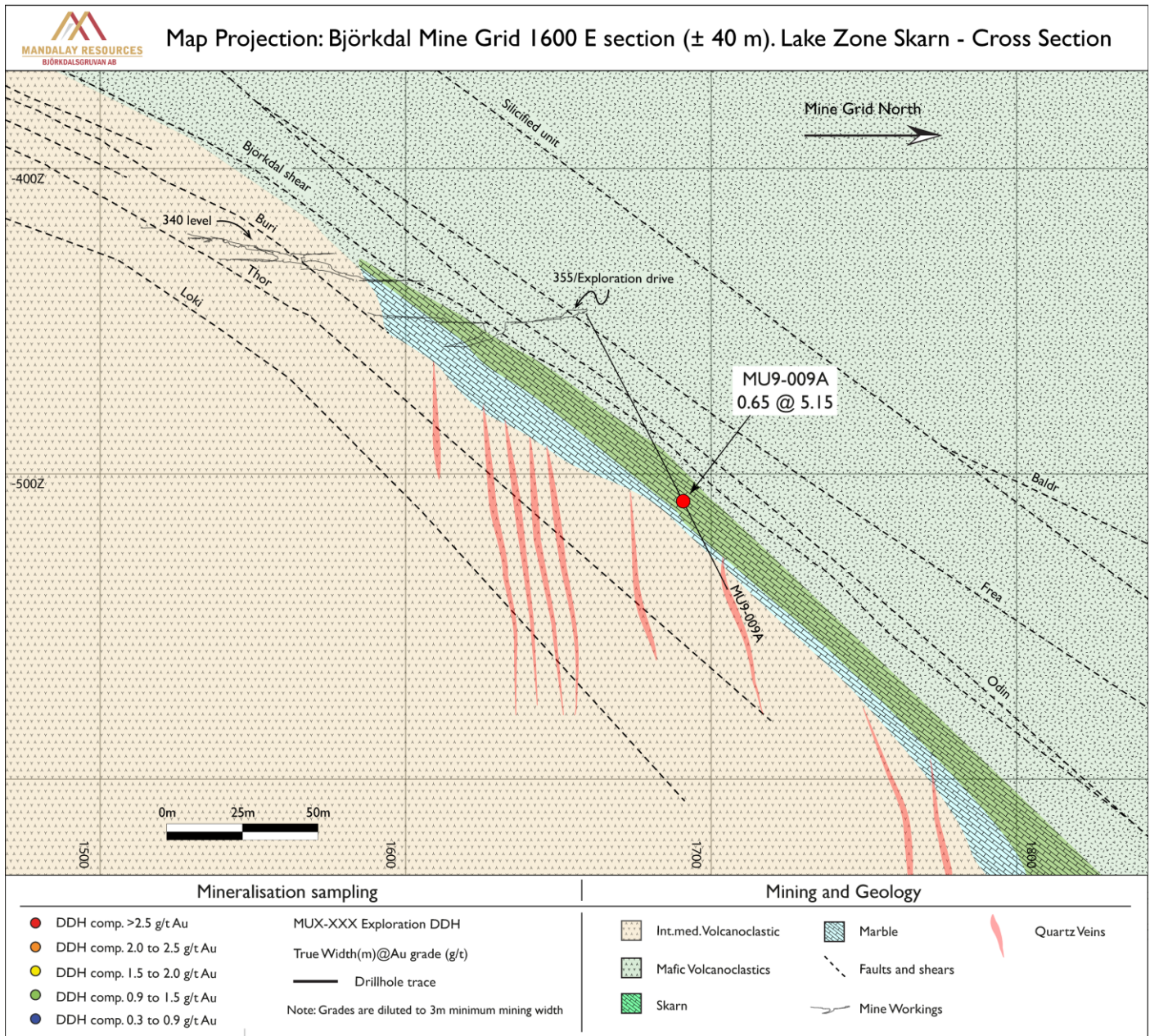
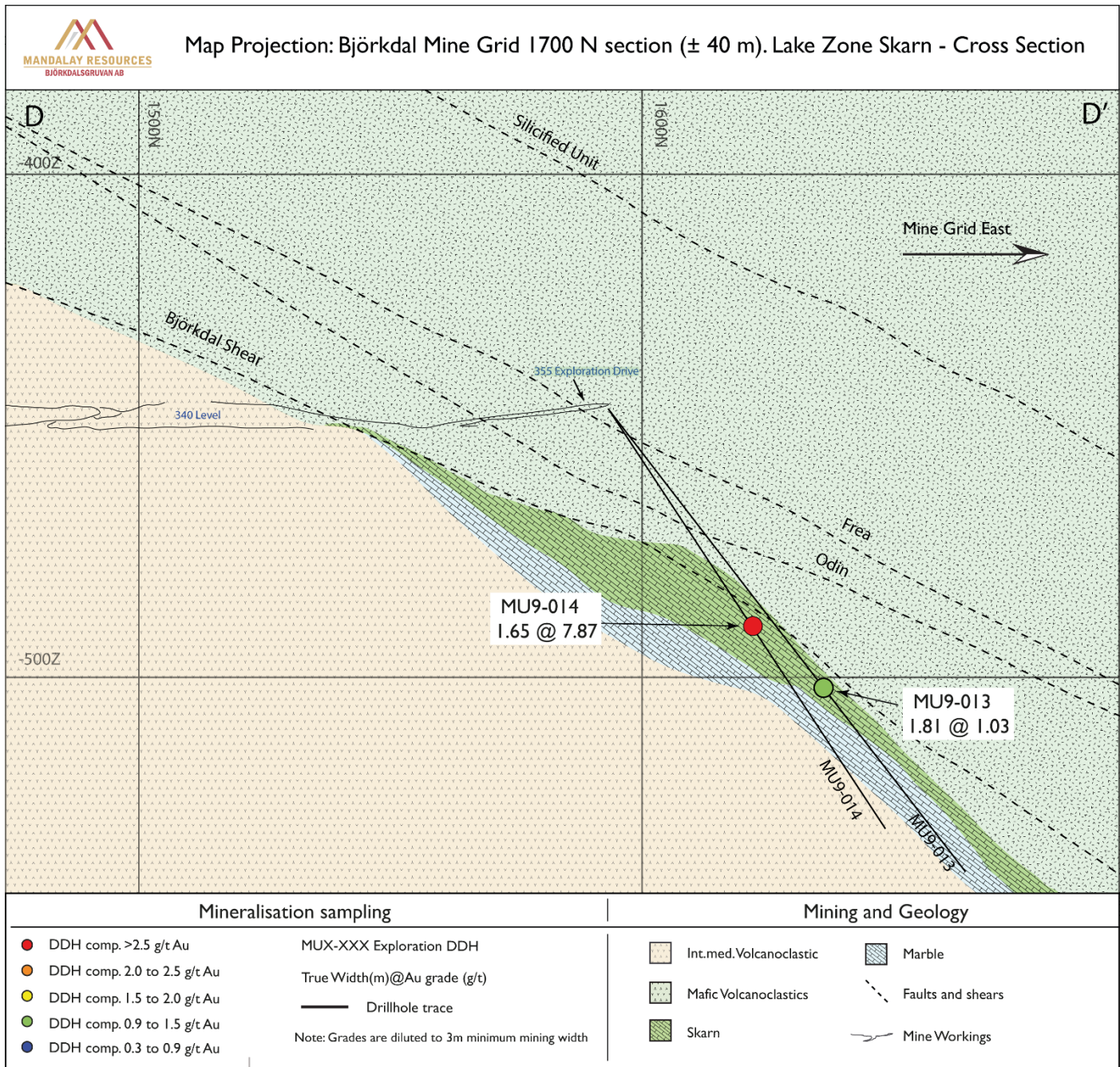
