OCEANAGOLD
WAIHI OPERATION

Annual Combined Stability Report

2022

Document ID: WAI-200-REP-010-003

Contents

1. PURPOSE

The purpose of the OceanaGold Waihi Annual Combined Stability Report is to comply with the requirements of the following Hauraki District Council (HDC) consent conditions:

- LUC RC-15774 (Trio) Condition 16 – Risk of Surface Instability;
- LUC 202.2012 (Correnso) Condition 25 – Surface Stability;
- LUC 202.2016 (SUPA) Condition 19 – Surface Stability;
- LUC 202.2017 (MDDP) Condition 25 – Surface Stability; and
- LUC 202.2018 (Project Martha) Condition 75 – Underground and Surface Stability

Please note that the anniversary for the Correnso report was originally 20 December, the date in 2013 when the first blast was initiated in the Correnso Consent Area. In agreement with HDC, this anniversary was revised to 31 December to coincide with other calendar year data collation and reporting. The agreed anniversary for the SUPA, MDDP and Martha Undergound stability reports was also agreed to be 31 December to allow the information from the linked projects to be amalgamated into one combined report. Additionally, in agreement with HDC, the Trio Stability report has been incorporated into the combined annual stability report from 2021.

For ease of reporting and interpretation, work completed within the MDDP project area is reported within the Martha Underground sections of this report.

1.1 AS REQUIRED BY CONDITION 16 OF LUC RC-15774 (TRIO)

16. The consent holder shall provide to the Hauraki District Council on an annual basis (within one month of the agreed anniversary) a report:

a) Describing the location, depth height of completed filled stopes, and unfilled stopes;
b) Describing the backfilling and compaction associate with each stope; and
c) Ground conditions revealed by the mine excavations
d) Describing the measures adopted to manage the risk of surface instability, particularly as provided for in Condition 15 and the outcomes of such measures.

1.2 AS REQUIRED BY CONDITION 25 OF LUC 202.2012 (CORRENSO)

25. The consent holder shall provide to the Council on an annual basis (within one month of the agreed anniversary) a report:

e) Describing the location, depth height and volume (m^3) of stopes; and a summary of the data required by Condition 26 regarding unfilled stope voids; and
f) Describing the lengths of development that, due to the encountered geotechnical conditions where multiple levels overlap, will require backfilling prior to mine closure; and
g) Describing the backfilling and compaction associated with each stope; and
h) Describing the ground conditions revealed by the mine excavations; and
i) Describing the monitoring and measures adopted to ensure ground surface stability, particularly as provided for in Condition 23 and the outcomes of such measures; and
j) Describing the location and depth of exploratory drives;
k) Confirming that the extent of the mining works is confined to CEPPA, as defined in Figure 1.

1.3 AS REQUIRED BY CONDITION 19 OF LUC 202.2016 (SUPA)

19. The consent holder shall provide to the Council an annual report (within one month of the agreed anniversary established in condition 4 or as otherwise agreed in writing by the Council):

a) Describing the location, depth height and volume (m^3) of stopes; and a summary of the data required by Condition 20 regarding unfilled stope voids; and

b) Describing the lengths of development that, due to the encountered geotechnical conditions where multiple levels overlap, will require backfilling prior to mine closure; and

c) Describing the backfilling and compaction associated with each stope; and

d) Describing the ground conditions revealed by the mine excavations; and

e) Describing the monitoring and measures adopted to ensure ground surface stability, particularly as provided for in Condition 15 and the outcomes of such measures; and

f) Describing the location and depth of exploratory drives;

g) Confirming that the extent of the mining works is confined to SUPA, as defined in Figure 1.

These reports may be prepared in conjunction with similar reports prepared in accordance with the consent conditions applying to the Correnso Underground Mine.

1.4 AS REQUIRED BY CONDITION 25 OF LUC 202.2017 (MDDP)

25. The consent holder shall provide to the Council an annual report (within one month of the agreed anniversary established in condition 4 or as otherwise agreed in writing by the Council):

a) Describing the location and depth of the exploratory drives and any intentional interceptions of historic development, rises and access drives; and

b) Describing the lengths of development that, due to the encountered geotechnical conditions or where multiple levels overlap, will require backfilling prior to MDDP closure; and

c) Describing the ground conditions revealed by the MDDP excavations using key identification criteria as defined by an independent geotechnical specialist and

d) Describing the monitoring and measures adopted to ensure ground surface stability, particularly as provided for in condition 21 and the outcomes of such measures; and

e) Confirming that the extent of the underground works is confined to the MDDP area as defined in Figure 1.

Advice Note:

These reports may be prepared in conjunction with similar reports prepared in accordance with the consent conditions applying to the CEPPA and SUPA.

1.5 AS REQUIRED BY CONDITION 74 OF LUC 202.2018 (PROJECT MARTHA)

74. The consent holder shall provide to the Council on an annual basis (within one month of an agreed anniversary date) a report:

a) Describing the location, depth height and volume (m3) of stopes and a summary of the data required by Condition 75 regarding unfilled stope voids; and

b) Describing the lengths of the development that, due to the encountered geotechnical conditions or where multiple levels overlap, will require backfilling prior to mine closure; and

c) Describing the backfilling associated with each stope; and

d) Describing the ground conditions revealed by the mine excavations; and

e) Describing the monitoring and measures adopted to ensure surface stability, particularly as provided for in Condition 71 and the outcomes of such measures; and
f) Describing the location and depth of exploratory drives; and
g) Confirming that the extent of the mining works is confined to the Project Martha area as defined in Plan A of Appendix 2.

2. LOCATION, DEPTH, HEIGHT AND VOLUME OF STOPES

(Consent conditions: Trio c.16a, Correnso c.25a, SUPA c.19a, Project Martha c.74a)

Trio
No stoping in the Trio project area was undertaken during 2022.

Correnso/SUPA
Only a very small amount of stoping was carried out in the upper parts of Correnso in 2022 as the lower sections have all previously been completed. Some areas were also backfilled in line with the closure plans.

The stoping methodology is Modified Avoca (refer to Appendix A for a graphical representation). This method requires a 'bottom-up' mining technique, whereby each successively higher stope is mined out by driving on the surface of the previously laid backfill of underlying stopes. This technique also requires development firstly to the extremities of the ore body, then mining back towards the access points.

A view of Correnso mining operations for the period is presented in Figure 3.

No mining activities occurred in Louis mining area during 2022.

Stope extraction began in mid-2015, with production continuing through 2022. Only one level was in production during the year meaning that production was cyclic with either ore extraction or filling taking place. This means that a stope may have open voids at the end of the month. By the end of the reporting period, a cumulative 593,119 m^3 of stope volume had been extracted, with 592,172 m^3 backfilled (Figure 1). The upper level of mining remained at the 965 level on the Daybreak Vein. The upper level of Correnso remained at the 954 level during 2022 and the depth remained unchanged at 705 mRL.

The stope width during 2022 was narrow with the primary mining being from narrow vein techniques, with stope widths around 2 m wide. The vertical height was typically 8 m, driven by stope width and vibration constraints.

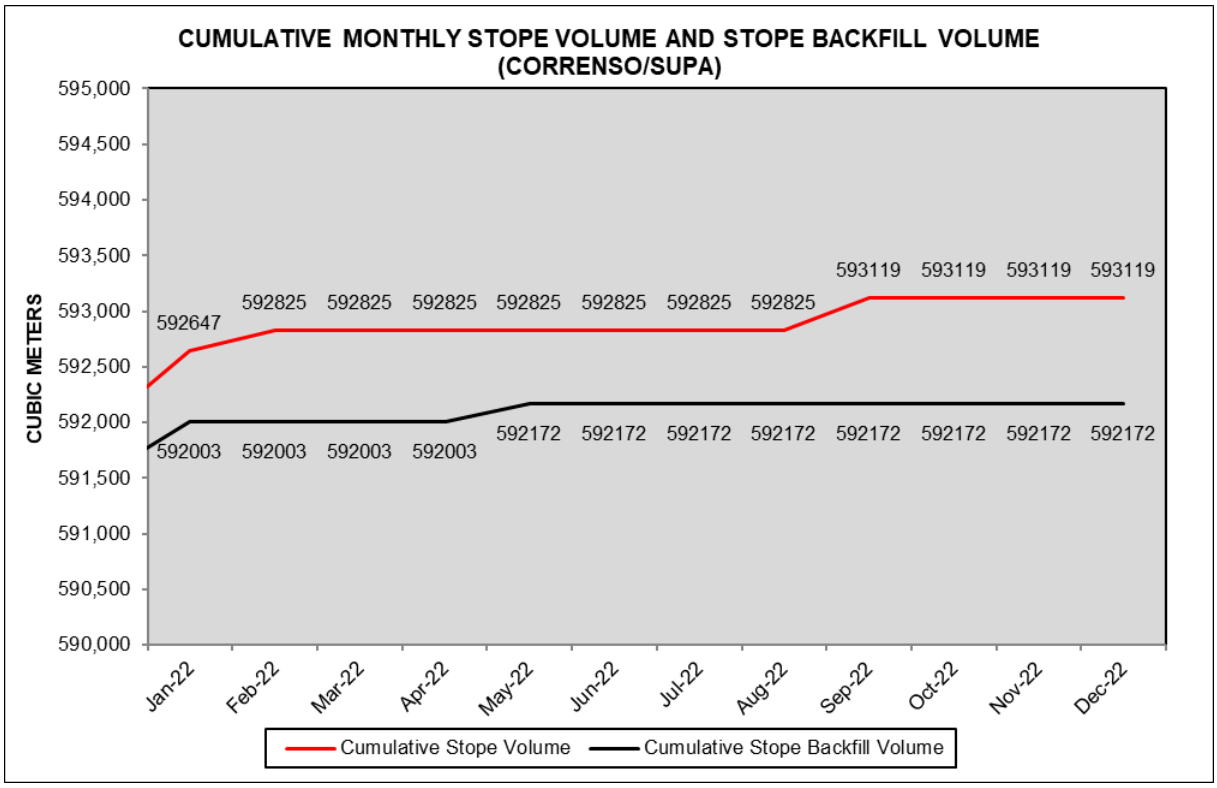


Figure 1: Correnso cumulative monthly stope voids and backfill volumes 2022

Martha Undergound
Stoping commenced in the Martha Underground area in 2021 and continued through the 2022 reporting period.

The cumulative stope volume extracted up until the end of the period was 110,995 m³, with 103,7944 m³ of backfill placed (Figure 2). Stope heights are typically 18 m (floor to floor).

Stoping widths vary from 2 m to 4m depending on the vein width. The vertical extent of development at the end of 2021 was approximately 350 m spanning from 660 mRL to 996 mRL. A view of Martha Underground mining operations undertaken to date is included as Figure 4.

Either Cemented Rock Fill (2-6% binder content) or run of mine waste rock fill material is used to fill production and historic voids as required. Any backfilling is conducted promptly after stoping and production bogging has been completed usually within 12 hours and no longer than 24 hours after bogging has been completed.

Various mining methods have been employed to cater for different production scenarios at the Waihi underground mining operation. The methods are summarised below:

<u>Modified Avoca</u>
Bottom-up Modified Avoca methods are largely employed in virgin ground regions including Rex, Edward, Royal East and West. Mining occurs bottom up, up dip and along strike retreating to a central access. Stope void volumes in both the Rex and Edward generally range between 450-1,000 m^3 between levels with stope strike lengths between 8-12 m.

<u>Remnant Methods</u>

Remnant mining of historical fill and ore ‘skins’ was also trialled in Empire West and Edward mine area during the reporting period. Stopes were mined at various levels through these mining areas ranging from 750 mRL to 983 mRL in a transverse approach to the orebody via footwall drive development and cross cuts approaching historic voids and ‘skins’.

Tailored remnant mining in Empire West has been conducted in a top-down fashion to allow establishment of a stabilised crown horizon between the 700 mRL and 800m RL levels. Local stabilisation of historic voids and fill extraction is managed through various phases of enabling works to secure historic fill:

1. Spiling - the installation of a network of spiling arrangements from transverse footwall drive development allows installation through the historic fill mass and provides bridging into the in-situ hanging wall as an interim stabilised horizon. Spilling allows initial short turnaround breakthrough into historic void/fill and enables managed undercutting of the ‘stiff’ historic backfill material. Pressure grouting and resin injection techniques are also employed as part the ground consolidation works prior to fill extraction if applicable.
2. Interim CRF Plug – once the supported historic backfill has been undercut at the top level (700 mRL) the excavated void of 5-10 m wide x 4.5 m high is then immediately tight filled and ‘choked’ with an interim CRF Plug to provide passive resistance to the undercut fill mass.
3. Crown CRF Plug – once the upper-level interim plug has been placed and cured, extraction of historic fill materials on the lower level (800 mRL) can commence. At completion of the target historic fill volume below the previously placed interim plug, a final crown CRF plug is placed in the extracted void via a fill pass and tipple from the top level (700mRL) filling down to the lower extraction drive level (800). This final CRF installation completes the CRF Crown system.

Each individual CRF crown installation is approximately 12-15m along strike between levels with a target extraction volume of around 700-800m^3. Extraction and replacement with CRF is scheduled and completed in a primary and secondary sequence.

The establishment of each individual crown CRF block contributes to the wider regional stability of the historic fill mass to the surface to allow future mining down dip. Regional stability is also monitored via surface settlement surveys, the Open Pit south wall Radar system and inclinometers.

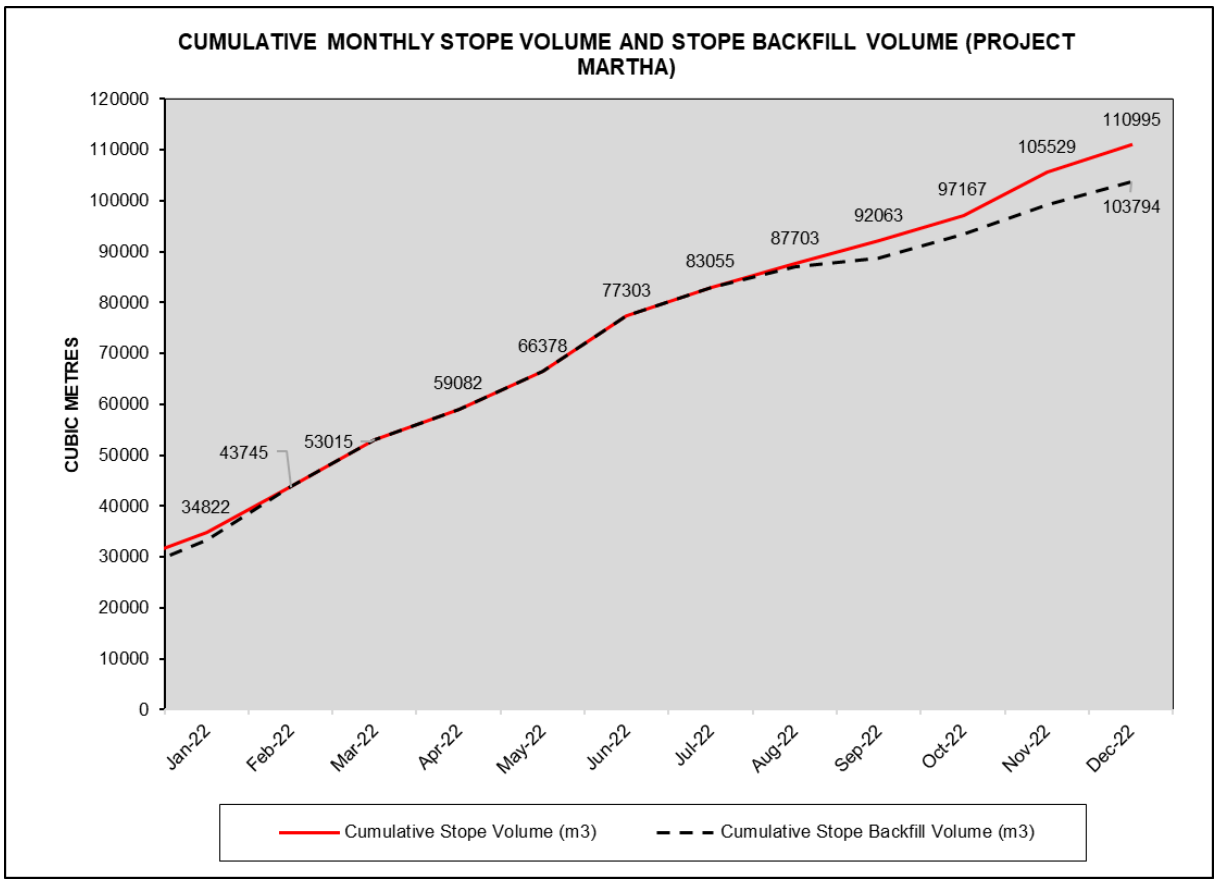


Figure 2: Martha Underground cumulative monthly stope voids and backfill volumes 2022

3. DEVELOPMENT & EXPLORATION DRIVES

(Consent conditions: Correnso c.25b&f, SUPA c.19b&f, MDDP c.25a, Project Martha c.74f)

Areas of the mine in which development occurred during 2022 are:

- Rex
- Edward
- Empire
- Royal East
- Royal West

Figures 3 to 7 indicate development progress across the operations as at 31 December 2022.