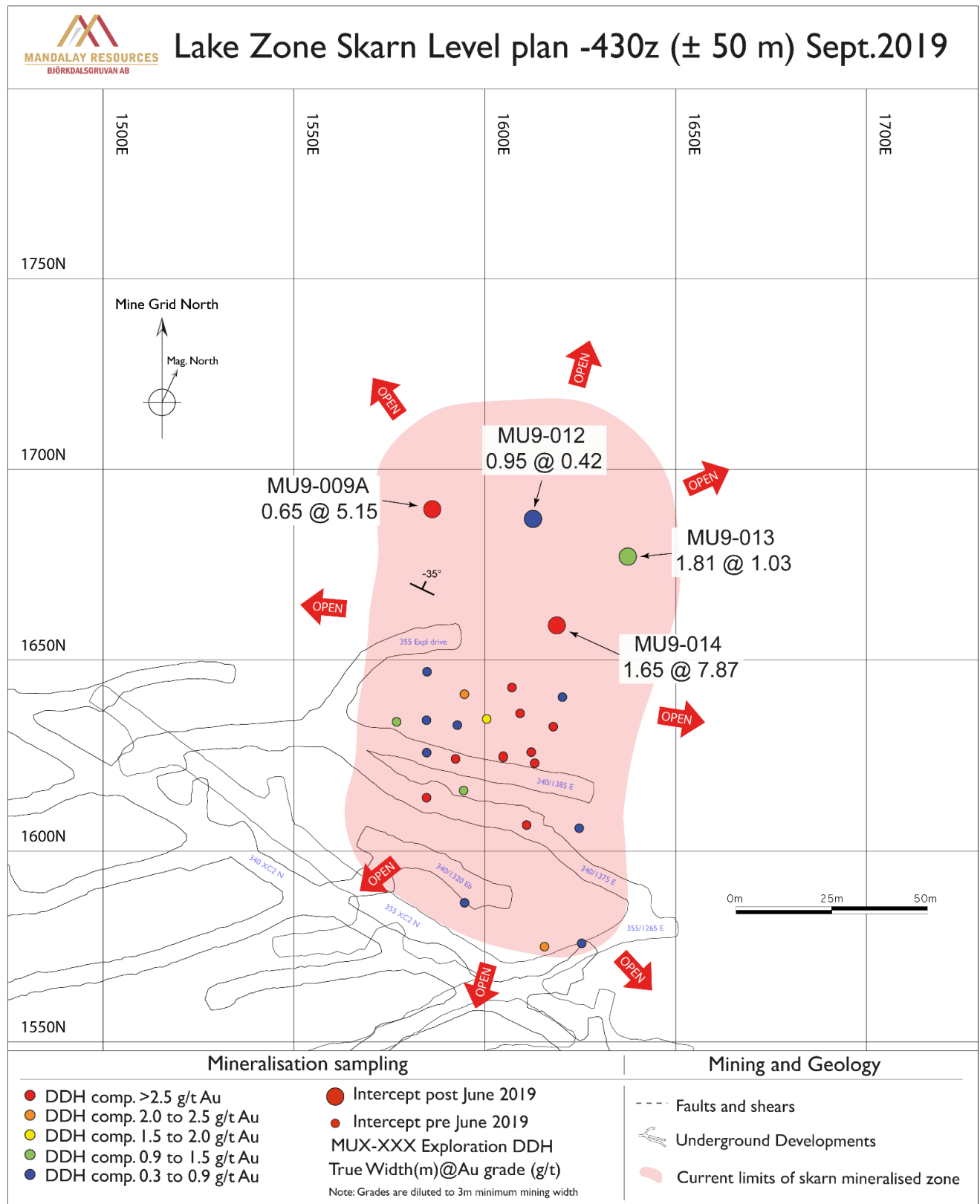