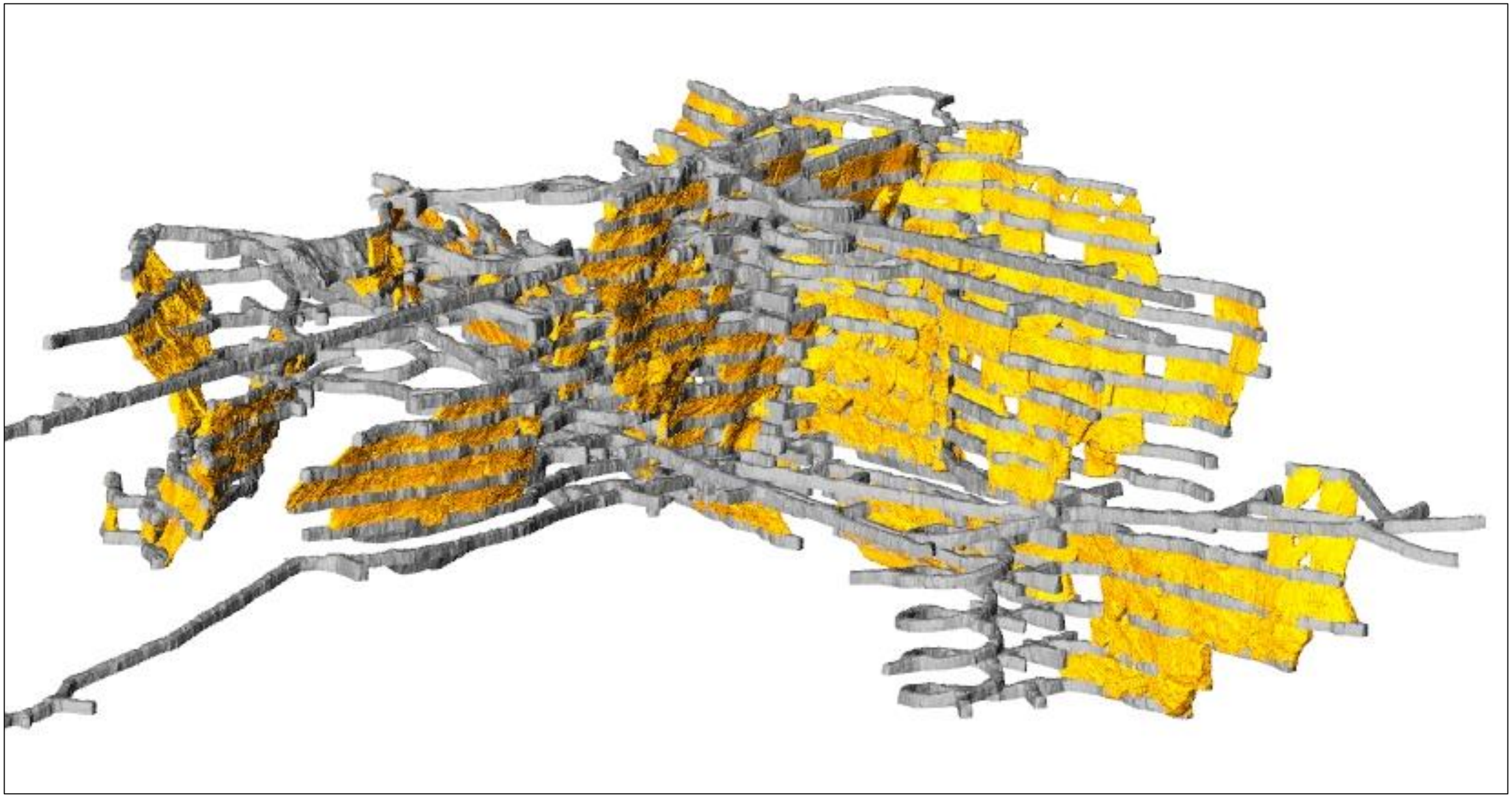


Figure 3: Oblique view of Correnso showing completed development (grey) and stoping (orange) activities. View is looking northeast.

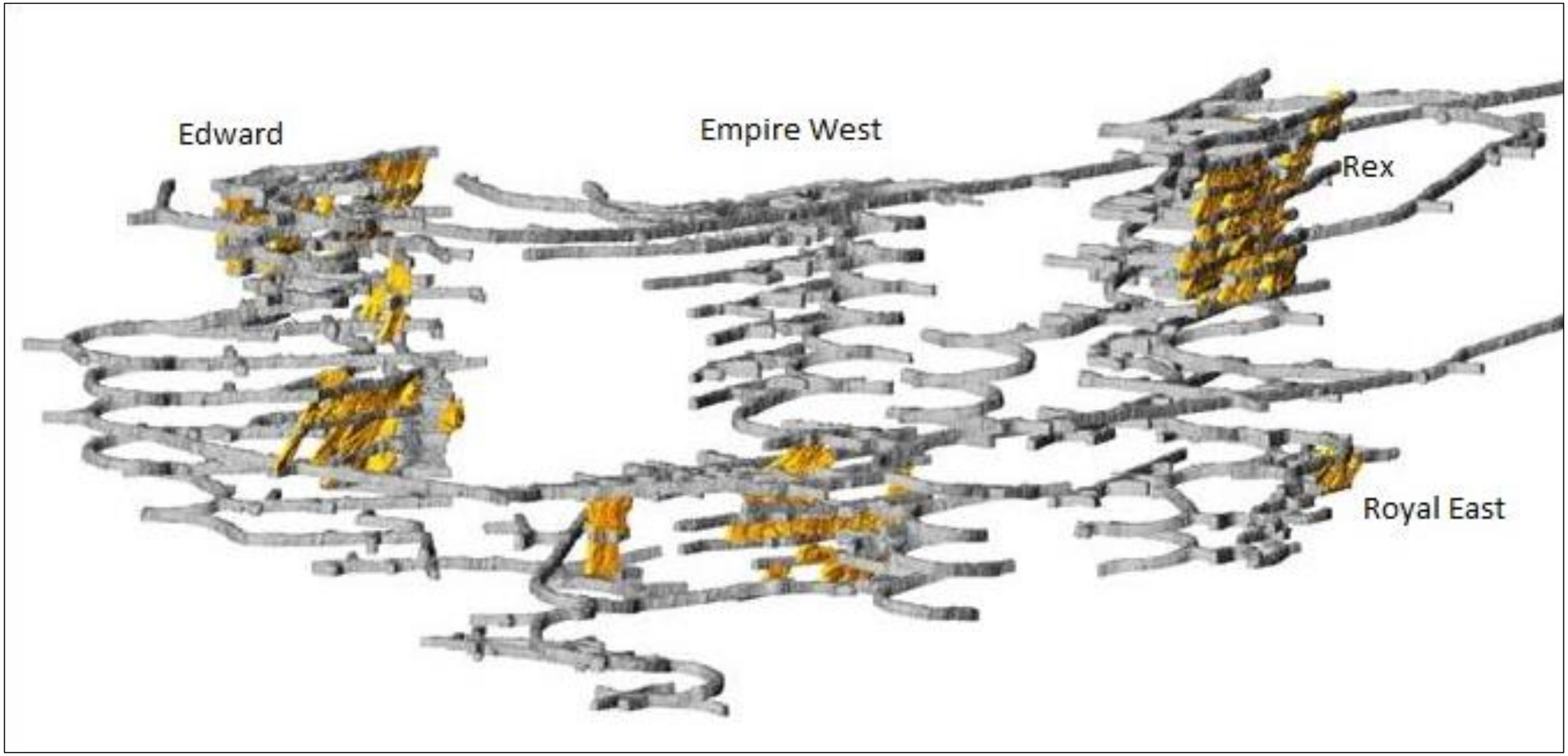


Figure 4: Oblique view of Martha Underground showing completed development (grey) and stoping (orange) activities. View looking northeast.

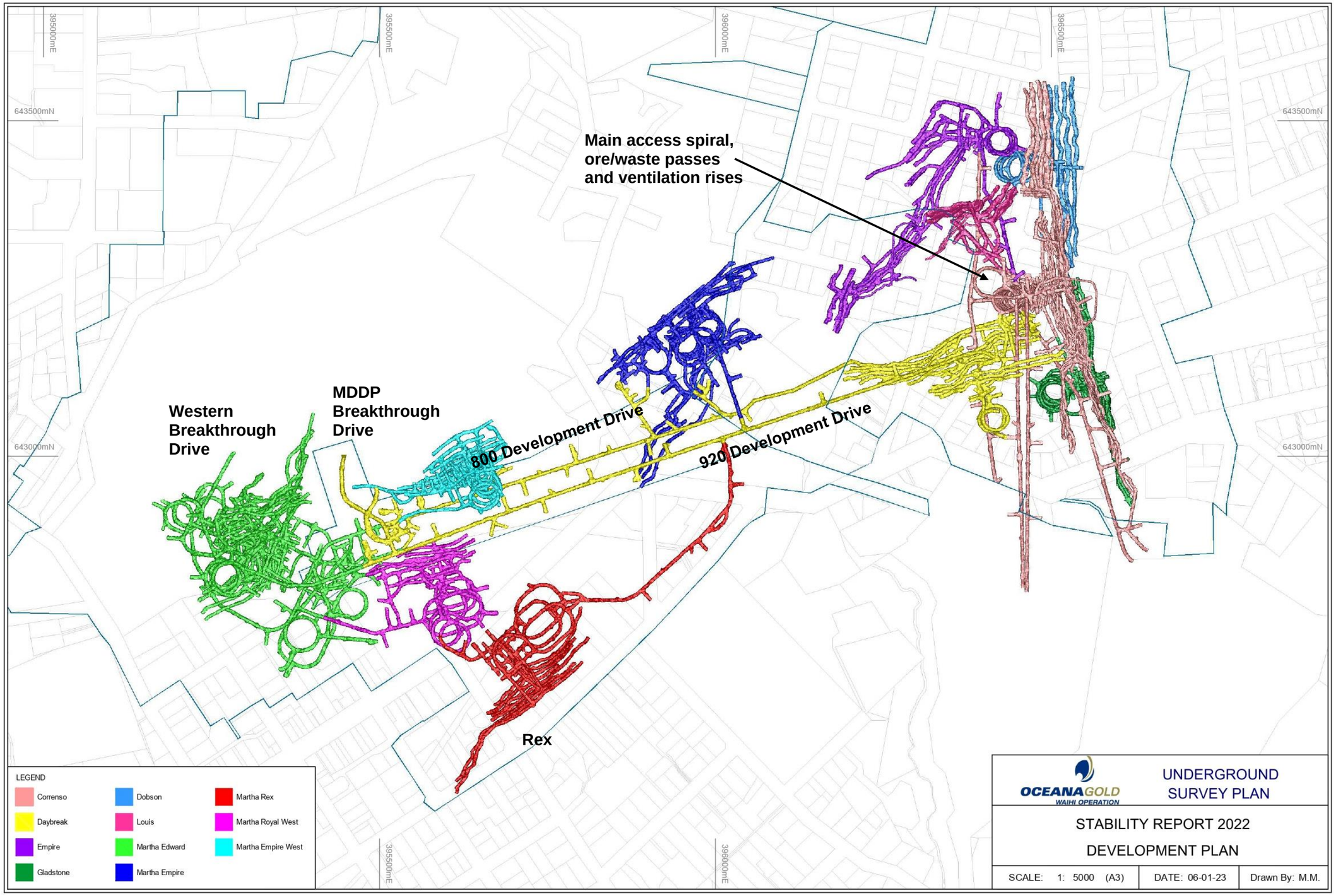


Figure 5: Development – Plan View

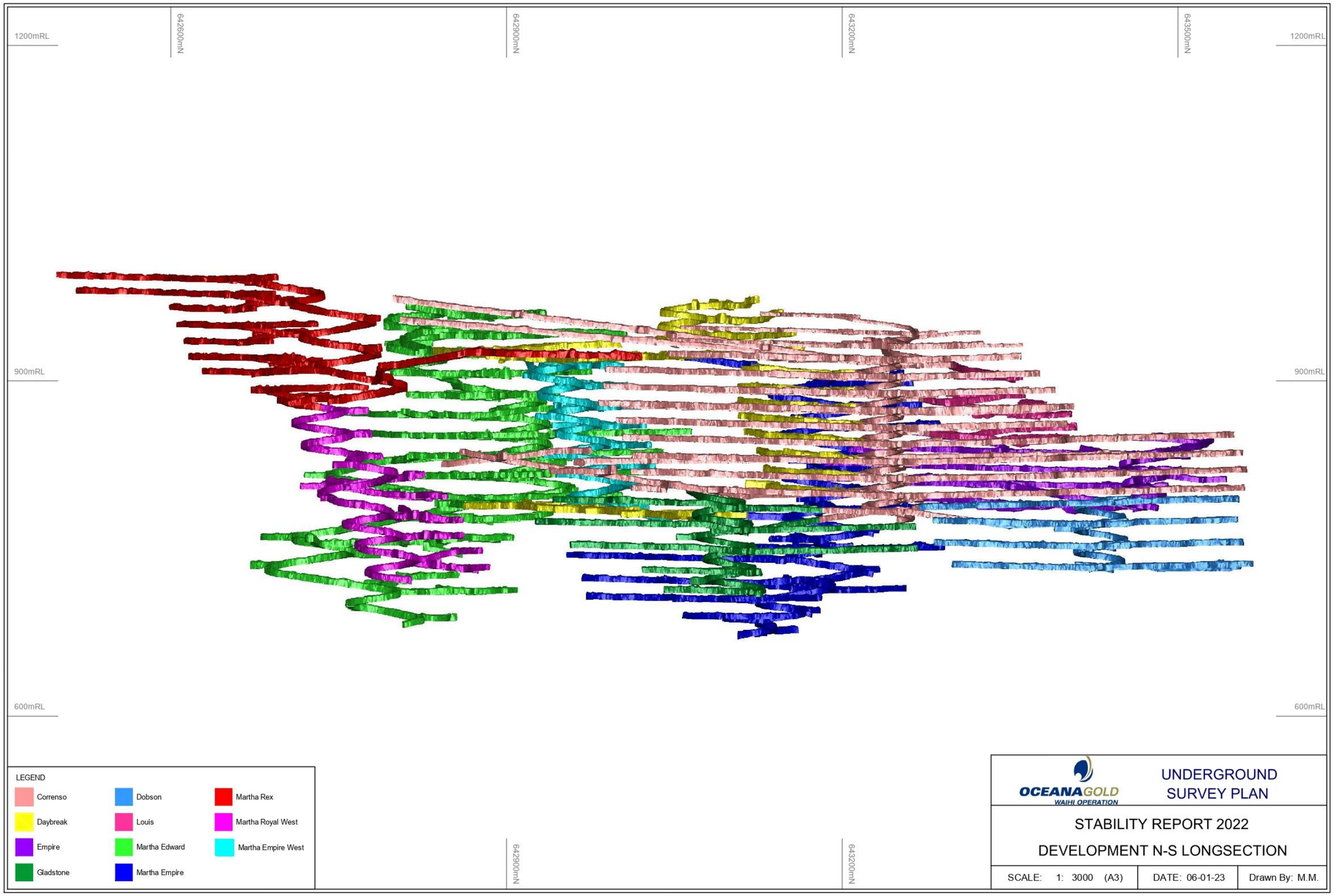


Figure 6: Development – Long Section View (left to right: south to north)

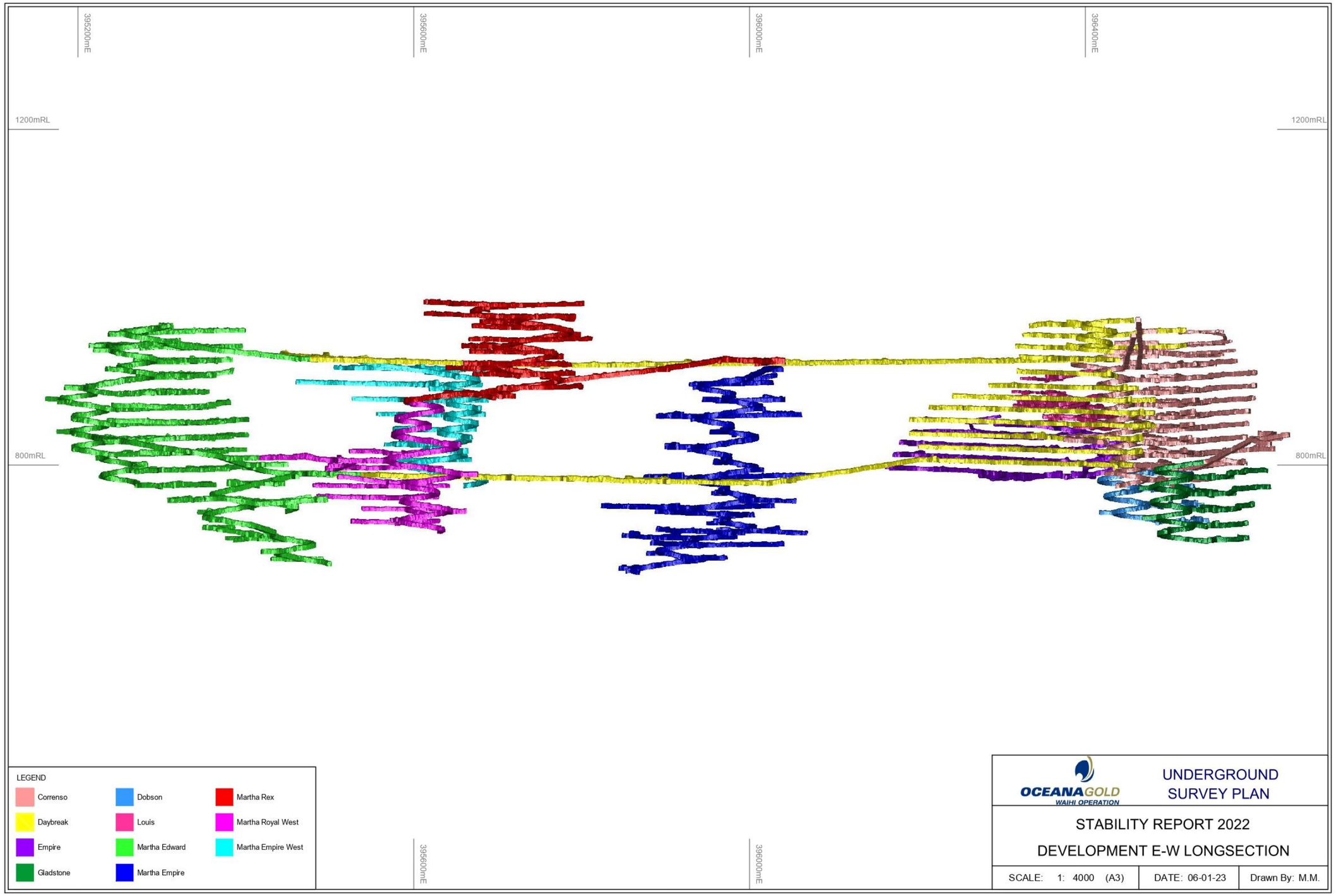


Figure 7: Development – Long Section View (left to right: west to east)

4. BACKFILLING AND COMPACTION

(Consent conditions: Trio c.16b, Correnso c.25c, SUPA c.19c, MDDP c.25b, Project Martha c.74c)

All stopes extracted to date are backfilled with either loose rock or consolidated fill as is dictated by the mining method and conditions. In some cases, compaction occurs during backfilling by the machine placing the fill in the stope, then continues with subsequent operations of heavy machinery on top of the backfill.

Historical voids, where identified, have been backfilled. 31,928 m^3 of backfill was placed into historic voids during the reporting period.

Extensions of drives beyond stoped areas were also backfilled where required.

5. GROUND CONDITION REVEALED BY EXCAVATIONS

(Consent conditions: Trio c.16c, Correnso c.25d, SUPA c.19d, MDDP c.25c, Project Martha c.74d; Consent conditions: Correnso c.25b, SUPA c.19b, MDDP c.25b, Project Martha c.74b)

Ground conditions encountered were mostly as expected. General ground conditions for each mining area has been summarised below. The rock mass classification terms (Very Poor, Poor, Fair, Good, Very Good) are derived and in line with NGI (Barton, 1974) Q-value rock mass classification terms based on a combination of the blockiness of the rock mass, the frictional properties of the joints and the stress environment.