Figure 8: Cross Section Displaying the Current Limits of the Lake Zone Skarn Horizon



**Figure 9: Schematic Level Plan of the Lake Zone Skarn Horizon Illustrating Location of Recent Intercepts**



## **Drilling and Assaying**

At Costerfield, diamond drill core was logged and sampled by Costerfield geologists. All samples were sent to OnSite Laboratory Services in Bendigo, Victoria, Australia, for sample preparation and assay. Site geological and metallurgical personnel have implemented a QA/QC process that includes the regular submission of standard reference materials and blanks with drill and face samples submitted for assay. Standard reference materials have been certified by Geostats Pty Ltd. (February 6, 2019 Technical Report entitled "Costerfield Operation, Victoria, Australia NI 43-101 Report", available on SEDAR ([www.sedar.com](http://www.sedar.com)), which contains a complete description of drilling, sampling, and assaying procedures).

At Björkdal, all diamond drill core was logged and sampled by Björkdal geologists. Exploration drill hole samples (prefix MU) were sent to CRS Minlab Oy (CRS) in Kempele, Finland for sample preparation and assaying. Development Optimization drill hole samples (prefix DOD) were at the onsite lab ran by ALS for sample preparation and assaying (see March 28, 2019, Technical Report entitled "Technical Report on the Björkdal Gold Mine, Sweden", available on SEDAR ([www.sedar.com](http://www.sedar.com)), which contains a complete description of drilling, sampling, and assaying procedures).

Assaying in both the CRS and ALS laboratories was conducted utilizing the Pal1000 (CRS) cyanide leaching processes. Mandalay's rigorous QA/QC program included the use of standard reference samples, blanks, duplicates, repeats, and internal laboratory quality assurance procedures.

## **Qualified Person:**

Chris Gregory, Vice President of Operational Geology and Exploration at Mandalay Resources, is a Member of the Australian Institute of Geoscientists (AIG), and a Qualified Person as defined by NI 43-101. He has reviewed and approved the technical and scientific information provided in this release.

## **For Further Information**

Dominic Duffy  
President and Chief Executive Officer

Edison Nguyen  
Manager, Analytics and Investor Relations

Contact:  
647.260.1566



## **About Mandalay Resources Corporation**

Mandalay Resources is a Canadian-based natural resource company with producing assets in Australia and Sweden, and care and maintenance and development projects in Chile. The Company is focused on growing production at its gold and antimony operation in Australia, and gold production from its operation in Sweden to generate near term cash flow.

### **Forward-Looking Statements:**

*This news release contains "forward-looking statements" within the meaning of applicable securities laws, including statements regarding the exploration and development potential of the Youle deposit (Costerfield) and the Aurora Zone (Björkdal). Readers are cautioned not to place undue reliance on forward-looking statements. Actual results and developments may differ materially from those contemplated by these statements depending on, among other things, changes in commodity prices and general market and economic conditions. The factors identified above are not intended to represent a complete list of the factors that could affect Mandalay. A description of additional risks that could result in actual results and developments differing from those contemplated by forward-looking statements in this news release can be found under the heading "Risk Factors" in Mandalay's annual information form dated March 28, 2019, a copy of which is available under Mandalay's profile at [www.sedar.com](http://www.sedar.com). In addition, there can be no assurance that any inferred resources that are discovered as a result of additional drilling will ever be upgraded to proven or probable reserves. Although Mandalay has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.*