Trio
Ground conditions encountered in the Trio project area have been covered in previous editions of the Trio Stability Reports. No new conditions have been encountered during this reporting period.

Correnso/SUPA
The upper levels of Correnso, above 915 level, are rated Good to Very Good ground conditions. Development has been mostly narrow vein air-leg equipment and drive dimensions are smaller above the 915 level.

No new development has been carried out in this reporting period

Martha Underground
The Edward Decline continued to be developed during 2022. In general, ground conditions are Fair to Good with only some local regions characterised by moderate to highly weathered zones generally associated with geological structures such the Welcome series of structures and are classed as Poor to Very Poor. Fibrecrete and upgraded ground support was carried out locally through the more intensely oxidised and weathered zones as a profile control measure along with corrosion-prevention.

Upper and mid Edward Ore drive development has encountered significantly poorer ground conditions usually associated with geological structures and mineralisation. The rock mass is strongly jointed and oxidised with the most intense oxidation associated with numerous vein structures and late-stage jointing. Local exsolution cavities occur within the zones of veining and discontinuous shear zones are not uncommon in the sections of poorer ground. Secondary support (shotcrete, in-cycle fibrecrete and cable bolts) has been utilised as additional reinforcement during development to provide passive and deeper embedment ground support mechanisms. Rock mass classification ranges locally from Very Poor to not much better than Fair.

The rock mass conditions in Edward closer to the Open Pit (South) wall is characterised by increased joint weathering and a more dilated rock mass although the oxidation is still strongly associated with veining.

The lower Edward development does see an improvement of rock mass conditions at depth. Fair to Good ground conditions are observed in general, with localised vein and structure associated with poorer ground conditions often requiring application of fibrecrete or increased support density.

Capital development in the Empire and Royal East decline continues below the 19 Level. Access and ore drive development for the Empire mine area has been consistently in favourable rock mass conditions characterised by Good to Very Good ground conditions. No secondary support has been required beyond standard installation practices in general development. Some local support upgrades have been required in the Empire West and Royal East areas in relation to local wedge forming discontinuities or orebody associated structures and shears. Rock mass conditions appear increasingly oxidised closer to the Open Pit (south) wall, although the oxidation is still strongly associated with veining and geological structures.

Capital and ore drive development in the Rex and local parts of the Royal West area has continued in 2022. Ore drive development from the hanging wall sees largely Fair to Good ground conditions. However, the associated vein and ore body structures in the Rex have been characterised by 'sugary' quartzose Very Poor to Poor rock mass conditions. Local support upgrades have been required in the form of fibrecrete, spiling and deeper embedment split set support. Level access and ore drive development in the Royal West mining areas has generally encountered Fair to Very Good rock mass conditions and only localised support upgrades have been required due to mining geometries or wedge forming discontinuities or where localised zones of poor ground have been encountered again generally associated with weathered or sheared geological structures.

Where ground conditions have been encountered that pose vulnerability to long term geotechnical instability, or where multiple levels overlap, development areas have been tight backfilled as a precautionary measure prior to level closure.

6. MONITORING AND MEASURES FOR STABILITY

(Consent conditions: Trio c.16d, Correnso c.25e, SUPA c.19e, MDDP c.25d, Project Martha c.74e)

Geotechnical review is an integral part of void stability and backfill management. As part of the general design and planning processes geotechnical checklists and assessments are completed prior to any development or production activities being undertaken within proximity or into historical workings or voids. As mining activities progress, ongoing and regular geotechnical inspections and assessments undertaken as required.

The initial and ongoing geotechnical assessment of historic voids and backfill incorporates multiple stages and methods.

These may include but are not limited to:

- Initial desktop assessment based on spatial location of void in relation to other mine workings – both historical and current
- Assessment of interaction potential i.e. induced stress affects
- Review of drill logs and core photos
- Rock mass characterization based on drill holes and mapping:
  - Q-determinations
  - Rock Mass Rating (RMR)
  - Geological Strength Index (GSI)

  - domain modelling
  - numerical modelling plus on-going rock property test work
- Review of all mapping and other information relevant to the void to determine:
  - significant discontinuities
  - orientations
  - jointing
  - nature of veining
  - previous history
- Stability assessments are carried out using the above information. These assessments will include:
  - Empirical assessment such as Mathews Potvin stability graph where applicable
  - Wedge and kinematic assessment as appropriate e.g. UNWEDGE
  - 2D & 3D FEM and BEM numerical assessment e.g. RS3 and EX3
- Empirical caving assessment to investigate propagation risks.
- Analysis and Modelling of CRF or Undercut Fill Sill Pillars via numerical, analytical and empirical methods e.g. Mitchell & Roettger Method and CPillar
- Backfill Strength assessment for Crushing, Caving, Shear and Rotational Failure coupled with geotechnical CRF QA/QC lab testing program
- C-ALS and void scanning where it can be performed. Routine targeted C-ALS surveys of historical open voids provides precise data on potential changes to void geometry with time or due to potential impacts of mining activities in near proximity
- Other monitoring across near-field and far-field scenarios using surface or Open Pit monitoring systems:
  - near-field monitoring includes Mine seismic system, MPBX extensometers, piezometers, clock its, SMART cables and slough meters above and around historic voids
  - open pit monitoring of the prism network and on-going pit-slope monitoring by radar
  - Crown extensometers

The previously installed seismic monitoring system (as per consent conditions: Correnso c.23d, SUPA c.15d, & MDDP c.21c) was upgraded and expanded in 2021 to cover and capture wider field monitoring that covers the Martha Underground mining areas and continued to perform its functions in 2022. The system is designed to provide additional reassurance that mining activity is not inducing notifiable seismic events in response to current mining.

The seismic system also stands to help monitor regional stability and the rock mass response to mining activities in the critical areas. Given the shallow depth of stoping and a relatively benign stress regime, the seismic system is not expected to record many non-blasting related seismic events. The maximum horizontal stresses pre-mining at 300m depth are measured at 22 MPa; with maximum vertical stresses (due to depth of the overlying rock) are around 15 MPa. These stresses are well below the 60 to 120 MPa average range of strengths of the rock mass that hosts the ore-bodies in the region.

It is generally accepted in industry that event magnitudes of:

Magnitude	**Potential impact**
$mL \leq 0.0$	does not impact on operations
$0.0 < mL \leq 0.5$	could potentially impact on operations, but typically marginally.
$0.5 < mL \leq 1.0$	prudent to utilise dynamic ground support systems
$1.0 < mL \leq 2.0$	could require special energy absorbent support systems
$mL > 2$	requires specifically designed dynamic ground support systems.

The agreed critical magnitude for Correnso and Martha is a conservative ML = -0.5. Any seismic event of ML = -0.5 and above are thus defined as an "anomalous result", and must be reported to the HDC monthly and the following details are required:

- Event magnitude and location coordinates;
- Image plot of the seismic events that includes existing openings and significant geological structures; and
- Explanation of the probable cause of the seismic events.

There were no reportable seismic events in 2022.

Further and ongoing rock mass monitoring where applicable, is planned for 2023 including MPBX extensometers, slough meters, smart cables and clock-its. Monitoring will target crown pillar areas, where mining activity and development is near historic voids, where pillar close out for production is required and any other scenario required for safety as mining continues in all areas of Martha Underground.

The monitoring of 3 deep borehole multi point wire extensometers above the Rex mining area from the surface continued in 2022. Data indicates less than 2 mm of movement being recorded at 90 m depth over the reporting period for 2022. The purpose of these instruments is to monitor any deformation or settlement of the crown pillar above the Rex mining area in response to mining activity. This is largely due to the Rex's relatively shallow depth, overlying aquifers, and the proximity to Waihi township. These live real-time instruments will continue to monitor deformation in 2023.

7. MINING CONFINED TO CONSENT BOUNDARIES

(Consent conditions: Correnso c.25g, SUPA c.19g, MDDP c.25e, Project Martha c.74g)

Figure 8 displays the current mine development overlying an aerial projection, with the consent boundaries superimposed. All current works are entirely within the consent boundaries.

Surveying methodology has been previously audited and found to be well within the standards prescribed. This accuracy has been utilised to ensure that works stay conservatively within consent boundaries.

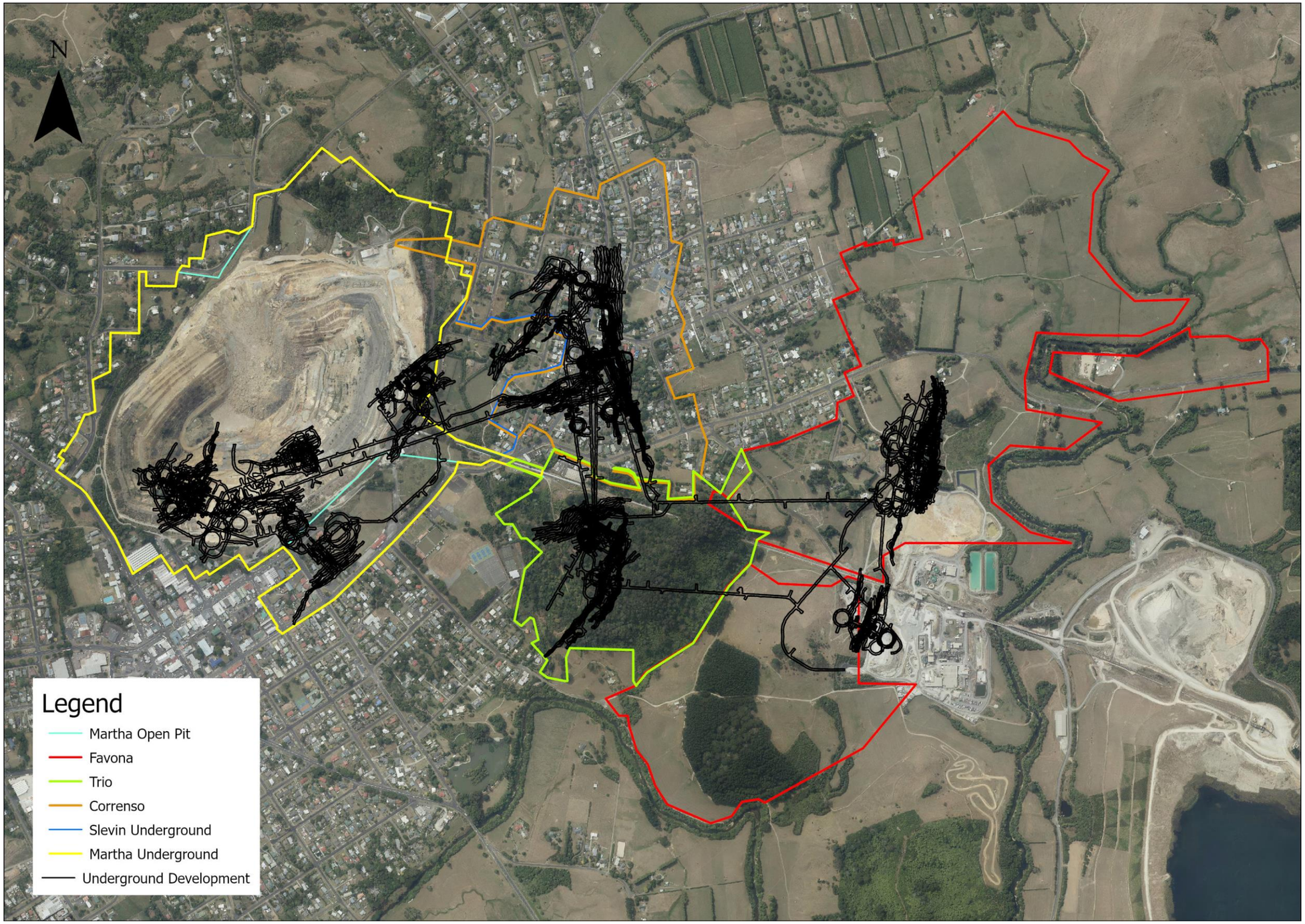


Figure 8: Development – Plan View (with Martha Open Pit, Favona, Trio, Correnso, Slevin Underground (SUPA), and Martha Undeground boundaries)

8. REVIEW OF CONSENT CONDITION REQUIREMENTS

a) Mining methods used require stope voids to be backfilled

All stopes are backfilled as is required for the Avoca mining method (pictorial representation in Appendix A). The limited areas of Cut and Fill mining have also been backfilled. Backfilling of remnant mining areas is covered in Section 2.

b) Limits to upper levels of stoping

The uppermost level on which stoping has been carried out by the end of 2022 was the Rex 3 level (983mRL).

c) Development backfilling where required by geotechnical conditions

Refer Section 4 and 5. Unless ground conditions were encountered that create geotechnical instability, or where multiple levels overlap, no areas of development having ground conditions described in section 5 are expected to require backfilling.

d) Seismic monitoring and rock movement monitoring

Refer Section 6 above for monitoring systems.

e) Grouting of surface-drilled holes

All surface-drilled exploration holes have been grouted during the reporting period.

f) Interception of surface-drilled holes with water flows, and their treatment

Six drillholes intercepted underground workings during 2022. All were dry. (Refer Appendix B).

g) Works confined within consent boundaries

Refer Figure 7 for work locations.

h) Historical open voids formed from caving or stoping shall be identified to be backfilled

Refer Section 4.

i) No stoping in the Rex Orebody shall occur above a depth of at least 40m below the top of the andesite

No stoping has occurred above this level.

j) Backfilling of any other underground workings that overlap with the Martha Underground Mine where geotechnical conditions require backfilling to ensure long-term stability

Refer Sections 4 and 5.

k) Three extensometers to be installed from the surface above the Rex Orebody where practicable

Refer Section 6.

9. CONCLUSION

OceanaGold believes it has fully complied with Conditions 16 (of HDC LUC RC-15774 [Trio]), 25 (of HDC LUC 202.2012 [Correnso]), 19 (of HDC LUC 202.2016 [SUPA]), 25 (of HDC LUC 202.2017 [MDDP]) and 74 (HDC LUC 202.2018 [Project Martha]) and that the risk of ground surface instability is extremely low due to the geology of the area and best practice underground mining methodologies which have been employed.

Please note also that the 6-monthly tilt surveys have continued to show there is no evidence of mining induced surface instability.

10. REFERENCES

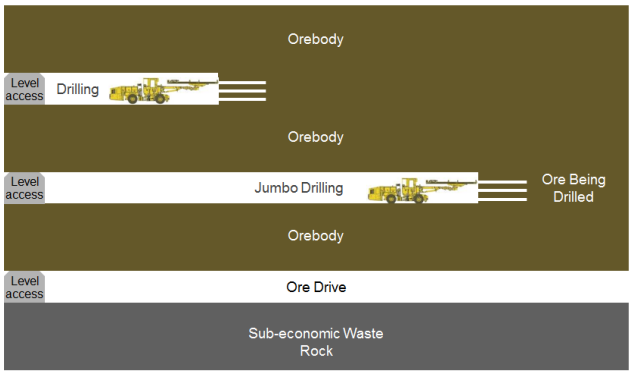
Barton et al (1974). Barton, N., Lien, R. and Lunde, J. 1974. Engineering classification of rock masses for the design of tunnel support. Rock Mech., May. 189-236.

Appendix A

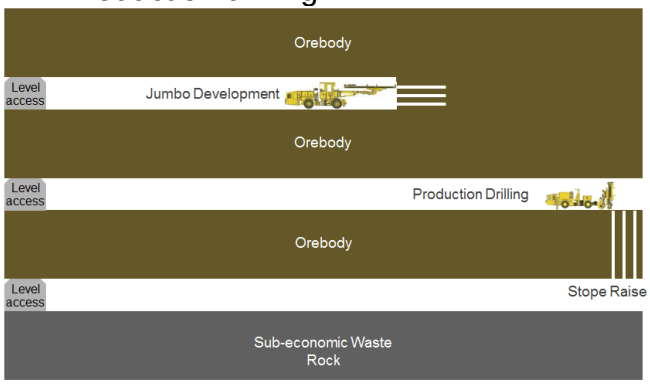
Modified Avoca Technique

Schematic of Modified Avoca Technique

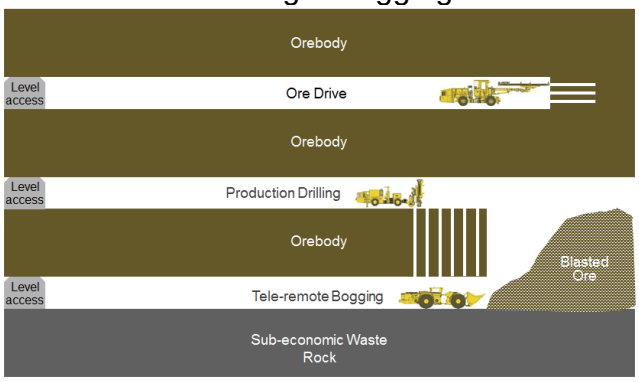
1 Drill drive access



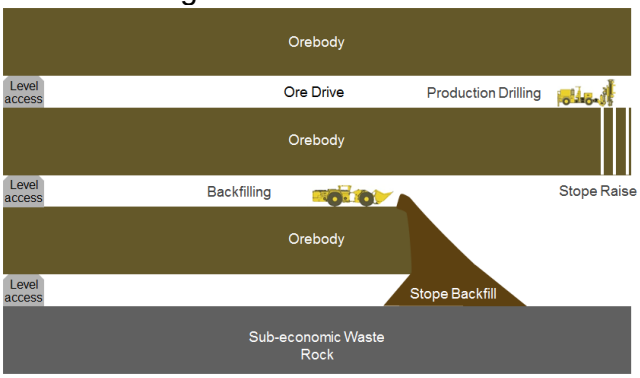
2 Production drilling



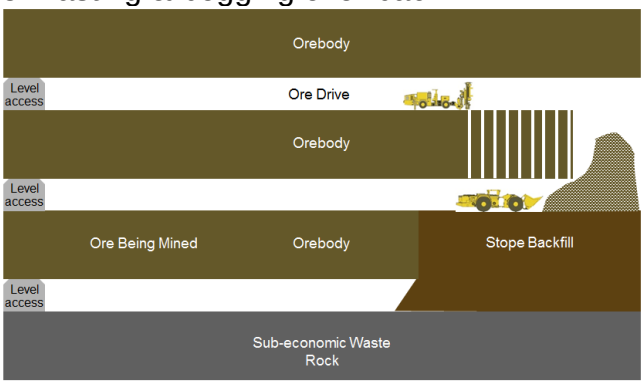
3 Production blasting & bogging



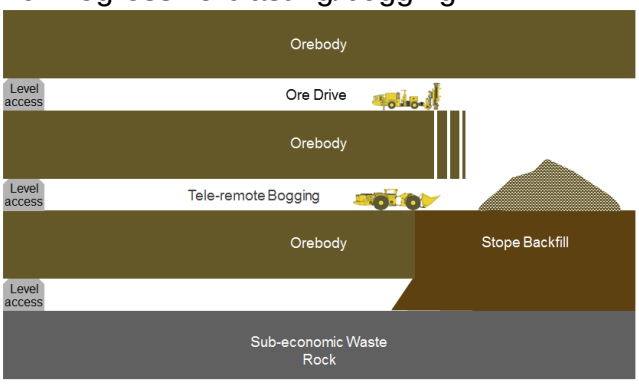
4 Backfilling



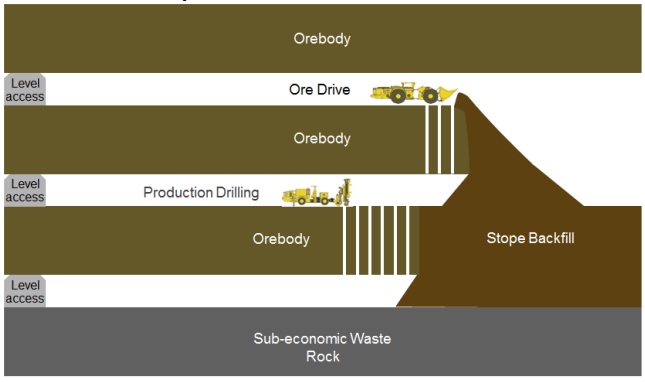
5 Blasting & bogging over backfill



6 Progressive blasting/bogging



7 Multi-level production/backfill



Appendix B

Surface Drillholes Intersecting Workings

Hole ID	Level	Drive	E	N	m.R.L	Date intersected	Pickup	Grouting status	Comments
CGD008	810	C4-FW	396488.5	643473.4	821.4	13/06/2015	Estimated	Not grouted	Hole dry - no evidence of being a water conduit at this level: no Fe staining
UW320	912	ACC	396431.997	643265.11	917.774	13/04/2015	Surveyed	Not grouted	Hole dry
UW348	900	C1-N	396520.5	643263.45	907.62	14/12/2015	Estimated	Grouted	Trickling water which ceased within a day - grouted 16/12/2015
UW358A	900	C1-S	396586.70	643035.20	910.55	25/07/2016	Estimated	Grouted	Low flow, originally grouted within 12 hours, re-grouted after 36 hours. Surrounding split sets grouted as were acting as a conduit. Flow was approximately 1ltr/min
UW365	810	C4-FW	396488.4	643474.8	821.4	9/06/2015	Estimated	Not grouted	Hole dry
UW368	825	C7-S	396515.304	643114.23	833.067	26/08/2015	Surveyed	Grouted	Minor flow - hole re-grouted 16/12/2015
UW386	915	ORE PASS	396482.291	643218.53	914.937	4/02/2015	Surveyed	Not grouted	Hole dry - now in ore pass
UW390	840	C1-S	396541.39	643198.97	844.082	25/03/2015	Surveyed	Not grouted	Hole dry - no evidence of being a water conduit at this level: no Fe staining
UW393	840	C4-HW	396472.922	643416.31	851.398	16/08/2015	Estimated	Not grouted	Hole dry
UW402	953	CDD	396449.3	643126.9	930.5	17/12/2014	Surveyed	Grouted	Hole was producing minimal water for only a few hours
UW402	855	C7-S	396515.03	643092.42	864.645	18/10/2015	Surveyed	Not grouted	Dry - second time intersecting hole with development - was grouted on the 953
UW374	860	DB-HWW	396237.72	643120.73	871.896	16/12/2016	Surveyed	Not grouted	Hole was dry, no indication of previous water - i.e. no fe staining, etc.
CGD003	942	ACC	396486.76	643260.62	941.1	12/03/2017	Estimated	Not grouted	Only a very light trickle and ceased completely within 24 hours
UW339	~775	Dobson RAD	396489.45	643296.31	778.239	10/06/2017	Surveyed	Not grouted	Hole intercept in backs dry but producing water from the floor due to being below the current water table. Floor intercept plugged 26/6/17 but no need to plug the backs intercept.
UW178	767	TS	396531.446	642606.78	772.142	29/07/2019	Estimated	Not grouted	Hole dry
UW363	752	ACC	396414.65	642616.38	603.538	17/05/2020	Estimated	Not grouted	Hole dry
UW146	752	TN	396421.954	642748.94	612.354	7/10/2020	Estimated	Not grouted	Hole dry
UW366A	782	TN	396531.684	642608.27	789.086	12/06/2019	Estimated	Not grouted	Hole dry
UW412A	EDW6ODR4	MUG	395288.9732	642890.04	961.6746	12/10/2021	Estimated	Not grouted	Hole dry
UW457	EDW 006 ACC	MUG	395261.179	642840.59	958.36	5/06/2021	Surveyed	Grouted	No significant flow
UW658	EDW 007 5 2 1	MUG	395355.0324	642926.43	939.1	11/05/2021	Surveyed	Grout from 496.70m to the Surface, Van ruth plug set at 360m	No significant flow
UW418	EDW 008 ACC	MUG	395311.079	642864.49	922.453	28/06/2020	Surveyed	Not grouted	No significant flow
UW498	REX 007 ODR 5 02	MUG	395707.58	642657.05	924.99	24/05/2021	Estimated	140m - 100m; Set HQCWBP @ 140m; Mix and pump 289.8L of grout. 12 x 25kg 289.8L	Hole dry
UW414	EDW 009 ODR 3 2 1 2	MUG	395316.365	642968.55	911.071	26/07/2021	Estimated	Not grouted	No significant flow
UW412A	EDW 009 ACC	MUG	395340.937	642880.67	907.23	27/10/2021	Surveyed	Not grouted	Hole dry
UW738	REX 006 ODR 02	MUG	395689.31	642629.53	939.14	7/11/2021	Estimated	Grouted hole from 284.3m, 136 x Cement, 3800ltrs.	Hole dry intersected at 274 m down hole
UW414A	EDW 13 FWD 13	MUG	395352.51	642880.08	833.35	1/04/2022	Estimated	Grouted	Hole dry
UW721	REX 003 ODR 1 01	MUG	395757.86	642668.11	976.30	28/05/2022	Estimated	Grouted	Hole dry
UW722	REX 004 ODR 02	MUG	395707.41	642630.64	967.03	30/05/2022	Estimated	Grouted	Hole dry
UW678	REX 004 ODR 02	MUG	395682.33	642609.08	969.59	13/05/2022	Estimated	Grouted	Hole dry
UW710	REX 002 ODR 02	MUG	395721.01	642625.06	988.85	5/08/2022	Estimated	Grouted	Hole dry
UW719	REX 002 ODR 02	MUG	395689.19	642607.20	994.23	25/08/2022	Estimated	Grouted	Hole dry

Below is are plan view sections showing development in the Edward and Rex mine areas. Surface drillholes which intersect development, along with their pierce points, are shown; green points indicate the drillhole collars in the view while the red points indicate the approximate intersection point of surface drillholes with development.

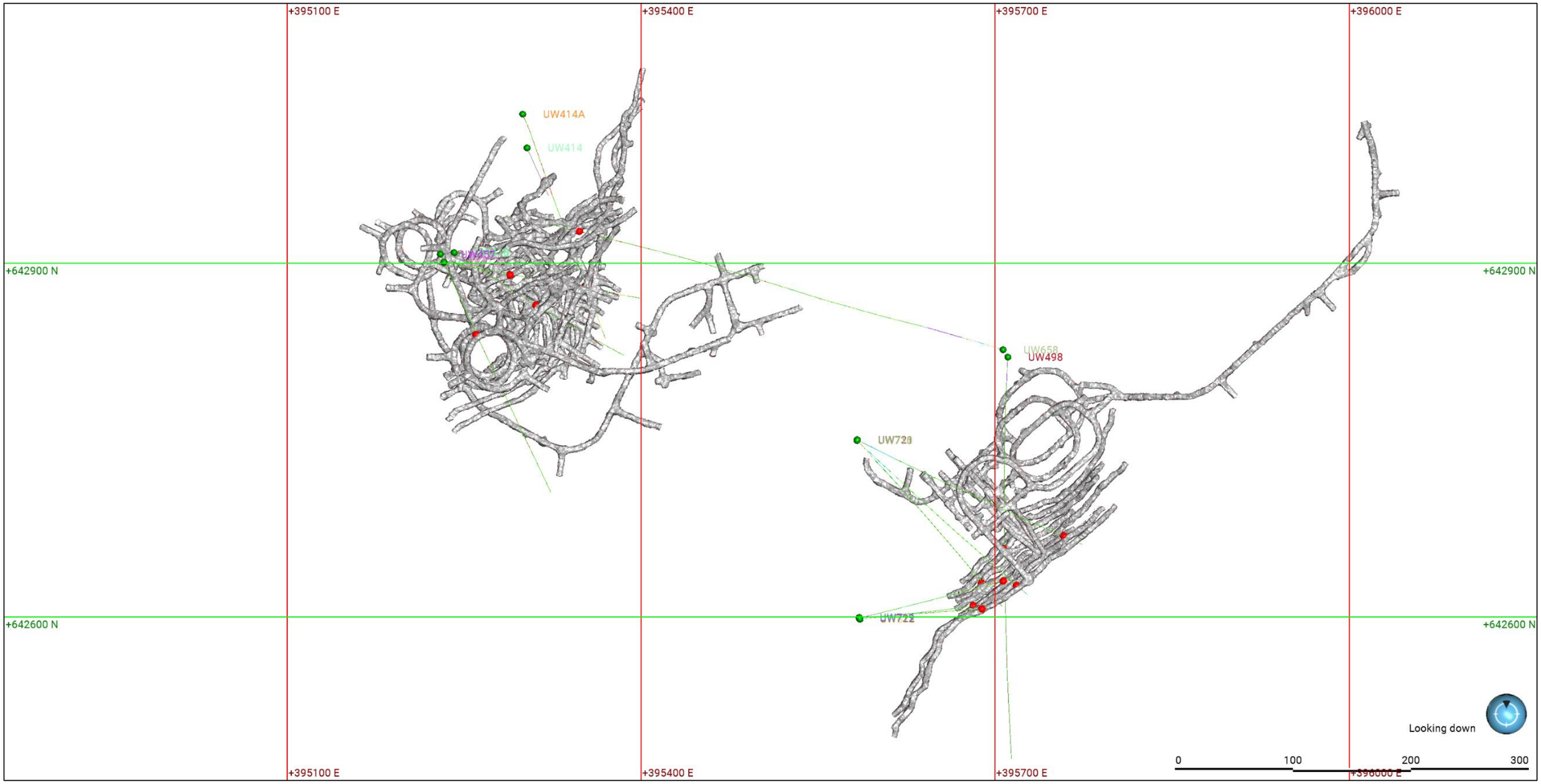


Figure 1: Surface holes intercepting underground workings, Edward and Rex

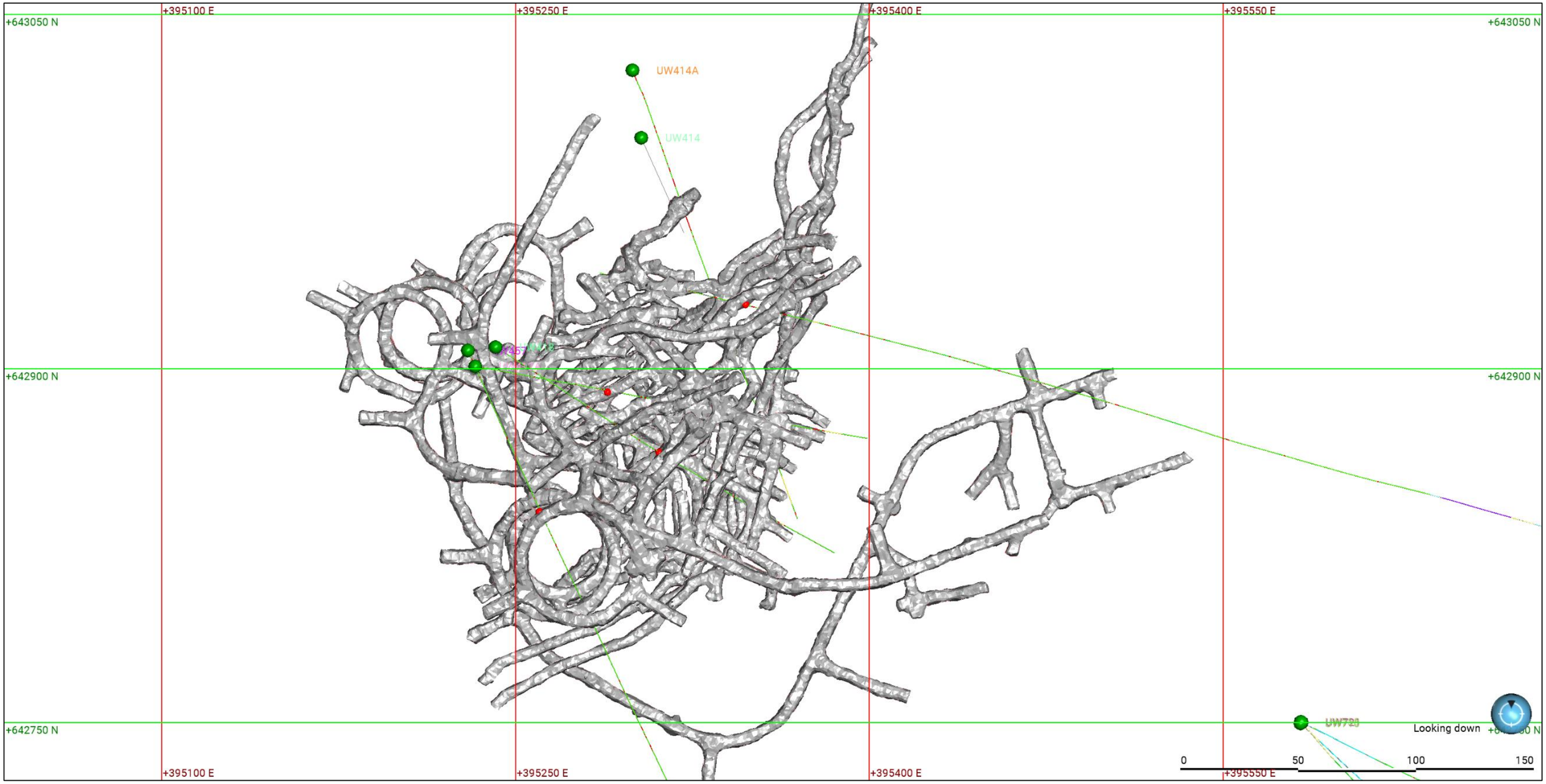


Figure 2: Surface holes intercepting underground workings, 6-15 level Edward

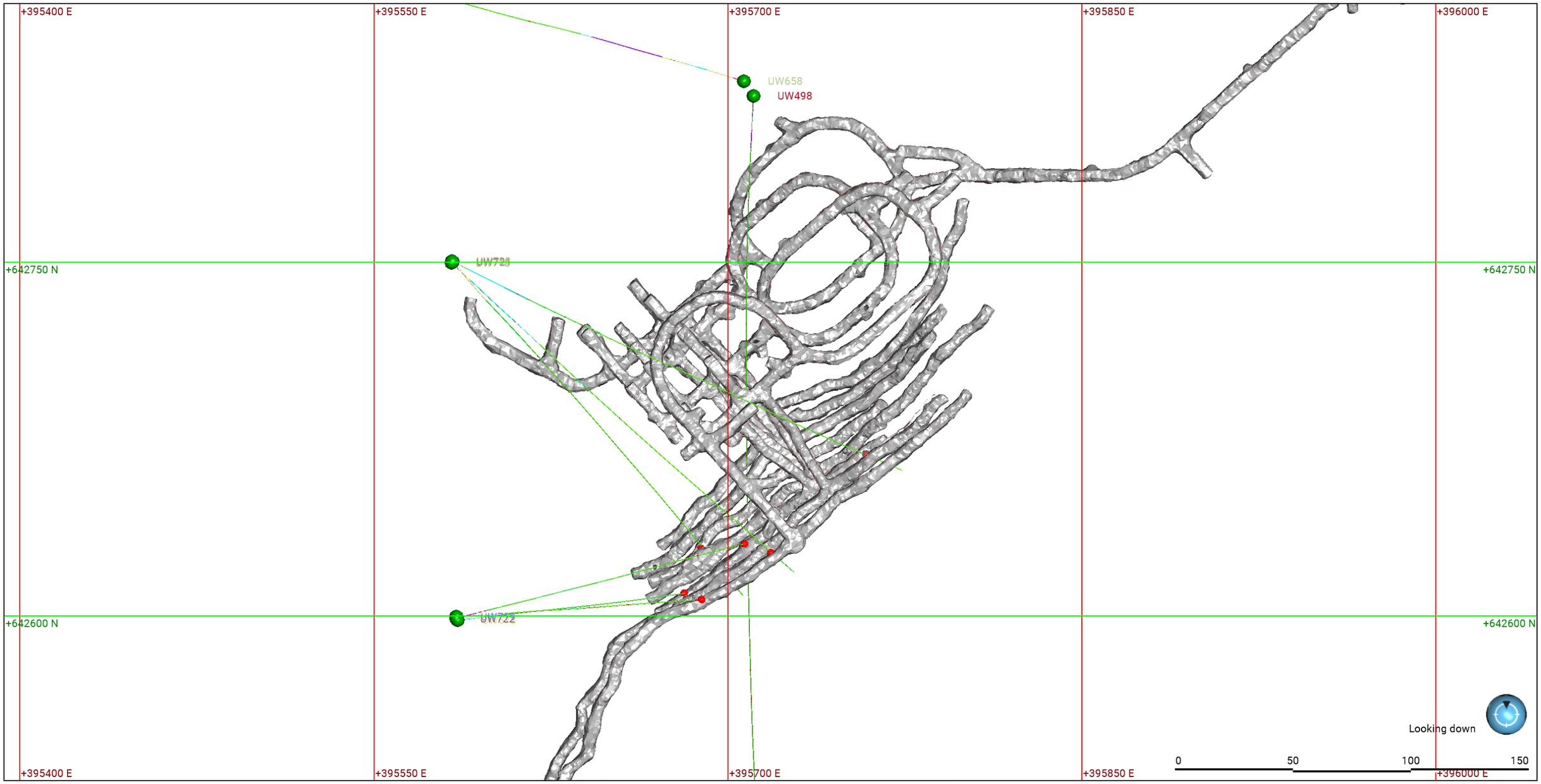


Figure 3: Surface holes intercepting underground workings, Rex